MORRISON HERSHFIELD

# Final DEPRECIATION REPORT

# Mountaingate Strata

# CORPORATION NW 2040

Moorside Place, Braemoor Place, Ridgemoor Place, Burnaby, British Columbia

Presented to:

**The Owners of NW 2040**
**c/o** James Kennedy, Treasurer
James@9815.ca
9054 Moorside Place

Report No. 2102140.00 June 28, 2021

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## APPENDICES

# 1. INTRODUCTION

This letter report and appendices comprise your 2021 Depreciation Report. It is based on our proposal dated September 9, 2020. Approval was provided by James Kennedy, Treasurer, dated February 9, 2021.

This document was prepared in general compliance with Section 6.2 (Depreciation Report) of the Strata Property Regulation B.C. Reg. 43/2000 with Amendments by B.C. Reg. 68/2014 dated July 16, 2014.

This report is subject to the limitations identified in Appendix C.

**PROJECT TEAM AND QUALIFICATIONS**

As per section 6.2 of the Act, clause 1d, the report must provide the name of the person from whom the depreciation report was obtained and a description of:

i) Their qualifications

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

iii) The relationship between that person and the strata corporation

a. Morrison Hershfield Limited (MH) prepared this report. MH is a prominent, privately held, multi-disciplinary engineering and management firm. Our mandate is to provide services and solutions that will assist our clients in achieving their objectives in a cost effective, efficient, professional and friendly manner. The firm was established in 1946 and has a broad range of engineering, architectural and specialist skills that are used to serve clients in the public and private sectors.

This Depreciation Report has been prepared and/or reviewed by various personnel. They, along with their qualifications and areas of responsibility, are listed below:

- Jacquelyn White, P.Eng. is a Principal of MH and project manager in facility assessment with over twenty years of experience in the design, review and assessment of buildings. Ms. White has been performing depreciation report/reserve fund studies since the late 1990's while working in Ontario. Ms. White reviewed this report.

- Nicole Wilson, A.T., LEED Green Associate, of MH is a building science consultant experienced in the design, construction and assessment of both low-rise and high-rise construction. Ms. Wilson addressed the building, mechanical / electrical and site elements and prepared the report including the BCA/RFS Tables.

b. We confirm that we carry professional liability insurance in the amount of $2,000,000 per claim.

c. Morrison Hershfield is not associated with Strata Corporation NW 2040 beyond being retained to perform professional services. We are not aware of any conflicts of interest.

## DRAFT SUBMISSION

A draft report was provided for the review of the council dated May 25, 2021. Minor edits have been carried out through to the final.

# 2. PHYSICAL ASSESSMENT

This study is based on a review of relevant documents provided by NW 2040. It is also based on a visual review of the common elements as described in the Building Data Sheet (Appendix A). The following documents were reviewed:

- Architectural drawings prepared by L.D. Laidlaw Architecture, 4/1/1982
- Landscape drawings prepared by J.D. Mitchell & Associates Ltd dated 8/13/1982
- Financial information as provided by Strata
- Strata bylaws dated November 7, 2001, amended November 6, 2019

The visual reviews were completed on 3/25/2021 by Nicole Wilson, A.T., LEED Green Associate. During our review, we met with James Kennedy (treasurer), Aaron (council president) and Doug (former council president) who provided access to representative areas of the facility including

- 9054 Moorside Place, 9045 Moorside Place and 9155 Ridgemoor Place
- Service rooms containing electrical equipment.
- The site.

Current condition and recommendations by component are included in the attached Tables (Appendix D). The component inventory excludes capital expenses less than $1,000. As identified in the startup questionnaire, these smaller items will be covered out of the operating budget. Following accounting standards, we identify a fiscal year by the year in which it ends. For example, the 2020/2021 fiscal year is referred to throughout as 2021. To maintain consistency in calculations, a component's year of acquisition is also shown as the fiscal year rather than the calendar year.

In summary, we recommend planning for the following significant renewal projects and studies:

| SHORT TERM (WITHIN TWO YEARS) | MIDDLE TERM (WITHIN SIX YEARS) |
|---|---|
| **Projects** | **Projects** |
| • Continued IGU replacements<br>• Continued water main and valve replacement<br>• Planter replacement<br>• Main entrance door repainting | • Sliding door replacement<br>• Electrical disconnect switch and metering center replacement<br>• Outdoor lighting replacement |
| **Studies** | **Studies** |
| • None | • Electrical system review |

Prior to any major projects, a detailed review should be undertaken. This will help refine timing and budget.

For example, an electrical analysis will determine the actual condition of the electrical systems. Once this is done, the timing and budget of the replacement project can be adjusted to reflect the analysis findings.

Similarly, regular building envelope assessments will assist in prioritizing renewals as the life expectancies of those components approach. Windows for example, may be deferred well beyond

their useful service life if it is known that they are not contributing to any damage to the wall assembly and owners are satisfied with their appearance and thermal performance.

Ultimately, every identified project should be reviewed by council. The council should act in the best interest of the corporation based on assumed risk and available funds.

Further, we note that while a number of large projects in the future may be shown to occur within a single year (due to the nature of assigning many of the service lives in general five-year increments), in reality major projects will be completed in discrete years. As the depreciation report is updated over time, and these projects become closer, slight timing adjustments can be made as necessary.

# 3. FINANCIAL ANALYSIS

Reserve fund contributions should be established by the Council. Three funding Scenarios are summarized below and detailed in Appendix C.

## SUMMARY OF FUNDING SCENARIOS

### Scenario 1

This scenario is based on the last approved funding plan.

This Scenario shows contribution increases of 10% per year, including inflation, for 2 years, followed by increases due to inflation only thereafter. The Reserve Fund Balance remains positive over the next thirty years, with a minimum balance of approximately $37,980 in fiscal year 2026. For details, please see the 30 Year Reserve Fund Cash Flow Table for Scenario 1.

| | 2021 | 2022 | 2023 | 2024 |
|---|---|---|---|---|
| Annual Reserve Contribution* | $46,151 | $50,766 | $55,843 | $56,960 |
| % Increase | n/a | 10.0% | 10.0% | 2.0% |
| Average Increase per Unit | n/a | $128.20 | $141.02 | $31.02 |
| Average Annual CRF Contribution per Unit | $1,281.97 | $1,410.17 | $1,551.19 | $1,582.21 |

### Scenario 2

This Scenario shows contribution increases of 5% per year, including inflation, for 29 years, followed by increases due to inflation only thereafter. Other contributions are included as required. The Reserve Fund Balance remains positive over the next thirty years, with a minimum balance of approximately $39,913 in fiscal year 2036. For details, please see the 30 Year Reserve Fund Cash Flow Table for Scenario 2.

| | 2021 | 2022 | 2023 | 2024 |
|---|---|---|---|---|
| Annual Reserve Contribution* | $46,151 | $48,459 | $50,881 | $53,426 |
| % Increase | n/a | 5.0% | 5.0% | 5.0% |
| Average Increase per Unit | n/a | $64.10 | $67.30 | $70.67 |
| Average Annual CRF Contribution per Unit | $1,281.97 | $1,346.07 | $1,413.37 | $1,484.04 |

### Scenario 3

This Scenario shows contribution increases of 15% per year, including inflation, for 6 years, followed by increases due to inflation only thereafter. Other contributions are included as required.The Reserve Fund Balance remains positive over the next thirty years, with a minimum balance of approximately $41,028 in fiscal year 2036. For details, please see the 30 Year Reserve Fund Cash Flow Table for Scenario 3.

| | 2021 | 2022 | 2023 | 2024 |
|---|---|---|---|---|
| Annual Reserve Contribution* | $46,151 | $53,074 | $61,035 | $70,190 |
| % Increase | n/a | 15.0% | 15.0% | 15.0% |
| Average Increase per Unit | n/a | $192.30 | $221.14 | $254.31 |
| Average Annual CRF Contribution per Unit | $1,281.97 | $1,474.27 | $1,695.41 | $1,949.72 |

*Annual Reserve Contribution refers to the amount contributed each year to the reserve fund from the monthly common expenses.

** Total Other Contributions refers to other contributed amounts including special assessments or surplus funds transferred from other sources (i.e. operating budget or contingency fund).

We recommend you review this deprecation report with your accountants. They should confirm it meets the needs of your Corporation and is in keeping with their accepted principles. Closure

This Depreciation Report presents 3 possible funding strategies. They all provide adequate funding to cover anticipated major repairs and renewals expected in the next 30 years. They are based on the information provided to us by Strata Corporation and our review of the site.

The Depreciation Report is a dynamic document that will change over time as repairs/renewals are completed and interest/inflation rates change. Note too, the Capital Plan's schedule for expenses do not represent a fixed schedule for expenditures. Expenditures may be required sooner or later than we have anticipated. Similarly, the opinions of probable cost can vary due to a number of reasons including changing market conditions, availability of newer materials and systems, and increased or decreased scope of work than we have identified. As such, regular updates to this Depreciation Report are necessary to re-assess the needs of your building. At a minimum, you are required to complete a Depreciation Report Update within three years of the date of this study.

Thank you for trusting Morrison Hershfield to complete this study. Please contact us at any time if you wish to update this study or to pursue the recommended investigations and/or capital projects. We would be pleased to provide a proposal to perform any of the additional investigations identified. We also provide full engineering design, tender, construction management and contract administration services for major repair or replacement projects required at your site, and welcome the opportunity to provide Engineering services to assist you with these undertakings.

If you have any questions, please contact the undersigned.

Yours truly,
**MORRISON HERSHFIELD LIMITED**

Nicole Wilson, A.T., LEED Green Associate
*Building Science Consultant, Project Manager*

Jacquelyn White, P.Eng
*Principal, Department Manager-BSS*
*Vancouver*

# APPENDIX A:
# BUILDING DATA SHEET

# BUILDING DATA SHEET

<table>
<tr><td>Strata Name:</td><td colspan="3">Mountain Gate, NW2040</td></tr>
<tr><td>Address:</td><td colspan="3">9040 to 9093 Moorside Place, 9215 - 9299 Braemoor Place, 9120 - 9155 Ridgemoor Place, Burnaby, BC</td></tr>
<tr><td>Units:</td><td>36</td><td>Stories:</td><td>3</td></tr>
<tr><td rowspan="2">Recreation Facilities:</td><td rowspan="2">None</td><td>Constructed:</td><td>circa 1983</td></tr>
<tr><td>Garage:</td><td>Attached Carports</td></tr>
<tr><td colspan="2" rowspan="3">Common Elements:<ul><li>Structural systems</li><li>Exterior walls, all components up to the back-side of the interior gypsum wall board,</li><li>Windows, to the interior unfinished surface</li><li>Asphalt shingle sloped roofing systems and vinyl decking membranes</li><li>Mechanical systems (components that serve more than one unit)</li><li>Electrical systems (components that serve more than one unit)</li><li>Roadways, Sidewalks</li><li>Bridges</li></ul></td><td colspan="2">  </td></tr>
<tr><td colspan="2">Shared Facilities:<ul><li>None</li></ul></td></tr>
<tr><td colspan="2">Not part of this property (not covered in this document):<ul><li>None</li></ul></td></tr>
</table>

# APPENDIX B:
# GENERAL DEPRECIATION REPORT INFORMATION

# DEPRECIATION REPORT GENERAL INFORMATION

## OBJECTIVES

The objective of this study is to provide the Strata Council with sufficient information to enable you to:

i) Set up a schedule for the anticipated repair and replacement of common element items.

ii) Set up a special account for major repair items and replacement of common elements and assets of the Corporation.

iii) To determine the annual contributions necessary to maintain an adequate balance for the 30 year period of this study.

iv) Satisfy the legislation regarding the Strata Property Regulation B.C. Reg. 43/2000 with Amendments by B.C. Reg. 68/2014 dated July 16, 2014.

## LIMITATIONS AND ASSUMPTIONS

This report is intended for the sole use of Strata Corporation NW 2040, and must not be distributed or used by others without our knowledge (with the exception of disclosure to potential purchasers of Strata Corporation NW 2040 ). It is based on the documents and information provided to us and the findings at the time of our on-site investigation.

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

Unless specifically noted in this report, no testing, verification of operation of systems, physical review of subsurface conditions or concealed systems and components, review of concealed elements, intrusive openings, opening of system components for internal inspection, detailed analysis or design calculations were conducted, nor were they within the scope of this review.

Some of the findings herein are based on a random sampling visual review of the surface conditions, discussions with the Strata Council and/or their designated representatives, and review of relevant documents. Observations were made only of those areas that were readily accessible during our review. Deficiencies existing but not recorded in this report were not apparent given the level of study undertaken. Components not included have not been reviewed, and if their conditions need to be known, further study will be required.

It is possible that unexpected conditions may be encountered at the building/facility that have not been explored within the scope of this report. Should such an event occur, MH should be notified in order that we may determine if modifications to our conclusions are necessary.

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

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

## REPORT FORMAT

A description of the table contents and our approach to assigning ratings is described below:

| COLUMN | DESCRIPTION |
|---|---|
| **Component ID** | Descriptive component identifier |
| **Location / Type** | Where appropriate, we have provided a location or other modifier as needed to assist in identifying the specific component. This may refer to an elevation, floor number, room, or material type. |
| **Description & History** | A brief description of the component, deficiencies observed by MH (if any), and problems or previous repairs reported by site staff. |
| **Condition Rating** | We have also provided an overall condition rating for each component, as follows:<br>Excellent — Functioning as intended; as new condition.<br>Good — Functioning as intended; limited (if any) deterioration observed.<br>Fair — Function and operation exhibiting wear or minor deterioration, normal maintenance frequency.<br>Poor — Function and operation failing; significant deterioration and distress observed; increased maintenance attention has been required.<br>NR — Not Reviewed –applicable to concealed systems, such as buried services, or where access was not provided to MH to review a component<br>NA — Not Applicable – applicable to Studies/Reports/Surveys. |
| **Year of Acquisition** | This is assigned based on available data from drawings or reports, readily accessible nameplate information on equipment, or interviews with site staff. Where the year is not known, MH provides an estimate based on observed condition. Year reflects the fiscal year in which the component was acquired, not necessarily the calendar year. |
| **Recommendation** | Our recommended approach for reserve fund budgeting. |

| COLUMN | DESCRIPTION |
|---|---|
| **Type** | We have categorized the type of expense as follows:<br><br>Renewal — Replace like with like (typically at end of service life), allowing for changing contemporary standards.<br>Repair — For repairs, typically to extend the life of a component, restore functionality, or for partial replacements of isolated failures.<br>Contingency — For repairs likely to be required where the timing and scope cannot be assessed without additional study; or where failure is unpredictable.<br>Study — Further study is required to assign more accurate repair/replacement costs or timing for a Contingency item.<br>Upgrade — Replace to a higher standard (more efficient, higher quality, etc.).<br>Our report may identify upgrades which we believe are worth exploring. In such cases, the costs are not considered within the cash-flow, since we understand upgrades may not be funded out of the Reserve Fund.<br>New — For new components added to the Depreciation Report, typically to reflect changing legislation. |
| **Priority** | A Priority Rating is provided to each Recommendation to assist you with budgeting of expenses, and to assess where deferral of an expense may be appropriate.<br>1. Immediate: items that require immediate repair or replacement because of either a code deficiency, legislative requirement or a safety concern<br>2. Restore Functionality: items that currently show signs of failure, requiring repair or replacement to restore functionality in the near future.<br>3. Future Renewal: items that will require future repair or replacement to maintain functionality (life cycle replacement). Most Reserve Fund Expenses will fall under this category.<br>4. Discretionary Renewal: items where the timing, scope of work and phasing is at the owner's discretion. This is typically limited to cosmetic issues. |
| **Age in Current Fiscal Year** | The age at the time of the assessment. Where the exact age is unknown, MH provides an estimate based on observed condition. |

| COLUMN | DESCRIPTION |
|---|---|
| **Typical Lifecycle** | Standard lifespan, assuming normal maintenance, based on our experience and manufacturer's recommendations. A piece of equipment may have a typical lifespan for complete replacement, as well as a typical lifespan for a recommended repair with a much shorter frequency.<br>A lifecycle of 99 shows a one-time project, or study. |
| **Remaining Life Expectancy** | Remaining life of component and/or time to the next major repairs. Based on Age subtracted from Typical Lifespan, but confirmed and adjusted as needed depending on observed condition.<br>A negative value is used to show phased projects already partially complete. |
| **Years Over Which Project is Phased** | Normally projects are completed in one year. Larger projects may be phased over several consecutive years. |
| **Percent Responsibility** | Our understanding of the Corporation's responsibility for shared facilities.<br>Most common elements are budgeted for at 100%, but any exceptions are noted in this column. |
| **Include Y/N** | All components that are the responsibility of the corporation are listed; however, for various reasons, some are not carried through the capital plan. These can include items identified as being covered under other budgets and upgrades. |
| **Recommended Budget** | This represents our opinion of probable cost, in current fiscal year dollars, including consulting services (design, tendering and construction review) and contingencies where we believe it is appropriate. The cost for these services can vary significantly depending on the size, scope and degree of complexity of the project. Applicable taxes are also included.<br>Opinions of probable cost are provided only as an indication of possible cost of remedial work. The repair or replacement costs are based on published construction cost data, recent bid prices on similar work, information provided by the owner, and our professional judgment. More precise opinions of probable cost would require more detailed investigation to define the scope of work.<br>The costs in this report are typically referred to as Class D estimates (±50%), defined by the Budget Guidelines for Consulting Engineering Services as: "A preliminary estimate which, due to little or no site information, indicates the approximate magnitude of cost of the proposed project, based on the client's broad requirements. This overall cost estimate may be derived from lump sum or unit costs for a similar |

| COLUMN | DESCRIPTION |
|---|---|
| | project. It may be used in developing long term capital plans and for preliminary discussion of proposed capital projects."<br>The opinions of probable cost we have presented can vary due to a number of reasons including changing market conditions, availability of newer materials and systems, and increased or decreased scope of work than we have identified.<br>All opinions of probable cost assume that regular annual maintenance and repairs will be performed to all elements at the facility.<br>All costs in the Condition Assessment and Capital Plan tables are identified in CURRENT FISCAL YEAR Canadian dollars. |
| **Capital Plan** | The tables show MH's opinion of the probable cost to carry out the recommendations (in current fiscal year dollars) during the planning horizon. The repairs and replacements we have forecasted do not represent a fixed schedule for replacements; repairs or replacements may be required sooner or later than we have anticipated. |

The **Component Condition Assessment** and **Capital Plan Expenditure Forecast Table** in Appendices C and D show MH's opinion of the probable cost to carry out the recommendations (in current fiscal year dollars) during the depreciation planning period. The repairs and replacements we have forecasted do not represent a fixed schedule for replacements; repairs or replacements may be required sooner or later than we have anticipated.

Review of the Tables reveals several contingencies that occur in a single year of the study period. Though these repairs and replacements will not all take place in one year, and may not be required at all, it is prudent to budget for such repairs since failure of some components is unpredictable.

## FINANCIAL TERMS, ASSUMPTIONS AND CALCULATIONS

### Inflation

The Government of Canada and the Bank of Canada inflation-control policy is aimed at keeping inflations at agreed to target values. At present the target range is 1 to 3 per cent, with the Bank's monetary policy aimed at keeping inflation at the 2 per cent target midpoint. This policy has continued to be renewed since implementation in 1991, and currently extends to December 31, 2021.

The total annual estimated expenditures are shown in the Capital Plan in current fiscal year dollars. The expenditures shown in the Cash Flow Table are inflated annually by the inflation percentage show.

In the startup questionnaire, MH requested confirmation of the inflation rate to be used over the course of the study. This may not be the actual current inflation rate, but is a reasonable estimate to begin the long term planning.

## Interest

In the startup questionnaire, MH requested confirmation of the interest rate to be used over the course of the study. This may not be the actual rate of interest on the Corporation's current investments, but is a reasonable estimate to begin the long term planning.

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

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

$$Interest = InterestRate \times (StartingBalance - \frac{Expenses}{2} + \frac{AnnualContribution}{2})$$

## Starting Balance

MH requested information regarding the Reserve Fund balance at the start of the current fiscal year in the startup questionnaire. Where appropriate documents are provided, we confirm the opening balance against the financial statements. We assume the Strata Council confirms the starting balance is correct to the best of their knowledge prior to authorizing us to finalize the report.

## Contributions

MH requested information regarding the present annual contribution to the Reserve Fund in the startup questionnaire. We assume the Strata Council confirms the current annual contribution is correct to the best of their knowledge prior to authorizing us to finalize the report.

Future annual contributions are calculated based on the estimates of life expectancy and opinions of probable cost, Minimum Reserve Fund Balance, and the assumptions for inflation and interest. Sample annual contributions that would result in an adequate Reserve Fund are indicated in the attached Cash Flow Scenarios.

When large expenses are anticipated in the near future and the existing Reserve Fund Balance is relatively low, increases to the annual contribution may not be sufficient. Increasing the annual contribution to an amount that can accommodate the major expenses is typically not considered a suitable funding plan since the Reserve Fund Balance often becomes relatively high for the remainder of the study period. Excess funds in a Reserve Fund cannot be used for any other purpose except for the major repairs and replacements for which they have been budgeted.

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

## Minimum Reserve Fund Balance

MH requests information regarding the desired minimum balance in the startup questionnaire. We assume the Strata Council confirms the minimum balance of the approved scenario is acceptable even if it contradicts original directions provided in the completed questionnaire.

As a guideline, we recommend a minimum balance of 25% of the operating budget, as per Section 6.1 (a)(ii). (See below)

## REQUIREMENTS UNDER THE ACT

## Contributions

The Annual Reserve Contribution for the first year of this study was provided by the Strata. Future annual contributions are calculated based on the estimates of life expectancy and opinions of probable cost, Minimum Reserve Fund Balance, and the assumptions for inflation and interest.

Contributions may be limited by the Strata Act as provided by Section 6.1, which indicates that the amount of the annual contribution to the contingency reserve fund must be determined as follows:

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

    a. 10% of the total amount budgeted for the contribution to the operating fund for the current fiscal year; and

    b. The amount required to bring the contingency reserve fund to at least 25% of the total amount budgeted for the contribution to the operating fund for the current fiscal year.

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

## Timing of Studies

The Depreciation Report is a dynamic document that will change over time as repairs/replacements are carried out on the common elements and interest/inflation rates change. The repairs and replacements we have forecasted do not represent a fixed schedule for replacements; repairs or replacements may be required sooner or later than we have anticipated. Similarly, the opinions of probable cost we have presented can vary due to a number of reasons including changing market conditions, availability of newer materials and systems, and increased or decreased scope of work than we have identified. As such, regular updates are necessary to re-assess your needs.

The Corporation is required to complete an update with site Inspection within three years of this study.

# GLOSSARY OF BUILDING TERMS

The following is a list of terms and abbreviations which may have been used in the report produced for the noted project. All of the terms and abbreviations used are standard within the industry, but the glossary may be of some aid for those not familiar with construction terms.

| | |
|---|---|
| Air Barrier | Refers to a combination of materials and components, including joints, that control the flow of air through an assembly, limiting the potential for heat loss and condensation due to air movement. |
| Air Leakage | Refers to airflow through a space like a wall or roof assembly. The outward leakage of air is known as exfiltration and the inward leakage is known as infiltration. Exfiltration of warm, humid interior air will carry water vapour into the assembly which may condense if it contacts a cool enough surface. |
| Ampere (A) | The unit of measurement of electric current. The greater the amperage, the larger the size of the conductor required to carry the current. |
| Annunciator Panel | A lighted panel that provides information about the location of an activated fire alarm in a building, typically located near the main entrance of a building. |
| Backflow Preventer | A device used in plumbing systems to prevent potentially contaminated water from moving back into the clean water supply. |
| Balcony | Refers to a horizontal surface exposed to the outdoors, but projected from the building so that it is not located over a living space. |
| Base Coat | Refers to the initial wet state material, either factory or field-mixed, used to encapsulate the reinforcing mesh (e.g., in liquid applied balcony waterproofing or in EIFS applications). |
| Bitumen | The term covering numerous mixtures of hydrocarbons such as those found in asphalt and mineral pitch. |
| Building Envelope | Refers to those elements of the building that separate inside conditioned space from outside unconditioned space, and includes walls, windows, doors, roofs, balcony decks (over occupied living space) and foundations. Sometimes referred to as “building enclosure” or an “environmental separator” in building codes. |
| Building Paper | Refers to a breather-type asphalt sheathing paper which is rated in minutes (15, 30 or 60), based on preventing water flow through it for number of minutes in accordance with a standard test. |
| Built-Up Roof (BUR) | Refers to a waterproof system constructed of multiple felt layers mopped down with hot bitumen. |

| | |
|---|---|
| Capillary Break | Refers to the gap between parallel layers of material sufficient to break the surface tension of water, which is typically a minimum of 10 mm (3/8"). |
| Caulking | Material with widely different chemical compositions used to make a seam or joint air-tight or watertight. |
| CCTV | Closed Circuit Television, a video camera system that transmits video images to specific monitors as opposed to broadcasting the signal over air waves. Typically used in security applications. |
| CFM | Cubic feet per minute, the common unit of air flow measurement. |
| Cladding | Refers to a material or assembly that forms the exterior skin of the wall and is exposed to the full force of the environment. Cladding types include: stucco, EIFS, metal panels, brick/stone veneer, wood siding, and vinyl siding. |
| Control Joint | Also *Movement Joint*, a continuous joint in a structure or element, used to regulate the amount of cracking and separation resulting from relative movement. |
| Condenser | A device used to remove heat from refrigerating equipment by circulating hot refrigerant gas through coils in the unit and blowing outdoor air across the coils with a fan. Cooling the gas causes it to condense back into a liquid. |
| Cooling Tower | A device used to cool condenser water in a chiller by evaporation. Condenser water is sprayed into the top of the cooling tower. The droplets fall through the tower as air is blown upward through the tower, partly evaporating the droplets, which cools the remaining water. Water leaving the cooling tower is typically 10 degrees cooler than when it entered. |
| Deck | Refers to a horizontal surface exposed to the outdoors, located over a living space, and intended for moderate use but not for access to other areas of the building. |
| Delamination | Refers to a separation along a plane parallel to the surface. |
| Dew Point | Refers to the temperature at which air containing a constant amount of water vapour reaches the saturation point. As the temperature decreases, it has a lower capacity to contain moisture. Condensation can occur at or below the dew point temperature. |
| Direct Expansion | A refrigeration method in which an air cooling coil contains refrigerant rather than a secondary coolant glycol or brine. |

| | |
|---|---|
| Drained (also Rainscreen) Cavity | Refers to a design strategy whereby a positive drainage plane is created immediately behind the exterior cladding material, sufficient in width to break the surface tension of water, and to allow incidental water entering the wall system to drain by gravity with the aid of flashings and membranes. |
| Drip Edge | Refers to a projection detailed to direct water run-off away from wall, window, balcony or roofing element. |
| Efflorescence | Refers to the dissolved salts in the material (such as concrete or brick) being transported by water, and redeposited on the surface after evaporation. |
| EIFS | Refers to *Exterior Insulated Finish System* and generally consists of layers of rigid insulation adhered or fastened to the substrate, and finished with thin coats (lamina) of reinforced cementitious material and a finish coat of acrylic stucco. |
| EPDM (Ethylene Propylene Diene Monomer) | Refers to a waterproofing sheet membrane made of vulcanized rubber. These membranes, usually single-ply applications, may be installed fully bonded to the substrate with an adhesive, or may be "loose-laid" with only the laps and terminations of the membranes adhered. |
| Exhaust Air | Air mechanically removed from a building to reduce the concentration of moisture, cooking odours, and other contaminants from the building. |
| Face-seal | Refers to a building envelope strategy where the performance of the exterior wall is dependent on the ability of the exterior surface of the cladding, windows and associated sealant to shed water and prevent its infiltration. This system cannot accommodate water that penetrates past the exterior face since a positive drainage path and/or additional continuous barrier to water penetration are not provided. |
| Fan Coil Unit | A device consisting of a fan and water coil that can heat an area by circulating hot water through the coil and cool by circulating chilled water through the coil. |
| Fibre Saturation (of wood) | Refers to the point where the cell walls are fully swollen but the cells are otherwise empty of liquid water, also known as the *fibre saturation point.* |
| Finish Coat | Refers to the final wet state material, which provides colour and texture, applied over the reinforced base coat. |
| Fire Detector | A fire alarm system component which senses the presence of a possible fire through the presence of smoke particles or heat (i.e. smoke detector, heat detector). |
| Fishmouth | Refers to a deficiency in the installation of waterproofing membranes (roofing, self-adhering membranes, etc.) which results in a fold in the edge of the membrane, through which water can penetrate. |

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| Flashing | Refers to sheet metal or other material used in roof or wall construction and designed to shed water (typically sloped outwards, with a drip edge to shed water). Used in conjunction with:<br>• *Cap* or *parapet flashing:* top of wall, pier, column or chimney**.**<br>• *Saddle flashing* an upturn, sloping transition piece between a horizontal and vertical plane, e.g. balcony cap and wall intersection.<br>• *Head/sill flashing:* at head or sill of window opening or other penetration.<br>• *Base flashing:* at bottom edge of wall surface.<br>*Cross cavity (*or *through-wall flashing in masonry application):* a flashing which sheds water from the moisture barrier plane to the exterior, through the cladding. |
| Glazing | A generic term for the transparent, or sometimes translucent, material in a window or door. Often, but not always, glass. |
| Glazing Bead | A molding or stop around the inside of a frame to hold the glass in place. |
| Glazing Unit | That part of a window which includes more than one glazing layer sealed around the outside edge to prevent air or moisture from entering the airspace and eliminating dirt and condensation between glazings. |
| Gum Lip | Refers to a method of sealing a flashing to a wall surface whereby the top edge of the flashing is bent outwards to form a caulk-filled cavity (typically at the termination of a waterproofing membrane). |
| Heat Exchanger | A device used to heat a fluid or gas with another fluid or gas without the two streams coming in direct contact with each other and mixing. For example a radiator heats air using hot water. The air and water circulate through the heat exchanger (the radiator) but do are prevented from coming in contact with each other by the radiator. |
| Heat Pump | A mechanical device designed to provide both winter heating and summer cooling. |
| HID | High Intensity Discharge, a generic term for mercury, vapour, metal halide and high pressure sodium light fixtures. Light in these fixtures is produces by an electric arc between two electrodes. |
| House Panelboard | A panelboard which supplies power to common area loads. |
| Housewrap | Refers to a sheet plastic material which is used as a sheathing paper, generally between the wall sheathing material and the exterior cladding. Although recognized as a proprietary term, in this report *housewrap* is used to represent a generic group of materials. One common type of housewrap consists of spun-bonded Polyolefin (SBPO), another is made of perforated polyethylene. Their resistance to liquid water is high, but resistance to water vapour is lower than many common “vapour barrier” materials. |

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| Hydronic Heating | A means of heating a space through the use of hot water circulated through heating coils or a radiator in the space. |
| Initiating Device | A fire alarm system component which initiates a fire alarm (i.e. pull station). |
| Inverted Roof | Where the roof membrane is located below the insulation and ballast (also Protected Membrane Roof). |
| Joist | One of several parallel, horizontal and relatively closely spaced concrete, wood or steel members directly supporting a floor or roof slab or deck. |
| kVA | Kilo-Volt-Ampere, the unit used to measure apparent power. This is what is charged by the utility. |
| kW | Kilowatt, the unit used to measure real power. This is power that is actually used by the customer. |
| Lintel | A horizontal structural support above an opening in a wall. |
| Maintenance | Refers to a regular process of inspection, cleaning and minor repairs of envelope elements and exterior systems such as roof, walls, windows, gutters, downspouts and drains. Cleaning is for normal activities for those items as required on a regular basis, such as leaves from gutters and drains in the fall and cleaning lint from dryer vents. Minor repairs are for small projects for reinstating failed elements such as areas of cracked caulking or peeling paint. |
| Makeup Air | Fresh, outdoor air that is mechanically introduced to a building to make up for the air removed from buildings by exhaust systems. |
| Moister Content (MC) | Refers to the weight of water contained in the wood, expressed as a percentage of the weight of oven-dry wood. The term “oven-dry” indicates there is no moisture in the cell fibres or the cell cavities. |
| Movement Joint or Control Joint | Refers to a continuous joint in a structure, cladding or other element which allows differential movement of portions of the building structure (expansion joint), or prevents or localizes cracking of brittle materials, such as stucco, concrete or masonry, where movement needs to be controlled (control joint). |
| Operation | Operation of the building or envelope refers to normal occupancy of the building where the envelope is affected by interior space conditioning, changes to light fixtures, signs, vegetation and planters, and accidental damage or vandalism. |
| Panelboard | A component of an electrical distribution system which divides an electrical power feed into subsidiary circuits, while providing a protective fuse or circuit breaker for each circuit all contained in a common enclosure. |

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| Penetration | Of the building or envelope refers to normal occupancy of the building where the envelope is affected by interior space conditioning, changes to light fixtures, signs, vegetation and planters, and accidental damage or vandalism. |
| Punch Window | Refers to the architectural style of the window being expressed as a single “punched” opening surrounded by the cladding material, as opposed to being arranged in vertical or horizontal strips of several window units. |
| Relative Humidity | Refers to the ratio (expressed as a percentage) of the amount of moisture within the air to the maximum amount of moisture that the air could possibly contain for a given temperature. |
| Renewals / Replacement | Refers to the replacement of all aged or worn elements of a facility and are typically for components with life cycles in excess of one year. Renewal costs are generally large, occur infrequently and primarily form the basis for a Reserve Fund. A Reserve Fund is required for the major repair and replacement of common elements and assets of the Owner/Operators. The amounts to be contributed to the Fund are calculated on the basis of life expectancy and expected repair and replacement costs. |
| Retaining Wall | A wall constructed to hold back earth, water or other backfill. |
| Riser | Pipes or ductwork used to transport water, effluent, air, or service cables vertically through a multi-storey building for distribution of services. |
| Roof Structural Deck | An elevated platform consisting of a variety of materials such as wood planks or metal pans, often supported by structural joists, beams and columns made of steel or wood, all structurally designed to support loads such as a roofing system. |
| Saddle | Refers to the transition of small horizontal surfaces, such as the top of a balcony guardrail or parapet wall, with a vertical surface, such as a wall. |
| Scaling | A degradation of the surface of a concrete element, consisting of local flaking or peeling away of the near-to-surface sand and cement portion of hardened concrete or mortar. |
| Scupper | Refers to a metal pipe or trough section creating a drainage overflow from a roof or balcony to a downpipe or to a surface below. |
| Sealant | A flexible material used on the inside (or outside) of a building to seal gaps in the building envelope in order to prevent uncontrolled air infiltration and exfiltration. |
| Sealed Units | Two pieces (lites) of glass sealed around the perimeter, increasing the thermal resistance of the window. |

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| Shear Wall | A wall that resists horizontal forces applied in the plane of the wall, usually due to wind or seismic effects (also Flexural Wall). |
| Sheathing | Refers to a material used to provide structural stiffness to the wall framing and to provide structural backing for the cladding and sheathing paper. Typical materials are OSB (oriented strand board), plywood, or gypsum board. |
| Sheathing Membrane | Refers to a material or combination of materials in an exterior wall whose purpose is to retard penetration of incidental water further into the wall structure once past the cladding. Commonly used materials are building paper or housewrap. |
| Signaling Device | A fire alarm system component which visually or audibly alarms (i.e. bell, strobe). |
| Slab-on-Grade | A concrete floor slab placed directly on compacted fill and deriving its support from this fill (also Slab-on-Ground). |
| Spall | Refers to a fragment of material, such as concrete or masonry, detached from a larger mass by a physical blow, weather action, internal pressure or efflorescence within the mass (sub-fluorescence). |
| Stack Effect | Refers to air movement caused by warmer air rising over colder air. Warm interior air in a building is trying to rise over the colder exterior air. The resulting pressure differences in building can lead to air leakage and imbalanced mechanical ventilation systems. |
| Strapping | Refers to the use of wood or other material, typically ⅜″ to ¾" in thickness, to form a drainage cavity and act as a capillary break behind the cladding. |
| Stucco | A finish consisting of cement plaster, used for coating exterior building surfaces. |
| Surfactant | Refers to an agent (e.g., detergent) that, when mixed with water, breaks the surface tension of water drops, thus enabling easier absorption of water through a material. Without surfactants, water would have a greater tendency to remain as drops on the surface of a given material. |
| Switchboard | A board or panel equipped with apparatus for controlling the operation of a system of electric circuits. |
| Symptoms | Refers to visual evidence, such as staining or wetting of surfaces, loss of strength, material delamination or cracking, peeling paint, debonded coatings, etc., which suggests a performance problem within the exterior envelope of a building. |

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| Terminal Board | An insulating base on which terminals for wires or cables have been mounted. |
| Thermal Bridge | Refers to a material with higher thermal conductivity transferring heat through an assembly with lower thermal conductivity. For example, a stud in a wall will transfer more heat that the surrounding insulation, reducing the overall insulative value of the system. |
| Thermographic Scanning | Also known as infra-red scanning. A photograph that detects hot spots of electrical equipment or temperature differences at building surfaces. |
| Uninterruptible Power Supply (UPS) | A power electronic device primarily used as a back-up power source for computers and computer networks to ensure on-going operation in the event of a power failure. Sophisticated units also have power conditioning and power monitoring features. |
| UV | Refers to ultra-violet radiation (from the sun), which has a degrading effect on many membrane and sealing materials (asphalt based) unless protected by an appropriate shielding layer. |
| Vapour Barrier | A material or combination of materials having a high resistance to water vapour diffusion, used to separate a high water vapour pressure environment from a low water vapour pressure environment. |
| Vapour Retarder Barrier | Refers to a material having a high resistance to water vapour diffusion that is located within the assembly to control the flow of vapour and limit the potential for condensation due to diffusion. |
| Vent | An opening placed in a facing wall or window assembly to promote circulation of air within a cavity behind the facing, usually to encourage drying of the cavity and/or to moderate the pressure across the facing. |
| Volt (V) | A unit of potential energy equal to the potential difference between two points on a conductor carrying a current of 1 ampere. |
| Weather Strip | A strip of material placed around an operating window or door to reduce air leaks. |
| Weephole | Refers to an opening placed in a wall or window assembly to permit the escape of liquid water from within the assembly. Weepholes can also act as vents. |
| Weeping Tiles | Drainage pipes placed at the base of foundation walls. |
| Window | Refers to a manufactured assembly of a frame, sash, glazing and necessary hardware, made to fit an opening in a wall.<br>• *Window sill*: horizontal member at the base of a window opening<br>• *Window head*: horizontal member at the top of a window opening |

- *Window jamb*: either of the vertical members at the sides of a window opening
- *Mullion*: vertical member between glazed units
- *Rail:* horizontal member between glazed units
- *Glazing:* The glass portion of the window
- *IGU:* Insulated glazing unit. Double or triple panes of glass sealed together to provide insulation value. The still gas between the panes acts as the insulation.
- *Condensation track*: a channel at the interior sill level of the window intended to intercept small amounts of water condensing on the interior surface of the glass.

# APPENDIX C:
# FUNDING SCENARIOS

## 30 Year Reserve Fund Cash Flow Table
## Scenario 1 - FINAL- June 2021
## Current Contribution (Fully Funded by Other Contributions)

| | |
|---|---|
| Assumed Interest Rate | 2.0% |
| Assumed Inflation Rate | 2.0% |
| Reserve Fund Balance at Start of 2021 Fiscal Year | $121,203 |
| Present Annual Contribution to the Reserve Fund (budgeted operating surplus) | $46,151 |
| Minimum Reserve Fund Balance | $37,980 |

| Year Ending In | Opening Balance | Annual CRF Contribution * | Percent Increase over Previous Year | Other Contribution ** | Estimated Future Inflated Expenditures *** | Projected Interest Earned | Closing Balance | Average Annual CRF Contribution Per Unit |
|---|---|---|---|---|---|---|---|---|
| 2021 | $121,203 | $46,151 | | | $18,333 | $2,702 | $151,723 | $1,282 |
| 2022 | $151,723 | $50,766 | 10.0% | | $41,820 | $3,124 | $163,793 | $1,410 |
| 2023 | $163,793 | $55,843 | 10.0% | | $78,030 | $3,054 | $144,660 | $1,551 |
| 2024 | $144,660 | $56,960 | 2.0% | | $84,897 | $2,614 | $119,336 | $1,582 |
| 2025 | $119,336 | $58,099 | 2.0% | | $112,573 | $1,842 | $66,704 | $1,614 |
| 2026 | $66,704 | $59,261 | 2.0% | $40,000 | $128,625 | $640 | $37,980 | $2,757 |
| 2027 | $37,980 | $60,446 | 2.0% | | $39,979 | $964 | $59,411 | $1,679 |
| 2028 | $59,411 | $61,655 | 2.0% | | $29,291 | $1,512 | $93,287 | $1,713 |
| 2029 | $93,287 | $62,888 | 2.0% | $240,000 | $348,569 | $0 | $47,606 | $8,414 |
| 2030 | $47,606 | $64,146 | 2.0% | | $38,243 | $1,211 | $74,720 | $1,782 |
| 2031 | $74,720 | $65,429 | 2.0% | | $26,818 | $1,881 | $115,211 | $1,817 |
| 2032 | $115,211 | $66,737 | 2.0% | | $0 | $2,972 | $184,920 | $1,854 |
| 2033 | $184,920 | $68,072 | 2.0% | | $114,142 | $3,238 | $142,088 | $1,891 |
| 2034 | $142,088 | $69,433 | 2.0% | | $31,047 | $3,226 | $183,700 | $1,929 |
| 2035 | $183,700 | $70,822 | 2.0% | $180,000 | $392,545 | $457 | $42,434 | $6,967 |
| 2036 | $42,434 | $72,238 | 2.0% | $335,000 | $409,817 | $0 | $39,856 | $11,312 |
| 2037 | $39,856 | $73,683 | 2.0% | | $13,728 | $1,397 | $101,208 | $2,047 |
| 2038 | $101,208 | $75,157 | 2.0% | | $116,220 | $1,614 | $61,758 | $2,088 |
| 2039 | $61,758 | $76,660 | 2.0% | $325,000 | $421,333 | $0 | $42,086 | $11,157 |
| 2040 | $42,086 | $78,193 | 2.0% | | $30,593 | $1,318 | $91,004 | $2,172 |
| 2041 | $91,004 | $79,757 | 2.0% | $150,000 | $280,844 | $0 | $39,917 | $6,382 |
| 2042 | $39,917 | $81,352 | 2.0% | $190,000 | $272,820 | $0 | $38,449 | $7,538 |
| 2043 | $38,449 | $82,979 | 2.0% | | $29,374 | $1,305 | $93,360 | $2,305 |
| 2044 | $93,360 | $84,639 | 2.0% | | $3,154 | $2,682 | $177,527 | $2,351 |
| 2045 | $177,527 | $86,332 | 2.0% | | $46,645 | $3,947 | $221,161 | $2,398 |
| 2046 | $221,161 | $88,058 | 2.0% | | $92,694 | $4,377 | $220,902 | $2,446 |
| 2047 | $220,902 | $89,819 | 2.0% | | $14,224 | $5,174 | $301,672 | $2,495 |
| 2048 | $301,672 | $91,616 | 2.0% | | $53,767 | $6,412 | $345,933 | $2,545 |
| 2049 | $345,933 | $93,448 | 2.0% | $250,000 | $650,273 | $1,350 | $40,459 | $9,540 |
| 2050 | $40,459 | $95,317 | 2.0% | $85,000 | $181,136 | $0 | $39,640 | $5,009 |
| | TOTALS | $2,165,957 | | $1,795,000 | | | | |

* The term "annual contribution" refers to the amount contributed each year to the reserve fund from the monthly expenses.

** Total Other Contributions refers to other contributed amounts including special assessments or surplus funds transferred from other sources (i.e. operating budget or contingency fund).

*** Expenditures are presented as future dollars (based on 2% inflation), and are considered Class D estimates (+/-50%)

## 30 Year Reserve Fund Cash Flow Table
## Scenario 2 - FINAL- June 2021
## Gradual Contribution Increase + Other Contributions As Required

| | |
|---|---|
| Assumed Interest Rate | 5.0% |
| Assumed Inflation Rate | 2.0% |
| Reserve Fund Balance at Start of 2021 Fiscal Year | $121,203 |
| Present Annual Contribution to the Reserve Fund | $46,151 |
| Minimum Reserve Fund Balance | $39,913 |

| Year Ending In | Opening Balance | Annual CRF Contribution* | Percent Increase over Previous Year | Other Contribution ** | Estimated Future Inflated Expenditures *** | Projected Interest Earned | Closing Balance | Average Annual CRF Contribution Per Unit |
|---|---|---|---|---|---|---|---|---|
| 2021 | $121,203 | $46,151 | | | $18,333 | $6,756 | $155,776 | $1,282 |
| 2022 | $155,776 | $48,459 | 5.0% | | $41,820 | $7,955 | $170,370 | $1,346 |
| 2023 | $170,370 | $50,881 | 5.0% | | $78,030 | $7,840 | $151,061 | $1,413 |
| 2024 | $151,061 | $53,426 | 5.0% | | $84,897 | $6,766 | $126,356 | $1,484 |
| 2025 | $126,356 | $56,097 | 5.0% | | $112,573 | $4,906 | $74,786 | $1,558 |
| 2026 | $74,786 | $58,902 | 5.0% | $35,000 | $128,625 | $1,996 | $42,058 | $2,608 |
| 2027 | $42,058 | $61,847 | 5.0% | | $39,979 | $2,650 | $66,576 | $1,718 |
| 2028 | $66,576 | $64,939 | 5.0% | | $29,291 | $4,220 | $106,443 | $1,804 |
| 2029 | $106,443 | $68,186 | 5.0% | $215,000 | $348,569 | $0 | $41,061 | $7,866 |
| 2030 | $41,061 | $71,595 | 5.0% | | $38,243 | $2,887 | $77,300 | $1,989 |
| 2031 | $77,300 | $75,175 | 5.0% | | $26,818 | $5,074 | $130,731 | $2,088 |
| 2032 | $130,731 | $78,934 | 5.0% | | $0 | $8,510 | $218,175 | $2,193 |
| 2033 | $218,175 | $82,881 | 5.0% | | $114,142 | $10,127 | $197,041 | $2,302 |
| 2034 | $197,041 | $87,025 | 5.0% | | $31,047 | $11,252 | $264,271 | $2,417 |
| 2035 | $264,271 | $91,376 | 5.0% | $75,000 | $392,545 | $5,684 | $43,786 | $4,622 |
| 2036 | $43,786 | $95,945 | 5.0% | $310,000 | $409,817 | $0 | $39,913 | $11,276 |
| 2037 | $39,913 | $100,742 | 5.0% | | $13,728 | $4,171 | $131,098 | $2,798 |
| 2038 | $131,098 | $105,779 | 5.0% | | $116,220 | $6,294 | $126,951 | $2,938 |
| 2039 | $126,951 | $111,068 | 5.0% | $230,000 | $421,333 | $0 | $46,686 | $9,474 |
| 2040 | $46,686 | $116,621 | 5.0% | | $30,593 | $4,485 | $137,200 | $3,239 |
| 2041 | $137,200 | $122,452 | 5.0% | $60,000 | $280,844 | $2,900 | $41,708 | $5,068 |
| 2042 | $41,708 | $128,575 | 5.0% | $145,000 | $272,820 | $0 | $42,463 | $7,599 |
| 2043 | $42,463 | $135,004 | 5.0% | | $29,374 | $4,764 | $152,857 | $3,750 |
| 2044 | $152,857 | $141,754 | 5.0% | | $3,154 | $11,108 | $302,565 | $3,938 |
| 2045 | $302,565 | $148,842 | 5.0% | | $46,645 | $17,683 | $422,445 | $4,134 |
| 2046 | $422,445 | $156,284 | 5.0% | | $92,694 | $22,712 | $508,747 | $4,341 |
| 2047 | $508,747 | $164,098 | 5.0% | | $14,224 | $29,184 | $687,805 | $4,558 |
| 2048 | $687,805 | $172,303 | 5.0% | | $53,767 | $37,354 | $843,694 | $4,786 |
| 2049 | $843,694 | $180,918 | 5.0% | | $650,273 | $30,451 | $404,790 | $5,025 |
| 2050 | $404,790 | $189,964 | 5.0% | | $181,136 | $20,460 | $434,078 | $5,277 |
| | TOTALS | $3,066,219 | | $1,070,000 | $4,101,532 | | | |

* The term "annual contribution" refers to the amount contributed each year to the reserve fund from the monthly expenses.
** Total Other Contributions refers to other contributed amounts including special assessments or surplus funds transferred from other sources (i.e. operating budget or contingency fund).

*** Expenditures are presented as future dollars (based on 5% inflation), and are considered Class D estimates (+/-50%)

## 30 Year Reserve Fund Cash Flow Table
## Scenario 3 - FINAL- June 2021
## 6 Years at 15% Contribution Increase + Other Contributions as Required

| | |
|---|---|
| Assumed Interest Rate | 2.0% |
| Assumed Inflation Rate | 2.0% |
| Reserve Fund Balance at Start of 2021 Fiscal Year | $121,203 |
| Present Annual Contribution to the Reserve Fund | $46,151 |
| Minimum Reserve Fund Balance | $41,028 |

| Year Ending In | Opening Balance | Annual CRF Contribution* | Percent Increase over Previous Year | Other Contribution ** | Estimated Future Inflated Expenditures *** | Projected Interest Earned | Closing Balance | Average Annual CRF Contribution Per Unit |
|---|---|---|---|---|---|---|---|---|
| 2021 | $121,203 | $46,151 | | | $18,333 | $2,702 | $151,723 | $1,282 |
| 2022 | $151,723 | $53,074 | 15.0% | | $41,820 | $3,147 | $166,124 | $1,474 |
| 2023 | $166,124 | $61,035 | 15.0% | | $78,030 | $3,153 | $152,281 | $1,695 |
| 2024 | $152,281 | $70,190 | 15.0% | | $84,897 | $2,899 | $140,473 | $1,950 |
| 2025 | $140,473 | $80,718 | 15.0% | | $112,573 | $2,491 | $111,109 | $2,242 |
| 2026 | $111,109 | $92,826 | 15.0% | | $128,625 | $1,864 | $77,174 | $2,579 |
| 2027 | $77,174 | $106,750 | 15.0% | | $39,979 | $2,211 | $146,156 | $2,965 |
| 2028 | $146,156 | $108,885 | 2.0% | | $29,291 | $3,719 | $229,469 | $3,025 |
| 2029 | $229,469 | $111,063 | 2.0% | $50,000 | $348,569 | $2,214 | $44,177 | $4,474 |
| 2030 | $44,177 | $113,284 | 2.0% | | $38,243 | $1,634 | $120,852 | $3,147 |
| 2031 | $120,852 | $115,550 | 2.0% | | $26,818 | $3,304 | $212,889 | $3,210 |
| 2032 | $212,889 | $117,861 | 2.0% | | $0 | $5,436 | $336,186 | $3,274 |
| 2033 | $336,186 | $120,218 | 2.0% | | $114,142 | $6,784 | $349,046 | $3,339 |
| 2034 | $349,046 | $122,622 | 2.0% | | $31,047 | $7,897 | $448,519 | $3,406 |
| 2035 | $448,519 | $125,075 | 2.0% | | $392,545 | $6,296 | $187,344 | $3,474 |
| 2036 | $187,344 | $127,576 | 2.0% | $135,000 | $409,817 | $924 | $41,028 | $7,294 |
| 2037 | $41,028 | $130,128 | 2.0% | | $13,728 | $1,985 | $159,412 | $3,615 |
| 2038 | $159,412 | $132,730 | 2.0% | | $116,220 | $3,353 | $179,276 | $3,687 |
| 2039 | $179,276 | $135,385 | 2.0% | $150,000 | $421,333 | $726 | $44,054 | $7,927 |
| 2040 | $44,054 | $138,093 | 2.0% | | $30,593 | $1,956 | $153,510 | $3,836 |
| 2041 | $153,510 | $140,854 | 2.0% | $30,000 | $280,844 | $1,670 | $45,191 | $4,746 |
| 2042 | $45,191 | $143,672 | 2.0% | $125,000 | $272,820 | $0 | $41,042 | $7,463 |
| 2043 | $41,042 | $146,545 | 2.0% | | $29,374 | $1,993 | $160,206 | $4,071 |
| 2044 | $160,206 | $149,476 | 2.0% | | $3,154 | $4,667 | $311,196 | $4,152 |
| 2045 | $311,196 | $152,465 | 2.0% | | $46,645 | $7,282 | $424,298 | $4,235 |
| 2046 | $424,298 | $155,515 | 2.0% | | $92,694 | $9,114 | $496,233 | $4,320 |
| 2047 | $496,233 | $158,625 | 2.0% | | $14,224 | $11,369 | $652,003 | $4,406 |
| 2048 | $652,003 | $161,797 | 2.0% | | $53,767 | $14,120 | $774,154 | $4,494 |
| 2049 | $774,154 | $165,033 | 2.0% | | $650,273 | $10,631 | $299,545 | $4,584 |
| 2050 | $299,545 | $168,334 | 2.0% | | $181,136 | $5,863 | $292,606 | $4,676 |
| | TOTALS | $3,651,530 | | $490,000 | | | | |

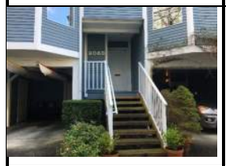
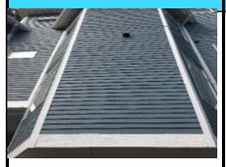
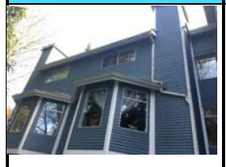
* The term "annual contribution" refers to the amount contributed each year to the reserve fund from the monthly expenses.
** Total Other Contributions refers to other contributed amounts including special assessments or surplus funds transferred from other sources (i.e. operating budget or contingency fund).

*** Expenditures are presented as future dollars (based on 2% inflation), and are considered Class D estimates (+/-50%)

# APPENDIX D:
# CONDITION ASSESSMENT AND CAPITAL PLAN

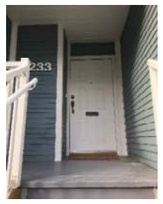
# Depreciation Report- Condition Assessment
# Mountain Gate Townhouses - Burnaby, BC
# FINAL- June 2021

**Priority Ratings:** 1: Immediate, items that require immediate repair or replacement because of either a code deficiency or a safety concern.
2: Deferred Maintenance, required to restore functionality.
3: Renewal, items that will require future repair or replacement to maintain functionality (life cycle replacement).
4: Discretionary, items where the timing and scope of work of the renewal is at the owner's discretion.

| PHOTOS | COMPONENT | | | CONDITION ASSESSMENT | | | RECOMMENDATION | | | LIFECYCLE DATA | | | | BUDGET | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Photos | Label | Components | Location | Description & History | Condition | Actual or Estimated Year of Acquisition | Recommendation | Type | Priority | Age in 2021 | Typical Life Cycle | Estimated Remaining Life | Years Over Which Project is Phased | Include Y/N | Recommended Budget in 2021 Dollars |
| | | **BELOW GRADE SYSTEMS** | | | | | | | | | | | | | |
|  | BG01 | Slab on Grade | Ground floor | The ground floor at each building is a slab on grade which extends out through the carport. Only the carports could be reviewed and no significant cracking was noted. Drawings indicate assembly consists of 4" concrete slab on vapour barrier on compacted gravel. | Good | 1983 | The slab on grade is expected to last the life of the complex with regular maintenance. No anticipated capital expenses. | Not Applicable | Not Applicable | 38 | | | | N | |
| | | **ABOVE GRADE SYSTEMS** | | | | | | | | | | | | | |
|  | AG01 | Wood Framing | All buildings | All nine buildings in the complex are wood framed on a concrete foundation. Carports are provided below the units and are open to the exterior. No issues have been reported or noted; however, no exploratory openings were made to assess the condition of the framing. Attics accessed appeared to be clean and dry with no significant staining on the wood strapping or plywood. Additional information concering the attic can be found below under "Sloped Roofs".Balconies have exposed framing which was reinforced during recent renewals of the membrane. | Good | 1983 | The wood framing is expected to last the life of the building. No capital expenditures are anticipated. | Not Applicable | Not Applicable | 38 | | | | N | |
|  | AG02 | Wood Entry Steps | All buildings | All units in the complex have pressure treated wood entry steps and landings with metal railings. It is our understanding that the stairs and railings were replaced in 2014. | Good | 2014 | Maintenance will be required of corroded fasteners and thresholds as needed. This can be completed under the maintenance budget. Replace the stairs at end of service life. Phase as needed. | Renewal | 3 | 7 | 35 | 28 | 2 | Y | $152,000 |
| | | **EXTERIOR WALLS** | | | | | | | | | | | | | |
|  | EW01 | Cedar Siding | Exterior walls | Horizontal cedar siding makes up the majority of the wall cladding. Wood trim is used around windows and at floor levels and corners. Overall, cladding appears to be in relatively good condition, considering its age. No issues were reported, and repairs and repainting was last completed in 2018-2019. Any sections that have been replaced have been replaced with cement lap siding to match. Drawings indicate wall assembly to consist of horizontal wood siding on building paper, on 3/8" sheathing with wood studs, batt insulation, vapour barrier and interior drywall. | Good | 1983 | Replacement of cedar siding may become necessary when repairs become onerous, or if damage to the wall assembly is widespread. At this time, budget allowance is for localized replacements and repainting as needed. Future updates and studies may determine that full replacement is warranted. | Repair Allowance | 3 | 38 | 10 | 8 | 1 | Y | $289,000 |
|  | EW02 | Chimneys | Above Roof Level | The strata reports that the cladding around the chimneys were replaced as needed and repainted during the painting project in 2019. No current issues are known. | Good | 1983 | Cladding repairs and replacements have been included in EW01. No capital expenditures are included. | Not Applicable | Not Applicable | 38 | | | | N | |
| | | WINDOW AND DOOR SYSTEMS | | | | | | | | | | | | | |
|  | WD01 | Exterior Windows | All Elevations | The windows and sliding glass doors used throughout the complex are aluminum framed with double glazed insulating glass units (IGU's). Frames are original; IGU's have been replaced as required. There are approximately 504 windows throughout the complex. | Fair | 1983 | An allowance has been included to replace 30 IGUs over for the next 5 years. This will have replaced approximately 50% of all IGUs. It is recommended to consider replacements of windows in 2035. | Repair Allowance | 2 | 38 | 30 | 1 | 5 | Y | $15,000 |
| | WD02 | Exterior Windows | All Elevations | As per above. At this time, it is not known if the windows are causing any damage to the wall assembly. This type of window has a history of leakage at the mitre joints that can cause damage to the wall assembly. Further review of the wall assembly below windows should be undertaken. Refer to PS02. | Fair | 1983 | A budget cost to replace the original windows in 5 buildings has been included in 2035. The replacement of the windows for the remaining 4 buildings has been pushed out 5 years in 2040 as it is assumed that the majority of these windows will have had their IGUs replaced between 2020 and 2028. | Renewal | 3 | 38 | 35 | 14 | 2 | Y | $553,000 |

# Depreciation Report- Condition Assessment
# Mountain Gate Townhouses - Burnaby, BC
# DRAFT- June 2021

**Priority Ratings:** 1: Immediate, items that require immediate repair or replacement because of either a code deficiency or a safety concern.
2: Deferred Maintenance, required to restore functionality.
3: Renewal, items that will require future repair or replacement to maintain functionality (life cycle replacement).
4: Discretionary, items where the timing and scope of work of the renewal is at the owner's discretion.

| PHOTOS | COMPONENT | | | CONDITION ASSESSMENT | | | RECOMMENDATION | | | LIFECYCLE DATA | | | | BUDGET | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Photos | Label | Components | Location | Description & History | Condition | Actual or Estimated Year of Acquisition | Recommendation | Type | Priority | Age in 2021 | Typical Life Cycle | Estimated Remaining Life | Years Over Which Project is Phased | Include Y/N | Recommended Budget in 2021 Dollars |
|  | WD03 | Exterior Glazed Swing Doors | Second floor balconies | Balconies are accessed by glazed swing doors in wood frames. Doors are in good condition. Six were replaced in 2020. Three are left to be replaced. | Good | 1983 | Replace remaining three doors within one year. Repair weather stripping and hardware as necessary under the mintenance budget. Replace the doors at the end of their useful service life. | Renewal | 3 | 38 | 35 | -2 | 3 | Y | $10,000 |
|  | WD04 | Sliding Glass Doors | Ground floor patios | All patios are accessed by aluminum framed, double glazed sliding doors. | Fair | 1983 | The sliding doors are nearing the end of their useful service life. Phase over 9 years (one building per year). | Renewal | 3 | 38 | 35 | 4 | 2 | Y | $114,000 |
|  | WD05 | Main Entry Doors (Repaint) | Main Entry | Units are accessed by swing doors in wood frames. In general, they are in serviceable condition and were painted in 2013 however the paint is chipping off some of the doors done at this time. | Good | 1983 | Repainting of the doors will extend the life of the doors. A painting allowance has been included. | Repair Allowance | 3 | 38 | 20 | 1 | 4 | Y | $8,000 |
| | WD06 | Main Entry Doors | Main Entry | | Good | 1983 | Replace doors at the end of service life. | Renewal | 3 | 38 | 50 | 12 | 2 | Y | $38,000 |
|  | WD07 | Carport Entry Doors | Carport | Units are accessed by the car port by metal skin swing doors. | Good | 1983 | Doors are well protected and will likely last the life of the complex with any localized repairs/replacement to be covered under operating. | Not Applicable | Not Applicable | 38 | | | | N | |
|  | WD08 | Electrical Closet Doors | Electrical Closets | There are electrical closets provided for each cluster, accessed by painted wood shed doors. The doors are in good condition considering age and material use. The door hardware was difficult to operate and should be replaced in the short term. This will fall under the maintenance and operations budget. | Good | 1983 | Any cladding renewal program will include these doors. Accounted for in EW01. | Renewal | 3 | 38 | | | | N | |
| | BALCONY SYSTEMS | | | | | | | | | | | | | | |
|  | BS01 | Balcony Membranes | Select Units | The framed balconies are protected with a fibre reinforced vinyl membrane. A full balcony rebuild including framing, support columns, wall tie in and membrane was undertaken in 2013. The underside has exposed framing. The balconies were in good condition during our review. | Good | 2013 | Replace membrane at end of service life (framing assumed last the remaining life of the complex). Typical lifespan for vinyl membranes is 20 years. | Renewal | 3 | 8 | 20 | 12 | 1 | Y | $48,000 |

# Depreciation Report- Condition Assessment
# Mountain Gate Townhouses - Burnaby, BC
# DRAFT- June 2021

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3: Renewal, items that will require future repair or replacement to maintain functionality (life cycle replacement).
4: Discretionary, items where the timing and scope of work of the renewal is at the owner's discretion.

| PHOTOS | COMPONENT | | | CONDITION ASSESSMENT | | | RECOMMENDATION | | | LIFECYCLE DATA | | | | BUDGET | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Photos | Label | Components | Location | Description & History | Condition | Actual or Estimated Year of Acquisition | Recommendation | Type | Priority | Age in 2021 | Typical Life Cycle | Estimated Remaining Life | Years Over Which Project is Phased | Include Y/N | Recommended Budget in 2021 Dollars |
|  | BS02 | Balcony Guardrails | Select Units | Balcony guardrails are face mounted, aluminum framed with pickets. | Good | 2013 | Replace at end of service life. | Renewal | 3 | 8 | 50 | 42 | 1 | Y | $20,000 |
| | **ROOF SYSTEMS** | | | | | | | | | | | | | | |
|  | RS01a | Sloped Roofs | All Units | The townhouses roofs are sloped and protected with asphalt shingles. A roof replacement project was undertaken in 2011 and 2012. The shingles are manufactured by CertainTeed and have a 30 year warranty. The shingles are provided with an anti-algae agent. Repairs were also conducted in 2019. There are several roofs with algae growth. If these roofs were replaced in 2011 and 2012, it is recommended to contact Certainteed for a review of the shingles. | Good | 2011 | Roofs with algae growth will have a reduced lifespan. It is recommended to contact CertainTeed to review the affected roofs. A budget cost to replace those roofs have been included as a precaution. Replacement includes all associated work such as flashing replacement and joint sealing. Maintenance of the roofs is also required to prolong the life of the roofs. | Renewal | 3 | 10 | 30 | 20 | 2 | Y | $273,000 |
|  | RS01b | Attics | All Units | Two of the three attic units reviewed have had additional blown insulation installed in the attic. The unit without the additional insualation was reported to be cold on the upper floor. Insulation was also noted to be missing on the backside of the attic hatch door of this unit. Blown insulation naturally settles after approximately 20 years, decreasing its performance. Poor attic insulation can increase the risk of condensation within the attics and result in moisture build up. | Fair | 1983 | It is understood that the installation of additional attic insulation is a Unit Owner responsibility and therefore not included. | Not Applicable | Not Applicable | 38 | 50 | 1 | 9 | Y | |
| | RS02 | Flat Roofs | Select Units | There are small areas of flat roofs, protected with a 2-ply SBS membrane installed in 2011 and 2012. Original drawings indicate that the insulation is in the joist space. The roofs are drained via a scupper to the sloped roof area. It was noted that downspouts are draining directly onto the flat roof. It is recommended that a splash pad is provided below the downspout to prevent direct runoff onto the membrane. | Good | 2011 | Replace at end of service life in conjunction with sloped roofs. | Renewal | 3 | 10 | 30 | 20 | 2 | Y | $37,000 |
|  | RS03 | Gutters and Downspouts/ Metal | Roofs | Metal sheet gutters are installed along the roof perimeter to direct rainwater to the downspout to the perimeter drain system. These are assumed to have been replaced in conjunction with the sloped roof replacement. Gutters are provided with leaf protection, however many roofs were observed to be backed up with leaves and debris. Regular maintenance is required to ensure free flowing drains. Staining below some eavestroughs were noted to be causing staining on the building cladding, overflow protection may be required. | Fair | 2011 | Replace at end of service life. Repair allowance included for overflow protection installation in one year. | Renewal | 3 | 10 | 30 | 20 | 2 | Y | $24,000 |
|  | RS04 | Wood Soffit | Roofs | Wood soffit panels are installed on the underside of roof overhangs. | Good | 2000 | The soffits are likely to last the life of the complex, but it is prudent to budget for some replacement as required. | Contingency | 3 | 21 | 5 | 5 | 1 | Y | $3,000 |
|  | RS05 | Board Soffit | Bay Windows, Front Entrances | Soffit panels on the underside of bay windows and front entries are a combination of original tongue and groove wood and newer cementious boards. We note that they are not vented and we are not aware of the construction assembly. The soffits appeared to be in good condition at the time of our review. | Good | Various | Budget for continued phased replacement at end of service life as required. | Contingency | 3 | Varies | 5 | 5 | 1 | Y | $4,000 |

# Depreciation Report- Condition Assessment
# Mountain Gate Townhouses - Burnaby, BC
# DRAFT- June 2021

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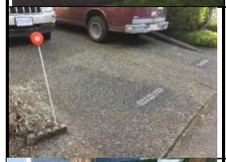
4: Discretionary, items where the timing and scope of work of the renewal is at the owner's discretion.

| PHOTOS | COMPONENT | | | CONDITION ASSESSMENT | | | RECOMMENDATION | | | LIFECYCLE DATA | | | | BUDGET | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Photos | Label | Components | Location | Description & History | Condition | Actual or Estimated Year of Acquisition | Recommendation | Type | Priority | Age in 2021 | Typical Life Cycle | Estimated Remaining Life | Years Over Which Project is Phased | Include Y/N | Recommended Budget in 2021 Dollars |
| | | SITE DEVELOPMENT | | | | | | | | | | | | | |
|  | SD01 | Aggregate Patios and Walkways | Unit patios and between buildings | There are exposed aggregate concrete walkways between buildings and at patios. Localized repairs appear to be undertaken as required. Some cracking was noted. | Fair | 1983 | An allowance for localized replacement and resetting. | Repair Allowance | 2 | 38 | 4 | 1 | 1 | Y | $2,000 |
|  | SD02 | Stamped Concrete walkways | Adjacent to roadways and at pedestrian bridge | Brick stamped concrete sidewalks are provided along the roadways and at pedestrian paths. Localized repairs appear to be undertaken as required. There are some locations that are in poor condition that should be addressed in the short term. | Fair | 1983 | An allowance for localized replacement. | Repair Allowance | 2 | 38 | 4 | 1 | 1 | Y | $3,000 |
|  | SD03 | Privacy Screen | Between patios | Vinyl privacy screens are provided between the patios. All privacy screens were replaced in 2018. | Good | 2018 | Replace the privacy screens at the end of their useful service life. | Contingency | 4 | 3 | 20 | 17 | 1 | Y | $29,000 |
|  | SD05 | Guardrails | Bridges | The guardrails at the bridges were replaced in 2016 with metal picket railings. | Good | 2016 | Replace the guard rails are replaced at the end of their useful service life. | Renewal | 3 | 5 | 30 | 25 | 1 | Y | $21,000 |
|  | SD06 | Roadways | Asphalt Roads & Parking | Asphalt roadways run throughout the complex providing access to each driveway. A few parking stalls are also paved. The asphalt generally appeared to be in fair condition with localized repairs being undertaken as required. | Fair | 1983 | An allowance for localized repairs has been included every 5 years for repairs. | Repair Allowance | 4 | 38 | 5 | 4 | 1 | Y | $21,000 |
|  | SD07 | Driveways | Each Unit | Each unit is provided with a concrete slab on grade parking area. They are generally in fair-good condition. | Fair | 1983 | An allowance for localized repairs has been included ever 5 years. | Repair Allowance | 4 | 38 | 5 | 2 | 1 | Y | $11,000 |
|  | SD08 | Planters | Various Locations throughout the site | Planters are provided throughout the site which contain trees and shrubs. Some planters were observed to have been replaced, however others are in poor condition. | Poor | 1984 | Replace the planters at the end of their useful service life every 15 years. | Renewal | 4 | 38 | 15 | 1 | 1 | Y | $10,000 |

# Depreciation Report- Condition Assessment
# Mountain Gate Townhouses - Burnaby, BC
# DRAFT- June 2021

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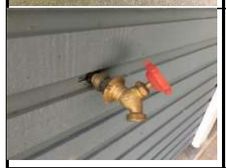
| PHOTOS | COMPONENT | | | CONDITION ASSESSMENT | | | RECOMMENDATION | | | LIFECYCLE DATA | | | | BUDGET | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Photos | Label | Components | Location | Description & History | Condition | Actual or Estimated Year of Acquisition | Recommendation | Type | Priority | Age in 2021 | Typical Life Cycle | Estimated Remaining Life | Years Over Which Project is Phased | Include Y/N | Recommended Budget in 2021 Dollars |
| **MECHANICAL SYSTEMS** | | | | | | | | | | | | | | | |
|  | MS01 | Domestic Water Mains | Distribution to Units | The water distribution system consists of below-grade water mains. They distribute domestic water to each building. The main city shut-off is on Ash Grove and each building has a shut-off, but each unit does not have a shut off. According to drawings, the water main is 3" PVC with 2" PVC branches to clusters complete with a pressure reducing valve. Pipes that run from beneath the slab to the shut off are reportedly Poly-B. To date we understand that three buildings have been addressed and now have water shutoffs to each unit. | Not Reviewed | 1983 | Assumes the continued replacement of piping for the remaining buildings. Assumes 1 building per year for 6 years. | Contingency | 3 | 38 | 35 | 1 | 6 | Y | $126,000 |
| | MS02 | Domestic Water Pipes and Fittings | Within Units | All original pipes and fittings within units are reportedly copper. Interior piping is the responsibility of the individual owners. | Not Reviewed | 1983 | No capital expenses. | Not Applicable | 3 | 38 | | | | N | |
| | MS03 | D3020 Sanitary Sewer | Underground | The underground sanitary service and sanitary systems to each unit was not accessible for review. According to the drawings the sanitary drainage system collects from each unit and drains with gravity to the existing municipal system located on Ash Grove Road. All sanitary sewer material pipes are 6" PVC. | Not Reviewed | 1983 | Contingency for repairs or replacement of underground sanitary piping. | Contingency | 3 | 38 | 15 | 2 | 1 | Y | $16,000 |
|  | MS04 | D3030 Storm Sewer | Underground | The storm water discharges to grade via eaves troughs and downspouts. According to the drawings the storm drainage system drains with gravity to the municipal system located on Ash Grove Road. All storm sewer pipes material are 10" PVC. | Not Reviewed | 1983 | Contingency for repairs or replacement of underground sanitary piping, starting at year 40. | Contingency | 3 | 38 | 15 | 2 | 1 | Y | $16,000 |
|  | MS05 | Hose bibbs | Back Patio | Each unit is provided with hose bibbs that are the responsibility of the individual owners. | Not Reviewed | 1983 | No capital expenses. | Not Applicable | Not Applicable | 38 | | | | N | |
| **ELECTRICAL SYSTEMS** | | | | | | | | | | | | | | | |
|  | ES01 | BC Hydro Service | BC Hydro Service | Several 12.5kV - 120/240V step-down transformers are provided throughout the complex. | Not Applicable | 1983 | Maintenance, service and replacement by BC Hydro. No capital expenses anticipated. | Not Applicable | Not Applicable | 38 | | | 1 | N | |
|  | ES02 | Electrical Service and Distribution | Electrical Room | There are 9 electrical rooms in the complex. Each has a 200A disconnect switch and metering center dedicated to each unit meter/breaker combo. Service is 200A 120/240 V 1 phase 3W. | Good | 1983 | Replace disconnect switch and metering center. May last service life of complex with regular maintenance. Conservative life expectancy is 30 years. | Contingency | 3 | 38 | 30 | 3 | 1 | Y | $48,000 |
|  | ES03 | Load centers | Units | Individual load centers are located in each unit and are assumed to be the responsibility of individual owners. | Not Reviewed | 1983 | No capital expenses. | Not Applicable | Not Applicable | 38 | | | | N | |

# Depreciation Report- Condition Assessment
# Mountain Gate Townhouses - Burnaby, BC
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4: Discretionary, items where the timing and scope of work of the renewal is at the owner's discretion.

| PHOTOS | COMPONENT | | | CONDITION ASSESSMENT | | | RECOMMENDATION | | | LIFECYCLE DATA | | | | BUDGET | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Photos | Label | Components | Location | Description & History | Condition | Actual or Estimated Year of Acquisition | Recommendation | Type | Priority | Age in 2021 | Typical Life Cycle | Estimated Remaining Life | Years Over Which Project is Phased | Include Y/N | Recommended Budget in 2021 Dollars |
|  | ES04 | Outdoor Lighting | Units and throughout complex | Each unit has a wall-mounted lighting fixture at the entrance and back patio. Some light standards are located throughout the complex. Signage is illuminated by ground lights. | Good | 1983 | An allowance to replace light fixtures is provided. | Contingency | 3 | 38 | 20 | 5 | 4 | Y | $34,000 |
| | ES05 | Electrical Service Cleaning | Electrical Room | Cleaning and infrared scanning in each electrical room is recommended every 5 years. Electrical closets should be cleaned of all debris and not used as storage space. | Not Applicable | 1983 | The infrared scan, maintenance and cleaning should be done every 5 years. | Repair Allowance | 3 | 38 | 5 | 0 | 1 | Y | $15,000 |
| | ES06 | Communications and Security | Telephone and TV cable | Located in the electrical rooms. | Not Applicable | 1983 | Maintenance and replacement of the equipment by service provider. No capital expenses anticipated. | Not Applicable | Not Applicable | 38 | | | | N | |
| | PROFESSIONAL SERVICES | | | | | | | | | | | | | | |
| | PS01 | Depreciation Report Updates | | Legislation requires updates every 3 years. | Not Applicable | 2014 | Update depreciation report. | Study | 4 | 7 | 3 | 3 | 1 | Y | $6,000 |
| | PS02 | Miscellaneous Engineering Reviews | | Periodic reviews of the building envelope and mechanical systems are prudent. Specifically, reviews of the envelope will assist in determining if windows are contributing to any damage of the wall assembly. These studies will help determine if planned replacements can be deferred. | Not Applicable | N/A | Recommend regular reviews of building systems as well as prior to any major renewal. | Study | 4 | N/A | 5 | 2 | 1 | Y | $6,000 |

**Depreciation Report- Capital Report**
**Mountain Gate Townhouses - Burnaby, BC**
**FINAL- June 2021**

| COMPONENT | | | RECOMMENDATION | CAPITAL PLAN / RESERVE FUND EXPENDITURE FORECAST | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Label | Components | Location | Recommendation | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 | 2045 | 2046 | 2047 | 2048 | 2049 | 2050 |
| | | | | $18,333 | $41,000 | $75,000 | $80,000 | $104,000 | $116,500 | $35,500 | $25,500 | $297,500 | $32,000 | $22,000 | $0 | $90,000 | $24,000 | $297,500 | $304,500 | $10,000 | $83,000 | $295,000 | $21,000 | $189,000 | $180,000 | $19,000 | $2,000 | $29,000 | $56,500 | $8,500 | $31,500 | $373,500 | $102,000 |
| **BELOW GRADE SYSTEMS** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| BG01 | Slab on Grade | Ground floor | The slab on grade is expected to last the life of the complex with regular maintenance. No anticipated capital expenses. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **ABOVE GRADE SYSTEMS** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| AG01 | Wood Framing | All buildings | The wood framing is expected to last the life of the building. No capital expenditures are anticipated. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| AG02 | Wood Entry Steps | All buildings | Maintenance will be required of corroded fasteners and thresholds as needed. This can be completed under the maintenance budget. Replace the stairs at end of service life. Phase as needed. | | | | | | | | | | | | | | | | | | | | | | | | | | | | $76,000 | $76,000 |
| **EXTERIOR WALLS** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| EW01 | Cedar Siding | Exterior walls | Replacement of cedar siding may become necessary when repairs become onerous, or if damage to the wall assembly is widespread. At this time, budget allowance is for localized replacements and repainting as needed. Future updates and studies may determine that full replacement is warranted. | | | | | | | | | $289,000 | | | | | | | | | | $289,000 | | | | | | | | | | $289,000 | |
| EW02 | Chimneys | Above Roof Level | Cladding repairs and replacements have been included in EW01. No capital expenditures are included. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **WINDOW AND DOOR SYSTEMS** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| WD01 | Exterior Windows | All Elevations | An allowance has been included to replace 30 IGUs over for the next 5 years. This will have replaced approximately 50% of all IGUs. It is recommended to consider replacements of windows in 2035. | | $3,000 | $3,000 | $3,000 | $3,000 | $3,000 | | | | | | | | | | | | | | | | | | | | | | | | |
| WD02 | Exterior Windows | All Elevations | A budget cost to replace the original windows in 5 buildings has been included in 2035. The replacement of the windows for the remaining 4 buildings has been pushed out 5 years in 2040 as it is assumed that the majority of these windows will have had their IGUs replaced between 2020 and 2028. | | | | | | | | | | | | | | | $276,500 | $276,500 | | | | | | | | | | | | | |
| WD03 | Exterior Glazed Swing Doors | Second floor balconies | Replace remaining three doors within one year. Repair weather stripping and hardware as necessary under the mintenance budget. Replace the doors at the end of their useful service life. | $3,333 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| WD04 | Sliding Glass Doors | Ground floor patios | The sliding doors are nearing the end of their useful service life. Phase over 9 years (one building per year). | | | | | $57,000 | $57,000 | | | | | | | | | | | | | | | | | | | | | | | |
| WD05 | Main Entry Doors (Repaint) | Main Entry | Repainting of the doors will extend the life of the doors. A painting allowance has been included. | | $2,000 | $2,000 | $2,000 | $2,000 | | | | | | | | | | | | | | | | | $2,000 | $2,000 | $2,000 | $2,000 | | | | |

**Depreciation Report- Capital Report**
**Mountain Gate Townhouses - Burnaby, BC**
**FINAL- June 2021**

| COMPONENT | | | RECOMMENDATION | CAPITAL PLAN / RESERVE FUND EXPENDITURE FORECAST | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Label | Components | Location | Recommendation | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 | 2045 | 2046 | 2047 | 2048 | 2049 | 2050 |
| | | | | $18,333 | $41,000 | $75,000 | $80,000 | $104,000 | $116,500 | $35,500 | $25,500 | $297,500 | $32,000 | $22,000 | $0 | $90,000 | $24,000 | $297,500 | $304,500 | $10,000 | $83,000 | $295,000 | $21,000 | $189,000 | $180,000 | $19,000 | $2,000 | $29,000 | $56,500 | $8,500 | $31,500 | $373,500 | $102,000 |
| WD06 | Main Entry Doors | Main Entry | Replace doors at the end of service life. | | | | | | | | | | | | | $19,000 | $19,000 | | | | | | | | | | | | | | | | |
| WD07 | Carport Entry Doors | Carport | Doors are well protected and will likely last the life of the complex with any localized repairs/replacement to be covered under operating. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| WD08 | Electrical Closet Doors | Electrical Closets | Any cladding renewal program will include these doors. Accounted for in EW01. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **BALCONY SYSTEMS** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| BS01 | Balcony Membranes | Select Units | Replace membrane at end of service life (framing assumed last the remaining life of the complex). Typical lifespan for vinyl membranes is 20 years. | | | | | | | | | | | | | $48,000 | | | | | | | | | | | | | | | | | |
| BS02 | Balcony Guardrails | Select Units | Replace at end of service life. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **ROOF SYSTEMS** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| RS01a | Sloped Roofs | All Units | Roofs with algae growth will have a reduced lifespan. It is recommended to contact CertainTeed to review the affected roofs. A budget cost to replace those roofs have been included as a precaution. Replacement includes all associated work such as flashing replacement and joint sealing. Maintenance of the roofs is also required to prolong the life of the roofs. | | | | | | | | | | | | | | | | | | | | $136,500 | $136,500 | | | | | | | | | |
| RS01b | Attics | All Units | It is understood that the installation of additional attic insulation is a Unit Owner responsibility and therefore not included. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| RS02 | Flat Roofs | Select Units | Replace at end of service life in conjunction with sloped roofs. | | | | | | | | | | | | | | | | | | | | $18,500 | $18,500 | | | | | | | | | |
| RS03 | Gutters and Downspouts/ Metal | Roofs | Replace at end of service life. Repair allowance included for overflow protection installation in one year. | | | | | | | | | | | | | | | | | | | | $12,000 | $12,000 | | | | | | | | | |
| RS04 | Wood Soffit | Roofs | The soffits are likely to last the life of the complex, but it is prudent to budget for some replacement as required. | | | | | | $3,000 | | | | | $3,000 | | | | | $3,000 | | | | $3,000 | | | | | $3,000 | | | | | |

**Depreciation Report- Capital Report**
**Mountain Gate Townhouses - Burnaby, BC**
**FINAL- June 2021**

| COMPONENT | | | RECOMMENDATION | CAPITAL PLAN / RESERVE FUND EXPENDITURE FORECAST | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Label | Components | Location | Recommendation | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 | 2045 | 2046 | 2047 | 2048 | 2049 | 2050 |
| | | | | $18,333 | $41,000 | $75,000 | $80,000 | $104,000 | $116,500 | $35,500 | $25,500 | $297,500 | $32,000 | $22,000 | $0 | $90,000 | $24,000 | $297,500 | $304,500 | $10,000 | $83,000 | $295,000 | $21,000 | $189,000 | $180,000 | $19,000 | $2,000 | $29,000 | $56,500 | $8,500 | $31,500 | $373,500 | $102,000 |
| RS05 | Board Soffit | Bay Windows, Front Entrances | Budget for continued phased replacement at end of service life as required. | | | | | | $4,000 | | | | | $4,000 | | | | | $4,000 | | | | | $4,000 | | | | | $4,000 | | | | |
| **SITE DEVELOPMENT** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SD01 | Aggregate Patios and Walkways | Unit patios and between buildings | An allowance for localized replacement and resetting. | | $2,000 | | | | $2,000 | | | | $2,000 | | | | $2,000 | | | | $2,000 | | | | $2,000 | | | | $2,000 | | | | $2,000 |
| SD02 | Stamped Concrete walkways | Adjacent to roadways and at pedestrian bridge | An allowance for localized replacement. | | $3,000 | | | | $3,000 | | | | $3,000 | | | | $3,000 | | | | $3,000 | | | | $3,000 | | | | $3,000 | | | | $3,000 |
| SD03 | Privacy Screen | Between patios | Replace the privacy screens at the end of their useful service life. | | | | | | | | | | | | | | | | | | $29,000 | | | | | | | | | | | | |
| SD05 | Guardrails | Bridges | Replace the guard rails are replaced at the end of their useful service life. | | | | | $21,000 | | | | | | | | | | | | | | | | | | | | | $21,000 | | | | |
| SD06 | Roadways | Asphalt Roads & Parking | An allowance for localized repairs has been included every 5 years for repairs. | | | | | $21,000 | | | | | $21,000 | | | | | $21,000 | | | | | $21,000 | | | | $21,000 | | | | | $21,000 |
| SD07 | Driveways | Each Unit | An allowance for localized repairs has been included ever 5 years. | | | $11,000 | | | | | $11,000 | | | | | $11,000 | | | | | $11,000 | | | | $11,000 | | | | $11,000 | | | |
| SD08 | Planters | Various Locations throughout the site | Replace the planters at the end of their useful service life every 15 years. | | $10,000 | | | | | | | | | | | | | | | $10,000 | | | | | | | | | | | | |
| **MECHANICAL SYSTEMS** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MS01 | Domestic Water Mains | Distribution to Units | Assumes the continued replacement of piping for the remaining buildings. Assumes 1 building per year for 6 years. | | $21,000 | $21,000 | $21,000 | $21,000 | $21,000 | $21,000 | | | | | | | | | | | | | | | | | | | | | | | |
| MS02 | Domestic Water Pipes and Fittings | Within Units | No capital expenses. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MS03 | D3020 Sanitary Sewer | Underground | Contingency for repairs or replacement of underground sanitary piping. | | | $16,000 | | | | | | | | | | | | | | | $16,000 | | | | | | | | | | | | |

**Depreciation Report- Capital Report**
**Mountain Gate Townhouses - Burnaby, BC**
**FINAL- June 2021**

| COMPONENT | | | RECOMMENDATION | CAPITAL PLAN / RESERVE FUND EXPENDITURE FORECAST | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Label | Components | Location | Recommendation | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 | 2045 | 2046 | 2047 | 2048 | 2049 | 2050 |
| | | | | $18,333 | $41,000 | $75,000 | $80,000 | $104,000 | $116,500 | $35,500 | $25,500 | $297,500 | $32,000 | $22,000 | $0 | $90,000 | $24,000 | $297,500 | $304,500 | $10,000 | $83,000 | $295,000 | $21,000 | $189,000 | $180,000 | $19,000 | $2,000 | $29,000 | $56,500 | $8,500 | $31,500 | $373,500 | $102,000 |
| MS04 | D3030 Storm Sewer | Underground | Contingency for repairs or replacement of underground sanitary piping, starting at year 40. | | | $16,000 | | | | | | | | | | | | | | | $16,000 | | | | | | | | | | | | |
| MS05 | Hose bibbs | Back Patio | No capital expenses. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **ELECTRICAL SYSTEMS** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ES01 | BC Hydro Service | BC Hydro Service | Maintenance, service and replacement by BC Hydro. No capital expenses anticipated. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ES02 | Electrical Service and Distribution | Electrical Room | Replace disconnect switch and metering center. May last service life of complex with regular maintenance. Conservative life expectancy is 30 years. | | | | $48,000 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ES03 | Load centers | Units | No capital expenses. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ES04 | Outdoor Lighting | Units and throughout complex | An allowance to replace light fixtures is provided. | | | | | | $8,500 | $8,500 | $8,500 | $8,500 | | | | | | | | | | | | | | | | $8,500 | $8,500 | $8,500 | $8,500 | | |
| ES05 | Electrical Service Cleaning | Electrical Room | The infrared scan, maintenance and cleaning should be done every 5 years. | $15,000 | | | | | $15,000 | | | | | $15,000 | | | | | $15,000 | | | | | $15,000 | | | | $15,000 | | | | | |
| ES06 | Communications and Security | Telephone and TV cable | Maintenance and replacement of the equipment by service provider. No capital expenses anticipated. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **PROFESSIONAL SERVICES** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PS01 | Depreciation Report Updates | | Update depreciation report. | | | | $6,000 | | | $6,000 | | | $6,000 | | | $6,000 | | | $6,000 | | | $6,000 | | | $6,000 | | | $6,000 | | | $6,000 | | |
| PS02 | Miscellaneous Engineering Reviews | | Recommend regular reviews of building systems as well as prior to any major renewal. | | | $6,000 | | | | | $6,000 | | | | | $6,000 | | | | | $6,000 | | | | | $6,000 | | | | | $6,000 | | |