

**Strata Plan BCS 4218 – Richards
1088 Richards Street, Vancouver, B.C.**

**CONTINGENCY RESERVE FUND STUDY/
DEPRECIATION REPORT:**



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1.0 INTRODUCTION:

1.1 Purpose of the Contingency Reserve Fund Study

In our opinion, prudent financial planning of a structure requires that contributions to the Reserve Fund be calculated on the basis of expected repair and/or replacement costs together with life expectancies of the common elements. *The British Columbia Strata Property Act, Part 6 – Finances, Division 1* requires the following:

Operating fund and contingency reserve fund

92 *To meet its expenses the strata corporation must establish, and the owners must contribute, by means of strata fees, to*

b) a contingency reserve fund for common expenses that usually occur less often than once a year or that do not usually occur.

In addition, on December 14, 2011, new amendments to Section 94 were made with the new regulations, requiring the strata corporations which comprise of five or more strata lots to comply with the legislation to obtain a Depreciation Report (Contingency Reserve Fund Study) by December 14, 2013 from a “qualified person” unless the strata corporation passes a resolution by $\frac{3}{4}$ vote at an annual or special general meeting within the described period to not conduct the study for the next 18 months. A further vote at the end of the 18 months would be necessary or the requirement would come into effect again.

The Consultant, Spratt Emanuel Engineering (SEE) was retained by Strata Plan BCS 4213 to carry out a Contingency Reserve Fund Study to assess the existing condition of the Strata Plan BCS 4213’s common elements to estimate the scope and timing of repairs or replacement which are likely to be required in order to prepare a schedule of required annual contributions to the Reserve Fund.

A Contingency reserve fund study is not intended to accurately predict the failure of building systems; it is a planning tool intended to facilitate the provision of adequate funds as required to address predictable capital replacements. Regular updates of a Reserve Fund Study are required to enable current information relating to component condition and replacement costs to be made.

Before any significant program of repair or replacement is implemented, SEE recommends that a suitably thorough engineering investigation or review be undertaken.

1.2 General Building Description

The following is a brief summary of general building description.

Building Address	1088 Richards Street, Vancouver, B.C.
Owner	Strata Plan BCS 4213
Building Type	High-rise Residential Condominiums and Townhomes
Principal Occupancy	Residential
Other Occupancy	None
Date of Construction	2011
Applicable Building Code	Vancouver Building By-Law 2007
Number of Storeys	18
Number of Suites	226
Type of Construction	Non-Combustible Concrete
Sprinklered	Yes
Window System	Insulated glazing units in punched and window wall aluminium frames
Window Colour	Brown
Number of Storeys	18
Adjoining Properties	South: Helmcken Street, Vancouver West: Richards Street, Vancouver North: Low Rise Townhouse Buildings East: Residential Alley
Parking	4-level Underground Parkade

The building of interest, the Richards includes 226 residential suites in a 18-level high-rise residential condominium building. The north wing consists of 8 levels only and includes townhouse units. There are two heritage homes which form part of the Strata Plan BCS 4213 at the south side of the building. The buildings are constructed on an underground four-level concrete parkade.

2.0 TERMS OF REFERENCE:

2.1 Authorization to Proceed

Spratt Emanuel Engineering prepared this report at the request of Mr. Baldev Sondhi on behalf of Strata Plan BCS 4213 – Richards.

This study is to provide guidance to the Strata Council Members for considering reasonable contributions to the Contingency Reserve Fund commencing with the next Fiscal Year (December 1, 2013 to November 30, 2014).

2.2 Investigation Procedures

Spratt Emanuel Engineering completed the assessment of the building envelope, finishes and structural, mechanical and electrical aspects of the building. The following investigation procedures and analysis were carried out as part of this Study.

1. Preparation of a questionnaire regarding the present financial situation of the Strata, known problems and repair histories or plans
2. Review of Declaration and Description, current By-Laws, and Schedules, of the Strata, where applicable, which outline the Unit Boundaries
3. Review of the financial situation, reported deficiencies and concerns, present maintenance philosophies and any other information considered pertinent by Management, including a review of the following (where available and/or applicable):
 - (a) most recent audited financial statement of the Strata;
 - (b) all reciprocal cost sharing agreements of the Strata;
 - (c) most recent Contingency Reserve Fund Study of the Strata; and
 - (d) most recent notice of future funding of the Reserve Fund sent to the Owners.
4. Inventory and quantification of the common element building components
5. Visual inspection of samples of all accessible and exposed building components from ground and roof levels, corridors, stairwells and mechanical and electrical rooms, including:
 - (a) visual inspection of the property, including each common element component where practical;
 - (b) verification of records of the Strata; and

- (c) interviews with those of the Strata's Directors, Officers, Employees and Agents that the persons conducting the Study consider appropriate.
6. Review of the following (where available and/or applicable):
 - (a) all existing warranties, guarantees and service contracts for each common element component;
 - (b) the as-built architectural, structural, engineering, mechanical, electrical and plumbing plans for the property;
 - (c) the as-built specifications for the building;
 - (d) the plans for underground site services, site grading, drainage and landscaping, and television, radio or other communications services for the property;
 - (e) the repair and maintenance records and schedules; and
 7. Preparation and submission of draft report with associated financial analysis for review
 8. Preparation of 3 copies of final analysis and report, that takes into account discussions arising from the draft report

2.3 Limitations

This Contingency Reserve Fund Study is designed to provide sufficient information to enable the selection of suitable repair and maintenance strategies, while trying to balance the cost of obtaining this information. Some of the findings detailed in this Study are based on random sampling, and some of the findings are based on a visual review of the surface conditions. Although every attempt is made to provide a full and accurate study, we are limited by available records and visual observations.

The review associated with this Study was limited to technical, construction and performance items. Spratt Emanuel Engineering has not conducted investigations into the nature and reasoning for the deficiencies found at the site and property whether visually inspected or of an inherent, hidden nature. As such, no legal survey, soil tests, assessment for environmental contaminants, engineering investigations, detailed quantity survey compilations, or exhaustive physical examinations have been made.

The recommendations detailed in this Study are based on our experience and on generally accepted practices. The long-term effectiveness of these recommendations cannot be assessed beyond present knowledge and experience.

The recommendations detailed in this Study are based primarily on technical considerations. A detailed assessment of previous financial records, studies and reports has not been made in order to substantiate the development's current financial position.

Cost estimates presented in this Study are based on estimated quantities and the Consultant's judgement and experience with similar projects. The cost estimates are entirely preliminary and meant as order of magnitude budget estimates only, and are subject to confirmation by competitive tendering and when the repairs/replacement work is actually performed. The cost estimates are also subject to change and are dependent upon factors over which the Consultant has no control, including but not limited to: market conditions; contractor availability; methods and bidding practices; and the cost of labour, materials, and equipment.

The recommendations detailed in this Study are based on the information available at the time of carrying out the Study. Should associated repair/restoration/replacement work reveal additional information, the recommendations may have to be revisited.

The Client to whom this Study report is addressed may use it in deliberations affecting the subject property only, and in doing so, the report must not be extracted; it must be read and used in its entirety for this specific property.

Specifications should be prepared for any of the work recommended within this Study to facilitate proper workmanship and material use and to obtain competitive bids from suitably qualified contractors.

Competent site review should be carried out during the course of any remedial work to facilitate compliance with the specified requirements and as required to review previously unidentified conditions.

SEE has not reviewed life-safety or environmental issues, as these areas are outside the scope of our work. We were not made aware of any environmental issues.

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

3.0 CONTINGENCY RESERVE FUND STUDY:

The subsequent sections of this Study provide a cataloguing of each of the capital common element components of this Development as well as related observations, discussions, and recommendations. Budget figures are provided for each item of work together with our estimate of the year or years in which the work is anticipated to be undertaken.

The actual year during which the various items of work are carried out will be dependant on a number of factors that may not exist or be apparent at the time this study was prepared given the level of study undertaken. In addition, issues of a non-technical nature will also often influence the timing of some capital repair and replacement work.

The anticipated schedule provided herewith for capital projects is based on a number of factors, both technical and non-technical in nature that may be interdependent with other repair and replacement work. For this reason we recommend a detailed list of capital projects carried out be kept for periodic comparison with this Study. We further recommend that such a comparison be made on a yearly basis for review as part of a regularly scheduled Strata Council meeting. This component of the meeting would ultimately serve to determine when a formal update of the Study is required. It is recommended that this meeting be attended by your current Reserve Fund Planner.

Yearly updates may prove to be excessive unless significant departures from the anticipated repair and replacement schedule are realized. However, a detailed technical review of the various building components should not necessarily wait for scheduled updates of the Study. A more appropriate procedure would be for the scheduling of updates to be based, at least in part, on the results of technical reviews. Yearly reviews will also serve to identify maintenance issues that may prolong the life of the affected components or may reduce the potential for progressive deterioration of a particular building component. The cost projections detailed in this study are based on timely repair schedules.

The following Glossary details a number of the terms used in the presentation of our findings and recommendations.

3.1 Glossary of Terms

1. Building Component

This term refers to the various parts of the building and property under discussion and can be an item, such as a roof, or a system, such as the domestic hot water system.

2. Life Cycle

Life cycle is the anticipated life span of a component, starting from the date of original construction/installation or the date of repair or replacement of the component. Life cycle is usually discussed as a frequency. The life cycle is based on the assumption that regular service and maintenance is carried out to the particular building. Regular maintenance is very important to ensure anticipated life cycles are achieved. A cycle of 100 years indicates that the item will only be required once in the duration of the study or life of the building.

3. Life Remaining

This is our estimate of how long from the present the work will be required. This estimate is based on our assessment of apparent conditions and not simply the time remaining in the component's "standard" life. The actual life achieved or Service Life of a building component is dependant on a number of factors and assumes regular maintenance is completed.

4. Replacement/Repair Costs

The cost figures provided in this report are estimates of the cost of the related repair or replacement as described herewith. The estimates are based on our experience with work of a similar nature. In some cases specific costs are available, and have been included accordingly. All costs are in current dollars and include allowances for applicable tax, engineering, design, and inspection and testing. Engineering, design, and inspection or testing allowances range from 0 to 15% of the projected replacement/repair costs depending on the specific nature of the work. Costs are based on replacing or repairing the components to a similar quality to that as existing.

Where expenditures are indicated in subsequent years the dollar figures provided represent current cost figures subjected to inflationary increases.

5. Operating Budget

Regular repair and maintenance costs are difficult to accurately predict on a cost-by-cost basis and are usually paid for from an Operating Budget. SEE has not included an allowance for any such item in the reserve fund contributions. SEE has also assumed that any item that cost less than \$500 to complete will be managed out of the Operating Budget, unless otherwise detailed within this Study.

Caution is required to ensure that expenditures assumed under the Operating Budget are not related to progressive problems that will require general replacements or increasing expenditures with time. Compilation of expenditure records by Management together with regular updates of the Study will assist in monitoring and correcting for such conditions should they exist or develop over time.

6. Opening Balance

Opening Balance refers to the balance in the Reserve Fund at the start of the current fiscal year.

7. Minimum Desired Balance

This is the present value of the minimum desired Reserve Fund balance on which SEE has based the analysis. In the event this is changed, our cost projections are subject to change as well. SEE assumes that no provision for a negative balance is in place.

The legal minimum value of the desired balance is 25% of the current Operating Budget. However, SEE recommends that this amount be increased and maintained for the next 30 years for unforeseen emergency work and budget overruns. SEE recognizes that arriving at a suitable minimum desired balance is subject to many considerations, some of which are subjective and are particular to management philosophy. In calculation of a minimum desired balance, SEE has utilized a mean value of the most and least expensive expenditures arising in the next 30 years.

Reserve funds are needed to provide for capital expenditures in the future that are both scheduled and become necessary through unexpected equipment breakdown and unexpected budget overages.

SEE recommends sufficient funds be allotted for the unexpected breakdowns that would require immediate attention. Examples would be boilers, elevators, roofs, etc. It is difficult to determine a suitable amount for these items without an

in depth evaluation and statistical analysis. Even with such, a review of this type may appear subjective, such that practical experience and intuition may be more suitable tools in arriving at a decision on a minimum balance.

Account should also be taken of the nature and extent of the major items of work scheduled in the foreseeable future (say 10 years following) and the sensitivity of that work to changes due to progressive deterioration or overruns.

Another component should be considered for uncertainty relating to future market forces and technological and legislative changes. Recent examples include the fire retrofit legislation, roof safety anchor legislation, refrigerant changes, etc. These are not possible to predict accurately.

8. Reference Year

For the purpose of this study, all reference to life remaining in years are referenced to the current reference fiscal year 2013 running from December 1, 2012 to November 30, 2013.

9. Critical Years

Critical Years occur, by definition, when the Reserve Fund balance in today's dollars approaches the Minimum Balance.

The First Critical Year generally governs the minimum level of contributions to the Reserve Fund required up to the first critical year. Subsequent Critical Years govern the contributions required beyond the First Critical Year.

10. Interest Rate

The assumed annual interest earned on the Reserve Fund balance. Any interest gained must be added to the Reserve Fund. It is not possible to reflect future actual interest rate fluctuations in our Reserve Fund calculations. As a result SEE has used a figure representative of current rates.

Minor variations in the assumed rate of interest and actual interest rates will not, in our experience have a significant impact on the accuracy of this Study. A sensitivity analysis shows variations in the difference between the rate of inflation and interest rates to be more significant to the accuracy of this Study. Also experience has shown that this difference is not subject to frequent significant fluctuations.

11. Inflation Rate

The annual inflation rate assumed to increase current cost estimates to arrive at future expenditure predictions. Interest earned on investments is generally greater than inflation due to a Time Value of Money component included in the interest rate.

12. Initial Contribution Increment

This is the percentage rate at which the Reserve Fund contribution is increased each year prior to the First Critical Year. Ideally contributions should be increased to match inflationary increases, although this may not accommodate increases to address current or future shortfalls. It should be noted that this increase is only applicable to the contribution towards the Reserve Fund, which is a percentage of the monthly Strata Fees.

13. Post-Critical Contribution Increment

This is the percentage at which contributions are increased after the First Critical Year. Contribution requirements often drop after the First Critical Year and therefore related increases need not generally exceed inflation.

4.0 EXPECTED REPAIRS AND REPLACEMENTS:

1.0 STRUCTURE

1.1 Building

The building structure is constructed of conventionally reinforced concrete, built over a four-level underground parkade. The parkade structure includes a parkade roof suspended slab, three intermediate suspended slabs, interior columns and exterior walls that are conventionally reinforced. The floor slab of the parking level (P4) is constructed on grade ("slab-on-grade"). Foundation walls are generally at the perimeter of the parkade and are also reinforced concrete.

SEE has assumed that the main elements of the structural framing of the building, consisting of interior columns, shear walls, slabs and walls will last the life of the structure. Significant repairs or expenditures of such components are unlikely within the service life of the building structure.

1.2.1 Parkade Roof Slab at Grade – Localized Repairs

1.2.2 Parkade Roof Slab at Grade – Waterproofing Membrane Replacement

The underground parkade roof slab buried under the soft and hard landscaping has a waterproofing membrane applied on the top surface. SEE has budgeted for future localized repairs to address water ingress as it develops and extend the life of the roof slab waterproofing membrane. Eventually, such localized repairs will not be feasible and full replacement of the waterproofing membrane will be required. SEE has also budgeted for full replacement of the underground parkade roof slab waterproofing membrane.

1.3 Parkade Walls – Periodic Repairs

SEE recommends budgeting for localized sealing of the exterior walls through injection on an as needed basis.

1.4.1 Parkade Suspended Slabs – Waterproofing Membrane Replacement

1.4.2 Parkade Suspended Slabs – Localized Repairs

P1, P2, and a portion of P3 levels consist of intermediate suspended slabs which have been reinforced with steel bars for flexural bending. In order to prevent premature deterioration of the steel bars, the concrete slabs have been protected with a cold liquid-applied polyurethane traffic grade waterproofing membranes. SEE has budgeted for a complete replacement of the waterproofing membrane, as well as periodic localized repairs. Minor membrane deterioration was noted during

the site review which can be addressed with localized removal and application of membrane repair patches.

1.5 Parkade Floor P4 – Slab on Grade Localized Repairs

The P4 slab and a portion of the P3 slab of the parkade are constructed as slab-on-grade. The slab is not structural not subject to freeze/thaw, and therefore typically does not require major repairs or replacement for the life of the building.

SEE has allowed for periodic concrete repairs of the parkade walls at all levels on an as needed basis to address repairs due to scaling of concrete or slab settlement.

1.6 Parkade Periodic Inspections

SEE recommends budgeting for a periodic review of the parkade on a regular basis to monitor the existing condition and recommend local repairs if necessary.

1.7 Parkade Painting

The underground parkade interior walls on each parking stall have been painted, which appeared to be in good condition. SEE has allowed for painting of the parking stall lines and numbers.

1.8 Parkade Entrance Doors

There is one electronically controlled overhead parkade door that allows vehicles to enter and exit the parkade. There is an addition overhead parkade door that separates the Visitors' Parking Area to the Resident Parking Area. During the site review, both of the doors were operating acceptably.

SEE has provided an allowance for the replacement of the parkade doors and associated equipment. SEE has assumed that future painting and maintenance of the door will be covered by the Operating Budget.

2.0 ROOF

The building roof system consists of an inverted roofing membrane assembly (IRMA) with gravel ballast, filter fabric, 4" of extruded styrene (XPS) rigid insulation boards on the waterproofing membrane. The penthouse level terrace decks have 2' by 2' concrete unit pavers on top of the filter fabric and XPS insulation boards.

Metal cap flashings with standing seams have been installed throughout the perimeter of the roof parapets. Concrete eyebrow overhangs at the perimeters of the roof levels and at slab edges have been protected with cold liquid-applied polyurethane waterproofing membrane.

The roof system at the 8th level terrace deck is heavily covered with soft and hard landscaping materials. It is assumed that the deck has a similar waterproofing membrane system as the main roof.

The two heritage homes located at the south side of the property have sloped asphalt shingled roofing membranes with underlay installed. The granulated asphalt shingles appeared to be fairly new and in good condition.

2.1.1 Roof System – Waterproofing Membrane Replacement

2.1.2 Roof System – Heritage Homes- Sloped Asphalt Shingles Replacement

2.1.3 Roof Systems – Periodic Repairs

Local problems with leakage that may develop prior to the time of general re-roofing are assumed to be managed out of the budget for roof maintenance. SEE expects that a complete replacement of the roof waterproofing membrane will be needed in about eventually roughly in 30 years. SEE has budgeted for separate replacements for the waterproofing membranes of the main roof/penthouse decks/8th level terrace deck and the heritage homes.

We recommend budgeting for the regular maintenance of the roofs to address localized leakage and defective sealants, etc. Periodic maintenance will help to extend the life of the roofs.

2.2 Fall Protection Systems - Roof Safety Anchors

Current legislation requires a fall protection system to be installed to facilitate window washing operations from the exterior. There are a total of 81 safety anchors (38 cast in recessed wall anchors, 13 cast in place roof anchors, 29 cast in place wall anchors, and 1 adhesive wall anchor) on the roof, which have been certified. A fall protection system drawing and a logbook are posted at the roof access door. SEE has budgeted for replacement of the fall protection systems. It is

assumed that annual maintenance and testing of the roof safety anchors are funded out of the operating budget.

2.3 Concrete Eyebrow Overhang: Waterproofing Membrane Replacement

SEE budgeted for replacement of the cold liquid-applied waterproofing membrane at the top horizontal surfaces of the concrete eyebrow overhangs. It is recommended that this work be carried out at the time of the balcony slab waterproofing membrane replacement.

3.0 EXTERIOR WALLS

3.1.1 Brick Masonry Unit Wall System – Localized Repairs

3.1.2 Brick Masonry Unit Wall System – Maintenance

3.1.3 Brick Masonry Unit Wall System – Sealer Application

A vast majority of the building walls have been constructed rain-screened brick masonry unit walls (BMU) with two types of colours. Where visible from the ground level and the 8th level terrace deck, the BMU wall system appeared to be in good condition.

SEE has provided an allowance for localized repairs of the stucco walls in the future. Periodic inspections and maintenance work such as power-washing, and was budgeted under the operating budget. SEE has allowed for periodic application of a weather-resistant brick sealer in the future, which will extend the overall service life of the BMU walls.

3.2.1 Exterior Exposed Mass Concrete Walls – Localized Repairs

3.2.2 Exterior Exposed Mass Concrete Walls – Maintenance

3.2.3 Exterior Exposed Mass Concrete Walls – Paint Coating

A portion of the building walls, particularly at window sills, has been constructed with cast-in-place exterior exposed mass concrete coated with an acrylic coating. The cast-in-place exterior exposed concrete, where visible, appeared to be in good condition.

SEE has provided an allowance for localized repairs of spalled and deteriorated exposed concrete walls in the future, on an as needed basis. Periodic inspections and maintenance work such as power-washing, and paint coating were assumed to be funded under the current exterior maintenance schedule. SEE has also budgeted for re-painting the concrete walls in the future.

3.3 Wood Siding – Heritage Homes - Replacement

SEE has budgeted for complete replacement of the existing face-sealed wall assembly with wood siding into a rain-screened system in the future to comply with the current building code requirement. This is considered to be a more conservative budgeting approach since City of Vancouver allows for alteration of the exterior of a heritage building.

3.4.1 Balcony Slabs – Waterproofing Membrane Replacement

3.4.2 Balcony Slabs – Localized Repairs

The concrete balcony slabs throughout the building have been protected with cold liquid-applied polyurethane waterproofing membrane on the top horizontal surfaces. SEE has budgeted for complete replacement of the waterproofing membranes in the future. SEE has also allowed for repairing the balconies and the membranes on an as needed basis, which includes minor repairs to the balcony guardrails.

3.4.3 Balcony Guardrails – Replacement

The balconies and the roof level have side and top-mounted aluminium guardrails with glass panels installed. SEE has budgeted for complete replacement of the aluminium guardrails in the future.

4.0 EXTERIOR WINDOWS AND DOORS

4.1.1 Insulated Glazing Units

4.1.2 Insulated Glazing Units - Offset

4.2.1 Window Systems - Replacement Phase I

4.2.2 Window Systems - Replacement Phase II

4.2.3 Window Systems - Replacement Phase III

4.2.4 Window Systems - Replacement Phase IV

The window systems of the building consist of insulated glazing units in brown aluminium frames in punched windows and window wall systems. Insulating glazing units (IGUs) are considered to fail when the perimeter seal fails and allows moisture into the cavity to the extent that condensation or scumming on the inside surfaces of the glass results in vision problems. Replacement is usually required for aesthetic reasons. Typically, IGUs are expected to last 10 to 40 years.

SEE has provided an allowance to replace failed IGUs on an annual basis as they fail until 3 years prior to the complete replacement of windows. It is to be noted that the Offset item is present strictly for the mathematical purpose of 'offsetting' the

cost of IGU replacement after the actual window replacement. We recommend that Management keep accurate records of these replacements to facilitate future budgeting.

SEE has also budgeted for complete replacement of the window systems in the building. The project was divided into four phases in order to minimize the financial burden. East and south elevation windows have assigned to be replaced as Phases I and II, respectively.

4.2.5 Window Systems – Heritage Homes - Replacement

Complete replacement of the windows in wood frames is included in the exterior cladding upgrade in item #3.3.

4.3 Window Refurbishment

Window minor sealants and hardware repair work to the existing windows is assumed to be funded out of the Operating Budget, on an as needed basis.

4.4 Sealants

Sealants become rigid as they weather. Local re-caulking of defects on an as-needed basis is assumed to be covered by the Operating Budget. However, before deterioration becomes a general problem resulting in more frequent leakage, a general program of removing and replacing sealants is recommended.

Caulking over existing defective materials is not recommended since the defects in the underlying caulking tend to reflect through to the surface of the new material in a relatively short period of time. Any caulking repairs should include for the complete removal of the existing materials and replacement with a good quality sealant material.

SEE has budgeted for replacement of polyurethane joint sealants. This will include removing and replacing all existing sealant joints and at window perimeters joints.

4.5 Balcony/Terrace Deck Doors

Replacement of this item is already included in the window replacement item #4.2.1 to 4.2.4.

5.0 INTERIOR FINISHES

Replacement timing and costs of common element finishes are either required by loss of serviceability or as considered aesthetically necessary by the residents. We recommend the allowances in this section be reviewed carefully to ensure they conform to present goals and standards.

5.1 Suite Entrance Doors

SEE has assumed that the budget for partial replacement of the suite entrance doors is to be funded out of the operating budget. Based on the site review, the doors appeared to be in good condition.

5.2 Service Doors

SEE has budgeted for the replacement of all service room doors in the building.

5.3 Baseboards and Wood Trim

5.4 Light Fixtures – Common Area

5.5 Textured Ceiling Finish

5.6 Interior Finishes

5.7 Carpeting – Replacement

Carpets and wallpapers in common areas are typically replaced after 10 to 15 years, or more, as a result of a combination of wear, fading, changing trends in decorating and Owner's desires for a change of appearance. SEE has budgeted for the replacement work of the above interior components to be simultaneously undertaken to minimize labour costs.

5.8 Entrance Lobbies – Major Refurbishment

A program of the two entrance lobby refurbishing is usually required to update finishes to modern standards in order to maintain the value of the building. We recommend budgeting more than bare minimum allowances to accommodate this work.

An allowance for replacement of carpet rug, wall coverings, lighting, furniture and refinishing of tiles in the lobby is budgeted for under the refurbishment item.

5.9 Stairwells – Maintenance

SEE assumes maintenance work such as repainting the stairs, and minor repairs to the stairs and handrails, on an as needed basis, will be funded out of operating budget.

5.10 Exercise Room

SEE has budgeted for replacement of the interior finishes and exercise equipment in the Exercise Room on an as needed basis.

5.11 Building Services Office / Meeting Room

SEE has budgeted for replacement of the interior finishes, office equipment, and furniture in the Building Services Office/ Meeting Room on an as needed basis. This work item includes the appliances and the washroom finishes.

6.0 SITE

6.1 Hard Landscaping Maintenance

SEE has budgeted for a general maintenance work of the hard landscaping items, including the brick paver driveways, walkways, and concrete curbs.

SEE assumes that an allowance for periodic repairs to such hard landscaping features will be funded out of operating budget. Complete replacement of the hard landscaping materials will take place under item #1.2.2.

6.2 Soft Landscaping

SEE has provided an allowance for periodic repairs or replacement to the landscaping finishes, including replacement of plants at the main entrance planters at grade. SEE has also included in this allowance the 8th level terrace deck garden.

6.3 Playground Equipment – 8th Level Terrace Deck Garden

SEE has budgeted for replacement of the playground equipment on the 8th level terrace deck garden.

6.4 8th Level Terrace Deck Garden Features - Replacement

SEE has budgeted for replacement of various architectural features on the 8th level terrace deck garden including the wood decking, aluminium pergolas, water

fountain, architectural ledgerstone cladding, etc. as part of the main roof waterproofing membrane replacement item in #2.1.1.

7.0 MECHANICAL SYSTEMS:

The life expectancies are based on manufacturer's recommendations and on the performance of similar types of equipment in the past. Life expectancies may be slightly increased in some cases if the building systems are well maintained. Actual service lives may be found to be longer than estimates, but it is recommended that funds be available for repair or replacement at the earliest time that failures are likely to occur.

The preventive maintenance program will ensure that equipment will reach or surpass its normal design life. If maintenance is continued through the life of the building, system life spans may be extended further in future reserve fund updates.

7.1 Heating and Cooling

- 7.1.1 Industrial Commercial Equipment Make-up Air Unit #1**
- 7.1.2 Armstrong Plate Heat Exchanger SX13-750-10**
- 7.1.3 3/4Hp Glycol Circulation Pump**
- 7.1.4 Industrial Commercial Equipment Make-up Air Unit #2**
- 7.1.5 Electric Baseboard Heaters**

The high-rise hallways and common areas are heated by an Industrial Commercial Equipment (ICE) make-up air unit located in the P1 mechanical room. The MAU utilizes the domestic hot water supply as its heat source. DHW is used to heat a closed-loop glycol circuit via an Armstrong, model #SX13-750-10, plate heat exchanger. A 3/4Hp circulation pump identified on the mechanical prints as a B&G Series 60 circulates glycol between MAU #1 and heat exchanger.

The low-rise hallways and common areas are heated by an ICE make-up air unit located outside on the level 9 rooftop. The unit did not have a visible nameplate; however mechanical prints indicate it heats via indirect fired natural gas, outputting 283,000BTU/Hr at 81% efficiency.

Multi-louvered dampers are controlled with individual zone thermostats to control the damper and the amount of air to each zone. Individual zone control is effective in this case since only single runs of duct and simple controls are required at the air terminal. Most of the replacement cost will be associated with the make-up air unit. If ducts are kept clean and not physically damaged they could last the life of the building. SEE has assumed that they will be repaired or replaced on an as-needed basis out of the Operating Budget.

The make-up air units appear to be original and appear to remain in good condition.

Basement and service rooms are heated with individual wall mounted electric heaters with thermostats in each room. The electrical heaters appear to be in good condition and would be repaired or replaced out of the operating budget.

7.1.6 Trane 10 Ton AC, SCIH10032A01010 (Transformer Room)

A single Trane, model #SCIH10032A01010 air conditioner, rated at 10 tons, is provided to cool the electrical transformer room. Air conditioner warranties are up to 10 years and the expected lifespan is 15 to 20 years depending on amount of use. Having the unit professionally maintained and tuned will prolong its life. We have budgeted for the eventual replacement of this unit.

7.2 Plumbing Systems

Domestic water supply use is measured by a Sensus C² meter. Water pressure is boosted for circulation to the top floors with a Grundfos Triplex pump system. There are a number of gate, pressure reducing and check valves in the intake system to provide isolation of pumps and the water meter while providing continuous water supply. Pressure reduction valves (PRV) are located at various locations throughout the building to regulate booster water pressure to a usable pressure (not reviewed). Both domestic hot and cold water is supplied through copper piping to suites.

7.2.1 Domestic Water Heaters

7.2.1.12x RBI 8900 Series Boiler, #HW1685

7.2.1.22x Tjernlund Power Vent, #HS5

7.2.1.3 Tekmar Boiler Control, #274

There are two RBI, Model 8900 HW1685, gas-fired copper heating boilers, located in the P1 mechanical room. Each boiler is rated at 1,365k BTU output and have an 81% operational efficiency. The boilers serve the domestic hot water system and high-rise building heating system (MUA #1) and have been maintained. No signs of leakage or corrosion were present at the headers.

Boiler operation is controlled by a Tekmar Boiler Control, Model #274

Exhaust from both boilers is fan boosted by a Tjernlund Products, model HS5, high temperature squirrel cage Power Venter.

7.2.2 DHW Storage Tanks

7.2.2.1 4x A.O. Smith DHW Storage tank, #TJV-200M

7.2.2.2 1x Therm-X-Trol Expansion Tank, #ST-201V

Connected to the two boilers are four (4) A.O. Smith TJV-200M, 180 gallon hot water storage tanks. They maintain a supply of hot water readily available for distribution. The tanks are of glass lined steel construction, internally lined and externally insulated to reduce heat loss. The copper piping from tanks is also insulated which helps reduce heat loss.

The hot water tank supply is fed in series through a Therm-X-Trol ST-210V, 86 gallon expansion tank charged at approximately 40 psi.

The storage tanks should be inspected yearly, and the condition of the anodes checked. If sacrificial anodes are not replaced as necessary this will greatly affect the lifespan of the tanks. Every three to four years the domestic hot water system should be shut down, drained, and the interior of the tank inspected. With continued maintenance, the tanks should exceed their life expectancy. SEE has made an allowance for replacement of the tanks after 20 years of life.

7.2.2.3 1x A.O. Smith Electric Reheat Tank, #DVE-52 100

There is a single AO Smith Model DVE-52 100, 50 gallon, 12,000W electric hot water reheat tank. This tank serves to reheat the domestic hot water circuit in times of low usage. A leak was noted in the tank during the inspection. We understand the building manager is working with the manufacturer to have this repaired/replaced under warranty.

7.2.3 Circulating Pumps – Domestic Water Booster

7.2.3.1 3x Grundfos CRE20-3 Booster Pumps

To distribute water to the upper levels of the building, a triplex booster pump system is located in the Water Entry room in P1. Three Grundfos Model # CRE20-3, 7.5HP booster pumps, each rated at 111GPM @ 160FT of head. Booster pumps are controlled and cycled by a Grundfos triplex pump controller.

7.2.4 Circulating Pumps – DHW Circulation Pumps

7.2.4.1 2x Grundfos C1044 Boiler Circulation Pump

7.2.4.2 2x Grundfos DHW Loop Circulation Pump

Domestic hot water is circulated through the primary boiler loop by 2x Grundfos C1044 1.5Hp circulation pumps. DWH is circulated throughout the building by two additional Grundfos circulation pumps (not observed). SEE has provided allowances for the eventual replacement of the pumps.

7.2.5 Irrigation System

7.2.5.1 Grey Water Storage Cistern

7.2.5.2 Grundfos CR10-05 Supply Pump

7.2.5.3 System Piping

7.2.5.4 Rain Bird Irrigation Controller

The landscaped area is provided with a lawn irrigation system. The system was not active during our site inspection. The system uses grey water (rain water) collected on site and stored in a cistern below the P3 slab. It is circulated to the landscaped areas by a Grundfos CR10-05, 5hp pump generating 191FT of head. The system piping is direct buried PVC and will not corrode. Pipe leaks, control problems and head failures are the usual repair items. Conditions and life expectancies are difficult to establish. SEE has budgeted for an allowance for irrigation system repairs.

It was noted that the membrane used to seal the cistern shows possible signs of blistering or delamination. Further investigation was not within the scope of this study. This should be investigated and repaired if necessary. Eventual replacement of the membrane has been included in the budget.

7.2.6 Sump Pumps

7.2.6.1 2x Myers 3RH 5Hp (Storm Water)

7.2.6.2 2x Myers WHRH-20 1-½Hp (Sanitary)

7.2.6.3 2x Myers WHRH-5 ½Hp (Sanitary)

7.2.6.4 3x NWTC DCP208/IVO Duplex Sump Controllers

There are three pairs of Myers submersible sump pumps. Each set is connected in duplex and controlled by a North West Tech-Con DCP208/IVO duplex pump control system. Two sets of pumps serve the sanitary system, the third serves storm water.

We assume the pumps are maintained under the maintenance contract. These types of pumps have a typical life span of 10 to 12 years depending on the degree of maintenance received. SEE has budgeted for partial replacement of sump pumps and controls every 10 years.

7.2.7 Distribution System – System Piping Replacement

As the systems ages, various sections of the system will likely have to be replaced resulting from such problems as seizing or leakage of valves, piping specific problems such as corrosion, pitting, or erosion (which can typically be affected by pipe material as well as the condition of water). Additionally, fatigue and failures related to thermal movements of the piping may lead to replacement.

SEE has made for an allowance for localized valve replacement and leak repairs every 3 years. Full-scale replacement or sectional replacement is a choice of the Strata. We recommend budgeting for replacement after 35 years of life. Periodic repairs are performed as required.

Replacement or repair of backflow preventers, pressure reducing stations, gauges and controllers, and failed valves should be funded on an as-needed basis out of the Operating Budget.

7.3 Service Area Fans

7.3.1 6x Parkade Exhaust & Transfer, Penn Barry

7.3.2 Garbage Room Exhaust

7.3.3 3x Stair Core Pressurization Fans, Delhi

7.3.4 Fan Controllers

Various areas of the building are provided with exhaust fans including areas such as the elevator, garbage room, common area washrooms, emergency generator room, exercise, and storage rooms. Larger fans supply fresh air to the building core and fire escape staircases to prevent smoke ingress to those areas during an emergency. The parkade fans are cycled by a time controller, while others are connected to the emergency systems or manual switches. The fans are in good condition where observed.

SEE has provided a contingency for replacement on an as needed basis. It is assumed that the distribution ducts will last the life of the building.

7.4 Fire Suppression System

The fire suppression system consists of a dry sprinkler system in the parkade and a wet sprinkler system in heated areas such as the lobby and residential units. A standpipe system is provided in the tower and the parkade.

Elements of the fire protection system which we assume will be addressed out of the Operating Budget as part of annual inspection and repairs include:

- Replacement of sprinkler heads and fire extinguishers
- Replacement of sprinkler header trim

7.4.1 Fire Pump System

7.4.1.1 Mitt, #1580-Inline/QKL673 Fire Pump

7.4.1.2 Torna Fire Pump Controller

7.4.1.3 Torna Fire Pump Transfer Switch

7.4.1.4 Goulds 7GBC0512J4 Jockey Pump

7.4.1.5 Baldor 0.5HP Jockey Pump Motor

A Torna Fire Pump Controller monitors the wet standpipe pressure and activates the Fire Pump when system pressure drops below threshold. The Controller also maintains a communication link to the Emergency Generator and activates the emergency back-up power supply as necessary to ensure the Fire Pump has a stable power supply. The Torna Transfer Switch automatically transfers power to the emergency generator under back up conditions.

The Fire Pump is a Mitt #1580-Inline/QKL673, 50 HP, rated at 500GPM @ 100PSI. The Goulds/Baldor Jockey Pump appears to be self-controlling; its purpose is to maintain a threshold pressure higher than what will trigger the main fire pump, to ensure the fire pump is not activated due to a minor leak or single sprinkler head opening.

We recommend budgeting for replacement of the fire pump and controller after 25 years of life.

7.4.2 Fire Protection System

7.4.2.1 Backflow Check Valves

7.4.2.2 Fire Lock NXT S/678 Dry Standpipe Valve

7.4.2.3 Swan, SU-101, Dry Valve Activation Compressor

Supply to both the dry and wet fire protection standpipes is provided by city water supply from a branch in the combined domestic and fire protection line. The fire protection branch passes through a double check valve prior to supplying dry and wet fire protection standpipes.

Four NXT S/678 fire protection system dry valves are located in the water entry and fire pump room at level P1. Dry valve activation air pressure is provided by a Swan, model SU-101, 3/4hp air compressor. The NXT firelock valves activate to provide water to dry sprinkler heads in unheated parkade areas in the event of a fire.

Fire protection wet sprinkler valves and fire hose standpipes on each floor are pressurized by city water pressure that is boosted by the Jockey Pump. The Fire Pump works in parallel to city supply. Upon activation of the 50 Hp Mitt Fire Pump the wet standpipe system is pressurized and the city supply forced closed by a check valve.

The standpipe zones are complete with supervised isolation valves and flow switches. The valves should last the life of the building if maintained. Rebuild is usually not required if maintenance continues. SEE has assumed that the pipe systems will last the life of the building

We recommend budgeting for future repairs or partial replacement of the sprinkler and standpipe system piping and valves every 15 years.

7.5 Garbage Disposal Systems

7.5.1 Smithrite Garbage Compactor

7.5.2 Garbage/Recycling Bins

A Smithrite Trash Compactor provides trash compaction for the building. The trash compactor appears to be in good condition. We understand the garbage compactor is leased, and have not included funds for its replacement. This item should be revisited if this changes.

The recycling bins are in good condition. The bottoms of the metal bin will start to rust out over a life of 15 years. Bins are assumed to be repaired out of the Operating Budget. SEE has allocated funds for bin replacement. In the event bins will be provided by the City or other operator, this item should be revisited.

8.0 ELECTRICAL SYSTEMS:

The life expectancies are based on manufacturer's recommendations and on the performance of similar type of equipment in the past. Life expectancies may be slightly increased in some cases as the building systems are well maintained. Actual service lives may be found to be longer than estimates, but it is recommended that funds be available for repair or replacement at the earliest time that failures are likely to occur.

A preventive maintenance program will ensure that equipment will reach or surpass its normal design life. If maintenance is continued through the life of the building, system life spans may be extended further in future reserve fund updates.

We understand the emergency generator is maintained through a separate maintenance contract and checked regularly for operation.

8.1 Electrical Distribution

The electrical distribution system includes all panels, switchboards and wiring required to feed electricity from the bulk meter to the suites and house distribution systems.

SEE has assumed that maintenance of these systems which is managed as part of the operating budget will include:

- Replacement of fuses, defective switches, receptacles, etc.
- Thermal scans with associated repairs.
- Mechanical switchgear for the major mechanical components are expected to be replaced in conjunction with equipment repairs and replacements or as needed as part of maintenance.

8.1.1 Electrical Allowance

The electrical distribution system consists of a General Electric, Model CPTA1500 S009047, transformer which reduces 12,470 volt line voltage to 208 Volt, 3 phase power for use within the building. Three GE switchgears, rated at 1200A, 6000A and 6000A distribute power to the emergency and residential loads. Distribution panel boards are located in the residential hallways, mechanical rooms and amenity rooms. Panel boards divide the power into subsidiary circuits for distribution.

Distribution panels should be inspected and connections re-torqued regularly as part of a maintenance plan. Thermographic scanning should be performed every 5 years.

The actual service life of modern electrical equipment is not known. We estimate that general replacement will not be required within the foreseeable future. Larger conductors are assumed to last the life of the building. However, we recommend maintaining an allowance of about 10% of the value of this system after 40 years of service towards repairs or replacements that may be required as a result of local or specific problems that develop.

8.1.2 Cummins DQDAB Emergency Generator

8.1.3 Power Command Controller

Emergency power is supplied with a Cummins DQDAB generator set. The integrated Power Command engine controller automatically starts the generator and manages power output during a power outage. A Tidy Tanks, 1140L capacity custom diesel fuel tank is located beside the generator.

The generator set provides power to the emergency lighting circuits, two elevators, fire pump, and other emergency circuits upon loss of normal power. SEE has budgeted for replacement of the emergency generator in 35 years.

The Emergency Distribution Room contains emergency bypass breakers and a Thompson Technologies GCS, 600amp switchgear unit which switches power to the emergency system.

8.1.4 Lighting

SEE has assumed that exit lights, ballasts for fluorescent fixtures, light bulbs and timing switches will be replaced out of the operating budget as required.

The lighting systems are in good condition and light levels visually appeared adequate where observed.

8.1.4.1 Parkade Light Fixtures

Parkade lighting is facilitated by a series of surface mounted fluorescent fixtures fitted to the parkade ceiling. Parkade lighting fixtures are mainly fed by conduit buried in the slab. These fixtures would be replaced out of the operating budget.

8.1.4.2 Exterior Light Fixtures

The exterior light fixtures are in good condition where observed. Wall mounted fixtures are installed over the entrances to the building. The nuts and bolts securing the light posts base plates should be checked regularly to ensure that the structural integrity of the anchorages has not been jeopardized.

SEE has allowed a contingency for partial replacement on an as needed basis.

8.2 Fire Alarm System

The fire alarm system includes the signalling devices (gong stations, smoke detectors and heat detectors), the control panel and annunciator panel, the signal wiring, and the alarm devices. Yearly maintenance of this system is managed from the operating budget. Testing and replacement of failed components is performed on an ongoing basis.

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8.2.1 Fire Alarm System – Local Repairs

8.2.2 Fire Alarm System Replacement

SEE has provided an allowance for localized repairs, such as smoke detectors and component replacement on an as needed basis.

The main panel, piping, pumps and related equipment appear to be original to the building and appear to be in good condition and meet current code requirements. Maintenance and testing of the system will be completed as part of the operation budget.

8.3 Elevators

There are a total of three Thyssen Krupp elevators, two which serve the high-rise apartments, and one which serves the low rise. The elevator control room was not accessible at the time of our inspection.

The elevators visually appear to be in good condition and are original, however there have been recurring elevator callbacks indicating below average performance.

8.3.1 Elevator Door Operator

8.3.2 Elevator Refurbishment

SEE has provided a budget for elevator refurbishment and door replacement which should be performed in approximately 30 years.

8.4 Auxiliary Systems

The security systems consist of the door and parkade entry system, and a closed circuit television camera system. No problems with the operation of the security systems were reported or observed during our site inspection.

8.4.1 CCTV - Replacement

Security cameras are located throughout the building. Closed circuit camera systems require constant upgrades, such as to the camera and recording devices, and SEE has provided a separate allowance for these upgrades.

We recommend budgeting for the replacement of the CCTV system, assuming the wiring can be re-used as indicated in the information summary table.

8.4.2 Enterphone/Entry System

CONTINGENCY RESERVE FUND STUDY/
DEPRECIATION REPORT
STRATA PLAN BCS 4213 - RICHARDS
1088 RICHARDS STREET, VANCOUVER, B.C.

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A Sentex Systems video enterphone system operates between the entrance locations at Richards St., alley or parkade, and the suites. The suite number is dialed and access is permitted by the door release mechanism. The system is reported to operate properly. An ICT key fob access reader system permits access to the building for residents. The entry system should be repaired or replaced on an as-needed basis.

8.4.3 Parkade Overhead Gates

There are two Manaras, model OTBH, 1/2Hp, overhead doors which allow access to the parkade. These types of gates typically last for 20 years. SEE has allowed a contingency for replacement.

CONTINGENCY RESERVE FUND STUDY:

9.1 Contingency Reserve Fund Study

SEE has budgeted for a regular updates to the CRFS in the future.

5.0 FINANCIAL ANALYSIS:

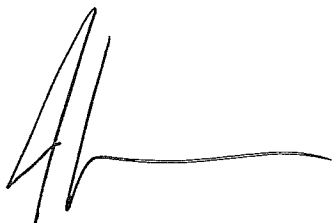
The financial analysis detailed in the following tables is based on the information collected and detailed in section 4.0 of this Study.

Regular updates to this study are recommended.

Should you have any questions, please do not hesitate to contact the undersigned.

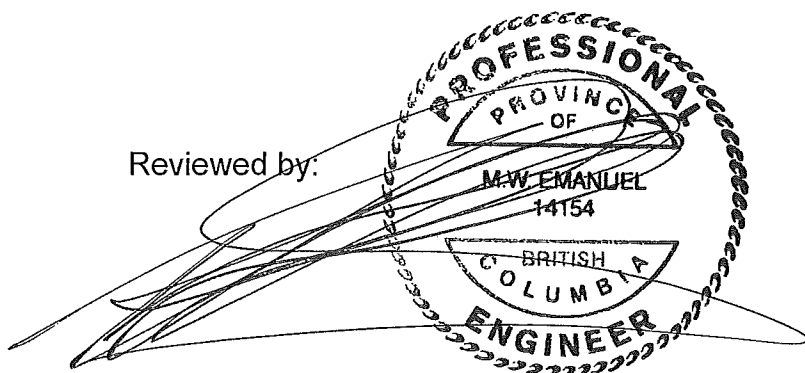
Yours truly,
Spratt Emanuel Engineering Ltd.

Per:



John Drinkwater, B.A.Sc., EIT
Depreciation Studies Manager

Reviewed by:



Mark W. Emanuel, P.Eng.
Principal

Depreciation Report
Repair/Replacement Information Summary

Final

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Item #	Building Component	Item Description	Life Cycle (years)	Estimated Age (years)	Life Remaining (years)	2013 Budget for Replacement/Repair
1.1	Building	Repairs and expenditures unlikely for the life of the building	100	2	98	\$0
1.2.1	Parkade Roof Slab at Grade - Localized Repairs	Budget for localized repairs of the parkade roof slab on as needed basis	30	2	28	\$15,000
1.2.2	Parkade Roof Slab at Grade - Waterproofing Membrane Replacement : 14000 sq.ft.	Budget for replacement of the roof slab waterproofing membrane. Overburden material such as cast in place concrete walkways and landscaped areas will need to be removed.	50	2	48	\$350,000
1.3	Parkade Walls - Periodic Repairs	Budget for periodic repairs of the concrete parkade walls.	30	2	28	\$5,000
1.4.1	Parkade Suspended Slabs - Waterproofing Membrane Replacement: 79000 sq.ft	Budget for complete replacement of the waterproofing membranes installed on the top surfaces of Levels P1, P2, and P3. Removal of existing membrane included.	30	2	27	\$440,000
1.4.2	Parkade Suspended Slabs - Localized Repairs	Budget for localized repairs of the parkade suspended slabs	15	2	3	\$4,000
1.5	Parkade Slab-on-Grade - Localized Repairs : 29000 sq.ft.	Budget for localized repairs of the parkade slab on grade on an as needed basis.	15	2	13	\$18,000
1.6	Parkade Periodic Inspections	Budget to carry out periodic inspections of the parkade.	10	2	8	\$3,000
1.7	Parkade Painting	Allowance for painting the parking stall lines and numbers	25	2	23	\$45,000

Item #	Building Component	Item Description	Life Cycle (years)	Estimated Age (years)	Life Remaining (years)	2013 Budget for Replacement/Repair
1.8	Parkade Entrance Doors x 2	Allowance for replacing the parkade overhead doors	40	2	38	\$12,000
2.1.1	Roof System - Waterproofing Membrane Replacement : 17000 sq.ft.	Budget to replace the flat roof waterproofing membrane. Includes the terrace decks at the penthouse levels and 8th level terrace garden. Includes replacement of the	35	2	33	\$275,000
2.1.2	Roof System - Heritage Homes - Sloped Asphalt Shingles Replacement : 1350 sq.ft.	Budget to replace the existing heritage home roof asphalt shingles.	35	2	33	\$16,000
2.1.3	Roof System - Periodic Repairs	Budget to carry out periodic repairs to the roofing	10	2	8	\$5,000
2.2	Fall Protection System - Roof Anchors - 81 Anchors	Budget for eventual replacement of the roof anchors at the roof. Maintenance repair and inspections assumed to be funded out of the operating budget	50	2	48	\$80,000
2.3	Concrete Eyebrow Overhang : Waterproofing Membrane Replacement : 6000 sq.ft.	Budget to replace the cold liquid-applied waterproofing membrane installed at the horizontal top surfaces of the concrete eyebrows including slab edges throughout the	20	2	19	\$50,000
3.1.1	Brick Masonry Unit Wall System - Localized Repairs :	Allowance for periodic repair of the rainscreened stucco walls on an as needed basis assumed to be funded out of the operating maintenance schedule	10	3	8	\$0
3.1.2	Brick Masonry Unit Wall System - Maintenance	Allowance for periodic inspection and maintenance (powerwashing etc...) for the rainscreened stucco walls. Included in the operating maintenance schedule	10	2	8	\$0
3.1.3	Brick Masonry Unit Wall System - Sealer Application : 17000 sq.ft.	Allowance for periodic paint coating of the rainscreened stucco walls	10	2	8	\$51,000

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3.2.1	Exterior Exposed Mass Concrete Walls - Localized Repairs	Allowance for periodic localized repairs to the mass concrete walls, on an as needed basis	10	2	8	\$5,000
3.2.2	Exterior Exposed Mass Concrete Walls - Maintenance	Allowance for inspection and maintenance work to the mass concrete walls assumed to be funded out of the operating maintenance schedule	10	2	8	\$0
3.2.3	Exterior Exposed Mass Concrete Walls - Paint Coating : 5000 sq.ft.	Allowance for re-coating the exterior exposed mass concrete walls with new acrylic paint coating. Includes complete removal of the existing coating	20	2	18	\$40,000
3.3	Wood Siding - Heritage Homes - Replacement	Budget to replace the horizontal wood siding at the exterior walls of the heritage homes	40	2	38	\$50,000
3.4.1	Balcony Slabs - Waterproofing Membrane Replacement : liquid-applied polyurethane : 12000	Budget to replace the waterproofing membrane on balcony slabs	20	2	18	\$66,000
3.4.2	Balcony Slabs - Localized Repairs	Budget for repair of the balconies on an as needed basis	10	2	8	\$10,000
3.4.3	Balcony Guardrails - Replacement : 4500 ft	Budget for replacement of the aluminium balcony guardrails. Includes the guardrails installed on the 8th level terrace garden	50	2	48	\$360,000
4.1.1	Insulated Glazing Units	Allowance for replacement of the Insulated Glazing Units	1	2	15	\$20,000
4.1.2	Insulated Glazing Units - Offset	Allowance for replacement of the Insulated Glazing Units : To stop replacement of IGUs 3 years prior to complete window replacement	1	2	45	-\$20,000

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Item #	Building Component	Item Description	Life Cycle (years)	Estimated Age (years)	Life Remaining (years)	2013 Budget for Replacement/Repair
4.2.1	Window Systems - Phase I East Replacement : (14000 sq.ft. WW & 4000 sq.ft. Punched)	Allowance for replacement of the punched windows and window wall systems	50	2	48	\$1,004,000
4.2.2	Window Systems - Phase II South Replacement : (8000 sq.ft. WW & 2500 sq.ft. Punched)	Allowance for replacement of the punched windows and window wall systems	50	2	50	\$605,000
4.2.3	Window Systems - Phase III West Replacement : (11000 sq.ft. WW & 5500 sq.ft. Punched)	Allowance for replacement of the punched windows and window wall systems	50	2	52	\$935,000
4.2.4	Window Systems - Phase IV North Replacement : (4000 sq.ft. WW & 2500 sq.ft. Punched)	Allowance for replacement of the punched windows and window wall systems	50	2	54	\$365,000
4.2.5	Window Systems - Heritage Homes	Allowance for replacement of the punched windows in the heritage homes. Included in the exterior cladding upgrade	50	40	10	\$0
4.3	Window Refurbishment	Allowance for refurbishment on an as needed basis, to be funded by operating budget.	10	2	8	\$0
4.4	Sealants	Allowance for replacement of the exterior sealants applied at window perimeters, cladding joints between dissimilar materials etc.	20	2	18	\$65,000
4.5	Balcony/Terrace Deck doors	Allowance for replacement of the balcony doors on an as needed basis, included in the window replacement item	50	2	48	\$0
5.1	Suite Entrance Doors	Budget for <u>partial</u> replacement of suite entrance doors, on an as needed basis, out of operating budget.	80	2	78	\$0

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Item #	Building Component	Item Description	Life Cycle (years)	Estimated Age (years)	Life Remaining (years)	2013 Budget for Replacement/Repair
5.2	Service Doors	Allowance for replacing all service room doors	80	2	78	\$15,000
5.3	Baseboards and Wood Trim 5200 ft	Allowance for replacement of all baseboards and wood trim in the corridors and around elevators	80	2	78	\$36,000
5.4	Light fixtures - Common Area	Allowance for replacement of the corridor and common area light fixtures	20	2	19	\$20,000
5.5	Textured Ceiling Finishes sq.ft. 5200 ft	Allowance for replacement of the stucco ceilings in the common areas	20	2	19	\$12,000
5.6	Interior Finishes 45000 sq.ft	Allowance for replacing the interior painting, wallpapers, and tiles	20	2	19	\$135,000
5.7	Carpeting - Replacement : 10000 sq.ft	Allowance for replacing the common area carpet.	20	2	19	\$60,000
5.8	Entrance Lobbies - Major Refurbishment	Allowance for refinishing the two entrance lobbies.	30	2	28	\$35,000
5.9	Stairwells - Maintenance	Allowance for repainting stairwells and minor repairs to the stairs and handrail, on an as needed basis, out of operating budget	0	2	0	\$0
5.10	Exercise Room	Allowance for replacing the interior finishes and exercise equipment on an as needed basis	10	2	8	\$18,000

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Item #	Building Component	Item Description	Life Cycle (years)	Estimated Age (years)	Life Remaining (years)	2013 Budget for Replacement/Repair
5.11	Building Services Office / Meeting Room	Allowance for replacing the interior finishes, furniture, and office equipment in the Meeting Room	15	2	13	\$10,000
6.1	Hard Landscaping Maintenance	Maintenance work of the hard landscaping items such as brick pavers, walkways and curbs	10	2	8	\$15,000
6.2	Soft Landscaping	Allowance for periodic replacement of trees, shrubs and landscaped areas on an as needed basis on ground and the 8th level terrace deck garden.	10	2	8	\$3,000
6.3	Playground Equipment - 8th Level Terrace Deck Garden : Replacement	Allowance to replace the playground equipment at the 8th level terrace deck garden	20	2	19	\$10,000
6.4	8th Level Terrace Deck Garden Features : Replacement	Allowance to replace the terrace deck garden finishes on the 8th level. Includes wood decking, aluminium pergolas, water feature, architectural ledgerstone cladding etc. Included in the 8th level terrace deck garden.	30	2	28	\$0
7.1.1	MUA #1 - Industrial Commercial Equipment	Allowance for replacement every 35 years	35	2	33	\$20,000
7.1.2	Armstrong plate heat exchanger	Allowance for replacement after 30 years	30	2	28	\$3,000
7.1.3	Glycol circulation pump	Budget for replacement of the pump	10	2	8	\$1,000
7.1.4	MUA #2 - Industrial Commercial Equipment	Allowance for replacement every 35 years	35	2	33	\$20,000

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Item #	Building Component	Item Description	Life Cycle (years)	Estimated Age (years)	Life Remaining (years)	2013 Budget for Replacement/Repair
7.1.5	Electric Baseboard Heaters	Allowance for replacement to be funded from the operating budget	50	2	48	\$0
7.1.6	Air Conditioner - Trane, 10Ton	Allowance for replacement every 20 years	20	2	18	\$10,000
7.2.1.1	DHW Boiler #1 - RBI 8900 Series, 1,400 MBH	Allowance for replacement every 35 years	35	2	33	\$25,000
7.2.1.1	DHW Boiler #2 - RBI 8900 Series, 1,400 MBH	Allowance for replacement every 35 years	35	2	33	\$25,000
7.2.1.2	Tjernlund Power Venter, HS5	Budget for replacement of the power venter	15	2	13	\$3,000
7.2.1.2	Tjernlund Power Venter, HS5	Budget for replacement of the power venter	15	2	13	\$3,000
7.2.1.3	Tekmar Boiler Control, #274	budget for replacement of the controller	10	2	8	\$1,000
7.2.2.1	DHW Storage #1 - AO Smith, 180 Gal	Budget for replacement of the tank	20	2	18	\$2,000
7.2.2.1	DHW Storage #2 - AO Smith, 180 Gal	Budget for replacement of the tank	20	2	18	\$2,000

**Depreciation Report
Repair/Replacement Information Summary**

Current Fiscal Year:
December 1, 2012 to November 30, 2013

June 30, 2013

Item #	Building Component	Item Description	Life Cycle (years)	Estimated Age (years)	Life Remaining (years)	2013 Budget for Replacement/Repair
7.2.2.1	DHW Storage #3 - AO Smith, 180 Gal	Budget for replacement of the tank	20	2	18	\$2,000
7.2.2.1	DHW Storage #4 - AO Smith, 180 Gal	Budget for replacement of the tank	20	2	18	\$2,000
7.2.2.2	Expansion Tank, Therm-X-Trol, 86 Gal	Budget for replacement of the tank	20	2	18	\$2,000
7.2.2.3	Reheat tank - AO Smith	Budget for replacement of the reheat tank	20	2	18	\$4,000
7.2.3.1	Domestic Water Booster - 7.5hp Grundfos pump	Budget for replacement of the pump & motor	15	2	13	\$5,000
7.2.3.1	Domestic Water Booster - 7.5hp Grundfos pump	Budget for replacement of the pump & motor	15	2	13	\$5,000
7.2.3.1	Domestic Water Booster - 7.5hp Grundfos pump	Budget for replacement of the pump & motor	15	2	13	\$5,000
7.2.4	Circulation Pumps - DHW	Budget for partial replacement of the circulation pumps	10	2	8	\$3,000
7.2.4.1	Boiler Loop pumps	Budget for replacement included above	10	2	8	\$0

**Depreciation Report
Repair/Replacement Information Summary**

Current Fiscal Year:
December 1, 2012 to November 30, 2013

June 30, 2013

Item #	Building Component	Item Description	Life Cycle (years)	Estimated Age (years)	Life Remaining (years)	2013 Budget for Replacement/ Repair
7.2.4.2	DHW loop pumps	Budget for replacement included above	10	2	8	\$0
7.2.5.1	Irrigation Cistern	Budget for replacement of the membrane	15	2	10	\$11,000
7.2.5.2	Irrigation supply pump - Grundfos CR10-05	Budget for replacement of the pump & motor	10	2	8	\$3,000
7.2.5.3	Irrigation System piping	Budget for partial replacement or repairs to be funded from the operating budget	15	2	13	\$0
7.2.5.4	Irrigation System Controller	Budget to replace controller	10	2	8	\$1,500
7.2.6.1	Sump Pump Replacement Allowance	Budget for replacement of the sump pumps and controller	12	2	10	\$10,000
7.2.6.2	Sump Pump Replacement Allowance	Budget for replacement of the sump pumps and controller	12	2	10	\$7,000
7.2.6.3	Sump Pump Replacement Allowance	Budget for replacement of the sump pumps and controller	12	2	10	\$5,000
7.2.6.4	Sump Pump Controllers	Included in the above lines	12	2	12	\$0

Depreciation Report
Repair/Replacement Information Summary

Current Fiscal Year:
December 1, 2012 to November 30, 2013

June 30, 2013

Item #	Building Component	Item Description	Life Cycle (years)	Estimated Age (years)	Life Remaining (years)	2013 Budget for Replacement/Repair
7.2.7	Distribution system - Valve replacement	Allowance for partial replacement of the system valves.	3	2	1	\$5,000
7.2.7	Distribution system - System Piping replacement	Allowance for partial replacement of the system piping.	35	2	33	\$75,000
7.3.1	Parkade Fans	Allowance for replacement of the fans	20	2	18	\$10,000
7.3.2	Exhaust Fans	Allowance for replacement of the fans	20	2	18	\$2,500
7.3.3	Pressurization Fans	Allowance for replacement of the fans	20	2	18	\$8,000
7.3.4	Fan Controllers	Included in above items	0	0	0	\$0
7.4.1.1	Fire Pump - Mitt 1580	Budget for replacement of the pump, motor and controller	25	2	23	\$25,000
7.4.1.2	Fire Pump Controller	Budget included above	0	0	0	\$0
7.4.1.3	Fire Pump Transfer Switch	Budget to replace transfer switch	40	2	38	\$10,000

**Depreciation Report
Repair/Replacement Information Summary**

Current Fiscal Year:
December 1, 2012 to November 30, 2013

June 30, 2013

Item #	Building Component	Item Description	Life Cycle (years)	Estimated Age (years)	Life Remaining (years)	2013 Budget for Replacement/ Repair
7.4.1.4	Jockey Pump - Goulds/Baldor	Budget for replacement of the pump and motor	20	2	18	\$3,000
7.4.1.5	Jockey pump motor	included in above line	0	0	0	\$0
7.4.2	Fire protection valves	To be maintained out of the operating budget	40	2	38	\$0
7.4.2.3	Dry sprinkler air compressor, Swan SU-101	Budget for replacement of the compressor	20	2	18	\$1,000
7.5.1	Garbage Compactor	Item is leased, all costs assumed to be from operating budget	20	2	18	\$0
7.5.2	Recycling Bins	Budget for partial replacement of the bins	15	2	13	\$2,000
8.1.1	Electrical Allowance	Allowance for repair or replacement of the high-voltage transformer, switchgear, and distribution system	40	2	38	\$15,000
8.1.2	Emergency Generator - Cummins DQDAB	Budget for the replacement of the generator	35	2	33	\$80,000
8.1.3	Generator controller	Included in the above line	30	2	28	\$0

Depreciation Report
Repair/Replacement Information Summary

Curent Fiscal Year:
December 1, 2012 to November 30, 2013

June 30, 2013

Item #	Building Component	Item Description	Life Cycle (years)	Estimated Age (years)	Life Remaining (years)	2013 Budget for Replacement/Repair
8.1.4.1	Parkade lighting	To be maintained out of the operating budget	20	2	18	\$0
8.1.4.2	Exterior Light Fixtures	To be maintained out of the operating budget	20	2	18	\$0
8.2.1	Fire alarm system - local repairs	To be maintained out of the operating budget	15	2	13	\$0
8.2.2	Fire alarm system - Replacement	Budget for upgrade of the system	35	2	33	\$0
8.3	Elevators - Thyssenkrupp	Allowance for upgrading to current standards	40	2	38	\$350,000
8.3.1	Elevator Door replacement	Allowance for replacement of the Door Operator	30	2	28	\$20,000
8.3.2	Elevator Refurbishment	Allowance for replacement of the controller	25	2	23	\$15,000
8.4.1	CCTV - Replacement	Budget for upgrade of the CCTV system	10	2	8	\$4,000
8.4.2	Enterphone/Entry System	Allowance for repairs of the Enterphone System	25	2	23	\$5,000

Item #	Building Component	Item Description	Life Cycle (years)	Estimated Age (years)	Life Remaining (years)	2013 Budget for Replacement/Repair
8.4.3	Parkade Overhead doors	Budget for replacement (2x total)	20	2	18	\$10,000
9.1	Contingency Reserve Fund Study	Allowance for future Contingency Reserve Fund Studies	3	0	3	\$8,000

**Scenario #1: Fully Funded
No Increase for 9 Years
RECOMMENDED**
Final

Opening Balance of the Reserve Fund: \$116,200

Minimum Desired Reserve Fund Balance: \$350,000

Assumed Inflation: 3.00%

Initial Contribution Increment: 0.00%

Assumed Annual Interest Rate for Interest Earned: 1.20%

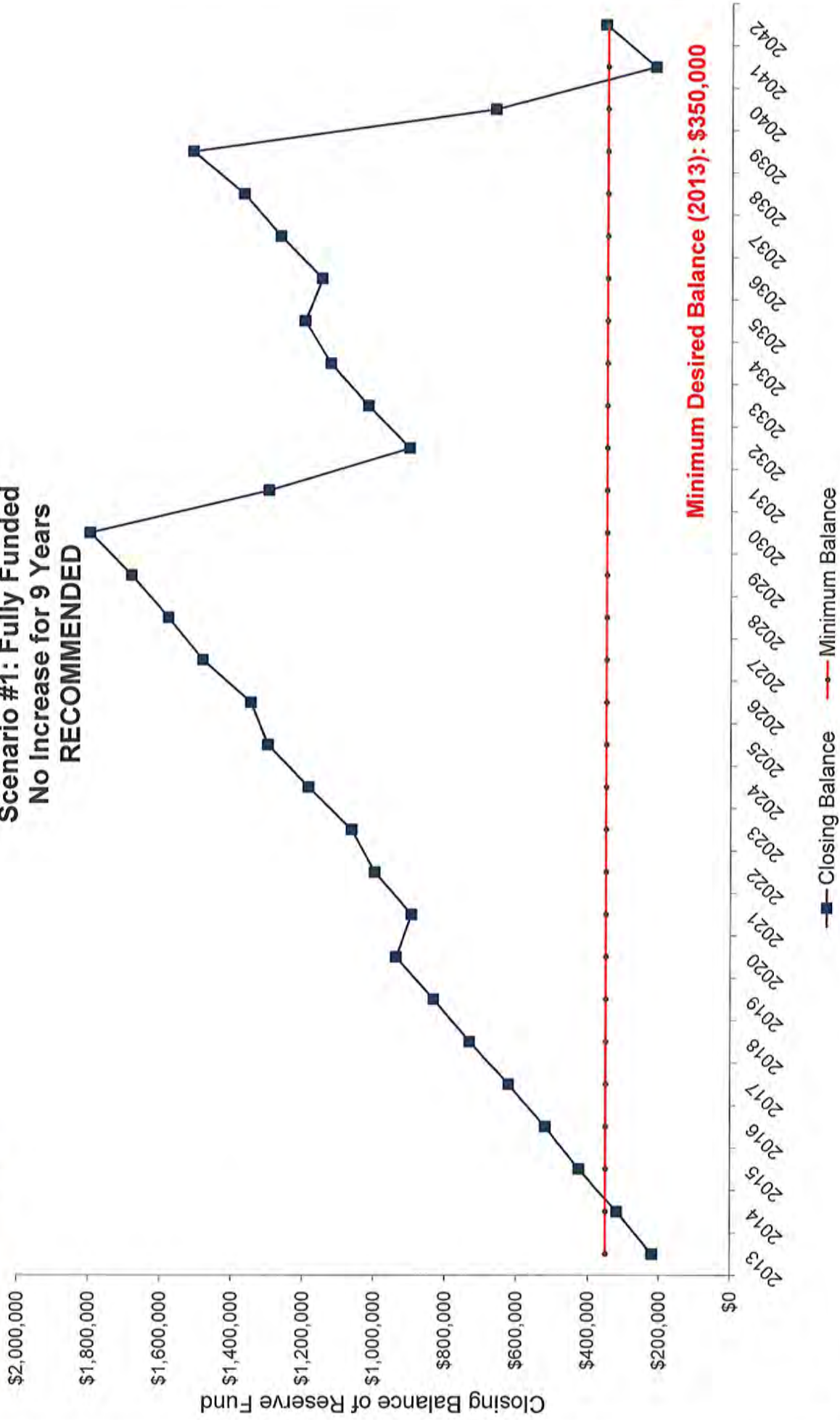
Final Contribution Increment: 3.00%

Year	Opening Balance	Recommended Annual Contribution	Estimated Inflation Adjusted Expenditures	Estimated Interest Earned	Percentage Increase in Recommended Annual Contribution**	Closing Balance	Comments
2013	\$116,200	\$102,074	\$0	\$615	N/A	\$218,889	Critical Year #1
2014	\$218,889	\$102,074	-\$5,150	\$2,627	0.00%	\$318,439	
2015	\$318,439	\$102,074	\$0	\$3,821	0.00%	\$424,335	
2016	\$424,335	\$102,074	-\$13,113	\$5,092	0.00%	\$518,388	
2017	\$518,388	\$102,074	-\$5,628	\$6,221	0.00%	\$621,055	
2018	\$621,055	\$102,074	\$0	\$7,453	0.00%	\$730,582	
2019	\$730,582	\$102,074	-\$9,552	\$8,767	0.00%	\$831,870	
2020	\$831,870	\$102,074	-\$6,149	\$9,982	0.00%	\$937,777	
2021	\$937,777	\$102,074	-\$156,446	\$11,253	0.00%	\$894,659	
2022	\$894,659	\$102,074	-\$10,438	\$10,736	0.00%	\$997,030	
2023	\$997,030	\$105,136	-\$51,069	\$11,964	3.00%	\$1,063,062	
2024	\$1,063,062	\$108,290	\$0	\$12,757	3.00%	\$1,184,109	
2025	\$1,184,109	\$111,539	-\$11,406	\$14,209	3.00%	\$1,298,451	
2026	\$1,298,451	\$114,885	-\$82,238	\$15,581	3.00%	\$1,346,680	
2027	\$1,346,680	\$118,332	\$0	\$16,160	3.00%	\$1,481,172	
2028	\$1,481,172	\$121,882	-\$43,623	\$17,774	3.00%	\$1,577,205	
2029	\$1,577,205	\$125,538	-\$40,118	\$18,926	3.00%	\$1,681,552	
2030	\$1,681,552	\$129,304	-\$33,057	\$20,179	3.00%	\$1,797,978	
2031	\$1,797,978	\$133,183	-\$655,437	\$21,576	3.00%	\$1,297,300	
2032	\$1,297,300	\$137,179	-\$547,094	\$15,568	3.00%	\$902,953	
2033	\$902,953	\$141,294	-\$36,122	\$10,835	3.00%	\$1,018,960	
2034	\$1,018,960	\$145,533	-\$52,088	\$12,228	3.00%	\$1,124,632	
2035	\$1,124,632	\$149,899	-\$90,057	\$13,496	3.00%	\$1,197,970	
2036	\$1,197,970	\$154,396	-\$217,095	\$14,376	3.00%	\$1,149,648	
2037	\$1,149,648	\$159,028	-\$56,918	\$13,796	3.00%	\$1,265,553	
2038	\$1,265,553	\$163,799	-\$75,376	\$15,187	3.00%	\$1,369,162	
2039	\$1,369,162	\$168,713	-\$43,132	\$16,430	3.00%	\$1,511,173	
2040	\$1,511,173	\$173,774	-\$1,039,563	\$18,134	3.00%	\$663,518	
2041	\$663,518	\$178,987	-\$634,900	\$7,962	3.00%	\$215,568	Critical Year #2
2042	\$215,568	\$184,357	-\$47,131	\$2,587	3.00%	\$355,381	Critical Year #3

** Refers to the increase in the current annual contributions to the Reserve Fund only, which is a portion of the Annual Operating Budget.

Annual Contingency Reserve Fund Balance :

**Strata Plan BCS 4213 - Richards
Scenario #1: Fully Funded
No Increase for 9 Years
RECOMMENDED**



**Scenario #2: Fully Funded
No Increase for 5 Years With
2% Post Inflationary Increases**
Final
Opening Balance of the Reserve Fund: \$116,200

Minimum Desired Reserve Fund Balance: \$350,000

Assumed Annual Interest Rate for Interest Earned: 1.20%

Assumed Inflation: 3.00%

Initial Contribution Increment: 0.00%

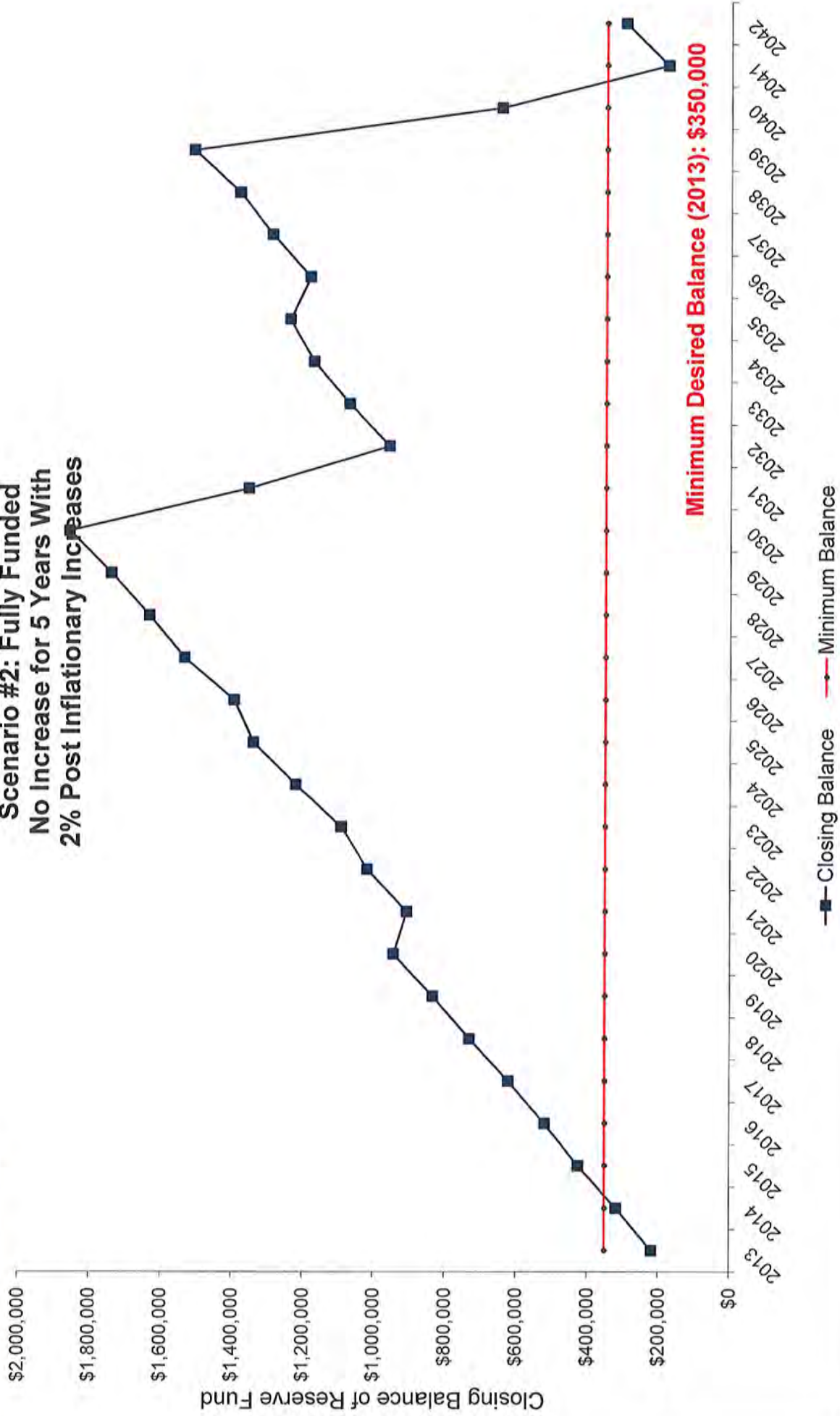
Final Contribution Increment: 2.00%

Year	Opening Balance	Recommended Annual Contribution	Estimated Inflation Adjusted Expenditures	Estimated Interest Earned	Percentage Increase in Recommended Annual Contribution**	Closing Balance	Comments
2013	\$116,200	\$102,074	\$0	\$615	N/A	\$218,889	Critical Year #1
2014	\$218,889	\$102,074	-\$5,150	\$2,627	0.00%	\$318,439	
2015	\$318,439	\$102,074	\$0	\$3,821	0.00%	\$424,335	
2016	\$424,335	\$102,074	-\$13,113	\$5,092	0.00%	\$518,388	
2017	\$518,388	\$102,074	-\$5,628	\$6,221	0.00%	\$621,055	
2018	\$621,055	\$102,074	\$0	\$7,453	0.00%	\$730,582	
2019	\$730,582	\$104,115	-\$9,552	\$8,767	2.00%	\$833,912	
2020	\$833,912	\$106,198	-\$6,149	\$10,007	2.00%	\$943,967	
2021	\$943,967	\$108,322	-\$156,446	\$11,328	2.00%	\$907,170	
2022	\$907,170	\$110,488	-\$10,438	\$10,886	2.00%	\$1,018,106	
2023	\$1,018,106	\$112,698	-\$51,069	\$12,217	2.00%	\$1,091,953	
2024	\$1,091,953	\$114,952	\$0	\$13,103	2.00%	\$1,220,008	
2025	\$1,220,008	\$117,251	-\$11,406	\$14,640	2.00%	\$1,340,493	
2026	\$1,340,493	\$119,596	-\$82,238	\$16,086	2.00%	\$1,393,937	
2027	\$1,393,937	\$121,988	\$0	\$16,727	2.00%	\$1,532,652	
2028	\$1,532,652	\$124,428	-\$43,623	\$18,392	2.00%	\$1,631,849	
2029	\$1,631,849	\$126,916	-\$40,118	\$19,582	2.00%	\$1,738,229	
2030	\$1,738,229	\$129,455	-\$33,057	\$20,859	2.00%	\$1,855,486	
2031	\$1,855,486	\$132,044	-\$655,437	\$22,266	2.00%	\$1,354,358	
2032	\$1,354,358	\$134,684	-\$547,094	\$16,252	2.00%	\$958,201	
2033	\$958,201	\$137,378	-\$36,122	\$11,498	2.00%	\$1,070,956	
2034	\$1,070,956	\$140,126	-\$52,088	\$12,851	2.00%	\$1,171,845	
2035	\$1,171,845	\$142,928	-\$90,057	\$14,062	2.00%	\$1,238,778	
2036	\$1,238,778	\$145,787	-\$217,095	\$14,865	2.00%	\$1,182,336	
2037	\$1,182,336	\$148,703	-\$56,918	\$14,188	2.00%	\$1,288,308	
2038	\$1,288,308	\$151,677	-\$75,376	\$15,460	2.00%	\$1,380,068	
2039	\$1,380,068	\$154,710	-\$43,132	\$16,561	2.00%	\$1,508,207	
2040	\$1,508,207	\$157,804	-\$1,039,563	\$18,098	2.00%	\$644,547	
2041	\$644,547	\$160,960	-\$634,900	\$7,735	2.00%	\$178,342	Critical Year #2
2042	\$178,342	\$164,180	-\$47,131	\$2,140	2.00%	\$297,530	Critical Year #3

** Refers to the increase in the current annual contributions to the Reserve Fund only, which is a portion of the Annual Operating Budget.

Annual Contingency Reserve Fund Balance :

Strata Plan BCS 4213 - Richards
Scenario #2: Fully Funded
No Increase for 5 Years With
2% Post Inflationary Increases



**Scenario #3: Fully Funded
1.5% Increases Throughout**

Final

Opening Balance of the Reserve Fund: \$116,200

Minimum Desired Reserve Fund Balance: \$350,000

Assumed Inflation: 3.00%

Initial Contribution Increment: 1.50%

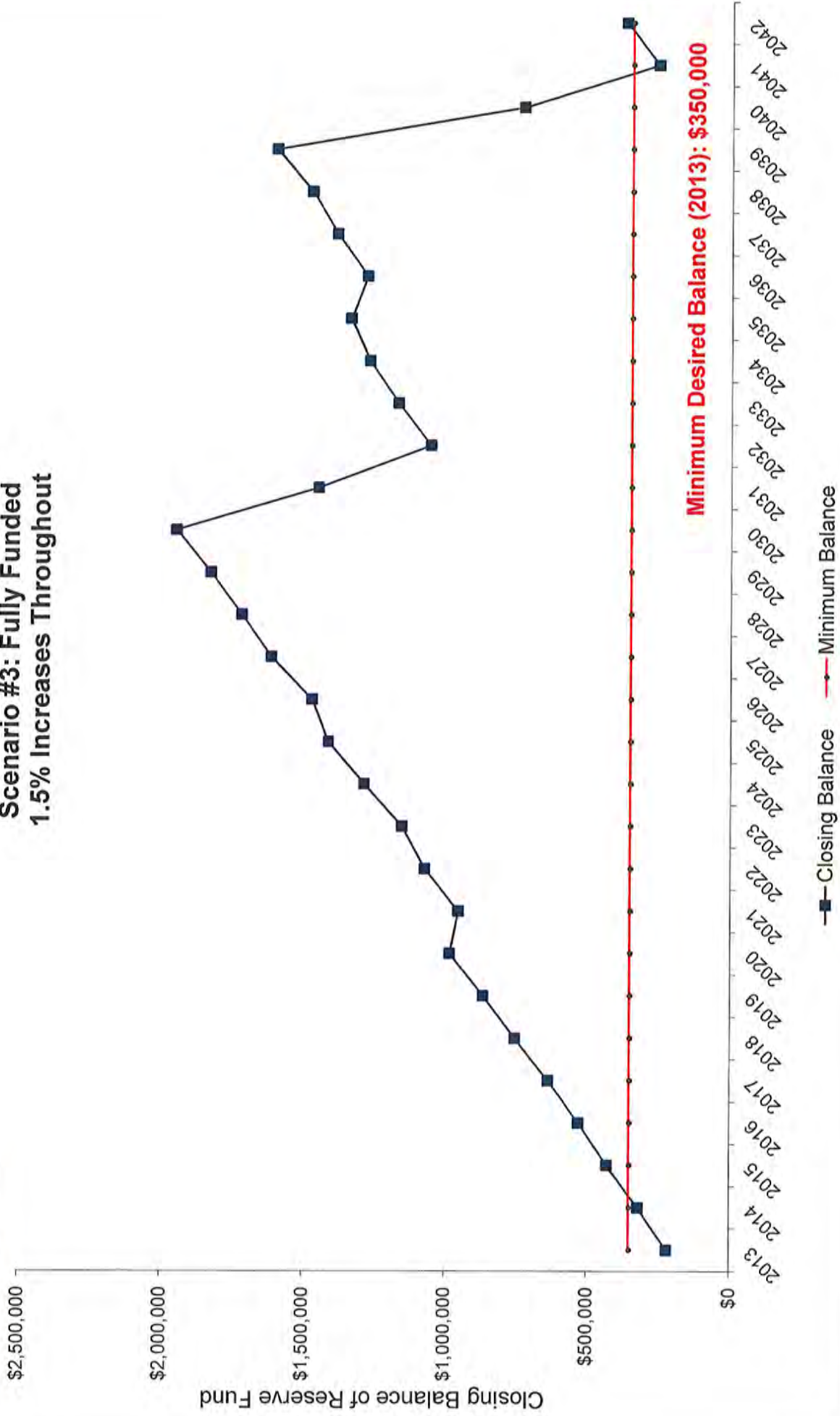
Assumed Annual Interest Rate for Interest Earned: 1.20%

Year	Opening Balance	Recommended Annual Contribution	Estimated Inflation Adjusted Expenditures	Estimated Interest Earned	Percentage Increase in Recommended Annual Contribution**	Closing Balance	Comments
2013	\$116,200	\$102,074	\$0	\$615	N/A	\$218,889	Critical Year #1
2014	\$218,889	\$103,605	-\$5,150	\$2,627	1.50%	\$319,971	
2015	\$319,971	\$105,159	\$0	\$3,840	1.50%	\$428,969	
2016	\$428,969	\$106,737	-\$13,113	\$5,148	1.50%	\$527,741	
2017	\$527,741	\$108,338	-\$5,628	\$6,333	1.50%	\$636,784	
2018	\$636,784	\$109,963	\$0	\$7,641	1.50%	\$754,388	
2019	\$754,388	\$111,612	-\$9,552	\$9,053	1.50%	\$865,500	
2020	\$865,500	\$113,286	-\$6,149	\$10,386	1.50%	\$983,023	
2021	\$983,023	\$114,986	-\$156,446	\$11,796	1.50%	\$953,359	
2022	\$953,359	\$116,710	-\$10,438	\$11,440	1.50%	\$1,071,071	
2023	\$1,071,071	\$118,461	-\$51,069	\$12,853	1.50%	\$1,151,317	
2024	\$1,151,317	\$120,238	\$0	\$13,816	1.50%	\$1,285,370	
2025	\$1,285,370	\$122,042	-\$11,406	\$15,424	1.50%	\$1,411,430	
2026	\$1,411,430	\$123,872	-\$82,238	\$16,937	1.50%	\$1,470,002	
2027	\$1,470,002	\$125,730	\$0	\$17,640	1.50%	\$1,613,372	
2028	\$1,613,372	\$127,616	-\$43,623	\$19,360	1.50%	\$1,716,725	
2029	\$1,716,725	\$129,530	-\$40,118	\$20,601	1.50%	\$1,826,739	
2030	\$1,826,739	\$131,473	-\$33,057	\$21,921	1.50%	\$1,947,076	
2031	\$1,947,076	\$133,445	-\$655,437	\$23,365	1.50%	\$1,448,450	
2032	\$1,448,450	\$135,447	-\$547,094	\$17,381	1.50%	\$1,054,185	
2033	\$1,054,185	\$137,479	-\$36,122	\$12,650	1.50%	\$1,168,191	
2034	\$1,168,191	\$139,541	-\$52,088	\$14,018	1.50%	\$1,269,663	
2035	\$1,269,663	\$141,634	-\$90,057	\$15,236	1.50%	\$1,336,476	
2036	\$1,336,476	\$143,759	-\$217,095	\$16,038	1.50%	\$1,279,178	
2037	\$1,279,178	\$145,915	-\$56,918	\$15,350	1.50%	\$1,383,525	
2038	\$1,383,525	\$148,104	-\$75,376	\$16,602	1.50%	\$1,472,855	
2039	\$1,472,855	\$150,325	-\$43,132	\$17,674	1.50%	\$1,597,723	
2040	\$1,597,723	\$152,580	-\$1,039,563	\$19,173	1.50%	\$729,912	
2041	\$729,912	\$154,869	-\$634,900	\$8,759	1.50%	\$258,640	Critical Year #2
2042	\$258,640	\$157,192	-\$47,131	\$3,104	1.50%	\$371,804	Critical Year #3

**** Refers to the increase in the current annual contributions to the Reserve Fund only, which is a portion of the Annual Operating Budget.**

Annual Contingency Reserve Fund Balance :

**Strata Plan BCS 4213 - Richards
Scenario #3: Fully Funded
1.5% Increases Throughout**



Scenario #4: nil
Final
Opening Balance of the Reserve Fund: \$116,200
Minimum Desired Reserve Fund Balance: \$350,000

Assumed Inflation: 3.00%
Contribution Increment: 3.00%

Assumed Annual Interest Rate for Interest Earned: 1.20%

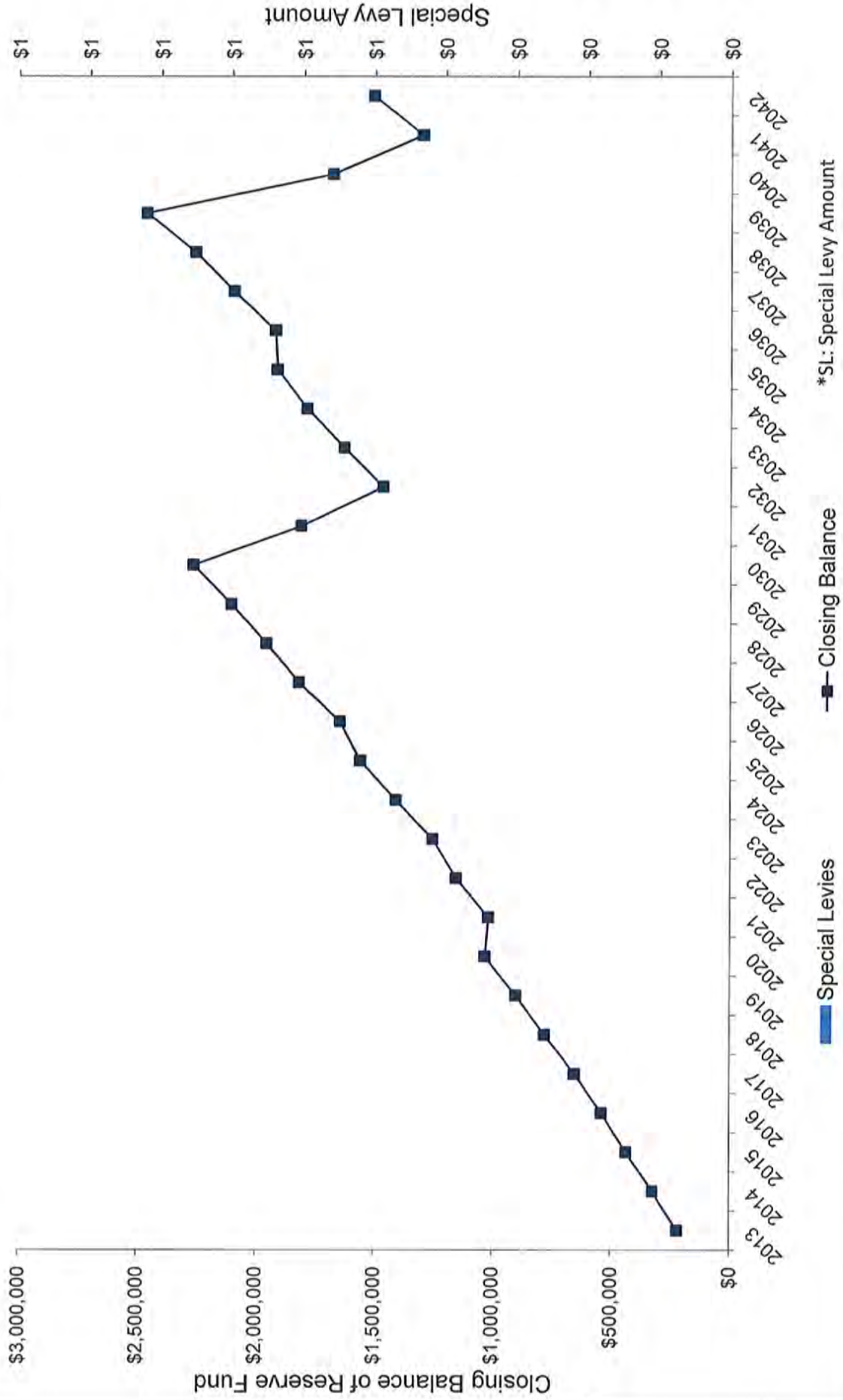
Year	Opening Balance	Recommended Annual Contribution	Estimated Inflation Adjusted Expenditures	Estimated Interest Earned	Special Levy	Percentage Increase in Recommended Annual Contribution**	Closing Balance	Comments
2013	\$116,200	\$102,074	\$0	\$615	\$0	0.00%	\$218,889	
2014	\$218,889	\$105,136	-\$5,150	\$2,627	\$0	3.00%	\$321,502	
2015	\$321,502	\$108,290	\$0	\$3,858	\$0	3.00%	\$433,650	
2016	\$433,650	\$111,539	-\$13,113	\$5,204	\$0	3.00%	\$537,280	
2017	\$537,280	\$114,885	-\$5,628	\$6,447	\$0	3.00%	\$652,985	
2018	\$652,985	\$118,332	\$0	\$7,836	\$0	3.00%	\$779,153	
2019	\$779,153	\$121,882	-\$9,552	\$9,350	\$0	3.00%	\$900,832	
2020	\$900,832	\$125,538	-\$6,149	\$10,810	\$0	3.00%	\$1,031,030	
2021	\$1,031,030	\$129,304	-\$156,446	\$12,372	\$0	3.00%	\$1,016,261	
2022	\$1,016,261	\$133,183	-\$10,438	\$12,195	\$0	3.00%	\$1,151,201	
2023	\$1,151,201	\$137,179	-\$51,069	\$13,814	\$0	3.00%	\$1,251,126	
2024	\$1,251,126	\$141,294	\$0	\$15,014	\$0	3.00%	\$1,407,434	
2025	\$1,407,434	\$145,533	-\$11,406	\$16,889	\$0	3.00%	\$1,558,450	
2026	\$1,558,450	\$149,899	-\$82,238	\$18,701	\$0	3.00%	\$1,644,813	
2027	\$1,644,813	\$154,396	\$0	\$19,738	\$0	3.00%	\$1,818,946	
2028	\$1,818,946	\$159,028	-\$43,623	\$21,827	\$0	3.00%	\$1,956,179	
2029	\$1,956,179	\$163,799	-\$40,118	\$23,474	\$0	3.00%	\$2,103,334	
2030	\$2,103,334	\$168,713	-\$33,057	\$25,240	\$0	3.00%	\$2,264,230	
2031	\$2,264,230	\$173,774	-\$655,437	\$27,171	\$0	3.00%	\$1,809,738	
2032	\$1,809,738	\$178,987	-\$547,094	\$21,717	\$0	3.00%	\$1,463,348	
2033	\$1,463,348	\$184,357	-\$36,122	\$17,560	\$0	3.00%	\$1,629,143	
2034	\$1,629,143	\$189,888	-\$52,088	\$19,550	\$0	3.00%	\$1,786,492	
2035	\$1,786,492	\$195,584	-\$90,057	\$21,438	\$0	3.00%	\$1,913,458	
2036	\$1,913,458	\$201,452	-\$217,095	\$22,961	\$0	3.00%	\$1,920,777	
2037	\$1,920,777	\$207,495	-\$56,918	\$23,049	\$0	3.00%	\$2,094,403	
2038	\$2,094,403	\$213,720	-\$75,376	\$25,133	\$0	3.00%	\$2,257,880	
2039	\$2,257,880	\$220,132	-\$43,132	\$27,095	\$0	3.00%	\$2,461,975	
2040	\$2,461,975	\$226,736	-\$1,039,563	\$29,544	\$0	3.00%	\$1,678,691	
2041	\$1,678,691	\$233,538	-\$634,900	\$20,144	\$0	3.00%	\$1,297,473	
2042	\$1,297,473	\$240,544	-\$47,131	\$15,570	\$0	3.00%	\$1,506,456	

** Refers to the increase in the current annual contributions to the Reserve Fund only, which is a portion of the Annual Operating Budget.

Annual Contingency Reserve Fund Balance :

Strata Plan BCS 4213 - Richards

Scenario #4: nil



Scenario #5: nil

Final

 Opening Balance of the Reserve Fund: \$116,200
 Minimum Desired Reserve Fund Balance: \$350,000

 Assumed Inflation: 3.00%
 Initial Contribution Increment: 1.50%

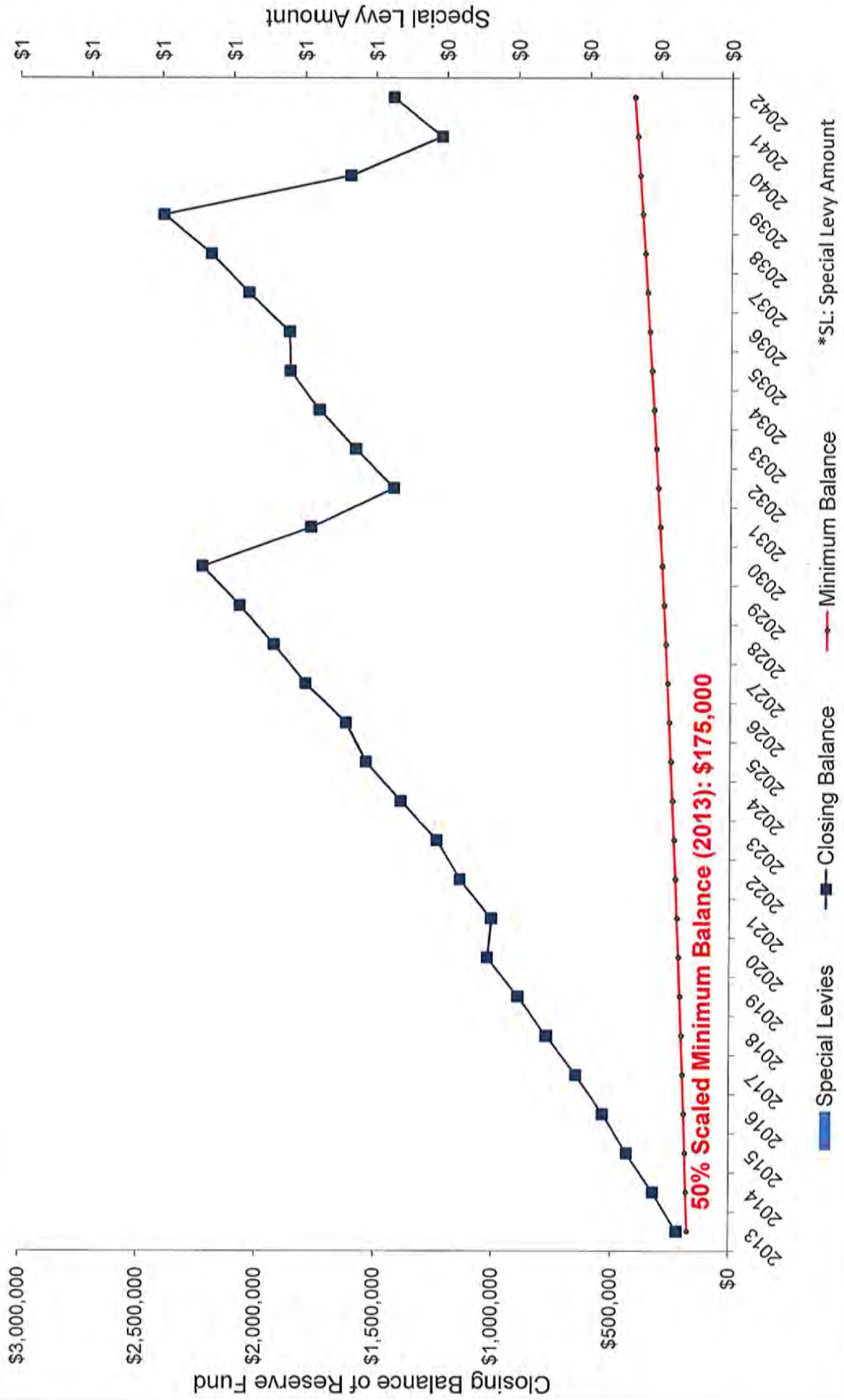
Assumed Annual Interest Rate for Interest Earned: 1.20%

Final Contribution Increment: 3.00%

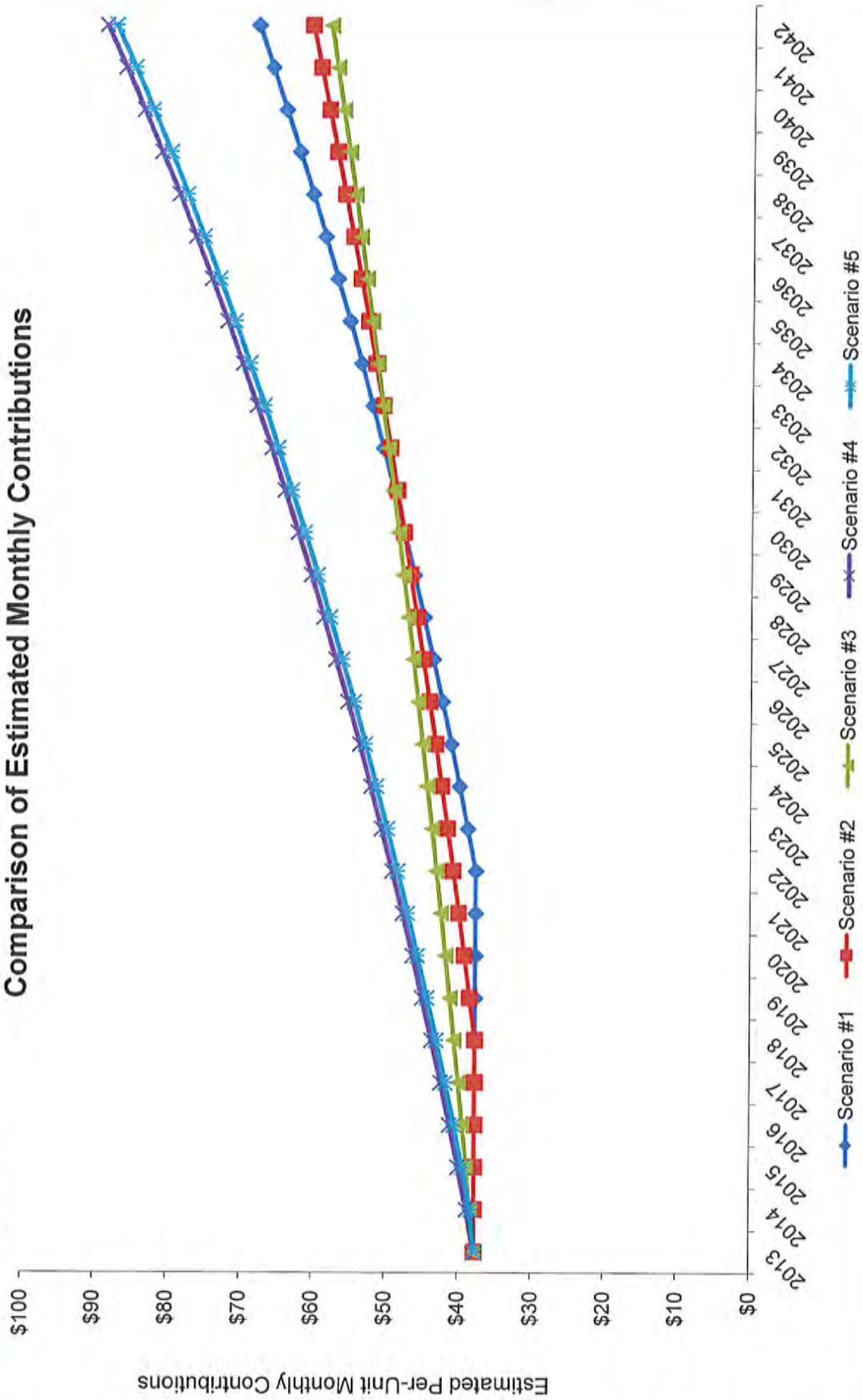
Year	Opening Balance	Recommended Annual Contribution	Estimated Inflation Adjusted Expenditures	Estimated Interest Earned	Special Levy	Percentage Increase in Recommended Annual Contribution**	Closing Balance	Comments
2013	\$116,200	\$102,074	\$0	\$615	\$0	0.00%	\$218,889	
2014	\$218,889	\$103,605	-\$5,150	\$2,627	\$0	1.50%	\$319,971	
2015	\$319,971	\$106,713	\$0	\$3,840	\$0	3.00%	\$430,523	
2016	\$430,523	\$109,915	-\$13,113	\$5,166	\$0	3.00%	\$532,492	
2017	\$532,492	\$113,212	-\$5,628	\$6,390	\$0	3.00%	\$646,466	
2018	\$646,466	\$116,608	\$0	\$7,758	\$0	3.00%	\$770,832	
2019	\$770,832	\$120,107	-\$9,552	\$9,250	\$0	3.00%	\$890,636	
2020	\$890,636	\$123,710	-\$6,149	\$10,688	\$0	3.00%	\$1,018,885	
2021	\$1,018,885	\$127,421	-\$156,446	\$12,227	\$0	3.00%	\$1,002,086	
2022	\$1,002,086	\$131,244	-\$10,438	\$12,025	\$0	3.00%	\$1,134,917	
2023	\$1,134,917	\$135,181	-\$51,069	\$13,619	\$0	3.00%	\$1,232,648	
2024	\$1,232,648	\$139,237	\$0	\$14,792	\$0	3.00%	\$1,386,677	
2025	\$1,386,677	\$143,414	-\$11,406	\$16,640	\$0	3.00%	\$1,535,325	
2026	\$1,535,325	\$147,716	-\$82,238	\$18,424	\$0	3.00%	\$1,619,227	
2027	\$1,619,227	\$152,148	\$0	\$19,431	\$0	3.00%	\$1,790,805	
2028	\$1,790,805	\$156,712	-\$43,623	\$21,490	\$0	3.00%	\$1,925,384	
2029	\$1,925,384	\$161,413	-\$40,118	\$23,105	\$0	3.00%	\$2,069,784	
2030	\$2,069,784	\$166,256	-\$33,057	\$24,837	\$0	3.00%	\$2,227,820	
2031	\$2,227,820	\$171,243	-\$655,437	\$26,734	\$0	3.00%	\$1,770,361	
2032	\$1,770,361	\$176,381	-\$547,094	\$21,244	\$0	3.00%	\$1,420,892	
2033	\$1,420,892	\$181,672	-\$36,122	\$17,051	\$0	3.00%	\$1,583,493	
2034	\$1,583,493	\$187,122	-\$52,088	\$19,002	\$0	3.00%	\$1,737,529	
2035	\$1,737,529	\$192,736	-\$90,057	\$20,850	\$0	3.00%	\$1,861,058	
2036	\$1,861,058	\$198,518	-\$217,095	\$22,333	\$0	3.00%	\$1,864,814	
2037	\$1,864,814	\$204,474	-\$56,918	\$22,378	\$0	3.00%	\$2,034,748	
2038	\$2,034,748	\$210,608	-\$75,376	\$24,417	\$0	3.00%	\$2,194,396	
2039	\$2,194,396	\$216,926	-\$43,132	\$26,333	\$0	3.00%	\$2,394,523	
2040	\$2,394,523	\$223,434	-\$1,039,563	\$28,734	\$0	3.00%	\$1,607,128	
2041	\$1,607,128	\$230,137	-\$634,900	\$19,286	\$0	3.00%	\$1,221,651	
2042	\$1,221,651	\$237,041	-\$47,131	\$14,660	\$0	3.00%	\$1,426,220	

** Refers to the increase in the current annual contributions to the Reserve Fund only, which is a portion of the Annual Operating Budget.

Annual Contingency Reserve Fund Balance :
Strata Plan BCS 4213 - Richards
Scenario #5: nil



**Contingency Reserve Fund :
Strata Plan BCS 4213 - Richards
Comparison of Estimated Monthly Contributions**



Assumed Inflation Rate = 3.00%																															
Total Annual Expenditures		0	-5,150	0	-13,113	-5,628	0	-9,552	-6,149	-159,446	-10,438	-51,069	0	-11,406	-82,238	0	-43,623	-40,118	-33,057	-655,437	-547,094	-36,122	-52,088	-90,057	-217,095	-66,918	-76,376	-43,132	-1,039,563	-634,800	-47,131
Item	Building Component	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042
1.1	Building																														
1.2.1	Parkade Roof Slab at Grade -																														
1.2.2	Parkade Roof Slab at Grade -																														
1.3	Parkade Walls - Periodic Repairs																														
1.4.1	Parkade Suspended Slabs - Wat																														
1.4.2	Parkade Suspended Slabs -																														
1.5	Parkade Slab-on-Grade -																														
1.6	Parkade Periodic Inspections																														
1.7	Parkade Painting																														
1.8	Parkade Entrance Doors x 2																														
2.1.1	Roof System -																														
2.1.2	Roof System - Heritage Homes -																														
2.1.3	Roof System - Periodic Repairs																														
2.2	Fall Protection System - Roof An																														
2.3	Concrete Eyebrow Overhang : W																														
3.1.1	Brick Masonry Unit Wall System																														
3.1.2	Brick Masonry Unit Wall System																														
3.1.3	Brick Masonry Unit Wall System																														
3.2.1	Exterior Exposed Mass Concrete																														
3.2.2	Exterior Exposed Mass Concrete																														
3.2.3	Exterior Exposed Mass Concrete																														
3.3	Wood Siding - Heritage Homes -																														
3.4.1	Balcony Slabs - Waterproofing M																														
3.4.2	Balcony Slabs - Localized Repair																														
3.4.3	Balcony Guardrails - Replaceme																														
4.1.1	Insulated Glazing Units																														
4.1.2	Insulated Glazing Units - Offset																														
4.2.1	Window Systems - Phase I East																														
4.2.2	Window Systems - Phase II Sou																														
4.2.3	Window Systems - Phase III We																														
4.2.4	Window Systems - Phase IV No																														
4.2.5	Window Systems - Heritage Hom																														
4.3	Window Refurbishment																														
4.4	Sealants																														
4.5	Balcony/Terrace Deck doors																														
5.1	Suite Entrance Doors																														
5.2	Service Doors																														
5.3	Baseboards and Wood Trim 520																														
5.4	Light fixtures - Common Area																														
5.5	Textured Ceiling Finishes sq.ft. 5																														
5.6	Interior Finishes 45000 sq.ft																														
5.7	Carpeting - Replacement : 10000																														
5.8	Entrance Lobbies -																														
5.9	Stairwells - Maintenance	0																													
5.1	Exercise Room																														
5.11	Building Services Office / Meeting																														
6.1	Hard Landscaping Maintenance																														
6.2	Soft Landscaping																														
6.3	Playground Equipment -																														
6.4	8th Level Terrace Deck Garden F																														
7.1.1	MUA #1 - Industrial Commercial																														
7.1.2	Armstrong plate heat exchanger																														
7.1.3	Glycol circulation pump																														
7.1.4	MUA #2 - Industrial Commercial																														
7.1.5																															