# 2016 DEPRECIATION REPORT UPDATE FOR

**Silverwood at Thetis Cove**
121 Aldersmith Place
View Royal, BC

June 23, 2016

Prepared For:

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Project Number: 161-02286-00

# Introduction

To help you meet the requirements of the *Strata Property Act*, we have provided the Strata with this Depreciation Report.

A Depreciation Report is a financial plan that estimates cost and timing of major building renewal projects. The purpose of the Depreciation Report is to assist the Strata Corporation in determining the amount of annual contributions to the Contingency Reserve Fund (CRF).

The *Strata Property Act* defines the CRF as a fund for common expenses that usually occur less often than once a year or that do not usually occur, relating to the common property or common assets of the Strata Corporation.

Before Depreciation Reports were required, many Stratas were not following a long term repair and renewal plan, resulting in poorly maintained buildings. Without such a plan, many Owners did not fully understand the true cost of repairing and maintaining a building. Stratas were making minimum CRF contributions towards the repair of the complex, and as the buildings aged, Owners were facing large special levies as there were insufficient funds in the CRF to cover the cost of these expenditures.

This Depreciation Report includes a number of different parts to help the Strata Corporation manage their complex, and to help Owners understand the true long term cost of ownership. The Depreciation Report includes:

- an inventory of the common property components;
- an opinion of budgets for CRF projects related to these components;
- an estimated timeframe for when we expect those repair/replacement costs to occur;
- the cycle at which we expect those costs to reoccur; and
- funding scenarios to help the Strata decide on how they are going to fund the CRF projects.

Every year the Strata Council puts together a budget that lays out contributions to your Contingency Reserve Fund and your Operating Fund. These two contributions are typically what make up your maintenance fees. When we talk about expenditures throughout the report, it is important to remember that the Depreciation Report only covers the CRF related expenditures (e.g., replacing windows, replacing roofs, etc.), not the day-to-day expenditures that are dealt with through the Operating Fund (e.g., janitorial cleaning, common area hydro fees, common property insurance fees, etc.).

Expenditures that are expected to be managed with funds from the operating budget are not shown in this report. Operating expenditures should be carefully monitored. Conditions that require increasing expenditure may indicate problems that should be dealt with differently than how we have assumed. Further evaluation may be appropriate to determine if a more comprehensive repair or replacement program should be added to the Depreciation Report, or if programs already planned should be advanced. These types of changes would be reflected in updates.

We hope this Depreciation Report will set the stage for financial stability and a well maintained and marketable Strata Corporation in future years.

Respectfully submitted,
**WSP Canada Inc.**

Andrew Russell, EIT
Junior Engineer

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Senior Engineer

Draft Report Issued: June 3, 2016
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# General Description

Silverwood at Thetis Cove is a four-storey, wood-framed building with 40 residential suites constructed in 1999 over a single level parkade. The building is clad primarily with fibre-cement siding with wood trim accents; parged concrete walls, extending from the parkade, are featured at the main entrance and common room areas. Ground-level suites and suites over the south-facing common room feature concrete paver patios. Above-grade suites have access to cantilevered balconies waterproofed with vinyl membrane and enclosed with curb-mounted, glass-and-aluminum guardrails. Building fenestration includes fixed and awning vinyl-framed windows, vinyl-framed balcony/patio sliding doors, storefront door assemblies, and hollow metal exit doors. Sloped roofing (4/12) is waterproofed with asphalt shingles to direct runoff towards gutters and downspouts connected to perimeter drainage. Interior common areas are finished with carpet, tiled floors, and painted walls and ceiling. Two rooftop air handling units provide tempered air throughout the building via pressurized corridor delivery. Supplemental electric heat is provided by wall and baseboard electric heaters.

Management/the Council reports that there are no shared facilities with neighboring properties.

The Strata's fiscal year end is December 31, therefore the 2016 fiscal year began on January 1, and ends on December 31.

# Reserve Fund Items

This section defines the components that are included in this Depreciation Report. The Projected Expenditure Table that follows this section summarizes the timing and costs of the projects included in this report.

### Strata vs. Owner Responsibility

The following is our interpretation of the Strata Plan and Bylaws, legal interpretations of the Strata Property Act, and how we understand the Strata to be operating.

Strata Responsibility:
- Structural frame;
- Balconies;
- Roofs;
- Exterior cladding, windows, and doors; and
- Site finishes.

Owner Responsibility:
- Interior suite finishes;
- Suite-specific plumbing;
- Suite HVAC units, including electric baseboard heaters and water heaters; and
- Suite-specific electrical fixtures and associated wiring.

The assumptions we have made about hidden conditions, predicting technical performance, and ongoing maintenance needs for the common elements are described in the “Repair and Replacement Rationale” document, which can be found at www.wspgroup.ca/rfs . Limitations and our Professional Liability Insurance Certificate can also be found here.

The Strata may wish to have these assumptions reviewed by their solicitor for the appropriateness of our determinations.

### Operating Costs

This report identifies costs which will be paid from the Contingency Reserve Fund. As such, operating costs are not shown, and only discussed in relation to CRF expenditures. The Strata has an operating line item titled 'Repairs & Maintenance - General' that amounts to $20,000 annually to cover incidental building component expenses. The Strata defines costs below $3,000 as operating expenses. The Strata Property Act (The Act) restricts the scope of the depreciation by excluding those activities which occur as part of the Strata’s normal operating budget, and which usually occur annually or more often than once per year.

Operating expenditures should be carefully monitored. Conditions that require increasing expenditure may indicate problems that should be dealt with differently than what we have assumed. Further evaluation may be appropriate to determine if a more comprehensive repair or replacement program should be added to the Depreciation Report, or if programs already planned should be advanced. These types of changes would be reflected in later updates.

### Capital Expenditure Definitions

*Present Cost*: Total project cost in today's dollars. The budgets assume a prudent level of ongoing maintenance. These amounts include contingencies (typically 5 to 15%) and allowances for design/project management (5 to 15%), where relevant. GST (5%) has been included.

*First Occur.*: The first fiscal year in which the project is anticipated to take place. Fiscal years are labeled according to the calendar year it ends in, regardless how many actual months fall in each calendar year.

*Cycle*: How often a project happens. For example, the number '1' in this column will cause the project to happen every year, and the number '5' in this column will cause the project to occur every fifth year. If the space is left blank, this indicates that the project is only scheduled to occur once. The time cycle following a repair or replacement may be different from the original service life as a result of changes in the materials or equipment employed, and changes in technology.

*No. Occur.*: How many times a project is anticipated to occur, or the 'Number of Occurrences' that are included in the capital plan. Often this column is left blank, which indicates that the project will repeat throughout the term of the report.

**Silverwood at Thetis Cove, 121 Aldersmith Place, View Royal, BC**

**Projected Expenditures**

| Item | Description | Class | Status | Present Cost | First Occur. | Cycle | No. Occur. | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1** | **STRUCTURE** | | | | | | | | | | | | | | | | | | | | | |
| 1.2.1 | Balcony Waterproofing | 3 | Forecasted | $47,898 | 2020 | 15 | 2 | | | | | $51,846 | | | | | | | | | | |
| 1.3.1 | Parking Garage Gate Motor | 3 | Forecasted | $3,500 | 2029 | 15 | 2 | | | | | | | | | | | | | | $4,528 | |
| 1.3.2 | Parkade Roof Membrane-West West membrane, including Patios G & H | 3 | Forecasted | $102,960 | 2039 | 40 | 1 | | | | | | | | | | | | | | | |
| 1.3.3 | Parkade Roof Membrane-East East membrane, including Patios A & B | 3 | Forecasted | $290,550 | 2039 | 40 | 1 | | | | | | | | | | | | | | | |
| 1.3.4 | Parkade Roof Membrane-North North Membrane, including Patios E & F | 3 | Forecasted | $98,280 | 2039 | 40 | 1 | | | | | | | | | | | | | | | |
| **2** | **BUILDING ENVELOPE** | | | | | | | | | | | | | | | | | | | | | |
| 2.1.1 | Paint Parging and FRC Boards | 3 | Forecasted | $82,800 | 2020 | 20 | 1 | | | | | $89,625 | | | | | | | | | | |
| 2.1.2 | Paint Wood Trim | 3 | Forecasted | $34,500 | 2020 | 10 | 3 | | | | | $37,344 | | | | | | | | | | $45,522 |
| 2.1.3 | Wood Trim Wood trim typical on all elevations | 3 | Forecasted | $57,500 | 2039 | 40 | 1 | | | | | | | | | | | | | | | |
| 2.2.1 | Vinyl Windows original PVC windows | 3 | Forecasted | $171,408 | 2039 | 40 | 1 | | | | | | | | | | | | | | | |
| 2.2.2 | Vinyl Windows - H Coupler original PVC windows | 3 | Forecasted | $24,150 | 2029 | 30 | 1 | | | | | | | | | | | | | | $31,241 | |
| 2.2.3 | Caulking - Fenestration Sealing Caulk the jambs of the exterior windows and doors | 3 | Forecasted | $18,506 | 2016 | 20 | 2 | $18,506 | | | | | | | | | | | | | | |
| 2.3.1 | Vinyl Sliding Doors Balconies/Patios | 3 | Forecasted | $66,125 | 2039 | 40 | 1 | | | | | | | | | | | | | | | |
| 2.4.1 | Patio Waterproofing - Over Conditioned Living Space Over guest suite/ammenities room, overlooking the green hosue | 3 | Forecasted | $18,720 | 2039 | 40 | 1 | | | | | | | | | | | | | | | |
| 2.5.1 | Sloped Roof low pitch, shingled roof | 3 | Forecasted | $75,900 | 2024 | 25 | 1 | | | | | | | | | $88,929 | | | | | | |
| 2.5.2 | Metal Gutters excluding downspouts | 3 | Forecasted | $8,996 | 2024 | 25 | 1 | | | | | | | | | $10,540 | | | | | | |
| **3** | **FIRE SAFETY** | | | | | | | | | | | | | | | | | | | | | |
| 3.1.1 | Fire Alarm Warning System includes control and annunciator panels | 3 | Forecasted | $7,800 | 2019 | 20 | 2 | | | | $8,277 | | | | | | | | | | | |
| **4** | **FINISHES, FURNITURE AND EQUIPMENT** | | | | | | | | | | | | | | | | | | | | | |
| 4.1.1 | Automatic Door Motors | 3 | Forecasted | $4,335 | 2030 | 15 | 2 | | | | | | | | | | | | | | | $5,720 |
| 4.2.1 | Interior Painting Corridors, lobbies, stairwells, and interior doors. Excluding garbage room and workshop | 3 | Forecasted | $31,356 | 2031 | 20 | 1 | | | | | | | | | | | | | | | |
| 4.2.2 | Carpeting Corridors, lounge, guest suite, stairwells | 3 | Forecasted | $27,602 | 2031 | 20 | 1 | | | | | | | | | | | | | | | |
| 4.3.1 | Common Room Amenitites | 3 | Forecasted | $4,500 | 2029 | 30 | 1 | | | | | | | | | | | | | | $5,821 | |
| 4.3.2 | Gym Equipment | 3 | Forecasted | $3,000 | 2031 | 20 | 1 | | | | | | | | | | | | | | | |
| **5** | **SITE** | | | | | | | | | | | | | | | | | | | | | |
| **6** | **HVAC** | | | | | | | | | | | | | | | | | | | | | |
| 6.1.1 | Replace AHUs | 3 | Forecasted | $12,420 | 2019 | 20 | 2 | | | | $13,180 | | | | | | | | | | | |
| 6.3.1 | Parkade Exhaust Fans | 3 | Forecasted | $6,500 | 2024 | 25 | 1 | | | | | | | | | $7,616 | | | | | | |
| 6.3.2 | Woodshop Exhaust Fan Install exhaust fan to wood shop for health and safety of users | 3 | Forecasted | $3,450 | 2017 | 25 | 2 | | $3,519 | | | | | | | | | | | | | |
| **7** | **PLUMBING** | | | | | | | | | | | | | | | | | | | | | |
| **8** | **ELECTRICAL** | | | | | | | | | | | | | | | | | | | | | |
| **9** | **CONVEYANCE** | | | | | | | | | | | | | | | | | | | | | |
| 9.1.1 | Short Term Upgrades | 3 | Forecasted | $17,388 | 2021 | 25 | 1 | | | | | | $19,198 | | | | | | | | | |
| 9.1.2 | Long Term Updgrades | 3 | Forecasted | $89,355 | 2026 | 25 | 1 | | | | | | | | | | | $108,923 | | | | |
| **10** | **MISCELLANEOUS** | | | | | | | | | | | | | | | | | | | | | |
| 10.1.1 | Enterphone System | 3 | Forecasted | $3,300 | 2022 | 25 | 1 | | | | | | | $3,716 | | | | | | | | |
| 10.2.1 | Depreciation Report Update | 3 | Forecasted | $6,000 | 2019 | 3 | 10 | | | | $6,367 | | | $6,757 | | | $7,171 | | | $7,609 | | |
| | **Total Projected Expenditures** | | | | | | | $18,506 | $3,519 | $0 | $27,825 | $178,816 | $19,198 | $10,473 | $0 | $107,085 | $7,171 | $108,923 | $0 | $7,609 | $41,589 | $51,242 |

**Silverwood at Thetis Cove, 121 Aldersmith Place, View Royal, BC**

**Projected Expenditures**

| Item | Description | Class | Status | Present Cost | First Occur. | Cycle | No. Occur. | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 | 2045 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1** | **STRUCTURE** | | | | | | | | | | | | | | | | | | | | | |
| 1.2.1 | Balcony Waterproofing | 3 | Forecasted | $47,898 | 2020 | 15 | 2 | | | | | $69,778 | | | | | | | | | | |
| 1.3.1 | Parking Garage Gate Motor | 3 | Forecasted | $3,500 | 2029 | 15 | 2 | | | | | | | | | | | | | | $6,094 | |
| 1.3.2 | Parkade Roof Membrane-West West membrane, including Patios G & H | 3 | Forecasted | $102,960 | 2039 | 40 | 1 | | | | | | | | | $162,358 | | | | | | |
| 1.3.3 | Parkade Roof Membrane-East East membrane, including Patios A & B | 3 | Forecasted | $290,550 | 2039 | 40 | 1 | | | | | | | | | $458,168 | | | | | | |
| 1.3.4 | Parkade Roof Membrane-North North Membrane, including Patios E & F | 3 | Forecasted | $98,280 | 2039 | 40 | 1 | | | | | | | | | $154,978 | | | | | | |
| **2** | **BUILDING ENVELOPE** | | | | | | | | | | | | | | | | | | | | | |
| 2.1.1 | Paint Parging and FRC Boards | 3 | Forecasted | $82,800 | 2020 | 20 | 1 | | | | | | | | | | | | | | | |
| 2.1.2 | Paint Wood Trim | 3 | Forecasted | $34,500 | 2020 | 10 | 3 | | | | | | | | | | $55,491 | | | | | |
| 2.1.3 | Wood Trim Wood trim typical on all elevations | 3 | Forecasted | $57,500 | 2039 | 40 | 1 | | | | | | | | | $90,672 | | | | | | |
| 2.2.1 | Vinyl Windows original PVC windows | 3 | Forecasted | $171,408 | 2039 | 40 | 1 | | | | | | | | | $270,293 | | | | | | |
| 2.2.2 | Vinyl Windows - H Coupler original PVC windows | 3 | Forecasted | $24,150 | 2029 | 30 | 1 | | | | | | | | | | | | | | | |
| 2.2.3 | Caulking - Fenestration Sealing Caulk the jambs of the exterior windows and doors | 3 | Forecasted | $18,506 | 2016 | 20 | 2 | | | | | | $27,499 | | | | | | | | | |
| 2.3.1 | Vinyl Sliding Doors Balconies/Patios | 3 | Forecasted | $66,125 | 2039 | 40 | 1 | | | | | | | | | $104,272 | | | | | | |
| 2.4.1 | Patio Waterproofing - Over Conditioned Living Space Over guest suite/ammenities room, overlooking the green hosue | 3 | Forecasted | $18,720 | 2039 | 40 | 1 | | | | | | | | | $29,520 | | | | | | |
| 2.5.1 | Sloped Roof low pitch, shingled roof | 3 | Forecasted | $75,900 | 2024 | 25 | 1 | | | | | | | | | | | | | | | |
| 2.5.2 | Metal Gutters excluding downspouts | 3 | Forecasted | $8,996 | 2024 | 25 | 1 | | | | | | | | | | | | | | | |
| **3** | **FIRE SAFETY** | | | | | | | | | | | | | | | | | | | | | |
| 3.1.1 | Fire Alarm Warning System includes control and annunciator panels | 3 | Forecasted | $7,800 | 2019 | 20 | 2 | | | | | | | | | $12,300 | | | | | | |
| **4** | **FINISHES, FURNITURE AND EQUIPMENT** | | | | | | | | | | | | | | | | | | | | | |
| 4.1.1 | Automatic Door Motors | 3 | Forecasted | $4,335 | 2030 | 15 | 2 | | | | | | | | | | | | | | | $7,698 |
| 4.2.1 | Interior Painting Corridors, lobbies, stairwells, and interior doors. Excluding garbage room and workshop | 3 | Forecasted | $31,356 | 2031 | 20 | 1 | $42,201 | | | | | | | | | | | | | | |
| 4.2.2 | Carpeting Corridors, lounge, guest suite, stairwells | 3 | Forecasted | $27,602 | 2031 | 20 | 1 | $37,149 | | | | | | | | | | | | | | |
| 4.3.1 | Common Room Amenitites | 3 | Forecasted | $4,500 | 2029 | 30 | 1 | | | | | | | | | | | | | | | |
| 4.3.2 | Gym Equipment | 3 | Forecasted | $3,000 | 2031 | 20 | 1 | $4,038 | | | | | | | | | | | | | | |
| **5** | **SITE** | | | | | | | | | | | | | | | | | | | | | |
| **6** | **HVAC** | | | | | | | | | | | | | | | | | | | | | |
| 6.1.1 | Replace AHUs | 3 | Forecasted | $12,420 | 2019 | 20 | 2 | | | | | | | | | $19,585 | | | | | | |
| 6.3.1 | Parkade Exhaust Fans | 3 | Forecasted | $6,500 | 2024 | 25 | 1 | | | | | | | | | | | | | | | |
| 6.3.2 | Woodshop Exhaust Fan Install exhaust fan to wood shop for health and safety of users | 3 | Forecasted | $3,450 | 2017 | 25 | 2 | | | | | | | | | | | | $5,773 | | | |
| **7** | **PLUMBING** | | | | | | | | | | | | | | | | | | | | | |
| **8** | **ELECTRICAL** | | | | | | | | | | | | | | | | | | | | | |
| **9** | **CONVEYANCE** | | | | | | | | | | | | | | | | | | | | | |
| 9.1.1 | Short Term Upgrades | 3 | Forecasted | $17,388 | 2021 | 25 | 1 | | | | | | | | | | | | | | | |
| 9.1.2 | Long Term Updgrades | 3 | Forecasted | $89,355 | 2026 | 25 | 1 | | | | | | | | | | | | | | | |
| **10** | **MISCELLANEOUS** | | | | | | | | | | | | | | | | | | | | | |
| 10.1.1 | Enterphone System | 3 | Forecasted | $3,300 | 2022 | 25 | 1 | | | | | | | | | | | | | | | |
| 10.2.1 | Depreciation Report Update | 3 | Forecasted | $6,000 | 2019 | 3 | 10 | $8,075 | | | $8,569 | | | $9,094 | | | $9,651 | | | $10,241 | | |
| | **Total Projected Expenditures** | | | | | | | $91,463 | $0 | $0 | $8,569 | $69,778 | $27,499 | $9,094 | $0 | $1,302,145 | $65,142 | $0 | $5,773 | $10,241 | $6,094 | $7,698 |

# Financial Analysis

The *Strata Property Act* establishes regulations for minimum contributions into the CRF based on the operating fund. In our experience preparing Depreciation Reports, following this minimum contribution approach typically causes under-funding, resulting in future special levies or larger future annual CRF contributions.

The funding scenarios that follow this section are intended to help you understand the long term implications of various CRF contribution approaches. The options presented range from maintaining a low annual CRF contribution and paying for the majority of the future capital projects by special levies, to increasing the annual CRF contribution in an effort to mitigate special levies. We have included the following funding scenarios for consideration, shown on the following pages. Owners could choose to follow one of these options or an alternate cash flow plan that better suits their needs.

Although each scenario only shows 30 years of expenditures/contributions, some of the cash flow scenarios are calculated based on a 45 year timeframe. While we appreciate that the *Strata Property Act* only requires a 30 year analysis period, we recommend that our clients consider a longer report term as many building components have life cycles longer than 30 years (such as the windows, the main electrical equipment, etc.), and some of these projects are very capital intensive.

### How To Read The Funding Scenarios

Each funding scenario is a separate CRF cash flow analysis. Once all the CRF project budgets are put together for the repair/replacement of the common elements, we incorporate them into our financial analysis tool along with the following information:

- The CRF Opening Balance for report starting year;
- The annual CRF Contribution for report starting year;
- Special Levies anticipated for the report starting year (if any);
- A specified Minimum Balance (the present value of the lowest allowable CRF balance, as set by the Strata Council);
- An estimated annual Interest Rate earned on savings (reflecting expected average trends, not necessarily the current rate); and
- An estimated Inflation Rate used to increase the estimated costs of repairs and replacements (reflecting expected average trends, not necessarily the current rate).

The cash flow analysis tool contains an algorithm that adds up all of the expenditures that the Strata will see over the report term, and calculates a contribution level to keep the CRF balance above the minimum balance that was specified by the Strata Council.

For each scenario, the algorithm optimizes itself so that at no point will the Strata be contributing more than is required to fund the future expenditures. You can see adjustments occur in some of the scenarios where the contribution rate decreases, indicated as a “Critical Year”. The algorithm is adjusting the CRF contribution level as you enter a period of lower average annual expenditures.

The funding scenarios should be read across each row, from left to right. The logic follows a simple mathematic equation:

Opening Balance + Recommended Annual Contributions + Other Contributions (typically special levies) - Estimated Inflation Adjusted Expenditures + Expected Interest Earned (on CRF balance) = Closing Balance

The closing balance at the end of this year is then inserted as the opening balance of the next fiscal year on the row below.

The “Recommended Annual Contribution Increase” column shows the year-over-year increase to the CRF portion of the monthly fees. The columns “Amount,” “Percentage(%),” and “per Unit per Month” express this same year-over-year increase in different ways. The “Amount” column shows the total increase for the Strata as a whole, while the “per Unit per Month” column shows the increase in monthly CRF contribution for an average unit (actual amounts vary by unit entitlement). The “Percentage (%)”column shows the increase expressed as a percentage of the previous year’s contribution.

Note that the financial scenarios consider only the CRF component of strata fees, and do not include the portion that goes to the operating fund. As such, the increases shown are increases in the CRF component only, rather than increases in the total strata fees. For example, consider a $400 monthly strata fee made up of a $100 CRF component and a $300 operating component. If a scenario shows a year-over-year increase of 30%, this means an increase of $30 ($100 x 30%) and a new strata fee of $430 (made up of a $130 CRF component and a $300 operating component). The new strata fee is not $520 ($400 + 30%).

There is no requirement within the *Strata Property Act* to implement a specific funding scenario that is provided in this Depreciation Report. We recommend using the information presented in these scenarios to assist in determining an appropriate amount for the annual contribution to the contingency reserve fund. When selecting your CRF contribution, you should consider the impact on not only the current owners, but the future owners as well, as deferring CRF contributions shifts the financial burden from present to future Owners.

# Scenario 1 - Current Contribution and Special Levies

**Assumptions:**

| | | | |
|---|---|---|---|
| Opening Balance of the Reserve Fund: | **$133,062** | Interest Rate Earned: | **1%** |
| Current Annual Contribution: | **$30,000** | Expenditure Inflation Rate: | **2%** |
| Minimum Reserve Fund Balance: | **$33,557** | Minimum Balance Inflation Rate: | **2%** |
| First Critical Year: | **N/A** | Number of Units: | **40** |
| Second Critical Year: | **N/A** | Fiscal Year End: | **Dec 31** |

**Results:**

| Year | Opening Balance | Recommended Annual Contributions | | Estimated Inflation Adjusted Expenditure | Estimated Interest Earned | Recommended Annual Contribution Increase | | | Closing Balance |
|---|---|---|---|---|---|---|---|---|---|
| | | Base | Other | | | Amount | Percentage (%) | per Unit per Month | |
| 2016 | $133,062 | $30,000 | | $18,506 | $1,388 | | | | $145,944 |
| 2017 | $145,944 | $30,600 | | $3,519 | $1,595 | $600 | 2 | $1.25 | $174,620 |
| 2018 | $174,620 | $31,212 | | $0 | $1,902 | $612 | 2 | $1.28 | $207,734 |
| 2019 | $207,734 | $31,836 | | $27,825 | $2,097 | $624 | 2 | $1.30 | $213,843 |
| 2020 | $213,843 | $32,473 | | $178,816 | $1,407 | $637 | 2 | $1.33 | $68,907 |
| 2021 | $68,907 | $33,122 | | $19,198 | $759 | $649 | 2 | $1.35 | $83,590 |
| 2022 | $83,590 | $33,785 | | $10,473 | $952 | $662 | 2 | $1.38 | $107,854 |
| 2023 | $107,854 | $34,461 | | $0 | $1,251 | $676 | 2 | $1.41 | $143,565 |
| 2024 | $143,565 | $35,150 | | $107,085 | $1,076 | $689 | 2 | $1.44 | $72,706 |
| 2025 | $72,706 | $35,853 | | $7,171 | $870 | $703 | 2 | $1.46 | $102,258 |
| 2026 | $102,258 | $36,570 | $10,290 | $108,923 | $711 | $717 | 2 | $1.49 | $40,906 |
| 2027 | $40,906 | $37,301 | | $0 | $596 | $731 | 2 | $1.52 | $78,803 |
| 2028 | $78,803 | $38,047 | | $7,609 | $940 | $746 | 2 | $1.55 | $110,181 |
| 2029 | $110,181 | $38,808 | | $41,589 | $1,088 | $761 | 2 | $1.59 | $108,488 |
| 2030 | $108,488 | $39,584 | | $51,242 | $1,027 | $776 | 2 | $1.62 | $97,857 |
| 2031 | $97,857 | $40,376 | | $91,463 | $723 | $792 | 2 | $1.65 | $47,493 |
| 2032 | $47,493 | $41,184 | | $0 | $681 | $808 | 2 | $1.68 | $89,358 |
| 2033 | $89,358 | $42,007 | | $0 | $1,104 | $824 | 2 | $1.72 | $132,469 |
| 2034 | $132,469 | $42,847 | | $8,569 | $1,496 | $840 | 2 | $1.75 | $168,243 |
| 2035 | $168,243 | $43,704 | | $69,778 | $1,552 | $857 | 2 | $1.79 | $143,721 |
| 2036 | $143,721 | $44,578 | | $27,499 | $1,523 | $874 | 2 | $1.82 | $162,323 |
| 2037 | $162,323 | $45,470 | | $9,094 | $1,805 | $892 | 2 | $1.86 | $200,505 |
| 2038 | $200,505 | $46,379 | | $0 | $2,237 | $909 | 2 | $1.89 | $249,121 |
| 2039 | $249,121 | $47,307 | $1,100,000 | $1,302,145 | $1,717 | $928 | 2 | $1.93 | $96,000 |
| 2040 | $96,000 | $48,253 | | $65,142 | $876 | $946 | 2 | $1.97 | $79,987 |
| 2041 | $79,987 | $49,218 | | $0 | $1,046 | $965 | 2 | $2.01 | $130,251 |
| 2042 | $130,251 | $50,203 | | $5,773 | $1,525 | $984 | 2 | $2.05 | $176,205 |
| 2043 | $176,205 | $51,207 | | $10,241 | $1,967 | $1,004 | 2 | $2.09 | $219,137 |
| 2044 | $219,137 | $52,231 | | $6,094 | $2,422 | $1,024 | 2 | $2.13 | $267,696 |
| 2045 | $267,696 | $53,275 | | $7,698 | $2,905 | $1,045 | 2 | $2.18 | $316,178 |

**Description:**

This scenario shows the special levies that would be required each year if you continue annual CRF contributions at the current level. Special levies are shown in the 'Other' contributions column. Levies are calculated to cover funding shortfalls in years where expenditures exceed savings, and are only as large as necessary to maintain the specified minimum balance.

This approach puts off saving for large projects and shifts the financial burden toward future owners.

## Scenario 2 - Ten-Year Phased Contribution Increase with Moderate Special Levy

**Assumptions:**

| | | | |
|---|---|---|---|
| Opening Balance of the Reserve Fund: | **$133,062** | Interest Rate Earned: | **1%** |
| Current Annual Contribution: | **$30,000** | Expenditure Inflation Rate: | **2%** |
| Minimum Reserve Fund Balance: | **$33,557** | Minimum Balance Inflation Rate: | **2%** |
| First Critical Year: | **2039** | Number of Units: | **40** |
| Second Critical Year: | **2040** | Fiscal Year End: | **Dec 31** |

**Results:**

| Year | Opening Balance | Recommended Annual Contributions | | Estimated Inflation Adjusted Expenditure | Estimated Interest Earned | Recommended Annual Contribution Increase | | | Closing Balance |
|---|---|---|---|---|---|---|---|---|---|
| | | Base | Other | | | Amount | Percentage (%) | per Unit per Month | |
| 2016 | $133,062 | $30,000 | | $18,506 | $1,388 | | | | $145,944 |
| 2017 | $145,944 | $34,187 | | $3,519 | $1,613 | $4,187 | 14 | $8.72 | $178,225 |
| 2018 | $178,225 | $38,459 | | $0 | $1,975 | $4,271 | 12.5 | $8.90 | $218,658 |
| 2019 | $218,658 | $42,815 | | $27,825 | $2,262 | $4,357 | 11.3 | $9.08 | $235,910 |
| 2020 | $235,910 | $47,259 | | $178,816 | $1,701 | $4,444 | 10.4 | $9.26 | $106,055 |
| 2021 | $106,055 | $51,792 | | $19,198 | $1,224 | $4,533 | 9.6 | $9.44 | $139,872 |
| 2022 | $139,872 | $56,415 | | $10,473 | $1,628 | $4,623 | 8.9 | $9.63 | $187,442 |
| 2023 | $187,442 | $61,131 | | $0 | $2,180 | $4,716 | 8.4 | $9.83 | $250,753 |
| 2024 | $250,753 | $65,941 | | $107,085 | $2,302 | $4,810 | 7.9 | $10.02 | $211,910 |
| 2025 | $211,910 | $70,847 | | $7,171 | $2,437 | $4,906 | 7.4 | $10.22 | $278,024 |
| 2026 | $278,024 | $75,851 | | $108,923 | $2,615 | $5,004 | 7.1 | $10.42 | $247,567 |
| 2027 | $247,567 | $77,368 | | $0 | $2,863 | $1,517 | 2 | $3.16 | $327,798 |
| 2028 | $327,798 | $78,916 | | $7,609 | $3,635 | $1,547 | 2 | $3.22 | $402,739 |
| 2029 | $402,739 | $80,494 | | $41,589 | $4,222 | $1,578 | 2 | $3.29 | $445,866 |
| 2030 | $445,866 | $82,104 | | $51,242 | $4,613 | $1,610 | 2 | $3.35 | $481,341 |
| 2031 | $481,341 | $83,746 | | $91,463 | $4,775 | $1,642 | 2 | $3.42 | $478,398 |
| 2032 | $478,398 | $85,421 | | $0 | $5,211 | $1,675 | 2 | $3.49 | $569,030 |
| 2033 | $569,030 | $87,129 | | $0 | $6,126 | $1,708 | 2 | $3.56 | $662,286 |
| 2034 | $662,286 | $88,872 | | $8,569 | $7,024 | $1,743 | 2 | $3.63 | $749,613 |
| 2035 | $749,613 | $90,649 | | $69,778 | $7,600 | $1,777 | 2 | $3.70 | $778,085 |
| 2036 | $778,085 | $92,462 | | $27,499 | $8,106 | $1,813 | 2 | $3.78 | $851,154 |
| 2037 | $851,154 | $94,312 | | $9,094 | $8,938 | $1,849 | 2 | $3.85 | $945,309 |
| 2038 | $945,309 | $96,198 | | $0 | $9,934 | $1,886 | 2 | $3.93 | $1,051,441 |
| 2039 | $1,051,441 | $98,122 | $200,000 | $1,302,145 | $5,494 | $1,924 | 2 | $4.01 | $52,912 |
| 2040 | $52,912 | $65,673 | | $65,142 | $532 | -$32,449 | -33.1 | -$67.60 | $53,974 |
| 2041 | $53,974 | $6,944 | | $0 | $574 | -$58,728 | -89.4 | -$122.35 | $61,493 |
| 2042 | $61,493 | $7,083 | | $5,773 | $621 | $139 | 2 | $0.29 | $63,425 |
| 2043 | $63,425 | $7,225 | | $10,241 | $619 | $142 | 2 | $0.30 | $61,028 |
| 2044 | $61,028 | $7,369 | | $6,094 | $617 | $144 | 2 | $0.30 | $62,920 |
| 2045 | $62,920 | $7,517 | | $7,698 | $628 | $147 | 2 | $0.31 | $63,367 |

**Description:**
This scenario shows a phased increase in contribution levels over the next 10 years. Phasing in a required increase results in higher future contributions than those calculated in an inflation-matched scenario but lower special levy assessment. In this scenario the special levy is moderate at $200,000 or $5000/unit.

## Scenario 3 - Five-Year Phased Contribution Increase with Large Special Levy

**Assumptions:**

| | | | |
|---|---|---|---|
| Opening Balance of the Reserve Fund: | **$133,062** | Interest Rate Earned: | **1%** |
| Current Annual Contribution: | **$30,000** | Expenditure Inflation Rate: | **2%** |
| Minimum Reserve Fund Balance: | **$33,557** | Minimum Balance Inflation Rate: | **2%** |
| First Critical Year: | **2039** | Number of Units: | **40** |
| Second Critical Year: | **2040** | Fiscal Year End: | **Dec 31** |

**Results:**

| Year | Opening Balance | Recommended Annual Contributions | | Estimated Inflation Adjusted Expenditure | Estimated Interest Earned | Recommended Annual Contribution Increase | | | Closing Balance |
|---|---|---|---|---|---|---|---|---|---|
| | | Base | Other | | | Amount | Percentage (%) | per Unit per Month | |
| 2016 | $133,062 | $30,000 | | $18,506 | $1,388 | | | | $145,944 |
| 2017 | $145,944 | $34,609 | | $3,519 | $1,615 | $4,609 | 15.4 | $9.60 | $178,649 |
| 2018 | $178,649 | $39,311 | | $0 | $1,983 | $4,702 | 13.6 | $9.80 | $219,944 |
| 2019 | $219,944 | $44,107 | | $27,825 | $2,281 | $4,796 | 12.2 | $9.99 | $238,506 |
| 2020 | $238,506 | $48,998 | | $178,816 | $1,736 | $4,892 | 11.1 | $10.19 | $110,424 |
| 2021 | $110,424 | $53,988 | | $19,198 | $1,278 | $4,989 | 10.2 | $10.39 | $146,492 |
| 2022 | $146,492 | $55,068 | | $10,473 | $1,688 | $1,080 | 2 | $2.25 | $192,775 |
| 2023 | $192,775 | $56,169 | | $0 | $2,209 | $1,101 | 2 | $2.29 | $251,152 |
| 2024 | $251,152 | $57,292 | | $107,085 | $2,263 | $1,123 | 2 | $2.34 | $203,622 |
| 2025 | $203,622 | $58,438 | | $7,171 | $2,293 | $1,146 | 2 | $2.39 | $257,182 |
| 2026 | $257,182 | $59,607 | | $108,923 | $2,325 | $1,169 | 2 | $2.44 | $210,191 |
| 2027 | $210,191 | $60,799 | | $0 | $2,406 | $1,192 | 2 | $2.48 | $273,396 |
| 2028 | $273,396 | $62,015 | | $7,609 | $3,006 | $1,216 | 2 | $2.53 | $330,808 |
| 2029 | $330,808 | $63,255 | | $41,589 | $3,416 | $1,240 | 2 | $2.58 | $355,890 |
| 2030 | $355,890 | $64,520 | | $51,242 | $3,625 | $1,265 | 2 | $2.64 | $372,794 |
| 2031 | $372,794 | $65,811 | | $91,463 | $3,600 | $1,290 | 2 | $2.69 | $350,742 |
| 2032 | $350,742 | $67,127 | | $0 | $3,843 | $1,316 | 2 | $2.74 | $421,712 |
| 2033 | $421,712 | $68,470 | | $0 | $4,559 | $1,343 | 2 | $2.80 | $494,741 |
| 2034 | $494,741 | $69,839 | | $8,569 | $5,254 | $1,369 | 2 | $2.85 | $561,264 |
| 2035 | $561,264 | $71,236 | | $69,778 | $5,620 | $1,397 | 2 | $2.91 | $568,342 |
| 2036 | $568,342 | $72,660 | | $27,499 | $5,909 | $1,425 | 2 | $2.97 | $619,413 |
| 2037 | $619,413 | $74,114 | | $9,094 | $6,519 | $1,453 | 2 | $3.03 | $690,951 |
| 2038 | $690,951 | $75,596 | | $0 | $7,287 | $1,482 | 2 | $3.09 | $773,835 |
| 2039 | $773,835 | $77,108 | $500,000 | $1,302,145 | $4,113 | $1,512 | 2 | $3.15 | $52,911 |
| 2040 | $52,911 | $65,674 | | $65,142 | $532 | -$11,434 | -14.8 | -$23.82 | $53,974 |
| 2041 | $53,974 | $6,944 | | $0 | $574 | -$58,729 | -89.4 | -$122.35 | $61,493 |
| 2042 | $61,493 | $7,083 | | $5,773 | $621 | $139 | 2 | $0.29 | $63,425 |
| 2043 | $63,425 | $7,225 | | $10,241 | $619 | $142 | 2 | $0.30 | $61,028 |
| 2044 | $61,028 | $7,369 | | $6,094 | $617 | $144 | 2 | $0.30 | $62,920 |
| 2045 | $62,920 | $7,517 | | $7,698 | $628 | $147 | 2 | $0.31 | $63,367 |

**Description:**
This scenario is similar to scenario 2 in that a phased approach is used, but over 5 years as opposed to 10. Phasing in a required increase results in higher future contributions than those calculated in an inflation-matched scenario but lower special levy assessment. In this scenario the special levy is moderate to high at $500,000 or $12,500/unit.

## Scenario 4 – Phased-In Contribution Increase with No Special Levies

**Assumptions:**

| | | | |
|---|---|---|---|
| Opening Balance of the Reserve Fund: | **$133,061** | Interest Rate Earned: | **1%** |
| Current Annual Contribution: | **$30,000** | Expenditure Inflation Rate: | **2%** |
| Minimum Reserve Fund Balance: | **$33,557** | Minimum Balance Inflation Rate: | **2%** |
| First Critical Year: | **2039** | Number of Units: | **40** |
| Second Critical Year: | **2040** | Fiscal Year End: | **Dec 31** |

**Results:**

| Year | Opening Balance | Recommended Annual Contributions | | Estimated Inflation Adjusted Expenditure | Estimated Interest Earned | Recommended Annual Contribution Increase | | | Closing Balance |
|---|---|---|---|---|---|---|---|---|---|
| | | Base | Other | | | Amount | Percentage (%) | per Unit per Month | |
| 2016 | $133,061 | $30,000 | | $18,506 | $1,388 | | | | $145,943 |
| 2017 | $145,943 | $35,013 | | $3,519 | $1,617 | $5,013 | 16.7 | $10.44 | $179,054 |
| 2018 | $179,054 | $40,127 | | $0 | $1,991 | $5,114 | 14.6 | $10.65 | $221,172 |
| 2019 | $221,172 | $45,343 | | $27,825 | $2,299 | $5,216 | 13 | $10.87 | $240,989 |
| 2020 | $240,989 | $50,663 | | $178,816 | $1,769 | $5,320 | 11.7 | $11.08 | $114,605 |
| 2021 | $114,605 | $56,089 | | $19,198 | $1,331 | $5,427 | 10.7 | $11.31 | $152,827 |
| 2022 | $152,827 | $61,625 | | $10,473 | $1,784 | $5,535 | 9.9 | $11.53 | $205,763 |
| 2023 | $205,763 | $67,270 | | $0 | $2,394 | $5,646 | 9.2 | $11.76 | $275,427 |
| 2024 | $275,427 | $73,029 | | $107,085 | $2,584 | $5,759 | 8.6 | $12.00 | $243,955 |
| 2025 | $243,955 | $78,903 | | $7,171 | $2,798 | $5,874 | 8 | $12.24 | $318,485 |
| 2026 | $318,485 | $84,894 | | $108,923 | $3,065 | $5,991 | 7.6 | $12.48 | $297,521 |
| 2027 | $297,521 | $86,592 | | $0 | $3,408 | $1,698 | 2 | $3.54 | $387,521 |
| 2028 | $387,521 | $88,324 | | $7,609 | $4,279 | $1,732 | 2 | $3.61 | $472,515 |
| 2029 | $472,515 | $90,090 | | $41,589 | $4,968 | $1,766 | 2 | $3.68 | $525,984 |
| 2030 | $525,984 | $91,892 | | $51,242 | $5,463 | $1,802 | 2 | $3.75 | $572,098 |
| 2031 | $572,098 | $93,730 | | $91,463 | $5,732 | $1,838 | 2 | $3.83 | $580,097 |
| 2032 | $580,097 | $95,605 | | $0 | $6,279 | $1,875 | 2 | $3.91 | $681,981 |
| 2033 | $681,981 | $97,517 | | $0 | $7,307 | $1,912 | 2 | $3.98 | $786,805 |
| 2034 | $786,805 | $99,467 | | $8,569 | $8,323 | $1,950 | 2 | $4.06 | $886,026 |
| 2035 | $886,026 | $101,456 | | $69,778 | $9,019 | $1,989 | 2 | $4.14 | $926,723 |
| 2036 | $926,723 | $103,486 | | $27,499 | $9,647 | $2,029 | 2 | $4.23 | $1,012,356 |
| 2037 | $1,012,356 | $105,555 | | $9,094 | $10,606 | $2,070 | 2 | $4.31 | $1,119,424 |
| 2038 | $1,119,424 | $107,666 | | $0 | $11,733 | $2,111 | 2 | $4.40 | $1,238,823 |
| 2039 | $1,238,823 | $109,820 | | $1,302,145 | $6,427 | $2,153 | 2 | $4.49 | $52,924 |
| 2040 | $52,924 | $65,661 | | $65,142 | $532 | -$44,159 | -40.2 | -$92.00 | $53,974 |
| 2041 | $53,974 | $6,944 | | $0 | $574 | -$58,716 | -89.4 | -$122.32 | $61,493 |
| 2042 | $61,493 | $7,083 | | $5,773 | $621 | $139 | 2 | $0.29 | $63,425 |
| 2043 | $63,425 | $7,225 | | $10,241 | $619 | $142 | 2 | $0.30 | $61,028 |
| 2044 | $61,028 | $7,369 | | $6,094 | $617 | $144 | 2 | $0.30 | $62,920 |
| 2045 | $62,920 | $7,517 | | $7,698 | $628 | $147 | 2 | $0.31 | $63,367 |

**Description:**

This scenario shows a 10-year phased increase in the annual CRF contribution to a level which will fully cover future expenditures within the next 30 years. No special levies are needed. Following the phased increase, small annual increases adjust for inflation so that the contribution level remains consistent in terms of today's dollars.

This approach represents a middle ground between funding by special levy and becoming fully-funded next year.

# 1. STRUCTURE

## 1.1 Structural Frame

**Description:**

The building structure is wood-frame, supported by below-grade cast-in-place concrete walls on slab-on-grade. The foundation consists of concrete strip and spread footings, according to the structural drawings. The roof is framed with engineered wood roof trusses with plywood roof sheathing. The building's foundation rests on regional bedrock and the area is rated at a low seismic hazard according to BC Ministry of Energy and Mines - Quaternary Geological Map of Greater Victoria - 2000.

The above grade portions of the basement walls are treated with cementitious parging. Based on the drawings, below grade moisture protection is provided by a two layers of bituminous dampproofing product. We could not confirm the type or presence of moisture protection on the buried portions of the foundation walls.

**Condition:**

The main building structure is generally protected from the deteriorating effects of weather and was concealed from our review. Review of the parkade did not reveal any structural concerns with foundation walls, suspended slab, or slab-on-grade. One leak through the parkade soffit was noted in 2015 by council. This leak is addressed in more detail under the parkade section. No reserve fund expenditures are expected within the timeframe of this study for the protected structural components. The structural components that have exposure to weather (such as wood-framed balconies) are covered in other component sections.

## 1.2 Balconies

**Description:**

Balconies are present for each suite on second, third and fourth floors. The wood-framed balconies are cantilevered, with short curb walls and aluminum guard rails enclosing their perimeter. Vinyl membrane waterproofs each balcony with sufficient turn up the curb walls and building exterior walls. The balconies are sloped to interior drains that are connected to rainwater leaders and perimeter drains.

**Repair History:**

2010: Replace fourth-level balcony membrane and upgrade drainage capacity to 3"x3" with funnels to merge together and then again to main downspouts from sloped roof gutters, $5,418, as documented by Silverwood at Thetis Cove 35 Year Maintenance Plan.
2013: Replace deteriorated wood trim at base of balcony posts with fiber-cement board and sealant, $42,000, as documented by Silverwood at Thetis Cove 35 Year Maintenance Plan.
2013: Secured railings at patios over conditioned living space, operating expense

**Condition:**

Balconies that were reviewed appeared to be in good condition. Some instances of pooling water were noted near curb walls. Railings were hand-tested and felt secure, fasteners did not exhibit signs of corrosion. The improvements to the balcony post trim are performing well and are expected to be maintained through the operating budget. Maintenance expenses such as railing review, fastener replacement and localized membrane repairs are assumed to be financed through the operating budget. Within the next five years the balcony membranes are expected to be replaced as they reach the end of their expected service lives. The option to phase the replacement by addressing the open fourth-level balconies first, followed by the covered third and second levels is considered, however savings in cost and disruption favours full, single-phase replacement.

| Project Name | Present Cost | Inflated Cost | First Occur. | Cycle | # Occurrences | CL | Status |
|---|---|---|---|---|---|---|---|
| 1.2.1 Balcony Waterproofing | $47,898 | $51,846 | 2020 | 15 yrs | 2 | 3 | Forecasted |

Project Notes:
This item allows for removal of existing and installation of new vinyl membrane at all balconies.

Note: If detailed correctly, the membrane renewal may not require removing the railings; otherwise, they may need to be removed to access the membrane. We have assumed that the current railings will be left in place.

## 1.3 Parking Garage

**Description:**

The underground parkade (40 stalls) on one level is accessed from the south through a remotely activated roll-up gate. The parkade structure is constructed with conventionally reinforced concrete. The slab-on-grade is protected by an elastomeric traffic deck coating, concrete columns and foundation walls are painted, and the suspended ceiling slab is finished with spray-foam insulation. Portions of the parkade ceiling slab extend beyond the building footprint; this portion of the ceiling slab is waterproofed with an exterior 2-ply SBS membrane, located below landscaping and patios in three locations (east, west and north site areas).

**Repair History:**

2014: Replaced parkade overhead gate motor with commercial grade motor, $3,500, as documented by Silverwood at Thetis Cove 35 Year Maintenance Plan.

**Condition:**

The parkade is generally in good condition. A leak near the gate entrance was first observed by residents in 2015 after work had been performed on the gravel ballast overhead roof. Efflorescence and slight water staining were also noted at the cold joints (ceiling to wall) within the storage rooms. Based on current conditions, capital expenditures are not anticipated within the reporting term for the parkade structure. Isolated leaks and cracks are expected to be addressed on an as-needed basis as part of ongoing maintenance. Replacement of the buried waterproofing membrane may be required within the next 30 years. The cost to replace the membrane is budgeted so that the Strata can proactively plan towards its' replacement. Monitoring the membranes condition by regularly reviewing the interior of the parkade for leaks and efflorescence is recommended.

| Project Name | Present Cost | Inflated Cost | First Occur. | Cycle | # Occurrences | CL | Status |
|---|---|---|---|---|---|---|---|
| 1.3.1 Parking Garage Gate Motor | $3,500 | $4,528 | 2029 | 15 yrs | 2 | 3 | Forecasted |
| Project Notes:<br>This project allows for replacement of the overhead gate motor every 15 years. | | | | | | | |
| 1.3.2 Parkade Roof Membrane-West West membrane, including Patios G & H | $102,960 | $162,358 | 2039 | 40 yrs | One time | 3 | Forecasted |
| Project Notes:<br>This project allows for replacement of the 2-ply SBS waterproofing membrane. The work includes excavate fill, remove old membrane, install 2 ply SBS membrane, drainage mat and reinstate backfill, including the vegetation, landscaping, and pavement. | | | | | | | |
| 1.3.3 Parkade Roof Membrane-East East membrane, including Patios A & B | $290,550 | $458,168 | 2039 | 40 yrs | One time | 3 | Forecasted |
| Project Notes:<br>This project allows for replacement of the 2-ply SBS waterproofing membrane. The work includes excavate fill, remove old membrane, install 2 ply SBS membrane, drainage mat and reinstate backfill, including the vegetation, landscaping, and pavement. Access to the eastern portion is more confined than the west and north resulting in a greater anticipated cost per square foot. | | | | | | | |
| 1.3.4 Parkade Roof Membrane-North North Membrane, including Patios E & F | $98,280 | $154,978 | 2039 | 40 yrs | One time | 3 | Forecasted |

Project Notes:
Visual: Concealed leakage not observed in parkade.

Action: Excavate fill, remove old membrane, install 2 ply SBS membrane, drainage mat and reinstate backfill, including the vegetation and landscaping.

# 2. BUILDING ENVELOPE

## 2.1 Walls

**Description:**

The exterior walls are clad with parged concrete, fibre cement board, and comb-faced spruce trim. All cladding materials are painted and require periodic painting as protection against deterioration (i.e., replacement). The parged concrete walls extend from the parkade structure along the west elevation to the south west corner. Trim is present at door and window perimeters, balcony and roof fascia, and feature band. Flashing (cross-cavity, base of wall, and balcony caps) are featured at areas of concentrated water runoff and greater exposure.

The fibre cement clad wall systems are designed as a drained / rain-screen system, meaning that the outer surface is not intended to be perfectly watertight. Drainage cavities and secondary moisture barriers have been incorporated to drain any water that penetrates through the face back to the exterior.

**Repair History:**

2007: Paint wood trim and seal joints, $29,000, as documented by Silverwood at Thetis Cove 35 Year Maintenance Plan.

**Condition:**

The exterior walls appeared to be good condition. Paint is holding well at parged concrete, fibre-cement siding and wood trim. Painting of wood trim is recommended every 10 years, and fiber-cement board and parging every 20. This schedule aligns full paint renewal every second cycle for cost savings. During installation the fibre cement boards had sealant applied between their butt joints. This has resulted in an aesthetic irregularity between field and joint paint wearing at different rates. When the fibre-cement is painted these areas can be addressed by sanding the sealant and repainting to form a consistent aesthetic. It is reasoned that board replacement is addressed through operating expenses. Parging and Fibre-cement board may last 70 years or more with regular painting and is thus not expected for replacement within the reporting period. Wood trim is budgeted to be renewed with vinyl window replacement after 40 years of service (2039).

| Project Name | Present Cost | Inflated Cost | First Occur. | Cycle | # Occurrences | CL | Status |
|---|---|---|---|---|---|---|---|
| 2.1.1 Paint Parging and FRC Boards | $82,800 | $89,625 | 2020 | 20 yrs | One time | 3 | Forecasted |
| Project Notes:<br>This project allows for cleaning, sanding excess sealant at butt joints, and repainting all fibre-cement board and parged concrete every 20 years. | | | | | | | |
| 2.1.2 Paint Wood Trim | $34,500 | $37,344 | 2020 | 10 yrs | 3 | 3 | Forecasted |
| Project Notes:<br>This project allows for sanding and repainting of wood trim every 10 years. We have assumed the cost of access out ways the influence of trim width on price and have thus priced based on lineal feat. | | | | | | | |
| 2.1.3 Wood Trim Wood trim typical on all elevations | $57,500 | $90,672 | 2039 | 40 yrs | One time | 3 | Forecasted |
| Project Notes:<br>Comb-faced spruce trim highlights window and door perimeters, balcony and roof fascia, corners, and feature band. The trim is painted for protection against the elements.<br><br>This project allows for removing existing wood trim and installing new. Replacement to be scheduled with neighbouring work such as window replacement for practical reasons and financial savings. | | | | | | | |

## 2.2 Windows

**Description:**

Windows throughout the building are vinyl-framed with insulating glass units (IGUs). Window types include: casement, awning and fixed. The vinyl windows are factory-welded at mitre joints and installed with waterproofing details. Larger windows (likely 25, 27, 28 and 29 window types from the window schedule in the architectural drawings) feature two fixed frames connected by a horizontal H coupler.

The window to wall joints are protected by wood trim. Sealant was not observed at the jambs. There may be a concealed seal that complies with the BC Building Code to "Caulk between dissimilar materials".

**Repair History:**

2005-2009: Piecewise glazing unit replacement as sealed units fail, operating expense.

**Condition:**

Council members did not indicate any reports of water or excessive air leakage through the windows. We noted no evidence of water leakage in the areas reviewed. Weather-stripping on operable windows, where seen, was in serviceable condition. Some amount of IGU replacements should be expected on an annual basis, but based on the currently reported replacement requirements (which have been limited to about two units per year), we assume glass replacement will be managed from operating funds rather than capital, so no budget is included here. We assume ongoing repairs (i.e., replacing weather stripping and rollers, adjusting frames, etc.) will also be completed on an as-needed basis as a maintenance expense. Based on age and reported performance, full replacement of the window system may not be required within the report term, however a replacement budget is provided, after the average 40-year service life is reached, for Strata planning purposes.

| Project Name | Present Cost | Inflated Cost | First Occur. | Cycle | # Occurrences | CL | Status |
|---|---|---|---|---|---|---|---|
| 2.2.1 Vinyl Windows original PVC windows | $171,408 | $270,293 | 2039 | 40 yrs | One time | 3 | Forecasted |
| Project Notes:<br>This project allows for removing window trim and existing window (frame and IGU's) and installing a new frame, complete the new IGU's. Although included, the actual life may exceed this report period. | | | | | | | |
| 2.2.2 Vinyl Windows - H Coupler original PVC windows | $24,150 | $31,241 | 2029 | 30 yrs | One time | 3 | Forecasted |
| Project Notes:<br>Remove the window trim and existing H coupler window, including the frame and IGU's. Install a new frame, complete with new IGU's. | | | | | | | |
| 2.2.3 Caulking - Fenestration Sealing Caulk the jambs of the exterior windows and doors | $18,506 | $18,506 | 2016 | 20 yrs | 2 | 3 | Forecasted |
| Project Notes:<br>This project allows installation of sealant at the window and door jambs and all joints in the wood trim. Subsequent renewals will require first removing the sealant in place and installing new sealant. Note: The lack of sealant should not result in the failure of the rainscreen wall system; however, the lack of sealant is allowing excess water to directly enter and thus load the window and door trim, particularly at the sill. Installing sealant should prolong the life of the wood trim. | | | | | | | |

## 2.3 Exterior Doors

**Description:**

The main entrance doors on the west elevation are aluminum-framed with full-height glazing and are secured by enterphone access. Service rooms, stairwells, and ground-level exits are steel doors in steel frames. The parkade entrance features a metal grill, motorized, overhead door. Balcony/patio doors are vinyl sliding doors with insulated glazing units.

**Condition:**

We noted no concerns with doors that were reviewed. Exterior metal doors are expected to be repaired or replaced on an as-needed basis, as a maintenance expense. The vinyl sliding doors may not need to be replaced within the reporting term, however we have budgeted their replacement to coincide with vinyl-framed windows as proactive planning.

| Project Name | Present Cost | Inflated Cost | First Occur. | Cycle | # Occurrences | CL | Status |
|---|---|---|---|---|---|---|---|
| 2.3.1 Vinyl Sliding Doors Balconies/Patios | $66,125 | $104,272 | 2039 | 40 yrs | One time | 3 | Forecasted |
| Project Notes:<br>This project allows for removing balcony and patio vinyl sliding doors and replacement with new doors. The project is scheduled with vinyl-window replacement after an estimated 40 years of service. | | | | | | | |

## 2.4 Flat Roofing

**Description:**

There are south-facing second-level patios over livable space (common room and fitness room). These flat roof areas are waterproofed with a 2-ply SBS roofing membrane concealed below landscaping and concrete pavers.

**Condition:**

Council was not aware of any concerns for these patio roofing areas. A concealed waterproofing membrane generally serves 40 years, a replacement budget is scheduled to occur with the parkade roof membrane replacement in 2039.

| Project Name | Present Cost | Inflated Cost | First Occur. | Cycle | # Occurrences | CL | Status |
|---|---|---|---|---|---|---|---|
| 2.4.1 Patio Waterproofing - Over Conditioned Living Space Over guest suite/ammenities room, overlooking the green hosue | $18,720 | $29,520 | 2039 | 40 yrs | One time | 3 | Forecasted |
| Project Notes:<br>This item allows for removal of pavers, soil and existing SBS membrane, installation of a new 2-ply SBS membrane and reinstatement of pavers and landscaping. | | | | | | | |

## 2.5 Roofing

**Description:**

The main sloped roof is pitched at 4:12 and is finished with asphalt shingles. Exhaust vent and plumbing stack terminations penetrate the sloped roof and are sealed appropriately (flashing, storm collars). The metal gutters running the perimeter of the sloped roof connect to rainwater leaders which continue to perimeter drains.

**Condition:**

The asphalt shingle roof was observed in good condition from grade and hatch-access view points. Asphalt shingle and metal gutter replacement is scheduled after 25 years of service. Roof review, gutter cleaning, and localized repairs are assumed to financed through the operating budget periodically.

| Project Name | Present Cost | Inflated Cost | First Occur. | Cycle | # Occurrences | CL | Status |
|---|---|---|---|---|---|---|---|
| 2.5.1 Sloped Roof low pitch, shingled roof | $75,900 | $88,929 | 2024 | 25 yrs | One time | 3 | Forecasted |
| Project Notes:<br>This project allows for removal of existing roofing materials and installation of new shingles. | | | | | | | |
| 2.5.2 Metal Gutters excluding downspouts | $8,996 | $10,540 | 2024 | 25 yrs | One time | 3 | Forecasted |
| Project Notes:<br>This project allows for full replacement of metal gutters. | | | | | | | |

# 3. FIRE SAFETY

## 3.1 Detection/Alarm

**Description:**

The building has a single-stage fire alarm system. The original control panel was manufactured by Edwards System Technologies (EST), model 2, and is located in the main electrical room. A remote annunciator panel is located at the west entrance to the main lobby. The system is monitored by smoke and heat detectors, supervised flow switches, valves, and manual pull stations.

**Condition:**

TROY Fire and Safety conducted annual inspection and testing of the fire alarm system in April 2016. No major operational concerns were reported in their inspection report, or noted during our review. Minor repairs and replacement of bells, pull stations, and detectors, as identified by ongoing inspections, are expected to be completed as part of annual maintenance.

Fire alarm panels have a typical service life of about 15 to 20 years, but can often remain in service longer if replacement parts are available. Although parts for the EST 2 unit are readily available, TROY now deals with Tyco Simplex products and is recommended a Simplex panel for replacement. We assume that the new panel will be compatible with the existing system, re-using the majority of field devices and wiring. This may not be possible. Further review (which is beyond the scope of this mandate) is needed to confirm this. If the devices and wiring were to require replacement, the cost would be significantly higher.

| Project Name | Present Cost | Inflated Cost | First Occur. | Cycle | # Occurrences | CL | Status |
|---|---|---|---|---|---|---|---|
| 3.1.1 Fire Alarm Warning System includes control and annunciator panels | $7,800 | $8,277 | 2019 | 20 yrs | 2 | 3 | Forecasted |

Project Notes:
This project allows for replacement of the fire alarm and annunciator panels. It assumes that the new panel will be compatible with the existing devices and wiring; if this is not the case, the budget will need to be adjusted accordingly.

## 3.2 Suppression

**Description:**

The building is fully sprinklered by a pressurized dry sprinkler system serving the parkade and utility service rooms, and a wet suppression system throughout corridors and suites. Portable fire extinguishers are located throughout the corridors, lobbies and common areas. The main mechanical room in the parkade houses the main incoming line, main sprinkler valves, fire suppression line backflow preventer, and air compressor. The fire department connection was not located during the site visit but is reasoned to be along the west side of the property with access from Aldersmith Place.

**Condition:**

Council reports no major problems with the suppression systems, and no major issues are indicated on the latest annual testing report prepared by TROY (dated March 2016).

As the fire supression system is a relatively simple system, and the fact that no major problems were noted or reported, no capital expenditures are expected within the report term. Repairs or replacement of some individual components should be expected (e.g., valves, piping, sprinkler heads, compressor etc.). We assume this work, as well as other minor repairs identified by annual testing, will be financed as needed through the operating budget.

## 3.3 Emergency Power

**Description:**

Emergency power is provided by battery packs connected to the fire alarm panel as well as remote emergency light fixtures and exit signs. A backup power generator is not located on the premises.

**Condition:**

Emergency lighting was functional, where checked. TROY indicated seven battery and one exit sign deficiencies in there most recent inspection dated March 2016. Given the limited extent of emergency power systems we assume they will be repaired/replaced as part of ongoing maintenance activities.

# 4. FINISHES, FURNITURE AND EQUIPMENT

## 4.1 Entrance Lobby

**Description:**

The main lobby is located near the south-west corner of the building. The lobby is also accessed from the parkade through a vestibule. The lobby flooring is ceramic tile, walls are decorated and painted. Doors from both lobby entrances are automated for accessibility.

**Repair History:**

2008: Replace automatic door openers, $3,670, as documented in Silverwood at Thetis Cove 35 Year Maintenance Plan.
2015: Replace automatic door motors, cost not determined.

**Condition:**

The lobby finishes appeared to be in good condition. The automatic doors see significant use and are budgeted for replacement every 15 years.

| Project Name | Present Cost | Inflated Cost | First Occur. | Cycle | # Occurrences | CL | Status |
|---|---|---|---|---|---|---|---|
| 4.1.1 Automatic Door Motors | $4,335 | $5,720 | 2030 | 15 yrs | 2 | 3 | Forecasted |
| Project Notes:<br>This project allows for replacement of automatic door motors. The motors were recently replaced after approximately 15 years of service. This 15-year service life is carried forward to anticipate the next replacement. | | | | | | | |

## 4.2 Corridors

**Description:**

Corridors and common rooms are carpeted throughout the building's four levels. Walls are painted and feature trim at baseboard and mid-height.

**Repair History:**

2011: Paint and replace carpets in all common areas (corridors, common rooms), $53,513, as documented by Silverwood at Thetis Cove 35 Year Maintenance Plan.

**Condition:**

The corridors and common room finishes appeared to be in good condition. Touch-up painting, and carpet cleaning are assumed to occur through the Strata's operating budget.

| Project Name | Present Cost | Inflated Cost | First Occur. | Cycle | # Occurrences | CL | Status |
|---|---|---|---|---|---|---|---|
| **4.2.1 Interior Painting Corridors, lobbies, stairwells, and interior doors. Excluding garbage room and workshop** | **$31,356** | **$42,201** | **2031** | **20 yrs** | **One time** | **3** | **Forecasted** |
| Project Notes:<br>This project includes repainting corridors and common room walls. Trim at baseboard, doors, etc. is included. | | | | | | | |
| **4.2.2 Carpeting Corridors, lounge, guest suite, stairwells** | **$27,602** | **$37,149** | **2031** | **20 yrs** | **One time** | **3** | **Forecasted** |
| Project Notes:<br>This project allows for replacement of all corridor and common room carpets. | | | | | | | |

## 4.3 Recreation Facilities

**Description:**

Silverwood at Thetis Cove has various common-property amenities. The furnished common room features a small fitness area with gym equipment, and a kitchen area with appliances (fridge, microwave, stove). A greenhouse is located on the south portion of the property for resident use.

**Repair History:**

2010: Update common-room furnishings, $750, as documented in Silverwood at Thetis Cove 35 Year Maintenance Plan.
2011: Replace gym equipment, $2,548, as documented in Silverwood at Thetis Cove 35 Year Maintenance Plan.

**Condition:**

Common area amenities appeared in good condition. Budgets are provided for updating furnishings and gym equipment.

| Project Name | Present Cost | Inflated Cost | First Occur. | Cycle | # Occurrences | CL | Status |
|---|---|---|---|---|---|---|---|
| 4.3.1 Common Room Amenitites | $4,500 | $5,821 | 2029 | 30 yrs | One time | 3 | Forecasted |
| Project Notes:<br>This project allows for a full refurbishment to the common room, including furniture, décor, and kitchen appliances. | | | | | | | |
| 4.3.2 Gym Equipment | $3,000 | $4,038 | 2031 | 20 yrs | One time | 3 | Forecasted |
| Project Notes:<br>This project allows for a refurbishment of the gym equipment after 20 years of use. | | | | | | | |

# 5. SITE

## 5.1 Site Features

**Description:**

Site features include the following:

- Soft landscaping: Sodded areas, trees, small shrubs, and flower beds are located throughout the site. There is an in-ground, 12-zone, irrigation system for the landscaped areas.

- Signs: A wooden sign at the north end of the property displaying address and suite vacancies (about 2m tall).

- Fences: Chain link fencing along the east property line.

-Railings: Painted metal handrails at staircases

**Condition:**

Site features and landscaping are well maintained and were observed in good condition. It is assumed that repair and replacement of the signs, fences, and upkeep of the landscaping will be handled on an as-needed basis as part of regular maintenance.

## 5.2 Paving

**Description:**

Hard paving includes concrete (cast-in-place, and pavers) drive aisle, pedestrian walkways, and curbs.

**Repair History:**

2006: Back pathway replacement, $2,500, as documented by Silverwood at Thetis Cove 35 Year Maintenance Plan.

**Condition:**

The condition of hard surfaces throughout the property is being maintained well. Differential settlement or tree root encroachment was not observed. We recommend continuing to clean and repair locally through the operating budget in lieu of general replacement within the term of this report.

## 5.3 Irrigation Systems

**Description:**

Landscaping surrounding the property is irrigated with an underground system featuring elevated sprinkler heads. The multi-zone system is serviced regularly for spring start-up and winterization. The system was not operating during our review.

**Repair History:**

2009: Irrigation Sprinkler Upgrade, $3,500, as documented by Silverwood at Thetis Cove 35 Year Maintenance Plan.

**Condition:**

The condition of this component is not fully known as most of the components are buried. Concerns over the systems operation were not reported at the time of our site visit. The 2009 upgrade included installing a backflow preventer and pressure reducing valves. Maintenance expenses (servicing, sprinkler heads, valves, and pipe replacement) are expected to continue to be funded by operating budget. Replacement of the irrigation system is expected to be performed at the same time as parkade membrane replacement. The replacement cost has been included within the membrane replacement budget.

## 5.4 Site Services

**Description:**

Buried site services include incoming municipal water, storm and sanitary drainage systems, and utilities such as electricity, gas and telecommunications.

Drainage systems include the following:

- Site: catch basins and trench drains on grade
- Roof: gutters and rainwater leaders to perimeter drains
- Garage: catch basins and trench drains on grade
- Storm and sanitary drainage: 4" acrylonitrile-butadiene-styrene (ABS) buried and above grade piping
- Perimeter: perforated poly vinyl-chloride (PVC)

**Condition:**

The condition of buried services could not be confirmed. The east portion of landscaping can become saturated with storm events; drainage otherwise appears to be performing adequately. We recommend that drains be flushed and scoped annually at a minimum. This maximizes the service life of the piping and also helps identify repair needs. We assume this will be done as part of ongoing maintenance.

# 6. HVAC

## 6.1 Air Handling Unit(s)

**Description:**

Fresh conditioned air is supplied to the corridors and lobby by two air-handling units (AHUs) manufactured by Greenheck. The units are located on the sloped roof, resting on landings from built-up curb walls. Both units provide heating via two-stage, 6 kW electric duct heaters at 1150 CFM and 870 CFM respectively. The AHUs are original to the building.

**Condition:**

The air-handling units were operating at the time of our site review. Corrosion was observed on exterior surfaces of units, however the interior condition of each unit was not visible during our review. Applying rust inhibiting paint may improve service life.

This type of equipment has a standard service life of about 20-25 years. However, it can last much longer with maintenance as many of the components can be changed without replacing the unit outright. Victoria JetVac typically conducts annual preventative maintenance and servicing of the equipment. The cost of this work, and any localized repairs, are assumed to be a maintenance expense.

Given the age of the AHUs we recommend planning replacement in 2019.

| Project Name | Present Cost | Inflated Cost | First Occur. | Cycle | # Occurrences | CL | Status |
|---|---|---|---|---|---|---|---|
| 6.1.1 Replace AHUs | $12,420 | $13,180 | 2019 | 20 yrs | 2 | 3 | Forecasted |

## 6.2 Heating and Air Conditioning Units

**Description:**

The building contains the following common area terminal electric units that supplement heating:

- electric baseboard heaters at stairwells, common room, and utility rooms

- wall fan heaters along corridors

**Repair History:**

2011: Install 8 electric wall heaters complete with fans, $1,466, as documented by Silverwood at Thetis Cove 35 Year Maintenance Plan.

**Condition:**

No problems were noted or reported to us during our review and interviews. The plan assumes heaters will be replaced on an individual, as-needed basis as part of ongoing maintenance.

## 6.3 Exhaust Fan(s)

**Description:**

The parking garage is ventilated by two wall-mounted, propeller-type exhaust fans, rated at 3/4 Hp with a design air flow of 5650 cfm. The fans are controlled by an Armstrong AMC 1022 M2 carbon monoxide (CO) monitoring system serviced by Island Temperature Controls.

Suite bathrooms and kitchens are ventilated by roof-mounted exhaust fans.

There are smaller individual Greenheck fans within storage and service rooms. These fans have fractional HP and design air flow of 212 cfm.

**Condition:**

No operation concerns were noted. Where reviewed, exhaust fans were operating at the time of our visit. Smaller fans can often be maintained through an operating budget by repairing or replacing individual parts. The larger parkade exhaust fans will likely require contingency reserve funds to replace motors and fans. We anticipate their replacement within the next 10-15 years.

The common area wood shop is in needed of greater exhaust ventilation to improve indoor air quality. Installing a central or window-mounted, filter exhaust unit is recommended.

| Project Name | Present Cost | Inflated Cost | First Occur. | Cycle | # Occurrences | CL | Status |
|---|---|---|---|---|---|---|---|
| 6.3.1 Parkade Exhaust Fans | $6,500 | $7,616 | 2024 | 25 yrs | One time | 3 | Forecasted |
| Project Notes:<br>Visual Condition: Fair<br><br>Action: Replace fans<br><br>Note: Island Temperature Controls (ITC) replaced the CO monitors in September of 2014. Previous CO system was not functioning. | | | | | | | |
| 6.3.2 Woodshop Exhaust Fan Install exhaust fan to wood shop for health and safety of users | $3,450 | $3,519 | 2017 | 25 yrs | 2 | 3 | Forecasted |
| Project Notes:<br>This project allows for installation of exhaust ventilation in the woodshop to meet indoor air quality requirements. ASHRAE 62.1 recommends 150-200 cfm for the rooms size and activity. Concrete shop walls and ceiling make ducting costly. Installation by removing a small window and replacing with a ductless unit may be more feasible. | | | | | | | |

# 7. PLUMBING

## 7.1 Domestic Water Boilers

**Description:**

Domestic hot water is decentralized within the building by individual suite 40 gal, 6kW, electric water heaters. These are considered private property and are thus maintained and replaced by individual owners. There is one common-property water heater that serves the guest suite.

**Repair History:**

2010: Replace guest-suite water heater and install flood-protection monitoring/alarm system, cost not provided.

**Condition:**

The water heater serving the guest suite was not reviewed at the time of our site visit but was reported as operating without concern. Replacement of the single unit is expected to be funded from the operating budget as it is below the Strata's defined contingency reserve fund threshold of $3,000.

## 7.2 Domestic Water Piping, Valves and Pumps

**Description:**

The main water service to the building enters from the north, through a water meter, and into the Mechanical Room for distribution. The main line splits to supply a 4-inch diameter domestic water line, 4-inch incoming fire service line, and a 1.5-inch irrigation service line. There are backflow preventers installed on all services.

Domestic cold water is distributed to washrooms, kitchens, and hose connections though copper piping and riser valves.

**Condition:**

The copper distribution piping dates to original installation, making it approximately 17 years old. Strata Council reported no problems with water flow or pressure. Servicing and repairs to distribution components is expected to occur as required through the operating budget. A full-scale piping replacement is not expected within the reporting period.

# 8. ELECTRICAL

## 8.1 Electric Supply and Distribution

**Description:**

The main electrical room is located in the parking garage. The room was not available for review during our site visit. Electrical drawings indicate the main disconnect (1200A, 120/208V, 3 phase, 4 wire), meters, main distribution panel, fire alarm control panel and parkade exhaust controls are present in the main electrical room. Secondary distribution panels are located on levels 2,3, and 4.

**Condition:**

The Strata did not report any problems with electrical performance or service capacity.

Major electrical equipment has an average service life of 50 years or more. Given the age of the electrical equipment, we do not anticipate capital renewal within the report term.

Infrared scans of all panels and equipment are recommended to identify hot spots that require repair. This type of maintenance allows proactive repairs before they develop into larger problems and is understood to be addressed with annual servicing.

## 8.2 Lighting

**Description:**

Lighting systems include the following:

- Corridors and common areas: Wall and ceiling-mounted sconces with compact fluorescent/incandescent lamps.

- Stairwells: Ceiling mounted 2x4ft strip fluorescent fixtures with T8 OR T12 lamps (one per landing)

- Parking garage: Ceiling-mounted fixtures with high-pressure sodium 100W lamps

- Exterior: Wall-mounted bracket and recessed pot fixtures with 100W compact fluorescent lamps.

**Condition:**

The fixtures, where reviewed, are in serviceable condition and the lamps are generally considered energy efficient except for T12 fluorescents. Current lighting levels appear to meet minimum by-law requirements. Full-scale replacement of the lighting systems is not expected within the report term, unless desired as part of an aesthetic or energy-efficiency upgrade. It is assumed that light fixtures and lamps will continue to be replaced as required through the operating budget.

# 9. CONVEYANCE

## 9.1 Elevators

**Description:**

Conveyance within the building is provided by a single passenger elevator servicing four floors. The in-ground hydraulic elevator was manufactured by Northern with a 2500 lb capacity and was installed by Plimley Elevator c.1999. The elevator is presently maintained by Thyssen Krupp Elevator, whom provided the outlined recommendations below.

**Condition:**

To date the elevator has not had any major upgrades. Routine servicing from Thyssen Krupp Elevator (TKE) has reported the elevator components to generally be in good condition. TKE has recommended the following long and short term replacement and upgrades:

Short Term

- Code compliant auto-dialer (emergency phone)
- Pipe Rupture Valve
- Solid State Starter (soft start)

Long Term

- Hydraulic Power Unit (motor, pump, valve and oil reservoir)
- Controller and Door Operator Upgrade along with landing system and all related hoistway wiring

Please refer to the appended TKE elevator evaluation and capital budget documents for more information on these recommendations. We have budgeted TKE's short term recommendations within the next 5 years and their long term recommendations within the next 10 years to coincide with the expected 25-30 year service life.

| Project Name | Present Cost | Inflated Cost | First Occur. | Cycle | # Occurrences | CL | Status |
|---|---|---|---|---|---|---|---|
| 9.1.1 Short Term Upgrades | $17,388 | $19,198 | 2021 | 25 yrs | One time | 3 | Forecasted |
| Project Notes:<br>This project allows for installation of ThyssenKrupp Elevator recommendations to bring the elevator to current code and safety levels. The project includes an auto-dialing phone for emergency use, a rupture shut off valve for the hydraulic piston, and a solid-state starter to protect the controllers and reduce current draw. | | | | | | | |
| 9.1.2 Long Term Updgrades | $89,355 | $108,923 | 2026 | 25 yrs | One time | 3 | Forecasted |
| Project Notes:<br>This project allows for long term upgrades to the elevator to continue its use past 25 years of service. The project includes replacing the power unit (motor, pump, valve and oil reservoir), controllers which will become obsolete, door operators, landing system and all related hoistway wiring. | | | | | | | |

# 10. MISCELLANEOUS

## 10.1 Security Systems

**Description:**

The building has the following security/access control systems:

- Enterphone system at the main entrance controlling guest communication and access.

**Condition:**

No problems were reported with the enterphone system by The Strata. However, based on the age of the system and the typical service life (20-25 years), replacement is expected and budgeted within the report term.

| Project Name | Present Cost | Inflated Cost | First Occur. | Cycle | # Occurrences | CL | Status |
|---|---|---|---|---|---|---|---|
| 10.1.1 Enterphone System | $3,300 | $3,716 | 2022 | 25 yrs | One time | 3 | Forecasted |
| Project Notes:<br>This project allows for replacement of the enterphone panel. It is assumed that a similar panel will be installed so that wiring costs are kept to a minimum. | | | | | | | |

## 10.2 Consulting Services

**Description:**

Strata corporations engage consultants such as engineers, lawyers, or other professionals to provide building services. In this instance we are referring to renewing The Strata's depreciation report.

**Repair History:**

2012, Initial depreciation report, $6,155, as documented by Silverwood at Thetis Cove 35 Year Maintenance Plan.

**Condition:**

We recommend having the depreciation report updated every three years; this practice renews contingency fund management as well as monitor condition of aging building components.

| Project Name | Present Cost | Inflated Cost | First Occur. | Cycle | # Occurrences | CL | Status |
|---|---|---|---|---|---|---|---|
| 10.2.1 Depreciation Report Update | $6,000 | $6,367 | 2019 | 3 yrs | 10 | 3 | Forecasted |
| Project Notes:<br>This project allows for engineering consulting services to renew The Strata's depreciation report every three years as stipulated by The Strata Act. | | | | | | | |

# Scope Of Work

## Authorization

This Depreciation Report Update was commissioned by Strata Plan No. VIS 4908 in accordance with our proposal, dated December 11, 2015, and authorization to proceed received February 16, 2016 via email correspondence.

## Mandate

As per the *Strata Property Act Regulations*, we confirm our qualifications as follows:

- We are a firm of engineers and consultants who has prepared Depreciation type reports across the Country since the early '90s; our Team is familiar with all building systems, their failure mechanisms and required maintenance, repair and replacement needs; and we have completed over 250 such reports in BC for Strata's since 2004.

- We carry $2,000,000 in errors and omissions insurance.

- At the time of writing this report, no employee carries any ownership in this Strata, thereby solely providing independent 3rd party consulting services to the Strata.

In preparing this Depreciation Report for the Strata, we:

- Reviewed and visually evaluated the condition of the major common element components (without completing any destructive testing);

- Prepared an inventory of common elements we expect to deteriorate and require repairs or replacement based on our best interpretation of Corporation documentation;

- Estimated the scope of repairs or replacement, which is likely to be required;

- Predicted the times when repairs or replacements will be necessary and the life expectancies following the repairs;

- Provided our opinion of the costs required to carry out the repairs or replacements; and

- Calculated various funding scenarios to determine options for contributions into the Contingency Reserve Fund to plan for future expenditures.

We include items, which typically require replacement because their service life is shorter than the service life of the building (such as caulking, roofing, equipment, etc.). We also include items, which would not have been anticipated to be required when the building was new, but which have become necessary due to building specific deterioration (concrete repair related to poor durability, window modifications due to loss of internal seals, etc.). There may be expenses, which arise, which we have not anticipated, related to concealed conditions or unexpected deterioration. As long as these relate to the repair or replacement of the common elements, they can often be paid out of the Contingency Reserve Fund provided the report is updated to account for the impact of these expenditures.

If you are in doubt about whether or not an expenditure can be paid for out of the Contingency Reserve Fund, we recommend you check with your legal counsel or chartered accountant.

## Survey Method

We reviewed the building on March 10, 2016.

The survey consisted of visual review of portions of the building, including:

- suites: 208, 405, and 107;
- common areas: lobbies, corridors, stairwells, common room, fitness room, guest suite, greenhouse;
- the exterior walls, windows and doors from exterior, and sample interior areas;
- balconies, terraces and patios from exterior and sample interior areas;
- the roofs from the hatch access ladder;
- the parking garage;
- service rooms: mechanical, electrical, elevator, garbage and recycling, and storage;
- the perimeter site.

There was no access to the elevator pit or hoistway.

## Information Provided

We have reviewed the following documents:

- Strata Plan;
- Troy Life & Fire Safety Ltd. Annual Inspection Report, May 19, 2016;
- Bylaws, last updated December 18, 2015;
- Financial statements for the months ending January 31, 2016;
- Strata 35 year maintenance plan (2005-2040) and;
- Previous depreciation report by Chatwin Engineering, dated November 2, 2012

We have reviewed the following drawings:

- Architectural drawings by Nancy Mackin Architecture, dated July 1997;
- Structural drawings by Nancy Mackin Architecture, dated August 1998;
- Mechanical drawings by Nancy Mackin Architecture, dated August 1998; and
- Electrical drawings by McKAY Electrical Drafting Services Ltd., dated October 30, 1998.

Council members, Paul Schumacher and Francine Thivierge chaperoned the site visit, answered questions about the history and performance of the various building systems, and described capital expenditures and plans since the previous 2012 report.

The following service contractors were contacted:

- Thyssen Krupp Elevator (Elevator);

Photo No. 1: North Elevation

Photo No. 2: East Elevation

Photo No. 3: South Elevation

Photo No. 4: West Elevation

Photo No. 5: Balcony Doors

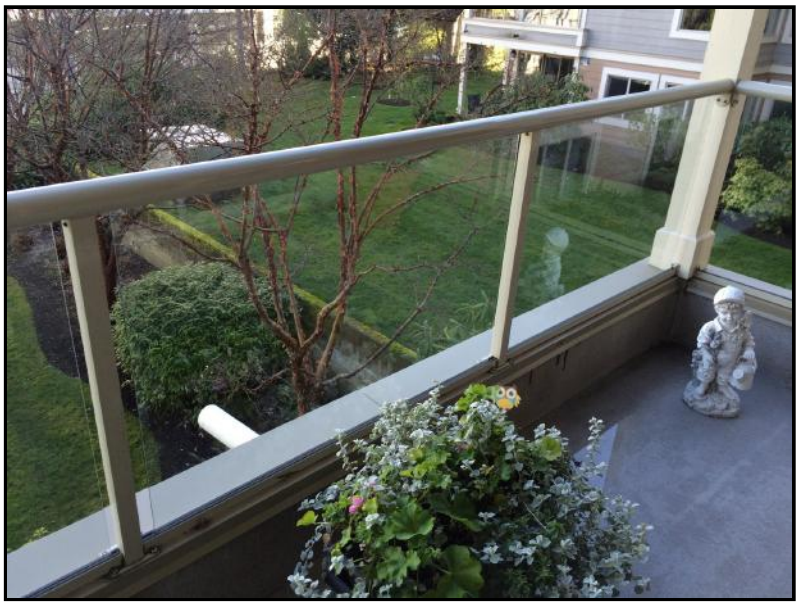


Photo No. 6: Balcony Railings

Photo No. 7: Balcony Posts

Photo No. 8: Balcony Waterproofing

Photo No. 9: Parkade Roof Membrane

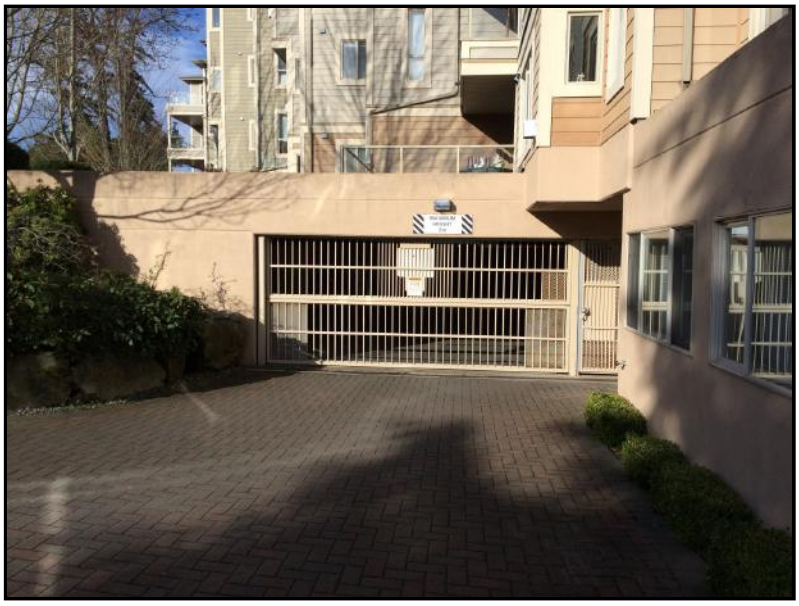


Photo No. 10: Parkade Gate


Photo No. 11: Parkade Motor

Photo No. 12: Fiber Reinforced Concrete (FRC) Siding

Photo No. 13: Vinyl Windows

Photo No. 14: Vinyl Windows - H Coupler

Photo No. 15: Caulking - Fenestration Sealing

Photo No. 16: Exterior Doors

Photo No. 17: Patio Waterproofing - Over Conditioned Living Space

Photo No. 18: Asphalt Shingles

Photo No. 19: Metal Gutters


Photo No. 20: Fire Alarm System

Photo No. 21: Lighting Emergency


Photo No. 22: Common Area Carpeting


Photo No. 23: Lobby and Parkade Vestibule Flooring

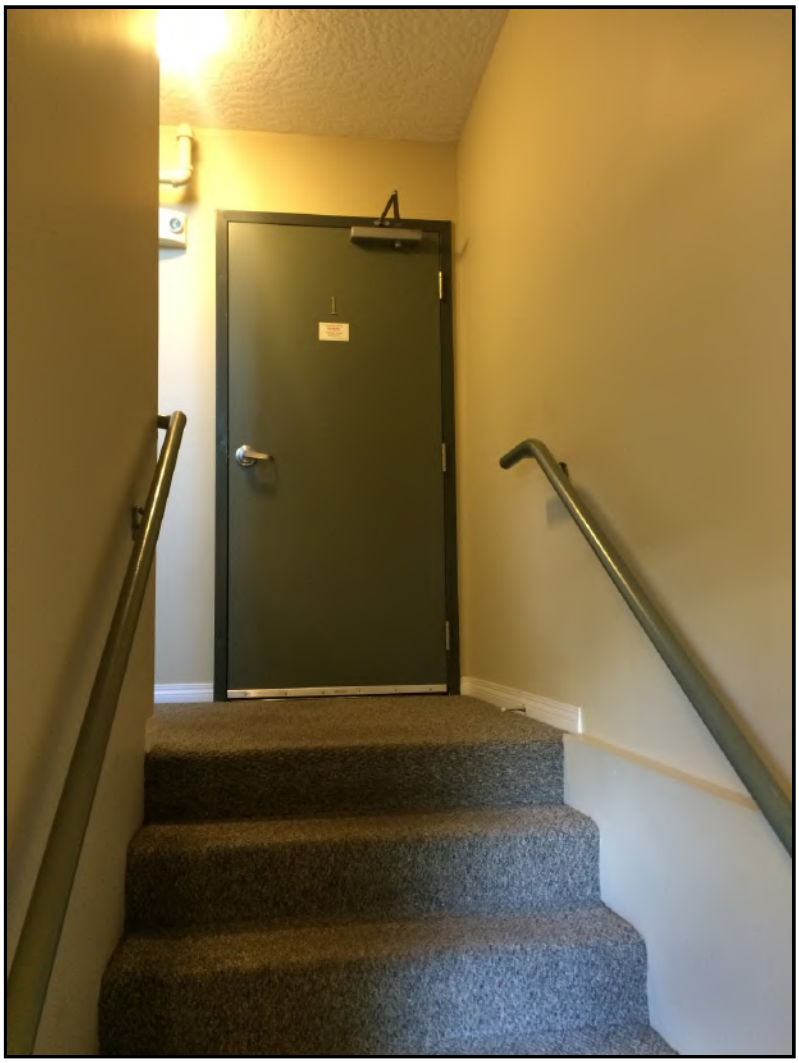


Photo No. 24: Interior Painting

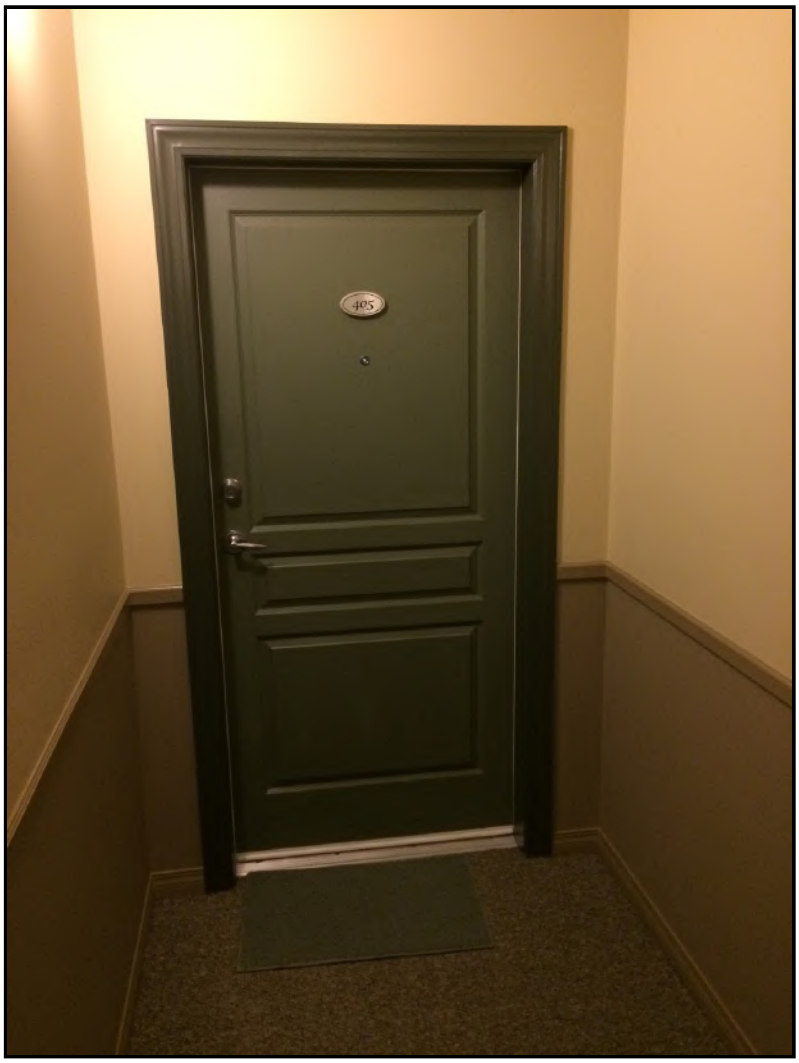



Photo No. 25: Interior Doors

Photo No. 26: Common Room Amenities

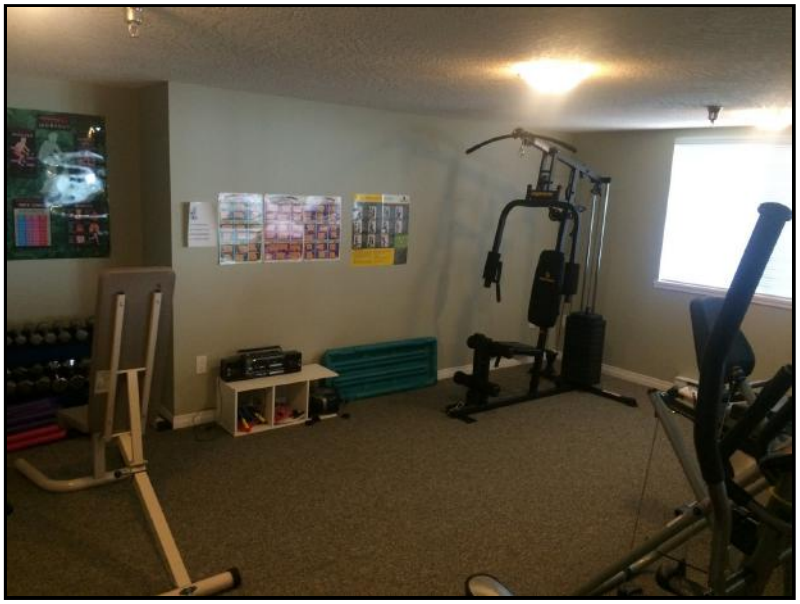


Photo No. 27: Gym Equipment

Photo No. 28: Concrete Walkways

Photo No. 29: Patio Pavers

Photo No. 30: Greenhouse


Photo No. 31: Irrigation Controls

Photo No. 32: Domestic Piping

Photo No. 33: Air Handling Unit

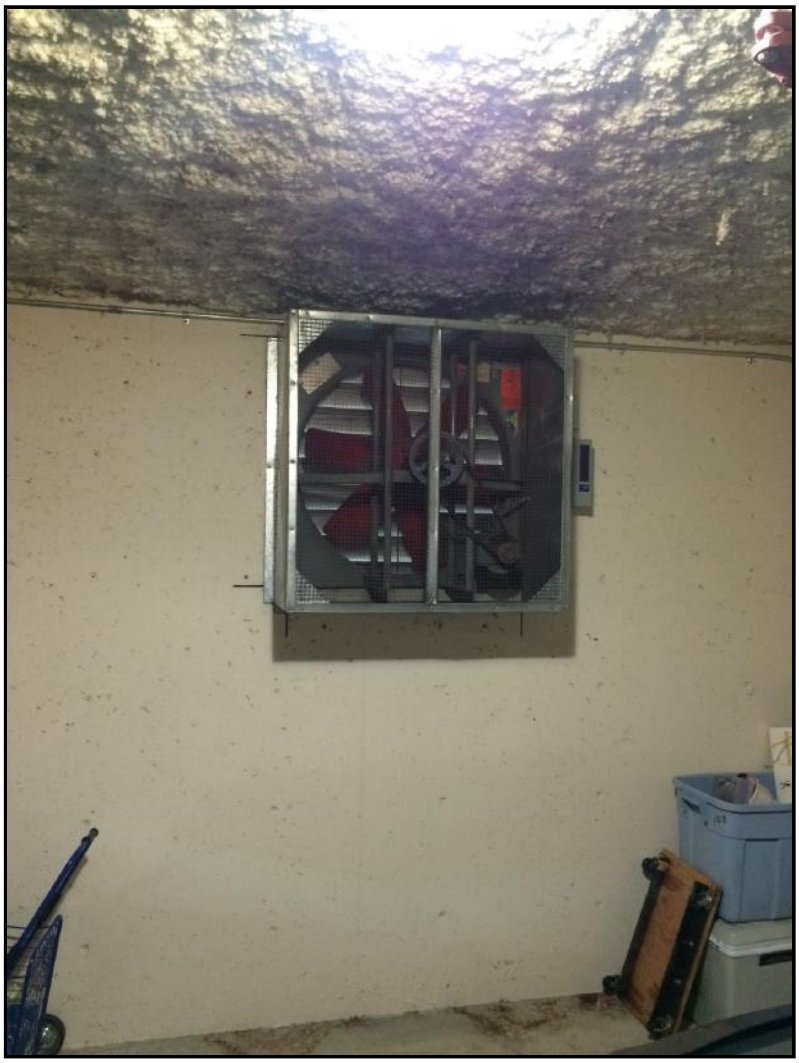


Photo No. 34: Parkade Exhaust

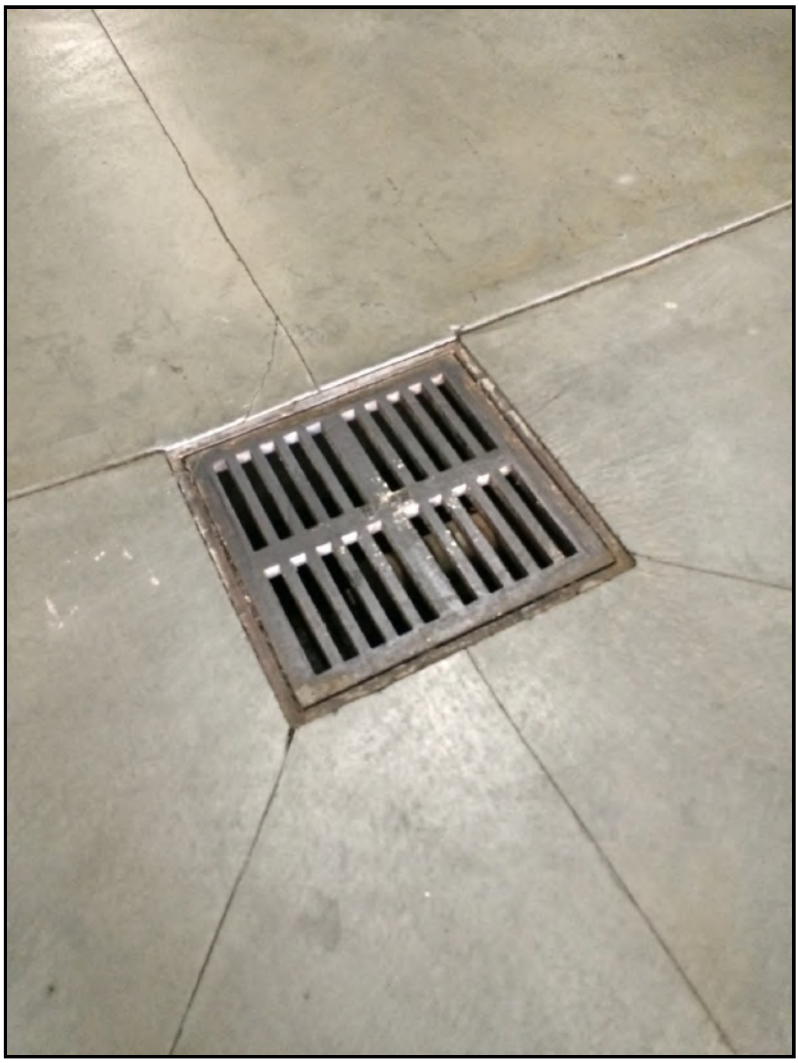


Photo No. 35: Storm Drain

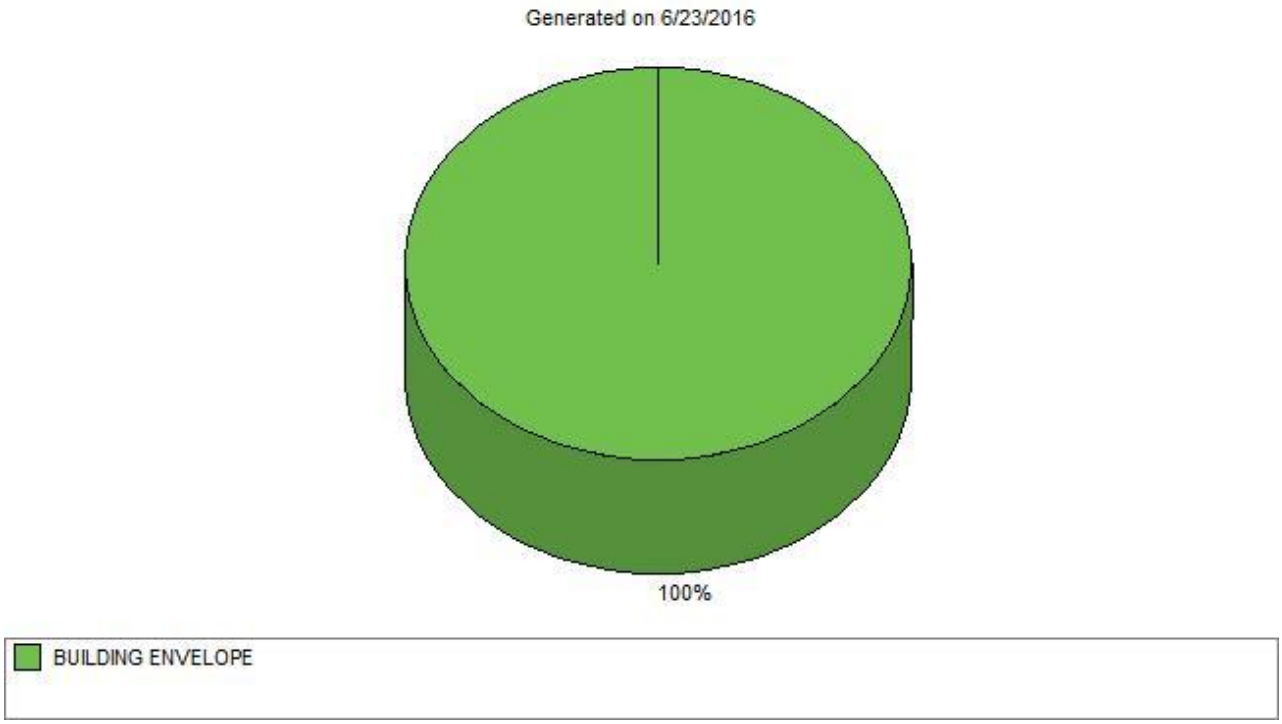
Photo No. 36: Exterior Lighting


Photo No. 37: Electric Hot Water Tank

Photo No. 38: Corridor Electric Wall Heaters

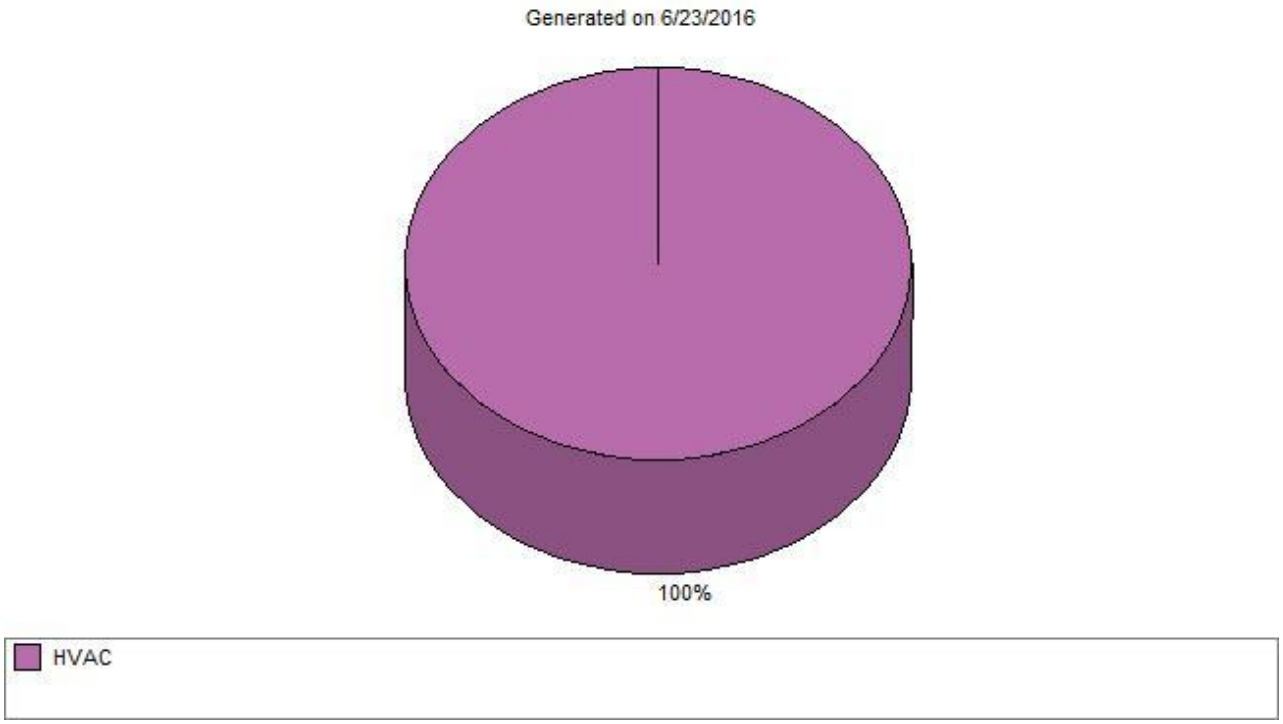
Photo No. 39: Elevator

# 2016 - Total Annual Expenditures by System




| Projects for 2016 listed by System | | |
|---|---|---|
| BUILDING ENVELOPE | | |
| Caulking - Fenestration Sealing Caulk the jambs of the exterior windows and doors | Forecasted | $18,506 |
| | **TOTAL:** | $18,506 |

# 2017 - Total Annual Expenditures by System

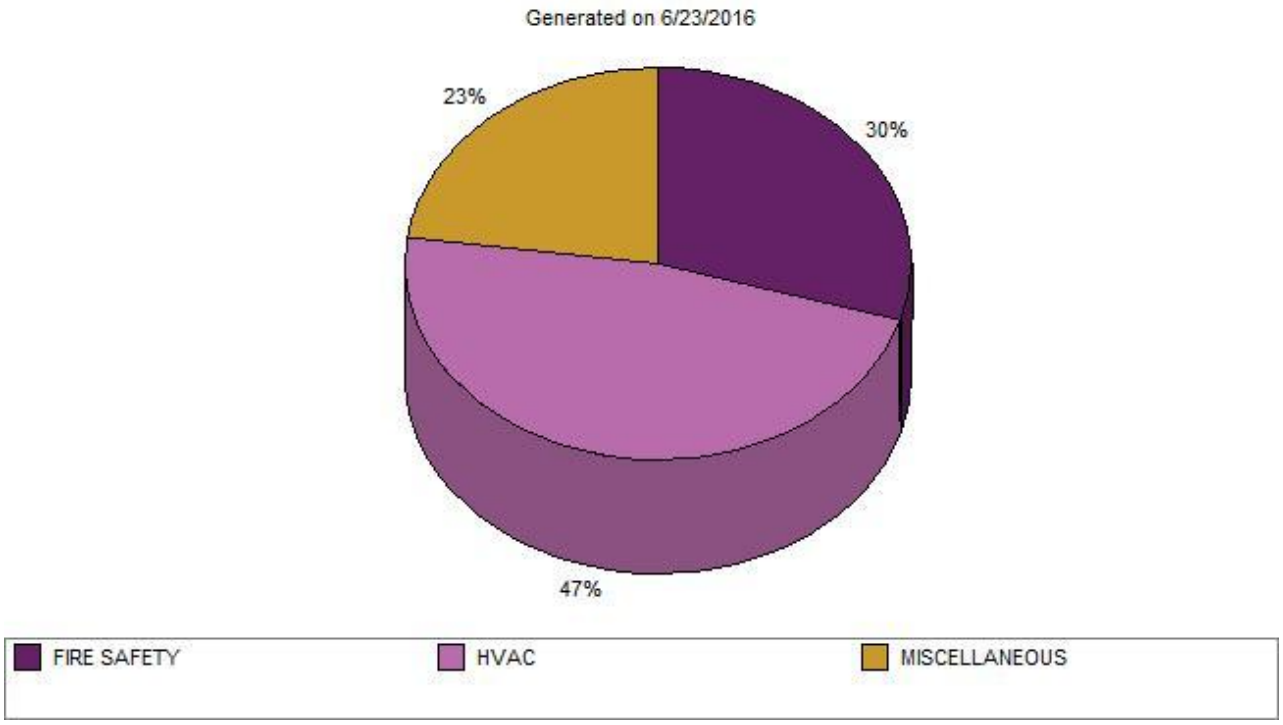



| Projects for 2017 listed by System | | |
|---|---|---|
| HVAC | | |
| Woodshop Exhaust Fan Install exhaust fan to wood shop for health and safety of users | Forecasted | $3,519 |
| | **TOTAL:** | $3,519 |

# 2018 - Total Annual Expenditures by System

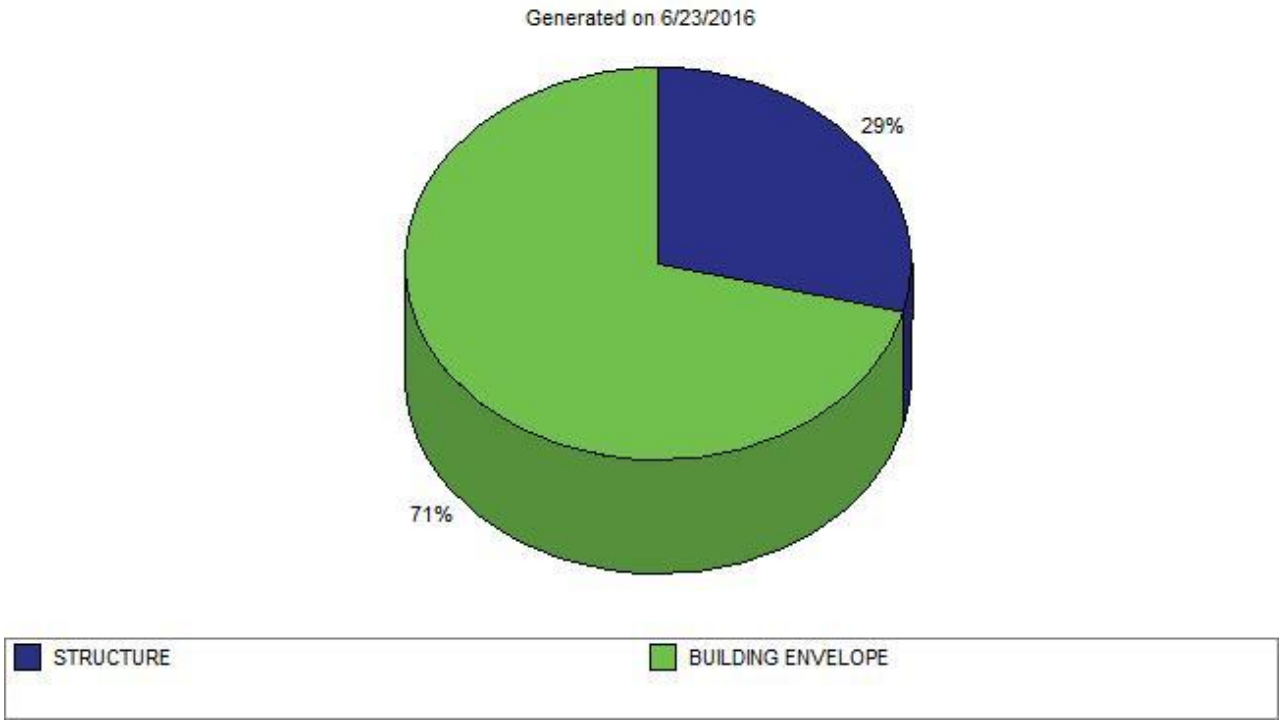
**No Project Expenditures data for this year.**

# 2019 - Total Annual Expenditures by System




| Projects for 2019 listed by System | | |
|---|---|---|
| FIRE SAFETY | | |
| Fire Alarm Warning System includes control and annunciator panels | Forecasted | $8,277 |
| HVAC | | |
| Replace AHUs | Forecasted | $13,180 |
| MISCELLANEOUS | | |
| Depreciation Report Update | Forecasted | $6,367 |
| | **TOTAL:** | $27,824 |

# 2020 - Total Annual Expenditures by System




| Projects for 2020 listed by System | | |
|---|---|---|
| STRUCTURE | | |
| Balcony Waterproofing | Forecasted | $51,846 |
| BUILDING ENVELOPE | | |
| Paint Parging and FRC Boards | Forecasted | $89,625 |
| Paint Wood Trim | Forecasted | $37,344 |
| | **TOTAL:** | $178,815 |

ThyssenKrupp Elevator

# Elevator Evaluation and Capital Budget:

## Silverwood

**121 Aldersmith Place**
**Victoria, BC**

**Prepared by: Scott Teuber**
**June 2016**
thyssenkrupp Elevator (Canada) Limited
1055 Henry Eng Place, Victoria, BC V9B 6B2
Phone: 250-474-1150 ext.1201 Fax: 250-474-6150
Email: scott.teuber@thyssenkrupp.com

## EXECUTIVE SUMMARY

On Behalf of **thyssenkrupp Elevator Canada Ltd**. *(tke)*, I am pleased to provide for the owners and your administration this detailed vertical transportation analysis for the existing hydraulic elevator.

The purpose of the report is to provide an assessment of the equipment's condition and to assist in your strategic capital asset planning by providing a recommended schedule of Capital Expenditures Upgrades. We will provide you with a description of equipment, assessment of the original equipment's condition, a review on the equipment's reliability and a list of proposed upgrades.

## SITE SUMMARY

The elevator located at the Silverwood was manufactured by Northern and installed by Plimley Elevator in 2000 and is in excellent operating condition.

## APPENDIX A: INVENTORY OF ELEVATOR EQUIPMENT

| | |
|---|---|
| OEM Manufacturer | Plimley/Northern |
| BC ID No. | 18794 |
| Type | Passenger, In-Ground Hydraulic |
| Operation | Selective Collective |
| Capacity/speed | 2500lbs/125fpm |
| Floors Served | 5 (42" in-line entrances, front only) |
| Door Operator | ECI 85 |
| Door Detector | Safety Edge |
| Communication | None |
| Power Unit | 30HP submersible with Blaine Valve |
| Cylinder | Installed with safety bulkhead and PVC lining |

## EVALUTATION OF EQUIPMENT:

| **Machine Room Equipment:** | **Condition** | **Notes** |
|---|---|---|
| • Controller | Good | Northern Controller<br>**Solid State Soft Start could be installed** |
| • Power Unit | Good | 30 HP submersible |

| Door Equipment: | Condition | Notes |
|---|---|---|
| • Door Operator | Good | ECI 895 |
| • Door Detector | Poor | Mechanical Safety Edge<br>**Upgrade to a multi-beam door detector should be considered** |

| Cab & Pushbutton Fixtures | Condition | Notes |
|---|---|---|
| • Fixtures | Good | Dupar US 89 push buttons |
| • Communications | Poor | Non Code Compliant Hand Set<br>**Code compliant hands free auto-dialing phone should be considered** |

## RECOMMENDTIONS / PERFORMANCE IMPROVEMENTS

**Phone** – The code did not require the elevator to have a hands free device at the time of installation, however a hands free auto dialing phone could easily be installed into the cabinet to meet current safety code. With the push of a single button the auto-dialer will put passengers in touch with our trained emergency call representatives.

**Rupture and Shut off valves -** The rupture valve is a code required item that will stop the elevator in the event of an over speed in the down direction. This device is the only free fall protections for a hydraulic elevator. It is designed to stop the elevator should the oil line rupture or the reservoir is damaged during an earthquake.

**Solid State Starter –** A reduced voltage starter (or soft start) should be added to the controller to protect the existing components. This device will control the current draw, thus helping to reduce the total facility electrical use.

**Maintenance –** Our Service Technicians have been performing regular monthly inspections on this unit since the original installation. All records and tests required by the BC Safety Authority are up to date.

**SUMMARY**

The existing equipment is in excellent running condition and there have been very few service issues since the elevators installation. However it is recommended that the owners consider the proposed upgrades as soon as budgeting allows in an effort to meet current safety and performance expectations.

On behalf of **thyssenkrupp Elevator**, I thank you for your business opportunity to provide this technical assessment on your vertical transportation. Elevators are often the most forgotten capital asset in a building, and it is our professional obligation to all of our service customers to advise you on the status of your equipment and the options available to you in the years to come. Please refer to the budget schedule for the owners review and consideration.

If you require any further information, or if you have any questions or concerns, please contact me directly at 250-474-1150, ext 1201.

Sincerely,

_____

Scott Teuber
**thyssenkrupp Elevator (Canada) Ltd.**

ThyssenKrupp Elevator

## SILVERWOOD CAPITAL BUDGET / PLAN

| Scope of Work | Short Term Recommendations | Long Term Recommendations | Optional |
|---|---|---|---|
| Auto-dialer | $1,400 | | |
| Pipe Rupture Valve | $4,600 | | |
| Solid State Starter (Soft Start) | $7,800 | | |
| Hydraulic power unit (motor, pump, valve and oil reservoir) | | $25,000 | |
| Controller and Door Operator upgrade, Landing system and all related hoistway wiring | | $49,000 | |

- Prices listed are in current (2016) value
- All applicable taxes are extra
- Please note that the above prices are estimates only
- Prices include submissions and inspections by BC Safety Authority (as required)

**ThyssenKrupp Elevator (Canada) Limited.**
1055 Henry Eng Place, Victoria BC V9B 6B2, Canada
Phone: 1 (250) 474-1150 Ext: 1203 Fax: 1 (250) 474-6150