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SUMMARY OF COVERAGE

POLICY NO. CP1021869, 100009998-505, 7513984-950

INSURED: OWNERS STRATA PLAN VIS6323

LOCATION ADDRESS: 1375 & 1395 BEAR MOUNTAIN PARKWAY, VICTORIA, BC V9B 0E1

POLICY PERIOD: FROM: JULY 15, 2020 TO: JULY 15, 2021 (12:01 AM STANDARD TIME)

Coverage	Deductible	Limit
All Property – “All Risks” Form	\$5,000	\$46,500,000
Water Damage	\$25,000	Included
Sewer Back-Up	\$25,000	Included
Flood	\$25,000	Included
Earthquake	15%, \$250,000 minimum	Included
Stated Amount Clause		Included
Replacement Cost Endorsement		Included
Exterior Glass	\$250	Included
Master Key Coverage	\$500	Included
Comprehensive Crime		\$10,000
Additional Living Expense - Limit Per Unit		\$50,000
- Policy Aggregate		\$1,000,000
Comprehensive General Liability	\$1,000	\$5,000,000
Medical Payments - Any one person		\$10,000
Sudden & Accidental Pollution Liability	\$1,000	\$1,000,000
Directors & Officers Liability	\$1,000	\$2,000,000
SPF6 - Standard Non-Owned Automobile	\$1,000	\$1,000,000
Equipment Breakdown	\$1,000	\$46,500,000
Extra Expense		\$100,000
Volunteer Workers Accident Program		\$200,000
Legal Expense	\$500	\$100,000

Insurers: Aviva Insurance Company of Canada
Certain Underwriters at Lloyds
HDI Global Specialty SE
The Wawanesa Mutual Insurance Company
Industrial Alliance Insurance and Financial Services

Subject to the terms, conditions and exclusions of the applicable policy(ies). This summary is issued as a matter of information only and confers no rights on the holder and imposes no liability on the insurer(s).

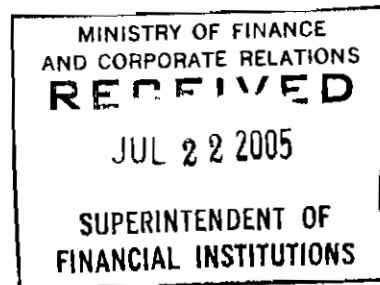
Printed: 08/17/2020

RENTAL DISCLOSURE STATEMENT

1. The proposed strata plan in respect of which this statement is made is a strata development known as St. Andrews Walk which will be legally described as:

Parcel Identifier: 009-858-636
Section 82
Highland District
Except Part In Plans VIP75509, VIP76197,
VIP76364, VIP76365, VIP76988 and VIP77878

Parcel Identifier: 025-695-126
Lot 2
Sections 81, 82, 83 and 84
Highland District
Plan VIP75509 Except Parts in Plans VIP76365 and VIP78873



and will contain 1 commercial strata lot and 135 residential strata lots,

2. The strata lots described below are under lease as of the date of this statement and the owner-developer intends to lease each strata lot until the date set out opposite its description.

NIL

3. The owner-developer reserves the right to itself and/or subsequent owners to lease any and all of the proposed strata lots for an indefinite period.

4. There is presently no bylaw of the strata corporation which limits the number of strata lots that may be leased by the owners.

DATED this 21st day of July, 2005,

LGB9 DEVELOPMENT CORPORATION

Per: 

Authorized Signatory

**ST. ANDREWS WALK
RULES AND REGULATIONS
2017**

1. PARKING STALLS

1.1 An Owner, tenant, or occupant shall not:

- (a) normally use any parking space other than the Limited Common Property Parking Stall that belongs to his or her strata lot.
- (b) carry out any oil changes, major repairs or adjustments to motor vehicles other mechanical equipment on common property or on any limited common property, except in cases of an emergency;
- (c) use the parking stalls for storage of any objects;
- (d) park or store any boat(s) or trailer(s) in the parkade.

1.2 An Owner, tenant or occupant may only:

- (a) use parking stalls or rental stalls for the parking of licensed and insured vehicles including licensed and insured Motorcycles;
- (b) park a licensed and insured Motorcycle in front or behind a vehicle in a parking stall as long as it does not protrude into the laneway or exceed the limits of the parking stall painted lines.

1.3 An Owner, tenant or occupant must promptly, and at his or her own expense, clean up any oil or other substance which spills or leaks on to the common property or limited common property.

1.4 All vehicles that use common electricity in the parkades are subject to a charge of \$10.00 a month for motorcycles and \$20.00 for cars.

THE OWNERS, STRATA PLAN VIS6323 (St. Andrews Walk)

STATEMENT OF OPERATING FUND
For the fiscal year ended September 30, 2020; and
Budget for the fiscal year ended September 30, 2021

DESCRIPTION	FISCAL 2020	FISCAL 2020	APPROVED
	ACTUAL	BUDGET	FISCAL 2021 BUDGET
INCOME			
Strata Assessments - Operating	467,620.03	467,957.00	504,879.00
Strata Assessments - Reserve	40,000.00	40,000.00	40,000.00
Move In/Out Fees	950.00	2,200.00	2,200.00
Parking	1,055.00	2,300.00	2,300.00
Locker Revenue	5,520.00	4,900.00	5,000.00
Other Income	3,025.00	1,000.00	2,000.00
Subtotal	518,170.03	518,357.00	556,379.00
OPERATING EXPENSES			
Building Common Areas			
Hydro	43,996.73	40,000.00	45,316.00
Natural Gas	28,064.57	28,000.00	28,000.00
Water & Sewer	80,073.03	67,000.00	74,000.00
Garbage & Recycling	23,144.96	20,500.00	20,500.00
Fire Alarm Servicing/Monitoring	1,622.25	8,000.00	8,000.00
Elevator Maintenance	17,402.22	17,000.00	17,500.00
Electrical	325.08	500.00	500.00
Plumbing & Heating	3,415.67	500.00	2,000.00
Janitorial	31,900.00	32,500.00	32,500.00
Carpet Cleaning	7,192.50	7,000.00	3,500.00
Building Maintenance - General	14,336.49	18,000.00	30,000.00
Parking Lot & Garage	2,287.12	4,000.00	1,500.00
Dryer Vent Cleaning	-	-	5,000.00
Lock Repairs & Maintenance	2,437.23	1,200.00	1,200.00
Pest Control	3,549.00	1,500.00	2,000.00
Gutter Cleaning	-	3,500.00	-
Worksafe	211.05	300.00	300.00
Air Handling System	230.98	5,000.00	1,000.00
General Supplies	178.26	-	-
Supplies - Lighting	2,206.93	1,500.00	2,000.00
Supplies - Janitorial	148.09	500.00	500.00
Grounds Maintenance	32,390.90	39,000.00	36,000.00
Irrigation Equipment & Maintenance	698.25	2,000.00	3,500.00
Tree Maintenance	-	1,000.00	2,000.00
Snow Removal	3,250.85	4,500.00	3,500.00
Insurance	146,489.25	126,231.00	127,000.00
Insurance Deductible	-	(12,374.00)	-
Telephone	6,073.53	7,000.00	7,000.00
Subtotal - Building Common Areas	451,624.94	423,857.00	454,316.00
Administration			
Property Management Fees	41,095.02	41,095.00	43,561.00
Taxes on Property Management Fees	2,054.76	2,055.00	2,178.00
Strata Lot 1 - Property Tax/Strata Fees	2,311.95	2,300.00	2,500.00
Administration & Postage	3,506.10	4,100.00	4,000.00
Interest/Bank Charges	300.00	300.00	300.00
Professional Fees	4,995.75	4,000.00	4,000.00
Miscellaneous	995.96	650.00	650.00
Subtotal - Administration	55,259.54	54,500.00	57,189.00
Other Expenses			
Transfer to Reserve	40,000.00	40,000.00	40,000.00
Subtotal - Other Expenses	40,000.00	40,000.00	40,000.00
TOTAL OPERATING EXPENSES	546,884.48	518,357.00	551,505.00
NET CASH FLOW - SURPLUS/(DEFICIT)	(28,714.45)	-	4,874.00
OPENING BALANCE, OPERATING FUND	64,940.46	64,940.00	36,226.00
CLOSING BALANCE, OPERATING FUND	36,226.01	64,940.00	41,100.00

THE OWNERS, STRATA PLAN VIS6323 (St. Andrews Walk)

STATEMENT OF CONTINGENCY RESERVE FUND
 For the fiscal year ended September 30, 2020; and
 Budget for the fiscal year ended September 30, 2021

	FISCAL 2020 ACTUAL	FISCAL 2020 BUDGET	APPROVED FISCAL 2021 BUDGET
CONTRIBUTIONS			
Monthly Assessments	40,000.00	40,000.00	40,000.00
Interest Income	5,123.10	7,300.00	7,300.00
Total Contributions	45,123.10	47,300.00	47,300.00
EXPENSES			
Lighting LED Conversion - Parkade Remaining	401.05	1,141.00	739.95
Lighting LED Conversion - Interior of Both Buildings	-	12,069.00	15,000.00
Parkade Vents	-	-	6,500.00
Commence a BC Supreme Court Action	-	-	10,000.00
Depreciation Report Update	6,300.00	9,500.00	3,200.00
Total Expenses	6,701.05	22,710.00	35,439.95
NET INCREASE/(DECREASE) IN FUND	38,422.05	24,590.00	11,860.05
OPENING FUND BALANCE	356,298.62	356,299.00	394,721.00
CLOSING FUND BALANCE	394,720.67	380,889.00	406,581.05



To Strata Plan VIS6323
c/o Ms. Shannon Close
Proline Management Ltd.
201 - 20 Burnside Road West
Victoria BC V9A 1B3

Site Visit: June 3, 2015
Submitted: January 29, 2016 by
RDH Building Science Inc.
3795 Carey Road #500
Victoria BC V8Z 6T8

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1 Introduction

RDH Building Science Inc. (RDH) was retained by Strata Plan VIS6323 (the Owners) to prepare a Depreciation Report (the Report) for the residential complex known as St. Andrews Walk, which is located at 1395 and 1375 Bear Mountain Parkway, Victoria, BC. The Report considers the common property and limited common property components (the Assets) that the Strata Corporation is responsible to maintain, repair, and replace.

The Report is intended to help the Owners, the strata council, and the management team make informed decisions about the allocation of resources to the common property Assets (such as roofs, fences, boilers, and paving).

This Report meets the requirements stipulated in the current Strata Property Act and Regulations. The Report includes a physical inventory of the common property assets; estimated costs for capital expenditures over a 30 year horizon; and four funding models. Refer to the appendices for RDH's qualifications and information on errors and omissions insurance. In accordance with the requirements of the Act, RDH declares that there is no relationship between the employees at RDH and the Owners.

This report is an update to the Depreciation Report issued in 2012. A site visit was completed on June 03, 2015, and the financial data is based on the 2014/2015 fiscal year. A draft report was distributed to the strata council and strata management on November 17, 2015. Feedback from the strata management, received on January 27, 2016 was incorporated, and the final 2015 report was issued on January 29, 2016.

The Depreciation Report is a synopsis of a significant volume of data and has two parts: the summary and the appendices. The summary is intended to provide an overview of the Depreciation Report. The appendices provide detailed information to support the summary report. The appendices include a glossary of terms. Words that are *italicized* are defined in the glossary.

In addition to the Report, the supporting data are available to authorized users through RDH's interactive Building Asset Management Services (BAMS) software, posted on a secure website. The data is owned by the Strata Corporation and can be printed and/or exported on request. RDH has developed the interactive software tool to enable Owners to proactively manage their funding requirements and maintenance obligations, and a variety of other services in addition to the Depreciation Report are available.

As the physical and financial status of the Assets changes, the Report will require updating. The Strata Property Act requires updates to the Report every three years; however, the Strata Corporation can choose to update portions of the Report to reflect changes to their financial status and completed work more frequently at their discretion.

2 St. Andrews Walk

St. Andrews Walk is an eight-year-old strata complex, with two buildings that are typically of wood-framed construction.

The principal systems in the complex include the building enclosure (the separation of the interior from exterior space), electrical (the distribution and communications equipment), mechanical (heating and plumbing), elevators, fire safety (sprinklers, fire detection, and egress equipment), interior finishes, amenities, and site work. The Assets within each system are described in detail in Appendix B.

The key physical parameters of St. Andrews Walk are summarized in Table 2.1.


TABLE 2.1 KEY PHYSICAL PARAMETERS		
 <p><i>Figure 2.1 Elevation photograph of East building</i></p>	Date of first occupancy (approximate)	2007
	Gross floor area, including the parkade (ft ²)	116,000
	Stories above grade	4
	Total number of strata lots	136



Figure 2.2 Aerial photograph of 1375 Bear Mountain Parkway (© CRD Atlas).

3 Assessments

Depreciation Reports combine two distinct types of analysis: a *physical assessment*, and a *financial assessment*. The assessments are used to determine what the Strata Corporation owns, what condition the Assets are in, what the strata is responsible for, and the *capital costs* associated with the Assets.

3.1 Physical Assessment

The physical assessment has two parts: an inventory and an evaluation.

The *Asset Inventory* identifies “the common property, the common assets and those parts of a strata lot or limited common property, or both, that the Strata Corporation is responsible to maintain or repair under the Act, the Strata Corporation’s bylaws or an agreement with an owner” (*Strata Property Act Regulation*, BC Reg 43/2000, Ch. 6.2). In other words, it identifies what the Strata Corporation owns and must repair and maintain. The Asset Inventory is included as an appendix to this report.

The evaluation is used to forecast common repairs, replacements and maintenance activities that “usually occur less often than once a year or that do not usually occur” (*Strata Property Act Regulation*, BC Reg 43/2000, Ch.6.2). In other words, the evaluation predicts only events that occur at intervals greater than one year.

The evaluation is typically based on:

- A review of historical documentation such as minutes, invoices, and the general ledger,
- Discussions with Strata Corporation representatives,
- A visual review of the buildings, limited to a sample of readily accessible Assets, and
- A review of other technical information such as construction drawings, previous investigations or reports, and maintenance manuals.

Destructive testing, disassembly, and performance testing are not included in the physical evaluation; this report does not replace a Warranty Review or Condition Assessment. Please visit www.rdh.com for additional information on Warranty Reviews and Condition Assessments.

Failure of some Assets may be concealed, for example, buried infrastructure such as sanitary drainage lines or building enclosure assets such as cladding. For Assets with the potential for concealed failure, a number of tools are used to assign a reasonable expected service life including the typical performance of the asset in other, similar properties; the performance history reported by the Strata Corporation; the original drawings; and any previous investigation reports commissioned by the Strata Corporation. It is expected that the Strata Corporation will need more detailed reviews as Assets approach the end of their service lives. A summary of Asset Service lives is provided in Appendix C. Allowances for additional reviews or investigations are included as appropriate. Recommendations taken from any additional reviews should be incorporated into future Depreciation Report updates.

St. Andrews Walk is relatively young, and aside from addressing any deficiencies from the original construction, few renewals have taken place.

As part of the physical assessment, RDH compiled a history of completed projects by reviewing the documents provided by the strata and interviewing Strata Corporation representatives. The history is summarized in Table 3.1 below. The history establishes the chronological age of any renewed Assets.

TABLE 3.1 MAINTENANCE AND RENEWALS HISTORY

Mechanical

- 2015 - One hot water storage tank and one recirculation pump replaced

On June 02, 2015, two representatives of RDH Building Engineering Ltd. visited the site to visually review the Assets. While the Depreciation Report does not constitute a maintenance review or condition assessment, some observations regarding the general condition, design and construction of the Assets were made as part of the visual review. These observations were used to determine a reasonable estimated remaining service life of various assets. Table 3.2 includes examples of observations made during the site review.

TABLE 3.2 OBSERVATIONS BY SYSTEM

SYSTEM	OBSERVATION
Building Enclosure	<ul style="list-style-type: none"> → There are moderate overhangs at most areas that protect the cladding and windows from direct exposure to rain and sun. → Some sealant failure was observed at window/door perimeters, trim, and at the decorative cornice. → Drainage through weep holes at several windows was restricted; weep holes were either blocked or taped over. → The coating of the trellis is deteriorated. One trellis joist is detached on a fourth floor balcony on the East building. → Air pockets and ridging was observed at some vinyl membranes.
Electrical	<ul style="list-style-type: none"> → A data logger was present in the West building electrical room.
Interior Finishes	<ul style="list-style-type: none"> → Wood trim finish is showing signs of wear, commensurate with age. Overall the interior finishes are in good condition.
Amenities	<ul style="list-style-type: none"> → The unit number signage is beginning to fade.
Site work	<ul style="list-style-type: none"> → One railing post near the fire hydrant has been modified and needs to be removed.

3.2 Financial Assessment

The financial assessment estimates the future costs associated with the Assets, and examines how future funding requirements will be affected by current financial practises. More specifically, the financial assessment identifies:

- The opening balance in the *Contingency Reserve Fund* (CRF).
- The estimated value of capital expenditures, expressed in *Current Year Dollars* (CYD).
- The estimated future value of capital expenditures, expressed in *Future Year Dollars* (FYD). These costs are calculated by applying an inflation rate (2% per year) to the current costs.

The future value of major maintenance and renewal costs can be compared against the building reproduction cost. The building reproduction cost is the cost to reproduce the buildings in similar materials, in accordance with the most recent insurance appraisal.

The financial assessment begins with a review of the current financial situation of the Strata Corporation. Table 3.3 below summarizes the key financial parameters reviewed as part of the financial assessment.

TABLE 3.3 KEY FINANCIAL PARAMETERS		
PARAMETER	INITIAL STUDY (2012)	UPDATE STUDY (2015)
Fiscal year end	September 30, 2012	September 30, 2015
Building reproduction cost	\$31,595,000	\$33,640,000
Operating budget (excluding CRF contribution)	\$337,653*	\$411,805
Annual CRF contribution	\$40,800	\$40,000
Opening Balance of the CRF	\$153,164**	\$220,347

*Initial report recorded \$377,653, which included CRF contributions.

**Accumulated balance as of January 31, 2012.

Depreciation Reports include capital costs only: the costs for activities that occur at intervals greater than one year. Activities that occur annually or more frequently than once a year are considered operating expenses and are not included in the Depreciation Report funding models and calculations.

Capital costs can be distributed into three general categories:

- *Catch-up costs.* The cost to complete any deferred maintenance and renewals
- *Keep-up costs.* The cost to complete planned cyclical maintenance and renewals
- *Get-ahead costs.* The cost to adapt, upgrade and improve

The Depreciation Report is based on keep-up costs. Get-ahead costs (improvements) may also be included, but only if they are required to meet changing codes or standards.

Costs are considered *Class D* estimates ($\pm 50\%$), as defined by the Association of Professional Engineers and Geoscientists of British Columbia (APEGBC). Unless otherwise noted, soft costs, such as consulting fees and contingency allowances are not included, because these costs are highly dependent on the scope of work for a particular project.

The cost estimates in the Depreciation Report are a starting point for the capital planning process, and can help Strata Corporations make preliminary decisions about how and when to implement projects. These cost estimates will be refined as the Strata Corporation makes decisions such as what is included or excluded in a project, and if Assets will be improved or changed.

The current value of many major maintenance and renewal activities is calculated by multiplying the quantity of an Asset by standard unit rates (for example, the cost per square foot or cost per linear foot). Quantities are measured from original construction documents and visual observations on site. The unit rates are based on historical information, construction trends, information from contractors, and other sources as appropriate. Unit rates will fluctuate over time. Basic unit rates are adjusted for the relative complexity of the property. A detailed list of activities and their associated costs is provided in the appendices of the report. The major maintenance and renewal costs listed in Appendix D are for events forecast within the 30-year planning horizon only. Events beyond this horizon are not included.

4 Expenditures

Maintenance refers to activities that preserve the Assets, to ensure the Assets will last their predicted service lives and perform as expected. *Renewal* refers to the replacement or refurbishment of an Asset at the end of its useful service life.

Major maintenance refers to maintenance that occurs at intervals greater than one year, for example, every 18 months, two years, five years, etc. (less frequently than once a year). Major maintenance typically includes activities such as testing and inspecting, and is considered a capital expense. Minor maintenance includes maintenance activities that occur once a year or more frequently such as quarterly or monthly. The costs associated with *major maintenance and renewals* are included in the Depreciation Report funding models. Costs associated with minor maintenance are included in the Strata Corporation’s operating fund and not in this report.

4.1 Major Maintenance and Renewals Expenditures

St. Andrews Walk is now approximately 8 years old, and has not yet replaced many Assets (please see Table 3.1 Maintenance and Renewals History on page 4 for a detailed list of projects). As the residential complex ages, some renewal expenditures can be anticipated in the next 10 years. Table 4.1 below summarizes all major maintenance and renewal costs by system, including costs forecast for the next 10 and 30 years.

TABLE 4.1 CAPITAL EXPENDITURES SUMMARY BY SYSTEM				
SYSTEM	10 YEAR CAPITAL COSTS	10 YEAR CAPITAL COSTS (WITH 2% INFLATION)	30 YEAR CAPITAL COSTS	30 YEAR CAPITAL COSTS (WITH 2% INFLATION)
Building Enclosure	\$460,000	\$500,000	\$1,900,000	\$2,700,000
Electrical	\$9,200	\$10,000	\$43,000	\$58,000
Mechanical	\$190,000	\$210,000	\$1,500,000	\$2,100,000
Elevator	\$60,000	\$69,000	\$340,000	\$470,000
Fire Safety	\$9,100	\$10,000	\$120,000	\$160,000
Interior Finishes	\$200,000	\$220,000	\$520,000	\$700,000
Amenities	\$6,000	\$6,900	\$22,000	\$30,000
Sitework	\$30,000	\$33,000	\$93,000	\$130,000
Building Total	\$964,300	\$1,058,900	\$4,538,000	\$6,348,000

Approximately 20% of the Strata Corporation’s capital expenditures will occur in the next 10 years. The distribution of estimated capital expenditures over the next 10 years is shown in Figure 4.1 below.

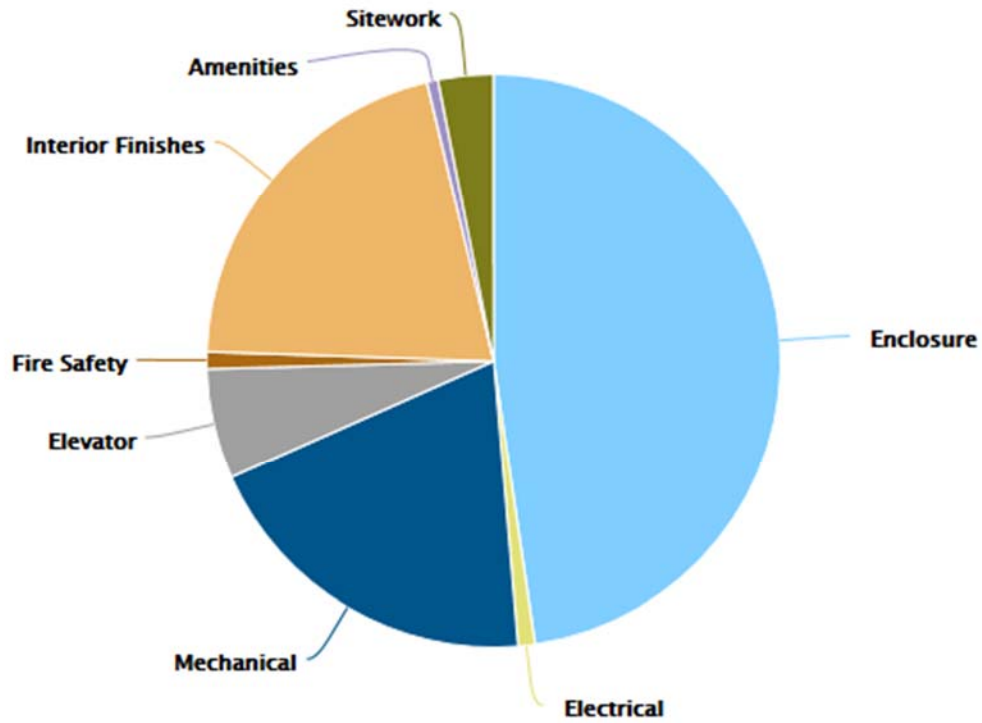


Figure 4.1 Distribution of estimated capital expenditures over 10 years by system.

Section 5 discusses the timing and size of renewal projects forecast for the next 30 years. A detailed list of each major maintenance and renewal activity, including the frequency and costs, expressed both in current year dollars (CYD), and in future year dollars including inflation rates (FYD), is available to Strata Corporation owners.

5 Major Maintenance and Renewals Planning Horizons

There are three common planning horizons, used for making different types of capital planning decisions:

- **Strategic** (30 years): The average service life of many of Assets is approximately 25 years (such as roofs) so a long-range view captures most renewal projects. In some cases, an asset may be replaced more than once in the 30 year horizon.
- **Tactical** (5-10 years): Many residential Owners will own their strata lot for less than 10 years; the tactical plan captures projects that may occur while current Owners still have an interest in the Strata Corporation.
- **Operational** (1 year): The annual operating period encompasses one fiscal cycle (12 months). Typically the budget is presented and approved at the annual general meeting (AGM) and will include any capital expenditures paid from the CRF, as well as the CRF contributions for the year. As a minimum, the decision on the CRF contribution should consider projects forecast for the next five to ten years.

5.1 Strategic Planning Horizon

Estimated major maintenance and renewal costs over the next 30 years are shown on the graph below (Figure 5.1). The red bars represent the estimated value of capital costs.

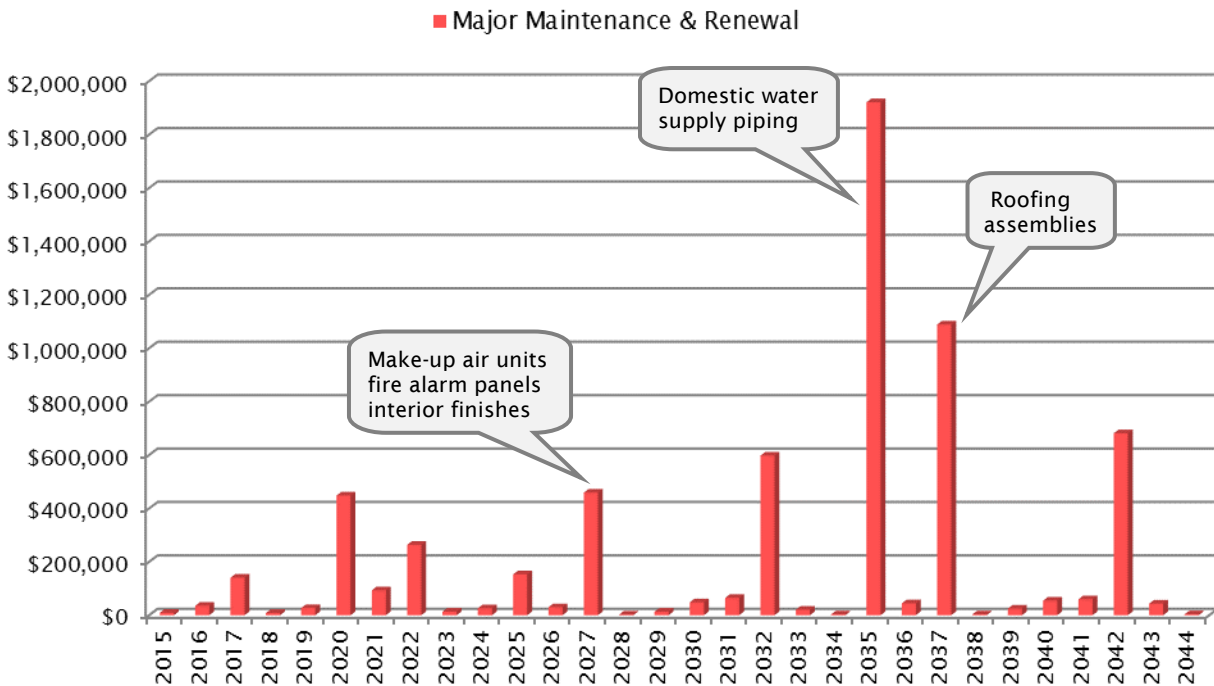


Figure 5.1 Strategic Forecast (30 years) showing the approximate timing and value of capital expenditures

Each bar on the graph represents a collection of different major maintenance and renewal activities, each with different values. The labels on the graph summarize significant renewal expenditures forecast for that year. Detailed information about each year, including a description of the maintenance and renewal activities and estimated costs, is also available through the online version of the Depreciation Report, available through BAMS (please contact the strata council for additional information).

The strategic plan represents an estimate of future projects. The actual timing of projects will likely vary. Assets may be replaced earlier or later, depending on the quality of maintenance, in-service conditions and other factors. The Strata Corporation can anticipate changes to the strategic plan with each update of the Depreciation Report.

5.2 Tactical Planning Horizon

The graph below shows the projected major maintenance and renewal costs for the next ten years (Figure 5.2). Commonly, building managers refer to a five year tactical plan; however, a ten year plan allows the Strata Corporation to see a wider range of projects.

The bars indicate the years in which an event (or bundle of events) is most likely to occur as well as the total magnitude of major maintenance and renewal costs for that year and the costs broken down by system. Labels summarize renewals and major maintenance activities forecast for that year. The soft costs associated with project implementation, such as site access, design, contract administration, are not included.

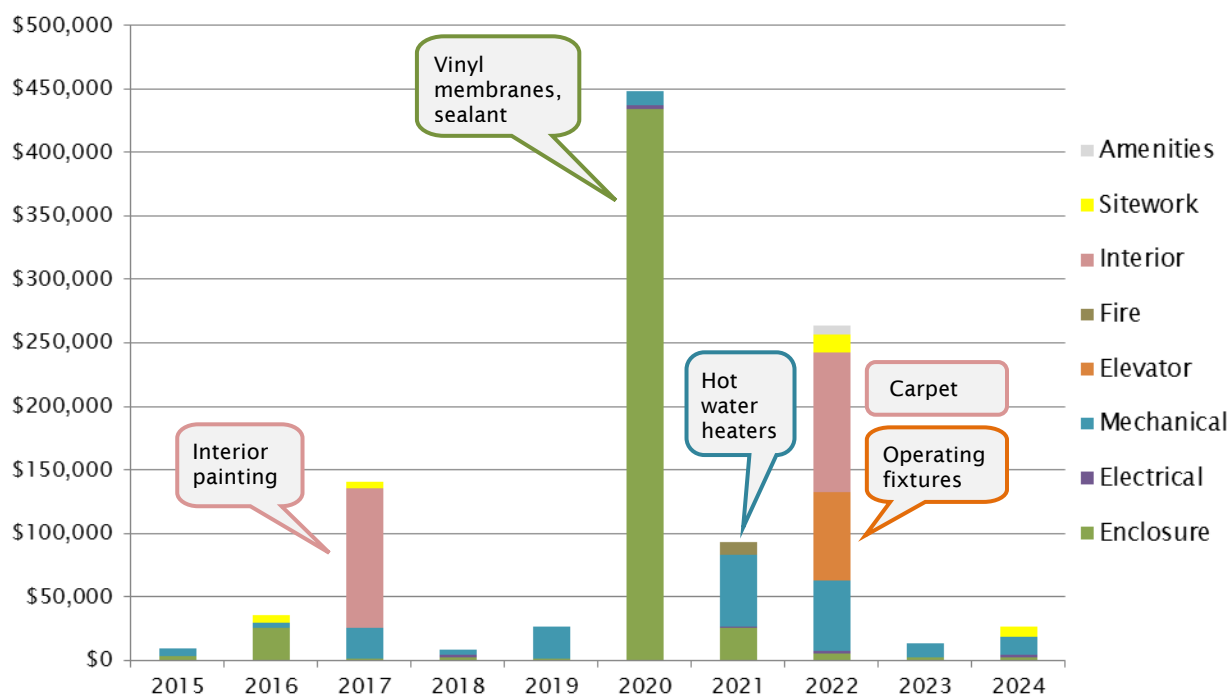


Figure 5.2 Tactical Forecast (10 years) showing the approximate timing and value of capital expenditures.

The tactical plan above represents one of many possible approaches to planning major maintenance and renewal activities. The Strata Corporation can use this initial plan as a tool, a starting point to identify probable projects, priorities and strategies. The actual cost, timing, and scope of projects will be determined by the Strata Corporation and may be reflected in updates to the Depreciation Report.

To help the Strata Corporation start the project planning process, Table 5.1 below categorizes some of the activities forecast for the next 10 years into different management strategies: Major maintenance, condition based renewals, and time based renewals. The list below is not comprehensive; more detailed information is available to the Strata Corporation in the appendices and the online software.

TABLE 5.1 SUMMARY OF KEY PROJECTS WITHIN THE 10-YEAR TACTICAL PLAN

CATEGORY AND ACTIVITIES

Major Maintenance

Major maintenance projects are intended to preserve the assets to achieve their full design life, and typically occur on a regular, predictable basis.

- 2016: Repair damaged EIFS panels.
- 2016: Inspect exterior sealant throughout for discontinuities, debonding, cracking, chalking, or bulging. Repair as required.
- 2016: Repaint wood trim. To be coordinated with sealant work. (Five year cycle.)
- 2016: Re-finish wood trellis structures. Inspect and repair wood joists and connections.
- 2017: Repaint interior walls, including wood trim re-finishing, as required.
- 2020: Renew concrete wall coating.
- 2020: Sanitary Drainage Collection: Auger lateral drain lines.

Condition Based Renewals

Assets are kept in service as long as possible, but the intent is to replace them before they fail. Condition based strategies require Assets be periodically reviewed in detail, potentially with some testing, in order to predict when failure is likely. The actual timing of renewals in this category may be determined by the results of an assessment, or by other project planning considerations.

- 2020: Replace vinyl deck membrane and associated components.
- 2020: Replace vinyl balcony membrane and associated components.
- 2020: Remove existing sealant and replace with new.
- 2022: Replace carpet flooring.

Time Based Renewals

Assets are replaced on a regular, time based schedule. This strategy is used when there is low tolerance for failure or out of service conditions. Components, materials or assemblies are typically replaced or refurbished at fixed intervals.

- 2017: Cyclical replacement of gas detection sensors. (Five year cycle.)
- 2017: Cyclical phased replacement of domestic hot water storage tanks (one tank every two years)
- 2019: Cyclical replacement of failed or damaged general purpose exhaust fans, as required.
- 2021: Cyclical replacement of gas-fired domestic hot water heaters.
- 2021: Replace fire sprinkler compressor.
- 2022: Replace elevator operating and signal fixtures, including cab phones.

In addition to the three categories mentioned above, the Strata Corporation may also elect to replace some Assets only once they have failed, or upon imminent failure. This strategy is known as *run to failure*. This strategy is only appropriate when failure does not create a safety hazard, will not result in damage to other property, and does not affect the operations of the building. The Strata Corporation should still have funds available to replace assets within this category.

5.3 Operational Planning Horizon

Some major maintenance work such as repairs to trellises, sealant, and EIFS panels are recommended for the next calendar year (2016).

5.4 Project Implementation

The projects identified in the previous section represent a preliminary step that is only intended to help the Strata Corporation identify, prioritize and plan projects. Most significant renewal projects identified in the Depreciation Report will subsequently go through four basic steps before implementing the work: Assessment, Design, Documentation and Quotation.

- **Assessment** – Determines what work must be done, what should be done and what could be done in general terms. The evaluation will help the Strata Corporation understand the risks and opportunities associated with deferring or implementing renewals work.
- **Design** – Refines the recommendations from the evaluation, and defines what work will be done in a specific project. The Design may include recommendations for different project strategies such as phasing or bundling projects, or may include recommendations for upgrades.
- **Documentation** – Describes the project in enough technical detail to get competitive pricing.
- **Quotation** – Obtains competitive pricing from different contractors or service providers to perform the work described in the documents, including alternate prices for optional work.

The time period for each step can range from a few days to a few months or more, depending on the scale of the project under consideration. The budget and scope of work will be refined in each step. Most estimates currently included in the Depreciation Report are considered Class D ($\pm 50\%$) due to the lack of information regarding specific projects and are based on a number of general assumptions regarding scopes of work.

The Owners can implement projects in a variety of ways, including:

- **Targeted Projects**. These projects are localized to particular portions of the building. Different exposure conditions and wear patterns may require that only some sections of the building require renewal at one point in time. *Example*: the carpets in stairwells would be replaced at a different time to the hallway carpets due to additional wear in high traffic locations.
- **Phased Projects**. These projects are carried out in multiple stages rather than as a single coordinated project. Phased projects can reduce the financial burden by spreading the costs over a longer time period. *Example*: the sealant could be renewed on one elevation in the first year and then on the other elevations in subsequent years.
- **Comprehensive Projects**. These projects are implemented as one coordinated undertaking. Comprehensive projects may allow the Strata Corporation to leverage the best economies of scale, shorten the overall duration, and lower the overall costs. *Example*: all wood trim is repainted in all locations around the buildings at the same time.
- **Bundled Projects**. These projects bundle or combine various related renewals activities (e.g. renewals that are located in close physical proximity, or that require the same type of trade workers). Bundled projects may allow the Strata Corporation to leverage economies of scale and lower the overall costs, improve the quality of the work, and incorporate upgrades. *Example*: the exterior wood trim is repainted at the same time as the cladding and the trellises, on both buildings.

The scope of the Depreciation Report does not compare different implementation methods.

6 Funding Scenarios

The physical and financial assessments were used to create a tentative schedule and budget for forecasted major maintenance and renewal projects. Within this section, *funding scenarios*, also known as *funding models*, based on different annual contributions to the contingency reserve fund (CRF) are presented.

The process of developing funding scenarios for a Depreciation Report is represented in Figure 6.1.



*Figure 6.1
Depreciation Report Processes
Funding scenarios are provided as benchmarks to aid the strata in developing a specific funding model that fits with their current needs.*

The Strata Corporation can use the funding scenarios as benchmarks to develop an appropriate funding strategy, based on their tolerance for risk and desired standard of care for the property. RDH provides the tools so the Owners can determine a suitable CRF contribution.

6.1 Minimum Funding Requirements

The Strata Property Act Regulations dictates that if the CRF closing balance is less than 25% of the operating fund, then the Strata Corporation must contribute either the difference between the balance and 25% of the operating fund, or up to 10% of the operating fund (*Strata Property Act Regulation*, BC Reg 43/2000, Ch. 6.1). Table 6.1 below shows the calculation to confirm the Strata Corporation meets the minimum requirements set out in the Strata Property Act Regulation.

TABLE 6.1 MINIMUM FUNDING REQUIREMENT CALCULATION	
PARAMETER	VALUE
2014/2015 operating fund (excluding CRF contribution)	\$ 411,805
→ 25% of the operating fund	\$ 102,951
→ 10% of the operating fund	\$ 41,181
2013/2014 CRF closing balance	\$ 220,347
2014/2015 CRF Contribution	\$ 40,000
Will the CRF closing balance exceed 25% of the operating fund at the end of the fiscal year?	Yes
Does the CRF contribution exceed 10% of the operating fund?	No

Although the Strata Corporation meets the statutory minimum contribution to the CRF, it is important to note that the statutory guideline is not a good measure of the financial preparedness of the corporation. If the Owners wish to avoid special levies, or to reduce the number and size of the levies, then increases to the CRF contributions will need to be made over the upcoming years.

6.2 Funding Scenario Comparison

The funding scenarios below compare the financial impact of different funding levels over the next 30 years. The scenarios serve as a sensitivity analysis that allow the Strata Corporation to evaluate how changes to the contingency reserve fund impact the number and size of special levies. The actual size and timing of special levies will be affected by how the Strata Corporation chooses to implement the renewal projects.

While there are many different scenarios that can be generated, Table 6.2 compares the following four:

- **Statutory.** The CRF allocation required to meet the statutory requirements in BC, as described in section 6.1 above. This scenario represents the lower bound for the CRF allocation amount.
- **Current (2015).** The CRF allocation that was approved by the Owners at the last Annual General Meeting. The current allocation is also known as the status quo.
- **Alternate.** An increase from the status quo. The alternate is just one of many possible scenarios for a new funding level in the next fiscal year and is selected to provide a logical benchmark between the current and progressive models.
- **Progressive.** This is the annual allocation that would have been set aside since the first year of operations to ensure that the reserve balance would have been sufficient to avoid any special assessments over a 30-year period. The progressive reserve allocation is an idealistic target that typically represents an upper bound for the amount allocated to the CRF.

	STATUTORY	CURRENT (2014/15)	ALTERNATE	PROGRESSIVE
Annual CRF allocation	Up to \$41,181	\$40,000	\$60,000	\$206,000
Percent of progressive reserve	20 %	19 %	29 %	100 %
CRF contribution per average strata lot				
Per month	\$25.42	\$24.69	\$37.04	\$127.16
Per year	\$305.04	\$296.30	\$444.44	\$1,525.93
Approximate number of special levies (over 30 years)	11	11	9	1
Approximate value of special levies (over 30 years)	\$5.1 M	\$5.0 M	\$4.4 M	\$0.5 M
Assumed Inflation Rate	2 %	2 %	2 %	2 %
Assumed Interest Rate	0 %	0 %	0 %	0 %

The following sections of the report provide more detailed information about each funding scenario, including a graph showing the closing balance of the CRF, annual CRF contributions, and the approximate value of special levies. Tables with ten years of cash flow data are also provided.

The appendices to the report include 30 years of cash flow data for each funding scenario.

6.3 Statutory Funding Scenario

The first scenario is based on the minimum funding level required by the Strata Property Act Regulation, as described in section 6.1 above. The scenario is based on a variable annual CRF contribution over the 30-year planning horizon; when the CRF closing balance is greater than 25% of the current operating fund, no funds are deposited into the CRF.

TABLE 6.3 STATUTORY FUNDING SCENARIO: CASH FLOW TABLE						
FISCAL YEAR	CRF OPENING BALANCE	RESERVE CONTRIBUTION	SPECIAL LEVY	RESERVE INCOME	RENEWAL COSTS	CRF CLOSING BALANCE
2015	\$220,347	\$0	\$0	\$0	\$9,200	\$211,147
2016	\$211,147	\$0	\$0	\$0	\$35,300	\$175,847
2017	\$175,847	\$0	\$0	\$0	\$140,480	\$35,367
2018	\$35,367	\$41,181	\$0	\$0	\$8,130	\$68,417
2019	\$68,417	\$34,534	\$0	\$0	\$26,700	\$76,251
2020	\$76,251	\$26,700	\$344,899	\$0	\$447,850	\$0
2021	\$0	\$41,181	\$51,980	\$0	\$93,160	\$0
2022	\$0	\$41,181	\$222,370	\$0	\$263,550	\$0
2023	\$0	\$41,181	\$0	\$0	\$12,900	\$28,281
2024	\$28,281	\$41,181	\$0	\$0	\$26,000	\$43,461

The graph below shows the annual contribution to the CRF, the closing balance of the CRF, and the size of the special levies forecast for the next 30 years.

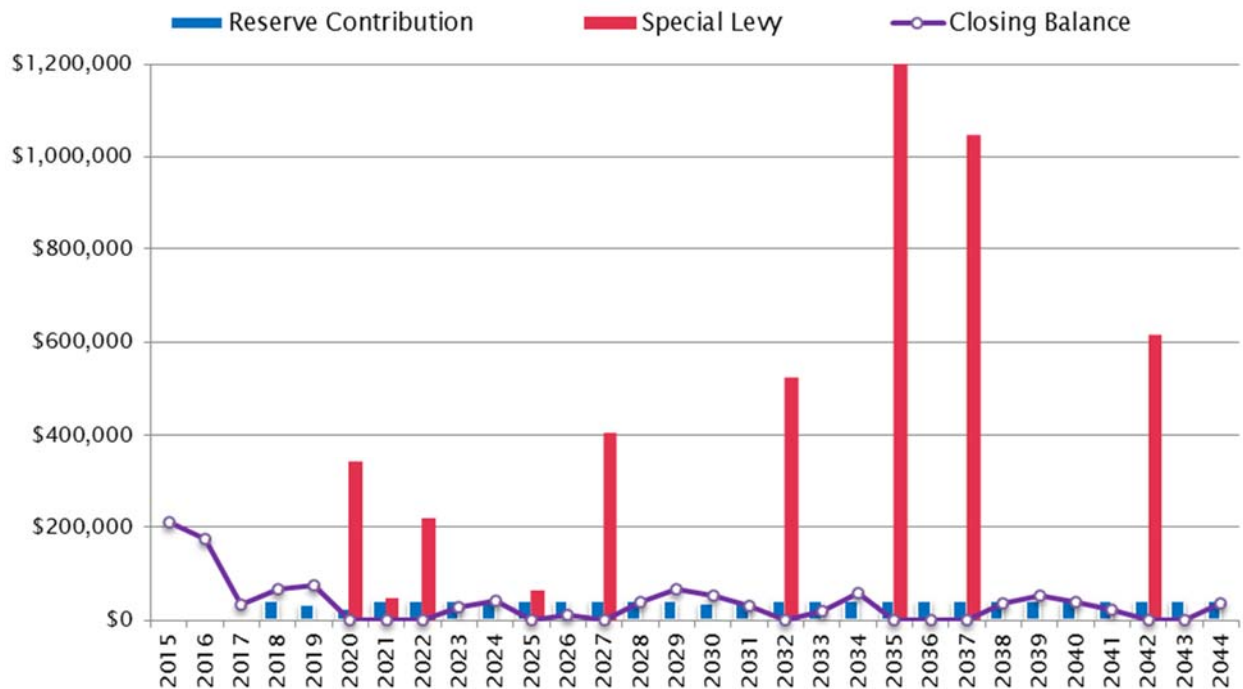


Figure 6.2 CRF balance, contribution and special levies based on the statutory minimum funding. *Please note the levy in 2035 is approximately \$1.8M and therefore exceeds the scale of the graph.

The minimum CRF contributions required by the Strata Property Act Regulation will result in numerous special levies, and is generally not considered adequate as a long-term funding strategy.

6.4 Current (2014/2015) Funding Scenario

The current funding scenario is based on the CRF contribution approved by the Owners at the last annual general meeting (2014). The scenario is based on a fixed annual CRF contribution (with no increases).

TABLE 6.4 CURRENT (2014/2015) FUNDING SCENARIO: CASH FLOW TABLE						
FISCAL YEAR	CRF OPENING BALANCE	RESERVE CONTRIBUTION	SPECIAL LEVY	RESERVE INCOME	RENEWAL COSTS	CRF CLOSING BALANCE
2015	\$220,347	\$40,000	\$0	\$0	\$9,200	\$251,147
2016	\$251,147	\$40,000	\$0	\$0	\$35,300	\$255,847
2017	\$255,847	\$40,000	\$0	\$0	\$140,480	\$155,367
2018	\$155,367	\$40,000	\$0	\$0	\$8,130	\$187,237
2019	\$187,237	\$40,000	\$0	\$0	\$26,700	\$200,537
2020	\$200,537	\$40,000	\$207,313	\$0	\$447,850	\$0
2021	\$0	\$40,000	\$53,160	\$0	\$93,160	\$0
2022	\$0	\$40,000	\$223,550	\$0	\$263,550	\$0
2023	\$0	\$40,000	\$0	\$0	\$12,900	\$27,100
2024	\$27,100	\$40,000	\$0	\$0	\$26,000	\$41,100

The graph below shows the annual contribution to the CRF, the closing balance of the CRF, and the size of the special levies forecast for the next 30 years.

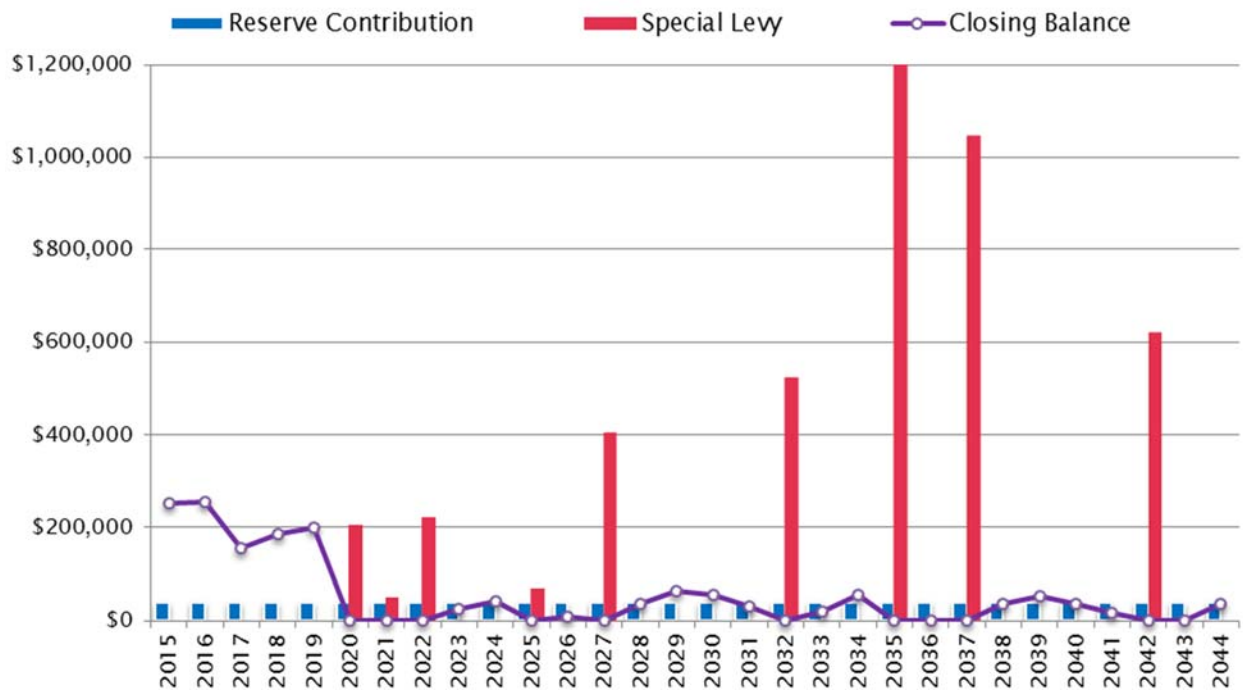


Figure 6.3 CRF balance, contribution and special levies based on the current funding. *Please note the levy in 2035 is approximately \$1.8M and therefore exceeds the vertical scale of the graph.

If the Strata Corporation wishes to reduce the number and size of special levies, then increases will need to be made over the upcoming years.

6.5 Alternate Funding Scenario

The alternate funding scenario is based on a fixed annual CRF contribution. The contribution is approximately 20% more than the current funding level.

TABLE 6.5 ALTERNATE FUNDING SCENARIO CASH FLOW TABLE						
FISCAL YEAR	CRF OPENING BALANCE	RESERVE CONTRIBUTION	SPECIAL LEVY	RESERVE INCOME	RENEWAL COSTS	CRF CLOSING BALANCE
2015	\$220,347	\$60,000	\$0	\$0	\$9,200	\$271,147
2016	\$271,147	\$60,000	\$0	\$0	\$35,300	\$295,847
2017	\$295,847	\$60,000	\$0	\$0	\$140,480	\$215,367
2018	\$215,367	\$60,000	\$0	\$0	\$8,130	\$267,237
2019	\$267,237	\$60,000	\$0	\$0	\$26,700	\$300,537
2020	\$300,537	\$60,000	\$87,313	\$0	\$447,850	\$0
2021	\$0	\$60,000	\$33,160	\$0	\$93,160	\$0
2022	\$0	\$60,000	\$203,550	\$0	\$263,550	\$0
2023	\$0	\$60,000	\$0	\$0	\$12,900	\$47,100
2024	\$47,100	\$60,000	\$0	\$0	\$26,000	\$81,100

The alternate funding scenario eliminates some of the smaller levies, but it is not adequate to offset all the special levies over the 30-year planning horizon. The graph below shows the annual contribution to the CRF, the closing balance of the CRF, and the size of the special levies forecast for the next 30 years.

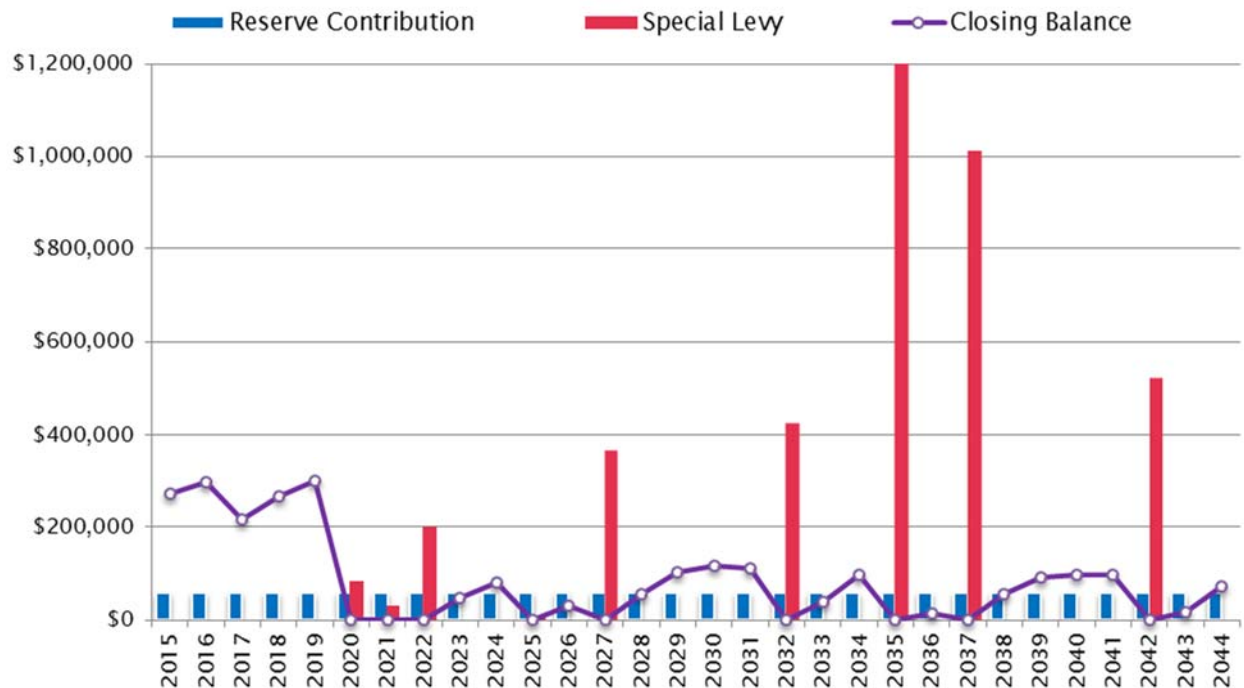


Figure 6.4 CRF balance, contribution, and special levies based on an alternate CRF contribution. *Please note the levy in 2035 is approximately \$1.8M and therefore exceeds the vertical scale of the graph.

6.6 Progressive Funding Scenario

The progressive funding scenario is based on a fixed annual CRF contribution.

TABLE 6.6 PROGRESSIVE FUNDING SCENARIO: CASH FLOW TABLE						
FISCAL YEAR	CRF OPENING BALANCE	RESERVE CONTRIBUTION	SPECIAL LEVY	RESERVE INCOME	RENEWAL COSTS	CRF CLOSING BALANCE
2015	\$220,347	\$206,000	\$0	\$0	\$9,200	\$417,147
2016	\$417,147	\$206,000	\$0	\$0	\$35,300	\$587,847
2017	\$587,847	\$206,000	\$0	\$0	\$140,480	\$653,367
2018	\$653,367	\$206,000	\$0	\$0	\$8,130	\$851,237
2019	\$851,237	\$206,000	\$0	\$0	\$26,700	\$1,030,537
2020	\$1,030,537	\$206,000	\$0	\$0	\$447,850	\$788,687
2021	\$788,687	\$206,000	\$0	\$0	\$93,160	\$901,527
2022	\$901,527	\$206,000	\$0	\$0	\$263,550	\$843,977
2023	\$843,977	\$206,000	\$0	\$0	\$12,900	\$1,037,077
2024	\$1,037,077	\$206,000	\$0	\$0	\$26,000	\$1,217,077

The progressive allocation would offset smaller special levies. However, because of the timing of anticipated renewal projects, a fixed annual contribution will not eliminate all special levies over the 30-year planning horizon. The graph below shows the annual contribution to the CRF, the closing balance of the CRF, and the size of the special levies forecast for the next 30 years.

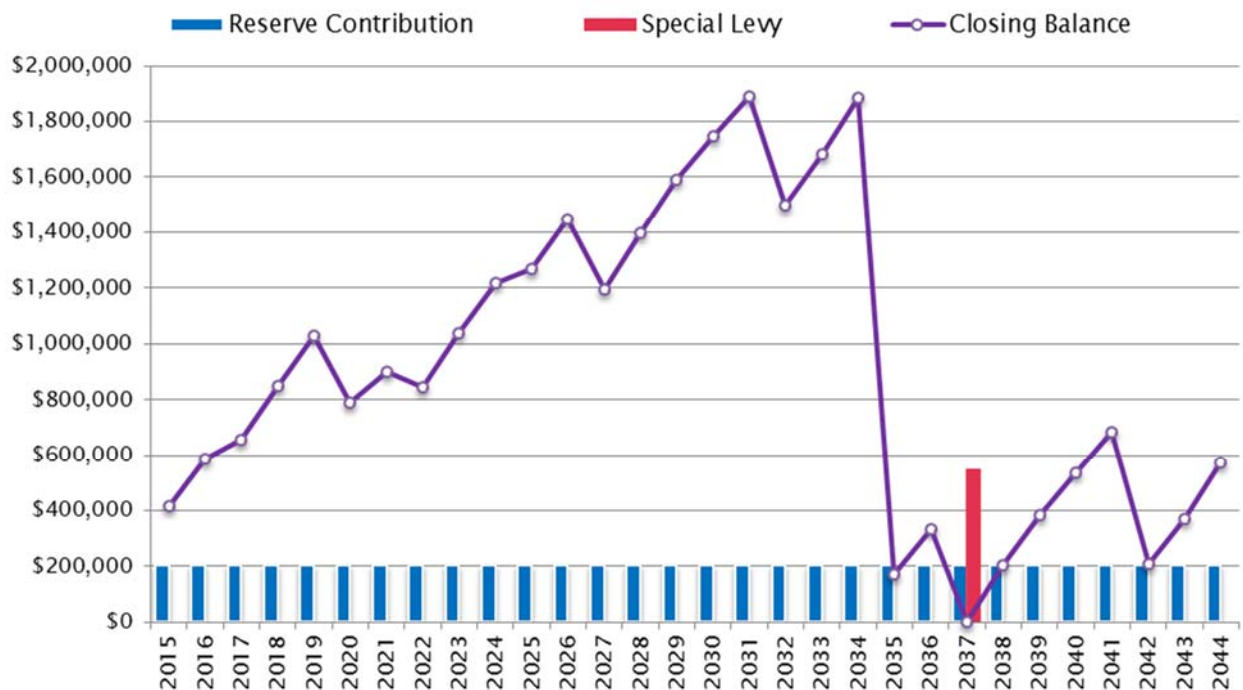


Figure 6.5 CRF balance, contribution and special levies based on a progressive allocation.

7 Next Steps

The Depreciation Report identifies the predictable major maintenance and renewal expenditures St. Andrews Walk is likely to encounter over the next 30 years. Estimated timelines have been provided to assist the Strata Corporation with the planning process; however the Depreciation Report should be considered a first step when planning for renewals. Funding scenarios have been developed to provide the Strata Corporation with an objective basis for determining appropriate CRF contributions.

St. Andrews Walk is an 8-year-old building, and several significant assets such as sealant and vinyl membranes will likely need to be renewed in the next 10 years. It is unlikely that the Strata Corporation can avoid special levies in this time period; however, there may be opportunities to reduce the scope of work needed or otherwise manage projects to alleviate the financial impact on individual owners.

The recommendations below are intended to aid the Strata Corporation in the next steps of the renewal planning process.

Recommendations

- **Asset Replacement Policy.** Using the Asset Inventory, develop an asset replacement policy. The policy would assign replacement strategies (run-to-failure, condition-based, or time-based) to assets.
- **Maintenance Plan.** Using the Asset Inventory, develop a maintenance plan, or commission a maintenance plan through RDH. The maintenance plan should provide the Strata Corporation with information on how and when to implement different maintenance activities.
- **Operating vs. Capital Costs.** Identify those small capital items that are generally funded from the annual operating budget, such as exterior lighting etc. Update the Depreciation Report accordingly.
- **Project Planning.** The following projects have been identified as highest priority, and the Strata should consider completing these projects prior to the update of the Report in three years' time.
 - Document and measure the crack above the entrance to the West parking garage. Monitor for changes over the next couple of years.
 - Repair the damaged EIFS window trim on the South side of the West building.
 - Repair the sealant throughout the strata complex.

Yours truly,
RDH Building Science Inc.

Appendix A

Glossary of Terms

Glossary

Annual Contribution – Funds allocated to the Reserve Fund each fiscal year. Sometimes referred to as the Annual Allocation. Determining the appropriate size of the Annual Allocation is aided with a Reserve Study (a Depreciation Report in B.C.).

Asset – An integrated assembly of multiple physical components, which requires periodic maintenance, repair and eventual renewal. Typical examples of assets are: roofs, boilers and hallway carpets.

Catch-up Costs – The costs associated with the accumulated backlog of deferred maintenance associated with the assets.

Chronological Age – The age of an asset relative to its date of installation (current year minus year of installation).

Classes of Cost Estimates – Until a project is actually constructed, a cost estimate represents the best judgement of the professional according to their experience and knowledge and the information available at the time. Its completeness and accuracy is influenced by many factors, including the project status and development stage. Estimates have a limited life and are subject to inflation and fluctuating market conditions. The precision of cost estimating is categorized into the following four classes and are as defined in guidelines prepared by the Association of Professional Engineers and Geoscientists of B.C. The percentage figures in parentheses refer to the level of precision or reliability of the cost estimates.

- **Class A Estimate** (±10-15%): A detailed estimate based on quantity take-offs from final drawings and specifications. It is used to evaluate tenders or as a basis of cost control during day-labour construction.
- **Class B Estimate** (±15-25%): An estimate prepared after site investigations and studies have been completed, and the major systems defined. It is based on a project brief and preliminary design. It is used for obtaining effective project approval and for budgetary control.
- **Class C Estimate** (±25-40%): An estimate prepared with limited site information and based on probable conditions affecting the project. It represents the summation of all identifiable project elemental costs and is used for program planning, to establish a more specific definition of client needs and to obtain preliminary project approval.
- **Class D Estimate** (±50%): 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 for a similar project. It may be used in developing long term capital plans and for preliminary discussion of proposed capital projects.

Closing Balance – Alternatively referred to as the Starting Balance. The balance of funds remaining in the reserve account at the end of a fiscal period (Fiscal year end, calendar year or study period). The Closing Balance becomes the Opening Balance for the subsequent fiscal period.

Contingency Costs – An allowance for unexpected or unforeseen costs that may impact monies required for projects to maintain or replace assets. (Not to be confused with costs of Renewal or Major Maintenance projects which are paid for out of the Reserve Fund (otherwise known the Contingency Reserve Fund.)

Contribution Threshold - A dollar value which dictates the size of the Contingency Reserve Fund (CRF) contribution based on whether the accumulated CRF balance is greater than or less than the specified dollar value. For example, the Strata Property Act indicates that if the closing balance of the CRF at the end of the fiscal year is less than 25% of the operating budget for the next fiscal year, then the CRF contribution for the next fiscal year should be a minimum of 10% of the operating budget. In this case, the threshold is 25% of the operating budget.

Current Dollars – Dollars in the year they were actually received or paid, unadjusted for price changes.

Effective Age – An assessment of the age of an asset relative to its condition and how that condition may have accelerated or decelerated the chronological age of the asset (service life minus remaining service life).

Funding Model – A mathematical model used to establish an appropriate funding level for sustaining the assets in a building. Running a number of scenarios out of the funding model using different parameters (such as inflation rates and interest rates) can serve as a sensitivity analysis to determine the financial impact of different funding levels.

Future Dollars – The projected cost of future asset renewal projects, which accounts for inflation and escalation factors.

Get Ahead Costs – These are costs associated with adaptation of the building to counter the forces of retirement associated with different forms of obsolescence, such as:

- Functional obsolescence
- Legal obsolescence
- Style obsolescence

Some of the costs in this category are discretionary spending that result in either a change or an improvement to the existing strata building. This category includes projects to alter the physical plant for changes in use, codes and standards. Some typical examples include:

- Energy retrofits
- Code retrofits
- Hazardous material abatement
- Barrier free access retrofits
- Seismic Upgrades

Keep-up Costs – The monies required for renewal projects as each asset reaches the end of its useful service life. If an asset is not replaced at the end of its useful service life

and is kept in operation, through targeted repairs, then these costs get reclassified into the “catch-up” category.

Major Maintenance – Any maintenance work for common expenses that usually occurs less often than once a year or that do not usually occur. Major maintenance provides for the preservation of assets to ensure that they achieve their full intended service life.

Next Renewal Year - The forecasted date of asset replacement or renewal.

Opening Balance – Alternatively referred to as the Starting Balance. The amount of money in an account at the beginning of a fiscal period. Opening balances are derived from the balance sheet and are used in cash flow calculations in the Funding Model.

Operating Costs – Frequently recurring expenses that arise during the course of a single fiscal year and are paid from the operating budget as opposed to the Reserve Fund.

Operational Plan/Horizon (1 year) – The annual operating period encompasses one fiscal cycle (12 months). The Reserve Contribution in the operating budget should reflect the majority of the projects in the Tactical Plan (5 years) and ideally should also contemplate elements of the Strategic Plan (30 years).

Percent Funded – The ratio, at a particular point of time (typically the beginning of the fiscal year), of the actual or projected Reserve Fund balance to the accrued Reserve Fund balance, expressed as a percentage. For example: If the 100% funded balance is \$100,000 and there is \$76,000 in the Reserve Fund, the Reserve Fund is 76% funded.

Since funds can typically be allocated from one asset to another with ease, this parameter has no real meaning on an individual reserve component basis. The purpose of this parameter is to identify the relative strength or weakness of the entire Reserve Fund at a particular point in time. The value of this parameter is to provide a more stable measure of Reserve Fund strength, since cash in reserve may mean very different things to different governing bodies or Owner groups.

- **Poor Level.** When the Percent Funded falls to 0% - 30%, the current reserves may be considered to be at a ‘poor’ level. At this funding level, Special Levies are common. This is also commonly known as the Unfunded or Special Levy Model. The Owner Group does not have a Reserve Fund balance that will cover expected renewal costs and the only recourse is to raise funds by Special Levies to cover those costs when they become due.
- **Fair Level.** If the Percent Funded level is 31 to 70% then the current reserve may be considered to be in a mid-range level.
- **Good Level.** If the Percent Funded level is 70% or higher this is likely to be considered ‘strong’ because cash flow problems are rare.

Renewal – The replacement of an Asset as it reaches the end of its useful service life.

Renewal Cost – The cost required to replace an Asset, which is paid from the Reserve Fund, Special Levy or combination thereof.

Reserve Contribution – See Annual Contribution.

Reserve Fund – Also known as the Contingency Reserve Fund (CRF). The account in which the accumulated Annual Contributions are deposited and from which costs are withdrawn for Renewal projects and Major Maintenance projects.

Reserve Income – The interest earned from investing the money deposited in the Reserve Fund.

Reserve Study – Also referred to as a Reserve Fund Study or Depreciation Report in BC.

- A long-range financial planning tool that identifies the current status of the Owners' Reserve Fund and recommends a stable and equitable funding plan to offset the costs of anticipated future major expenditures associated with replacement of the assets and major maintenance.
- The purpose of the Reserve Study is to provide a plan for appropriate funding for renewal and major maintenance work.
- While Reserve Studies provide analysis of the timing, costs and funding for renewal projects, they should ideally be supported by a maintenance plan that assists the Owners to plan for maintenance activities so that assets achieve their predicted service lives.

Service Life - The estimated period of time over which an asset (and its components or assembly) provides adequate performance and function.

Special Levy – Also referred to as a "Special Assessment". A financial levy to be paid by the Owner group to finance large-scale projects for major maintenance, repairs, renewal and rehabilitation of an asset, which occur as result of a shortfall in available funds and requires special decision making and approval procedures. A Reserve Study contains funding scenarios that assist the Owners in long-range financial planning.

Statutory Funding Model - A funding model which uses the Strata Property Act and Regulations to determine the minimum amount of money to contribute to the Contingency Reserve Fund on an annual basis.

Strategic Horizon – The longest of the three planning horizons, which typically covers the full study period of 30 years and identifies the long-term needs of the assets.

Style Obsolescence – When an asset is no longer desirable because it has fallen out of popular fashion, its style is obsolete. Some assets, particularly interior furnishings, reflect fashion cycles and can become out-dated.

Tactical Plan/Horizon – A period of planning for asset Renewal projects and Major Maintenance projects, which typically extends five years from the current year.

Appendix B

Asset Inventory

Enclosure

Roofs & Decks

Encl 01 - 2 Ply SBS Roof Membrane



Location

Small roof area above parkade at north elevation of east building.

Description

Two plies of a manufactured modified bitumen sheet membrane installed over existing membrane and insulation sloping. The membrane is exposed. The top ply is not protected by embedded granules, as typically done, therefore the service life has been adjusted accordingly.

Information

Service Life: 15
Installed Year: 2007
Chronological Age: 8
Effective Age: 8
Next Renewal Year: 2022

Encl 02 - Asphalt Shingle Roofs



Location

At main roof of east and west building

Description

Asphalt shingles over a membrane underlayment.

Information

Service Life: 30
Installed Year: 2007
Chronological Age: 8
Effective Age: 8
Next Renewal Year: 2037

Encl 03 - PVC Panel Soffits



Location

At underside of balconies, archways and roof overhangs of east and west building

Description

Perforated PVC panel soffit system. Asset includes a small area of metal soffit below the attic bay window at north elevation of the east building.

Information

Service Life: 50
Installed Year: 2007
Chronological Age: 8
Effective Age: 8
Next Renewal Year: 2057

Encl 04 - Roof Decks



Location

At various ground floor decks on both buildings.

Description

Waterproofing membrane overlaid with concrete pavers at majority of ground floor decks.

Information

Service Life: 25
Installed Year: 2007
Chronological Age: 8
Effective Age: 8
Next Renewal Year: 2032

St. Andrews Walk

Asset Inventory - 2015

Encl 05 - Vinyl Roof Deck Membrane



Location

Roof decks over living space, 4th floor.

Description

Sheet vinyl membrane applied over wood deck sheathing.

Information

Service Life: 15
 Installed Year: 2007
 Chronological Age: 8
 Effective Age: 10
 Next Renewal Year: 2020

Walls

Encl 06 - Painted Exterior Concrete



Location

At parkade entrance, at base of wall along grade and parkade walls at east and west building.

Description

Cast in place concrete (CIP) formed over reinforcing steel. Concrete substrate has been coated with an exterior paint.

Information

Service Life: 100
 Installed Year: 2007
 Chronological Age: 8
 Effective Age: 8
 Next Renewal Year: 2107

Encl 07 - Cultured Stone Veneer



Location

At ground floor exterior walls, columns and some small upper wall accent areas at the east and west building.

Description

Cultured stone veneer with mortar joints. Stone veneer is installed with a drained and vented cavity.

Information

Service Life: 50
 Installed Year: 2007
 Chronological Age: 8
 Effective Age: 8
 Next Renewal Year: 2057

Encl 08 - EIFS Cladding



Location

Head and sill trims at windows in stone veneer cladding areas on east and west building.

Description

Textured acrylic finish applied over wall assembly, comprising expanded polystyrene foam board, reinforcing mesh, and cementitious finish.

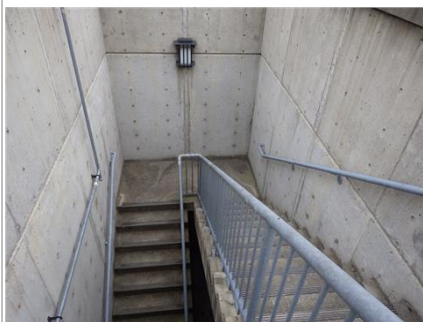
Information

Service Life: 25
 Installed Year: 2007
 Chronological Age: 8
 Effective Age: 8
 Next Renewal Year: 2032

St. Andrews Walk

Asset Inventory - 2015

Encl 09 - Exposed Concrete



Location

At rear building elevations of east and west building.

Description

Cast in place concrete (CIP) formed over reinforcing steel.

Information

Service Life: 100
 Installed Year: 2007
 Chronological Age: 8
 Effective Age: 8
 Next Renewal Year: 2107

Encl 10 - Fibre Reinforced Cement Board Cladding



Location

At all exterior walls and columns above ground floor at east and west building.

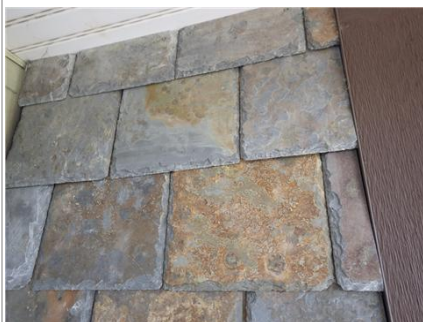
Description

Rainscreened, horizontal lap, shingle and panel style fibre reinforced cement board siding installed on vertical strapping.

Information

Service Life: 40
 Installed Year: 2007
 Chronological Age: 8
 Effective Age: 8
 Next Renewal Year: 2047

Encl 11 - Slate Wall Cladding



Location

At upper floor accent walls and balcony structures on the east and west building.

Description

Stone and slate rainscreen cladding on exterior insulated structural stud and cast in place concrete walls.

Information

Service Life: 40
 Installed Year: 2007
 Chronological Age: 8
 Effective Age: 8
 Next Renewal Year: 2047

Encl 12 - Wood Trim



Location

At window and door perimeters, roof and balcony fascias, and building corners.

Description

Vertical and horizontal wood trim boards with coated surface for protection of the substrate and aesthetics.

Information

Service Life: 30
 Installed Year: 2007
 Chronological Age: 8
 Effective Age: 8
 Next Renewal Year: 2037

St. Andrews Walk

Asset Inventory - 2015

Windows

Encl 13 - Windows - Vinyl



Location

At all units at east and west building.

Description

Exterior glazed vinyl rainscreen awning windows.

Information

Service Life: 40
 Installed Year: 2007
 Chronological Age: 8
 Effective Age: 8
 Next Renewal Year: 2047

Encl 14 - Lobby Door and Glazing Assembly



Location

At main entrance to east and west buildings.

Description

Glazed vinyl clad aluminum door assembly with thermally broken aluminum frames and double glazed IGUs at primary entry point into the buildings. Asset includes electronic door opener and control unit at main entry lobby.

Information

Service Life: 40
 Installed Year: 2007
 Chronological Age: 8
 Effective Age: 8
 Next Renewal Year: 2047

Doors

Encl 15 - Swing Doors - Glazed



Location

At patios, decks, and balconies at east and west building.

Description

A variety of single and double swing exterior glazed doors for access to patios, decks, and balconies.

Information

Service Life: 40
 Installed Year: 2007
 Chronological Age: 8
 Effective Age: 8
 Next Renewal Year: 2047

Encl 16 - Metal Clad Service & Entry Doors



Location

At stair exits and service rooms to the east and west buildings and some patios and balconies along the east wall of the west building.

Description

Exterior metal and metal clad wood doors for pedestrian exit and service room access at the exterior of the building.

Information

Service Life: 30
 Installed Year: 2007
 Chronological Age: 8
 Effective Age: 8
 Next Renewal Year: 2037

St. Andrews Walk

Asset Inventory - 2015

Balconies

Encl 17 - Aluminum Glazed Guardrails



Location

At residential patios, decks, and balconies at the east and west building.

Description

Tubular painted aluminum exterior railing assemblies with glazing panels.

Information

Service Life: 35
 Installed Year: 2007
 Chronological Age: 8
 Effective Age: 8
 Next Renewal Year: 2042

Encl 18 - Vinyl Balcony Membrane



Location

At all upper level balconies at the East and West buildings

Description

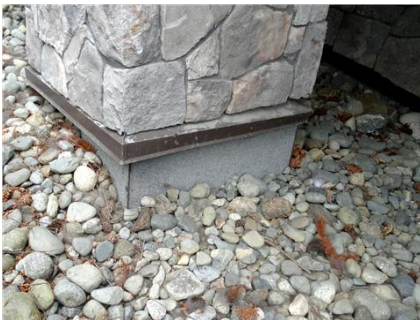
Internally reinforced 60 mil vinyl membrane.

Information

Service Life: 15
 Installed Year: 2007
 Chronological Age: 8
 Effective Age: 10
 Next Renewal Year: 2020

At and Below Grade

Encl 19 - Below Grade Parkade Waterproofing



Location

At grade level above parkade and along base of east and west building.

Description

2-ply SBS waterproofing membrane applied to the concrete podium slab above the below grade parking.

Information

Service Life: 40
 Installed Year: 2007
 Chronological Age: 8
 Effective Age: 8
 Next Renewal Year: 2047

Parking Garage

Encl 20 - Open-grid Overhead Parkade Gate



Location

Parking garage and garbage room entrances

Description

Pre-finished metal grid overhead gate [with motor drive and hardware] for underground parking garages. Also included is the solid metal overhead door at garbage room.

Information

Service Life: 25
 Installed Year: 2007
 Chronological Age: 8
 Effective Age: 8
 Next Renewal Year: 2032

St. Andrews Walk

Asset Inventory - 2015

General & Inspections

Encl 21 - Exterior Sealant

**Location**

Throughout the east and west building

Description

A flexible material used to seal a gap between two surfaces to prevent leakage of water and air.

Information

Service Life:	15
Installed Year:	2007
Chronological Age:	8
Effective Age:	10
Next Renewal Year:	2020

Encl 22 - Miscellaneous & Inspections

**Location**

Throughout the east and west building.

Description

Miscellaneous exterior components, such as service penetrations and interface details, not related to any particular assembly.

Information

Service Life:	50
Installed Year:	2007
Chronological Age:	8
Effective Age:	8
Next Renewal Year:	2057

Electrical

Distribution

Elec 01 - Electrical Distribution

**Location**

Parkade Electrical Room

Description

East building - 800A 208.3.60 Federal Pioneer distribution switchgear, panelboards, breakers and wiring to several local sub-panels and mechanical loads. Served from unit substation in adjacent building. West building - 1200A 208.3.60 Federal Pioneer distribution switchgear, panelboards, breakers and wiring to several local sub-panels and mechanical loads. Served from padmount transformer at the front of the property.

Information

Service Life:	40
Installed Year:	2007
Chronological Age:	8
Effective Age:	8
Next Renewal Year:	2047

St. Andrews Walk

Asset Inventory - 2015

Light Fixtures

Elec 02 - Exterior Light Fixtures



Location

At balconies and decks and throughout landscaped areas around buildings.

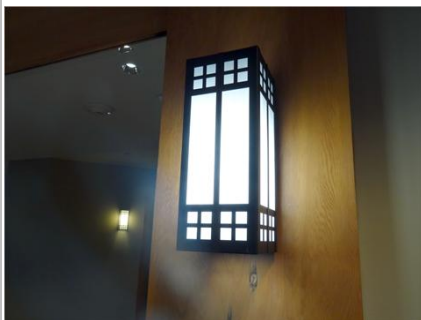
Description

A mixture of wall-mounted, soffit recessed and metal bollard fixtures with compact fluorescent lights, metal halide, PAR halogen fixtures and fluorescent accent lights.

Information

Service Life: 15
 Installed Year: 2007
 Chronological Age: 8
 Effective Age: 8
 Next Renewal Year: 2022

Elec 03 - Interior Lighting Components



Location

Throughout interior areas of building.

Description

A variety of fixture types and wattage, including fluorescents, compact fluorescents, pot lights, surface, pendant and wall sconces, halogen spot lights for accent lighting.

Information

Service Life: 25
 Installed Year: 2007
 Chronological Age: 8
 Effective Age: 8
 Next Renewal Year: 2032

Security

Elec 04 - Enterphone System



Location

Front entry

Description

Linear Access, flush mounted, AE-1000 telephone entry panel with associated key pads, display panels.

Information

Service Life: 25
 Installed Year: 2007
 Chronological Age: 8
 Effective Age: 8
 Next Renewal Year: 2032

Mechanical

Controls and End Devices

Mech 01 - Gas Detection - Parking Garage



Location

East and West parking garage

Description

Honeywell Vulcain 201T electronic sensing devices for detection of carbon monoxide (CO) and nitrogen dioxide (NO2) produced by vehicles and to activate the exhaust fans accordingly.

Information

Service Life: 10
 Installed Year: 2007
 Chronological Age: 8
 Effective Age: 8
 Next Renewal Year: 2017

St. Andrews Walk

Asset Inventory - 2015

Mech 02 - Heat Tracing - Freeze Protection



Location

East and West parking garage

Description

RayChem heat trace controller for piping systems exposed to freezing (self regulating heater cable with parallel circuit heater strip and outer thermoplastic elastomer jacket).

Information

Service Life: 15
 Installed Year: 2007
 Chronological Age: 8
 Effective Age: 8
 Next Renewal Year: 2022

Plumbing & Drainage

Mech 03 - Oil Interceptor - high efficiency



Location

East and West parking garage

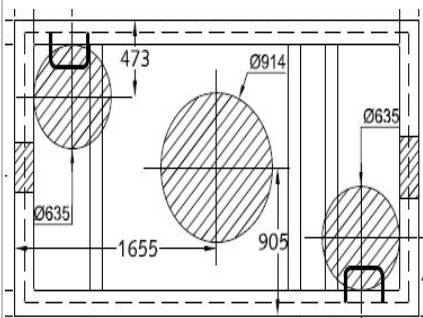
Description

Proceptor multi-chamber flow-through interceptor, rotomolded plastic, with hatches to grade. Serves ramp drainage, piped to storm.

Information

Service Life: 50
 Installed Year: 2007
 Chronological Age: 8
 Effective Age: 8
 Next Renewal Year: 2057

Mech 04 - Oil Interceptor - Type 1



Location

East and West parking garage

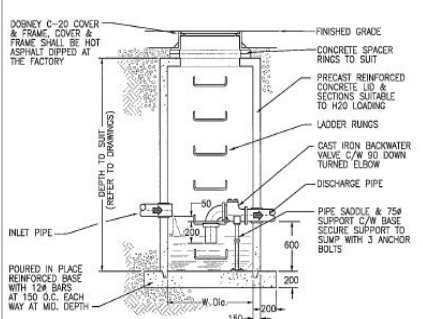
Description

Langlay Concrete baffled flow-through interceptor Type 1 concrete with hatches to grade. Serves parkade drainage, piped to sanitary.

Information

Service Life: 50
 Installed Year: 2007
 Chronological Age: 8
 Effective Age: 8
 Next Renewal Year: 2057

Mech 05 - Sediment Interceptor



Location

East and West parking garage

Description

Underslab concrete silt interceptor assembly with backwater valve, cast steel cover and frame

Information

Service Life: 50
 Installed Year: 2007
 Chronological Age: 8
 Effective Age: 8
 Next Renewal Year: 2057

St. Andrews Walk

Asset Inventory - 2015

Mech 06 - Cross Connection & Backflow Prevention



Location

Mechanical Room East and Mechanical Room West, at parkade level

Description

Each of two buildings has a separate double check valve assembly backflow prevention devices on fire protection systems. A double check valve assembly backflow prevention device for the irrigation system is located in the parkade mechanical room east.

Information

Service Life: 20
 Installed Year: 2007
 Chronological Age: 8
 Effective Age: 8
 Next Renewal Year: 2027

Mech 07 - Piping - Domestic Water Distribution



Location

Throughout buildings, in walls and dropped ceilings; PEX in slab

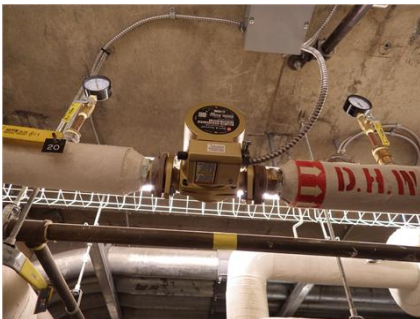
Description

Insulated copper domestic water piping for vertical/horizontal distribution mains; PEX piping within the suites.

Information

Service Life: 40
 Installed Year: 2007
 Chronological Age: 8
 Effective Age: 20
 Next Renewal Year: 2035

Mech 08 - Pumps - Domestic Circulation and Recirculation



Location

Mechanical Room East and Mechanical Room West, at parkade level

Description

Pipe-mounted bronze body domestic hot water circulation and recirculation pumps. Armstrong E7B 1/12 HP and Bell & Gossett NBF-36 1/6 HP. One pump was replaced in the West building in 2015.

Information

Service Life: 8
 Installed Year: 2007
 Chronological Age: 8
 Effective Age: 8
 Next Renewal Year: 2015

Mech 09 - Pumps - Sewage Lift and Control Panels



Location

East parking garage

Description

Myers 2" WHR Series 1/2 HP Duplex sewage sump pumps and control panels for sanitary.

Information

Service Life: 15
 Installed Year: 2007
 Chronological Age: 8
 Effective Age: 8
 Next Renewal Year: 2022

St. Andrews Walk

Asset Inventory - 2015

Mech 10 - Sanitary Drainage Collection



Location

East and West parking garage

Description

PVC-DWV (System 15) piping and fittings with glued joints; insulated and heat traced traps. Cast iron and copper in building.

Information

Service Life: 50
 Installed Year: 2007
 Chronological Age: 8
 Effective Age: 8
 Next Renewal Year: 2057

Mech 11 - Storm Drainage Collection



Location

All exterior drainable surfaces

Description

In parkade, PVC-DWV (System 15) piping and fittings with glued joints; insulated and heat traced traps. Cast iron and copper in building. Deck and balcony drains (shown), catch basins, and associated gravity-drained components for collection of rainwater runoff. Oil interceptors are located under the parkades.

Information

Service Life: 40
 Installed Year: 2007
 Chronological Age: 8
 Effective Age: 13
 Next Renewal Year: 2042

Mech 12 - Tanks - DHW Storage



Location

Mechanical Room East and Mechanical Room West, at parkade level

Description

Bradford White, 200 US gallon, glass-lined hot water storage tanks connected to domestic water heater system. One tank replaced in West building in 2015.

Information

Service Life: 8
 Installed Year: 2007
 Chronological Age: 8
 Effective Age: 8
 Next Renewal Year: 2015

Mech 13 - Valves - Plumbing Flow Control and Directional



Location

Throughout building

Description

Various types and sizes of valves, including pressure reducing valves, isolation valves, two-way and three way valves, circuit flow control valves and check valves to regulate the flow of water through domestic plumbing systems.

Information

Service Life: 15
 Installed Year: 2007
 Chronological Age: 8
 Effective Age: 8
 Next Renewal Year: 2022

St. Andrews Walk Asset Inventory - 2015

Mech 14 - Water Heaters -DHW- Gas Fired



Location

Mechanical Room East and Mechanical Room West, at parkade level

Description

Bradford White, 98 gallon, natural gas fired tank water heater, 199,999 BTU input, atmospheric vented. Connected to storage tanks.

Information

Service Life: 14
 Installed Year: 2007
 Chronological Age: 8
 Effective Age: 8
 Next Renewal Year: 2021

Mech 15 - Expansion Tank - diaphragm-type



Location

Mechanical Room East and Mechanical Room West, at parkade level

Description

Expanflex floor mounted diaphragm expansion tank connected to the circulation loop between the water heaters and storage tanks.

Information

Service Life: 20
 Installed Year: 2007
 Chronological Age: 8
 Effective Age: 8
 Next Renewal Year: 2027

Mech 16 - Drainage - Perimeter and Foundation



Location

Perimeter of buildings

Description

PVC perforated piping forming part of a sub-surface foundation/footing drainage system around perimeters of buildings and underground structures.

Information

Service Life: 40
 Installed Year: 2007
 Chronological Age: 8
 Effective Age: 8
 Next Renewal Year: 2047

Heating & Cooling

Mech 17 - Electric Baseboards



Location

Service rooms.

Description

Standard grade, wall mounted, baseboard heaters with electrical fins for space heating in service rooms and suites with local thermostat control.

Information

Service Life: 40
 Installed Year: 2007
 Chronological Age: 8
 Effective Age: 8
 Next Renewal Year: 2047

St. Andrews Walk

Asset Inventory - 2015

Mech 18 - Electric Cadet Heaters



Location

Entryways and corridors.

Description

Ouellet wall-mounted and ceiling-mounted electric fan heaters with integral thermostat control for localized space heating.

Information

Service Life: 20
 Installed Year: 2007
 Chronological Age: 8
 Effective Age: 8
 Next Renewal Year: 2027

Mech 19 - Electric Unit Heaters



Location

Mechanical and Service Rooms

Description

Ouellet electric unit heaters with fans and directional louver with local thermostat control.

Information

Service Life: 17
 Installed Year: 2007
 Chronological Age: 8
 Effective Age: 8
 Next Renewal Year: 2024

Mech 20 - Fireplace - Electric



Location

Lobbies.

Description

Electric fireplaces with hearth mantel and electric heating element.

Information

Service Life: 30
 Installed Year: 2007
 Chronological Age: 8
 Effective Age: 8
 Next Renewal Year: 2037

Ventilation and Air-conditioning

Mech 21 - Make up Air Units



Location

Attic, East building, and Attic, West building

Description

Each building has an Engineered Air DJE40 indoor make-up air unit with a 6,600 CFM, belt-driven, centrifugal fan and indirect natural gas fired heating, with 400MBH input and 324MBH output capacity, to supply tempered make-up air to the interior spaces.

Information

Service Life: 20
 Installed Year: 2007
 Chronological Age: 8
 Effective Age: 8
 Next Renewal Year: 2027

St. Andrews Walk
Asset Inventory - 2015

Mech 22 - Exhaust Fans - Service Room Ventilation



Location

Elevator Machine Rooms and Electrical Rooms

Description

Delhi cabinet blower, centrifugal fan, belt driven by 1/4 HP electric motor.

Information

Service Life: 20
 Installed Year: 2007
 Chronological Age: 8
 Effective Age: 8
 Next Renewal Year: 2027

Mech 23 - General Exhaust Fans - Inline



Location

Storage Rooms, Meeting Rooms, Garbage Rooms

Description

Cook centrifugal inline exhaust fans, belt driven by 1/6 HP electric motor.

Information

Service Life: 12
 Installed Year: 2007
 Chronological Age: 8
 Effective Age: 8
 Next Renewal Year: 2019

Mech 24 - Exhaust Fans Parking Garage – Propeller



Location

East and West parking garage

Description

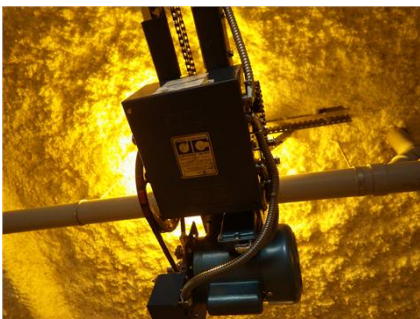
Cook 1-1/2 HP belt driven propeller exhaust fans mounted in exterior wall.

Information

Service Life: 20
 Installed Year: 2007
 Chronological Age: 8
 Effective Age: 8
 Next Renewal Year: 2027

Other

Mech 25 - Overhead Gate Motors



Location

Parking garages, Garbage Rooms East and West

Description

Overhead gate motors and commercial-grade overhead sectional door controlled by an electric operator.

Information

Service Life: 15
 Installed Year: 2007
 Chronological Age: 8
 Effective Age: 8
 Next Renewal Year: 2022

St. Andrews Walk

Asset Inventory - 2015

Elevator

Hydraulic

Elev 01 - Hydraulic Elevator, Holeless



Location

East and West elevator machine rooms

Description

ThyssenKrupp TAC20 holeless hydraulic elevators.

Information

Service Life:	25
Installed Year:	2007
Chronological Age:	8
Effective Age:	8
Next Renewal Year:	2032

Car Interiors

Elev 02 - Elevator Cabs & Hoistway



Location

East and West Elevators

Description

Cabs furnished with tile flooring, wall panelling, and metal handrails.

Information

Service Life:	15
Installed Year:	2007
Chronological Age:	8
Effective Age:	8
Next Renewal Year:	2022

Fire Safety

Controls

Fire 01 - Fire Alarm Panel - Addressable



Location

Parking garage

Description

Notifier AFP-200 microprocessor and supervised unit with an annunciator panel at the front entrance and digital display.

Information

Service Life:	20
Installed Year:	2007
Chronological Age:	8
Effective Age:	8
Next Renewal Year:	2027

St. Andrews Walk
Asset Inventory - 2015

Detection

Fire 02 - Fire Detection & Alarm



Location

Throughout building

Description

Smoke detectors, heat detectors, flow switches, tamper switches, horns, pull stations and other fixed apparatus field devices to detect fire and smoke conditions and initiate timely response.

Information

Service Life: 20
 Installed Year: 2007
 Chronological Age: 8
 Effective Age: 8
 Next Renewal Year: 2027

Suppression

Fire 03 - Sprinkler Valve Assemblies - Dry



Location

East and West sprinkler Rooms; fourth floor stair east and west of each building (attic service).

Description

Dry sprinkler valves and trim, steel piping. One serving each parkade, and two serving each attic.

Information

Service Life: 40
 Installed Year: 2007
 Chronological Age: 8
 Effective Age: 8
 Next Renewal Year: 2047

Fire 04 - Sprinklers & Standpipe - Wet



Location

Throughout building, all heated spaces. Dry sidewall sprinklers in loading dock and some exterior areas.

Description

Concealed pendant sprinklers in all heated spaces, and dry sidewall sprinkler heads, steel and PVC distribution lines.

Information

Service Life: 50
 Installed Year: 2007
 Chronological Age: 8
 Effective Age: 8
 Next Renewal Year: 2057

Fire 05 - Sprinkler systems - Dry



Location

Throughout parkade levels, unheated spaces.

Description

Dry-type sprinkler system, exposed upright sprinkler heads, steel piping.

Information

Service Life: 50
 Installed Year: 2007
 Chronological Age: 8
 Effective Age: 8
 Next Renewal Year: 2057

St. Andrews Walk

Asset Inventory - 2015

Fire 06 - Dry Sprinkler Compressor



Location

East and West sprinkler Rooms; Fourth Floor stair East and West

Description

Swan air compressor with fractional 1/2 - 2hp HP motor to maintain the pressure of air in the dry fire sprinkler lines.

Information

Service Life: 14
 Installed Year: 2007
 Chronological Age: 8
 Effective Age: 8
 Next Renewal Year: 2021

Fire 07 - Fire Hydrant [PLACEHOLDER]



Location

At front of property

Description

Devices used to access water directly from the municipal water supply to assist in extinguishing fires.

Information

Service Life: 40
 Installed Year: 2007
 Chronological Age: 8
 Effective Age: 8
 Next Renewal Year: 2047

Fire 08 - Portable Fire Extinguishers



Location

At or near every exit, and in mechanical, electrical, and service rooms

Description

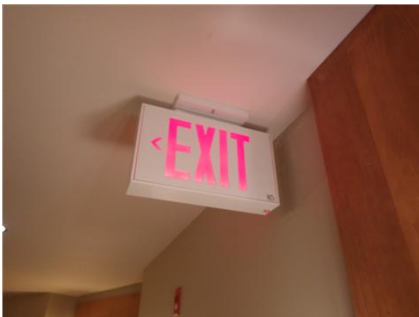
Wall mounted, manually operated, 5lbs and 10lbs ABC type, pressurized vessels for controlled discharge of chemicals to extinguish small fires.

Information

Service Life: 24
 Installed Year: 2007
 Chronological Age: 8
 Effective Age: 8
 Next Renewal Year: 2031

Egress

Fire 09 - Emergency Egress Equipment



Location

All corridors, stairs, and paths of exit

Description

READY-LITE unit battery packs and LED exit signs.

Information

Service Life: 20
 Installed Year: 2007
 Chronological Age: 8
 Effective Age: 8
 Next Renewal Year: 2027

Interior Finishes

Floors

Finish 01 - Carpet Flooring



Location

At residential corridors and upper elevator lobby areas of the east and west buildings.

Description

Loop and cut pile nylon texture carpet laid on high density commercial rubber undercushion.

Information

Service Life: 15
Installed Year: 2007
Chronological Age: 8
Effective Age: 8
Next Renewal Year: 2022

Finish 02 - Painted Concrete Flooring



Location

In storage room and utility room areas of the east and west buildings.

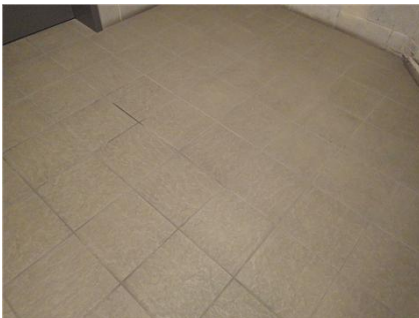
Description

Exposed concrete floors, painted in some locations to provide a cleaner finish. Includes parking demarcation.

Information

Service Life: 25
Installed Year: 2007
Chronological Age: 8
Effective Age: 8
Next Renewal Year: 2032

Finish 03 - Resilient Flooring



Location

At main floor loading bay room at east and west buildings.

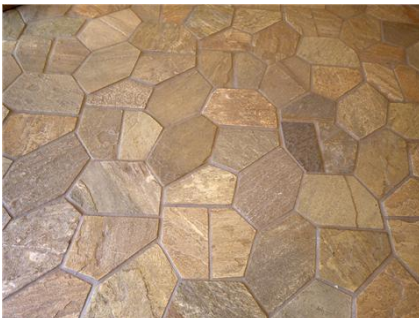
Description

Combination of vinyl tile and vinyl sheet laid over a subfloor, including door thresholds and interface thresholds with adjoining floor finishes.

Information

Service Life: 25
Installed Year: 2007
Chronological Age: 8
Effective Age: 8
Next Renewal Year: 2032

Finish 04 - Tiled Flooring



Location

At main entry lobby of the east and west buildings.

Description

Ceramic tiles and grout laid on concrete substrate.

Information

Service Life: 30
Installed Year: 2007
Chronological Age: 8
Effective Age: 8
Next Renewal Year: 2037

St. Andrews Walk

Asset Inventory - 2015

Interior Painting

Finish 05 - Interior Painting



Location

Common corridors, stairwells and service rooms in the east and west buildings.

Description

Primers and multiple pigmented coating finishes applied to interior gypsum wallboard, concrete block and concrete walls as well as, millwork trim details and metal trims.

Information

Service Life:	10
Installed Year:	2007
Chronological Age:	8
Effective Age:	8
Next Renewal Year:	2017

Finish 06 - Millwork and Carpentry



Location

Throughout the residential areas of the east and west buildings.

Description

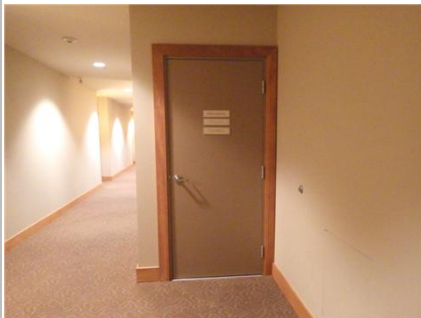
Wood accent pieces, mouldings such as baseboards, door and window casings.

Information

Service Life:	35
Installed Year:	2007
Chronological Age:	8
Effective Age:	8
Next Renewal Year:	2042

Furnishings

Finish 07 - Interior Swing Doors



Location

At common areas to exit stairs and service rooms throughout the east and west buildings.

Description

Variety of solid and glazed swing doors hung in framed openings excluding utility closets. Exterior doors are considered separately as part of the building enclosure system. There are approximately 63 single and 14 double doors located in the interior of the building.

Information

Service Life:	40
Installed Year:	2007
Chronological Age:	8
Effective Age:	8
Next Renewal Year:	2047

St. Andrews Walk

Asset Inventory - 2015

Amenities

Furnishings

Amen 01 - Metal Storage Lockers



Location

In common storage room area at east and west buildings.

Description

Metal chain link fence storage lockers.

Information

Service Life: 40
 Installed Year: 2007
 Chronological Age: 8
 Effective Age: 8
 Next Renewal Year: 2047

Amen 02 - Central Mailboxes



Location

In mailroom adjacent to entry lobbies at east and west buildings.

Description

Flush mounted, horizontal front loading, suite series, anodized aluminum finish with Canada Post lock.

Information

Service Life: 40
 Installed Year: 2007
 Chronological Age: 8
 Effective Age: 8
 Next Renewal Year: 2047

Amen 03 - Public Signage



Location

Signage, door names and suite numbers etc. throughout the site and interior of the east and west buildings.

Description

Variety of surface mounted placards in the public exterior and interior areas of the building, including suite numbers, room names and notices.

Information

Service Life: 20
 Installed Year: 2007
 Chronological Age: 8
 Effective Age: 8
 Next Renewal Year: 2027

Suite

Amen 04 - Lobby



Location

At main entrance lobbies in the east and west buildings.

Description

Millwork, furniture, lighting, floor & wall coverings, paintwork and other miscellaneous items. Renewal cycles for floor coverings are included with common area assets.

Information

Service Life: 15
 Installed Year: 2007
 Chronological Age: 8
 Effective Age: 8
 Next Renewal Year: 2022

St. Andrews Walk Asset Inventory - 2015

Sitework

Hard Landscaping

Site 01 - Aggregate Paving



Location

At main entrances

Description

Concrete paving with painted broom finish laid on compacted subgrade and base course with expansion joints.

Information

Service Life: 50
 Installed Year: 2007
 Chronological Age: 8
 Effective Age: 33
 Next Renewal Year: 2032

Site 02 - Asphalt Paving



Location

Drive way area at north side and to parkade entrances at the east and west buildings.

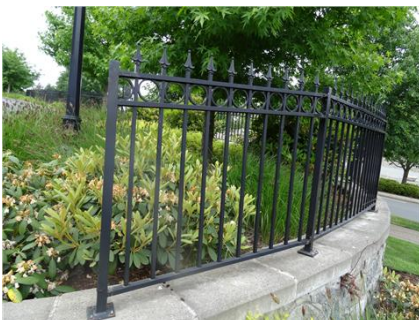
Description

Flexible asphalt paving with concrete curbs.

Information

Service Life: 40
 Installed Year: 2007
 Chronological Age: 8
 Effective Age: 8
 Next Renewal Year: 2047

Site 03 - Exterior Metal Railings



Location

At access ramps, parkade entrance areas and at change of grade locations throughout the site

Description

A combination of tubular painted exterior metal railing and metal frame with glazed infill panels.

Information

Service Life: 35
 Installed Year: 2007
 Chronological Age: 8
 Effective Age: 8
 Next Renewal Year: 2042

Site 04 - Interlocking Unit Paving



Location

At pedestrian areas and ground level patios throughout the site.

Description

Concrete unit pavers, combination of joint filler and jointing sand, bedding sand, compacted gravel base, compacted sub-base.

Information

Service Life: 40
 Installed Year: 2007
 Chronological Age: 8
 Effective Age: 8
 Next Renewal Year: 2047

St. Andrews Walk

Asset Inventory - 2015

Site 05 - Stone and Concrete Retaining Walls



Location

Along the north side and at various locations throughout the site.

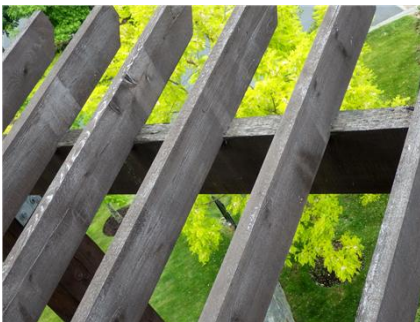
Description

Cast-in-place concrete retaining wall some with stone facing on compacted sub-grade.

Information

Service Life:	50
Installed Year:	2007
Chronological Age:	8
Effective Age:	8
Next Renewal Year:	2057

Site 06 - Wood Trellis Structures



Location

At the pedestrian area on the south side between both buildings, the east and west end of the east building and the east end of the west buildings.

Description

Several trellises with solid timber framing, structural timber beams and timber posts are assembled to form an overhead trellis for residential patios, some decks and balconies plus a stand-alone trellis in the common pedestrian area between the east and west building.

Information

Service Life:	35
Installed Year:	2007
Chronological Age:	8
Effective Age:	8
Next Renewal Year:	2042

Soft Landscaping

Site 07 - Irrigation Sprinklers



Location

In soft landscape areas throughout the site.

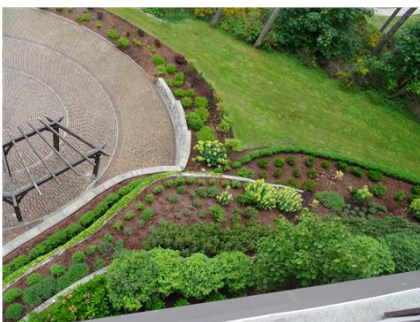
Description

Signature Control Systems Inc., 8300 series EZ-Pro Jr. controller units with network of pipes, backflow preventer valves, and pop-up irrigation heads buried amongst the exterior 'soft' landscaping.

Information

Service Life:	15
Installed Year:	2007
Chronological Age:	8
Effective Age:	8
Next Renewal Year:	2022

Site 08 - Soft Landscaping



Location

At various locations throughout the site.

Description

Various forms of plant material, including lawns, shrubs, flowers, ground cover, hedges and trees. Also considered are growing medium such as top soil.

Information

Service Life:	40
Installed Year:	2007
Chronological Age:	8
Effective Age:	8
Next Renewal Year:	2047

St. Andrews Walk

Asset Inventory - 2015

Site Services

Site 09 - Underground Drainage Services - Storm



Location

Concealed asset. Between buildings and city connection on North side of site.

Description

Storm sewer from buildings and catch basins to property line.

Information

Service Life: 80
 Installed Year: 2007
 Chronological Age: 8
 Effective Age: 8
 Next Renewal Year: 2087

Site 10 - Underground Sewer Services - Sewer



Location

Concealed asset. Between buildings and city connection on North side of site.

Description

Sanitary sewer system from the buildings to the property line, including all appurtenances.

Information

Service Life: 80
 Installed Year: 2007
 Chronological Age: 8
 Effective Age: 8
 Next Renewal Year: 2087

Site 11 - Underground Water Services



Location

Concealed asset. Between buildings, hydrants, and city connection on South side of site.

Description

Fire and domestic water supplies, from the property line to the buildings and hydrants.

Information

Service Life: 50
 Installed Year: 2007
 Chronological Age: 8
 Effective Age: 8
 Next Renewal Year: 2057

Site 12 - Electrical Site Services



Location

Concealed asset, below grade.

Description

Underground secondary distribution conduits and services from individual pad mounted transformers (BC Hydro-owned) to building electrical rooms.

Information

Service Life: 50
 Installed Year: 2007
 Chronological Age: 8
 Effective Age: 8
 Next Renewal Year: 2057

Appendix C

Asset Service Life Summary

St. Andrews Walk

Asset Service Life Summary - 2015

Asset Ref	Asset Name	Chronological Age	Estimated Remaining SL
Encl 01	2 Ply SBS Roof Membrane	8	7
Encl 02	Asphalt Shingle Roofs	8	22
Encl 03	PVC Panel Soffits	8	42
Encl 04	Roof Decks	8	17
Encl 05	Vinyl Roof Deck Membrane	8	5
Encl 06	Painted Exterior Concrete	8	92
Encl 07	Cultured Stone Veneer	8	42
Encl 08	EIFS Cladding	8	17
Encl 09	Exposed Concrete	8	92
Encl 10	Fibre Reinforced Cement Board Cladding	8	32
Encl 11	Slate Wall Cladding	8	32
Encl 12	Wood Trim	8	22
Encl 13	Windows - Vinyl	8	32
Encl 14	Lobby Door and Glazing Assembly	8	32
Encl 15	Swing Doors - Glazed	8	32
Encl 16	Metal Clad Service & Entry Doors	8	22
Encl 17	Aluminum Glazed Guardrails	8	27
Encl 18	Vinyl Balcony Membrane	8	5
Encl 19	Below Grade Parkade Waterproofing	8	32
Encl 20	Open-grid Overhead Parkade Gate	8	17
Encl 21	Exterior Sealant	8	5
Encl 22	Miscellaneous & Inspections	8	42
Elec 01	Electrical Distribution	8	32
Elec 02	Exterior Light Fixtures	8	7
Elec 03	Interior Lighting Components	8	17
Elec 04	Enterphone System	8	17
Mech 01	Gas Detection - Parking Garage	8	2
Mech 02	Heat Tracing - Freeze Protection	8	7
Mech 03	Oil Interceptor - high efficiency	8	42
Mech 04	Oil Interceptor - Type 1	8	42
Mech 05	Sediment Interceptor	8	42
Mech 06	Cross Connection & Backflow Prevention	8	12
Mech 07	Piping - Domestic Water Distribution	8	20
Mech 08	Pumps - Domestic Circulation and Recirculation	8	0
Mech 09	Pumps - Sewage Lift and Control Panels	8	7
Mech 10	Sanitary Drainage Collection	8	42
Mech 11	Storm Drainage Collection	8	27
Mech 12	Tanks - DHW Storage	8	0
Mech 13	Valves - Plumbing Flow Control and Directional	8	7
Mech 14	Water Heaters -DHW- Gas Fired	8	6
Mech 15	Expansion Tank - diaphragm-type	8	12







St. Andrews Walk

Asset Service Life Summary - 2015

Asset Ref	Asset Name	Chronological Age	Estimated Remaining SL
Mech 16	Drainage - Perimeter and Foundation	8	32
Mech 17	Electric Baseboards	8	32
Mech 18	Electric Cadet Heaters	8	12
Mech 19	Electric Unit Heaters	8	9
Mech 20	Fireplace - Electric	8	22
Mech 21	Make up Air Units	8	12
Mech 22	Exhaust Fans - Service Room Ventilation	8	12
Mech 23	General Exhaust Fans - Inline	8	4
Mech 24	Exhaust Fans Parking Garage - Propellor	8	12
Mech 25	Overhead Gate Motors	8	7
Elev 01	Hydraulic Elevator, Holeless	8	17
Elev 02	Elevator Cabs & Hoistway	8	7
Fire 01	Fire Alarm Panel - Addressable	8	12
Fire 02	Fire Detection & Alarm	8	12
Fire 03	Sprinkler Valve Assemblies - Dry	8	32
Fire 04	Sprinklers & Standpipe - Wet	8	42
Fire 05	Sprinkler systems - Dry	8	42
Fire 06	Dry Sprinkler Compressor	8	6
Fire 07	Fire Hydrant [PLACEHOLDER]	8	32
Fire 08	Portable Fire Extinguishers	8	16
Fire 09	Emergency Egress Equipment	8	12
Finish 01	Carpet Flooring	8	7
Finish 02	Painted Concrete Flooring	8	17
Finish 03	Resilient Flooring	8	17
Finish 04	Tiled Flooring	8	22
Finish 05	Interior Painting	8	2
Finish 06	Millwork and Carpentry	8	27
Finish 07	Interior Swing Doors	8	32
Amen 01	Metal Storage Lockers	8	32
Amen 02	Central Mailboxes	8	32
Amen 03	Public Signage	8	12
Amen 04	Lobby	8	7
Site 01	Aggregate Paving	8	17
Site 02	Asphalt Paving	8	32
Site 03	Exterior Metal Railings	8	27
Site 04	Interlocking Unit Paving	8	32
Site 05	Stone and Concrete Retaining Walls	8	42
Site 06	Wood Trellis Structures	8	27
Site 07	Irrigation Sprinklers	8	7
Site 08	Soft Landscaping	8	32
Site 09	Underground Drainage Services - Storm	8	72

St. Andrews Walk

Asset Service Life Summary - 2015

Asset Ref	Asset Name	Chronological Age	Estimated Remaining SL
Site 10	Underground Sewer Services - Sewer	8 	72 
Site 11	Underground Water Services	8 	42 
Site 12	Electrical Site Services	8 	42 

Appendix D

Depreciation Report Costing

St. Andrews Walk

Depreciation Report Costing 2015

Enclosure

	Description	Next Event	Frequency (events in 30 years)	cost per event (no inflation)	30 Year Cost (no inflation)	30 Year Cost (inflation)
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Roofs & Decks

Encl 01 - 2 Ply SBS Roof Membrane

R01	Replace 2-ply SBS conventional roof membrane assembly and associated flashing. The cap sheet is not granulated, therefore, the service life of the exposed membrane has been reduced to reflect this.	2022	15 Yrs (2)	\$1,500	\$3,000	\$4,000
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Encl 02 - Asphalt Shingle Roofs

J01	Review and touch-up metal flashings as required.	2015	5 yrs (6)	\$1,000	\$6,000	\$7,800
J02	Conduct warranty review in sufficient time prior to expiration of installation contractor's warranty period. Prepare list of any deficiencies for correction.	2017	10 Yrs (1)	\$0	\$0	\$0
J03	Conduct warranty review in sufficient time prior to expiration of the RCABC warranty period. Prepare list of any deficiencies for correction.	2017	5 yrs (1)	\$0	\$0	\$0
R01	Replace asphalt shingles and accessories.	2037	30 Yrs (1)	\$350,000	\$350,000	\$540,000

Encl 03 - PVC Panel Soffits

J01	Clean exterior surfaces of metal panel soffits to remove atmospheric dirt, vegetation growth and other stains. Use of cleaning agent will depend on the tenacity of the dirt.	2015	5 yrs (6)	\$0	\$0	\$0
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Encl 04 - Roof Decks

J01	Locally repaint flashings, as required.	2015	15 Yrs (2)	\$1,000	\$2,000	\$2,300
R02	Replace roof deck membrane assemblies and relay existing concrete pavers.	2032	25 Yrs (1)	\$100,000	\$100,000	\$140,000

Encl 05 - Vinyl Roof Deck Membrane

R01	Replace vinyl deck membrane and associated components.	2020	15 Yrs (2)	\$15,840	\$31,680	\$41,000
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Walls

Encl 06 - Painted Exterior Concrete

J01	Clean surface of painted concrete to remove localized accumulations of atmospheric dirt, vegetative growth and other stains.	2015	5 yrs (6)	\$0	\$0	\$0
R01	Renew sealant at assembly interfaces. [Cost included within the Exterior Sealant asset of the Enclosure System].	2020	10 Yrs (3)	\$0	\$0	\$0
R02	Renew concrete wall coating.	2020	10 Yrs (3)	\$9,000	\$27,000	\$36,900

St. Andrews Walk

Depreciation Report Costing 2015

Enclosure

	Description	Next Event	Frequency (events in 30 years)	cost per event (no inflation)	30 Year Cost (no inflation)	30 Year Cost (inflation)
Encl 07 - Cultured Stone Veneer						
J01	Clean surfaces to remove localized accumulations of atmospheric dirt, vegetative growth and other stains. Extent of work and frequency depends on environmental exposure conditions.	2015	5 yrs (6)	\$0	\$0	\$0
R01	Replace exterior sealant at masonry cladding, as required. [Cost included in the Exterior Sealants asset of the Enclosure System].	2020	15 Yrs (2)	\$0	\$0	\$0
R02	Repoint mortar joints between masonry cladding as required.	2032	25 Yrs (1)	\$20,000	\$20,000	\$28,000
Encl 08 - EIFS Cladding						
R01	Repair damaged EIFS panels and replace exterior sealant at EIFS panels and interface details.	2019	7 Yrs (3)	\$1,000	\$3,000	\$3,800
R02	Renew acrylic finish on EIFS as required. [Frequency of recoating will depend on tenacity of dirt accumulations and whether adequate cleaning has taken place as part of the ongoing maintenance program]. Cost included with re-coating of primary cladding system.	2020	10 Yrs (3)	\$0	\$0	\$0
R03	Replace EIFS wall assembly and associated components.	2032	25 Yrs (1)	\$20,000	\$20,000	\$28,000
Encl 09 - Exposed Concrete						
J01	Review and remove localized areas of staining and vegetation growth as required.	2020	5 yrs (6)	\$0	\$0	\$0
Encl 10 - Fibre Reinforced Cement Board Cladding						
J01	Clean surface of fibre cement board and flashings to remove atmospheric dirt, vegetative growth and other stains. [Cost included in the Rainscreen Stucco asset of the Enclosure System].	2015	5 yrs (6)	\$0	\$0	\$0
J02	Replace exterior sealants at interfaces in fibre reinforced cement board. [Cost included within the Exterior Sealants asset of the Enclosure System].	2020	15 Yrs (2)	\$0	\$0	\$0
R01	Recoat fibre reinforced cement board.	2025	10 Yrs (2)	\$105,000	\$210,000	\$290,000
Encl 11 - Slate Wall Cladding						
J01	Clean exterior surfaces of stone and slate cladding, as required, to remove vegetation growth and other atmospheric staining.	2015	5 yrs (6)	\$0	\$0	\$0

St. Andrews Walk

Depreciation Report Costing 2015

Enclosure

	Description	Next Event	Frequency (events in 30 years)	cost per event (no inflation)	30 Year Cost (no inflation)	30 Year Cost (inflation)
J02	Perform 10 year warranty review in sufficient time prior to expiration of the warranty period. Prepare list of any deficiencies for correction. Refer to Miscellaneous & Inspections, coordinate with other assemblies.	2017	10 Yrs (1)	\$0	\$0	\$0

Encl 12 - Wood Trim

J01	Clean surface of wood trim, as required, to remove vegetation growth and other staining. [Cost to be included with cleaning of exterior wall asset.]	2016	3 Yrs (10)	\$0	\$0	\$0
J02	Locally repair wood trim, as required.	2016	2 Yrs (15)	\$1,991	\$29,871	\$40,800
R01	Repaint wood trim. To be coordinated with sealant work.	2016	5 yrs (6)	\$16,595	\$99,570	\$133,000
R02	Replace wood trim, as required.	2037	30 Yrs (1)	\$82,975	\$82,975	\$130,000

Windows

Encl 13 - Windows - Vinyl

J01	Replace failed sealed insulating glass units. Typically funded from the operating/maintenance fund.	2017	2 Yrs (14)	\$0	\$0	\$0
J02	Conduct warranty review in sufficient time prior to expiration of sealed glazing unit manufacturers warranty period.	2017	10 Yrs (1)	\$0	\$0	\$0

Encl 14 - Lobby Door and Glazing Assembly

R01	Replace exterior sealant at the lobby door and glazing assembly, as required [Cost included in the Exterior Sealants asset of the Enclosure System].	2020	20 Yrs (2)	\$0	\$0	\$0
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Doors

Encl 16 - Metal Clad Service & Entry Doors

J01	Grind off signs of corrosion, prime and repaint metal door and frame.	2020	10 Yrs (2)	\$1,050	\$2,100	\$2,600
R01	Replace metal clad service & entry doors.	2037	30 Yrs (1)	\$14,000	\$14,000	\$22,000

Balconies

Encl 17 - Aluminum Glazed Guardrails

J01	Review all aluminum finishes. Provide touch up paint as required.	2022	5 yrs (4)	\$900	\$3,600	\$4,790
R01	Replace aluminum glazed guardrails.	2042	35 Yrs (1)	\$210,000	\$210,000	\$360,000

Encl 18 - Vinyl Balcony Membrane

R01	Replace vinyl membrane.	2020	15 Yrs (2)	\$285,000	\$570,000	\$730,000
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Parking Garage

Encl 20 - Open-grid Overhead Parkade Gate

J01	Locally touch up paint at overhead gate, as required.	2015	2 Yrs (15)	\$1,000	\$15,000	\$20,000
R01	Replacement of sectional overhead door and associated hardware.	2032	25 Yrs (1)	\$8,000	\$8,000	\$11,000

St. Andrews Walk

Depreciation Report Costing 2015

Enclosure

	Description	Next Event	Frequency (events in 30 years)	cost per event (no inflation)	30 Year Cost (no inflation)	30 Year Cost (inflation)
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General & Inspections

Encl 21 - Exterior Sealant

J01	Inspect exterior sealant throughout for discontinuities, debonding, cracking, chalking or bulging. Repair as required.	2016	5 yrs (6)	\$5,000	\$30,000	\$39,800
R01	Remove existing sealant and replace with new (refer to asset renewal tasks for locations).	2020	15 Yrs (2)	\$84,000	\$168,000	\$213,000

Enclosure - 30 Year Capital Costs **\$2,005,796** **\$2,828,790**

Electrical

	Description	Next Event	Frequency (events in 30 years)	cost per event (no inflation)	30 Year Cost (no inflation)	30 Year Cost (inflation)
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Distribution

Elec 01 - Electrical Distribution

J01	Conduct infrared scanning to verify that terminations are sound and operating temperatures of all conducting parts are within allowable limits. Correct any conditions contributing to overheating if it occurs.	2020	5 yrs (5)	\$2,500	\$12,500	\$17,000
J02	Clean and test main breakers and central distribution panel board.	2015	3 Yrs (10)	\$500	\$5,000	\$6,610

Light Fixtures

Elec 02 - Exterior Light Fixtures

R01	Replace photocell time clocks for exterior lights, excluding field wiring.	2018	6 Yrs (5)	\$1,200	\$6,000	\$8,100
R02	Replace exterior light fixtures. Replacement due to failure will likely be completed as part of regular maintenance. Comprehensive replacement would likely be completed in conjunction with an exterior re-cladding project. Cost shown is an allowance for targeted renewal.	2022	25 Yrs (1)	\$2,250	\$2,250	\$2,600

Elec 03 - Interior Lighting Components

R01	Replace interior light fixtures. Replacement due to failure will likely be completed as part of regular maintenance. Comprehensive replacement would likely be completed in conjunction with an interior renovation project. Cost shown is an allowance for targeted renewal.	2032	25 Yrs (1)	\$5,000	\$5,000	\$7,000
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St. Andrews Walk

Depreciation Report Costing 2015

Electrical

	Description	Next Event	Frequency (events in 30 years)	cost per event (no inflation)	30 Year Cost (no inflation)	30 Year Cost (inflation)
Security						
Elec 04 - Enterphone System						
R01	Replace enterphone control panels, excluding field wiring.	2032	25 Yrs (1)	\$12,000	\$12,000	\$17,000
Electrical - 30 Year Capital Costs					\$42,750	\$58,310

Mechanical

	Description	Next Event	Frequency (events in 30 years)	cost per event (no inflation)	30 Year Cost (no inflation)	30 Year Cost (inflation)
Controls and End Devices						
Mech 01 - Gas Detection - Parking Garage						
R01	Cyclical replacement of gas detection sensors.	2017	5 yrs (6)	\$12,600	\$75,600	\$102,000
Mech 02 - Heat Tracing - Freeze Protection						
R01	Cyclical replacement of components of electric heat tracing cable, including control module and pipe insulation.	2022	15 Yrs (2)	\$5,000	\$10,000	\$13,400
Plumbing & Drainage						
Mech 06 - Cross Connection & Backflow Prevention						
R01	Cyclical replacement of backflow prevention devices.	2027	20 Yrs (1)	\$18,000	\$18,000	\$23,000
Mech 07 - Piping - Domestic Water Distribution						
J01	Check integrity of all soldered pipe connections and couplings.	2015	5 yrs (6)	\$500	\$3,000	\$3,890
J02	Comprehensive third-party testing and inspection of the plumbing distribution system.	2030	5 yrs (1)	\$3,000	\$3,000	\$4,000
R01	Replace components of domestic plumbing distribution system, including domestic valves.	2035	28 Yrs (1)	\$742,500	\$742,500	\$1,100,000
Mech 08 - Pumps - Domestic Circulation and Recirculation						
J01	Inspect brushes and remove brush dust from motor. Costs are assumed to be paid for as part of the annual maintenance expenditures.	2017	2 Yrs (14)	\$0	\$0	\$0
R01	Cyclical phased replacement of recirculating pumps, as required.	2017	2 Yrs (14)	\$1,500	\$21,000	\$28,600
R02	Cyclical replacement of recirculating pumps, as required. Refer to phased events.	2015	8 Yrs (4)	\$0	\$0	\$0
Mech 09 - Pumps - Sewage Lift and Control Panels						
R01	Overhaul sanitary sump pumps.	2015	5 yrs (6)	\$4,000	\$24,000	\$31,200
R02	Replace sump pumps.	2022	15 Yrs (2)	\$8,000	\$16,000	\$21,200
Mech 10 - Sanitary Drainage Collection						
J01	Auger lateral drain lines.	2020	10 Yrs (3)	\$4,000	\$12,000	\$16,400

St. Andrews Walk

Depreciation Report Costing 2015

Mechanical

	Description	Next Event	Frequency (events in 30 years)	cost per event (no inflation)	30 Year Cost (no inflation)	30 Year Cost (inflation)
Mech 11 - Storm Drainage Collection						
R01	Repair and/replace components of storm water drainage distribution system, as required.	2042	40 Yrs (1)	\$40,000	\$40,000	\$68,000
Mech 12 - Tanks - DHW Storage						
J01	Replace anode rods in hot water heaters.	2015	5 yrs (6)	\$1,200	\$7,200	\$9,400
R01	Cyclical phased replacement of domestic hot water storage tanks.	2017	2 Yrs (14)	\$5,000	\$70,000	\$95,300
R02	Replacement of domestic hot water storage tanks. Refer to phased renewal events.	2015	8 Yrs (4)	\$0	\$0	\$0
Mech 13 - Valves - Plumbing Flow Control and Directional						
R01	Cyclical replacement of valves, as required.	2022	20 Yrs (2)	\$12,000	\$24,000	\$34,000
Mech 14 - Water Heaters -DHW- Gas Fired						
J01	Tighten electrode mounting clamp. Costs are assumed to be paid for as part of the annual maintenance expenditures.	2017	2 Yrs (12)	\$0	\$0	\$0
J02	Replace sacrificial anodes in storage tanks.	2017	2 Yrs (12)	\$2,400	\$28,800	\$39,500
R01	Cyclical replacement of gas fired domestic hot water heaters.	2021	14 Yrs (2)	\$40,000	\$80,000	\$104,000
Mech 15 - Expansion Tank - diaphragm-type						
R01	Replace expansion tanks.	2027	20 Yrs (1)	\$3,000	\$3,000	\$3,800
Mech 16 - Drainage - Perimeter and Foundation						
J01	By means of pipe camera service, visually inspect underground piping runs. Look for build up of silts and dirt fines, tree roots, and other obstructions. Look for standing water indicating saturated soil conditions or impermeable conditions.	2017	5 yrs (6)	\$2,300	\$13,800	\$18,600
Heating & Cooling						
Mech 18 - Electric Cadet Heaters						
R01	Replace cadet heaters.	2027	20 Yrs (1)	\$4,800	\$4,800	\$6,100
Mech 19 - Electric Unit Heaters						
R01	Cyclical replacement of electric unit heaters.	2024	17 Yrs (2)	\$4,000	\$8,000	\$11,500
Mech 20 - Fireplace - Electric						
R01	Replace fireplaces.	2037	30 Yrs (1)	\$1,000	\$1,000	\$1,500
Ventilation and Air-conditioning						
Mech 21 - Make up Air Units						
R01	Cyclical replacement of pulleys and motors and vibration isolation, as required.	2016	8 Yrs (4)	\$4,000	\$16,000	\$21,100
R02	Cyclical rebuild or replacement of make-up air units.	2027	15 Yrs (2)	\$67,600	\$135,200	\$206,000

St. Andrews Walk

Depreciation Report Costing 2015

Mechanical

	Description	Next Event	Frequency (events in 30 years)	cost per event (no inflation)	30 Year Cost (no inflation)	30 Year Cost (inflation)
Mech 22 - Exhaust Fans - Service Room Ventilation						
R01	Cyclical replacement of motors, fan blades and bearings on supply and exhaust fans, as required.	2018	3 Yrs (9)	\$2,000	\$18,000	\$24,500
R02	Rebuild of supply and exhaust fans, as required.	2027	20 Yrs (1)	\$8,000	\$8,000	\$10,000
Mech 23 - General Exhaust Fans - Inline						
R01	Cyclical replacement of failed or damaged general purpose exhaust fans, as required.	2019	12 Yrs (3)	\$15,000	\$45,000	\$63,000
Mech 24 - Exhaust Fans Parking Garage - Propellor						
R01	Cyclical replacement of motors, fan blades and bearings on supply and exhaust fans, as required.	2018	3 Yrs (9)	\$2,000	\$18,000	\$24,500
R02	Rebuild of supply and exhaust fans, as required.	2027	20 Yrs (1)	\$20,000	\$20,000	\$25,000
Other						
Mech 25 - Overhead Gate Motors						
R01	Replace overhead door motors and operators, as required.	2022	15 Yrs (2)	\$9,000	\$18,000	\$24,000
Mechanical - 30 Year Capital Costs					\$1,483,900	\$2,133,490

Elevator

	Description	Next Event	Frequency (events in 30 years)	cost per event (no inflation)	30 Year Cost (no inflation)	30 Year Cost (inflation)
Hydraulic						
Elev 01 - Hydraulic Elevator, Holeless						
R01	Replace elevator controls, tank unit and valve.	2032	25 Yrs (1)	\$220,000	\$220,000	\$310,000
Car Interiors						
Elev 02 - Elevator Cabs & Hoistway						
R01	Replace elevator operating and signal fixtures, including cab phones.	2022	15 Yrs (2)	\$60,000	\$120,000	\$162,000
Elevator - 30 Year Capital Costs					\$340,000	\$472,000

Fire Safety

	Description	Next Event	Frequency (events in 30 years)	cost per event (no inflation)	30 Year Cost (no inflation)	30 Year Cost (inflation)
Controls						
Fire 01 - Fire Alarm Panel - Addressable						
R01	Replace fire alarm annunciator panels and control panel, excluding field wiring and field devices.	2027	20 Yrs (1)	\$80,000	\$80,000	\$100,000

St. Andrews Walk

Depreciation Report Costing 2015

Fire Safety

	Description	Next Event	Frequency (events in 30 years)	cost per event (no inflation)	30 Year Cost (no inflation)	30 Year Cost (inflation)
Detection						
Fire 02 - Fire Detection & Alarm						
R01	Cyclical replacement of speakers, heat detectors, smoke detectors and related modules, excluding field wiring. [\$0 reflects that ongoing replacements, as required, are funded through the annual operating fund.]	2027	20 Yrs (1)	\$0	\$0	\$0
Suppression						
Fire 03 - Sprinkler Valve Assemblies - Dry						
J01	Sprinkler Piping - Conduct flow test on piping, both exposed and underground. Costs are assumed to be paid for as part of the annual maintenance expenditures.	2017	5 yrs (6)	\$0	\$0	\$0
R01	Replace gaskets in dry sprinkler valves.	2027	20 Yrs (1)	\$3,600	\$3,600	\$4,600
R02	Rebuild dry sprinkler valves.	2027	10 Yrs (2)	\$4,000	\$8,000	\$11,300
Fire 04 - Sprinklers & Standpipe - Wet						
J01	Sprinkler Piping - Conduct flow test on piping, both exposed and underground. Costs are assumed to be paid for as part of the annual maintenance expenditures.	2017	5 yrs (6)	\$0	\$0	\$0
R01	Phased replacement of sprinkler zone control valves, as required.	2027	20 Yrs (1)	\$12,500	\$12,500	\$16,000
Fire 05 - Sprinkler systems - Dry						
R02	Replaced damaged sprinkler heads, hangers, and leaking gaskets, cages, sway-braces, drains etc. as required.	2017	10 Yrs (3)	\$100	\$300	\$380
Fire 06 - Dry Sprinkler Compressor						
R01	Replace fire sprinkler compressor.	2021	14 Yrs (2)	\$9,000	\$18,000	\$23,000
Fire 08 - Portable Fire Extinguishers						
R01	Cyclical replacement of fire extinguishers. [\$0 reflects that ongoing replacements, as required, are funded through the annual operating fund.]	2031	12 Yrs (2)	\$0	\$0	\$0
Egress						
Fire 09 - Emergency Egress Equipment						
R01	Cyclical replacement of LED exit signs and emergency lighting battery packs. [\$0 reflects that ongoing replacements, as required, are funded through the annual operating fund.]	2027	20 Yrs (1)	\$0	\$0	\$0
Fire Safety - 30 Year Capital Costs					\$122,400	\$155,280

St. Andrews Walk

Depreciation Report Costing 2015

Interior Finishes

	Description	Next Event	Frequency (events in 30 years)	cost per event (no inflation)	30 Year Cost (no inflation)	30 Year Cost (inflation)
Floors						
Finish 01 - Carpet Flooring						
R01	Replace carpet flooring.	2022	15 Yrs (2)	\$95,000	\$190,000	\$260,000
Finish 02 - Painted Concrete Flooring						
R01	Repaint painted concrete flooring, as required.	2032	30 Yrs (1)	\$1,830	\$1,830	\$2,600
Finish 03 - Resilient Flooring						
R01	Replace resilient flooring.	2032	25 Yrs (1)	\$2,400	\$2,400	\$3,400
Finish 04 - Tiled Flooring						
R01	Replace tiled flooring in main lobby, common room and ground level corridor as required.	2037	30 Yrs (1)	\$10,000	\$10,000	\$15,000
Interior Painting						
Finish 05 - Interior Painting						
R01	Repaint interior walls, including wood trim re-finishing, as required.	2017	10 Yrs (3)	\$104,000	\$312,000	\$400,000
Finish 06 - Millwork and Carpentry						
R01	Replace damaged components of carpentry and millwork, as required.	2042	35 Yrs (1)	\$8,000	\$8,000	\$14,000
Furnishings						
Finish 07 - Interior Swing Doors						
R01	Replace door hardware, as required.	2020	10 Yrs (3)	\$0	\$0	\$0
Interior Finishes - 30 Year Capital Costs					\$524,230	\$695,000

Amenities

	Description	Next Event	Frequency (events in 30 years)	cost per event (no inflation)	30 Year Cost (no inflation)	30 Year Cost (inflation)
Furnishings						
Amen 03 - Public Signage						
R01	Replace damaged and outdated signage, as required.	2027	20 Yrs (1)	\$4,000	\$4,000	\$5,100
Suite						
Amen 04 - Lobby						
R01	Cyclical replacement/updating of furniture and accessories, as required. The lobby currently includes: three cushioned chairs, one main table, two side tables, one table lamp, floor rug, one wall mounted mirror, and artwork.	2022	10 Yrs (3)	\$6,000	\$18,000	\$25,300
Amenities - 30 Year Capital Costs					\$22,000	\$30,400

St. Andrews Walk

Depreciation Report Costing 2015

Sitework

	Description	Next Event	Frequency (events in 30 years)	cost per event (no inflation)	30 Year Cost (no inflation)	30 Year Cost (inflation)
Hard Landscaping						
Site 01 - Aggregate Paving						
R01	Reconstruct sections of exposed aggregate paving, as required.	2032	25 Yrs (1)	\$1,000	\$1,000	\$1,400
Site 02 - Asphalt Paving						
J01	Apply sealer to asphalt surfaces, including localized crack repair and re-apply traffic demarcation lines.	2017	10 Yrs (3)	\$2,350	\$7,050	\$9,000
Site 03 - Exterior Metal Railings						
J01	Repaint exterior metal railings, as required.	2022	15 Yrs (2)	\$2,000	\$4,000	\$5,400
J02	Remove damaged anchor plate on retaining wall along North site boundary.	2015	One Time Event (1)	\$0	\$0	\$0
R01	Replace exterior metal railings.	2042	35 Yrs (1)	\$5,000	\$5,000	\$8,500
Site 06 - Wood Trellis Structures						
R01	Refinish wood trellis structures. Inspect and repair wood members and connections.	2016	8 Yrs (4)	\$6,000	\$24,000	\$31,500
R02	Replace components of trellis structures.	2042	35 Yrs (1)	\$22,000	\$22,000	\$38,000
Soft Landscaping						
Site 07 - Irrigation Sprinklers						
R01	Cyclical replacement of components of irrigation sprinkler system, as required.	2022	15 Yrs (2)	\$10,000	\$20,000	\$26,000
Site Services						
Site 09 - Underground Drainage Services - Storm						
J01	Review underground drainage piping by video camera for condition and performance.	2017	5 yrs (6)	\$500	\$3,000	\$4,040
J02	Powerflush underground drainage piping to clear and remove any buildup of debris.	2017	10 Yrs (3)	\$500	\$1,500	\$1,920
Site 10 - Underground Sewer Services - Sewer						
J01	CCTV length of services for inspection of condition and function.	2017	5 yrs (6)	\$600	\$3,600	\$4,840
J02	Powerflush underground sanitary drains to remove buildup and debris.	2017	10 Yrs (3)	\$600	\$1,800	\$2,310
Sitework - 30 Year Capital Costs					\$92,950	\$132,910

Appendix E

Funding Scenario Cash Flow Tables

STATUTORY FUNDING SCENARIO: CASH FLOW TABLE (30 YEARS)

FISCAL YEAR	CRF OPENING BALANCE	RESERVE CONTRIBUTION	SPECIAL LEVY	RESERVE INCOME	RENEWAL COSTS	CRF CLOSING BALANCE
2015	\$220,347	\$0	\$0	\$0	\$9,200	\$211,147
2016	\$211,147	\$0	\$0	\$0	\$35,300	\$175,847
2017	\$175,847	\$0	\$0	\$0	\$140,480	\$35,367
2018	\$35,367	\$41,181	\$0	\$0	\$8,130	\$68,417
2019	\$68,417	\$34,534	\$0	\$0	\$26,700	\$76,251
2020	\$76,251	\$26,700	\$344,899	\$0	\$447,850	\$0
2021	\$0	\$41,181	\$51,980	\$0	\$93,160	\$0
2022	\$0	\$41,181	\$222,370	\$0	\$263,550	\$0
2023	\$0	\$41,181	\$0	\$0	\$12,900	\$28,281
2024	\$28,281	\$41,181	\$0	\$0	\$26,000	\$43,461
2025	\$43,461	\$41,181	\$68,569	\$0	\$153,210	\$0
2026	\$0	\$41,181	\$0	\$0	\$29,700	\$11,481
2027	\$11,481	\$41,181	\$406,079	\$0	\$458,740	\$0
2028	\$0	\$41,181	\$0	\$0	\$2,600	\$38,581
2029	\$38,581	\$41,181	\$0	\$0	\$13,100	\$66,661
2030	\$66,661	\$36,290	\$0	\$0	\$48,140	\$54,811
2031	\$54,811	\$41,181	\$0	\$0	\$64,600	\$31,392
2032	\$31,392	\$41,181	\$525,068	\$0	\$597,640	\$0
2033	\$0	\$41,181	\$0	\$0	\$20,510	\$20,671
2034	\$20,671	\$41,181	\$0	\$0	\$2,900	\$58,951
2035	\$58,951	\$41,181	\$1,820,609	\$0	\$1,920,740	\$0
2036	\$0	\$41,181	\$2,980	\$0	\$44,160	\$0
2037	\$0	\$41,181	\$1,046,970	\$0	\$1,088,150	\$0
2038	\$0	\$41,181	\$0	\$0	\$3,100	\$38,081
2039	\$38,081	\$41,181	\$0	\$0	\$24,700	\$54,561
2040	\$54,561	\$41,181	\$0	\$0	\$54,820	\$40,922
2041	\$40,922	\$41,181	\$0	\$0	\$59,700	\$22,402
2042	\$22,402	\$41,181	\$617,418	\$0	\$681,000	\$0
2043	\$0	\$41,181	\$2,020	\$0	\$43,200	\$0
2044	\$0	\$41,181	\$0	\$0	\$3,500	\$37,681

CURRENT (2014/2015) FUNDING SCENARIO: CASH FLOW TABLE (30 YEARS)

FISCAL YEAR	CRF OPENING BALANCE	RESERVE CONTRIBUTION	SPECIAL LEVY	RESERVE INCOME	RENEWAL COSTS	CRF CLOSING BALANCE
2015	\$220,347	\$40,000	\$0	\$0	\$9,200	\$251,147
2016	\$251,147	\$40,000	\$0	\$0	\$35,300	\$255,847
2017	\$255,847	\$40,000	\$0	\$0	\$140,480	\$155,367
2018	\$155,367	\$40,000	\$0	\$0	\$8,130	\$187,237
2019	\$187,237	\$40,000	\$0	\$0	\$26,700	\$200,537
2020	\$200,537	\$40,000	\$207,313	\$0	\$447,850	\$0
2021	\$0	\$40,000	\$53,160	\$0	\$93,160	\$0
2022	\$0	\$40,000	\$223,550	\$0	\$263,550	\$0
2023	\$0	\$40,000	\$0	\$0	\$12,900	\$27,100
2024	\$27,100	\$40,000	\$0	\$0	\$26,000	\$41,100
2025	\$41,100	\$40,000	\$72,110	\$0	\$153,210	\$0
2026	\$0	\$40,000	\$0	\$0	\$29,700	\$10,300
2027	\$10,300	\$40,000	\$408,440	\$0	\$458,740	\$0
2028	\$0	\$40,000	\$0	\$0	\$2,600	\$37,400
2029	\$37,400	\$40,000	\$0	\$0	\$13,100	\$64,300
2030	\$64,300	\$40,000	\$0	\$0	\$48,140	\$56,160
2031	\$56,160	\$40,000	\$0	\$0	\$64,600	\$31,560
2032	\$31,560	\$40,000	\$526,080	\$0	\$597,640	\$0
2033	\$0	\$40,000	\$0	\$0	\$20,510	\$19,490
2034	\$19,490	\$40,000	\$0	\$0	\$2,900	\$56,590
2035	\$56,590	\$40,000	\$1,824,150	\$0	\$1,920,740	\$0
2036	\$0	\$40,000	\$4,160	\$0	\$44,160	\$0
2037	\$0	\$40,000	\$1,048,150	\$0	\$1,088,150	\$0
2038	\$0	\$40,000	\$0	\$0	\$3,100	\$36,900
2039	\$36,900	\$40,000	\$0	\$0	\$24,700	\$52,200
2040	\$52,200	\$40,000	\$0	\$0	\$54,820	\$37,380
2041	\$37,380	\$40,000	\$0	\$0	\$59,700	\$17,680
2042	\$17,680	\$40,000	\$623,320	\$0	\$681,000	\$0
2043	\$0	\$40,000	\$3,200	\$0	\$43,200	\$0
2044	\$0	\$40,000	\$0	\$0	\$3,500	\$36,500

ALTERNATE FUNDING SCENARIO: CASH FLOW TABLE (30 YEARS)

FISCAL YEAR	CRF OPENING BALANCE	RESERVE CONTRIBUTION	SPECIAL LEVY	RESERVE INCOME	RENEWAL COSTS	CRF CLOSING BALANCE
2015	\$220,347	\$60,000	\$0	\$0	\$9,200	\$271,147
2016	\$271,147	\$60,000	\$0	\$0	\$35,300	\$295,847
2017	\$295,847	\$60,000	\$0	\$0	\$140,480	\$215,367
2018	\$215,367	\$60,000	\$0	\$0	\$8,130	\$267,237
2019	\$267,237	\$60,000	\$0	\$0	\$26,700	\$300,537
2020	\$300,537	\$60,000	\$87,313	\$0	\$447,850	\$0
2021	\$0	\$60,000	\$33,160	\$0	\$93,160	\$0
2022	\$0	\$60,000	\$203,550	\$0	\$263,550	\$0
2023	\$0	\$60,000	\$0	\$0	\$12,900	\$47,100
2024	\$47,100	\$60,000	\$0	\$0	\$26,000	\$81,100
2025	\$81,100	\$60,000	\$12,110	\$0	\$153,210	\$0
2026	\$0	\$60,000	\$0	\$0	\$29,700	\$30,300
2027	\$30,300	\$60,000	\$368,440	\$0	\$458,740	\$0
2028	\$0	\$60,000	\$0	\$0	\$2,600	\$57,400
2029	\$57,400	\$60,000	\$0	\$0	\$13,100	\$104,300
2030	\$104,300	\$60,000	\$0	\$0	\$48,140	\$116,160
2031	\$116,160	\$60,000	\$0	\$0	\$64,600	\$111,560
2032	\$111,560	\$60,000	\$426,080	\$0	\$597,640	\$0
2033	\$0	\$60,000	\$0	\$0	\$20,510	\$39,490
2034	\$39,490	\$60,000	\$0	\$0	\$2,900	\$96,590
2035	\$96,590	\$60,000	\$1,764,150	\$0	\$1,920,740	\$0
2036	\$0	\$60,000	\$0	\$0	\$44,160	\$15,840
2037	\$15,840	\$60,000	\$1,012,310	\$0	\$1,088,150	\$0
2038	\$0	\$60,000	\$0	\$0	\$3,100	\$56,900
2039	\$56,900	\$60,000	\$0	\$0	\$24,700	\$92,200
2040	\$92,200	\$60,000	\$0	\$0	\$54,820	\$97,380
2041	\$97,380	\$60,000	\$0	\$0	\$59,700	\$97,680
2042	\$97,680	\$60,000	\$523,320	\$0	\$681,000	\$0
2043	\$0	\$60,000	\$0	\$0	\$43,200	\$16,800
2044	\$16,800	\$60,000	\$0	\$0	\$3,500	\$73,300

PROGRESSIVE FUNDING SCENARIO: CASH FLOW TABLE (30 YEARS)

FISCAL YEAR	CRF OPENING BALANCE	RESERVE CONTRIBUTION	SPECIAL LEVY	RESERVE INCOME	RENEWAL COSTS	CRF CLOSING BALANCE
2015	\$220,347	\$206,000	\$0	\$0	\$9,200	\$417,147
2016	\$417,147	\$206,000	\$0	\$0	\$35,300	\$587,847
2017	\$587,847	\$206,000	\$0	\$0	\$140,480	\$653,367
2018	\$653,367	\$206,000	\$0	\$0	\$8,130	\$851,237
2019	\$851,237	\$206,000	\$0	\$0	\$26,700	\$1,030,537
2020	\$1,030,537	\$206,000	\$0	\$0	\$447,850	\$788,687
2021	\$788,687	\$206,000	\$0	\$0	\$93,160	\$901,527
2022	\$901,527	\$206,000	\$0	\$0	\$263,550	\$843,977
2023	\$843,977	\$206,000	\$0	\$0	\$12,900	\$1,037,077
2024	\$1,037,077	\$206,000	\$0	\$0	\$26,000	\$1,217,077
2025	\$1,217,077	\$206,000	\$0	\$0	\$153,210	\$1,269,867
2026	\$1,269,867	\$206,000	\$0	\$0	\$29,700	\$1,446,167
2027	\$1,446,167	\$206,000	\$0	\$0	\$458,740	\$1,193,427
2028	\$1,193,427	\$206,000	\$0	\$0	\$2,600	\$1,396,827
2029	\$1,396,827	\$206,000	\$0	\$0	\$13,100	\$1,589,727
2030	\$1,589,727	\$206,000	\$0	\$0	\$48,140	\$1,747,587
2031	\$1,747,587	\$206,000	\$0	\$0	\$64,600	\$1,888,987
2032	\$1,888,987	\$206,000	\$0	\$0	\$597,640	\$1,497,347
2033	\$1,497,347	\$206,000	\$0	\$0	\$20,510	\$1,682,837
2034	\$1,682,837	\$206,000	\$0	\$0	\$2,900	\$1,885,937
2035	\$1,885,937	\$206,000	\$0	\$0	\$1,920,740	\$171,197
2036	\$171,197	\$206,000	\$0	\$0	\$44,160	\$333,037
2037	\$333,037	\$206,000	\$549,113	\$0	\$1,088,150	\$0
2038	\$0	\$206,000	\$0	\$0	\$3,100	\$202,900
2039	\$202,900	\$206,000	\$0	\$0	\$24,700	\$384,200
2040	\$384,200	\$206,000	\$0	\$0	\$54,820	\$535,380
2041	\$535,380	\$206,000	\$0	\$0	\$59,700	\$681,680
2042	\$681,680	\$206,000	\$0	\$0	\$681,000	\$206,680
2043	\$206,680	\$206,000	\$0	\$0	\$43,200	\$369,480
2044	\$369,480	\$206,000	\$0	\$0	\$3,500	\$571,980

Appendix F

RDH Qualifications

Maintenance and Planning (MaP)

Our Maintenance and Planning (MaP) group works with your owner group to plan and develop strategies for the long- and short-term needs of your building – everything from roof maintenance to boiler replacement. As the acronym suggests, our services are designed so that we can provide you with a comprehensive roadMaP for the management of your assets.

RDH staff have broad practical experience assisting building owners with all aspects of planning for the long term stewardship of their building(s). Our reserve fund analysts, engineers, architects, and technologists have a wide variety of formal training—including building science, structural engineering, and mechanical engineering. We believe that by using a team approach, we can ensure an appropriate level of thoroughness and quality. We have prepared hundreds of Depreciation Reports and are recognized as industry leaders.

Depreciation Reports

A depreciation report is a long-range financial planning tool. It’s used to identify funding requirements for costs associated with future repair, renewal, and replacement projects. The report establishes where you need to focus resources and is a good place to start developing your roadMAP.

The first step in the preparing the report is to compile an inventory of all of your building’s assets (roofs, boilers, carpets, etc.). Using the inventory as a foundation, we estimate the remaining life of each asset, forecast the replacement costs in future-year dollars, and display the financial analysis with graphs and cash flow tables.

Building Asset Management Software

All of this information is accessible through our propriety online BAM software - we do the groundwork and provide the critical information so that you can leverage the software to track and report on maintenance, repair, and renewal activities. Alternatively, we can follow up and manage the activities on your behalf.

The software tool also empowers you to create your own funding scenarios so you can evaluate different funding levels and find a solution that works specifically for your building. Where a depreciation report identifies what items you need to spend money on and when you need to spend it, this tool helps you optimize the way you spend your money. Ultimately, we can help you track what work is completed vs. what is outstanding so that you are better able to produce reports and make informed decisions.



About Us



David Albrice, B.Sc. URP, ARP, PRA
Principal, Senior Specialist, Maintenance and Planning

- Certified Professional Reserve Analyst, APRA
- B.Sc. Urban and Regional Planning
- Associate Reserve Planner, REIC
- Project Manager on 100’s of Facility Condition Assessments and Reserve Studies (Depreciation Reports)





Serge Desmarais, B.Arch. Architect AIBC, CP
Managing Principal, Senior Building Science Specialist

- Registered architect, AIBC, Certified Professional, UBC
- 30 years' experience in building design and construction capital renewal projects
- Technical lead for MaPs



Peter Fitch, C.Tech.
Mechanical Specialist

- UBC/UBCM Certified Professional program (audit only)
- Member of Applied Science Technologists & Technicians of British Columbia
- 30 years' experience in the mechanical design field
- Technical review of asset inventories for MEFS and site assets



Harvey Goodman, P.Eng.
Building Science Specialist

- B.A.Sc., Civil Engineering
- Registered professional engineer, APEGBC
- 20 years' experience in building science consulting



Robin Breuer, A.Sc.T., RRO
Senior Building Science Technologist

- Dipl.T., Building Engineering Technology (Building Science Option)
- Registered Roof Observer, RCI Inc.
- 15 years' experience in building science consulting



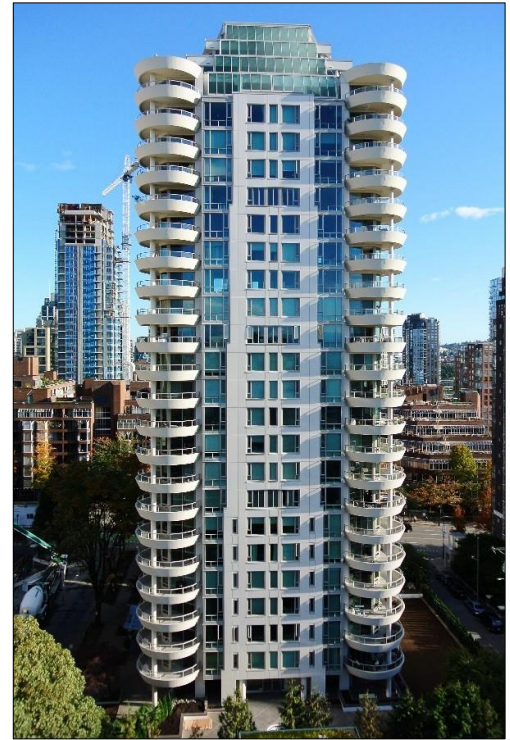
Lauren Stokes, Dipl.T.
Associate, Regional Manager Maintenance and Planning

- Dipl.T., Architectural & Building Engineering Technology (Building Science Option)
- 5+ years' experience in building science consulting



Jason Dunn, B.Arch.Sc., CCCA
Associate, Project Manager

- B.Arch.Sc, Building Science Option
- Certified Construction Contract Administrator, CSC
- 10+ years' experience in building science consulting





Amy Montgomery, EIT, M.A.Sc., LEED® AP
Building Science Engineer

- M.A.Sc., Mechanical Engineering
- 5 years' experience in building asset reserve studies and energy modeling



Byron Searle, B.B.Sc.
Maintenance and Planning Technologist

- B.B.Sc., Building Science, New Zealand
- 3 years' experience in Carpentry
- 2 years' experience in Architectural Drafting



Jesus De Mesa, Dipl.T.
Maintenance and Planning Technologist

- Dipl.T., Architectural & Building Engineering Technology (Building Science Option)



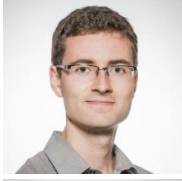
Brandon Carreira, Dipl.T.
Maintenance and Planning Technologist

- Dipl.T., Architectural & Building Engineering Technology (Building Science Option)



Roma Santos, Dipl.T.
Maintenance and Planning Technologist

- Dipl.T., Architectural & Building Engineering Technology (Building Science Option)



Jesse Listoen, Dipl.T.
Maintenance and Planning Technologist

- Dipl.T., Architectural & Building Engineering Technology (Building Science Option)



James Hornett, Dipl.T.
Maintenance and Planning Technologist

- Dipl.T., Architectural & Building Engineering Technology (Building Science Option)



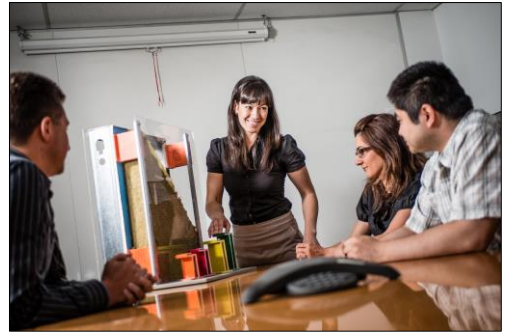
Nicola Alexander, B.Tech
Maintenance and Planning Technologist

- B.Tech., Architectural Science



Megan Butland, Dipl.T
Building Science Technologist

- Dipl.T., Civil Engineering
- Certificate, Drafting



Quantity Take-Offs



Roya Kiani Amin, B.Sc.

Quantity Estimator

- B.Sc., Civil Engineering
- 5+ years' experience in architectural drafting
- 2+ years' experience in construction
- Preparation of quantified and itemized lists of enclosure elements from architectural drawings



Brigitte MacKenzie

Architectural Technologist

- 3-year Apprenticeship Program, Germany
- 25 years' experience in architectural drafting



Andrea Corona, Dipl.

Senior Draftsperson

- Dipl., Small Craft Naval Architecture
- 25 years' experience in architectural drafting

Administrators and Client Support



Vanessa Jumawan

Maintenance and Planning Coordinator

- 5+ years' experience in administration within engineering/architecture
- Preparation of depreciation report estimates and proposals



Anna Qiu

Maintenance and Planning Project Assistant

- Certificate, Business Administration
- 10+ years' experience in administration within engineering/architecture firms
- BAMS user account setup and maintenance

Software Support and Programmers



Matthew Branch, P.Eng.

Software Engineer

- B.Sc., Civil Engineering
- Registered professional engineer, APEGBC
- 13+ years' experience in engineering data analysis



Gary Zhang, B.Sc.

Software Development Manager

- B.Sc., Computer Science and Engineering
- 15+ years' experience in software development



Kan Ma, B.Sc.

Software Designer

- B.Sc., Computing Science
- 7+ years' experience in software development



Appendix G

Disclosures and Disclaimers

Insurance Certificate

Disclosures and Disclaimers

Condition of the Assets

The method of determining the physical condition of the assets is based on a visual review of a representative sampling of the assets in readily accessible locations, discussions with facility representatives, and review of readily available reference documents. No destructive testing or exploratory openings are carried out on any of the assets and the equipment is not disassembled, operated, or subject to re-commissioning tests. The physical review is not a full “condition assessment” since operating, testing, or exploratory openings are excluded from the scope of services.

Cost Estimating for Assets

- All estimates of costs are provided in future year dollars.
- All estimates of costs are Class D estimates intended for planning purposes and not for accounting or tender use. See Glossary of Terms for definition of Class D estimates.
- Actual costs will vary depending on several factors. The estimates assume economies of scale will be achieved by bundling work tasks together into larger renewal, repair, or rehabilitation projects. Small tasks performed individually may exceed the estimates presented.
- Soft costs, such as consulting services and contingency allowances are not included in the budget estimates. When developing cost estimates for projects in greater detail for budgeting, each project should include appropriate soft costs - such as Owner contingency, permit fees, engineering fees, etc. Depending on the sizes, scope and timing of individual projects, the magnitude of the soft costs will vary.
- Construction costs are subject to the vagaries of the marketplace. At the time of tender, costs may vary depending on the time of the year, contractor availability, and other factors.
- The estimates must be updated over time, further developed for scope of work and confirmed by competitive tender before any contracts are awarded.
- Detailed repair specifications are required to be prepared in order to confirm scopes of work and costs.
- The estimates do not include allowances for site specific access requirements or environmental concerns, which should be addressed on a project-by-project basis.
- Consideration may sometimes need to be given to costs arising from the impact of projects on occupancy use and facility operations.
- Replacement costs are typically based on like-for-like with a similar asset unless code or other circumstances require the replacement cost to include an upgrade.

Maintenance of the Assets:

The maintenance checklists are not exhaustive and are intended as a framework for the ongoing refinement of the maintenance program.

- Work must only be carried out by appropriately qualified personnel who have the necessary and sufficient knowledge about the maintenance tasks and maintenance intervals.
- The manufacturers' latest printed instructions should take precedence in the event of any conflict with the maintenance checklists.
- The Owners' maintenance staff and/or service contractors are responsible to verify what is contained in the manufacturers' documentation regarding recommended maintenance procedures and intervals.
- The maintenance checklists and maintenance intervals should be reviewed annually and adjusted, as required, to reflect the service environment, feedback from contractors, etc.

Specialist and Non-Specialist Reviews

Our personnel collect the asset inventory data for all the different systems, including mechanical, plumbing, fire safety, elevator, electrical, interior finishes, and sitework. Our scope of services is to identify the assets within each system, determine their age and report on their reasonable service life-cycles according to accepted industry standards. RDH personnel do not make observations with regard to specialty building system conditions unless specifically addressed in our proposal.

Forecasting the Useful Service Life of Assets

The service life of assets can be affected by a variety of circumstances, including the following:

- The quality of the maintenance conducted on an asset will affect the service life of the asset. Poor maintenance can lead to a reduced service life and may result in the premature failure of an asset.
- Insurable losses (force majeure), such as earthquakes, fires, and floods can shorten the life of an asset. These events are not considered in a Depreciation Report.
- Asset service life in a Depreciation Report is determined according to accepted industry standards.

Funding Models

The funding models for Depreciation Reports are based on a 30-year horizon and use "future year dollars termed" methodology. This methodology projects the costs (in future year dollars) over the planning horizon and not beyond the terminus year of the planning horizon. The current year is the starting year of the planning horizon. The term,

therefore, matches the initial horizon and does not respect a shifting horizon. This means that in year 1 the funding scenarios will look forward for 30 years.

For example, in 2012 the model looks forward to 2042. In year two, it will be accurate for 29 years, as it is only looking forward to year 2042. When an update study is performed in three years, the revised funding scenarios will look forward 30 years from 2015 to 2045. Renewal and major maintenance projects that occur beyond the 30-year planning horizon are not considered in the scenarios; that is, those projects that occur beyond 30 years are unfunded in the funding scenarios.

Ref. No. 320007195560

CERTIFICATE OF INSURANCE

Aon Reed Stenhouse Inc.
401 West Georgia Street, Suite 1200
PO Box 3228 STN. TERMINAL
Vancouver BC V6B 3X8
tel 604-688-4442 fax 604-682-4026

Re: Evidence of Insurance:

To Whom It May Concern

Insurance as described herein has been arranged on behalf of the Insured named herein under the following policy(ies) and as more fully described by the terms, conditions, exclusions and provisions contained in the said policy(ies) and any endorsements attached thereto.

Insured

RDH Building Engineering Ltd.
224 West 8th Avenue
Vancouver, BC V5Y 1N5

Coverage

Commercial General Liability	Insurer	Zurich Insurance Company Ltd	
Policy #	8611292		
Effective	02-May-2015	Expiry	02-May-2016
Limits of Liability	Bodily Injury & Property Damage, Each Occurrence \$1,000,000 Products and Completed Operations, Aggregate \$1,000,000 Non-Owned Automobile Liability \$1,000,000 Policy may be subject to a general aggregate and other aggregates where applicable		
Professional Liability	Insurer	Lloyd's Underwriters	
Policy #	QC1502155		
Effective	02-May-2015	Expiry	02-May-2016
Limits of Liability	Subject to aggregate where applicable		

Terms and / or Additional Coverage

Professional Liability
Limit: \$2,000,000 Per Claim Limit / \$4,000,000 Aggregate Limit

**THE POLICY CONTAINS A CLAUSE THAT MAY LIMIT THE AMOUNT PAYABLE
OR, IN THE CASE OF AUTOMOBILE INSURANCE,
THE POLICY CONTAINS A PARTIAL PAYMENT OF LOSS CLAUSE**



Ref. No. 320007195560

CERTIFICATE OF INSURANCE

Commercial General Liability

Products and Completed Operations
Broad Form Property Damage
Cross Liability
Contractual Liability
Owners and Contractors Protective
Contractual Liability included

THIS CERTIFICATE CONSTITUTES A STATEMENT OF THE FACTS AS OF THE DATE OF ISSUANCE AND ARE SO REPRESENTED AND WARRANTED ONLY TO THE INSURED. OTHER PERSONS RELYING ON THIS CERTIFICATE DO SO AT THEIR OWN RISK.

Aon Reed Stenhouse Inc.



Dated : 05-May-2015
Issued By : McLean, Chris J.
Tel : 1-604-688-4442

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