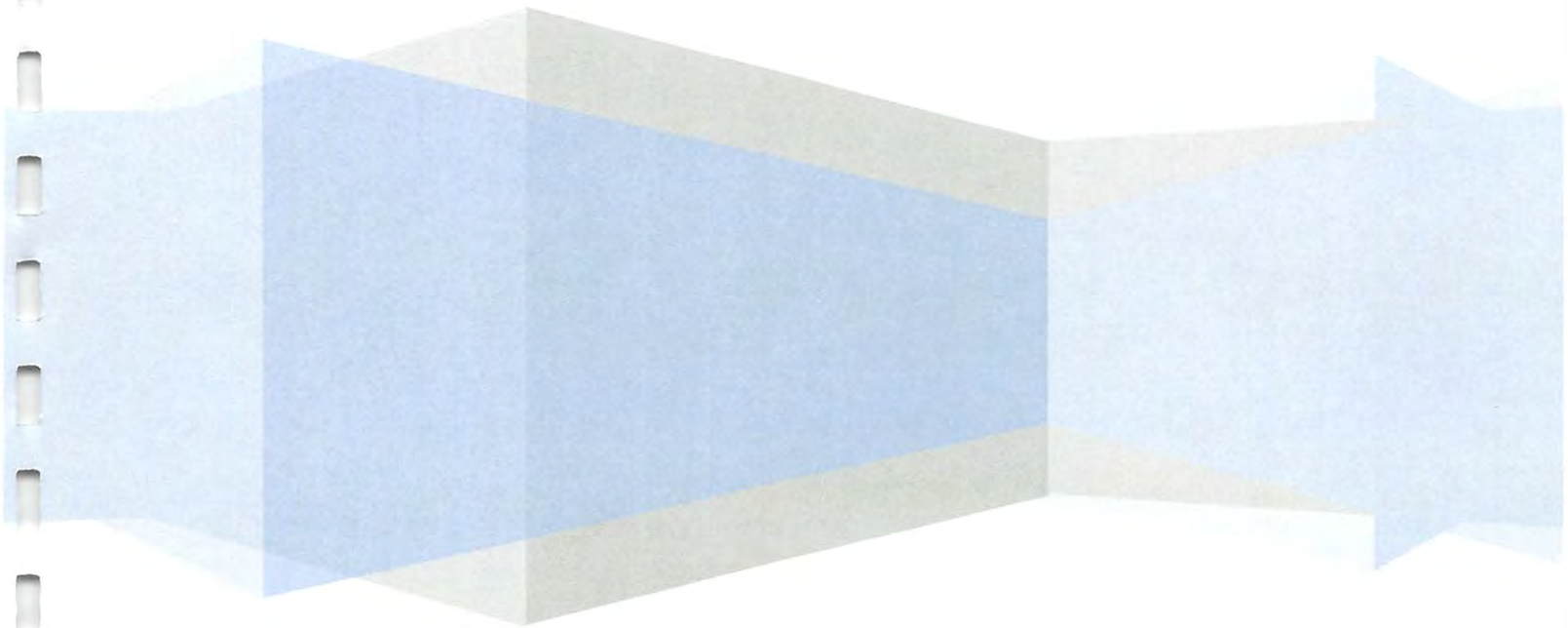
Strata Engineering Inc.

Absolute Building Science

Depreciation Report

LMS474 – City Gardens

Absolute Building Science Strata Engineering Inc.



Cover Letter

Absolute Building Science
Strata Engineering Inc.
#2322-938 Smithe Street
Vancouver, BC V6B 1E5

January 2, 2014

Strata Plan LMS474
1268 W Broadway
Vancouver, BC V6H 1G6

RE: Depreciation Report for Strata Plan LMS474
File No. 20130808-DR-LMS474

Dear Sirs or Mesdames,

The subject of this depreciation report consists of "City Gardens", a 34-unit high rise apartment complex constructed in 1993 and located at 1268 W Broadway in Vancouver, BC. We are pleased to present you with the enclosed draft depreciation report, which we believe will serve as the basis of your reserve planning to help better equip your members for future expenditures.

The depreciation report describes the common property conditions, providing current and future replacement cost estimates. The projected replacement cost estimates serve to be the basis for financial models guiding contingency reserve fund management. The depreciation report is an extensive document prepared based on on-site inspections and financial analyses. The replacement cost estimates herein apply solely to property defined as common property, unless otherwise noted. This depreciation report is subject to the Assumptions and Limiting Conditions in Section 2.1.

We have inspected the subject property and reviewed all documentations made available by the strata corporation. With extensive analyses performed in conjunction with all pertinent data, our cash flow models predict that the optimal reserve fund management includes the following:

1) Contributions of $20,388 to the CRF in the upcoming fiscal year; and
2) An increase of monthly fee allocations to the Contingency Reserve Fund by $29.15 per unit. (Note that this does not necessarily entail an increase in strata fees, but rather an increase in the allocations to the CRF within the annual budget.)

We are hereby delivering to you a report describing our study objectives, methods of research, results, and recommendations.

We appreciate the opportunity of compiling this depreciation report for you and would be honoured to provide you with reviews and updating services as required in future. If you have any questions, please do not hesitate to contact the undersigned.

Respectfully yours,

Absolute Building Science
Strata Engineering Inc.

LMS474 – City Gardens
1268 W Broadway
Vancouver, BC

Executive Summary

Property Statistics			
Municipal Address	1268 W Broadway, Vancouver, BC		
Legal Description	Strata Plan LMS474		
Real Property Type	Twelve-storey high rise apartment		
Units	34		
Year of Construction	1993		
Designated Land Use	Mixed use residential and commercial		
Reserve Fund Components	54 components: 3 substructure components, 16 shell components, 8 interior components, 16 services components, 1 furnishings component, and 10 site improvement components.		
Financial Statistics			
Date of Study	October 22, 2013		
Critical Assumptions	The review is limited to readily accessible and visible building components and documents. Certain inaccessible, hidden problems may not be detected.		
Current Contingency Reserve Fund Balance	$56,389		
Future Replacement Costs	First 10 years: $838,562 Final 20 years: $2,574,794		
		Contributions	**Financial Strength**
CRF Contributions and Financial Strength Over 30-year Projection	**Current investment schedule:**	$263,345	10%
	Early investment schedule:	$3,365,991	100%
	Delayed investment schedule:	$3,296,212	97%
	Capped increase schedule:	$2,585,903	80%
	Capped special levies schedule:	$2,796,458	85%

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1. Introduction

1.1 Strata Development

A strata development divides land and buildings into parts for separate ownership with common features. The part of the property that an individual owns is known as the "strata lot", whereas the remainder of the property is known as "common property". Strata-titled properties, commonly known as condominiums, provide freehold ownership of a strata lot, together with the use of common property and facilities jointly owned with all strata units.

The strata development is administered by a strata corporation comprising of all owners within the strata development. The strata corporation is the decision-making body responsible for maintaining, managing, repairing, and insuring the common property and common assets. The strata corporation is also tasked with record-keeping responsibilities and must enforce its bylaws or rules.

The Strata Property Act[1] (the "**Act**"), bylaws, and Strata Plan of the corporation are the typical documents governing the operation of the strata corporation. They form the legal basis of the strata corporation and are generally enforceable in a court of law should the need arise.

As legislated within the Act, an executive body, known as a strata council, is elected annually by the strata owners to oversee the strata corporation during intervals between general meetings of all members. The strata council meets at regular intervals and makes decisions on behalf of and binding upon all owners for matters concerning the administration of the strata development that do not require the vote of the strata owners.

The strata council usually hires a strata manager or property manager for the management and maintenance of all common areas and facilities including the exterior of the buildings. The strata manager implements the decisions of the strata council, approves expenses, pays accounts according to the budget, administers the collection of monthly maintenance fees, and performs other like duties. In cases of self-managed stratas, the strata council directly oversees the management and maintenance of all common areas and facilities, assuming the duties of a strata manager.

[1] *Strata Property Act*, SBC 1998, c 43, as amended

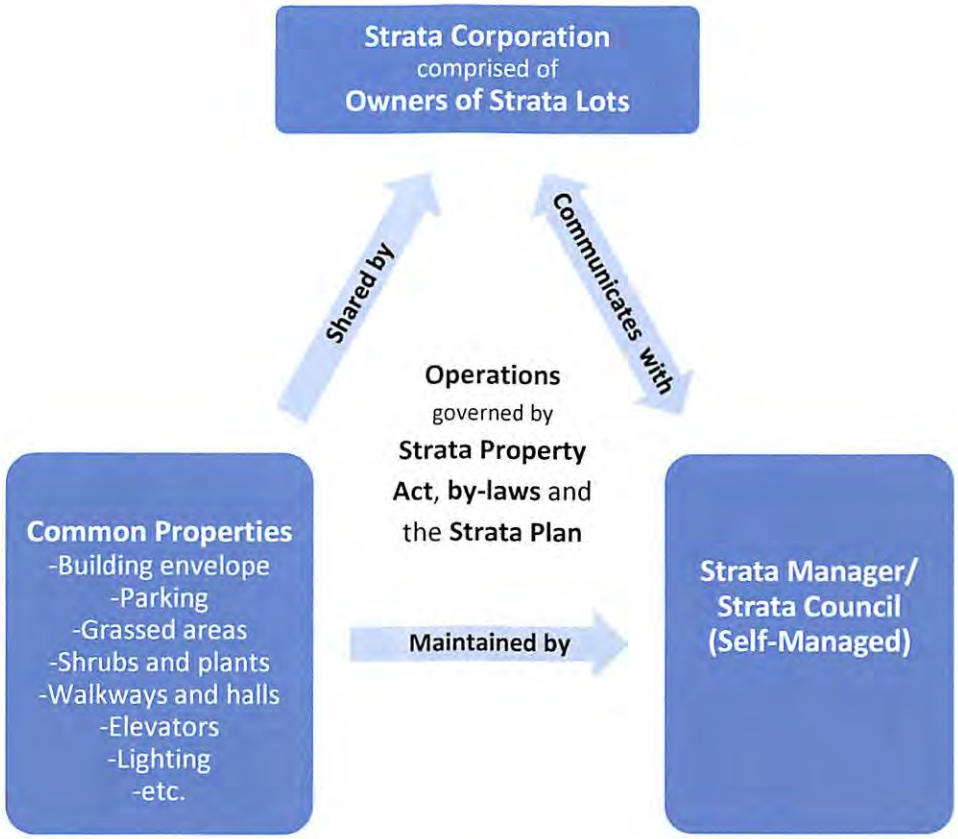

Figure 1: The strata community

1.2 Finances

In order to cover the costs of operating the strata, owners are assessed dues (termed maintenance fees or strata fees) for their proportionate share of the strata corporation's expenses based on their unit entitlement (a measure of the owner's allocated interest within the development). The strata fees are used to establish: 1) the operating fund, and 2) the contingency reserve fund. As outlined within the Act[2], these two funds cover the short-term and long-term expenses of the Strata Corporation.

1.2.1 Operating Fund

The operating fund is a fund set up for expenses that relate to the common properties and common assets of strata corporations that occur more than once per year[3]. These are normally recurring administrative expenses or costs that relate to the routine maintenance of the common properties. The operating expenses are treated as a separate sum of expenses and are not taken into consideration for the purposes of this report.

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[2] *Strata Property Act*, SBC 1998, c 43, s 92
[3] *Ibid*

1.2.2 Contingency Reserve Fund

The contingency reserve fund ("**CRF**") is a fund set up for expenses that occur less than once per year or do not usually occur[4] (e.g. major repairs like roof repairs, machinery repairs, etc.). The CRF constitutes an important part of the strata corporation's annual budget and is generally collected by means of strata fee contributions to a separate CRF account. Ideally, all major repair and replacement costs would be covered by the funds in the CRF account.

1.2.3 Special Levy

The Strata Corporation may raise money from the owners by means of a special levy for various reasons, the primary reason being that the CRF is insufficient to cover the Strata Corporation's existing or anticipated expenditures. A special levy must be approved by a resolution passed by a minimum 3/4 vote at an annual or special general meeting.

1.2.4 Legislation Governing the CRF

Section 6.1 of the Strata Property Regulation (the "**Regulation**") sets out a formula for the purposes of determining the amount of the annual contribution to the CRF, as follows[5]:

> **6.1** ... the amount of the annual contribution to the CRF for a fiscal year, other than the fiscal year following the first annual general meeting, must be determined as follows:
>
> (a) if the amount of money in the CRF at the end of any fiscal year after the first annual general meeting is less than 25% of the total amount budgeted for the contribution to the operating fund for the fiscal year that has just ended, the annual contribution to the CRF for the current fiscal year must be at least the lesser of
>
> (i) 10% of the total amount budgeted for the contribution to the operating fund for the current fiscal year, and
>
> (ii) the amount required to bring the CRF to at least 25% of the total amount budgeted for the contribution to the operating fund for the current fiscal year;
>
> (b) if the amount of money in the CRF at the end of any fiscal year after the first annual general meeting is equal to or greater than 25% of the total amount budgeted for the contribution to the operating fund for the fiscal year that has just ended, additional contributions to the CRF may be made as part of the annual

[4] *Ibid*

[5] *Strata Property Regulation*, BC Reg. 238/2011, s 6.1, as amended

budget approval process after consideration of the depreciation report, if any, obtained under section 94 of the Act.

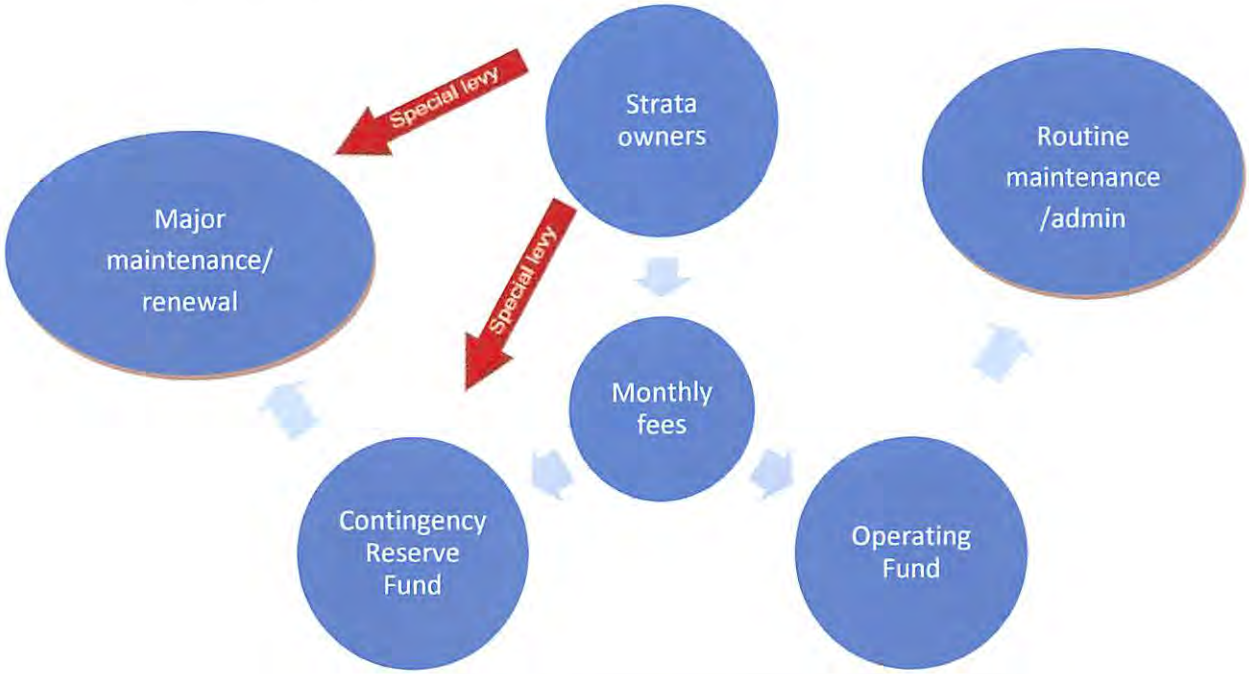

Figure 2: Financial structure of the strata community

1.3 Depreciation Reports

The depreciation report, also known as a reserve fund study, is a legislated planning requirement for strata corporations in British Columbia. Depreciation reports are used to establish long-term planning for CRF management. They are prepared after a thorough assessment of common properties and finances of the strata corporation, taking into account projected expenditures, replacement costs, and other factors.

Common properties for the purposes of a depreciation report include those items that comprise the common property, the common assets, the parts of a strata lot and/or limited common property that the Strata Corporation is responsible to maintain or repair under the Act[6], and the strata corporation's bylaws or an agreement with an owner, including, but not limited to, the following items:

- the building's structure;
- the building's exterior, including roofs, roof decks, doors, windows and skylights;
- the building's systems, including the electrical, heating, plumbing, fire protection and security systems;

[6] *Strata Property Act, supra* note 1

- common amenities and facilities;
- parking facilities and roadways;
- utilities, including water and sewage;
- landscaping, including paths, sidewalks, fencing and irrigation;
- interior finishes, including floor covering and furnishings;
- green building components; and
- balconies and patios.

1.3.1 Benefits of a Depreciation Report

Some important benefits to a well-prepared depreciation report are listed as follows:

A. The depreciation report ensures that the strata corporation complies with the Act. As discussed earlier, the Regulation[7] sets out certain thresholds for the management of the CRF. The depreciation report recommends a cash-flow model that will balance expenditures and corresponding special levies to assist the strata corporation with maintaining such compliance.

B. The depreciation report seeks to optimize strata investments over time. The depreciation report is a planning tool which recommends a schedule for planned investment of funds amassed through strata fees. This optimized investment schedule incorporating interest and inflation contributions seek to ensure CRF sufficiency while maximizing returns.

C. The depreciation report provides a more accurate description of a strata's financial strength and market value. Hence, other parties such as lending institutions for the strata's individual owners or prospective owners often review depreciation reports when considering financing decisions, such as credit-worthiness. Depreciation reports are important tools for evaluating a property and its value.

D. The depreciation report allows for the preservation of the property value through a timely maintenance schedule. The depreciation report identifies the condition of major items of a strata corporation and their maintenance/replacement costs. It also provides preventative maintenance recommendations, which can help preserve the condition of the components and possibly extend their residual or useful lives.

E. The depreciation report identifies risks for consumers interested in the property. As depreciation reports gain widespread use, consumers will use them as tools to gauge possible special levies or otherwise unknown future costs. This increases consumers' confidence in purchasing the property.

[7] *Strata Property Regulation, supra* note 3

F. The depreciation report may also identify unknown risks to strata corporations, allowing for better management. Many strata corporations assume that their budgeted CRF contributions can adequately cover their expenses. However, developer estimates may be outdated and may not have accounted for modifications made since the complex was first conveyed. Hence, the interim calculations may not have reflected the strata's true exposure.

1.3.2 Legislation Regarding the Depreciation Report

The depreciation report must be completed by a "qualified person" as defined in the Act[8]. It must be based upon an on-site visual inspection, comprising of a physical component inventory, a summary of repairs and maintenance work for common property expenses (for items that usually occur less than once per year or that do not usually occur), a financial forecasting section, and other information specified in the Regulation[9]. Beginning on December 13, 2012, a depreciation report is required to be conducted every 3 years and may only be deferred with a 3/4 vote at an annual or a special general meeting for strata corporations that are members of a prescribed class of strata corporations. These details outlined within the Act[10] can be found in Appendix A.

1.4 Objectives

This depreciation report can be used as a guide to establish long term planning for the management of common assets or properties outlined in detail in Section 1.3. Strata Engineering strives to use this report to determine the following:

- The common properties the strata corporation owns;
- The condition of common properties in the strata corporation;
- The timeline for replacement of the common properties of the strata corporation;
- The balance within the CRF;
- The cost for future replacement of common properties; and
- Five cash flow models outlining future payments for future costs.

1.5 Intended Use

This depreciation report has been completed for the exclusive use of the council of the strata corporation, Strata Plan LMS474. No other party may rely on the report without specific written approval of Strata Engineering. This depreciation report is subject to the assumptions and limiting conditions set out in Appendix D attached hereto.

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[8] *Strata Property Act*, SBC 1998, c 43, s 94.1
[9] *Strata Property Regulation*, BC Reg. 238/2011, s 6.2
[10] *Strata Property Act*, SBC 1998, c 43, s 94

2. Methods

A physical assessment and a financial assessment were first performed, providing information regarding the current status of the building. After determining the common properties, the data were used to generate different strategic plans.

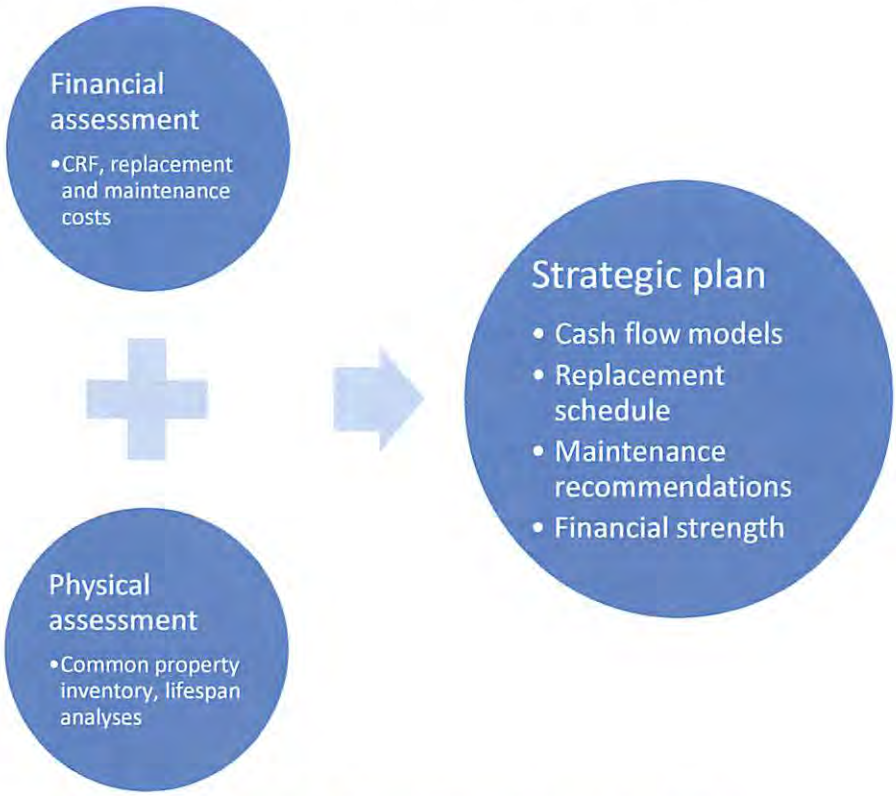


Figure 3: Formulation of the strategic plan

2.1 Assumptions and Limitations

This work resulted in recommendations made based on the information reviewed by the personnel at the time of preparation. This is not a certification of compliance with past or present regulations. This depreciation report is to be read in its entirety and as a whole. No portion of this report can be severed or read independently of the other portions.

This work does not completely eliminate uncertainty regarding the potential for existing or future costs, hazards or losses in connection with a property. Neither physical testing nor design calculations have been performed unless specifically noted. Conditions existing but not noted were not apparent given the level of study undertaken. Only conditions visibly apparent during examination of representative samples have been reviewed.

Only the specific information identified below has been reviewed. Absolute Building Science Strata Engineering (ABSSEI) is not obligated to identify mistakes or insufficiencies in the information obtained from the various sources or to verify the accuracy of the information.

The depreciation report estimates are subjective and are provided for approximate budgeting purposes only. The figures are calculated based on an understanding of the life cycle of building components and comparative analyses of similar properties over time. Accurate figures can only be obtained by establishing a scope of work and receiving quotes from suitable contractors. Time frames given for undertaking replacement or maintenance work represent our opinion of when to budget for the work. Failure of the item, or the optimum repair or replacement process, may vary from our estimate.

2.2 Physical Assessment

2.2.1 Physical Inspection

A site visit was performed on October 22, 2013 at 1268 W Broadway in Vancouver, BC.

2.2.2 Documentation Review

The following documents were reviewed upon availability from the Strata Corporation:

- Building plans – architectural
- Budget (2013)
- Financial Statements (2011 – 2012, 2013 second quarter)
- Bylaws

2.2.3 Inspection of Common Properties

2.2.3.1 Common Property Classification

During the inspection, we classify the common properties assets according to the Uniformat II[11] system, specified by the National Institute of Standards and Technology. The Uniformat II system is organized into seven major building component divisions, with a letter assigned to each specific division. The building components inspected are classified into the following divisions[12]:

[11] ASTM Uniformat II for Building Elements (E1557-97)

[12] Components belonging to certain divisions may not be inspected due to accessibility issues.

Substructure: Slab on grade, underground garage and basement structures

Shell: Roof construction, exterior walls, exterior windows, balconies etc.

Interiors: Wall finishes, floor finishes, stairs, partitions etc.

Services: Elevators and lifts, HVAC, fire protection etc.

Equipment and furnishings: Commercial, institutional equipment, furniture etc.

Special construction and demolition: Special structures, integrated construction, special facilities etc.

Site improvements: Paving, landscaping, sewers etc.

2.2.3.2 Reserve Component Inventory

The reserve component inventory was compiled following the inspection and included in Section 3.2. It lists all common properties inspected, along with their quantities and life cycle indices.

2.2.4 Remaining Useful Life Estimation

The method of estimating the remaining useful life of common properties first necessitates the determination of their physical condition. The chronological age of any asset may not equate to its effective age. Some assets' lifetimes may have been prolonged by continued maintenance whereas others might have undergone rapid deterioration due to unforeseen circumstances or neglect.

In this depreciation report, the effective age of a common property is estimated via documentation review, discussion with facility representatives, and visual inspection. The total useful life is estimated based on industry standards of comparative improvements. The remaining useful life is thus represented by the following equation:

$$Remaining\ useful\ life\ =\ Estimated\ useful\ life\ -\ Effective\ age$$

No destructive testing was carried out on any of the common properties, nor were the common properties disassembled or subjected to confirmation of functionality.

2.3 Financial Assessment

Over the life of every building, owners contribute towards operating, maintenance, and renewal costs of capital assets. Occasionally, more comprehensive rehabilitation costs are also incurred.

The financial assessment identifies the following:

- The current replacement costs of the common properties and their future replacement costs;
- The status of the current CRF balance and how it is impacted by ongoing CRF requirements; and
- The ability of the current budget to meet major maintenance renewal needs.

This depreciation report is primarily concerned with costs of building upkeep. Expenditures such as legal consultation fees and unforeseen emergency expenses are not included.

2.3.1 Future Replacement Cost Estimation

The future replacement cost estimation is performed using the current replacement cost compounded by an average inflation rate across the remaining useful life of the components. Replacement costs were estimated based on the cost data service provided by RSMeans Online[13]. Inflation measurement in this depreciation report is based on construction indices rather than the widely quoted Consumer Price Index (CPI) which measures consumer goods. The average inflation rate was calculated based on changes in construction price index over a period of 20 years from 1991 to 2011. From the analysis, the inflation rate was found to be 3.4%.

2.3.2 Projected Cash Flow

The projected cash flow predicts how well the CRF would be able to cover necessary replacement costs over the next 30 years. There will be five cash flow models for your reference.

Model 1 (Current investment schedule): This model maintains the current method of funding the CRF and estimates future special levies based on current CRF contributions. This method has the effect of deferring the funding of replacement costs for your Common Properties to the date when such replacement is required, resulting in larger special levies and greater future financial burden.

Model 2 (Early investment schedule): This model increases current CRF contributions rapidly over the next three years, such that no special levies will be required over the 30-year projection. Depending on interest rates, this method potentially allows for the greatest investment returns, maximizing financial strength.

Model 3 (Delayed investment schedule): This model increases current CRF contributions over a period of five years, such that no special levies will be required over the 30-year

[13] www.rsmeansonline.com

projection. This method still allows for a reasonable return on investment while maintaining financial strength.

Model 4 (Partially funded investment schedule – capped increase): This model increases current CRF contributions by a maximum of 150% in the next two years. For the remaining 30-year projection, CRF contributions are increased annually by the current inflation rate.

Model 5 (Partially funded investment schedule – capped special levies): This model increases current CRF contributions over the next three years, such that all special levies for the 30-year projection are $100,000 or less. For the remaining 30-year projection, CRF contributions are increased annually by the current inflation rate.

2.3.2.1 Current CRF Levels

Current CRF level is defined as the opening balance of the reserve account beginning the year in which the inspection took place. In this case, it is $56,389 beginning in 2013. In cases where reserve accounts are unavailable, the current CRF level is calculated by summing the total amount of funds set aside for major replacement or repairs beginning the year during which the inspection is performed.

2.3.2.2 Special Levies

The Strata Corporation may raise money from the owners by means of a special levy for various reasons, the primary reason being that the CRF is insufficient to cover the Strata Corporation's existing or anticipated expenditures. A special levy must be approved by a resolution passed by a minimum 3/4 vote at an annual or special general meeting.

2.3.2.3 Investment Returns

For this report, the strata corporation's funds are placed with a savings account. Hence, investment returns are estimated to be 2.5%.

2.3.2.4 CRF Contributions

CRF contributions with all our cash flow models except the current model are set based on different calculations tailored to different scenarios.

2.3.2.5 Calculations

The closing balance for a given year was calculated as follows:

$$Closing\ balance = (CRF\ opening\ balance + CRF\ contributions + investment\ returns + Special\ levies) - Replacement\ expenses$$

2.3.3 Financial Strength

Within this depreciation report, the analysis is performed primarily based upon the CRF of the Strata Corporation, not accounting for operating expenses that are paid through the operating fund. The financial strength of the Strata Corporation is thus the proportion of replacement or maintenance expenses that can be covered by the CRF contributions and investment returns. The optimal CRF with maximized financial strength would be able to cover all expenses at any given time, resulting in no special levies over a specified period.

2.3.3.1 Reserve Requirements

Insufficiency in this depreciation report is determined by the percent of replacement expenses covered by special levies, given by the following formula:

$$\%\ Insufficiency = \frac{Special\ levies}{Replacement\ expenses} \times 100\%$$

Financial strength in this depreciation report is expressed in the following formula:

$$\%\ Financial\ strength = 100\% - \frac{Total\ special\ levies}{Total\ replacement\ expenses}$$

Hence, 100% strength means that no special levies are needed (insufficiency is 0%).

3. Results

3.1 Building Information

The building investigated was a 34-unit high rise apartment complex built in 1993 for residential purposes. The key statistics of the building are presented in Table 1 below.

Table 1: Property statistics

City Gardens	
Municipal Address:	1268 W Broadway, Vancouver, BC
Legal description	Strata Plan LMS474
Real property type	Twelve-story high rise apartment complex
Units	34
Year of Construction	1993
Designated land use	Multi-family residential use
Reserve fund components	54 components: 3 substructure components, 16 shell components, 8 interior components, 16 services components, 1 furnishings component, and 10 site improvement components.

3.2 Reserve Components Inventory

The identified components were grouped into major categories according to the Uniformat II system. The schedule of common property components can be found on the next page. Detailed descriptions can be found in Appendix B (reserve component data sheets) and the major replacement schedule regarding the components can be found in Appendix D. The reserve components included within this budget is listed in the following table.

Table 2 : Reserve components

Component	Estimated Useful Life (years)	Effective Age (years)	Remaining Useful Life (years)
Underground parkade - floor slab	Building life	20	Building life
Underground parkade - suspended slab	Building life	20	Building life
Underground parkade - walls	Building life	20	Building life
Roof deck	30	20	10
Roof deck railings	Building life	20	Building life
Roofing	30	21	9
Roof drainage	30	21	9
Cladding - brick veneer	40	5	35
Cladding - stucco	30	10	20
Cladding - granite tiles	Building life	20	Building life
Caulking	8	7	1
Exterior painting	8	6	2
Windows (frames)	30	21	9
Windows (glazing)	15	6	9

Table 2 continued

Component	Estimated Useful Life (years)	Effective Age (years)	Remaining Useful Life (years)
Main doors	50	21	29
Sliding doors	8	20	10
Exterior unit doors	30	15	15
Flashings	30	21	9
Interior unit doors	50	20	30
Egress doors	50	20	30
Service doors	50	21	29
Interior stairs	Building life	20	Building life
Stair railings	Building life	20	Building life
Wall finishes	10	3	7
Floor finishes - tile	30	3	27
Floor finishes - carpet	12	0	12
Ceiling surfaces	27	21	6
Elevator - cab	30	21	9
Elevator - machinery	15	21	9
Elevator - controller/dispatcher	15	21	4
Elevator - shaftway doors	15	21	9
Elevator - shaftway machinery	15	18	7
Sanitary Waste and Vent System	Building life	20	Building life
Boilers, with Insulation, Piping, Controls & Flue	40	2	38
Hot and Cold Water Distribution	Building life	20	Building life
HVAC - make up air unit	20	10	10
Fire Pumps	30	21	9
Fire Suppression	50	21	29
Emergency generator	50	21	29
Interior lighting	25	21	4
Emergency Call Alarm System	Building life	20	Building life
Smoke & Fire Detection System	Building life	N/A	Building life
Emergency Lights	Building life	N/A	Building life
Mail facilities	50	21	29
Exterior paving	10	20	10
Retaining walls	Building life	20	Building life
Amenity room	10	21	Building life
Landscaping	Building life	20	Building life
Irrigation system	Building life	20	Building life
Water main	Building life	20	Building life
Gas main	Building life	20	Building life
Sanitary lines	Building life	20	Building life
Electrical main	Building life	20	Building life
Exterior lighting	10	21	4

3.3 Thirty-Year Cash Flow Models

Cash flow models allow you to tailor your budget to suit your own needs or financial abilities. We have provided five distinct cash flow models for the estimation of CRF contributions and special levies not accounting for preventive maintenance. In each of these models, calculations are based on the 2013 CRF opening balance of $56,389. In order to satisfy legal requirements, special levies are assessed to bring the CRF closing balance to $10,000 where there is a shortfall in covering replacement or repair expenses.

3.3.1 Model 1: Current Investment Schedule

In the current investment schedule, an annual CRF contribution of $8,495 (as noted in the annual budget for 2013) is kept constant over the 30-year projection. Over the 30-year projection, twenty-nine special levies, ranging from $17,072 to $173,052 are expected to be required to cover all replacement expenses. An investment return of $17,418 is obtained.

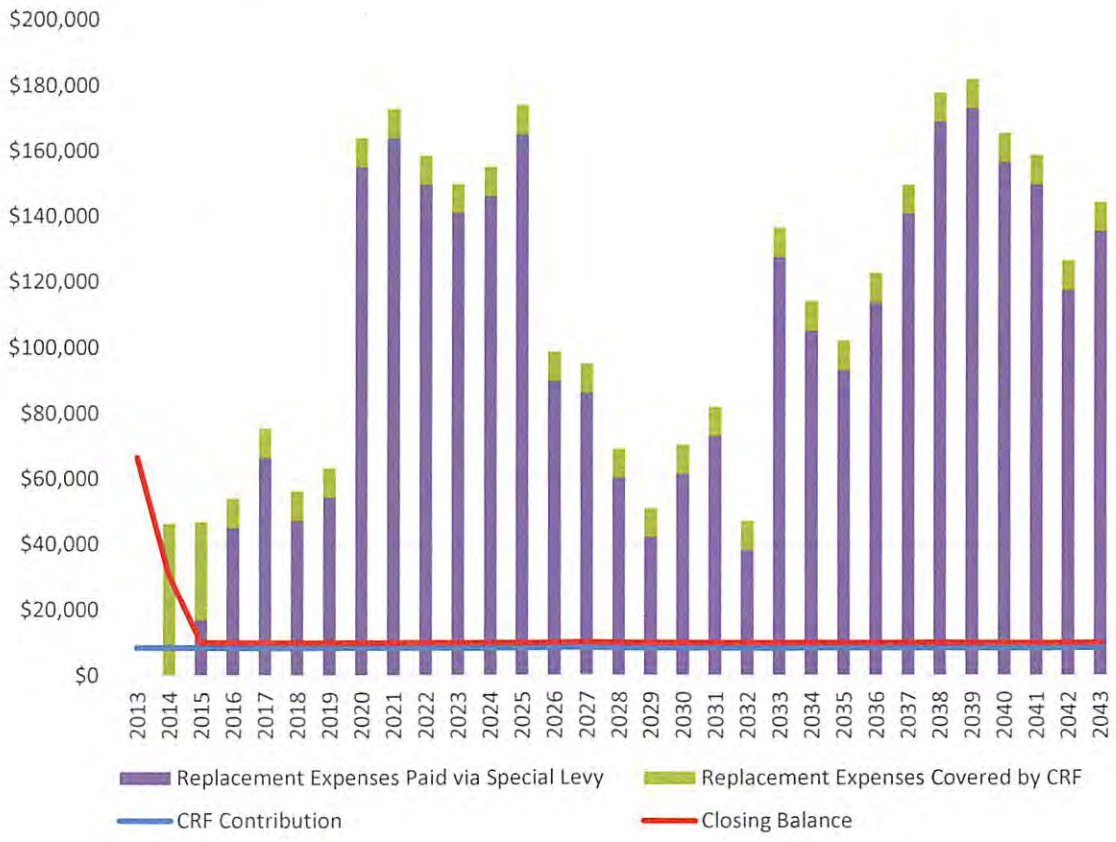


Figure 4: 30-year projection of CRF cash flow using current investment schedule

Table 3: Cash flow table for CRF with current investment schedule

Year	Opening balance	CRF contributions	Contribution changes	Investment returns	Replacement expenses	Special levies	Closing balance
2013	$56,389	$8,495		$1,622	$0	$0	$66,506
2014	$66,506	$8,495	0%	$1,875	$46,396	$0	$30,481
2015	$30,481	$8,495	0%	$974	$47,021	$17,072	$10,000
2016	$10,000	$8,495	0%	$462	$54,148	$45,190	$10,000
2017	$10,000	$8,495	0%	$462	$75,573	$66,615	$10,000
2018	$10,000	$8,495	0%	$462	$56,290	$47,332	$10,000
2019	$10,000	$8,495	0%	$462	$63,303	$54,346	$10,000
2020	$10,000	$8,495	0%	$462	$164,084	$155,127	$10,000
2021	$10,000	$8,495	0%	$462	$173,065	$164,108	$10,000
2022	$10,000	$8,495	0%	$462	$158,683	$149,726	$10,000
2023	$10,000	$8,495	0%	$462	$150,108	$141,151	$10,000
2024	$10,000	$8,495	0%	$462	$155,212	$146,254	$10,000
2025	$10,000	$8,495	0%	$462	$174,100	$165,142	$10,000
2026	$10,000	$8,495	0%	$462	$98,812	$89,855	$10,000
2027	$10,000	$8,495	0%	$462	$95,045	$86,087	$10,000
2028	$10,000	$8,495	0%	$462	$69,273	$60,316	$10,000
2029	$10,000	$8,495	0%	$462	$51,221	$42,264	$10,000
2030	$10,000	$8,495	0%	$462	$70,617	$61,660	$10,000
2031	$10,000	$8,495	0%	$462	$82,145	$73,188	$10,000
2032	$10,000	$8,495	0%	$462	$47,188	$38,230	$10,000
2033	$10,000	$8,495	0%	$462	$136,618	$127,661	$10,000
2034	$10,000	$8,495	0%	$462	$114,142	$105,184	$10,000
2035	$10,000	$8,495	0%	$462	$102,205	$93,247	$10,000
2036	$10,000	$8,495	0%	$462	$122,751	$113,794	$10,000
2037	$10,000	$8,495	0%	$462	$149,821	$140,863	$10,000
2038	$10,000	$8,495	0%	$462	$177,983	$169,025	$10,000
2039	$10,000	$8,495	0%	$462	$182,009	$173,052	$10,000
2040	$10,000	$8,495	0%	$462	$165,628	$156,670	$10,000
2041	$10,000	$8,495	0%	$462	$158,865	$149,908	$10,000
2042	$10,000	$8,495	0%	$462	$126,572	$117,614	$10,000
2043	$10,000	$8,495	0%	$462	$144,481	$135,523	$10,000

3.3.2 Model 2: Early Investment Schedule (Recommended)

In the early investment schedule, contributions to the initial opening balance in the CRF increase 140% per year over the next three years. Over the 30-year projection, no special levies are required. An investment return of $227,663 is obtained.

Figure 5: 30-year projection of CRF cash flow using early investment schedule

Table 4: Cash flow table for CRF with early investment schedule

Year	Opening balance	CRF contributions	Contribution changes	Investment returns	Replacement expenses	Special levies	Closing balance
2013	$56,389	$8,495		$1,622	$0	$0	$66,506
2014	$66,506	$20,388	140%	$2,172	$46,396	$0	$42,671
2015	$42,671	$48,931	140%	$2,290	$47,021	$0	$46,871
2016	$46,871	$117,435	140%	$4,108	$54,148	$0	$114,265
2017	$114,265	$117,435	0%	$5,793	$75,573	$0	$161,920
2018	$161,920	$117,435	0%	$6,984	$56,290	$0	$230,049
2019	$230,049	$117,435	0%	$8,687	$63,303	$0	$292,868
2020	$292,868	$117,435	0%	$10,258	$164,084	$0	$256,477
2021	$256,477	$117,435	0%	$9,348	$173,065	$0	$210,194
2022	$210,194	$117,435	0%	$8,191	$158,683	$0	$177,137
2023	$177,137	$117,435	0%	$7,364	$150,108	$0	$151,828
2024	$151,828	$117,435	0%	$6,732	$155,212	$0	$120,783
2025	$120,783	$117,435	0%	$5,955	$174,100	$0	$70,073
2026	$70,073	$117,435	0%	$4,688	$98,812	$0	$93,384
2027	$93,384	$117,435	0%	$5,270	$95,045	$0	$121,044
2028	$121,044	$117,435	0%	$5,962	$69,273	$0	$175,168
2029	$175,168	$117,435	0%	$7,315	$51,221	$0	$248,696
2030	$248,696	$117,435	0%	$9,153	$70,617	$0	$304,668
2031	$304,668	$117,435	0%	$10,553	$82,145	$0	$350,510
2032	$350,510	$117,435	0%	$11,699	$47,188	$0	$432,456
2033	$432,456	$117,435	0%	$13,747	$136,618	$0	$427,019
2034	$427,019	$117,435	0%	$13,611	$114,142	$0	$443,924
2035	$443,924	$117,435	0%	$14,034	$102,205	$0	$473,188
2036	$473,188	$117,435	0%	$14,766	$122,751	$0	$482,637
2037	$482,637	$117,435	0%	$15,002	$149,821	$0	$465,253
2038	$465,253	$117,435	0%	$14,567	$177,983	$0	$419,273
2039	$419,273	$117,435	0%	$13,418	$182,009	$0	$368,116
2040	$368,116	$117,435	0%	$12,139	$165,628	$0	$332,062
2041	$332,062	$117,435	0%	$11,237	$158,865	$0	$301,870
2042	$301,870	$117,435	0%	$10,483	$126,572	$0	$303,215
2043	$303,215	$117,435	0%	$10,516	$144,481	$0	$286,686

3.3.3 Model 3: Delayed Investment Schedule

In the delayed investment schedule, the CRF contributions to an initial opening balance of are phased in over a period of five years at increases of 70% per year. Over the 30-year projection, five special levies ranging from $2,598 and $50,217 will be required.

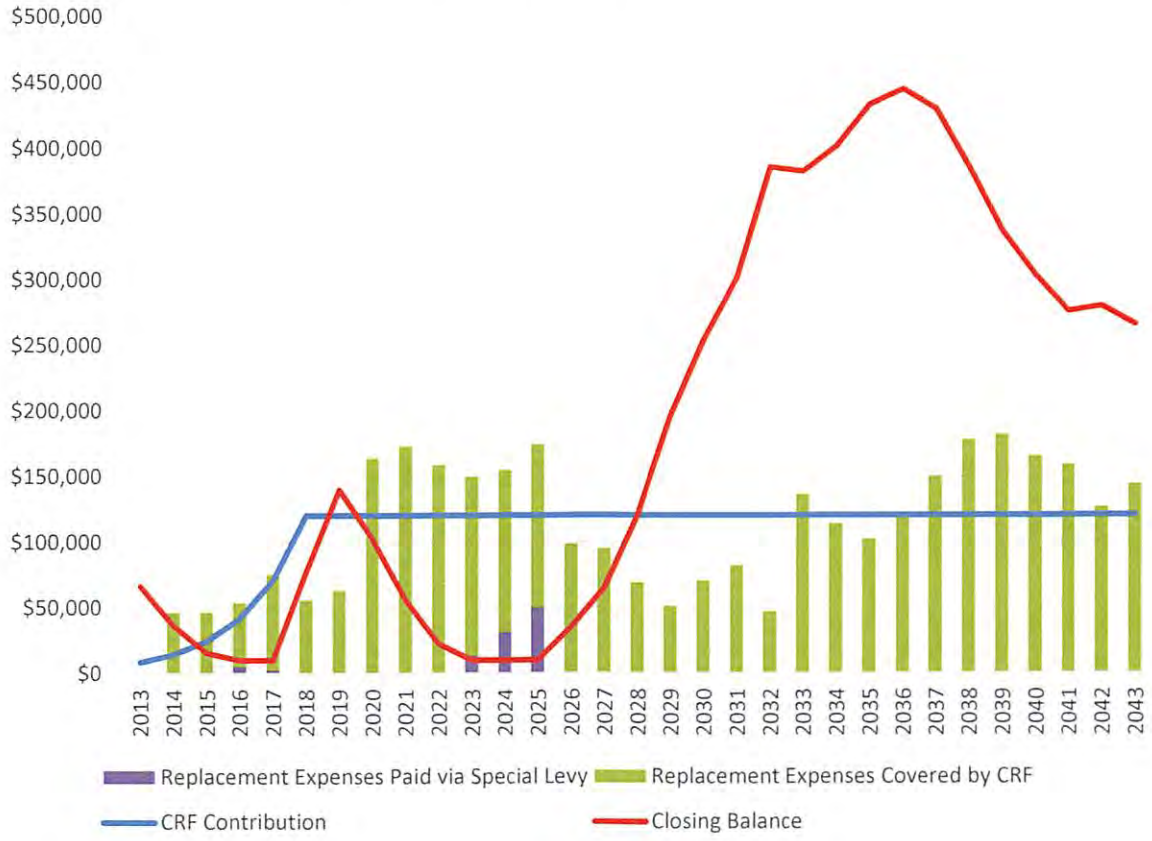


Figure 6: 30-year projection of CRF cash flow using delayed investment schedule

Table 5: Cash flow table for CRF with delayed investment schedule

Year	Opening balance	CRF contributions	Contribution changes	Investment returns	Replacement expenses	Special levies	Closing balance
2013	$56,389	$8,495		$1,622	$0	$0	$66,506
2014	$66,506	$14,442	70%	$2,024	$46,396	$0	$36,576
2015	$36,576	$24,551	70%	$1,528	$47,021	$0	$15,633
2016	$15,633	$41,736	70%	$1,434	$54,148	$5,345	$10,000
2017	$10,000	$70,951	70%	$2,024	$75,573	$2,598	$10,000
2018	$10,000	$120,617	70%	$3,265	$56,290	$0	$77,593
2019	$77,593	$120,617	0%	$4,955	$63,303	$0	$139,862
2020	$139,862	$120,617	0%	$6,512	$164,084	$0	$102,907
2021	$102,907	$120,617	0%	$5,588	$173,065	$0	$56,046
2022	$56,046	$120,617	0%	$4,417	$158,683	$0	$22,397
2023	$22,397	$120,617	0%	$3,575	$150,108	$13,519	$10,000
2024	$10,000	$120,617	0%	$3,265	$155,212	$31,329	$10,000
2025	$10,000	$120,617	0%	$3,265	$174,100	$50,217	$10,000
2026	$10,000	$120,617	0%	$3,265	$98,812	$0	$35,070
2027	$35,070	$120,617	0%	$3,892	$95,045	$0	$64,534
2028	$64,534	$120,617	0%	$4,629	$69,273	$0	$120,507
2029	$120,507	$120,617	0%	$6,028	$51,221	$0	$195,930
2030	$195,930	$120,617	0%	$7,914	$70,617	$0	$253,844
2031	$253,844	$120,617	0%	$9,362	$82,145	$0	$301,677
2032	$301,677	$120,617	0%	$10,557	$47,188	$0	$385,663
2033	$385,663	$120,617	0%	$12,657	$136,618	$0	$382,319
2034	$382,319	$120,617	0%	$12,573	$114,142	$0	$401,367
2035	$401,367	$120,617	0%	$13,050	$102,205	$0	$432,829
2036	$432,829	$120,617	0%	$13,836	$122,751	$0	$444,531
2037	$444,531	$120,617	0%	$14,129	$149,821	$0	$429,456
2038	$429,456	$120,617	0%	$13,752	$177,983	$0	$385,842
2039	$385,842	$120,617	0%	$12,661	$182,009	$0	$337,111
2040	$337,111	$120,617	0%	$11,443	$165,628	$0	$303,544
2041	$303,544	$120,617	0%	$10,604	$158,865	$0	$275,899
2042	$275,899	$120,617	0%	$9,913	$126,572	$0	$279,857
2043	$279,857	$120,617	0%	$10,012	$144,481	$0	$266,005

3.3.4 Model 4: Partially Funded Investment Schedule (Capped Increase)

In the capped increase investment schedule, contributions to the initial CRF opening balance are kept at a maximum increase of 150% over the next two years, then increased by the current inflation rate for the remaining years. Over the 30-year projection, twelve special levies, ranging from $2,227 and $106,305, are expected to be required. An investment return of $100,742 is obtained.

Figure 7: 30-year projection of CRF cash flow using capped increase investment schedule

Table 6: Cash flow table for CRF with capped increase investment schedule

Year	Opening balance	CRF contributions	Contribution changes	Investment returns	Replacement expenses	Special levies	Closing balance
2013	$56,389	$8,495		$1,622	$0	$0	$66,506
2014	$66,506	$21,238	150%	$2,194	$46,396	$0	$43,542
2015	$43,542	$53,094	150%	$2,416	$47,021	$0	$52,030
2016	$52,030	$54,899	3.4%	$2,673	$54,148	$0	$55,454
2017	$55,454	$56,766	3.4%	$2,805	$75,573	$0	$39,452
2018	$39,452	$58,696	3.4%	$2,454	$56,290	$0	$44,312
2019	$44,312	$60,691	3.4%	$2,625	$63,303	$0	$44,325
2020	$44,325	$62,755	3.4%	$2,677	$164,084	$64,327	$10,000
2021	$10,000	$64,888	3.4%	$1,872	$173,065	$106,305	$10,000
2022	$10,000	$67,095	3.4%	$1,927	$158,683	$89,661	$10,000
2023	$10,000	$69,376	3.4%	$1,984	$150,108	$78,748	$10,000
2024	$10,000	$71,735	3.4%	$2,043	$155,212	$81,434	$10,000
2025	$10,000	$74,174	3.4%	$2,104	$174,100	$97,822	$10,000
2026	$10,000	$76,695	3.4%	$2,167	$98,812	$19,950	$10,000
2027	$10,000	$79,303	3.4%	$2,233	$95,045	$13,509	$10,000
2028	$10,000	$81,999	3.4%	$2,300	$69,273	$0	$25,026
2029	$25,026	$84,787	3.4%	$2,745	$51,221	$0	$61,338
2030	$61,338	$87,670	3.4%	$3,725	$70,617	$0	$82,116
2031	$82,116	$90,651	3.4%	$4,319	$82,145	$0	$94,941
2032	$94,941	$93,733	3.4%	$4,717	$47,188	$0	$146,203
2033	$146,203	$96,920	3.4%	$6,078	$136,618	$0	$112,582
2034	$112,582	$100,215	3.4%	$5,320	$114,142	$0	$103,976
2035	$103,976	$103,623	3.4%	$5,190	$102,205	$0	$110,584
2036	$110,584	$107,146	3.4%	$5,443	$122,751	$0	$100,421
2037	$100,421	$110,789	3.4%	$5,280	$149,821	$0	$66,670
2038	$66,670	$114,555	3.4%	$4,531	$177,983	$2,227	$10,000
2039	$10,000	$118,450	3.4%	$3,211	$182,009	$60,347	$10,000
2040	$10,000	$122,478	3.4%	$3,312	$165,628	$39,838	$10,000
2041	$10,000	$126,642	3.4%	$3,416	$158,865	$28,807	$10,000
2042	$10,000	$130,948	3.4%	$3,524	$126,572	$0	$17,900
2043	$17,900	$135,400	3.4%	$3,832	$144,481	$0	$12,651

3.3.5 Model 5: Partially Funded Investment Schedule (Capped Special Levies)

In the capped special levies investment schedule, contributions to the initial CRF opening balance are increased by 92% over the next three years such that any special levies are kept at $100,000 or less. For the remaining years, the annual CRF contributions are increased at the current inflation rate. Over the 30-year projection, eight special levies, ranging from $5,804 to $100,000 are expected to be required. An investment return of $124,134 is obtained.

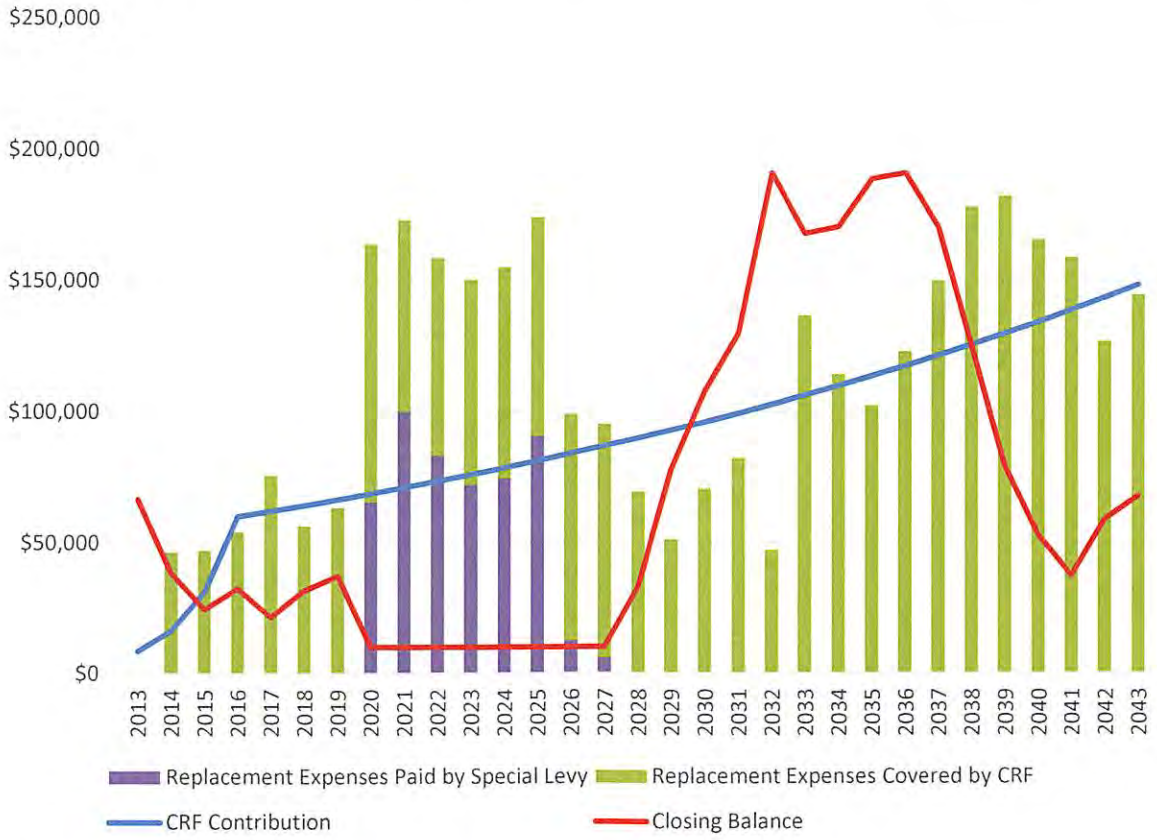


Figure 8: 30-year projection of CRF cash flow using capped special levies investment schedule

Table 7: Cash flow table for CRF with partially funded investment schedule

Year	Opening balance	CRF contributions	Contribution changes	Investment returns	Replacement expenses	Special levies	Closing balance
2013	$56,389	$8,495		$1,622	$0	$0	$66,506
2014	$66,506	$16,308	92%	$2,070	$46,396	$0	$38,489
2015	$38,489	$31,308	92%	$1,745	$47,021	$0	$24,520
2016	$24,520	$60,103	92%	$2,116	$54,148	$0	$32,591
2017	$32,591	$62,146	3.4%	$2,368	$75,573	$0	$21,533
2018	$21,533	$64,259	3.4%	$2,145	$56,290	$0	$31,648
2019	$31,648	$66,444	3.4%	$2,452	$63,303	$0	$37,241
2020	$37,241	$68,703	3.4%	$2,649	$164,084	$65,491	$10,000
2021	$10,000	$71,039	3.4%	$2,026	$173,065	$100,000	$10,000
2022	$10,000	$73,455	3.4%	$2,086	$158,683	$83,142	$10,000
2023	$10,000	$75,952	3.4%	$2,149	$150,108	$72,007	$10,000
2024	$10,000	$78,534	3.4%	$2,213	$155,212	$74,464	$10,000
2025	$10,000	$81,205	3.4%	$2,280	$174,100	$90,615	$10,000
2026	$10,000	$83,965	3.4%	$2,349	$98,812	$12,498	$10,000
2027	$10,000	$86,820	3.4%	$2,421	$95,045	$5,804	$10,000
2028	$10,000	$89,772	3.4%	$2,494	$69,273	$0	$32,993
2029	$32,993	$92,824	3.4%	$3,145	$51,221	$0	$77,742
2030	$77,742	$95,980	3.4%	$4,343	$70,617	$0	$107,449
2031	$107,449	$99,244	3.4%	$5,167	$82,145	$0	$129,715
2032	$129,715	$102,618	3.4%	$5,808	$47,188	$0	$190,953
2033	$190,953	$106,107	3.4%	$7,427	$136,618	$0	$167,868
2034	$167,868	$109,715	3.4%	$6,940	$114,142	$0	$170,381
2035	$170,381	$113,445	3.4%	$7,096	$102,205	$0	$188,717
2036	$188,717	$117,302	3.4%	$7,650	$122,751	$0	$190,918
2037	$190,918	$121,290	3.4%	$7,805	$149,821	$0	$170,193
2038	$170,193	$125,414	3.4%	$7,390	$177,983	$0	$125,015
2039	$125,015	$129,678	3.4%	$6,367	$182,009	$0	$79,052
2040	$79,052	$134,088	3.4%	$5,328	$165,628	$0	$52,841
2041	$52,841	$138,646	3.4%	$4,787	$158,865	$0	$37,409
2042	$37,409	$143,360	3.4%	$4,519	$126,572	$0	$58,717
2043	$58,717	$148,235	3.4%	$5,174	$144,481	$0	$67,645

4. Analysis

4.1 Investment Schedule Comparison

Apart from the current investment schedule, all other cash flow models propose increases to the CRF contributions in the next few years (in addition to matching inflation), eliminating or reducing special levies. Model 2 (the early investment schedule) and Model 3 (the delayed investment schedule) distinguish themselves in that no special levies will be required over the 30-year projection due to larger increases in CRF contributions. The figure below illustrates the outcome of each investment schedule (without preventive maintenance), along with the changes in CRF contributions.

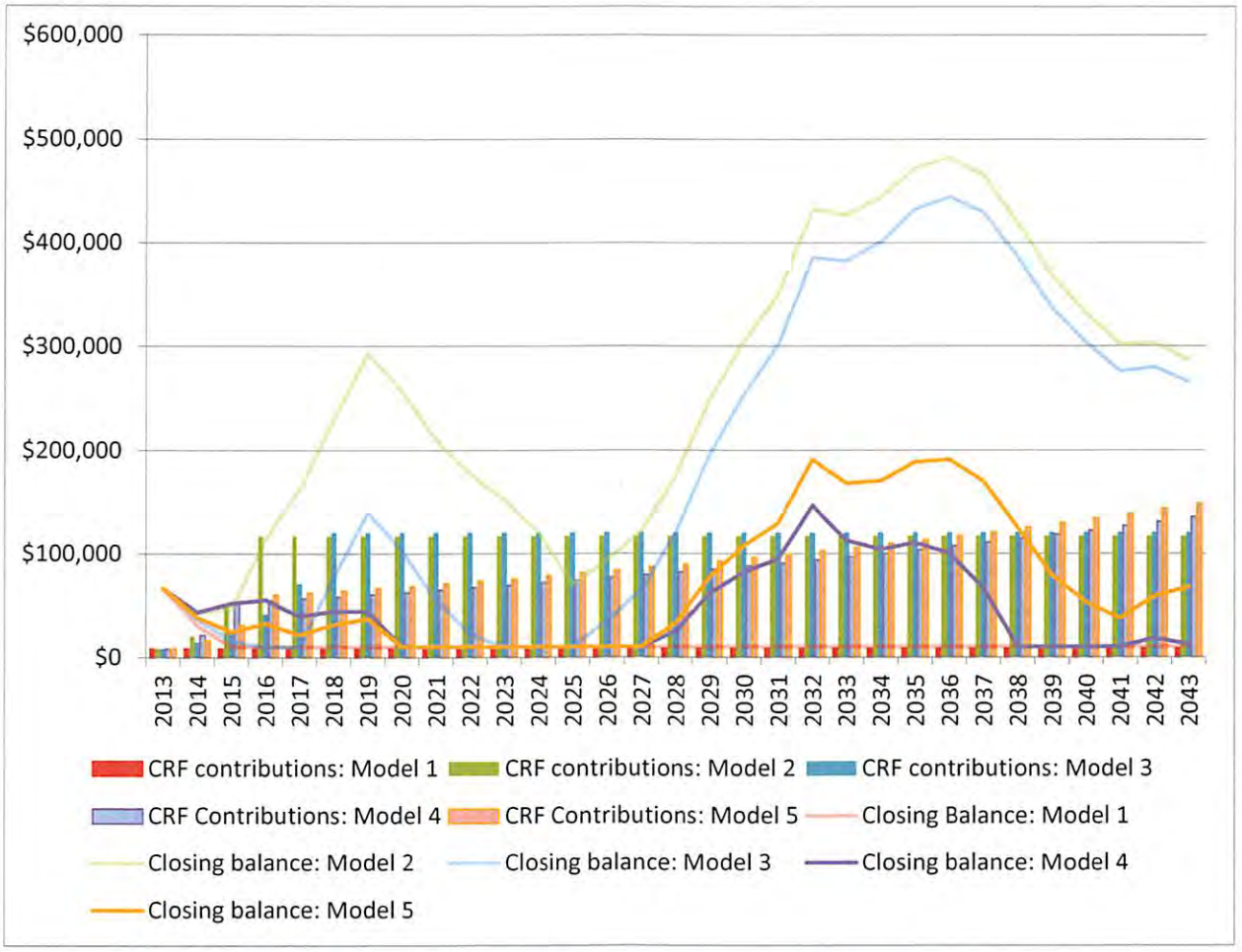


Figure 9: Comparison of CRF contributions and closing balances

Table 8: Summary of investment schedules

	Model 1: Current Model	Model 2: Early investment	Model 3: Delayed investment	Model 4: Capped Increase	Model 5: Capped Special Levies
Analysis for first 10 years					
Current CRF balance	$56,389	$56,389	$56,389	$56,389	$56,389
CRF contributions	$84,950	$899,858	$763,258	$508,615	$522,261
Investment returns	$7,708	$59,452	$33,369	$23,266	$21,279
Special levies	$699,515	$0	$7,943	$260,293	$248,633
Replacement expenses	$838,562	$838,562	$838,562	$838,562	$838,562
Financial strength	17%	100%	99%	69%	70%
Insufficiency	83%	0%	1%	31%	30%
Analysis for final 20 years					
Opening balance in year 11	$10,000	$177,137	$22,397	$10,000	$10,000
CRF contributions	$178,395	$2,466,132	$2,532,954	$2,077,288	$2,274,197
Investment returns	$9,710	$218,211	$190,383	$77,476	$102,854
Special levies	$2,386,689	$0	$95,066	$422,682	$255,388
Replacement expenses	$2,574,794	$2,574,794	$2,574,794	$2,574,794	$2,574,794
Financial strength	7%	100%	96%	84%	90%
Insufficiency	93%	0%	4%	16%	10%
Overall analysis (30-yr course)					
Opening balance in year 1	$56,389	$56,389	$56,389	$56,389	$56,389
CRF contributions	$263,345	$3,365,991	$3,296,212	$2,585,903	$2,796,458
Investment returns	$17,418	$277,663	$223,753	$100,742	$124,134
Special levies	$3,086,205	$0	$103,008	$682,974	$504,021
Replacement expenses	$3,413,357	$3,413,357	$3,413,357	$3,413,357	$3,413,357
Financial strength	10%	100%	97%	80%	85%
Insufficiency	90%	0%	3%	20%	15%
Closing balance in year 30	$10,000	$286,686	$266,005	$12,651	$67,645

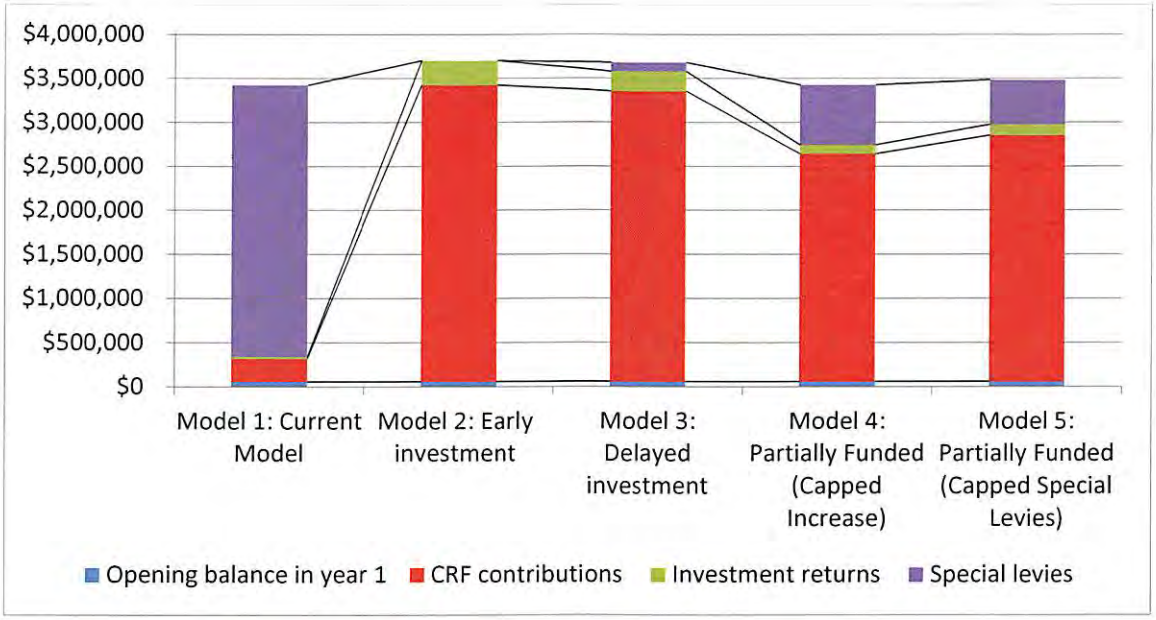


Figure 10: Comparison of financial models over 30-year projection

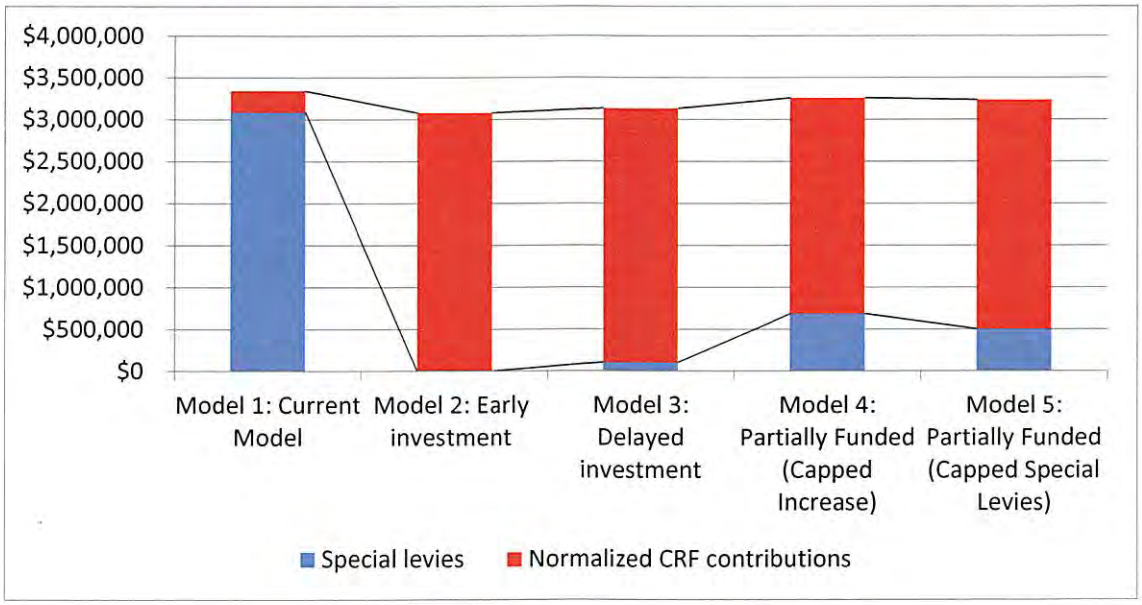


Figure 11: Normalized CRF contributions and special levies

From Table 8 and Figures 9, 10, and 11 above, it is apparent that Model 2, the early investment schedule, has the highest rate of investment returns after the 30-year projection, at $227,663. Though Model 2 requires a surge in CRF contributions over the next three years, the overall CRF contribution amount is still the lowest of all investment schedules (with normalized CRF contributions and special levies summed; see Figure 11).

5. Recommendations

Given the aforementioned scenarios, the adoption of Cash Flow Model 2, the delayed investment schedule, is the most recommended because it has the potential to lead to the greatest amount of investment returns. Investing in the CRF at the earliest possible time is recommended because a greater delay in investment may lead to lower potential income from investment returns.

Both Models 2 and 3 seek to minimize special levies via surges in CRF contributions within a short period of time. However, such rapid increases in CRF contributions may not be practical for the Strata Corporation. Hence, ABSSEI has included Models 4 and 5 to illustrate alternative scenarios involving both special levies and CRF contributions as funding means for the CRF. Furthermore, given the uncertainty within the projections themselves, special levies may be a necessity when funding for large scaled projects. The thresholds for CRF contributions and special levies will vary depending on the demographics and financial interests of the respective owners.

If the Strata Corporation has any additional concerns about the investment schedule, please do not hesitate to contact ABSSEI so that a more feasible and reasonable solution may be determined to suit your specific needs.

Appendix A – Strata Property Act

[SBC 1998] CHAPTER 43

Part 6 — Finances

Division 1 — Operating Fund and Contingency Reserve Fund

Depreciation report

94 (1) In this section, **"qualified person"** has the meaning set out in the regulations.

(2) Subject to subsection (3), a strata corporation must obtain from a qualified person, on or before the following dates, a depreciation report estimating the repair and replacement cost for major items in the strata corporation and the expected life of those items:

(a) for the first time,

(i) December 14, 2013, in the case of a strata corporation that existed on December 14, 2011, or

(ii) the prescribed date, in all other cases;

(b) if the strata corporation has, before or after the coming into force of this section, obtained a depreciation report that complies with the requirements of this section, the date that is the prescribed period after the date on which that report was obtained;

(c) if the strata corporation has, under subsection (3) (a), waived the requirement under this subsection to obtain a depreciation report, the date that is the prescribed period after the date on which the resolution waiving the requirement was passed.

(3) A strata corporation need not comply with the requirement under subsection (2) to obtain a depreciation report on or before a certain date if

(a) the strata corporation, by a resolution passed by a 3/4 vote at an annual or special general meeting within the prescribed period, waives that requirement, or

(b) the strata corporation is a member of a prescribed class of strata corporations.

(4) A depreciation report referred to in subsection (2) must contain the information set out in the regulations.

STRATA PROPERTY REGULATION

Part 6 — Finances

Contributions to contingency reserve fund

6.1 For the purposes of section 93 of the **Act**, the amount of the annual contribution to the contingency reserve fund for a fiscal year, other than the fiscal year following the first annual general meeting, must be determined as follows:

(a) if the amount of money in the contingency reserve fund at the end of any fiscal year after the first annual general meeting is less than 25% of the total amount budgeted for the contribution to the operating fund for the fiscal year that has just ended, the annual contribution to the contingency reserve fund for the current fiscal year must be at least the lesser of

(i) 10% of the total amount budgeted for the contribution to the operating fund for the current fiscal year, and

(ii) the amount required to bring the contingency reserve fund to at least 25% of the total amount budgeted for the contribution to the operating fund for the current fiscal year;

(b) if the amount of money in the contingency reserve fund at the end of any fiscal year after the first annual general meeting is equal to or greater than 25% of the total amount budgeted for the contribution to the operating fund for the fiscal year that has just ended, additional contributions to the contingency reserve fund may be made as part of the annual budget approval process after consideration of the depreciation report, if any, obtained under section 94 of the **Act**.

[en. B.C. Reg. 238/2011, Sch. 1, s. 2.]

Depreciation report

6.2 (1) For the purposes of section 94 of the **Act**, a depreciation report must include all of the following:

(a) a physical component inventory and evaluation that complies with subsection (2);

(b) a summary of repairs and maintenance work for common expenses respecting the items isted in subsection (2) (b) that usually occur less often than once a year or that do not usually occur;

(c) a financial forecasting section that complies with subsection (3);

(d) the name of the person from whom the depreciation report was obtained and a description of

(i) that person's qualifications,

(ii) the error and omission insurance, if any, carried by that person, and

(iii) the relationship between that person and the strata corporation;

(e) the date of the report;

(f) any other information or analysis that the strata corporation or the person providing the depreciation report considers appropriate.

(2) For the purposes of subsection (1) (a) and (b) of this section, the physical component inventory and evaluation must

(a) be based on an on-site visual inspection of the site and, where practicable, of the items listed in paragraph (b) conducted by the person preparing the depreciation report,

(b) include a description and estimated service life over 30 years of those items that comprise the common property, the common assets and those parts of a strata lot or limited common property, or both, that the strata corporation is responsible to maintain or repair under the **Act**, the strata corporation's bylaws or an agreement with an owner, including, but not limited to, the following items:

(i) the building's structure;

(ii) the building's exterior, including roofs, roof decks, doors, windows and skylights;

(iii) the building's systems, including the electrical, heating, plumbing, fire protection and security systems;

(iv) common amenities and facilities;

(v) parking facilities and roadways;

(vi) utilities, including water and sewage;

(vii) landscaping, including paths, sidewalks, fencing and irrigation;

(viii) interior finishes, including floor covering and furnishings;

(ix) green building components;

(x) balconies and patios, and

(c) identify common property and limited common property that the strata lot owner, and not the strata corporation, is responsible to maintain and repair.

(3) For the purposes of subsection (1) (c), the financial forecasting section must include

(a) the anticipated maintenance, repair and replacement costs for common expenses that usually occur less often than once a year or that do not usually occur, projected over 30 years, beginning with the current or previous fiscal year of the strata corporation, of the items listed in subsection (2) (b),

(b) a description of the factors and assumptions, including interest rates and rates of inflation, used to calculate the costs referred to in paragraph (a),

(c) a description of how the contingency reserve fund is currently being funded,

(d) the current balance of the contingency reserve fund minus any expenditures that have been approved but not yet taken from the fund, and

(e) at least 3 cash-flow funding models for the contingency reserve fund relating to the maintenance, repair and replacement over 30 years, beginning with the current or previous fiscal year of the strata corporation, of the items listed in subsection (2) (b).

(4) For the purposes of subsection (3) (e), the cash-flow funding models may include any one or more of the following:

(a) balances of, contributions to and withdrawals from the contingency reserve fund;

(b) special levies;

(c) borrowings.

(5) If a strata corporation contributes to the contingency reserve fund based on a depreciation report, the contributions in respect of an item become part of the contingency reserve fund and may be spent for any purpose permitted under section 96 of the **Act**.

(6) For the purposes of section 94 (1) of the **Act**, **"qualified person"** means any person who has the knowledge and expertise to understand the individual components, scope and complexity of the strata corporation's common property, common assets and those parts of a strata lot or limited common property, or both, that the strata corporation is responsible to maintain or repair under the **Act**, the strata corporation's bylaws or an agreement with an owner and to prepare a depreciation report that complies with subsections (1) to (4).

(7) The following periods are prescribed:

(a) for the purposes of section 94 (2) (b) of the **Act**, 3 years;

(b) for the purposes of section 94 (2) (c) of the **Act**, 18 months;

(c) for the purposes of section 94 (3) (a) of the **Act**, the one year period immediately preceding the date on or before which the depreciation report is required to be obtained.

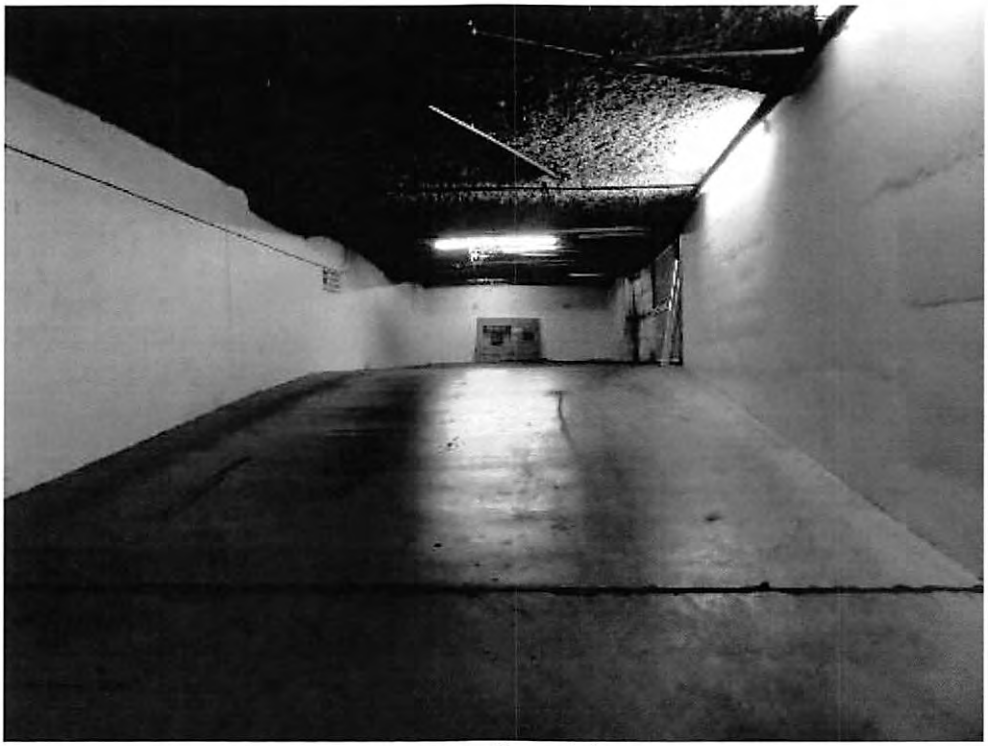
(8) A strata corporation is prescribed for the purposes of section 94 (3) (b) of the **Act** if and for so long as there are fewer than 5 strata lots in the strata plan.

[en. B.C. Reg. 238/2011, Sch. 1, s. 2.]

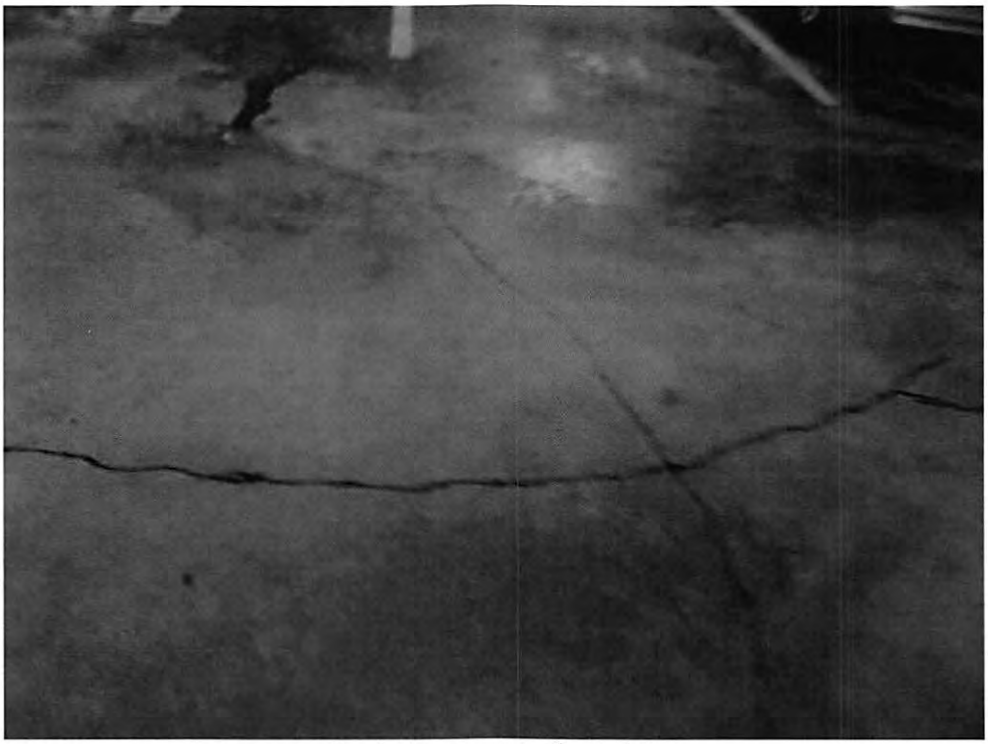
Appendix B – Component Data Sheets

Please note that the estimated year of repair/replacement noted in this section may vary from the dates noted in Appendix D – Replacement Schedule. The estimated costs have been distributed over the 30-year projection to optimize the financial models.

Reserve Component A103001	**Underground parkade**	
Properties	Concrete floor slab	
Potential Deterioration	Settlement over time due to grade changes can lead to cracks in the concrete floor. Prolonged load can also lead to extensive wear.	
Condition Analysis	***Deterioration***	Areas of abrasion on the floor slabs.
	Repair/Replacement History	N/A
	Overall Condition	Good
Life Cycle Analysis	***Date of Installation***	1993
	Chronological Age	20 years
	Estimated Useful Life	Building life
	Effective Age	20 years
	Remaining Useful Life	Building life
Replacement/Repair Estimates	***Current Repair/ Replacement Cost Estimate***	$ 20,000 (Repair costs approximated over 15 years)
	Estimated Year of Repair/Replacement	2015
Recommendations	None	
Preventive Maintenance	Sealant injections to repair minor cracks.	

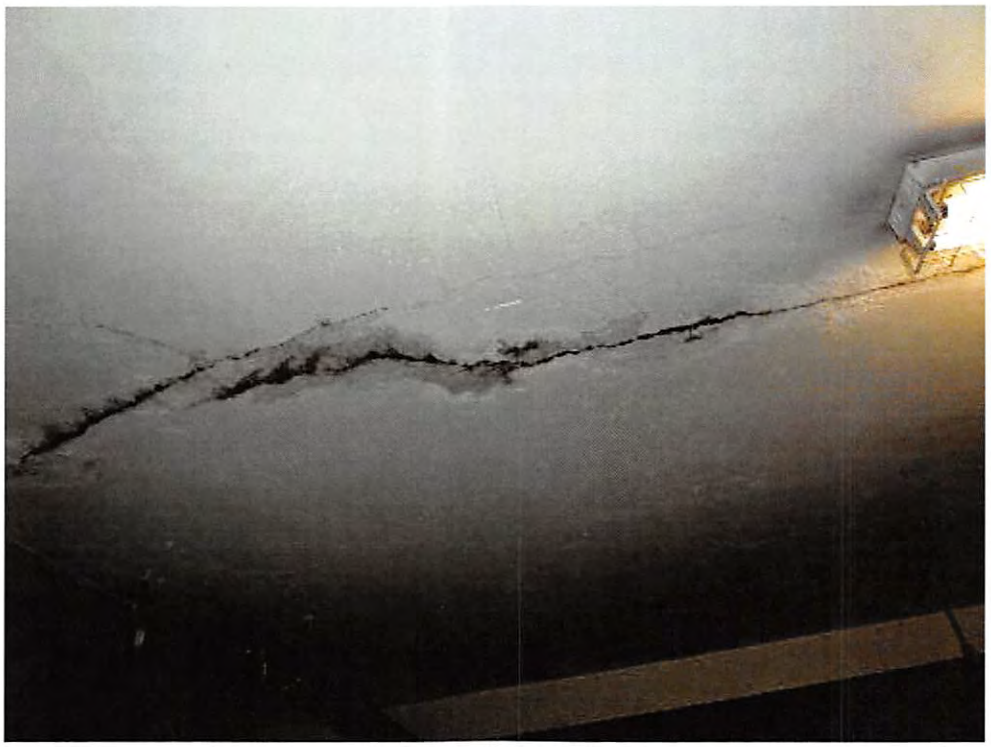


Concrete floor slab



Cracks in concrete floor slab

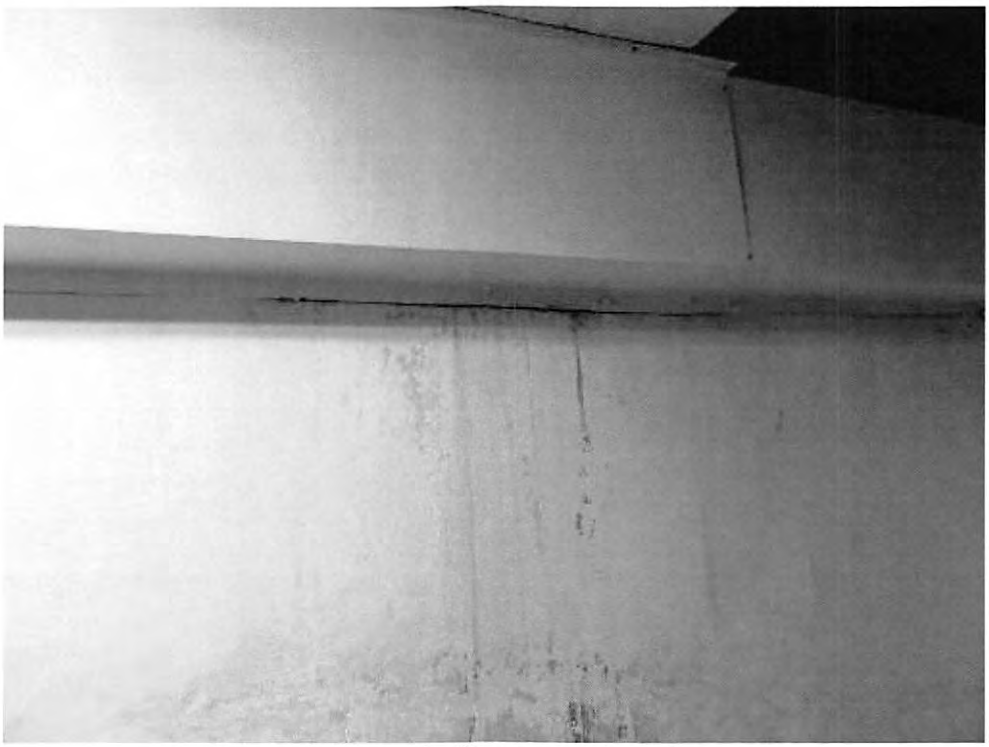
Reserve Component A103002	Underground parkade	
Properties	Concrete suspended slab	
Potential Deterioration	Settlement over time due to grade changes can lead to cracks in the roof slab.	
Condition Analysis	*Deterioration*	Water from planters may be leaking through cracks in P1 ceiling. Leaks were discovered under the electrical cable on P2.
	Repair/Replacement History	N/A
	Overall Condition	Good
Life Cycle Analysis	*Date of Installation*	1993
	Chronological Age	20 years
	Estimated Useful Life	Building life
	Effective Age	20 years
	Remaining Useful Life	Building life
Replacement/Repair Estimates	*Current Repair/ Replacement Cost Estimate*	Repair cost included with the concrete floor slab repair estimate.
	Estimated Year of Repair/Replacement	N/A
Recommendations	Repair all leaky cracks, waterproof planters.	
Preventive Maintenance	Sealant injections to repair minor cracks.	



Leaky cracks in ceiling

Leaky cracks in ceiling

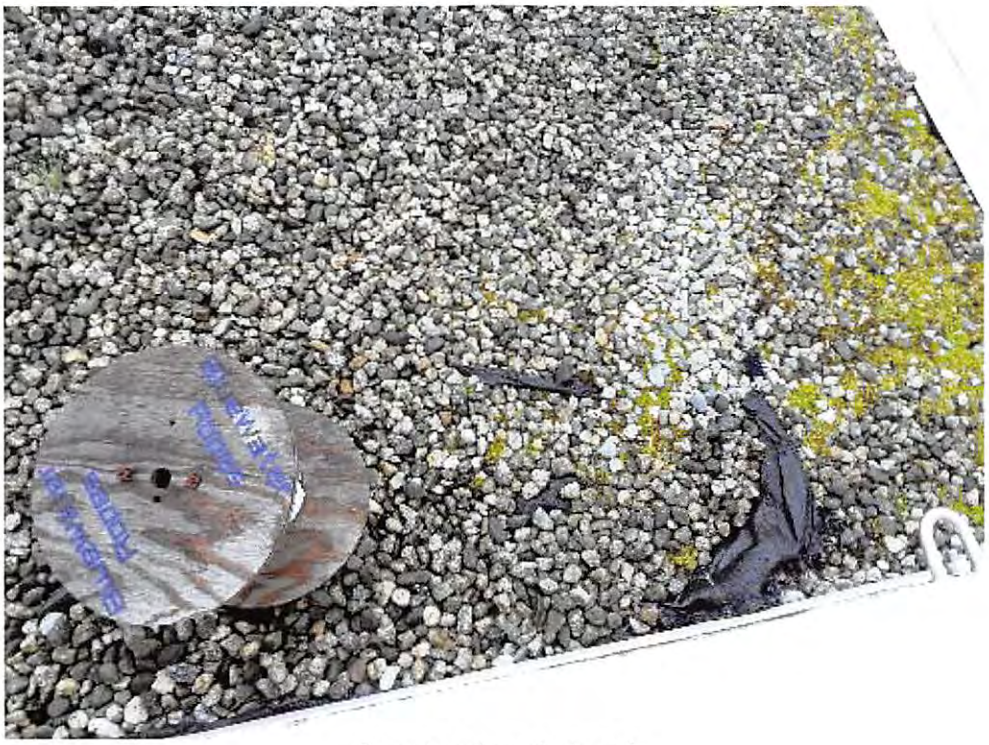
Reserve Component A103003	Underground parkade	
Properties	Concrete walls	
Potential Deterioration	Plantation and soil changes can lead to settling of the structure, causing cracks in the foundation over time. Cracks in concrete walls may lead to water penetration.	
Condition Analysis	***Deterioration***	Cracks and efflorescence were observed.
	Repair/Replacement History	N/A
	Overall Condition	Good
Life Cycle Analysis	***Date of Installation***	1993
	Chronological Age	20 years
	Estimated Useful Life	Building life
	Effective Age	20 years
	Remaining Useful Life	Building life
Replacement/Repair Estimates	***Current Repair/ Replacement Cost Estimate***	Repair cost included with the concrete floor slab repair estimate.
	Estimated Year of Repair/Replacement	N/A
Recommendations	None	
Preventive Maintenance	Sealant injections to repair minor cracks.	



Cracks and efflorescence in wall

Reserve Component B10100102	Roof deck	
Properties	Inverted roofing with gravel	
Potential Deterioration	Uneven distribution of gravel will lead to an uneven load distribution on the inverted roof, affecting membrane exposure to the elements.	
Condition Analysis	*Deterioration*	None
	Repair/Replacement History	N/A
	Overall Condition	
Life Cycle Analysis	*Date of Installation*	1993
	Chronological Age	20 years
	Estimated Useful Life	30 years
	Effective Age	20 years
	Remaining Useful Life	10 years
Replacement/Repair Estimates	*Current Repair/ Replacement Cost Estimate*	$ 20,537
	Estimated Year of Repair/Replacement	2023
Recommendations	None	
Preventive Maintenance	Annual inspection.	

Roof deck



Gravel on inverted roof

Reserve Component B10100103	Roof deck railings	
Properties	Concrete with stucco parapet	
Potential Deterioration	The junctions between the parapet wall and the building wall /balcony floor are prone to moisture ingress, which may cause premature deterioration of the building wall and balcony floor.	
Condition Analysis	***Deterioration***	Caulking is pulling away from flashings on the parapet walls
	Repair/Replacement History	N/A
	Overall Condition	Good
Life Cycle Analysis	***Date of Installation***	1993
	Chronological Age	20 years
	Estimated Useful Life	Building life
	Effective Age	20 years
	Remaining Useful Life	Building life
Replacement/Repair Estimates	***Current Repair/ Replacement Cost Estimate***	$ 10,000 (Repair costs approximated over 10 years)
	Estimated Year of Repair/Replacement	2020
Recommendations	Repair caulking at the bottom of concrete parapet. Treatment/sealing is required for rusty flashing at the top of parapet walls.	
Preventive Maintenance	Annual inspection and repair as needed.	

Concrete parapet wall with stucco

Reserve Component B10200101	Roofing	
Properties	Inverted roofing	
Potential Deterioration	The inverted roofing is exposed to various stresses and deterioration can occur after prolonged exposure to the elements.	
Condition Analysis	*Deterioration*	None observed
	Repair/Replacement History	N/A
	Overall Condition	Good
Life Cycle Analysis	*Date of Installation*	1993
	Chronological Age	20 years
	Estimated Useful Life	30 years
	Effective Age	21 years
	Remaining Useful Life	9 years
Replacement/Repair Estimates	*Current Repair/ Replacement Cost Estimate*	$ 22,396
	Estimated Year of Repair/Replacement	2022
Recommendations	N/A	
Preventive Maintenance	Inspect twice a year (spring and fall) and repair/replace any damage.	

Reserve Component B102010	Roof drainage	
Properties	Drain covers	
Potential Deterioration	Roof drains and baskets may be clogged by organic debris over time, leading to poor drainage on the roof.	
Condition Analysis	***Deterioration***	None observed
	Repair/Replacement History	N/A
	Overall Condition	Good
Life Cycle Analysis	***Date of Installation***	1993
	Chronological Age	20 years
	Estimated Useful Life	30 years
	Effective Age	21 years
	Remaining Useful Life	9 years
Replacement/Repair Estimates	***Current Repair/ Replacement Cost Estimate***	Replacement costs included in roof replacement estimate.
	Estimated Year of Repair/Replacement	2022
Recommendations	N/A	
Preventive Maintenance	Clean and remove debris once or twice a year.	

Reserve Component B20100101	Cladding	
Properties	Brick veneer	
Potential Deterioration	Expansion and contraction, wind erosion, settlement and other factors can lead to deterioration of brick masonry. Sometimes, brick motar can also deteriorate after prolonged exposure to the elements. Cracking, bulging and spalling are often indicative of defective window installation and water ingress problems.	
Condition Analysis	***Deterioration***	None observed
	Repair/Replacement History	N/A
	Overall Condition	Good
Life Cycle Analysis	***Date of Installation***	1993
	Chronological Age	20 years
	Estimated Useful Life	40 years
	Effective Age	5 years
	Remaining Useful Life	35 years
Replacement/Repair Estimates	***Current Repair/ Replacement Cost Estimate***	$ 260,000
	Estimated Year of Repair/Replacement	2048
Recommendations	N/A	
Preventive Maintenance	Clean with water every 5 years; apply masonry sealant every 6 years; repoint mortar every 15 years.	

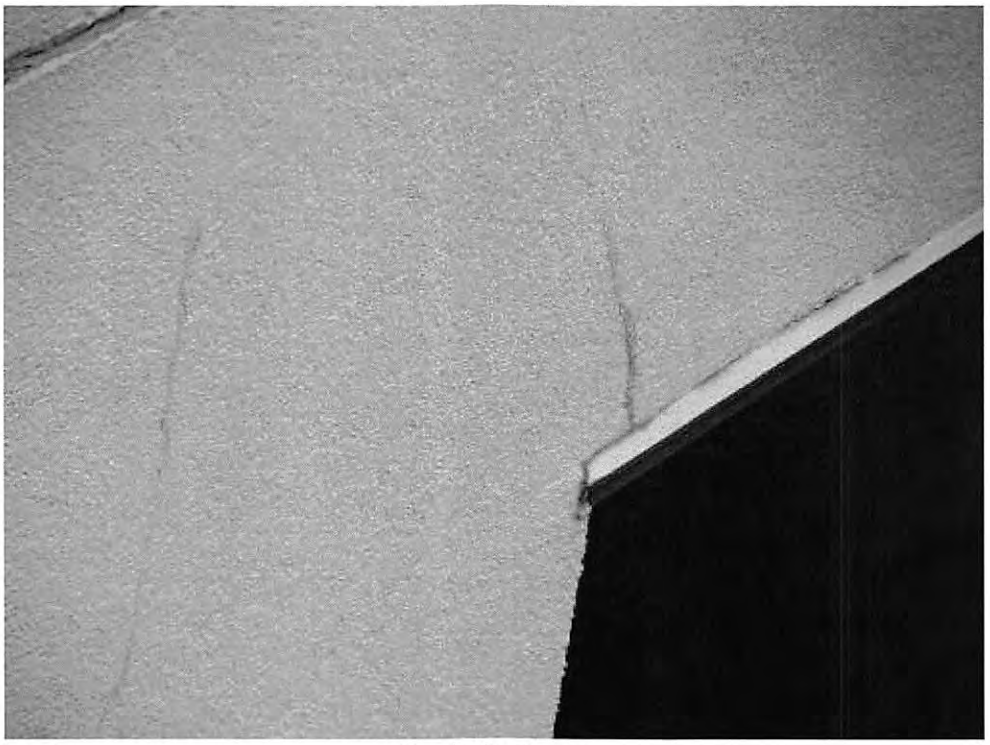
Brick veneer cladding

Brick veneer cladding

Reserve Component B20100102	Cladding	
Properties	Stucco	
Potential Deterioration	Internal or external stresses may cause cracks in stucco. If water intrusion occurs through cracks, damage will occur on building envelope components.	
Condition Analysis	***Deterioration***	Cracks were noted within the stucco.
	Repair/Replacement History	N/A
	Overall Condition	Good
Life Cycle Analysis	***Date of Installation***	1993
	Chronological Age	20 years
	Estimated Useful Life	30 years
	Effective Age	10 years
	Remaining Useful Life	20 years
Replacement/Repair Estimates	***Current Repair/ Replacement Cost Estimate***	$ 200,000*
	Estimated Year of Repair/Replacement	2033
Recommendations	Repairs in local areas are required. Stucco require painting within 5 years. A building envelope condition assessment is recommended in the next year.	
Preventive Maintenance	Clean with non-pressurized water or stucco-friendly solution every 2 years. Repaint surface to protect stucco.	

*Exact costs will depend on the extent of replacement and the recommendations within the condition assessment.

Stucco cladding



Cracks in stucco

Reserve Component B20100102	Cladding	
Properties	Granite tiles	
Potential Deterioration	Internal or external stresses may cause cracks in the granite.	
Condition Analysis	*Deterioration*	None observed
	Repair/Replacement History	N/A
	Overall Condition	Good
Life Cycle Analysis	*Date of Installation*	1993
	Chronological Age	20 years
	Estimated Useful Life	Building life
	Effective Age	20 years
	Remaining Useful Life	Building life
Replacement/Repair Estimates	*Current Repair/ Replacement Cost Estimate*	$ 10,000 (20% repair costs approximated over 10 years)
	Estimated Year of Repair/Replacement	2028
Recommendations	N/A	
Preventive Maintenance	Clean regularly.	

Granite tiles

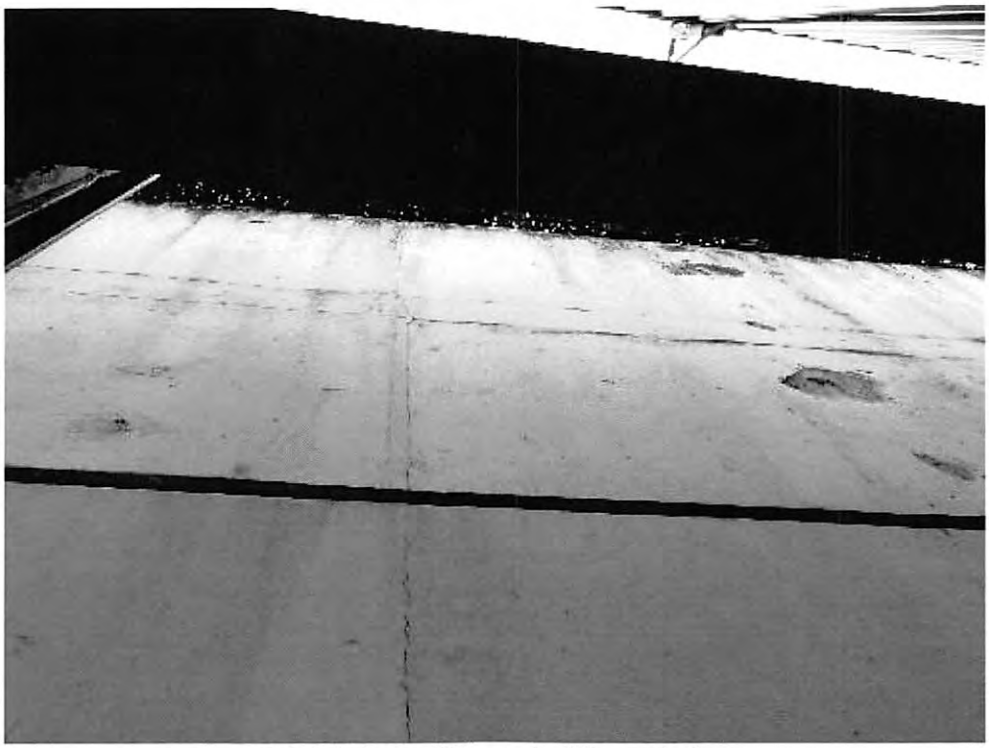
Granite tiles

Reserve Component B201002	Caulking	
Properties	Polyurethane caulking	
Potential Deterioration	Over prolonged exposure to the elements, the caulking may lose elasticity after multiple expansion/contraction cycles. The hardening of caulking leads to a lower tensile strength and may cause it to crack or pull away from the substrate. Long-term exposure to sunlight also causes caulking to fade in colour.	
Condition Analysis	*Deterioration*	Caulking has lost elasticity and is cracking.
	Repair/Replacement History	N/A
	Overall Condition	Poor
Life Cycle Analysis	*Date of Installation*	1993
	Chronological Age	20 years
	Estimated Useful Life	8 years
	Effective Age	7 years
	Remaining Useful Life	1 years
Replacement/Repair Estimates	*Current Repair/ Replacement Cost Estimate*	$ 77,960
	Estimated Year of Repair/Replacement	2014
Recommendations	Caulking should be redone within the next two years.	
Preventive Maintenance	Annual inspection.	

Caulking

Cracked caulking

Reserve Component B201011	Exterior painting	
Properties	Acrylic paint	
Potential Deterioration	Over prolonged exposure to the elements, the stain may peel or fade. Rusting of metal components on surface may further deteriorate the finish.	
Condition Analysis	*Deterioration*	Paint peeling away from the concrete.
	Repair/Replacement History	Exteriors repainted in 2001.
	Overall Condition	Fair
Life Cycle Analysis	*Date of Installation*	1993
	Chronological Age	20 years
	Estimated Useful Life	8 years
	Effective Age	6 years
	Remaining Useful Life	2 years
Replacement/Repair Estimates	*Current Repair/ Replacement Cost Estimate*	$ 25,000
	Estimated Year of Repair/Replacement	2015
Recommendations	Exterior painting is required in 3 years.	
Preventive Maintenance	Clean annually.	



Paint deterioration on building exterior

Reserve Component B20200101	Windows (frames)	
Properties	Aluminum-framed double glazed units	
Potential Deterioration	Building settlement may lead to the distortion of window frames, which may cause difficulties in opening and closing the windows.	
Condition Analysis	*Deterioration*	None observed
	Repair/Replacement History	N/A
	Overall Condition	Good
Life Cycle Analysis	*Date of Installation*	1993
	Chronological Age	20 years
	Estimated Useful Life	30 years
	Effective Age	21 years
	Remaining Useful Life	9 years
Replacement/Repair Estimates	*Current Repair/ Replacement Cost Estimate*	$ 537,240
	Estimated Year of Repair/Replacement	2022
Recommendations	N/A	
Preventive Maintenance	Annual washing.	

Exterior windows

Reserve Component B202011	Windows (glazing)	
Properties	Aluminum-framed double glazed units	
Potential Deterioration	The seals of the exterior windows may deteriorate over time, decreasing energy efficiency or causing potential failure of seals, leading to fogging of windows. Constant exposure to water can also cause oxidation to metallic parts around windows and discolouration or cause staining. Dirt in window sills may also make closing difficult.	
Condition Analysis	***Deterioration***	Some failed seals.
	Repair/Replacement History	N/A
	Overall Condition	Fair
Life Cycle Analysis	***Date of Installation***	1993
	Chronological Age	20 years
	Estimated Useful Life	15 years
	Effective Age	6 years
	Remaining Useful Life	9 years
Replacement/Repair Estimates	***Current Repair/ Replacement Cost Estimate***	$ 268,620
	Estimated Year of Repair/Replacement	2037 (Glazing replaced 15 years after installation of new windows)
Recommendations	Replace glazing where seals failed.	
Preventive Maintenance	Annual washing.	

Reserve Component B20300101	Main doors	
Properties	Aluminum and glass	
Potential Deterioration	Deterioration of main entrance doors mainly concerns aesthetic appeal.	
Condition Analysis	*Deterioration*	None observed
	Repair/Replacement History	N/A
	Overall Condition	Good
Life Cycle Analysis	*Date of Installation*	1993
	Chronological Age	20 years
	Estimated Useful Life	50 years
	Effective Age	21 years
	Remaining Useful Life	29 years
Replacement/Repair Estimates	*Current Repair/ Replacement Cost Estimate*	$ 10,490
	Estimated Year of Repair/Replacement	2042
Recommendations	N/A	
Preventive Maintenance	Regular cleaning.	

Main entrance doors

Reserve Component B20300102	Egress doors	
Properties	Metal fire doors	
Potential Deterioration	Egress doors are exposed to the elements and prone to rusting.	
Condition Analysis	*Deterioration*	None observed
	Repair/Replacement History	N/A
	Overall Condition	Good
Life Cycle Analysis	*Date of Installation*	1993
	Chronological Age	20 years
	Estimated Useful Life	50 years
	Effective Age	20 years
	Remaining Useful Life	30 years
Replacement/Repair Estimates	*Current Repair/ Replacement Cost Estimate*	$ 3,200
	Estimated Year of Repair/Replacement	2043
Recommendations	N/A	
Preventive Maintenance	Annual inspection.	

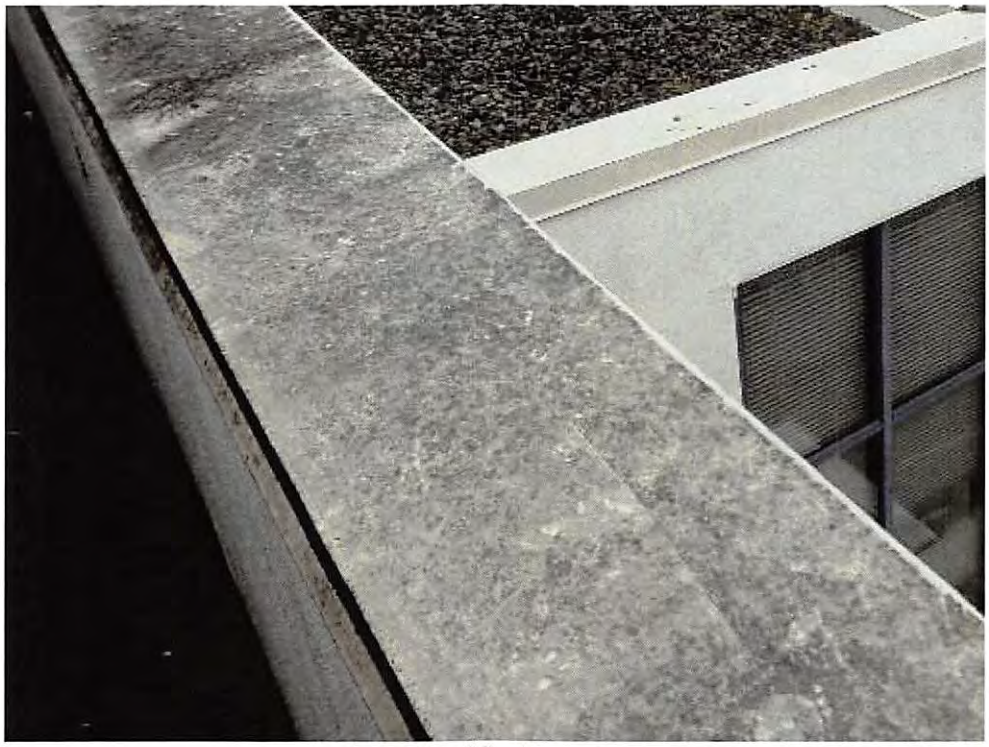
Egress door

Reserve Component B20300103	Sliding doors	
Properties	Aluminum framed, double glazed sliding doors	
Potential Deterioration	Dirt and debris may become trapped in sills, leading to difficulties opening. Settling over time can cause distortion of door frame, which also leads to difficulties opening. Seals between the glass may fail, leading to a loss of energy efficiency.	
Condition Analysis	*Deterioration*	None observed
	Repair/Replacement History	Some rollers and glazing replaced for sliding door in exercise room.
	Overall Condition	Good
Life Cycle Analysis	*Date of Installation*	1993
	Chronological Age	20 years
	Estimated Useful Life	30 years
	Effective Age	20 years
	Remaining Useful Life	10 years
Replacement/Repair Estimates	*Current Repair/ Replacement Cost Estimate*	$ 15,000 (Repair costs approximated over 8 years)
	Estimated Year of Repair/Replacement	2023
Recommendations	N/A	
Preventive Maintenance	Annual inspection and cleaning.	

Sliding door

Reserve Component B203002	Exterior unit doors	
Properties	Alumimum glass swinging entrance doors	
Potential Deterioration	Deterioration of main entrance doors mainly concerns aesthetic appeal.	
Condition Analysis	*Deterioration*	None observed
	Repair/Replacement History	N/A
	Overall Condition	Excellent
Life Cycle Analysis	*Date of Installation*	1993
	Chronological Age	20 years
	Estimated Useful Life	30 years
	Effective Age	15 years
	Remaining Useful Life	15 years
Replacement/Repair Estimates	*Current Repair/ Replacement Cost Estimate*	$ 3,473
	Estimated Year of Repair/Replacement	2028
Recommendations	N/A	
Preventive Maintenance	Regular cleaning.	

Reserve Component B301004	Flashings	
Properties	Metal flashing	
Potential Deterioration	Metal flashing may be affected by corrosion due to exposure to the elements. Furthermore, strong winds may dislodge flashing that is improperly secured.	
Condition Analysis	***Deterioration***	Flashings around first floor sloped negatively, directing water towards the building. Caulking in between flashing joints have deteriorated.
	Repair/Replacement History	N/A
	Overall Condition	Fair
Life Cycle Analysis	***Date of Installation***	1993
	Chronological Age	20 years
	Estimated Useful Life	30 years
	Effective Age	21 years
	Remaining Useful Life	9 years
Replacement/Repair Estimates	***Current Repair/ Replacement Cost Estimate***	$ 9,040
	Estimated Year of Repair/Replacement	2022
Recommendations	Roof parapet flashings are rusty and should be painted or replaced.	
Preventive Maintenance	Inspect twice a year (spring and fall) and repair/replace any damage.	



Roof flashing

Rusty flashing on parapet wall

Reserve Component C102001	Interior unit doors	
Properties	Hollow wood doors	
Potential Deterioration	Deterioration mostly concerns loss of aesthetic appeal.	
Condition Analysis	*Deterioration*	None observed
	Repair/Replacement History	N/A
	Overall Condition	Good
Life Cycle Analysis	*Date of Installation*	1993
	Chronological Age	20 years
	Estimated Useful Life	50 years
	Effective Age	20 years
	Remaining Useful Life	30 years
Replacement/Repair Estimates	*Current Repair/ Replacement Cost Estimate*	$ 8,500
	Estimated Year of Repair/Replacement	2043
Recommendations	N/A	
Preventive Maintenance	Wipe down once a month; inspect every 6 months.	

Interior unit door

Reserve Component C102006	Service doors	
Properties	Metal fire doors	
Potential Deterioration	Deterioration mostly concerns loss of aesthetic appeal.	
Condition Analysis	*Deterioration*	None observed
	Repair/Replacement History	N/A
	Overall Condition	Good
Life Cycle Analysis	*Date of Installation*	1993
	Chronological Age	20 years
	Estimated Useful Life	50 years
	Effective Age	21 years
	Remaining Useful Life	29 years
Replacement/Repair Estimates	*Current Repair/ Replacement Cost Estimate*	$ 9,000
	Estimated Year of Repair/Replacement	2042
Recommendations	N/A	
Preventive Maintenance	Regular cleaning.	

Service door

Reserve Component C201001	Interior stairs	
Properties	Concrete	
Potential Deterioration	Settlement may cause cracks in the concrete.	
Condition Analysis	*Deterioration*	Settlement has led to cracks within stairs.
	Repair/Replacement History	N/A
	Overall Condition	Good
Life Cycle Analysis	*Date of Installation*	1993
	Chronological Age	20 years
	Estimated Useful Life	Building life
	Effective Age	20 years
	Remaining Useful Life	Building life
Replacement/Repair Estimates	*Current Repair/ Replacement Cost Estimate*	$ 10,000 (Repair costs approximated over 15 years)
	Estimated Year of Repair/Replacement	2018
Recommendations	Repair cracks.	
Preventive Maintenance	Clean regularly. Repair as needed.	

Cracks in stairs

Cracking in stairs

Reserve Component C202001	Stair railings	
Properties	Metal railings	
Potential Deterioration	Deterioration mostly concerns the decrease in aesthetic appeal over time.	
Condition Analysis	*Deterioration*	Railings damaged in concrete stairwell leading to pizza shop.
	Repair/Replacement History	N/A
	Overall Condition	Fair
Life Cycle Analysis	*Date of Installation*	1993
	Chronological Age	20 years
	Estimated Useful Life	Building life
	Effective Age	20 years
	Remaining Useful Life	Building life
Replacement/Repair Estimates	*Current Repair/ Replacement Cost Estimate*	$ 9,870
	Estimated Year of Repair/Replacement	2015
Recommendations	Repairs are recommended.	
Preventive Maintenance	Inspect every two years.	

Stair railings

Reserve Component C301002	Wall finishes	
Properties	Interior acrylic paint	
Potential Deterioration	Paint may fade or peel over long periods of time.	
Condition Analysis	*Deterioration*	None available
	Repair/Replacement History	N/A
	Overall Condition	Good
Life Cycle Analysis	*Date of Installation*	2010
	Chronological Age	3 years
	Estimated Useful Life	10 years
	Effective Age	3 years
	Remaining Useful Life	7 years
Replacement/Repair Estimates	*Current Repair/ Replacement Cost Estimate*	$ 17,912
	Estimated Year of Repair/Replacement	2020
Recommendations	N/A	
Preventive Maintenance	Clean annually.	

Reserve Component C302004	Floor finishes	
Properties	Tile	
Potential Deterioration	Prolonged wear and tear deteriorates the tiles and grouting. Extensive deterioration may lead to water penetration and damage.	
Condition Analysis	***Deterioration***	None observed
	Repair/Replacement History	N/A
	Overall Condition	Good
Life Cycle Analysis	***Date of Installation***	2010
	Chronological Age	3 years
	Estimated Useful Life	30 years
	Effective Age	3 years
	Remaining Useful Life	27 years
Replacement/Repair Estimates	***Current Repair/ Replacement Cost Estimate***	$ 2,295
	Estimated Year of Repair/Replacement	2040
Recommendations	N/A	
Preventive Maintenance	Regular cleaning.	

Tile flooring

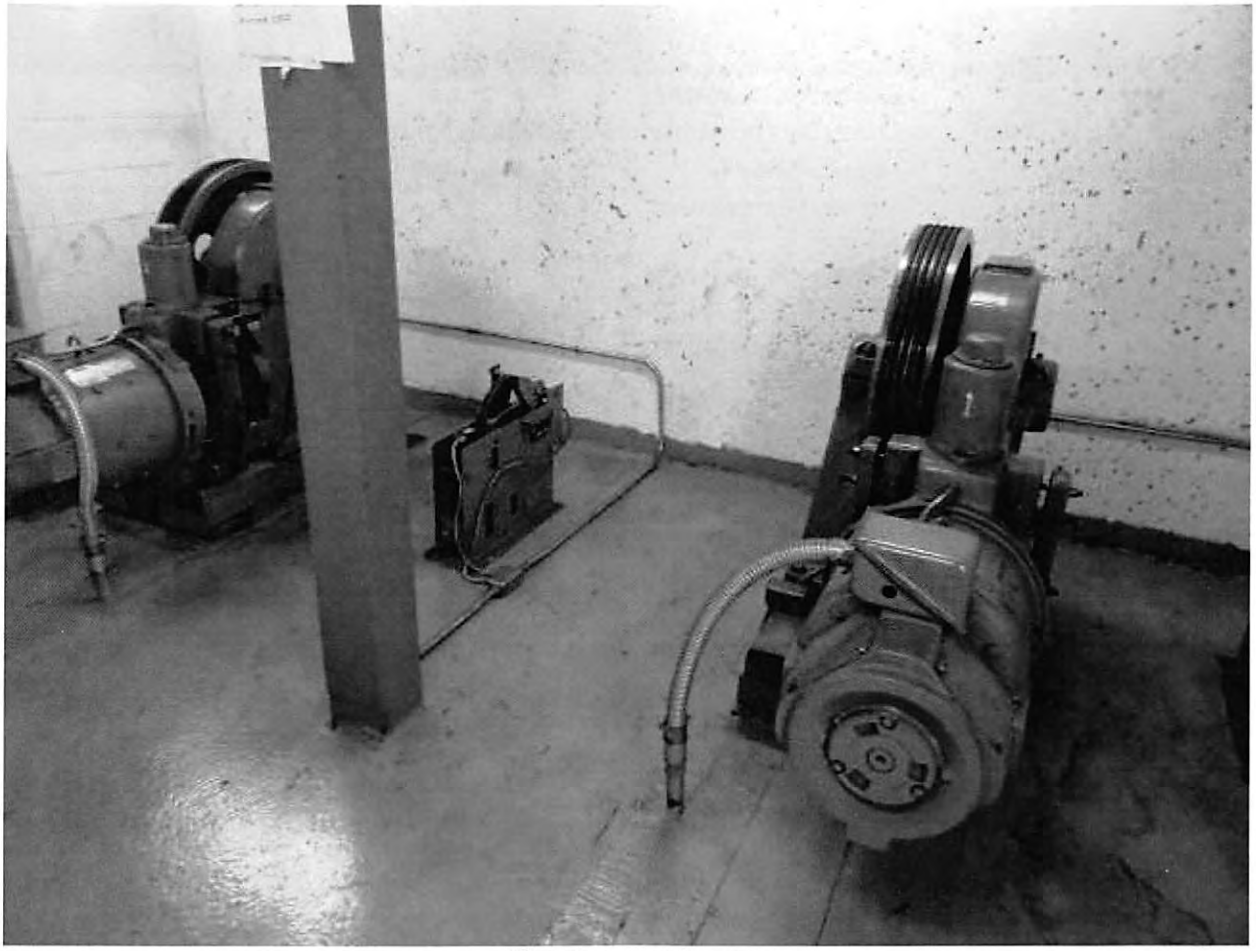
Reserve Component C302005	Floor finishes	
Properties	Carpet	
Potential Deterioration	Depending on load, the carpeting in the hallways may be damaged, stained or worn.	
Condition Analysis	*Deterioration*	
	Repair/Replacement History	
	Overall Condition	
Life Cycle Analysis	*Date of Installation*	1993
	Chronological Age	20 years
	Estimated Useful Life	12 years
	Effective Age	0 years
	Remaining Useful Life	12 years
Replacement/Repair Estimates	*Current Repair/ Replacement Cost Estimate*	$ 11,561
	Estimated Year of Repair/Replacement	2025
Recommendations		
Preventive Maintenance	Restorative cleaning annually or once every two years.	

Reserve Component C303001	Ceiling surfaces	
Properties	Painted ceilings	
Potential Deterioration	Paint may fade or peel over long periods of time.	
Condition Analysis	*Deterioration*	None observed
	Repair/Replacement History	N/A
	Overall Condition	Good
Life Cycle Analysis	*Date of Installation*	1993
	Chronological Age	20 years
	Estimated Useful Life	27 years
	Effective Age	21 years
	Remaining Useful Life	6 years
Replacement/Repair Estimates	*Current Repair/ Replacement Cost Estimate*	$ 1,797
	Estimated Year of Repair/Replacement	2019
Recommendations	N/A	
Preventive Maintenance	Regular cleaning.	

Reserve Component D10100101	Elevator	
Properties	Cab	
Potential Deterioration	Elevator cab may be damaged by moving large objects in and out. Vandalism and wear and tear are the main causes for deterioration for the elevator cab.	
Condition Analysis	***Deterioration***	None observed
	Repair/Replacement History	N/A
	Overall Condition	Good
Life Cycle Analysis	***Date of Installation***	1993
	Chronological Age	20 years
	Estimated Useful Life	30 years
	Effective Age	21 years
	Remaining Useful Life	9 years
Replacement/Repair Estimates	***Current Repair/ Replacement Cost Estimate***	$ 20,000
	Estimated Year of Repair/Replacement	2022
Recommendations	N/A	
Preventive Maintenance	Regular cleaning.	

Elevators

Reserve Component D10100102	Elevator	
Properties	Machinery	
Potential Deterioration	Conveying components are subject to electrical and mechanical failures as the equipment ages.	
Condition Analysis	***Deterioration***	None observed
	Repair/Replacement History	N/A
	Overall Condition	Good
Life Cycle Analysis	***Date of Installation***	1993
	Chronological Age	20 years
	Estimated Useful Life	30 years
	Effective Age	20 years
	Remaining Useful Life	10 years
Replacement/Repair Estimates	***Current Repair/ Replacement Cost Estimate***	$ 60,000 (Repair costs approximated over 20 years)
	Estimated Year of Repair/Replacement	2022
Recommendations	N/A	
Preventive Maintenance	Motor rewinding or replacement of control devices.	



Elevator machinery

Reserve Component D10100103	Elevator	
Properties	Controller/Dispatcher	
Potential Deterioration	Controllers are subject to electrical failures.	
Condition Analysis	*Deterioration*	None observed
	Repair/Replacement History	N/A
	Overall Condition	Fair
Life Cycle Analysis	*Date of Installation*	1993
	Chronological Age	20 years
	Estimated Useful Life	25 years
	Effective Age	21 years
	Remaining Useful Life	4 years
Replacement/Repair Estimates	*Current Repair/ Replacement Cost Estimate*	$ 5,000 (Repair costs approximated over 15 years)
	Estimated Year of Repair/Replacement	2017
Recommendations	N/A	
Preventive Maintenance	Inspect annually.	

Reserve Component D10102101	Elevator - shaftways	
Properties	Shaftway Doors	
Potential Deterioration	Shaftway doors are subject to mechanical failures.	
Condition Analysis	*Deterioration*	None observed
	Repair/Replacement History	N/A
	Overall Condition	Good
Life Cycle Analysis	*Date of Installation*	1993
	Chronological Age	20 years
	Estimated Useful Life	30 years
	Effective Age	21 years
	Remaining Useful Life	9 years
Replacement/Repair Estimates	*Current Repair/ Replacement Cost Estimate*	$ 10,000 (Repair costs approximated over 15 years)
	Estimated Year of Repair/Replacement	2022
Recommendations	N/A	
Preventive Maintenance	Inspect annually.	

Reserve Component D10102102	Elevator - shaftways	
Properties	Hoist Rails, Cables, Traveling Equipment	
Potential Deterioration	Conveying components are subject to mechanical failures after prolonged use.	
Condition Analysis	*Deterioration*	None observed
	Repair/Replacement History	N/A
	Overall Condition	Good
Life Cycle Analysis	*Date of Installation*	1993
	Chronological Age	20 years
	Estimated Useful Life	25 years
	Effective Age	18 years
	Remaining Useful Life	7 years
Replacement/Repair Estimates	*Current Repair/ Replacement Cost Estimate*	$ 25,000 (Repair costs approximated over 15 years)
	Estimated Year of Repair/Replacement	2020
Recommendations	N/A	
Preventive Maintenance	Inspect annually.	

Reserve Component D203004	Sanitary Waste and Vent System	
Properties	N/A	
Potential Deterioration	Over time, as the building ages, there could be seizing and leakage of valves. Impurities in the water and currents may lead to corrosion, pitting and erosion and/or embrittlement of piping.	
Condition Analysis	***Deterioration***	None observed
	Repair/Replacement History	N/A
	Overall Condition	Good
Life Cycle Analysis	***Date of Installation***	1993
	Chronological Age	20 years
	Estimated Useful Life	Building life
	Effective Age	20 years
	Remaining Useful Life	Building life
Replacement/Repair Estimates	***Current Repair/ Replacement Cost Estimate***	$ 5,000 (Repair costs approximated over 10 years)
	Estimated Year of Repair/Replacement	2019
Recommendations	N/A	
Preventive Maintenance	Inspect annually.	

Reserve Component D302001	Boilers, with Insulation, Piping, Controls & Flue	
Properties	Oil Gas or Dual-fuel-fired Package, High MBH	
Potential Deterioration	Boiler interior components are prone to corrosion and other forms of deterioration due to the high temperatures and impurities in the water. Heat exchangers, tubes and pipes may also suffer cracking, erosion or clogging due to deposits in the water accumulating over long periods of time. Vents may also corrode with the passage of moist air.	
Condition Analysis	*Deterioration*	None observed
	Repair/Replacement History	N/A
	Overall Condition	Good
Life Cycle Analysis	*Date of Installation*	2009
	Chronological Age	4 years
	Estimated Useful Life	40 years
	Effective Age	2 years
	Remaining Useful Life	38 years
Replacement/Repair Estimates	*Current Repair/ Replacement Cost Estimate*	$ 30,000
	Estimated Year of Repair/Replacement	2051
Recommendations	N/A	
Preventive Maintenance	Annual inspection.	

Boiler

Reserve Component D302001	Hot water tanks	
Properties	Indirectly fired hot water tanks	
Potential Deterioration	Interior components are prone to corrosion and other forms of deterioration due to the high temperatures and impurities in the water.	
Condition Analysis	*Deterioration*	None observed
	Repair/Replacement History	N/A
	Overall Condition	Good
Life Cycle Analysis	*Date of Installation*	1998
	Chronological Age	15 years
	Estimated Useful Life	15 years
	Effective Age	12 years
	Remaining Useful Life	3 years
Replacement/Repair Estimates	*Current Repair/ Replacement Cost Estimate*	$ 12,000
	Estimated Year of Repair/Replacement	2016
Recommendations	N/A	
Preventive Maintenance	Annual inspection.	

Hot water tanks

Hot water tank detail

Reserve Component D304004	Hot and Cold Water Distribution	
Properties	N/A	
Potential Deterioration	Over time, as the building ages, there could be seizing and leakage of valves. Impurities in the water and currents may lead to corrosion, pitting and erosion and/or embrittlement of piping. Soil settlement may also lead to the breakage and detachment of piping connections	
Condition Analysis	***Deterioration***	None observed
	Repair/Replacement History	N/A
	Overall Condition	Good
Life Cycle Analysis	***Date of Installation***	2011
	Chronological Age	2 years
	Estimated Useful Life	Building life
	Effective Age	2 years
	Remaining Useful Life	Building life
Replacement/Repair Estimates	***Current Repair/ Replacement Cost Estimate***	$ 10,000 (Repair costs approximated over 10 years)
	Estimated Year of Repair/Replacement	2019
Recommendations	Plumbing inspection is recommended.	
Preventive Maintenance	Annual inspection.	

Reserve Component D309007	HVAC	
Properties	Make up air unit	
Potential Deterioration	Dust particles accumulated over time may affect the efficiency of the fan. Over time, mechanical components of the fan may be prone to failure.	
Condition Analysis	***Deterioration***	None observed
	Repair/Replacement History	N/A
	Overall Condition	Good
Life Cycle Analysis	***Date of Installation***	1993
	Chronological Age	20 years
	Estimated Useful Life	20 years
	Effective Age	10 years
	Remaining Useful Life	10 years
Replacement/Repair Estimates	***Current Repair/ Replacement Cost Estimate***	$ 9,151
	Estimated Year of Repair/Replacement	2023
Recommendations	N/A	
Preventive Maintenance	Annual inspection; repair/replace, lubricate, re-align components as necessary.	

Make-up air unit

Reserve Component D402002	Fire Pumps	
Properties	N/A	
Potential Deterioration	N/A	
Condition Analysis	*Deterioration*	None observed
	Repair/Replacement History	N/A
	Overall Condition	Good
Life Cycle Analysis	*Date of Installation*	1993
	Chronological Age	20 years
	Estimated Useful Life	30 years
	Effective Age	21 years
	Remaining Useful Life	9 years
Replacement/Repair Estimates	*Current Repair/ Replacement Cost Estimate*	$ 5,000
	Estimated Year of Repair/Replacement	2022
Recommendations	N/A	
Preventive Maintenance	Annual inspection.	

Reserve Component D409000	Fire Suppression	
Properties	N/A	
Potential Deterioration	N/A	
Condition Analysis	*Deterioration*	None observed
	Repair/Replacement History	N/A
	Overall Condition	Good
Life Cycle Analysis	*Date of Installation*	1993
	Chronological Age	20 years
	Estimated Useful Life	50 years
	Effective Age	21 years
	Remaining Useful Life	29 years
Replacement/Repair Estimates	*Current Repair/ Replacement Cost Estimate*	$ 5,000
	Estimated Year of Repair/Replacement	2042
Recommendations	N/A	
Preventive Maintenance	Annual inspection.	

Reserve Component D409002	Emergency generator	
Properties	N/A	
Potential Deterioration	Electric generator experiences mechanical, electrical and thermal stress which may lead to its failure.	
Condition Analysis	***Deterioration***	Rusting in the exhaust of the emergency generator.
	Repair/Replacement History	N/A
	Overall Condition	Good
Life Cycle Analysis	***Date of Installation***	1993
	Chronological Age	20 years
	Estimated Useful Life	50 years
	Effective Age	21 years
	Remaining Useful Life	29 years
Replacement/Repair Estimates	***Current Repair/ Replacement Cost Estimate***	$ 28,000
	Estimated Year of Repair/Replacement	2042
Recommendations	Ventilation ducts may need treatment for rust.	
Preventive Maintenance	Inspect twice a year; change lubricant oil and filters as needed; ensure proper calibration yearly.	

Reserve Component D502002	Interior lighting	
Properties	13W Energy saving light bulbs used.	
Potential Deterioration	Incandescent lights may burn out after prolonged use.	
Condition Analysis	*Deterioration*	None observed
	Repair/Replacement History	N/A
	Overall Condition	Good
Life Cycle Analysis	*Date of Installation*	1993
	Chronological Age	20 years
	Estimated Useful Life	25 years
	Effective Age	21 years
	Remaining Useful Life	4 years
Replacement/Repair Estimates	*Current Repair/ Replacement Cost Estimate*	Contingency
	Estimated Year of Repair/Replacement	N/A
Recommendations	N/A	
Preventive Maintenance	Annual inspection.	

Reserve Component D503004	Emergency Call Alarm System	
Properties	Station	
Potential Deterioration	N/A	
Condition Analysis	***Deterioration***	None observed
	Repair/Replacement History	N/A
	Overall Condition	Fair
Life Cycle Analysis	***Date of Installation***	1993
	Chronological Age	20 years
	Estimated Useful Life	Building life
	Effective Age	20 years
	Remaining Useful Life	Building life
Replacement/Repair Estimates	***Current Repair/ Replacement Cost Estimate***	$ 5,000 (Repair costs approximated over 10 years)
	Estimated Year of Repair/Replacement	2019
Recommendations	Replace.	
Preventive Maintenance	Annual inspection.	

Reserve Component D503007	Smoke & Fire Detection System	
Properties	Central Panel	
Potential Deterioration	N/A	
Condition Analysis	***Deterioration***	None observed
	Repair/Replacement History	10-20 heat detectors changed yearly.
	Overall Condition	Fair
Life Cycle Analysis	***Date of Installation***	1993
	Chronological Age	20 years
	Estimated Useful Life	Building life
	Effective Age	N/A
	Remaining Useful Life	Building life
Replacement/Repair Estimates	***Current Repair/ Replacement Cost Estimate***	$ 5,000 (Repair costs approximated over 10 years)
	Estimated Year of Repair/Replacement	2021
Recommendations	N/A	
Preventive Maintenance	Annual inspection.	

Fire alarm

Fire alarm

Reserve Component D509002	Emergency Lights	
Properties	N/A	
Potential Deterioration	Emergency lighting needs to be tested annually and batteries should be replaced as needed.	
Condition Analysis	*Deterioration*	None observed
	Repair/Replacement History	1998- Exit light bulbs changed to LED
	Overall Condition	Good
Life Cycle Analysis	*Date of Installation*	1993
	Chronological Age	20 years
	Estimated Useful Life	Building life
	Effective Age	N/A
	Remaining Useful Life	Building life
Replacement/Repair Estimates	*Current Repair/ Replacement Cost Estimate*	$ 5,000 (Repair costs approximated over 10 years)
	Estimated Year of Repair/Replacement	2023
Recommendations	N/A	
Preventive Maintenance	Annual inspection.	

Reserve Component E201002	Mail facilities	
Properties	N/A	
Potential Deterioration	Deterioration mostly concerns loss of aesthetic appeal.	
Condition Analysis	*Deterioration*	None observed
	Repair/Replacement History	N/A
	Overall Condition	Good
Life Cycle Analysis	*Date of Installation*	1993
	Chronological Age	20 years
	Estimated Useful Life	50 years
	Effective Age	21 years
	Remaining Useful Life	29 years
Replacement/Repair Estimates	*Current Repair/ Replacement Cost Estimate*	Contingency
	Estimated Year of Repair/Replacement	N/A
Recommendations	N/A	
Preventive Maintenance	Regular cleaning.	

Reserve Component G203001	Exterior paving	
Properties	Concrete pavers with aggregate finish	
Potential Deterioration	Long-term use and exposure to the elements and freeze-thaw effects may lead to cracks. Minor cracks may decrease aesthetic appeal while major cracks may present a tripping hazard.	
Condition Analysis	*Deterioration*	Cracks are present in 4'x4' pavers.
	Repair/Replacement History	N/A
	Overall Condition	Good
Life Cycle Analysis	*Date of Installation*	1993
	Chronological Age	20 years
	Estimated Useful Life	30 years
	Effective Age	20 years
	Remaining Useful Life	10 years
Replacement/Repair Estimates	*Current Repair/ Replacement Cost Estimate*	$ 10,000 (Repair costs approximated over 10 years)
	Estimated Year of Repair/Replacement	2023
Recommendations	Repairs or partial replacement is recommended.	
Preventive Maintenance	Repair as needed.	

Cracks in concrete pavers

Reserve Component G204002	Concrete exterior walls	
Properties	Concrete	
Potential Deterioration	Long-term use and exposure to the elements and freeze-thaw effects may lead to cracks.	
Condition Analysis	***Deterioration***	Efflorescence and water damage of concrete observed.
	Repair/Replacement History	N/A
	Overall Condition	Fair
Life Cycle Analysis	***Date of Installation***	1993
	Chronological Age	20 years
	Estimated Useful Life	Building life
	Effective Age	20 years
	Remaining Useful Life	Building life
Replacement/Repair Estimates	***Current Repair/ Replacement Cost Estimate***	$ 15,000 (Repair costs approximated over 15 years)
	Estimated Year of Repair/Replacement	2015
Recommendations	Cracks needs to be repaired in the courtyard concrete walls. Also, the walls need painting.	
Preventive Maintenance	Sealant injections to repair minor cracks.	

Concrete walls

Concrete walls

Reserve Component G205005	Landscaping	
Properties	Planting	
Potential Deterioration	N/A	
Condition Analysis	*Deterioration*	None observed
	Repair/Replacement History	N/A
	Overall Condition	Good
Life Cycle Analysis	*Date of Installation*	1993
	Chronological Age	20 years
	Estimated Useful Life	Building life
	Effective Age	20 years
	Remaining Useful Life	Building life
Replacement/Repair Estimates	*Current Repair/ Replacement Cost Estimate*	$ 10,000 (Repair costs approximated over 15 years)
	Estimated Year of Repair/Replacement	2022
Recommendations	N/A	
Preventive Maintenance	Regular maintenance.	

Landscaping

Reserve Component G205007	Irrigation system	
Properties	N/A	
Potential Deterioration	Sprinklers must be inspected and maintained on a regular basis. There may be leaks and occasional fluctuations in pressures that may need to be monitored.	
Condition Analysis	*Deterioration*	None observed
	Repair/Replacement History	N/A
	Overall Condition	Good
Life Cycle Analysis	*Date of Installation*	1993
	Chronological Age	20 years
	Estimated Useful Life	Building life
	Effective Age	20 years
	Remaining Useful Life	Building life
Replacement/Repair Estimates	*Current Repair/ Replacement Cost Estimate*	$ 10,000 (Repair costs approximated over 15 years)
	Estimated Year of Repair/Replacement	2021
Recommendations	N/A	
Preventive Maintenance	Annual inspection.	

Reserve Component G301000	Water main	
Properties	N/A	
Potential Deterioration	N/A	
Condition Analysis	*Deterioration*	None observed
	Repair/Replacement History	N/A
	Overall Condition	Good
Life Cycle Analysis	*Date of Installation*	1993
	Chronological Age	20 years
	Estimated Useful Life	Building life
	Effective Age	20 years
	Remaining Useful Life	Building life
Replacement/Repair Estimates	*Current Repair/ Replacement Cost Estimate*	$ 5,000 (Repair costs approximated over 15 years)
	Estimated Year of Repair/Replacement	2020
Recommendations	N/A	
Preventive Maintenance	Annual inspection.	

Reserve Component G301002	Gas main	
Properties	N/A	
Potential Deterioration	N/A	
Condition Analysis	*Deterioration*	None observed
	Repair/Replacement History	N/A
	Overall Condition	Good
Life Cycle Analysis	*Date of Installation*	1993
	Chronological Age	20 years
	Estimated Useful Life	Building life
	Effective Age	20 years
	Remaining Useful Life	Building life
Replacement/Repair Estimates	*Current Repair/ Replacement Cost Estimate*	$ 5,000 (Repair costs approximated over 15 years)
	Estimated Year of Repair/Replacement	2021
Recommendations	N/A	
Preventive Maintenance	Annual inspection.	

Reserve Component G302001	Sanitary lines	
Properties	N/A	
Potential Deterioration	N/A	
Condition Analysis	*Deterioration*	None observed
	Repair/Replacement History	N/A
	Overall Condition	Good
Life Cycle Analysis	*Date of Installation*	1993
	Chronological Age	20 years
	Estimated Useful Life	Building life
	Effective Age	20 years
	Remaining Useful Life	Building life
Replacement/Repair Estimates	*Current Repair/ Replacement Cost Estimate*	$ 10,000 (Repair costs approximated over 15 years)
	Estimated Year of Repair/Replacement	2022
Recommendations	N/A	
Preventive Maintenance	Flushing of all risers and main lines every 1-2 years.	

Reserve Component G401001	Electrical main	
Properties	N/A	
Potential Deterioration	N/A	
Condition Analysis	*Deterioration*	None observed
	Repair/Replacement History	N/A
	Overall Condition	Good
Life Cycle Analysis	*Date of Installation*	1993
	Chronological Age	20 years
	Estimated Useful Life	Building life
	Effective Age	20 years
	Remaining Useful Life	Building life
Replacement/Repair Estimates	*Current Repair/ Replacement Cost Estimate*	$ 5,000 (Repair costs approximated over 15 years)
	Estimated Year of Repair/Replacement	2023
Recommendations	N/A	
Preventive Maintenance	Annual inspection.	

Reserve Component G402001	Exterior lighting	
Properties	Building mounted exterior lights	
Potential Deterioration	Fluorescent light bulbs may deteriorate with multiple on-off cycles. Lamp end discoloration may occur over time. Faults in ballast may produce humming sound. Furthermore, lighting may flicker at the end of life when cathode coating runs out.	
Condition Analysis	***Deterioration***	None observed
	Repair/Replacement History	N/A
	Overall Condition	Good
Life Cycle Analysis	***Date of Installation***	1993
	Chronological Age	20 years
	Estimated Useful Life	25 years
	Effective Age	21 years
	Remaining Useful Life	4 years
Replacement/Repair Estimates	***Current Repair/ Replacement Cost Estimate***	$ 5,000 (Repair costs approximated over 10 years)
	Estimated Year of Repair/Replacement	2017
Recommendations	N/A	
Preventive Maintenance	Annual inspection.	

Appendix C – Assumptions and Qualifications

Preamble

This report is subject to the assumptions and qualifications outlined below and otherwise set out elsewhere in this report. Use of this report by any reader constitutes acceptance of these assumptions, qualification and the conditions outlined below and elsewhere in this report. The acceptance of this report also constitutes acceptance of responsibility for payment of the fee balance and any due costs to ABSSEI.

Common Property Conditions

The determination of the physical condition of the common properties is solely based on a visual review of a representative sampling of all common properties in readily accessible locations after discussion with strata corporation representatives and a review of documentation provided by the strata corporation. No invasive testing or excavations were carried out on the site for the purposes of this report. Similarly, none of the equipment is disassembled, operated or subjected to any sort of functional testing. The physical inspection does not constitute a "technical audit" since extensive, comprehensive testing was not included in the scope of work.

Building Codes

The visual reviews were not conducted to determine whether common property construction meets or exceeds building code requirements and thus this depreciation report is exempt from all recommendations regarding build code requirements.

Cost Estimation for Common Properties

All cost estimates are performed in future year dollars. The estimates presented are solely intended for budgetary or planning purposes and not accounting for tender use. Actual costs will vary depending on a variety of factors. Most importantly, the estimates assume economies of scale and small operations will incur higher costs when performed individually. Miscellaneous costs such as consulting services and certain contingency allowances unrelated to building components are not included in the budget estimates. Cost estimates for actual projects should be developed in greater detail, accounting for owner contingency, permit fees, engineering fees etc. Construction costs may fluctuate, varying based on the time of year, contractor availability and other factors. These cost estimates must be updated over time and confirmed by competitive tender before any contracts are awarded. The cost estimates do not include allowances for site-specific access requirements or environmental concerns. Generally, replacement costs are based on like-for-like with a similar component except in face of building code modifications or external obsolescence.

Remaining Useful Life of Common Properties

Determination of the remaining useful life is based on the condition of the common properties assessed through a visual review and on the average lifespan of the same component by industry standards, Poor maintenance, insurable losses such as earthquakes, fires and floods can shorten the life of an asset. These unforeseen events are not accounted for in our calculation

Funding Models

The funding models for this depreciation report are calculated based on a 30-year horizon, beginning within the current year. A report performed in 2013 projects funding until 2043. The projected period is stationary and does not shift. Hence, in year 1, 2014, the projections will be valid for 29 years. The funding projections does not extend past 30 years and accuracy is only estimated by a +/- 30% error within the prescribed period of 30 years. Renewals and major maintenance projects occurring beyond the 30-year projection time frame are not considered in the given funding models.

Services Not Included

The agreed compensation for services rendered in preparing this report does not include fees for follow-up consultations and/or attendances to arbitrations or mediations, other than those outlined at the time of the acceptance of the given quote. Additional fees will have to be negotiated if personal appearances are required in connection with this report after its acceptance.

Services Included

Limited consulting or clarification regarding the content of this report or requested modifications shall be provided at no additional charge within one year of the completion of the draft report. Attendance of a final meeting with the strata council to clarify ramifications and concerns regarding the report will also be provided at no extra charge.

Currency

Unless otherwise noted, all estimates are expressed in Canadian currency.

Report Distribution, Third Party Liability

This report is intended sole and exclusive use of the Strata Corporation. Possession of a copy of the report shall not authorize use of the report for any purpose other than that noted in the agreement and/or report. This report shall not be distributed or communicated to unauthorized third parties in whole or in part without prior written consent of representative of the client as noted herein. Any liability, if any, of ABSSEI is limited to the strata corporation

only. Notwithstanding anything herein to the contrary, the strata corporation will forever indemnify and hold ABSSEI along with its employees harmless from any claims by third parties related in any way to this report.

Information Provided by Third Parties

This report, its analysis and conclusions required information from various sources. Such information was believed to be reasonably reliable, accurate, and true. ABSSEI shall not be responsible for the accuracy of any information used in this report that has been obtained from any source. No independent verification of factual data presented to ABSSEI has been undertaken by ABSSEI.

Modifications

ABSSEI reserves the right at any time to alter statements, analyses, conclusions or value estimates, if additional facts pertinent to this report are discovered at any time. ABSSEI is not responsible for any unauthorized alterations or distributions to the report. The report must not be abstracted and must be used in its entirety.

Measurements and Exhibits

The sketches, maps and photographs in the report are included solely for the purpose of assisting the reader in visualizing the assets and may not be to scale. All components assessed herein are assumed to be completed according to the architectural, structural, mechanical, electrical plans provided, unless otherwise noted. Any variation in land or building areas from those considered in the depreciation report may alter the estimates and in turn, the required funding. 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 any inherent or hidden condition of the property.

Legal Concerns

The author is highly qualified in matters concerning the depreciation report itself but otherwise not qualified in legal affairs and does not purport to give legal advice. It is assumed that:

1) The legal description as well as the registered survey as stated herein is that which is recorded by the Registrar of the requisite Land Titles Office and are assumed correct;
2) Title to the property is good and marketable; and
3) Rights-of-way, easements or encroachments over other real property, are legally enforceable.

The distribution of cost and other estimates in this report apply only under the programme of utilization as identified in this report. The estimates herein must not be used in conjunction with any other forms of valuation or depreciation reports and may be invalid if so used.

The report is based, unless otherwise stated, on there being full compliance with all applicable federal, provincial and local environmental regulations, laws and restrictions. Moreover, it is assumed that all required permits have been or can be obtained or renewed for any use considered herein. It is also assumed that the subject property is maintained and managed pursuant to prudent and competent ownership and management.

Environmental Concerns

ABSSEI personnel are not qualified in aspects of surveying and environmental assessment. Unless otherwise stated in the report, it is assumed that the subject assets are not affected in any way by any adverse environmental conditions. ABSSEI personnel are not qualified to detect potentially hazardous materials and/or substances which may adversely affect the value of the property. Hence, ABSSEI shall not be held responsible for past or present, legal or physical deficiencies that may be found.

Furthermore, ABSSEI personnel are not qualified to comment on environmental issues that may affect the market value of the property. These environmental issues include but are not limited to, the pollution or contamination of land, buildings, water, groundwater or air. Unless expressly stated, the property is assumed to be free and clear of pollutants and contaminants including, but not limited to, moulds or mildews or the conditions that might give rise to either. ABSSEI and its assignees expressly deny any legal liability relating to the effect of environmental issues on the market value of the property assessed.

Physical Concerns

ABSSEI shall not be held responsible for any costs incurred to investigate or correct any deficiencies of any type, which may be present in the real estate and/or real property described herein. It is assumed that there are no patent or latent defects in the subject improvements, that no objectionable materials are present and that the improvements are structurally, mechanically and electrically adequate and in need of no immediate repairs unless expressly noted within this report.

Appendix D – Replacement Schedule

The following table presents the replacement expenses and timelines of each individual component. Please note that the years listed may differ slightly from those in Appendix B (Component Data Sheets) in order to optimize the financial models.

Component	Current Cost	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Underground parkade - floor slab	$ 20,000	-	$ 20,680	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Underground parkade - suspended slab	N/A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Underground parkade - walls	N/A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Roof deck	$ 20,537	-	-	-	-	-	-	-	-	-	-	-	-	-	-	$ 32,796	-	-
Roof deck railings	$ 10,000	-	-	-	-	-	-	-	-	-	$ 13,511	-	-	-	-	-	-	-
Roofing	$ 22,396	-	-	-	-	-	-	-	$ 28,302	-	-	-	-	-	-	-	-	-
Roof drainage	N/A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cladding - brick veneer	$ 140,960	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cladding - stucco	$ 45,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cladding - granite tiles	$ 10,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	$ 17,074
Caulking	$ 77,960	-	-	$ 41,676	$ 43,093	-	-	-	-	-	-	-	-	-	$ 60,202	$ 62,249	-	-
Exterior painting	$ 25,000	-	-	-	-	$ 28,577	-	-	-	-	-	-	-	-	$ 38,611	-	-	-
Windows (frames)	$ 537,240	-	-	-	-	-	-	-	$ 135,782	$ 140,399	$ 145,172	$ 150,108	$ 155,212	-	-	-	-	-
Windows (glazing)	$ 268,620	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Main doors	$ 10,490	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sliding doors	$ 15,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Exterior unit doors	$ 3,473	-	-	-	-	-	$ 4,105	-	-	-	-	-	-	-	-	-	-	-
Flashings	$ 9,040	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	$ 14,927	-
Interior unit doors	$ 8,500	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Egress doors	$ 3,200	-	-	-	-	$ 3,658	-	-	-	-	-	-	-	-	-	-	-	-
Service doors	$ 9,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Interior stairs	$ 10,000	-	-	-	$ 11,055	-	-	-	-	-	-	-	-	-	-	-	-	-
Stair railings	$ 9,870	-	$ 10,206	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wall finishes	$ 17,912	-	-	-	-	$ 20,476	-	-	-	-	-	-	-	-	-	-	$ 29,578	-
Floor finishes - tile	$ 2,295	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Floor finishes - carpet	$ 11,561	-	-	-	-	-	-	-	-	-	-	-	-	$ 17,267	-	-	-	-
Ceiling surfaces	$ 1,797	-	-	-	-	-	-	$ 2,196	-	-	-	-	-	-	-	-	-	-
Elevator - cab	$ 20,000	-	-	-	-	-	-	-	-	-	-	-	-	$ 29,873	-	-	-	-
Elevator - machinery	$ 60,000	-	-	-	-	-	-	-	-	-	-	-	-	$ 89,619	-	-	-	-
Elevator - controller/dispatcher	$ 5,000	-	-	$ 5,346	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Elevator - shaftway doors	$ 10,000	-	-	-	-	-	-	-	-	-	-	-	-	$ 14,936	-	-	-	-
Elevator - shaftway machinery	$ 25,000	-	-	-	-	-	-	-	-	$ 32,667	-	-	-	-	-	-	-	-
Sanitary Waste and Vent System	$ 5,000	-	-	-	-	$ 5,715	-	-	-	-	-	-	-	-	-	-	$ 8,256	-
Boilers, with Insulation, Piping, Controls & Flue	$ 11,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot and Cold Water Distribution	$ 10,000	-	-	-	-	-	-	$ 12,221	-	-	-	-	-	-	-	-	-	$ 17,074
HVAC - make up air unit	$ 9,151	-	-	-	-	-	$ 10,816	-	-	-	-	-	-	-	-	-	-	-
Fire Pumps	$ 5,000	-	-	-	-	-	$ 5,910	-	-	-	-	-	-	-	-	-	-	-
Fire Suppression	$ 5,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Emergency generator	$ 28,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Interior lighting	N/A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Emergency Call Alarm System	$ 5,000	-	-	-	-	-	-	$ 6,111	-	-	-	-	-	-	-	-	-	$ 8,537
Smoke & Fire Detection System	$ 5,000	-	-	-	-	-	-	$ 6,111	-	-	-	-	-	-	-	-	-	$ 8,537
Emergency Lights	$ 5,000	-	-	-	-	-	$ 5,910	-	-	-	-	-	-	-	-	-	$ 8,256	-
Mail facilities	N/A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Exterior paving	$ 10,000	-	-	-	-	-	$ 11,820	-	-	-	-	-	-	-	-	-	-	-
Retaining walls	$ 15,000	-	$ 15,510	-	-	-	-	-	-	-	-	-	-	$ 22,405	-	-	-	-
Amenity room	$ 10,000	-	-	-	-	-	-	$ 12,221	-	-	-	-	-	-	-	-	-	-
Landscaping	$ 10,000	-	-	-	-	-	$ 11,820	-	-	-	-	-	-	-	-	-	-	-
Irrigation system	$ 10,000	-	-	-	-	-	-	$ 12,221	-	-	-	-	-	-	-	-	-	-
Water main	$ 5,000	-	-	-	-	-	-	$ 6,111	-	-	-	-	-	-	-	-	-	-
Gas main	$ 5,000	-	-	-	-	-	-	$ 6,111	-	-	-	-	-	-	-	-	-	-
Sanitary lines	$ 10,000	-	-	-	-	$ 11,431	-	-	-	-	-	-	-	-	-	-	-	-
Electrical main	$ 5,000	-	-	-	-	-	$ 5,910	-	-	-	-	-	-	-	-	-	-	-
Exterior lighting	$ 5,000	-	-	-	-	$ 5,715	-	-	-	-	-	-	-	-	-	-	$ 8,256	-
TOTAL		-	$ 46,396	$ 47,021	$ 54,148	$ 75,573	$ 56,290	$ 63,303	$ 164,084	$ 173,065	$ 158,683	$ 150,108	$ 155,212	$ 174,100	$ 98,812	$ 95,045	$ 69,273	$ 51,221

2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043
$ 35,308	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-
$ 17,654	-	-	-	-	-	-	-	-	-	-	$ 25,502	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	$ 87,826	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	$ 25,502	-	-
-	-	-	-	-	$ 81,338	$ 84,104	-	-	-	-	-	-	-
-	-	-	-	$ 50,451	-	-	-	-	-	-	$ 63,755	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	$ 149,821	$ 154,914	$ 160,182	$ 165,628	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	$ 28,602
-	-	-	-	-	-	-	-	-	-	-	-	-	$ 40,899
-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	$ 23,176
-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	$ 24,539
-	$ 18,254	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	$ 38,648	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	$ 5,853	-	-
-	-	-	-	$ 23,330	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	$ 9,127	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	$ 26,369	-
-	-	-	$ 48,792	-	-	-	-	-	-	-	-	-	-
-	-	-	-	$ 10,090	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	$ 23,068	-	-	-	-	-
-	-	-	-	-	-	-	-	-	$ 21,827	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	$ 13,185	-
-	-	-	-	-	-	-	-	-	-	-	-	$ 73,834	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	$ 13,185	-
-	-	-	-	-	-	-	-	-	-	-	$ 12,751	-	-
-	-	-	-	-	$ 10,433	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	$ 18,254	-	-	-	-	-	-	-	-	-	$ 25,502	-	-
-	-	$ 28,313	-	-	-	-	-	-	-	-	-	-	-
$ 17,654	-	-	-	-	-	-	-	-	-	-	-	-	$ 27,266
-	$ 18,254	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	$ 20,180	-	-	-	-	-	-	-	-	-
-	$ 9,127	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	$ 10,090	-	-	-	-	-	-	-	-	-
-	-	$ 18,875	-	-	-	-	-	-	-	-	-	-	-
-	$ 9,127	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	$ 10,433	-	-	-	-	-	-	-	-
$ 70,617	$ 82,145	$ 47,188	$ 136,618	$ 114,142	$ 102,205	$ 122,751	$ 149,821	$ 177,983	$ 182,009	$ 165,628	$ 158,865	$ 126,572	$ 144,481