



BC BUILDING SCIENCE

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DEPRECIATION REPORT

AVANTI (LMS 3853)
3126 - 3188 WEST 4TH AVENUE & 2018 - 2028 TRUTCH STREET,
VANCOUVER, BC

PREPARED FOR:
THE OWNERS, STRATA PLAN LMS 3853

JUNE 2018



This report is prepared for the Owners, for the current Owners' information and may not be used or relied upon by any other person, unless that person is specifically named by us in this Agreement as a beneficiary of the Report, in which case the Report may also be used by the additional beneficiary we have named. You agree to maintain the confidentiality of the Report and reasonably protect the Report from distribution to any other person. If you directly or indirectly cause the Report to be distributed to any other person, you agree to indemnify, defend, and hold us harmless if any third party brings a claim against us relating to our inspection or the Report.



The Owners, Strata Plan LMS 3853

SUBJECT: DEPRECIATION REPORT

Dear Sir or Madam:

Pursuant to your request for a Depreciation Report (Reserve Fund Study) for the Strata Corporation LMS 3853, BC Building Science Ltd. has prepared and submits to you this report.

The Depreciation Report describes the reserve fund concepts and major reserve fund items. It provides current and future replacement reserve estimates and recommends reserve fund actions. The Depreciation Report is a complex document and should be reviewed in detail and within the context of this report. An executive summary is included on pages 3 & 4, which outlines the key conclusions of the report.

BC Building Science would be pleased to provide you with a three-year update, including a site review, as per requirements. We appreciate the opportunity to perform this Depreciation Report for you. If you have any questions, please do not hesitate to contact the undersigned.

Respectfully Submitted,
BC BUILDING SCIENCE LTD.

Prepared by:



Asal Soury, B. Sc.
Project Consultant

Reviewed by:



Andrew Creighton, ASCT.
Project Manager



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1. INTRODUCTION

1.1 INTENT AND SCOPE

As requested by Strata Plan LMS 3853, BC Building Science Ltd. (BCBS) was commissioned to prepare a depreciation report for "Avanti", a residential complex located at 3126 - 3188 West 4th Avenue & 2018 - 2028 Trutch Street, Vancouver, BC.

This Depreciation Report is a financial document which provides cost estimates for various reserve components that are subject to major repairs and / or replacements over the lifetime of the property and provides an estimate of the funding required for such major repairs and replacements.

As outlined in our proposal, the intent of this report is to:

- Provide a reserve component inventory and evaluation of their existing condition followed by our recommendations.
- Provide an estimate cost¹ for any renewal and replacement for the common property components based upon the age and expected service life.
- Develop three Contingency Reserve Fund (CRF) cash flow scenarios based on the projected expenditures to determine the required annual contributions for maintaining a sufficient balance for the next 30-year period of this study.
- Satisfy the legislation regarding the Strata Property Act 1999 with Amendments July 1, 2000 and December 13, 2011 that requires a depreciation report be completed.

We performed a visual review of the building's common property on January 26, 2018. The purpose of our visual review was to gain an understanding and opinion of the general existing condition and to estimate the remaining service life. At no time during the preparation of our report were any exploratory openings made nor was any invasive testing performed to confirm actual conditions.

A draft report was distributed to the Strata Council and Strata management on April 6, 2018. Feedback from the Strata Council was incorporated into this final report.

Any use of, or reliance on, this report by any third party is the responsibility of such third parties. We accept no responsibility for damages, if any, suffered by any third party as a result of decisions made based on this review.

The figures included in this report should not be considered quotes; they are prudent estimates of future costs, which may change based on a wide variety of factors over time.

¹ Please note due to poor quality of the original architectural drawings, the dimensions marked on the drawings were not quite readable. Also, some assemblies on the drawings did not match with the existing condition. Therefore, the calculated areas and consequently the estimated renewal costs of these elements are not as accurate as typical measures.

1.2 STATEMENT OF QUALIFICATIONS AND INSURANCE

This depreciation report prepared by BCBS meets the requirements for Depreciation Reports as described by Section 94 of the British Columbia Strata Property Act and Part 6.2 of the British Columbia Strata Property Regulation B.C. Reg. 43/2000 with Amendments July 1, 2000 and April, 2014. This report is subject to the limitations identified in Appendix D.

BCBS is a professional engineering firm that has been involved with the consulting, design and management for the construction and remediation of numerous buildings constructed similarly to this project since our

establishment in 1996. Our core staff consists of experienced professionals and we have earned a reputation for providing practical and economical solutions for buildings experiencing water penetration related issues. We have been involved in assisting Architects and Developers in constructing a durable building envelope on numerous newly constructed residential developments throughout the lower coastal area of British Columbia. We have also been involved with either the assessment or repair of numerous existing low-rise projects to date. Our expertise and professional status is recognized by the Homeowner Protection Office, a number of Insurance Providers and Building Departments throughout British Columbia.

This Depreciation Report has been prepared and / or reviewed by various personnel. We consult sub-consultants for items such as mechanical, electrical systems and elevators. We believe that by using a team approach, we can ensure an appropriate level of thoroughness and quality. The following are the reviewers, their qualifications, and the respective disciplines for which each was responsible:

- The primary preparer of this report was Ms. Asal Souri, B.Sc. of BCBS. As of the writing of this report, Ms. Souri has several years of experience conducting building condition assessments of both low-rise and high-rise construction and on-site construction reviews and has multiple years of conducting post-construction services such as warranty reviews, maintenance manuals and depreciation report / reserve fund studies. Also, she, has years of experience in building envelope renovation projects in design, tendering and onsite consulting phases.
- Farshid Bagheri, Ph.D., of BCBS, is a Mechanical Engineer with 12 years of professional experience in design of building mechanical systems including heating, ventilation, air conditioning, and plumbing for new construction and renovation projects. Mr. Bagheri prepared the part of mechanical systems in this depreciation report.
- Andrew Creighton, ASCT., of BCBS, is a partner / project manager with over 25 years of experience in building envelope design and building envelope renovation project management. Mr. Creighton finalized and reviewed the report for compliance with contractual requirements.
- Chad Cranswick, P. Eng., of BCBS, is a partner / project engineer with 20 years of experience specific to building envelope design and review, and consultant experience in new construction developments and existing building renovations. Mr. Cranswick reviewed the report for compliance with contractual requirements.

BC Building Science Ltd. is not associated with Strata Corporation LMS 3853 beyond being retained to perform professional services. We are not aware of any conflicts of interest. We confirm that we currently carry professional liability insurance.

1.3 DOCUMENTS REVIEWED

This study is based on a review of relevant documents and information provided by Strata Plan LMS 3853, and an on-site visual review of the common elements as described in the building description section. The following documents were reviewed:

- Architectural drawings prepared by Nigel Baldwin Architect completed in 1998.
- Financial statement provided by Strata property manager of Bradshaw Strata Management Ltd.
- Miscellaneous recorded payment documents.

No previous Depreciation Reports or Reserve Fund Studies were available for this study.

2. EXECUTIVE SUMMARY

This executive summary has been prepared as a quick reference for convenience only. It outlines the history of the building including a list of components and assemblies that have been renewed as well as the projects the strata are planning to complete in near future followed by a list of projects / studies we recommend within the next 3 years, and a summary of building financial cash flow provided for this study. Readers are advised to refer to the full text of this Depreciation Report for detailed information. Below, a summary list of the works completed prior to this study is provided:

TABLE 2.1: LIST OF COMPONENTS & ASSEMBLIES RENOVATED IN THE PAST			
#	Components / Assemblies	Description	Year Completed
1	Refinishing Exterior Cladding	Fibre-cement cladding are refinished.	2014.
2	Mechanical System	4 original hot water tanks were replaced with the existing one boiler, two hot water storage tanks, and a circulation pipe-mounted pump.	2012
3	Wooden Decking	All Wooden decking on roof decks have been replaced.	2010
4	Garbage Enclosure	New Garbage Enclosure installed.	2015
LIST OF PROJECTS IN NEAR FUTURE			
5	Piping	Strata is planning to replace piping.	2018 – 2019
6	Fences	Strata confirmed all ground floor fences and divider walls between adjacent balconies/roof decks will be replaced.	2018 – 2019
7	Balcony Membrane	Strata is planning to replace balcony and porch liquid membrane.	2019 – 2020

In summary, we recommend planning for the following projects and studies in the short-term:

TABLE 2.2: LIST OF PROJECTS AND STUDIES RECOMMENDED (WITHIN NEXT 3 YEARS)	
Contingency Reserve Projects	Maintenance Projects and Studies
<ul style="list-style-type: none"> - Replacing skylight opening at roof decks - Renewing exterior lighting 	<ul style="list-style-type: none"> - Updating Depreciation Report

The financial assessment requires reviewing of the current financial situation of the strata corporation. Below we provided a summary of complex financial cash flow provided for this study:

TABLE 2.3: BUILDING FINANCIAL CASH FLOW	
Current Fiscal Year with Starting Date:	2017 – 2018 / March 1 st , 2017
Present Contribution to Reserve Fund:	\$ 24,811
Reserve Fund Balance at start of Current Fiscal Year:	\$ 94,467
Operating Budget for Current Fiscal Year:	\$253,296
<ul style="list-style-type: none"> ➤ 25% of the annual operating budget as minimum closing balance approved by SC: 	\$63,324
Interest and inflation Rates confirmed by SC:	2.0%

3. PROPERTY DESCRIPTION

The complex contains three-storey wood framed buildings with total of 60 residential units. The below-grade, cast-in-place, concrete parking garage is a reinforced concrete structure (suspended slab over concrete column and perimeter foundation walls) and is sprinklered. A brief summary of building construction is presented in the table below:

TABLE 3.1: PROPERTY DESCRIPTION	
Name	Avanti (LMS 3853)
Address	3126 - 3188 West 4th Avenue & 2018 - 2028 Trutch Street, Vancouver, BC
Structure and Number of Storeys	Wood frame, 3 Storeys
Number of Units & Type of Occupancy	60, Residential
Date of Construction	1999
Parking Garage and Foundation	Below grade cast-in-place concrete parking garage
Recreation / Facilities	N/A
Shared Facilities	N/A
Sprinklered	Underground parking

The owners at Avanti are being proactive in maintaining and monitoring the various systems inherent to the buildings and property as outlined in the component section of this report.

4. RESERVE COMPONENT INVENTORY

The physical assessment includes inventory and evaluation of all building components and assemblies. This assessment is based on our visual review of the building performed on January 26th, 2018 and review of readily available reference documents. Access to two units was provided. A condition evaluation of each building component and assembly is outlined in Appendix C, including description, location, existing condition, history, recommendations, recommended action, typical service life, estimated remaining life and outstanding deficiencies (if any). The expected service life values noted here assume that regular maintenance is undertaken as recommended by manufacturers. In addition, items with probable cost relating to 'optional' upgrade work are not covered by the CRF and therefore are also not included in the capital plan.

Please note, this physical review is not a "full condition assessment", since no exploratory openings or testing were completed at the time of the assessment. For more information regarding Limitations and Assumptions, please refer to Appendix D of this report.

5. FINANCIAL ANALYSIS

5.1 CONDITION ASSESSMENT AND EXPENDITURES

To ensure reserve components and assemblies will last for their expected service lives and perform as expected, the Strata is required to conduct regular maintenance activities including repair or full replacement of components when they become due. In this section, BCBS itemizes the reserve components along with the recommended action, their expected and remaining service lives, and associated budgets in present Canadian dollar values. According to Strata Act Regulation, BC Reg. 43/2000, Ch.6.2., this assessment is used to forecast common repairs, replacements and any significant maintenance activities that usually occur less often than once a year or that do not usually occur. In other words, the evaluation predicts only events that occur at intervals greater than one year.

Following accounting standards, BCBS identifies a fiscal year by the year in which it ends. Therefore, 2017 / 2018 fiscal year is referred to throughout as 2018. To maintain consistency in calculations, a component's year of acquisition is also shown as the fiscal year rather than the calendar year. This analysis is presented in a table in Appendix B.

5.2 30 YEAR CAPITAL PLAN AND FUNDING SCENARIOS

BCBS provided a 30-year life cycle analysis including future anticipated repair and replacement costs of each common property component, system, or assembly.

In addition, per Strata Property Act requirements, three cash-flow funding scenarios are presented. These scenarios illustrate the required CRF contributions, special levies, and closing balance for the next 30 years. Three scenarios are presented for review and discussion in the draft report.

In addition, the estimated CRF balance, reserve contribution and special levies of Scenarios #1, #2, and #3 forecasted over the next 30 years are shown on the graphs provided in Fig 5.2.1 in Appendix B.

BCBS has assumed several factors in the calculation of probable costs and reserve components life cycle analysis. Refer to Appendix D for details.

Each scenario is provided in a table format. In this table, there is a column named "Reserve contribution". This refers to the amount contributed each year to the reserve fund from the monthly expenses. In addition, expenditures are presented as future dollars based on 2% inflation and are considered Class D estimates (+/- 50%).

Please note that the minimum amount of closing balance at the end of each year is maintained to be 25% of operating budget which is \$63,324 as per Strata request. Below is a summary description of each scenario approach:

Scenario 1		Amount	Year
This Scenario shows contribution increases due to inflation only apart from annual contribution increase in 2018 that strata approved about 15% increase. For details, please see the 30 Year Reserve Fund Cash Flow Table for Scenario 1 in Appendix B.	Minimum Balance	\$66,911	2040
	Total Special Levies	\$6,790,000	N/A
	Contribution Increase (%)	2%	30 years
Scenario 2		Amount	Year

This scenario increases contributions by 10% apart from 15% increase in 2018 (approved by SC), up to 2042 followed by no increases thereafter to maintain a reasonable closing balance at the end of each year. Special levies are included when required to maintain required minimum balance. For details, please see 30 Year Reserve Fund Cash Flow Table for Scenario 2 in Appendix B.	Minimum Balance	\$65,257	2026
	Total Special Levies	\$4,735,000	N/A
	Contribution Increase (%)	10%	Up to 2042
Scenario 3		Amount	Year
At the beginning it is similar to scenario 2, increase in contributions by 5% apart from 15% increase in 2018 (approved by SC), up to 2036 where 20% increase implemented for 6 years during substantial renewal plans in 2039 and 2043 to reduce required special levies within those years and then no increases to maintain a reasonable closing balance at the end of each year thereafter. As typical, special levies are included when required to maintain required minimum balance. For details, please see 30 Year Reserve Fund Cash Flow Table for Scenario 2 in Appendix B.	Minimum Balance	\$65,063	2034
	Total Special Levies	\$5,760,000	N/A
	Contribution Increase (%)	5%, 20%	17 years, 6 years

5.3 IMPLEMENTATION OF REPAIRS AND RENEWALS

The Strata Corporation is encouraged to engage qualified professionals when assessing and planning any major renewals. A qualified professional can aid the Strata in more accurately confirming: the specific timing of repairs or renewals; the actual scopes of repair or renewal required; what optional or mandatory upgrades may be required; ensuring appropriate regulatory requirements are considered and complied with (such as city permits or other); and that the work is completed in accordance with issued specifications or code as appropriate (i.e. field reviews during the work).

It is not the purpose of this report to identify either the scopes of work or technical aspects of any specific item. This report simply identifies an expected repair or renewal event, timing and expected cost based on current expectations. This information is then used to suggest certain funding priorities, amounts, and timing for consideration by the Strata. In particular, items with potential impacts on safety, such as elevator, should be renewed in a timely manner. The actual timing, actual scopes of work, and cost all vary once these are confirmed as the building ages and conditions change and depending on the advice and input of qualified professionals as may be retained as appropriate. Refer to Appendix C for more discussions.

Please note that some items are more discretionary than others, such as interior finishes. In these cases, the Strata may decide to defer or shorten the timing based on more subjective criteria.

6. CLOSING

Thank you for choosing BC Building Science to complete this study. The material in this report reflects BCBS's judgement in light of information available during its preparation.

The BC legislation requires updates to the Depreciation Report to be performed every three years, beginning within three years of the final date of this study. Please feel free to contact us at any time if you wish to update this study or to pursue the recommended investigations and / or capital projects.

Please contact our office if there are any questions or for further information.

Respectfully Submitted,
BC BUILDING SCIENCE LTD.

Prepared by: Asal Souri, B.Sc.

Reviewed by: Andrew Creighton, AScT.

APPENDIX A – RESERVE COMPONENT CONDITION ASSESSMENT AND ASSOCIATED COSTS

When reviewing these charts, we note the following:

Items that are noted as optional 'upgrade' items of work are not typically covered by the CRF and so are not included in the capital plan. In addition, due to poor quality of the original architectural drawings, the dimensions provided / marked on the drawings were not quite readable. Also, some assemblies on the drawings do not match with the existing condition. Therefore, the calculated areas and consequently the estimated renewal costs of these elements are not as accurate as typical measures.

In addition to the above, the type of actions we recommend for each item are categorized as follows:

- **Renewal:** Refers to work to supply and install a new assembly and/or component based on like with like, allowing for changing to contemporary standards.
- **Targeted Repair:** Refers to work needed to extend the life of a component, restore functionality, or for partial replacements of isolated failures.
- **Maintenance:** Refers to work needed maintain and to extend the life of a component, and the allowance assumed to be included in operating budget as part of annual maintenance plan.
- **Refurbishment:** Refers to work to implies a process of improvement by re-equipping and cleaning.
- **Study:** Refers to a recommendation to undertake an assessment to identify more accurate repair / replacement costs or timing.
- **Upgrade:** Refers to work of a more optional nature such as upgrading an assembly or component to a higher standard (more efficient, higher quality, etc.). In this case, we assume the cost may not be included within the cash-flow.
- **Discretionary:** Items where the timing, scope of work and phasing is at the owner's discretion.

#	Components/ Assemblies	Recommended Action	Actual or Estimated Year of Acquisition	Actual age in 2018	Expected service life	Estimated Remaining Life	Probable Cost
1	STRUCTURE & PARKING GARAGE						
2	Parkade Foundation	Targeted Repair	1999	19	10	1	\$5,000
3	Parking Overhead Door	Renewal	1999	19	25	7	\$7,000
4	VERTICAL ASSEMBLIES AND RELATED COMPONENTS						
5	Vinyl Siding : Assembly	Renewal	1999	19	40	21	\$787,000
6	Fibre-Cement Cladding: Assembly	Renewal	1999	19	40	21	\$374,000
7	Fibre-Cement Cladding: Finishing	Renewal	2014	4	15	11	\$38,000
8	Aluminum framed Windows	Renewal	1999	19	35	16	\$367,000
9	Aluminum framed Sliding Doors	Renewal	1999	19	35	16	\$51,000
10	Aluminum framed Swing Doors	Renewal	1999	19	35	16	\$67,000
11	Entry Gates	Renewal	1999	19	40	20	\$10,000
12	Balcony/ Patio Guardrails	Renewal	1999	19	40	20	\$128,000
13	HORIZONTAL SYSTEMS AND RELATED COMPONENTS						
14	Roofs / Roof Decks	Renewal	1999	19	25	8	\$223,000
15	Wooden Decks on Roof Decks	Renewal	2010	8	20	12	\$19,000
16	Sloped Roofs	Renewal	1999	19	25	8	\$48,000
17	Balconies	Renewal	1999	19	20	2	\$52,000
18	Skylights	Renewal	1999	19	20	2	\$43,000
19	Podium	Renewal	1999	19	40	25	\$1,335,000
20	SITE DEVELOPMENTS						
21	Concrete Retaining Walls and Steps	Targeted Repair	1999	19	10	2	\$4,000
22	Wooden Fences	Renewal	1999	19	25	2	\$93,000
23	Wooden Fences (Finishing)	Renewal	1999	19	15	17	\$8,000
24	INTERIOR						
25	Interior Unit Entry Doors	Discretionary	1999	19	40	21	\$15,000

#	Components/ Assemblies	Recommended Action	Actual or Estimated Year of Acquisition	Actual age in 2018	Expected service life	Estimated Remaining Life	Probable Cost
26	Corridors Interior Finishes : Walls / ceilings	Discretionary	1999	19	25	6	\$14,000
27	Corridors Interior Finishes : Floor	Discretionary	2014	4	25	21	\$6,000
28	MECHANICAL SYSTEMS						
29	Parkade Exhaust System	Renewal	1999	19	25	6	\$6,000
30	Common area Vnetilation System	Renewal	1999	19	25	6	\$9,000
31	Heating Systems : Baseboard Heaters	Renewal	1999	19	30	10	\$60,000
32	Domestic Water Distribution Systems	Renewal	1999	19	20	1	\$550,000
33	Domestic Hot Water Systems	Maintenance	2012	6	5	10	\$3,000
34		Renewal	2012	6	30	5	\$40,000
35	Drainage Systems	Renewal	1999	19	40	22	\$150,000
36	ELECTRICAL SYSTEMS						
37	Electrical Distribution	Maintenance	1999	19	10	1	\$2,000
38		Renewal	1999	19	50	30	\$50,000
39	Interior Lighting	Discretionary	1999	19	35	15	\$3,000
40	Exterior Lighting	Discretionary	1999	19	25	2	\$8,000
41	Security System	Renewal	1999	19	30	11	\$10,000
42	Fire Detection System	Renewal	1999	19	30	11	\$25,000
43	Fire Suppression System	Maintenance	1999	19	5	1	\$3,000
44		Renewal	1999	19	50	31	\$30,000
45	CONVEYANCE						
46	Passenger Elevator	Renewal	1999	19	30	12	\$60,000
47	OTHER PROFESSIONAL SERVICES						
48	Depreciation Report Updates	Study	2018	0	3	3	\$3,000
49	Miscellaneous Engineering Reviews	Study	2012	6	5	5	\$5,000

APPENDIX B – CAPITAL PLAN AND RECOMMENDED FUNDING SCENARIOS

The values in the scenario tables are estimated future costs associated with the Assets. To express the future year dollars*, inflation rate (2% per year) is added to the current costs in the calculation of these values unless noted otherwise. However, the replacement and repair schedules are not fixed and may be required sooner or later than we have anticipated.

In addition, in the tables below, please note that as Strata approved BCBS maintained the closing balance of each year with minimum 25% of the operating budget (\$63,324) as indicated in Strata Act Section 6.1. Refer to "Minimum Reserve Fund Balance Under the Act" in Appendix D for more details.

#	Components/ Assemblies	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047
		\$0	\$560,000	\$200,000	\$3,000	\$0	\$45,000	\$35,000	\$7,000	\$271,000	\$3,000	\$65,000	\$83,000	\$86,000	\$0	\$0	\$8,000	\$488,000	\$8,000	\$3,000	\$0	\$148,000	\$1,723,000	\$269,000	\$0	\$8,000	\$1,338,000	\$41,000	\$104,000	\$0	\$0
1	STRUCTURE & PARKING GARAGE																														
2	Parkade Foundation		\$5,000										\$5,000											\$5,000							
3	Parking Overhead Door								\$7,000																						
4	VERTICAL ASSEMBLIES AND RELATED COMPONENTS																														
5	Vinyl Siding : Assembly																						\$787,000								
6	Fibre-Cement Cladding: Assembly																						\$374,000								
7	Fibre-Cement Cladding: Finishing												\$38,000															\$38,000			
8	Aluminum framed Windows																	\$367,000													
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20	SITE DEVELOPMENTS																														
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29	Parkade Exhaust System								\$6,000																						
30	Common area Vnetilation System							\$9,000																							
31	Heating Systems : Baseboard Heaters											\$60,000																			
32	Domestic Water Distribution Systems		\$550,000																				\$550,000								
33	Domestic Hot Water Systems																						\$3,000				\$3,000				
34							\$40,000																								
35	Drainage Systems																							\$150,000							

#	Components/ Assemblies	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047			
		\$0	\$560,000	\$200,000	\$3,000	\$0	\$45,000	\$35,000	\$7,000	\$271,000	\$3,000	\$65,000	\$83,000	\$86,000	\$0	\$0	\$8,000	\$488,000	\$8,000	\$3,000	\$0	\$148,000	\$1,723,000	\$269,000	\$0	\$8,000	\$1,338,000	\$41,000	\$104,000	\$0	\$0			
36	ELECTRICAL SYSTEMS																																	
37	Electrical Distribution		\$2,000									\$2,000										\$2,000												
38																																		
39	Interior Lighting																	\$3,000																
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41	Security System												\$10,000																					
42	Fire Detection System												\$25,000																					
43	Fire Suppression System		\$3,000					\$3,000					\$3,000					\$3,000					\$3,000					\$3,000						
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46	Passenger Elevator													\$60,000																				
47	OTHER PROFESSIONAL SERVICES																																	
48	Depreciation Report Updates				\$3,000			\$3,000			\$3,000			\$3,000					\$3,000			\$3,000			\$3,000				\$3,000					
49	Miscellaneous Engineering Reviews						\$5,000				\$5,000						\$5,000					\$5,000			\$5,000				\$5,000					

30 Year Reserve Fund Cash Flow Table

Scenario 1: Based on Current Contribution due to inflation only apart from annual contribution increase of 15% in 2018 that strata approved, plus Special Levies when required.

Fiscal Year	Opening Balance	Reserve Contribution	Percent Progressive Increase in CRF	Special Levy	Expenditures *	Closing Balance
2018	\$94,467	\$24,811			\$0	\$121,415
2019	\$121,415	\$28,533	15.0%	\$500,000	\$571,200	\$78,748
2020	\$78,748	\$29,103	2.0%	\$170,000	\$208,080	\$69,771
2021	\$69,771	\$29,685	2.0%		\$3,184	\$97,934
2022	\$97,934	\$30,279	2.0%		\$0	\$130,474
2023	\$130,474	\$30,885	2.0%		\$49,684	\$114,097
2024	\$114,097	\$31,502	2.0%		\$39,416	\$108,386
2025	\$108,386	\$32,132	2.0%		\$8,041	\$134,886
2026	\$134,886	\$32,775	2.0%	\$220,000	\$317,520	\$70,142
2027	\$70,142	\$33,431	2.0%		\$3,585	\$101,688
2028	\$101,688	\$34,099	2.0%	\$10,000	\$79,235	\$68,135
2029	\$68,135	\$34,781	2.0%	\$70,000	\$103,200	\$70,395
2030	\$70,395	\$35,477	2.0%	\$70,000	\$109,069	\$67,475
2031	\$67,475	\$36,186	2.0%		\$0	\$105,372
2032	\$105,372	\$36,910	2.0%		\$0	\$144,759
2033	\$144,759	\$37,648	2.0%		\$10,767	\$174,804
2034	\$174,804	\$38,401	2.0%	\$530,000	\$669,919	\$73,286
2035	\$73,286	\$39,169	2.0%		\$11,202	\$102,999
2036	\$102,999	\$39,953	2.0%		\$4,285	\$141,083
2037	\$141,083	\$40,752	2.0%		\$0	\$185,064
2038	\$185,064	\$41,567	2.0%	\$60,000	\$219,920	\$68,628
2039	\$68,628	\$42,398	2.0%	\$2,600,000	\$2,611,493	\$99,533
2040	\$99,533	\$43,246	2.0%	\$340,000	\$415,869	\$66,911
2041	\$66,911	\$44,111	2.0%		\$0	\$112,801
2042	\$112,801	\$44,993	2.0%		\$12,867	\$147,504
2043	\$147,504	\$45,893	2.0%	\$2,070,000	\$2,195,131	\$68,266
2044	\$68,266	\$46,811	2.0%	\$20,000	\$68,610	\$67,614
2045	\$67,614	\$47,747	2.0%	\$130,000	\$177,516	\$67,899
2046	\$67,899	\$48,702	2.0%		\$0	\$118,446
2047	\$118,446	\$49,676	2.0%		\$0	\$170,988
TOTALS		\$1,131,656		\$6,790,000	\$7,889,792	

* Expenditures are presented as future dollars (based on 2% inflation).

30 Year Reserve Fund Cash Flow Table

Scenario 2: In this scenario annual contributions increases by 10% apart from 15% increase in 2018 (approved by SC), up to 2042 followed by no increases thereafter plus Special Levies when required.

Fiscal Year	Opening Balance	Reserve Contribution	Percent Progressive Increase in CRF	Special Levy	Expenditures *	Closing Balance
2018	\$94,467	\$24,811			\$0	\$121,415
2019	\$121,415	\$28,533	15.0%	\$500,000	\$571,200	\$78,748
2020	\$78,748	\$31,386	10.0%	\$170,000	\$208,080	\$72,054
2021	\$72,054	\$34,525	10.0%		\$3,184	\$105,149
2022	\$105,149	\$37,977	10.0%		\$0	\$145,609
2023	\$145,609	\$41,775	10.0%		\$49,684	\$140,533
2024	\$140,533	\$45,952	10.0%		\$39,416	\$149,946
2025	\$149,946	\$50,547	10.0%		\$8,041	\$195,876
2026	\$195,876	\$55,602	10.0%	\$130,000	\$317,520	\$65,257
2027	\$65,257	\$61,162	10.0%		\$3,585	\$124,715
2028	\$124,715	\$67,278	10.0%		\$79,235	\$115,133
2029	\$115,133	\$74,006	10.0%		\$103,200	\$87,950
2030	\$87,950	\$81,407	10.0%	\$5,000	\$109,069	\$66,771
2031	\$66,771	\$89,548	10.0%		\$0	\$158,550
2032	\$158,550	\$98,502	10.0%		\$0	\$261,208
2033	\$261,208	\$108,353	10.0%		\$10,767	\$364,994
2034	\$364,994	\$119,188	10.0%	\$250,000	\$669,919	\$66,055
2035	\$66,055	\$131,107	10.0%		\$11,202	\$188,480
2036	\$188,480	\$144,217	10.0%		\$4,285	\$333,581
2037	\$333,581	\$158,639	10.0%		\$0	\$500,479
2038	\$500,479	\$174,503	10.0%		\$219,920	\$464,617
2039	\$464,617	\$191,953	10.0%	\$2,050,000	\$2,611,493	\$95,077
2040	\$95,077	\$211,149	10.0%	\$180,000	\$415,869	\$70,357
2041	\$70,357	\$232,264	10.0%		\$0	\$306,351
2042	\$306,351	\$255,490	10.0%		\$12,867	\$557,527
2043	\$557,527	\$255,490	0.0%	\$1,450,000	\$2,195,131	\$67,886
2044	\$67,886	\$255,490	0.0%		\$68,610	\$257,992
2045	\$257,992	\$255,490	0.0%		\$177,516	\$341,905
2046	\$341,905	\$255,490	0.0%		\$0	\$606,788
2047	\$606,788	\$255,490	0.0%		\$0	\$876,969
TOTALS		\$3,827,324		\$4,735,000	\$7,889,792	

* Expenditures are presented as future dollars (based on 2% inflation).

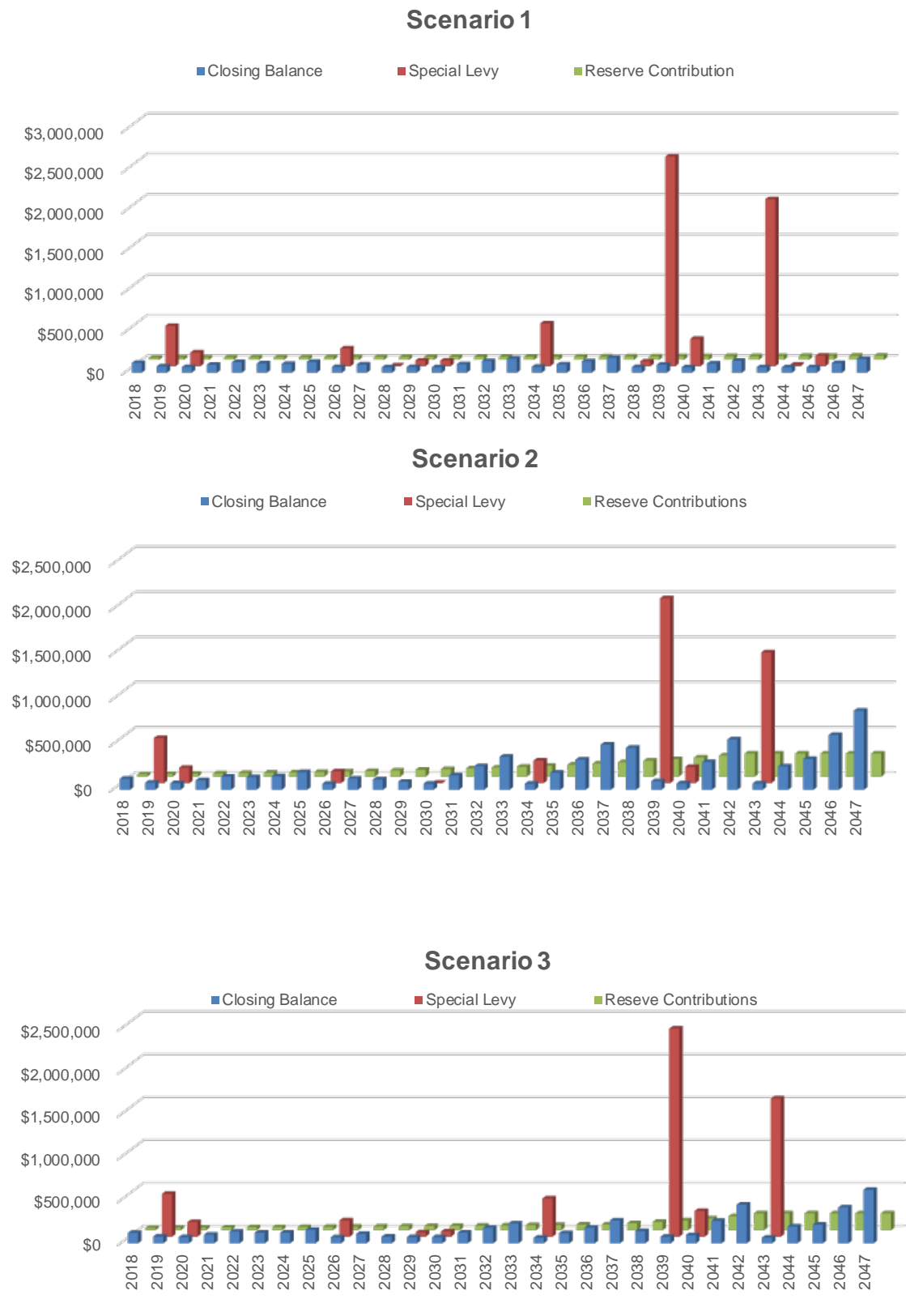
30 Year Reserve Fund Cash Flow Table

Scenario 3: Based on 5% annual increase apart from 15% increase in 2018 until 2036 where 20% increase implemented prior substantial renewal plans in 2039 and 2043 to reduce required special levies within those 6 years and then no increases thereafter to maintain a reasonable closing balance at the end of each year. As typical, special levies are included when required to maintain required minimum balance.

Fiscal Year	Opening Balance	Reserve Contribution	Percent Progressive Increase in CRF	Special Levy	Expenditures *	Closing Balance
2018	\$94,467	\$24,811			\$0	\$121,415
2019	\$121,415	\$28,533	15.0%	\$500,000	\$571,200	\$78,748
2020	\$78,748	\$32,813	15.0%	\$170,000	\$208,080	\$73,481
2021	\$73,481	\$34,453	5.0%		\$3,184	\$106,533
2022	\$106,533	\$36,176	5.0%		\$0	\$145,201
2023	\$145,201	\$37,985	5.0%		\$49,684	\$136,289
2024	\$136,289	\$39,884	5.0%		\$39,416	\$139,487
2025	\$139,487	\$41,878	5.0%		\$8,041	\$176,453
2026	\$176,453	\$43,972	5.0%	\$190,000	\$317,520	\$93,699
2027	\$93,699	\$46,171	5.0%		\$3,585	\$138,584
2028	\$138,584	\$48,479	5.0%		\$79,235	\$110,292
2029	\$110,292	\$50,903	5.0%	\$50,000	\$103,200	\$109,678
2030	\$109,678	\$53,448	5.0%	\$60,000	\$109,069	\$115,695
2031	\$115,695	\$56,121	5.0%		\$0	\$174,691
2032	\$174,691	\$58,927	5.0%		\$0	\$237,700
2033	\$237,700	\$61,873	5.0%		\$10,767	\$294,071
2034	\$294,071	\$64,967	5.0%	\$445,000	\$669,919	\$134,118
2035	\$134,118	\$68,215	5.0%		\$11,202	\$194,384
2036	\$194,384	\$71,626	5.0%		\$4,285	\$266,286
2037	\$266,286	\$85,951	20.0%		\$0	\$358,422
2038	\$358,422	\$103,141	20.0%		\$219,920	\$247,643
2039	\$247,643	\$123,769	20.0%	\$2,430,000	\$2,611,493	\$189,920
2040	\$189,920	\$148,523	20.0%	\$300,000	\$415,869	\$223,699
2041	\$223,699	\$178,228	20.0%		\$0	\$408,183
2042	\$408,183	\$213,873	20.0%		\$12,867	\$619,362
2043	\$619,362	\$213,873	0.0%	\$1,615,000	\$2,195,131	\$253,104
2044	\$253,104	\$213,873	0.0%		\$68,610	\$404,882
2045	\$404,882	\$213,873	0.0%		\$177,516	\$449,700
2046	\$449,700	\$213,873	0.0%		\$0	\$674,706
2047	\$674,706	\$213,873	0.0%		\$0	\$904,212
TOTALS		\$2,824,082		\$5,760,000	\$7,889,792	

* Expenditures are presented as future dollars (based on 2% inflation) up to 2042.

Fig. 5.2.1 CRF balance, Reserve Contribution and Special Levy



Below we provided financial projection summaries, prepared as recommended in the Financial Analysis section, including summary of the relevant cash flow and expenditures for the first five years based on the recommended Scenarios. Please note that the “Annual Increase” is only refer to the amount contributed each year to the reserve fund from the monthly common expenses. We recommend that interested readers go directly to the Financial Analysis section of this report for more detailed information.

TABLE 2.4: FINANCIAL PROJECTION SUMMARY OF SCENARIO 1 to 3 FOR FIRST 5 YEARS*					
Summary of Scenario 1	2018	2019	2020	2021	2022
Annual Reserve Contribution:	\$24,811	\$28,533	\$29,103	\$29,685	\$30,279
Average Annual Contribution per Unit	\$414	\$476	\$485	\$495	\$505
Annual Increase (%)	n/a	15%	2%	2%	2%
Average Increase per Unit **	n/a	\$62	\$10	\$10	\$10
Required Special Levy	\$0	\$500,000	\$170,000	\$0	\$0
Required Special Levy per Unit	\$0	\$8,333	\$2,833	\$0	\$0
Summary of Scenario 2					
Annual Reserve Contribution:	\$24,811	\$28,533	\$31,386	\$34,525	\$37,977
Average Annual Contribution per Unit	\$414	\$476	\$523	\$575	\$633
Annual Increase (%)	n/a	15%	10%	10%	10%
Average Increase per Unit **	n/a	\$62	\$48	\$52	\$58
Required Special Levy	\$0	\$500,000	\$170,000	\$0	\$0
Required Special Levy per Unit	\$0	\$8,333	\$2,833	\$0	\$0
Summary of Scenario 3					
Annual Reserve Contribution:	\$24,811	\$28,533	\$29,959	\$31,457	\$33,030
Average Annual Contribution per Unit	\$414	\$476	\$499	\$524	\$551
Annual Increase (%)	n/a	15%	5%	5%	5%
Average Increase per Unit **	n/a	\$62	\$24	\$25	\$26
Required Special Levy	\$0	\$500,000	\$170,000	\$0	\$0
Required Special Levy per Unit	\$0	\$8,333	\$2,833	\$0	\$0

* Refer to Appendix E for definitions.

** Please note the increase per unit is an average and is not based on the strata by laws unit entitlement.

APPENDIX C – RESERVE COMPONENT INVENTORY

Below, a complete list of reserve fund components is provided; including the physical assessment, history, our notes and recommendations and life cycle data. A description of the table contents and our approach to assigning ratings is provided in Appendix E.

Please note, below in some cases, the estimated remaining life that is recommended to implement the action could be done within next 5 years depends on the other projects in hand and prioritising them. In these occasions, we recommend the work to be done in 1 to 5 years (1 - 5); however, for calculation purposes, we need to select a specific year for “Reserve Component Assessment and Associate costs” table provided in Appendix A.

* The estimated remaining life is calculated for maintenance of components after renewal to be completed.

** The expected service life of 99 means the assembly lives the life of the building.

*** In some cases, the remaining service life and expected service life of an assembly is not added up with the year of Actual or Estimated Year of Acquisition.

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STRUCTURE: PARKADE FOUNDATION



Physical Assessment:

Component Classification	Structure / Parking Garage
Description and Location	The structural framing of the parking garage consists of reinforced suspended concrete slab on reinforced concrete shear walls, foundation walls and columns. Dampproofing was assumed to be installed on the exterior surfaces of foundation walls. The concrete slab is sloped towards the drains with control joint provisions for crack control. The walls and columns are painted.
Existing Condition	Good
History	A few noticeable cracks observed in the slab on grade around the parkade drainage that need to be repaired. Also, a few cracks noted in the foundation walls. See photos provided below.

Notes and Recommendations:

Recommendation	A repair allowance to conduct periodic isolated repairs is recommended every 5 to 10 years. Slab-on-grade and foundation walls typically last the life of the complex, with minor repairs to seal cracking. An allowance to renew parkade interior painting is recommended; however, since this is a discretionary item, the cost is not included in the capital planning budget.
Action	Targeted Repair

Lifecycle Data:

Actual or Estimated Year of Acquisition	1999	Estimated Remaining Life
Typical Service life	Assembly	99 **
	Finishing	N/A



Photo 1: A crack noted in the concrete foundation wall at Stall #72. Monitor the crack and if widen repair as required.



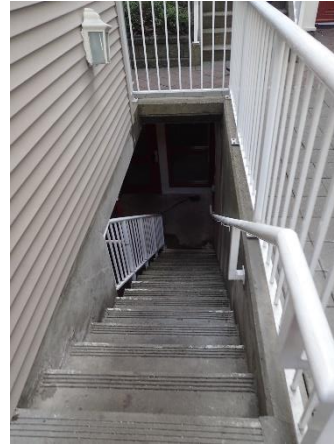
Photo 2: Noticeable cracks observed in slab on grade around the drainage that need to be repaired.



Photo 3: Staining noted on the concrete foundation wall at Stall #57 behind the parkade exhaust fan. Remove staining and monitor if reoccurs, repair as required.

(No photo)

STRUCTURE: EXTERIOR STAIR AND FIRE ESCAPE DOOR ASSEMBLY:



Physical Assessment:

Component Classification	Parking Garage
Description and Location	There are 3 exterior stairwells connecting the outer space to the parkade or common hallways to the courtyards via metal swing doors. The stairs are precast concrete with aluminum handrails and some with picket railings.
Existing Condition	Good
History	N/A

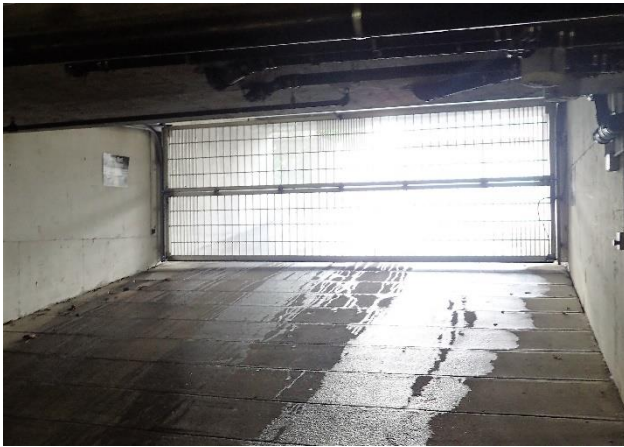
Notes and Recommendations:

Recommendation	Stairs likely to last the life of the building. Handrails may require replacement after approximately 40 years with some paint touch-ups. No significant capital expenditure required.
Action	Renewal

Lifecycle Data:

Actual or Estimated Year of Acquisition	1999	Estimated Remaining Life
Typical Service life	Assembly	99**
	Finishing	20
		1 – 5

EXTERIOR DOOR ASSEMBLY: OVERHEAD DOOR



Physical Assessment:

Component Classification	Parking Garage
Description and Location	There is a steel grated overhead door with plexiglass at the parking garage entrance.
Existing Condition	Good
History	The door appeared original and in serviceable condition.

Notes and Recommendations:

Recommendation	Replacement included the operating system as well as the door itself.
Action	Renewal

Lifecycle Data:

Actual or Estimated Year of Acquisition	1999	Estimated Remaining Life	
Typical Service life	Assembly	25 – 30	5 – 10
	Finishing	N/A	N/A

VERTICAL ASSEMBLY: VINYL SIDING



Physical Assessment:

Component Classification	Building Envelope
Description and Location	The vinyl siding is the main cladding at all elevations of this complex.
Existing Condition	Fair
History	The vinyl siding is original and in serviceable condition; however, dirt and staining observed on the siding at multiple locations.

Notes and Recommendations:

Recommendation	Regular maintenance and power washing of vinyl siding is recommended as part of whole complex maintenance schedule. Replace the siding at the end of expected service life.
Action	Renewal and maintenance

Lifecycle Data:

Actual or Estimated Year of Acquisition	1999	Estimated Remaining Life	
Typical Service life	Assembly	35 - 40	21
	Finishing	N/A	N/A

VERTICAL ASSEMBLY: FIBRE-CEMENT CLADDING



Physical Assessment:

Component Classification	Building Envelope
Description and Location	The fibre-cement cladding in different configurations are mainly installed on upper level walls at front elevation and courtyards as well as the bottom section of the columns.
Existing Condition	Good
History	The fibre-cement cladding is original; however, it has been refinished in 2014.

Notes and Recommendations:

Recommendation	Regular maintenance of the fibre-cement cladding is recommended. Apply new paint finish when required (estimated to be within the next 15 years).
Action	Renewal

Lifecycle Data:

Actual or Estimated Year of Acquisition	1999 / 2014		Estimated Remaining Life
Typical Service life	Assembly	40	21
	Finishing	15 – 20	11

VERTICAL ASSEMBLY: WOOD FASCIA BOARDS



Physical Assessment:

Component Classification	Building Envelope
Description and Location	Wood fascia boards are installed along the main roof perimeter.
Existing Condition	Good
History	Wood fascia boards are original and in good condition.

Notes and Recommendations:

Recommendation	Regular maintenance and cleaning of these elements assumed to be part of regular maintenance schedule. Apply new paint finish when required (estimated to be within the next 15 years). Replace them preferably in conjunction with roof or cladding renewal plan. The cost of renewal assumed to be included in those line items.
Action	Renewal and Maintenance

Lifecycle Data:

Actual or Estimated Year of Acquisition	1999	Estimated Remaining Life
Typical Service life	Assembly	40
	Finishing	15 – 20
		21
		1 – 5

WINDOW AND DOOR ASSEMBLY: METAL WINDOWS AND SLIDING DOORS



Physical Assessment:

Component Classification	Building Envelope
Description and Location	The metal frame windows and sliding doors (patio / balcony) with double glazed insulated glass units and vinyl trimming around the frame are installed at this complex.
Existing Condition	Good
History	All windows and sliding doors are original.

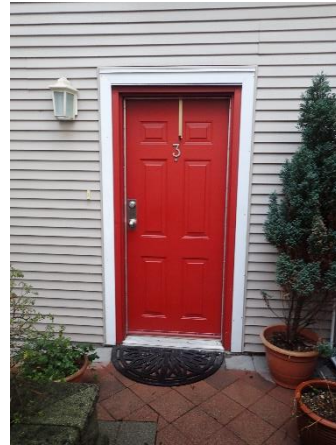
Notes and Recommendations:

Recommendation	Regular maintenance of these assemblies is recommended. Replace the windows and doors at the end of their expected service life of 35 years. However, the strata may consider upgrading the windows and sliding doors with higher energy efficient units prior to that time.
Action	Renewal & Targeted Repair (when required)

Lifecycle Data:

Actual or Estimated Year of Acquisition	1999	Estimated Remaining Life	
Typical Service life	Assembly	35	16
	Finishing	N/A	N/A

WINDOW AND DOOR ASSEMBLY: SWING DOORS



Physical Assessment:

Component Classification	Building Envelope
Description and Location	Access to balconies, courtyards and some units located at each end of complex provided via metal swing door in wood frames and vinyl trims around the frames. The doors are protected by overhangs. Some of these doors are protected by an overhang.
Existing Condition	Good
History	The doors are original and in good condition.

Notes and Recommendations:

Recommendation	Regular maintenance of these assemblies is recommended. Replace the doors at the end of their expected service life of approximately 35 – 40 years. It is recommended Strata to consider replacing these units in conjunction with sliding doors and windows.
Action	Renewal & Repair Allowance

Lifecycle Data:

Actual or Estimated Year of Acquisition	1999	Estimated Remaining Life	
Typical Service life	Assembly	35 – 40	16
	Finishing	20	1 – 5

WINDOW AND DOOR ASSEMBLY: ENTRY GATE



Physical Assessment:

Component Classification	Building Envelope
Description and Location	A metal picket raining style entry gate with plexiglass is installed at the entrance of each courtyard as well as the gate located at the back alley.
Existing Condition	Good
History	The doors are from the original construction and in fair serviceable condition. However, corroded hinges and self-closing mechanism noted on multiple doors. See sample photos provided below.

Notes and Recommendations:

Recommendation	Regular maintenance and applying paint touch up of these units assumed to be part of annual maintenance. We recommend to replaced corroded hinges as part of regular maintenance. Replace doors at the end of expected service life of 40 years.
Action	Renewal

Lifecycle Data:

Actual or Estimated Year of Acquisition		1999	Estimated Remaining Life
Typical Service life	Assembly	30 – 35	20
	Finishing	20	1 – 5



Photo 1: Corrosion observed on some elements of door control mechanism of a few entry gates.



Photo 2: Corroded hinges noted at multiple locations.

RELATED COMPONENT: METAL FLASHING



Physical Assessment:

Component Classification	Building Envelope
Description and Location	Light gauge sheet metal designed to deflect water. Metal flashing at through wall flashing is installed on upper walls where fibre-cement cladding is installed as well as window heads. Also, metal cap flashings are installed on the curbs at the perimeters of the roof decks on roof level.
Existing Condition	Good
History	The metal flashing is original and in serviceable condition.

Notes and Recommendations:

Recommendation	Maintenance and touch-up painting of the scratches is recommended as part of regular maintenance. Flashing replacement will be in conjunction with associated assembly replacement and the cost is included within those line items.
Action	Renewal

Lifecycle Data:

Actual or Estimated Year of Acquisition	1999	Estimated Remaining Life	
Typical Service life	Assembly	25 - 35	Varies
	Finishing	N/A	

RELATED COMPONENT: SEALANT



Physical Assessment:

Component Classification	Building Envelope
Description and Location	Sealants (or caulking) are flexible products typically is used to seal between two dissimilar materials. In this complex there are vinyl trims installed around the window and door frames as well as wall penetrations. Therefore, no sealant was required. However, sealant observed at some wall penetrations, such as hose-bibs.
Existing Condition	Fair /Poor
History	Sealant where observed was in fair condition.

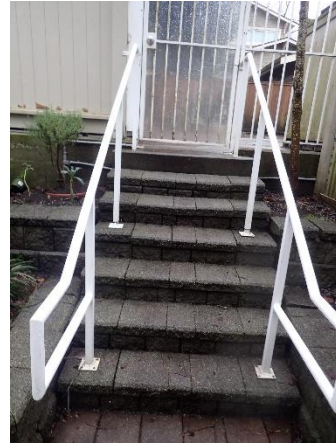
Notes and Recommendations:

Recommendation	Sealant usually has a service life of between 10 to 15 years depending on the location and maintenance. Replace damaged joint sealant on the regular maintenance schedule. No capital expenditure is anticipated.
Action	Targeted Repair

Lifecycle Data:

Actual or Estimated Year of Acquisition		1999	Estimated Remaining Life
Typical Service life	Assembly	15	
	Finishing	N/A	N/A

VERTICAL ASSEMBLY: GUARDRAIL



Physical Assessment:

Component Classification	Superstructure
Description and Location	Prefinished aluminum picket railings are top mounted to the balcony / roof deck curbs.
Existing Condition	Good
History	All guardrails are as part of the original construction. Severe staining observed on some of the railings at multiple locations.

Notes and Recommendations:

Recommendation	Regular cleaning and maintenance and paint touch-ups in the long-term are recommended. Replace guardrails at the end of their expected service lives of around 40 years.
Action	Renewal

Lifecycle Data:

Actual or Estimated Year of Acquisition	1999	Estimated Remaining Life	
Typical Service life	Assembly	40	21
	Finishing	20	

HORIZONTAL ASSEMBLY: ROOF



Physical Assessment:

Component Classification	Roofing
Description and Location	The main roof is a flat (low-sloped) roof with a torched-on SBS waterproofing membrane sloped to drains.
Existing Condition	Good
History	The roof is original and still in good condition with regular maintenance.

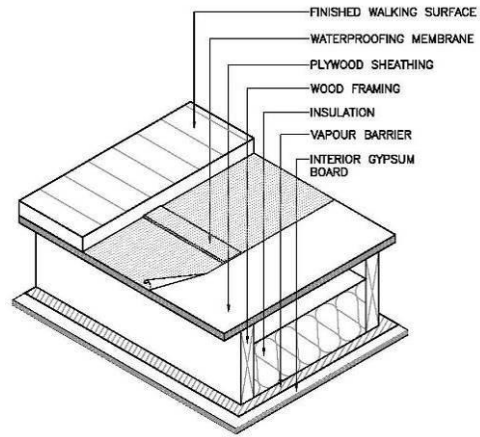
Notes and Recommendations:

Recommendation	Regular maintenance of the roof is recommended. Replace the membrane at the end of its expected service life. Prior to roof renewal, a study is recommended to confirm the condition of membrane at that time. It is recommended to replace the corroded door hatch.
Action	Renewal

Lifecycle Data:

Actual or Estimated Year of Acquisition	1999	Estimated Remaining Life
Typical Service life	Assembly	25 – 30
	Finishing	N/A
		5 – 10
		N/A

HORIZONTAL ASSEMBLY: ROOF DECK



Physical Assessment:

Component Classification	Roofing
Description and Location	Roof decks are exterior surfaces over heated space. This assembly consists of a walking surface over waterproofing membrane over vented framing.
Existing Condition	Not reviewed
History	The waterproofing membrane of the roof decks is protected by wood decking and therefore, not accessible to review. According to the strata all wood decking boards are the replaced 8 years ago.

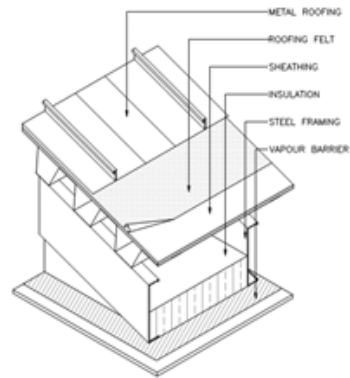
Notes and Recommendations:

Recommendation	Replace the membrane at the end of its expected service life of approximately 25 years. It is recommended to replace the membrane in conjunction with the main roof waterproofing replacement. The cost is included in that line item. Assumed wood decking to be saved at the time of roof renewal.
Action	Renewal

Lifecycle Data:

Actual or Estimated Year of Acquisition	1999 / 2010 (deck boards)	Estimated Remaining Life	
Typical Service life	Assembly	25 – 30	5 – 10
	Decking	20	

HORIZONTAL ASSEMBLY: SLOPED ROOF



Physical Assessment:

Component Classification	Roofing
Description and Location	There are sections of slope roofx mainly along the front elevations protected by asphalt shingles.
Existing Condition	Good
History	Asphalt shingles are original and in good serviceable condition; however, some organic growth observed at multiple locations.

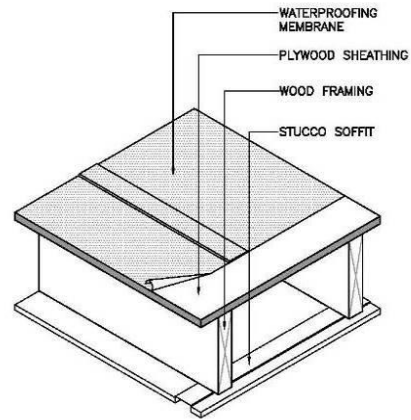
Notes and Recommendations:

Recommendation	Regular maintenance and cleaning of the roofs and gutters is recommended as part of maintenance schedule. Replace the roof at the end of its expected service life. Prior to roof renewal, a study is recommended to review the condition of roof at that time.
Action	Renewal

Lifecycle Data:

Actual or Estimated Year of Acquisition	1999	Estimated Remaining Life
Typical Service life	Assembly	25 – 30
	Finishing	N/A
		5 – 10
		N/A

HORIZONTAL ASSEMBLY: BALCONY



Physical Assessment:

Component Classification	Building Envelope
Description and Location	Balconies and porches consist of liquid applied membrane waterproofing.
Existing Condition	Good
History	Liquid membrane appears original and in serviceable condition; however, some staining and dirt observed at a few porches reviewed.

Notes and Recommendations:

Recommendation	Regular maintenance and cleaning is recommended by individual owners. Resurfacing this type of membrane is recommended every 5 to 7 years. Further review is recommended to verify the existing condition of all balconies / porches and replace if required.
Action	Renewal

Lifecycle Data:

Actual or Estimated Year of Acquisition	1999	Estimated Remaining Life	
Typical Service life	Assembly	15 – 20	2
	Resurfacing	5 – 7	N/A

ASSEMBLY: SKYLIGHT OPENING



Physical Assessment:

Component Classification	Roofing
Description and Location	Access to roof decks of 16 corner units' is provided via aluminum framed sloped skylights on third floor.
Existing Condition	Fair
History	All skylights are original and in fair to poor condition. Condensation observed at one unit reviewed.

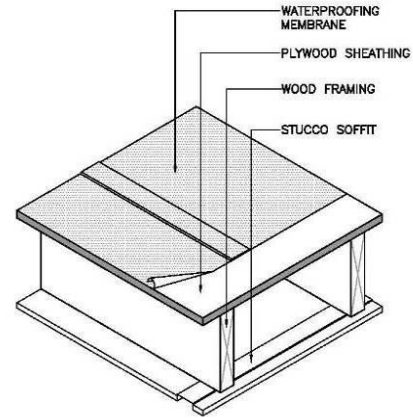
Notes and Recommendations:

Recommendation	Regular maintenance and inspection is recommended. It is recommended to replace skylights with high energy efficient units.
Action	Renewal

Lifecycle Data:

Actual or Estimated Year of Acquisition	1999	Estimated Remaining Life	
Typical Service life	Assembly	25	1 – 5
	Finishing	N/A	N/A

HORIZONTAL ASSEMBLY: SOFFIT



Physical Assessment:

Component Classification	Building Envelope
Description and Location	Perforated aluminum soffits are at the balconies and roof overhangs and below the projected walls.
Existing Condition	Good
History	N/A

Notes and Recommendations:

Recommendation	The soffits are well protected at the balconies and roof overhangs; therefore, no replacement is anticipated in future. Regular maintenance of these soffits and cleaning of the exhaust vents is recommended to be included in the Strata annual maintenance schedule. Typically replaced in conjunction with associated main components or full assemblies. The cost is included in those line items.
Action	Renewal

Lifecycle Data:

Actual or Estimated Year of Acquisition	1999	Estimated Remaining Life	
Typical Service life	Assembly	40	19
	Finishing	N/A	N/A

HORIZONTAL ASSEMBLY: PODIUM



Physical Assessment:

Component Classification	Site Development
Description and Location	Waterproofing membrane over the suspended slab around the footprint of the buildings is called podium membrane. This includes courtyards and patios.
Existing Condition	Not Reviewed
History	The waterproofing membrane is covered and concealed by different types of concrete or brick pavers, therefore, it was not available for review.

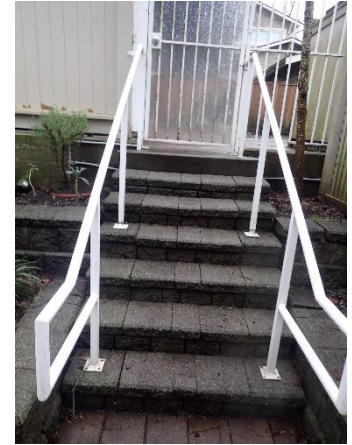
Notes and Recommendations:

Recommendation	Allowance to conduct periodic isolated repairs is recommended every 10 years in the parkade below. Replace the waterproofing membrane at the end of its expected service life of about 40 years. Prior to any renewal plan, a study is recommended to review the condition of roof at that time.
Action	Renewal

Lifecycle Data:

Actual or Estimated Year of Acquisition	1999	Estimated Remaining Life	
Typical Service life	Assembly	40	20 – 25
	Finishing	40	20 – 25

SITE DEVELOPMENT: CONCRETE RETAINING WALLS AND STEPS



Physical Assessment:

Component Classification	Site Development
Description and Location	There are cast in place and concrete block steps and concrete block retaining walls at the patios and around the courtyards.
Existing Condition	Good
History	The retaining walls and concrete steps are in good serviceable condition; however, at a few corner concrete blocks separations observed (photo above) that need to be adjust and secured properly.

Notes and Recommendations:

Recommendation	An allowance for targeted repairs may be expected. Concrete steps and retaining walls typically last the life of the building. However, these elements might need to be replaced or removed and reinstated to complete podium membrane renewal. Therefore, no significant capital expenditure anticipated.
Action	Targeted Repair / Renewal

Lifecycle Data:

Actual or Estimated Year of Acquisition	1999	Estimated Remaining Life
Typical Service life	Assembly	99**
	Finishing	N/A
		27
		N/A

SITE DEVELOPMENT: FENCING



Physical Assessment:

Component Classification	Site Development
Description and Location	Wooden fencing with different configurations are installed at the perimeter of the development along the south and east sides as well as between adjacent patios and roof decks.
Existing Condition	Poor
History	Fences are in poor condition with fade and stained finishing noted at multiple locations specifically at roof deck dividers as well as gothic picket fences at front elevation. See photos below.

Notes and Recommendations:

Recommendation	Strata confirmed all ground floor fences and divider walls between adjacent balconies / roof decks will be replaced.
Action	Renewal

Lifecycle Data:

Actual or Estimated Year of Acquisition	1999	Estimated Remaining Life	
Typical Service life	Assembly	20 – 25	1 – 5
	Finishing	15	

¹ Applying new finishing assumed to be 15 years after replacing the fences.



Photo 1: Lattice fences installed between multiple adjacent patios.



Photo 2: Gothic Picket Fences installed at front side of the property. A sample of damaged fencing at front side of the complex.



Photo 2: Sample of fade paint finishing, and decayed elements noted on fencing on the roof decks.

(no photo)

SITE DEVELOPMENT: SITE FEATURE



Physical Assessment:

Component Classification	Site Development
Description and Location	At the entrance to the complex, there are wood frame structures with fibre-cement cladding over the columns and sloped roofs covered by asphalt shingles.
Existing Condition	Good
History	They are from original construction.

Notes and Recommendations:

Recommendation	Regular maintenance and paint touch-ups of these structures assumed to be part of annual maintenance schedule. Renewal of the cladding and roof shingles assumed to be part of main renewal plan of each assembly. Therefore, no significant capital expenditure is anticipated.
Action	Renewal

Lifecycle Data:

Actual or Estimated Year of Acquisition	1999	Estimated Remaining Life
Typical Service life	Assembly	Varies
	Finishing	15 – 20

INTERIOR: UNIT ENTRY DOOR



Physical Assessment:

Component Classification	Interiors
Description and Location	Suite entry doors at third floor are painted solid wood frame units.
Existing Condition	Good
History	The doors are from the original construction and they are in good condition.

Notes and Recommendations:

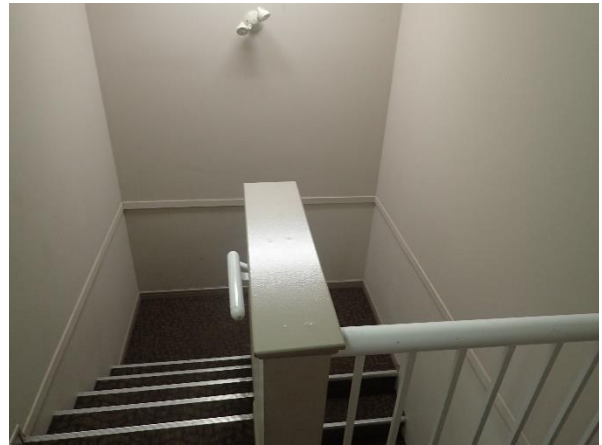
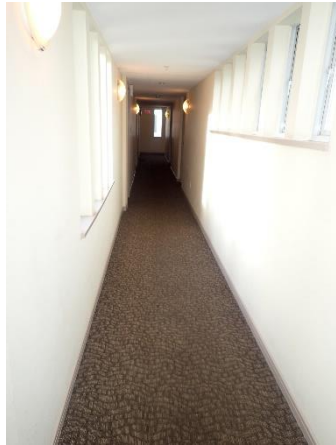
Recommendation	Replace at the end of service life; however, renewing interior doors is discretionary to the strata. Apply paint finish when required.
Action	Discretionary Renewal

Lifecycle Data:

Actual or Estimated Year of Acquisition	1999	Estimated Remaining Life
Typical Service life	Assembly	40 ¹
	Finishing	20 ¹ (paint touch when required)
		21
		1 – 5

1 The doors can last the life of the buildings and replacing these units is discretionary to the strata.

INTERIOR: INTERIOR FINISHING



Physical Assessment:

Component Classification	Interiors
Description and Location	The floor of the corridor on third floor and common stairwells are carpeted. The walls and ceilings are painted.
Existing Condition	Good
History	The carpet was replaced in 2014.

Notes and Recommendations:

Recommendation	An allowance is recommended to renew finishes when required. However, renewing these elements is discretionary to the strata.
Action	Discretionary

Lifecycle Data:

Actual or Estimated Year of Acquisition	1999 / 2014	Estimated Remaining Life	
Typical Service life	Wall / Ceiling	20 – 25	5 – 10
	Floor	20 – 25	21

MECHANICAL SYSTEM: PARKADE EXHAUST SYSTEM



Physical Assessment:

Component Classification	Mechanical system
Description and Location	The garage exhaust fan was not operating at the time of our visit. There are a few number of carbon Monoxide Monitors throughout parkade to detect vehicles exhaust gas.
Existing Condition	Fair
History	The fan is original; however, no problem was reported by the Strata.

Notes and Recommendations:

Recommendation	Replace fan at end of expected service life. Sensors should also be tested regularly.
Action	Renewal

Lifecycle Data:

Actual or Estimated Year of Acquisition	1999	Estimated Remaining Life	
Typical Service life	Assembly	25 – 30	5 – 10
	Component	N/A	N/A

MECHANICAL SYSTEM: COMMON AREAS VENTILATION SYSTEM



Physical Assessment:

Component Classification	Mechanical system
Description and Location	Air is supplied to corridors by a rooftop makeup air unit (MUA). Exhaust fans are installed in common areas for air quality control. Suite exhaust fans also include bathroom fans and kitchen range hood fans.
Existing Condition	Fair
History	There is no record of any issues with the fans. Maintenance of in-suite exhaust fans are responsibility of individual owners. However, the other fans and MUA, exhaust vents, and ducts need to be well-maintained by the strata.

Notes and Recommendations:

Recommendation	We expect that the common area fans and MUA be replaced within next 1-5 years. Although the MUA replacement is included in the costs, the cost of new exhaust fans for common areas is not significant; therefore, no capital expenditure is anticipated for those components. It is recommended that MUA be replaced with heated type to provide warm air into the corridors during cold seasons.
Action	Renewal

Lifecycle Data:

Actual or Estimated Year of Acquisition	1999	Estimated Remaining Life	
Typical Service life	Assembly	20	1 – 5
	Component	N/A	N/A

MECHANICAL SYSTEM: HEATING SYSTEM (SUITES & COMMON AREAS)



Physical Assessment:

Component Classification	Mechanical system
Description and Location	Heating effect for suites and common areas such as corridors and storage rooms are provided by electric baseboard heaters. Suites are also equipped with gas-fired fireplaces; however, the fireplaces are not used.
Existing Condition	Fair
History	The baseboard heaters are original to the building; however, there is no record of reported problems or failure. The inspected baseboards seem functional with no issues observed.

Notes and Recommendations:

Recommendation	Electric baseboard heaters have a service life of about 20 – 25 years. It is recommended to replace them at the end of expected service life with higher efficient ones.
Action	Maintenance & Renewal

Lifecycle Data:

Actual or Estimated Year of Acquisition		1999	Estimated Remaining Life
Typical Service life	Assembly	20 – 25	10
	Components	N/A	N/A

MECHANICAL SYSTEM: DOMESTIC WATER DISTRIBUTION



Physical Assessment:

Component Classification	Mechanical system
Description and Location	The entire development receives water from the underground supply line to a single service connection in the sprinkler room.
Existing Condition	Fair
History	The domestic water distribution is original.

Notes and Recommendations:

Recommendation	Strata is planning to replace the piping in 2018-2019.
Action	Renewal

Lifecycle Data:

Actual or Estimated Year of Acquisition	1999	Estimated Remaining Life
Typical Service life	Assembly	N/A
	piping	20 – 25
		1

MECHANICAL SYSTEM: DOMESTIC HOT WATER SYSTEM



Physical Assessment:

Component Classification	Mechanical system
Description and Location	There is a hot water boiler model DuraMax from A.O.Smith connected to two hot water storage tanks from A.O.Smith model TJV 120M with 119 US Gallon capacity installed in the mechanical room. The system functions throughout the year to provide domestic hot water to residents.
Existing Condition	Good
History	4 original hot water tanks were replaced with the existing one boiler, two hot water storage tanks, and a circulation pipe-mounted pump in 2012.

Notes and Recommendations:

Recommendation	The whole system in the boiler room is maintained by PML Professional Mechanical Ltd. It is recommended that regular maintenance be performed to keep the boiler and related components in good functionality condition. A renewal allowance is recommended to replace the boiler, storage tank and pumps at their end of expected service lives.
Action	Maintenance & Renewal

Lifecycle Data:

Actual or Estimated Year of Acquisition		2012	Estimated Remaining Life
Typical Service life	Boiler	30	25
	Tanks	25	20
	Pump	10 - 15	10
	Piping	30	25

MECHANICAL SYSTEM: DRAINAGE SYSTEM (SANITARY AND STORM)



Physical Assessment:

Component Classification	Mechanical system
Description and Location	The sanitary and storm drainage system are distributed throughout the development. The downpipes collect rainwater from the gutters and direct it to the drainage system at perimeter of the buildings. There is a sump pump located at parkade. The elements of the drainage system where reviewed were constructed of cast iron and PVC.
Existing Condition	Fair
History	The pump appeared original. There were no reports of any problems.

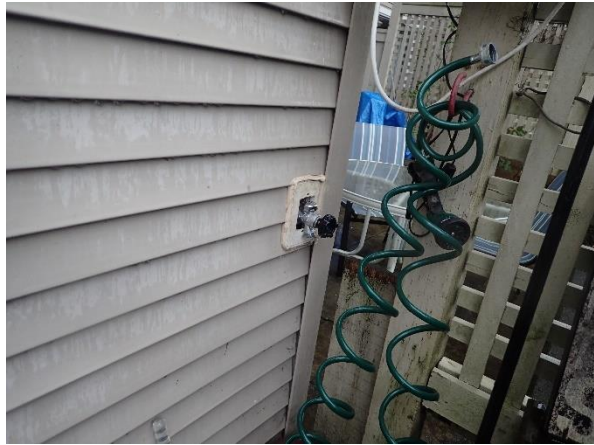
Notes and Recommendations:

Recommendation	It is recommended that the piping be regularly inspected / maintained to avoid leakage damages. A repair allowance is recommended for targeted repairs / replacement and periodic flushing of the drainage system every 10 years. However, Strata might need to consider replacing the whole system in long term (after 30 – 40 years).
Action	Targeted Repair & Renewal

Lifecycle Data:

Actual or Estimated Year of Acquisition	1999	Estimated Remaining Life	
Typical Service life	Assembly	30 – 40	20 – 25
	Components	N/A	N/A

ELECTRICAL SYSTEM: IRRIGATION SYSTEM



Physical Assessment:

Component Classification	Mechanical system
Description and Location	Irrigation to landscaped areas is provided by hose-bibs.
Existing Condition	Good
History	There were no reports of problems at the time of site visit.

Notes and Recommendations:

Recommendation	We assume that replacement of hoses will be completed as needed out of the maintenance operating budget. No significant capital expenditure is anticipated.
Action	Maintenance & Renewal

Lifecycle Data:

Actual or Estimated Year of Acquisition	Unknown		Estimated Remaining Life
Typical Service life	Assembly	N/A	N/A
	Components	N/A	N/A

ELECTRICAL SYSTEM: ELECTRICAL DISTRIBUTION



Physical Assessment:

Component Classification	Electrical system
Description and Location	The local utility (BC Hydro) supplies power through a switchgear unit 10 KA. The connected power is fed to 120/208 Volt distribution panels and the meter centres. The distribution panels supply power to the house loads.
Existing Condition	Fair
History	There were no reports of problems.

Notes and Recommendations:

Recommendation	The electrical equipment was clean, dry and free of physical damage where reviewed. Components of the electrical distribution system such as breakers and disconnect switches may not function reliably if they have not operated for decades. For this reason, some elements will have to be replaced. Cleaning the electrical room and the equipment is recommended to be part of the Strata's maintenance schedule.
Action	Maintenance / Renewal

Lifecycle Data:

Actual or Estimated Year of Acquisition	1999	Estimated Remaining Life	
Typical Service life	Assembly	40 – 50	30
	Components	N/A	N/A

ELECTRICAL SYSTEM: INTERIOR LIGHTING



Physical Assessment:

Component Classification	Electrical system
Description and Location	The corridors have compact fluorescent fixtures. The lighting throughout the parking garage and equipment rooms consists of surface mounted T8 fluorescent fixtures.
Existing Condition	Good
History	The lighting was clean, dry and free of physical damage. Light levels appeared adequate throughout.

Notes and Recommendations:

Recommendation	Replace light fixtures when required including the bulbs as part of the annual maintenance budget.
Action	Discretionary

Lifecycle Data:

Actual or Estimated Year of Acquisition	1999	Estimated Remaining Life	
Typical Service life	Assembly	30 – 35	10 – 15
	Components	As they fail	As they fail

ELECTRICAL SYSTEM: EXTERIOR LIGHTING



Physical Assessment:

Component Classification	Electrical system
Description and Location	The exterior lighting consists of wall-mounted light fixtures mainly with compact fluorescent lights at the exterior exits.
Existing Condition	Fair
History	The light fixtures are original and are aged and a few were damaged.

Notes and Recommendations:

Recommendation	The expected service life of light fixtures is approximately 25 years. The existing light fixtures are aged but appear to be functioning adequately currently. Replace lamps and ballasts as they fail.
Action	Discretionary Renewal

Lifecycle Data:

Actual or Estimated Year of Acquisition	1999	Estimated Remaining Life	
Typical Service life	Assembly	25	1 – 5
	Components	As they fail	As they fail

ELECTRICAL SYSTEM: EMERGENCY LIGHTING



Physical Assessment:

Component Classification	Electrical system
Description and Location	Emergency lights are installed in mechanical and electrical rooms as well as most of the common areas.
Existing Condition	Good
History	The fixtures are original, and the entire system is maintained by Tiger Power Fire.

Notes and Recommendations:

Recommendation	It is recommended that the batteries and light bulbs be regularly checked and replaced when necessary. No significant capital expenditure is anticipated.
Action	Maintenance

Lifecycle Data:

Actual or Estimated Year of Acquisition	1999	Estimated Remaining Life	
Typical Service life	Assembly	30 – 35	10 – 15
	Components	As they fail	As they fail

ELECTRICAL SYSTEM: SECURITY SYSTEM



Physical Assessment:

Component Classification	Electrical system
Description and Location	The door entry system employs a keypad at the main entrance to allow guests and residents access to the building. The system uses the phone in each suite to control access.
Existing Condition	Good
History	The door entry system is original to the building.

Notes and Recommendations:

Recommendation	A maintenance budget is recommended for repairing magnetic locks at entrance. Replace at end of expected service life.
Action	Renewal

Lifecycle Data:

Actual or Estimated Year of Acquisition	1999	Estimated Remaining Life	
Typical Service life	Assembly	25 – 30	5 – 10
	Components	N/A	N/A

SECURITY SYSTEM: FIRE DETECTION SYSTEM



Physical Assessment:

Component Classification	Life Safety
Description and Location	There is a fire alarm control panel from Notifier in the building. There are smoke detectors throughout the facilities, as well as pull stations and hand-held fire extinguishers at the exits and common areas.
Existing Condition	Good
History	Fire alarm panel is original to the building and there is no record of any issue.

Notes and Recommendations:

Recommendation	Over time, it becomes increasingly difficult to find replacement parts. Eventually, it becomes more economical to replace the panel and devices rather than trying to find replacement components. Replace the fire alarm control panel and devices at the end of their expected service lives.
Action	Maintenance & Renewal

Lifecycle Data:

Actual or Estimated Year of Acquisition		1999	Estimated Remaining Life
Typical Service life	Assembly	30 – 35	10 – 15
	Components	15	1 – 5

FIRE PROTECTION SPECIALTIES: FIRE SUPPRESSION SYSTEM



Physical Assessment:

Component Classification	Life Safety
Description and Location	There are hand-held fire extinguishers throughout the complex that protect the occupied areas and a dry sprinkler system through the parkade.
Existing Condition	Good
History	No operational problems were noted or reported. The system is maintained by Tiger Power Fire.

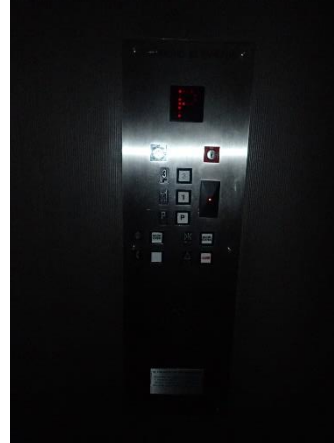
Notes and Recommendations:

Recommendation	An allowance to replace the dry valve, alarm valves, back-flow preventer and compressor is recommended as part of the maintenance budget. Ensure that all valves and valve assemblies are inspected, maintained and tested as per NFPA 25. The NFPA requires that the sprinkler heads be tested after 45 - 50 years of service. They can be replaced at that time.
Action	Maintenance/Targeted Repair

Lifecycle Data:

Actual or Estimated Year of Acquisition	1999	Estimated Remaining Life
Typical Service life	Assembly	Varies
	Components	50 (sprinkle heads)
		Varies
		30 – 35

CONVEYANCE SYSTEM: PASSENGER ELEVATOR



Physical Assessment:

Component Classification	Elevator
Description and Location	The building has a hydraulic elevator with 2500 lb capacity. There is a 20horsepower submersible hydraulic pump that drives the elevator.
Existing Condition	Good
History	The condition of the elevator is consistent with the age and serviceable condition. The elevator is maintained by Richmond Elevators.

Notes and Recommendations:

Recommendation	The hydraulic pump is required to be replaced at the end of its life expectancy. At some point, the elevator will have to be refurbished and modernized. This includes door operators, controls, rebuilding the drive system, replacement of finishes including walls, ceiling and floor. This kind of modernization is typically not addressed in a comprehensive service contract. An allowance is recommended for the updates. A full inspection is recommended prior to any renewals.
Action	Maintenance & Renewal

Lifecycle Data:

Actual or Estimated Year of Acquisition	1999	Estimated Remaining Life	
Typical Service life	Assembly	30 – 35	10 – 15
	Components	10 – 15 (Hydraulic Pump)	1-5

APPENDIX D – METHODOLOGY AND REPORT FORMAT

GENERAL DEPRECIATION REPORT INFORMATION

The depreciation report is a dynamic document to assist the Strata Council in planning budgets and maintenance programs. This report is recommended to be reviewed on an annual basis by the Strata to ensure it is current and provides the most up-to-date representation of future financial expenditures. A qualified professional should update the depreciation report every three years in accordance with the British Columbia Strata Property Act – Strata Regulation.

The report format is intended to allow Owners to review the findings and recommendations of this report in a focused manner while still making the more detailed background observations and discussion points available.

Below we provide a description and / or definition of the terminology used in the Appendices and our approach to assigning ratings in Appendices A and B reserve component inventory:

Component Classification:

Reserve Fund Components are classified in terms of component types, site developments and common element facilities.

Description and Location:

A brief description of the item and its location.

Existing Condition Rating:

Based on our observation, an opinion on the existing physical condition of a representative sampling of the building component at readily accessible locations is provided as listed below;

- New: New building / complex or the assembly / component is replaced/ renovated recently.
- Good: Functioning as intended; limited (if any) deterioration observed.
- Fair: Function and operation exhibiting wear or minor deterioration, normal maintenance frequency.
- Poor: Function and operation failing; significant deterioration and distress observed; increased maintenance attention has been required.
- Failed: significant deterioration and distress observed; renewal or replacement is required.
- N/A: Not Applicable

History:

Any history of the component including deficiencies observed (if any) by BCBS, and problems or previous repairs reported by the Strata.

Recommendation:

Based on our observation, BCBS recommends action required for reserve fund budgeting. Refer to Appendix A table for recommended cost estimates.

Action:

In addition to the above, the type of actions we recommend for each item are categorized as follows:

- Renewal: Refers to work to supply and install a new assembly and/or component based on like with like, allowing for changing to contemporary standards.
- Targeted Repair: Refers to work needed to extend the life of a component, restore functionality, or for partial replacements of isolated failures.
- Maintenance: Refers to work needed maintain and to extend the life of a component, and the allowance assumed to be included in the operating budget as part of annual maintenance plan.

- Study: Refers to a recommendation to undertake an assessment to identify more accurate repair / replacement costs or timing.
- Upgrade: Refers to work of a more optional nature such as upgrading an assembly or component to a higher standard (more efficient, higher quality, etc.). In this case, we assume the cost may not be included within the cash-flow.
- Discretionary: Items where the timing, scope of work and phasing is at the owner's discretion.
- Refurbishment: Refers to work that implies a process of improvement by re-equipping and cleaning.

Typical Service Life:

The typical or expected service life of each assembly or component is based on our experience and discussions with contractors or manufacturers by assuming regular maintenance is undertaken based on manufacturer's recommendations. A life cycle of 99 shows a one-time project and is for calculation reasons only.

Estimated Remaining Service Life:

Remaining service life is the difference of the expected service life and its present equivalent age. A negative value might be used to show phased projects already partially complete.

Phased projects:

For renewal work that usually is not completed in one year or projects with significant cost estimates, BCBS may recommend to phase the work over several consecutive years. Therefore, there may be a column in the table of Appendix A "Reserve Component Assessment and Associated Costs" to show the number of years over which a project is phased.

Probable Cost:

An opinion of probable cost or recommended budget is provided for items whose remaining service life is deemed to be 30 years or less.

The budget values only represent our opinion and are based on recent projects or similar work, information provided by the Strata and our professional judgment. However, they can vary due to a number of reasons, such as market conditions, availability of materials, regulatory requirements, etc.

The probable costs either for repair or full replacement are in current fiscal year dollars, including applicable taxes and allowance for consulting services (administration, design, tendering and construction review for some of the larger projects). However, the cost for these services can vary significantly depending on the size, scope and degree of complexity of the project, and changing demands or regulatory requirements over time.

The estimated costs are typically referred to as Class D estimates ($\pm 50\%$), defined by the Budget Guidelines for Consulting Engineering Services as: "A preliminary estimate which, due to little or no site information, indicates the approximate magnitude of cost of the proposed project, based on the client's broad requirements. This overall cost estimate may be derived from lump sum or unit costs from a similar project. It may be used in developing long term capital plans and for preliminary discussion of proposed capital projects." Please note that the probable cost estimates provided in this review do not include the general requirement costs such as demolition or scaffolding costs as well as other soft costs as may apply to some renewal projects.

Capital Plan (Appendix B):

In the capital plan table the estimated major repair and renewal costs associated with the Assets are provided over next 30 years. The estimated future costs in the Capital Plan table are in current fiscal year dollars. However, the values in scenarios are in future dollar value. To express the future year dollars, inflation rate (2% per year) is added to the current costs in the calculation of these values. Please take note that the replacement and repair schedules are not fixed and may be required sooner or later than they are anticipated. Therefore, BCBS recommends to conduct a study/ assessment of assembly or component prior any major renewal project.

ASSUMPTIONS AND LIMITATIONS

This report reflects our judgement in light of the information available at the time of preparation and has been prepared in accordance with generally accepted engineering, depreciation report, and building condition assessment practices.

BCBS assumes that the building systems were built and finished in general conformance with the documents provided by the Owners and property manager, unless otherwise noted.

This report is intended for the sole use of LSM 3853 and must not be distributed or used by others without our knowledge. It is based on the documents and information provided to us, discussions with the Strata representatives, the findings at the time of our on-site investigation.

No destructive testing, review of concealed elements and components, and verification of operation of systems were performed to confirm actual conditions during the preparation of our report nor were they within the scope of this review. No warranties, either expressed or implied, are made as to the professional services provided under the terms of our scope of work and included in this report.

It is a basic assumption that any correspondence, material, data, evaluations and reports furnished by others are free of latent deficiencies or inaccuracies except for apparent variances discovered during the completion of this report.

Observations were made only of those areas that were readily accessible during our visual review and photos of some observed deficiencies are provided in Appendix C following the assembly or component's description sheet for strata reference; however, any further discussion regarding the existing deficiencies is not part of the scope of this report. There may be components that have not been reviewed, and if their conditions need to be known, further study is recommended.

Unexpected conditions may be encountered at the building / facility that may not have been explored within the scope of this report. Should such an event occur, BCBS should be notified so that we may know whether modifications to our conclusions are necessary.

In issuing this report, BCBS does not assume any of the duties or liabilities of the designers, builders or Owners of the subject property. Owners, prospective purchasers, tenants or others who use or rely on the contents of this report do so with the understanding as to the limitations of the documents reviewed and the general visual inspection undertaken, and understand that BCBS cannot be held liable for damages they may suffer in respect to the purchase, ownership, or use of the subject property.

Professional judgment was exercised in gathering and analyzing the information obtained and in the formulation of the conclusions. Like all professional persons rendering advice, we do not act as insurers of the conclusions we reach, but we commit ourselves to care and competence in reaching those conclusions. No other warranties, either expressed or implied, are made.

DEPRECIATION REPORT PROJECTION FACTORS, FINANCIAL TERMS, AND ASSUMPTIONS

The three funding scenarios provided in this report illustrate the required Contingency Reserve fund (CRF) contributions, opening and closing balances, special assessments, and forecasted expenditures for the next 30 years. In order to produce these scenarios, a number of assumptions and variables are required. In the following, we provide a list of factors and assumptions that we considered in the preparation of this report.

Opening Balance

This is the reserve fund position at the beginning of each and every fiscal year showing the cash resources available. We assume the Strata Council confirms the starting balance is correct to the best of their knowledge prior to authorizing us to finalize the report.

Reserve Contribution

This refers to the amount contributed each year to the reserve fund from the monthly common expenses. Based on information provided for us by the Strata, we assume the Strata Council confirms the current annual contribution is correct to the best of their knowledge prior to authorizing us to finalize the report. Future annual contributions are calculated based on the estimates of expected service life and opinions of probable cost, Minimum Reserve Fund Balance, and the assumptions for inflation and interest. Sample annual contributions that would result in an adequate Reserve Fund are indicated in the attached Cash Flow Scenarios. When large expenses are anticipated in the near future and the existing Reserve Fund Balance is relatively low, increases to the annual contribution may not be sufficient. Increasing the annual contribution to an amount that can accommodate the major expenses is typically not considered a suitable funding plan since the Reserve Fund Balance often becomes relatively high for the remainder of the study period. Excess funds in a Reserve Fund cannot be used for any other purpose except for the major repairs and replacements for which they have been budgeted.

In such cases, Special Levies are considered in the Cash-Flow Plan. These contributions can be in the form of special assessments or surplus funds that the Board has indicated will be available from other sources (i.e. transferred from operating budgets or contingency funds).

Special Levy

This refers to the amounts including special assessments or surplus funds transferred from other sources (i.e. operating budget or contingency fund).

Inflation

The Government of Canada and the Bank of Canada inflation-control policy is aimed at keeping inflations at agreed upon target values. At present, the target range is 1 to 3 per cent, with the Bank's monetary policy aimed at keeping inflation at the 2 per cent target midpoint. This policy has continued to be renewed since implementation in 1991, and currently extends to December 31, 2016.

The total annual estimated expenditures are shown in the Capital Plan in current fiscal year dollars. The expenditures shown in the Cash Flow Table are inflated annually by the inflation percentage shown. This may not be the actual current inflation rate, but is a reasonable estimate to begin the long-term planning.

Interest

This value usually is based on the information provided for us to be used over the course of this study. However, this may not be the actual rate of interest on the Corporation's current investments, but is a reasonable estimate to begin the long-term planning.

The interest earned on the Reserve Fund for each year is based on a Mid-Year Interest Calculation in accordance with generally accepted accounting practice. Over the 30-year period, the calculated interest is lower than calculating Simple Interest, therefore it is a more conservative method for calculating interest.

With the Mid-Year Interest Calculation, the interest earned on the Reserve Fund is calculated at the middle of the fiscal year assuming that half the expenses have been taken out of the Reserve Fund and half the annual contribution has been deposited into the Reserve Fund. Therefore, interest is calculated as follows:

Interest is equal to Interest Rate multiplied by the sum of "Starting Balance" minus half of "Expenses" (for half of the year) plus half of "Annual Contribution".

Minimum Reserve Fund Balance Under the Act

The Strata Property Act regulation dictates that if CRF closing is less than 25% of the operating budget, then the Strata Corporation must contribute at least the lesser of either of the options below:

- The difference between the current balance and 25% of the operating budget,
- Up to 10% of the operating budget

At LMS 3853, Strata requested to have a minimum of \$63,324 as CRF closing balance at the end of each year. Therefore, in preparation of the scenarios, this amount is considered as the minimum closing balance at the end of each fiscal year for over the next 30 years.

APPENDIX E – GLOSSARY OF BUILDING TERMS

Definitions with * have specific meanings as per the Vancouver Building By-law and the BC Building Code

***Air barrier** system means the assembly installed to provide a continuous barrier to the movement of air.

***Attic** of roof space means the space between the roof and the ceiling of the top storey or between a dwarf wall and a sloping roof.

Balcony means a horizontal surface or projection exposed to the exterior.

***Basement** means a storey or storeys of a building located below the first storey.

***Building** means any structure used or intended for supporting or sheltering any use or occupancy.

Building Envelope means building materials that separate environmentally dissimilar interior space, or, building materials exposed to exterior space or the ground.

***Building Envelope Professional** means a member of the Architectural Institute of British Columbia or the Association of Professional Engineers and Geoscientists of British Columbia who has completed a recognized program in building envelope studies and has met all of the requirements for listing as a Building Envelope Professional with the Institute or Association.

***Cavity** wall means a construction of masonry units laid with cavity between the wythes. The wythes are tied together with metal ties or bonding units, and are relied on to act together in resisting lateral loads.

Cladding means a material or assembly that forms the exterior skin of the wall. Cladding types include; stucco, EIFS, metal panels, brick / stone veneer, various siding materials.

***Contractor** means a person who contracts with an owner or an authorized agent of an Owner to

undertake a project, and includes an Owner who contracts with more than one person for the work on a project or undertakes the work on a project or any part thereof.

Control Joint means a joint in a structure, usually applicable to stucco cladding used to regulate the amount and location of cracking.

Delamination means a separation along a plane parallel to the surface.

Deck means a horizontal surface exposed to the outdoors, located over a living space.

Drip Edge means a projection detailed to direct water run-off to the exterior.

***Exhaust Duct** means a duct through which air is conveyed from a room or space to the outdoors.

Face-Seal means a wall assembly where the performance of the wall depends on the ability of the exterior surface and associated sealants to shed water and prevent any water infiltration. This system has no drainage plane as provided by a rainscreen wall assembly.

***Firewall** means a type of fire separation of non-combustible construction which subdivides a building or separates adjoining buildings to resist the spread of fire, has a fire-resistance rating, and has structural stability to remain intact under fire conditions for the required fire-rated time.

Fishmouth means a deficiency in the installation of sheet membranes which results in a fold in the leading edge which can allow water penetration.

Flashing means a sheet metal or other material used in roof or wall construction designed to direct or shed water, typical type include: cap or parapet flashing: (top of walls, roof parapets), head or sill flashing (top or bottom of windows or other penetrations), cross-cavity (sheds water from the moisture barrier to the exterior, across the cavity and cladding), saddle flashing (flashing used at wall to horizontal planes), base flashing (used at the bottom edge of wall surfaces or edges of soffits)

Frame means the associated head, jamb, sill, and, where applicable, mullion and muntin that, when assembled, house the sash or fixed glazing.

***Grade** means the lowest of the average levels of finished ground adjoining each exterior wall of a

building.

***Guard** means a protective barrier around openings in floors or at the open sides of stairs, landings, balconies, mezzanines, galleries, raised walkways or other locations to prevent accidental falls from one level to another. Such barrier may or may not have openings through it.

Gum Lip means a method of sealing a flashing to a wall surface whereby the top edge of the flashing is bent outwards to provide a location for a sealant bead.

Head means horizontal member forming the top of the frame.

Insulating Glass Unit (IGU) means two or more panes spaced apart and hermetically sealed in a factory

Jamb means the upright or vertical members forming the side of the frame.

Mullion means a vertical or horizontal frame member that separates two or more lights within a window unit.

***Partition** means an interior wall 1 storey or part-storey in height that is not load-bearing.

***Party Wall** means a wall jointly owned and jointly used by 2 parties under easement agreement or by right in law, and erected at or upon a line separating 2 parcels of land each of which is, or is capable of being, a separate real-estate entity.

Punched Window means a single window frame and glass assembly surrounded by cladding as opposed to a number of frames coupled horizontally or vertically (window wall assembly).

Rainscreen (or Drainage) Cavity means a wall design providing a drainage plane behind the exterior cladding material. Allows incidental water entering the wall system to drain by gravity and allows venting and drying of underlying wall assemblies.

***Roof Drain** means a fitting or device that is installed in the roof to permit storm water to discharge into a leader.

***Roof Gutter** means an exterior channel installed at the base of a sloped roof to convey storm water.

Scupper means a metal pipe or trough section, which directs water to the exterior from a roof or balcony.

Sheathing means a panel material used to provide stiffness to the wall framing and /or provide backing for the cladding.

Sheathing Paper means a material in a wall assembly whose purpose is to protect materials from water penetration.

Spall means a piece of material, which has delaminated due to mechanical damage, or weather action (usually as a result of freeze / thaw condition).

Strapping means strips of wood or metal to form a cavity in a rainscreen wall assembly.

UV means ultra-violet radiation (from the sun), which has a degrading effect on many membrane and sealing materials (asphalt based) unless protected by an appropriate shielding layer.

***Vapour Barrier** means the elements installed to control the diffusion of water vapour.

Weep Hole means an opening in a wall or window assembly, which allows incidental water to drain to the exterior. Weep holes also act as vents allowing air movement and drying of cavity wall assembly.