

RFS



Reserve Fund Study

FOR

O.C.S.C.C. #750 – Merivale Gardens, Ottawa Ontario

By Oaktree Engineering Limited

684 A Bronson Avenue

Ottawa, ON K1S 4E9

(613) 234-3000

mail@propertyinspection.ca

October 27, 2017





Table of Contents

1. INTRODUCTION.....	Pg. 3
1.1 LOCATION.....	Pg. 4
1.2 SITE DESCRIPTION.....	Pg. 4
1.3 COMMON ELEMENTS.....	Pg. 5
2. STUDY OBJECTIVES.....	Pg. 7
2.1 SCOPE OF WORK.....	Pg. 7
2.2 ASSUMPTIONS AND LIMITATIONS.....	Pg. 7
2.3 REFERENCE MATERIAL.....	Pg. 8
2.3.1 BACKGROUND INFORMATION.....	Pg. 8
2.3.2 DOCUMENTATION AND DRAWINGS.....	Pg. 9
3. CAPITAL EXPENDITURES.....	Pg. 10
3.1 DETERMINATION OF LIFE EXPECTANCY AND REPAIR/REPLACEMENT COSTS.....	Pg. 10
3.2 FORECASTING OF CAPITAL REPLACEMENTS.....	Pg. 10
3.2.1 TIMING.....	Pg. 11
4. RESERVE FUND.....	Pg. 12
4.1 CONTRIBUTIONS.....	Pg. 12
4.2 EXPENDITURES.....	Pg. 13
5. EXPLANATION OF COMMON ELEMENTS – COMPONENT INVENTORY.....	Pg. 14
5.1 COMPONENT INVENTORY DESCRIPTION.....	Pg. 14
5.2 COMMON ELEMENT COMPONENT INVENTORY SUMMARY.....	Pg. 16
6. CAPITAL EXPENDITURES AND CASH FLOW.....	Pg. 26
6.1 NOTES FOR INTERPRETING CAPITAL EXPENDITURES & CASH FLOW CHARTS.....	Pg. 26
6.2 CAPITAL EXPENDITURES AND CASH FLOW CHARTS (YEARS 1-5).....	Pg. 28
6.3 CAPITAL EXPENDITURES AND CASH FLOW CHARTS (YEARS 6-10).....	Pg. 29
6.4 CAPITAL EXPENDITURES AND CASH FLOW CHARTS (YEARS 11-15).....	Pg. 30
6.5 CAPITAL EXPENDITURES AND CASH FLOW CHARTS (YEARS 16-20).....	Pg. 31
6.6 CAPITAL EXPENDITURES AND CASH FLOW CHARTS (YEARS 21-25).....	Pg. 32
6.7 CAPITAL EXPENDITURES AND CASH FLOW CHARTS (YEARS 26-30).....	Pg. 33
6.8 CAPITAL EXPENDITURES AND CASH FLOW CHARTS (YEARS 1-30 TOTALS).....	Pg. 34
7. EXECUTIVE SUMMARY.....	Pg. 35
7.1 DOCUMENTATION REVIEW.....	Pg. 35
7.2 SUMMARY OF EXAMINATION OF COMMON ELEMENTS.....	Pg. 35
7.3 RESERVE FUND.....	Pg. 37



1. Introduction

Oaktree Engineering Limited is pleased to have been retained by the Board of Directors of Ottawa Carleton Standard Condominium Corporation (OCSCC) #750 to conduct a Reserve Fund Study (RFS) of their property consisting of 14 blocks of buildings located Garden Glen Private, and Ridgepark Private (Merivale Gardens), Ottawa, Ontario.

The work includes a site visit to visually inspect the common elements of the condominium, review of the financial charts and recent maintenance and repair costs, and discussions with Board members.

This report is divided into various sections as detailed in the Table of Contents. This section is a description of the property and more importantly the common elements as described and interpreted by us from the By-laws and Declarations. Any issues or discrepancies are pointed out in this section.

The Study Objectives includes the scope of work that describes the assumptions, limitations and information used regarding this Reserve Fund Study. The Board must read and understand these as part of the Study.

Section 3 and 4 are general comments only in regards to the process of describing Capital Expenditures and the Reserve Fund.

The next two sections concerning the Examination of Common Elements and The Cash Flow Charts are the essential elements influencing the proposed monthly condo fees. Each common element item is described and quantified. Based on the expected life span, costs for repair are then placed under the year for the predicted repair. This may not be absolute; however it will give the condominium a good assessment of future repair costs over the next thirty years. These repair costs are placed in the Cash Flow Charts. The engineer will then adjust the amount placed into the reserve fund on an annual basis to produce a positive balance in all of the 30 years.

The final section is the Executive Summary and includes recommendations from all areas of the report. The Board can use this information to develop a workable plan for future funding of the complex. The condominium Board and the manager can use the information to complete Form 15 as required under the Condominium Act.



1.1 Location

The complex at Merivale Gardens is located in Nepean, within the City of Ottawa. This property is located in an older neighbourhood surrounded by residential housing, schools, recreational parks, and commercial/retail center (Merivale Mall) is located directly to the east of the property. Access to the 14 blocks of townhomes is provided from Glenridge Road and Wolmsley Crescent.

1.2 Site Description

The site was developed in 1969, and registered as a condominium in 2007. The condominium consists of 10 blocks of Garden Homes (GH) and 4 blocks of Town Homes (TH), for a total of 87 units. There are 2 laneways on the property, Garden Glen Private and Ridgemark Private providing access to five parking areas. The condominium has multiple asphalt walkways throughout the complex, common grassed areas and fenced exclusive use rear yards, unit and visitor parking, and underground site services.

The GH blocks have between 3-6 units per block, for a total of 47 units. Each unit is 2 storeys in building height with a finished basement and have exclusive use to a fenced rear yard. The GH blocks have direct access to the exterior with no interior common areas.

The TH blocks each have 10 units per block, for a total of 40 units. There is a common hallway in the middle of the building providing access to the front entrances to the units. Also, there are two common rooms in each TH block that are currently not used. The two common rooms have a staircase leading to an unfished basement hallway where the electrical panels and water meters are located.

The buildings apart of the condominium have similar structural components. Each unit has a poured concrete foundation, concrete block walls dividing each unit (fire wall), wood framed exterior and partition walls and floor systems. The flat/low slope roof structures are also wood framed. The exterior of the first storey of each building is clad with mostly brick veneer and some vinyl siding. The second story of each building is covered by a mansard asphalt roof cover. The common entrances, rooms, and hallways in the TH blocks have a poured concrete floor with steel decking underneath.



1.3 Common Element

The Common element and unit boundaries are described in the Declaration Schedule "C" and are repeated below.

Each Condominium Unit is Bounded Horizontally by:

- i. The upper unfinished surface and plane of the concrete floor slab beneath the unit and its production.
- ii. The upper surface and plane of the drywall ceiling above the unit and its production.
- iii. The upper face of the floor joists – Applicable to units 13-22 inclusive, 27-36 inclusive, 51-60 inclusive, 64-73 inclusive, all Level 1.
- iv. The lower face and plane of the floor joist – Applicable to units 5, 9, 25, 39, 44, 48, 63, 76, 81, and 85, all on Level 1.
- v. The unfinished unit-side surface of all exterior door frames and windows

Each Condominium Unit is Bounded Vertically by:

- i. The unit-side surface of the concrete foundation wall.
- ii. The backside surface and plane of the drywall and its vertical production enclosing the exterior walls.
- iii. The backside surface and plane of the drywall and its vertical production separating the unit from the common elements (pipe chases) – Applicable to units 4, 10, 43, 48, and 81, all Level 1.
- iv. The unit side surface of the concrete block wall separating the units.
- v. The unit side surface of the concrete block wall separating the unit from the common element.
- vi. The unfinished unit-side surface of all exterior doors, exterior door frames, windows and window frames, and the unit-side surface of all window panes contained therein.
- vii. The unfinished unit-side surface of all patio door frames, and the unit side surface of the patio door glass.
- viii. The vertical plane established by measurements in the vicinity of the electrical panel (common element) in the basement units 5, 9, 25, 39, 44, 48, 63, 76, 81, and 85.



The Parking Unit (Being Units 88-192 inclusive, Level 1):

- i. The upper surface and plane of the asphalt is the horizontal boundary with no upper limit.
- ii. The vertical plane controlled by measurements from iron survey bars.

Simply put, the individual unit owner owns the drywall and everything contained inside of vertical boundary of the inside face of the exterior walls. The condominium is responsible for the structural elements of the buildings with the exception to some of the wood framed floors in the units defined in the Declaration. The condominium is responsible for the extension of all exhaust vents and chimney flues. The condominium owns the structures, electrical supply and distribution system, sewer systems, all windows and doors, all exterior finishes, walkways, laneways, and asphalt paving of the parking spaces.



2. Study Objectives

The purpose of the Reserve Fund Study (RFS) is to examine and analyze all major common elements of OCSCC #750 and establish a long term plan for managing the expected capital expenditure requirements of the complex. The relationship between expenditures, contributions, and the reserve fund levels is scrutinized for a 30-year time period. The goal is to maintain a positive reserve fund balance for the study period while allowing contribution levels to rise at a reasonable rate which is agreeable to current and future unit owners.

The study does not in itself constitute a detailed, long range financial management plan but rather presents a technical review which serves as the basis for sound financial management and reserve fund contribution planning. This study suggests reserve fund contributions and funding levels, however, these should be set by the Board of Directors in conjunction with the corporation's managers and Auditor to reflect the perceived needs and planning objectives as set out by the Board.

2.1 Scope of Work

The Reserve Fund Study is a comprehensive overview and analysis of the condominium complex. The overview includes the visual inspection of the common elements from ground and rooftop levels. All readily accessible areas of the property including the roadways, walkways, landscapes, and the building exteriors of all units were inspected and quantified. The structural walls dividing the units were not exposed, the basement floor was examined in unit 1 only.

The report identifies and describes the common elements reviewed, the age and assessed condition of each item, our estimate of their life expectancy, remaining service life, and repair/replacement costs. A detailed analysis of the capital expenditure and contribution requirements of the condominium is projected in the Capital Costs and Cash Flow Charts.

2.2 Assumptions and Limitations

This technical report outlines our findings and assessments of major repairs, replacements, maintenance, and costing pertaining to the common elements of the condominium building. A description of the physical limits of the common elements from the condominium declaration is presented in the appendices.



The accuracy of discussions, conclusions, and cost information contained in this study is limited to the extent of information available at this time. The assessment of the condition of the property elements is based upon visual examination only. Underground site services such as piping and wiring were not visually examined and destructive testing or performance monitoring was not conducted.

Some items such as foundations or framing were inspected on a representative basis. Accordingly, it has been necessary to make certain assumptions and projections based on visible evidence and the experience and expertise of the authors. As per the requirements in the Condominium Acts of Ontario, 1998, and its regulations, a full reserve fund study is required every three years.¹ These studies should accurately reflect the current common element conditions, reserve fund levels and inflation rate trends at the time of the study.

2.3 Reference Material

2.3.1 Background Information

Reference documentation and plans were reviewed and background information was provided by Denis Demers from 20/20 Property Management. The first inspection of the interior common elements was completed on February 13, 2017. A second site visit was completed April 28, 2017, after the snow melt, on the exterior grounds of the condominium. Capital expenditures and cash flow charts projections, Condominium Declaration, and By-Laws were provided in April 2017. The final report is to be delivered in September of 2017.

1: Ontario Regulation 48/01, p. IV, s. 31(3)



2.3.2 Documentation and Drawings

Reference documentation and drawings provided to Oaktree Engineering Ltd. and utilized in this study include:

- Audited Financial Statements, year end – April 30, 2017 was provided
- Condominium Act of Ontario, 1998
Chapter 19, September 9, 2009
- Ontario Regulation 48/01
Made under the Condominium Act
- Ontario Regulation 49/01
Made under the Condominium Act
- Ontario Regulation 50/01
Made under the Registry Act
- Ontario Regulation 51/01
Made under the Land Registry and Reform Act
- Ontario Regulation 52/01
Made under the Land Registry and Reform Act
- Canadian Consumer Price Index
From Statistics Canada, 2016
- Sewer and Water Service Plan – None provided
- Structural Plans – None provided
- Certificate of Insurance – None provided



3. Capital Expenditures

3.1 Determination of Life Expectancy and Repair/Maintenance Costs

The anticipated life expectancy of building systems is based in general on manufacturer's published data and accepted industry standards in addition to the current condition of the items. The life expectancy or service life of a particular system or component can be considered to be the median time during which it remains in its original service application and then replaced. Replacement can occur for a multitude of reasons including failure, general obsolescence, excessive maintenance cost, or changed system requirements.

The estimate of the remaining service life of individual building components represents a judgement by the authors based on industry standards, visually observable conditions, and previous experience with similar systems in other similar applications. Projections of building component life expectancy assumes that the owners provide diligent and timely maintenance. The study does not make allowances for the effects of unpredictable events such as flood, fire, earthquake, lightning, etc.

The estimated replacement costs for various items are generally based on current industry standard unit prices. Material quantities are derived from architectural plan quantity take-offs and site measurements. Previous repair history at the complex and consultation with experts and contractors provide additional information in order to make as accurate determination as possible.

3.2 Forecasting of Capital Replacements

Capital expenditures for repair and replacement of building components have been forecasted in current (2017) Canadian dollars and the most probable years when these expenditures will be required have been set out in this report. An adjustment for inflation has been made to the yearly totals in the Capital Costs and Cash Flow Charts. The assessment of the remaining life of a system is not precise. It is influenced by factors that may occur at some future date.



3.2.1 Timing

The timing of any given expense is dependent on a number of factors, such as;

- I. The urgency of repair or replacement: Some building components such as roof membranes, water supply, sanitary sewers, or electrical distribution mains must operate flawlessly at all times. Interruptions in their proper operation cannot be tolerated and repair costs for these items cannot be postponed.
- II. The perceived importance of a repair or replacement: Items such as paving, painting, or caulking can be delayed for periods of time at the discretion of the Board of Directors subject to financial or other considerations.
- III. Changes to the regulatory environment: Rulings by government agencies or standards bureaus may require unanticipated replacement or updating of equipment.

In most cases, expenses for each building component have been budgeted for the specific year in which the repair/replacement is anticipated. Some costs are assigned over a number of contiguous years to reflect the potential range of years for an individual replacement and also to attempt to distribute the effects of large expenditures. Substantial deviations from the scheduled dates of major building component replacements should be undertaken with caution and professional advice.



4. Reserve Fund

The Condominium Act of Ontario states that the “corporation shall establish and maintain one or more reserve funds”². The act further states that a reserve fund shall be used solely for the purpose of major repair and replacement of the common elements and assets of the corporation”³. Common elements to be included in the reserve fund are generalized and individual corporations will set out specific items that will be covered by the fund, as stipulated in the condominium declaration. There is considerable discretion accredited to the Board of Directors to assign costs and timing to individual capital cost expenditures.

4.1 Contributions

The Act states that “The corporation shall collect contributions to the reserve fund from the owners, as part of their contributions to the common expenses”⁴. Upon completion of the first reserve fund study of the condominium, “the total amount of the contributions to the reserve fund ... shall be the amount that is reasonably expected to provide sufficient funds for the major repair and replacement of the common elements and assets of the corporation, calculated on the basis of the expected repair and replacement costs and the life expectancy of the common elements of the corporation”⁵.

The annual budget of the corporation specifies the revenue, operating expenditures, and reserve fund contributions necessary to functioning and long term planning pertaining to the condominium complex. The annual reserve fund contributions have as their goal the maintenance of a surplus amount in the reserve fund while adequately allowing for necessary periodic capital expenditures.

2: Condominium Act of Ontario, 1998, c.19, s. 93(1)

3: Ibid., c.19, s. 93(2)

4: Ibid., c.19, s. 93(4)

5: Ibid., c.19, s. 93(6)



The annual reserve fund contribution amount represents a portion of the total expenditures of the corporation which are paid for by the common charges and special assessments assigned to unit owners, and income earned from interest or miscellaneous sources. Increases or decreases in the annual contributions to the reserve fund are not necessarily reflected in direct common charges assessed to the unit owners. Adjustments to some operating costs may be periodically possible which can free up funds to add to the reserve fund. Alternatively, contributions to the fund can be increased to allow for unexpected expenditures. The Board of Directors of the condominium have as their responsibility and their discretion, the setting of funding and expenditure levels as reflected by the perceived needs and planning objectives of the corporation.

4.2 Expenditures

Operating costs for the condominium's common items and services such as utilities, insurance, minor repairs, summer and winter ground maintenance, etc., are annually budgeted and expended from operating funds separate from the reserve fund. Only major expenditures as defined in the study are paid for by the reserve fund.



5. Examination of Common Elements – Component Inventory

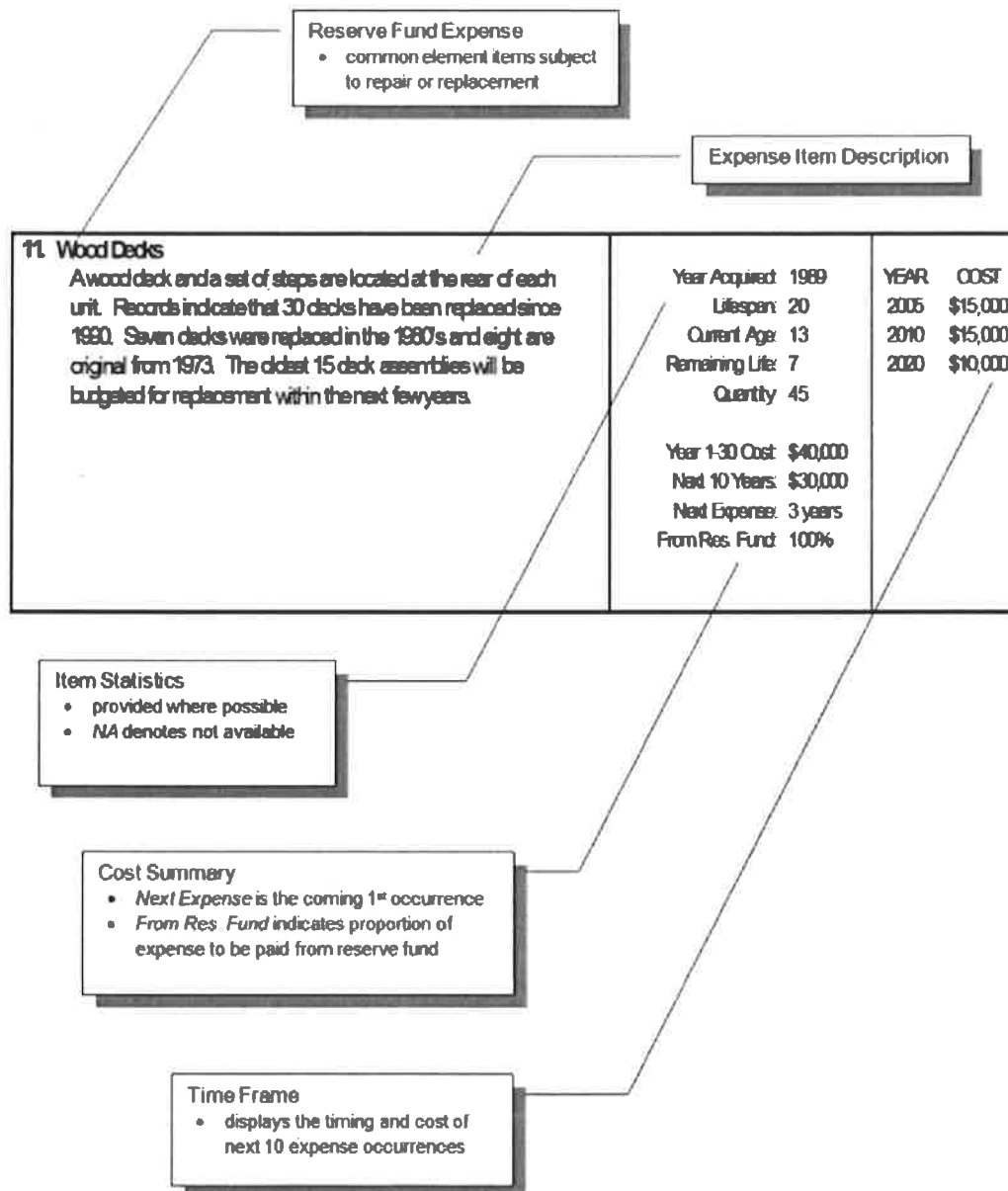
5.1 Component Inventory Description

The component inventory common element is a catalog of the constituent components of systems and assets of the condominium corporation. As per the Condominium Act, it is “an assessment of each item in the component inventory that states its actual or estimated year of acquisition, its present or estimated age, its normal or expected life span, its remaining life expectancy, its estimated year of its major repair or replacement, its estimated cost of repair or replacement as of the date of the study, percentage of that cost of major repair or replacement that is to be covered by the reserve fund, and the adjusted cost resulting from the application of that percentage.”⁶

The information in the Common Element Component Inventory Summary is generalized. Some items will require attention in more than one time period during the study. Moreover, the time frame given in estimated year of major repair or replacement column is the first instance only. Further major repairs of the same item later in the study, are not represented. Items such as site services and structural foundations or framing will not likely require major repair or replacement during the planning horizon of this study. The costs presented for these items are the contingency for unexpected repairs, which may or may not be required within the next 30 years.

6: Condominium Act of Ontario, 1998, Regulation 48/01, p. IV, s. 29(2)(b)

Figure 1 - Component Inventory Explanation



5.2 Common Element Component Inventory

OCSCC #750 - Merivale Gardens Reserve Fund Study - 2017

RESERVE FUND EXPENSES	STATISTICS	TIME FRAME	
1. Site Services <p>The underground civil elements of the condominium include water supply, sanitary and storm piping are considered to be constructed to endure for most of the life span of the building. No underground examination was undertaken however, there may be sudden failures which will require attention, yet they are unpredictable. No reasonable costs can therefore be estimated, however, a yearly contingency should be set aside for unexpected emergencies since this is a critical component of the common element.</p>	Year Acquired: 1969 Lifespan: 100 Current Age: 48 Remaining Life: 52 Quantity: NA Year 1-30 Cost: \$30,000 Next 10 Years: \$10,000 Next Expense: 1 year From Res. Fund: 100%	YEAR 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027	COST \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000
2. Asphalt Laneway & Parking Spaces <p>The common laneway is about 4,000 square meter (43,000 sq. ft.) in size and provides access to the condominium from Glenridge Road and Wolmsley Crescent. There are two common laneway's Garden Glen Private and Ridgepark Private. There are approximately 107 parking spaces. Leading up the asphalt re-surfacing a second budget of \$4,000 has been provided to repair damaged sections of the laneway.</p>	Year Acquired: Lifespan: 35 Current Age: Remaining Life: Quantity: 43,000 ft ² Year 1-30 Cost: \$207,000 Next 10 Years: \$12,000 Next Expense: this year From Res. Fund: 92%	YEAR 2017 2022 2026 2031 2040	COST \$4,000 \$4,000 \$4,000 \$190,000 \$5,000
3. Walkways <p>There is approximately linear feet of asphalt walkways throughout the premises. The walkways are 3.5 feet wide for a total of 1,024 square meters (11,000 sq. ft.). The asphalt laneway is in moderate condition with some damaged sections. This study assumes re-surfacing in 2028, and a second budget has been provided to repair sections of the walkway as needed.</p>	Year Acquired: Lifespan: 35 Current Age: 5 Remaining Life: Quantity: 11,000sq. ft. Year 1-30 Cost: \$59,000 Next 10 Years: \$6,000 Next Expense: 2 years From Res. Fund: 100%	YEAR 2019 2022 2028 2040	COST \$3,000 \$3,000 \$50,000 \$3,000

5.2 Common Element Component Inventory

OCSCC #750 - Merivale Gardens Reserve Fund Study - 2017

RESERVE FUND EXPENSES	STATISTICS	TIME FRAME	
4. Concrete Curb <p>Concrete curbs have been installed along the perimeter of the parking areas. There is approximately 1,200 linear feet of curb. The concrete curb is in moderate condition with some damaged areas. This study assumes replacement of the curb during the re-surfacing of the asphalt laneway. Throughout the winter months the concrete curb can be damaged by snow removal vehicles, a budget has been provided every few years for repairs.</p>	<p>Year Acquired: Lifespan: 35 Current Age: Remaining Life: Quantity: 1,200 ln. ft.</p> <p>Year 1-30 Cost: \$32,000 Next 10 Years: \$3,000 Next Expense: 5 years From Res. Fund: 100%</p>	<p>YEAR COST</p> <p>2022 \$3,000 2031 \$27,000 2040 \$2,000</p>	
5. Landscaping <p>The condominium is landscaped with sod, trees and shrubs. No budget has been provided for this element of the condominium. All maintenance costs should be accounted for in the annual operating budget.</p>	<p>Year Acquired: Lifespan: Current Age: Remaining Life: Quantity:</p> <p>Year 1-30 Cost: Next 10 Years: Next Expense: From Res. Fund: 100%</p>	<p>YEAR COST</p>	
6. Garbage Bins <p>There are two sets of garbage bins on the compound, one on each lane. The Board has retained an architect to draft plans for a new structure to house the bins. The goal is to reduce the number of bin locations down to 1, located at the east property line adjacent to Merivale Mall. A second budget had been provided in 2029 in the event the condominium needs to separate garbage disposal areas. Repairs to the structure are expected in 2041.</p>	<p>Year Acquired: Lifespan: 20 Current Age: Remaining Life: Quantity: 2</p> <p>Year 1-30 Cost: \$29,000 Next 10 Years: \$12,000 Next Expense: this year From Res. Fund: 100%</p>	<p>YEAR COST</p> <p>2017 \$12,000 2029 \$8,500 2041 \$8,500</p>	

5.2 Common Element Component Inventory

OCSCC #750 - Merivale Gardens Reserve Fund Study - 2017

RESERVE FUND EXPENSES	STATISTICS	TIME FRAME	
7. Patios Each unit has the exclusive use of the 10' x 17' rear yard. Some units have added patios. It is expected that the unit owner is responsible to maintain/repair/replace the patios.	Year Acquired: Variable Lifespan: Current Age: Remaining Life: Quantity: Year 1-30 Cost: \$0 Next 10 Years: \$0 From Res. Fund: 100%	YEAR	COST
8. Entrance Steps Each GH townhome is equipped with an entrance step. The TH blocks each have 2 entrance steps. Settlement was observed around some of the entrance steps. Most units have replaced the precast steps with interlock. A budget has been provided to replace the remaining steps and to level the existing interlock steps as needed over the years. We expect most of the entrance steps will require a lift & relay during the period of this study.	Year Acquired: Lifespan: 25 Current Age: Remaining Life: Quantity: 55 Year 1-30 Cost: \$33,000 Next 10 Years: \$21,000 Next Expense: this year From Res. Fund: 100%	YEAR 2017 2018 2019 2022 2023 2024 2025 2030 2035 2040	COST \$3,000 \$3,000 \$3,000 \$3,000 \$3,000 \$3,000 \$3,000 \$3,000 \$3,000
9. Retaining Walls There are stone and wood retaining walls throughout the complex. There is approximately 165 linear feet of combined retaining wall. A budget has been provided to replace the wood retaining wall (approx 35 linear feet) in 2026.	Year Acquired: 2007 Lifespan: 30 Current Age: 10 Remaining Life: 20 Quantity: Year 1-30 Cost: \$63,000 Next 10 Years: \$28,000 Next Expense: 9 years From Res. Fund: 100%	YEAR 2026 2036	COST \$28,000 \$35,000
10. Fencing Each rear yard has 10 linear feet of 6 foot tall wood fencing, and 17 linear feet of 3 foot tall wood fencing. The fencing has not been painted or stained. The fencing along the perimeter of the property is not owned by the condominium. Repairs are to be expensed to the operating budget for the condominium.	Year Acquired: 2006 Lifespan: 20 Current Age: 11 Remaining Life: 9 Quantity: 2,500 ln ft Year 1-30 Cost: \$115,000 Next 10 Years: \$0 Next Expense: 13 years From Res. Fund: 100%	YEAR 2030	COST \$115,000

5.2 Common Element Component Inventory

OCSCC #750 - Merivale Gardens Reserve Fund Study - 2017

RESERVE FUND EXPENSES	STATISTICS	TIME FRAME
11. Foundations Some damage was observed to the poured concrete foundations, these are tree related issues in some cases. The large trees need to be investigated. The property manager confirmed foundation cracks are sealed within a reasonable time period. An annual contingency has been provided for sealing cracks. A secondary budget every 4 years has been provided for installing exterior drainage systems ("waterproofing") in the amount of \$16,000.	Year Acquired: 1969 Lifespan: 100 Current Age: 48 Remaining Life: 52 Quantity: Year 1-30 Cost: \$159,800 Next 10 Years: \$55,800 Next Expense: this year From Res. Fund: 100%	YEAR COST 2017 \$13,000 2018 \$1,200 2019 \$1,200 2020 \$1,200 2021 \$17,200 2022 \$1,200 2023 \$1,200 2024 \$1,200 2025 \$17,200 2026 \$1,200
12. Window Wells Each unit has a basement window well. The common rooms in the 4 TH blocks also have a window well. Most of the window wells were observed to be in poor condition. Window wells are heaved out of the ground damaging the brick veneer siding. A budget has been provided to replace 45 window wells over the next 2 years. This work includes removal of soil from site, new drain tile, new well, and 3/4" clear stone backfill. The next window well replacement is expected in 2044.	Year Acquired: 1969 Lifespan: 50 Current Age: 48 Remaining Life: 2 Quantity: 95 Year 1-30 Cost: \$95,000 Next 10 Years: \$45,000 Next Expense: this year From Res. Fund: 100%	YEAR COST 2017 \$22,500 2018 \$22,500 2044 \$50,000
13. Parging Parging is the cementitious coating applied to the concrete foundation wall above grade. This is a coating for aesthetics only. In some areas the grade has settled revealing areas of the wall that are not parged. Some section of the parging is damaged. Any repairs to parging is discretionary. 2 - \$25,000 dollar expenditures have been allocated to years 2026 and 2029 to apply a new coating of parging on the foundation walls.	Year Acquired: 1969 Lifespan: 50 Current Age: 48 Remaining Life: 2 Quantity: 3,800 sq. ft. Year 1-30 Cost: \$30,000 Next 10 Years: \$15,000 Next Expense: 9 years From Res. Fund: 100%	YEAR COST 2026 \$15,000 2045 \$15,000
14. Exterior Walls The wood framed exterior walls are not expected to require major/replacement costs within the period of this study. The exterior walls should be inspected in future studies. A contingency has been provided Reserve Item #33 - Structural Elements.	Year Acquired: 1969 Lifespan: 75 Current Age: 48 Remaining Life: 27 Quantity: Year 1-30 Cost: \$0 Next 10 Years: \$0 From Res. Fund: 100%	YEAR COST

5.2 Common Element Component Inventory

OCSCC #750 - Merivale Gardens Reserve Fund Study - 2017

RESERVE FUND EXPENSES	STATISTICS	TIME FRAME	
15. Floors <p>The floor systems in the entrances, common rooms, and hallways of the TH blocks have poured concrete floor slabs installed on steel decking. The steel decking near the front entrances were observed to be in poor condition. A budget of \$13,500 has been provided to repair each of these areas (8 total) over the course of this study.</p>	<p>Year Acquired: 1969 Lifespan: 75 Current Age: 48 Remaining Life: 2.7 Quantity: 110</p> <p>Year 1-30 Cost: \$108,000 Next 10 Years: \$27,000 Next Expense: 5 years From Res. Fund: 100%</p>	<p>YEAR COST</p> <p>2022 \$13,500 2023 \$13,500 2027 \$13,500 2028 \$13,500 2032 \$13,500 2033 \$13,500 2043 \$13,500 2044 \$13,500</p>	
16. Insulation <p>The condominium is responsible for all the insulation and vapour barrier in the 14 buildings. The ceiling/attic insulation was replaced when the roof cover was replaced. Major problems have been encountered with the insulation in the mansards. We expect on-going issues with the insulation in mansards until a complete replacement project commences in 2021.</p>	<p>Year Acquired: N/A Lifespan: Current Age: Remaining Life: Quantity:</p> <p>Year 1-30 Cost: \$310,000 Next 10 Years: \$310,000 Next Expense: 4 years From Res. Fund: 100%</p>	<p>YEAR COST</p> <p>2021 \$310,000</p>	
17. Flat Roof Covers <p>All 14 roof covers have been replaced between 2007 and 2014. Over \$1.5 million has been spent to replace the roof covers. The insulation in the ceiling was replaced at this time. Some building have tar and gravel roof covers and about 4 buildings have a 2-ply mod-bit roof cover. It is expected the roof covers will start to be replaced in 2027, and will continue over eight years. The current age of each roof is: GH1 - 6yrs, GH2 - 6yrs, GH3 - 2yrs, GH4 - 6 yrs, GH5 - 6yrs, GH6 - 2yrs, GH7 - 6yrs, GH8 - 6yrs, GH9 - 8yrs, GH10 - 8 yrs, TH1 - 2 yrs, TH2 - 5 yrs, TH3 - 2 yrs, TH4 - 6 years.</p>	<p>Year Acquired: 2007-2014 Lifespan: 25 Current Age: Variable Remaining Life: Variable Quantity: 58,000sq.ft</p> <p>Year 1-30 Cost: \$600,000 Next 10 Years: \$0 Next Expense: 10 years From Res. Fund: 100%</p>	<p>YEAR COST</p> <p>2027 \$75,000 2028 \$75,000 2029 \$75,000 2030 \$75,000 2031 \$75,000 2032 \$75,000 2033 \$75,000 2034 \$75,000</p>	
18. Mansard Roof Covers <p>There is approximately 45,000 square feet of mansard roof between the 14 buildings. The mansard is covered with asphalt shingles. The shingles are in poor condition and need to be replaced. Annual repairs will be required until the mansards are replaced in 2021 along with the mansard insulation work.</p>	<p>Year Acquired: 2007 Lifespan: 15 Current Age: 10 Remaining Life: 5 Quantity: 45,000sq.ft</p> <p>Year 1-30 Cost: \$250,000 Next 10 Years: \$250,000 Next Expense: this year From Res. Fund: 100%</p>	<p>YEAR COST</p> <p>2017 \$5,000 2019 \$5,000 2021 \$240,000</p>	

5.2 Common Element Component Inventory

OCSCC #750 - Merivale Gardens Reserve Fund Study - 2017

RESERVE FUND EXPENSES	STATISTICS	TIME FRAME	
19. Chimneys <p>The masonry chimneys on the roof top are mostly no longer in use. A budget of \$8,000 has been provided to repair the masonry chimney between years 2027-2039.</p>	<p>Year Acquired: 2012 Lifespan: 50 Current Age: 5 Remaining Life: 45 Quantity: 11</p> <p>Year 1-30 Cost: \$32,000 Next 10 Years: \$8,000 Next Expense: 7 years From Res. Fund: 100%</p>	<p>YEAR COST</p> <p>2024 \$8,000 2029 \$8,000 2034 \$8,000 2039 \$8,000</p>	
20. Vent Covers <p>The condominium is responsible all vent covers on the rooftop and the exterior walls. The rooftop vents were replaced with the roof covers. The vent covers on the exterior walls were observed to be in poor condition and in some cases missing. A budget has been provided to replace the plastic vent covers on the exterior walls. The vents next to the entrance steps should be raised (This has been completed for a few units).</p>	<p>Year Acquired: Variable Lifespan: Current Age: Remaining Life: Quantity:</p> <p>Year 1-30 Cost: \$22,500 Next 10 Years: \$16,000 Next Expense: this year From Res. Fund: 100%</p>	<p>YEAR COST</p> <p>2017 \$9,500 2024 \$6,500 2037 \$6,500</p>	
21. Brick Veneer <p>Repairs to the brick veneer siding have been completed in recent years. A budget is required for on-going repairs as part of regular maintenance.</p>	<p>Year Acquired: 2012 Lifespan: 25 Current Age: 5 Remaining Life: 20 Quantity:</p> <p>Year 1-30 Cost: \$24,000 Next 10 Years: \$8,000 Next Expense: 1 year From Res. Fund: 100%</p>	<p>YEAR COST</p> <p>2018 \$4,000 2023 \$4,000 2028 \$4,000 2033 \$4,000 2038 \$4,000 2043 \$4,000</p>	
22. Vinyl Siding <p>The majority of the vinyl siding has been replaced. It is not expected that the siding will require major repair or replacement costs within the period of this study. The siding should be regularly inspected, any repairs should be expensed to the maintenance budget.</p>	<p>Year Acquired: 1969 Lifespan: 50 Current Age: 5 Remaining Life: 25 Quantity:</p> <p>Year 1-30 Cost: \$15,000 Next 10 Years: \$5,000 Next Expense: this year From Res. Fund: 100%</p>	<p>YEAR COST</p> <p>2017 \$500 2018 \$500 2019 \$500 2020 \$500 2021 \$500 2022 \$500 2023 \$500 2024 \$500 2025 \$500 2026 \$500</p>	

5.2 Common Element Component Inventory

OCSCC #750 - Merivale Gardens Reserve Fund Study - 2017

RESERVE FUND EXPENSES	STATISTICS	TIME FRAME	
23. Caulking Caulking sealant is required around exterior doors, windows, siding, joints, metal flashings, flues, vent covers and fixtures. The annual operating budget allows for general repairs as needed and checked annually for any problems.	Year Acquired: Recurring Lifespan: Current Age: Remaining Life: Quantity: 87 Units Year 1-30 Cost: \$66,000 Next 10 Years: \$22,000 Next Expense: this year From Res. Fund: 100%	YEAR 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026	COST \$6,200 \$1,200 \$1,200 \$1,200 \$1,200 \$6,200 \$1,200 \$1,200 \$1,200 \$1,200
24. Windows Each unit has on average 6 slider windows with vinyl trim. The windows were last replaced in 2006. There is approximately 5,800 square feet of window glazing. The next windows replacement is scheduled in 2041	Year Acquired: 2006 Lifespan: 35 Current Age: 11 Remaining Life: 24 Quantity: 87 Units Year 1-30 Cost: \$660,000 Next 10 Years: \$0 Next Expense: 23 years From Res. Fund: 100%	YEAR 2040 2042	COST \$330,000 \$330,000
25. Exterior Doors Every unit has a patio door (87), the doors were last replaced in 2006. A budget of \$197,000 has been provided in 2041. The GH blocks have 1 insulated steel door for each unit (47), and the TH blocks have 4 glass man door per building (16). A budget of \$100,000 has been provided in 2036 to replace the exterior doors.	Year Acquired: 2006 Lifespan: Current Age: Remaining Life: Quantity: 4 Year 1-30 Cost: \$27,000 Next 10 Years: \$0 From Res. Fund: 100%	YEAR 2036 2041	COST \$100,000 \$197,000
26. Fire Alarm, Detection, & Suppression The TH blocks require a fire detection system. The systems have been upgraded since the original construction of the building (1997) to meet current codes and by-laws. There are several fire hydrants on the property. A budget has been provided to replace the hydrants in 12 years.	Year Acquired: Lifespan: Current Age: Remaining Life: Quantity: Year 1-30 Cost: \$27,000 Next 10 Years: \$0 Next Expense: 11 years From Res. Fund: 100%	YEAR 2028	COST \$27,000

5.2 Common Element Component Inventory

OCSCC #750 - Merivale Gardens Reserve Fund Study - 2017

RESERVE FUND EXPENSES	STATISTICS	TIME FRAME	
27. Common Hallways <p>The TH blocks each have a finished common hallway on the main floor, an unfinished hallway in the basement, and 2 unfinished rooms that were once laundry rooms. 3 of the 4 buildings have recently replaced the flooring on the main floor hallway. A budget has been provided to replace the flooring in one TH building. The common hallways include the entrance doors to the TH units (40 total), these doors must have a 45 minute FRR with automatic closures. A separate budget has been provided to renovate one of the common rooms into an office.</p>	<p>Year Acquired: 2013 Lifespan: 3 Current Age: 4 Remaining Life: 0 Quantity: 1</p> <p>Year 1-30 Cost: \$90,000 Next 10 Years: \$20,000 Next Expense: 5 years From Res. Fund: 100%</p>	<p>YEAR COST</p> <p>2022 \$10,000 2024 \$10,000 2037 \$30,000 2039 \$20,000 2043 \$20,000</p>	
28. Plumbing <p>The sewers were recently investigated. The results of the investigation have not been analysed by OEL. An annual contingency has been provided for sewer repairs. Sewer caps are required in the basements of the TH blocks, this work has been budgeted for 2017.</p>	<p>Year Acquired: 1969 Lifespan: 50 Current Age: 48 Remaining Life: 2 Quantity: 95</p> <p>Year 1-30 Cost: \$7,500 Next 10 Years: \$2,000 Next Expense: 4 years From Res. Fund: 100%</p>	<p>YEAR COST</p> <p>2017 \$3,800 2018 \$3,800 2019 \$3,800 2020 \$3,800 2021 \$3,800 2022 \$3,800 2023 \$3,800 2024 \$3,800 2025 \$3,800 2026 \$3,800</p>	
29. Hose Bibs <p>Most of the hose bibs were observed to be in poor condition, with missing caulking and are not frost free taps. This study assumes replacement of 40 taps in 2022. The caulking on the remainder of the taps should be repaired at this time. A second budget has been provided in 2023 to replace the remainder of the hose bibs.</p>	<p>Year Acquired: 1969 Lifespan: 50 Current Age: 48 Remaining Life: 2 Quantity: 95</p> <p>Year 1-30 Cost: \$0 Next 10 Years: \$0</p> <p>From Res. Fund: 100%</p>	<p>YEAR COST</p> <p>2022 \$20,000 2023 \$30,000</p>	
30. Electrical distribution System <p>The condominium is responsible for the electrical distribution system. The large transformers are owned by Ottawa Hydro. Major repair/replacement costs are not expected within the period of this study, however a \$500/year contingency has been provided. A budget has been provided to install GFCI outlets in the rear yards with weather resistant covers.</p>	<p>Year Acquired: 1987 Lifespan: 30 Current Age: 30 Remaining Life: 0 Quantity: 2</p> <p>Year 1-30 Cost: \$25,000 Next 10 Years: \$15,000</p> <p>From Res. Fund: 100%</p>	<p>YEAR COST</p> <p>2017 \$500 2018 \$5,500 2019 \$500 2020 \$500 2021 \$500 2022 \$5,500 2023 \$500 2024 \$500 2025 \$500 2026 \$500</p>	



6. Capital Expenditures and Cash Flow

The Capital Expenditures and Cash Flow Charts are a forecasting tool, which presents the common items reviewed in the report, in tabular form. The main purpose of the cash flow chart is to determine the annual reserve fund contributions that will be required to maintain a positive balance in the reserve fund while covering all foreseeable expenditures for the planning horizon of the study.

6.1 Notes for Interpreting the Capital Expenditure and Cash Flow Charts

For easier readability, the total planning horizon of the study (30 years) is divided into six, five-year chart segments. A separate chart provides subtotals and totals for each line item.

The individual projected capital expenditure expense line items are numbered and listed in the left columns of the chart. The respective costs for each item are displayed across the chart in their estimated year of implementation. For present perspective, the individual expenditure items are shown over all the years of the study in year-2017 Canadian dollars. That inflation factor is handled in the yearly totals at the bottom of the charts.

The titles for the bottom rows of the charts and the definitions of the figures in each row are explained below. Each row is explained below. Each row is given a letter, (A) to (F):

(A) EXPENSE TOTALS (Current Canadian Dollars)

The sum of each year's common element expense items presented in non-inflation adjusted dollars.

(B) FUTURE EXPENSES (Adjusted for 2.0% Inflation)

The sum of each year's common element expense items in inflation-adjusted dollars. The assumed inflation rate is constant throughout the study, although it is bound to be variable. The rate is an estimate by the study authors based on previous years' inflation rates and their anticipation of future rates. The average inflation rate for Ontario for the years 2014 and 2015, has been 2.4% and 1.2% respectively⁷. Taking into account, the average inflation for the previous 9 years and the rate for the most recent two years, the authors decided to impose a 2.0% inflation rate throughout the study.

7: Consumer Price Index, Statistics Canada, Table 326-0002



(C) CONTRIBUTIONS TO RESERVE FUND

The yearly total of monies collected from general assessments that are contributed to the reserve fund, as determined by the budget.

(D) CONTRIBUTION CHANGE FROM PREVIOUS YEAR

The increase or decrease in contributions to the reserve fund from the previous year, expressed as a percentage.

(E) INTEREST INCOME

Income from investment instruments which could be reasonably expected to accrue yearly from balances maintained in the reserve fund.

(F) RESERVE FUND BALANCE

The anticipated fiscal year-end reserve fund balances based on a starting balance at the beginning time period of the study.

The actual capital costs may vary somewhat from those predicted due to unforeseen events as previously noted and the yearly inflation rate will fluctuate during the years of the study. Accordingly, adjustments to capital cost requirements or interest and inflation rates can be made during the regular Reserve Fund Studies every three years.

6.2 Capital Expenditure and Cash Flow Charts

OCSCC #750 - Merivale Gardens Reserve Fund Study - 2017

YEARS 1-5

NO	RESERVE FUND EXPENSES	YEAR 1-2017	YEAR 2-2018	YEAR 3-2019	YEAR 4-2020	YEAR 5-2021
1	Site Services	1,000	1,000	1,000	1,000	1,000
2	Asphalt Laneway & Parking Spaces	4,000				
3	Walkways			3,000		
4	Concrete Curb					
5	Landscaping					
6	Garbage Bins	12,000				
7	Patios					
8	Entrance Steps	3,000	3,000	3,000		
9	Retaining Walls					
10	Fencing					
11	Foundations	13,000	1,200	1,200	1,200	17,200
12	Window Wells	22,500	22,500			
13	Parging					
14	Exterior Walls					
15	Floors					
16	Insulation					310,000
17	Flat Roof Covers					
18	Mansard Roof Covers	5,000		5,000		240,000
19	Chimneys					
20	Vent Covers	9,500				
21	Brick Veneer		4,000			
22	Vinyl Siding	500	500	500	500	500
23	Caulking	6,200	1,200	1,200	1,200	1,200
24	Windows					
25	Exterior Doors					
26	Fire Alarm, Detection, & Suppression					
27	Common Hallways					
28	Plumbing	3,800	3,800	3,800	3,800	3,800
29	Hose Bibs					
30	Electrical distribution System	500	5,500	500	500	500
31	Bollards - Electrical Outlets					
32	Lighting	10,000				
33	Structural Elements	1,200	1,200	1,200	1,200	1,200
34	General Contingency	1,500	1,500	1,500	1,500	1,500
35	Reserve Fund Studies	5,000			3,000	
A	EXPENSE TOTALS (Current Canadian Dollars)	98,700	45,400	21,900	13,900	576,900
B	EXPENSE TOTALS (Adjusted for 2% Inflation)	98,700	46,308	22,785	14,751	624,455
C	CONTRIBUTIONS TO RESERVE FUND	135,000	138,105	141,281	144,531	147,855
D	CONTRIBUTION CHANGE FROM PREVIOUS YEAR	0.00%	2.30%	2.30%	2.30%	2.30%
E	INTEREST INCOME	1,004	1,374	2,296	3,492	4,811
F	RESERVE FUND BALANCE (Fiscal Year End)	138,767	231,938	352,731	486,003	14,214

6.3 Capital Expenditure and Cash Flow Charts

OCSO #750 - Merivale Gardens Reserve Fund Study - 2017

YEARS 6-10

NO	RESERVE FUND EXPENSES	YEAR 6-2022	YEAR 7-2023	YEAR 8-2024	YEAR 9-2025	YEAR 10-2026
1	Site Services	1,000	1,000	1,000	1,000	1,000
2	Asphalt Laneway & Parking Spaces	4,000				4,000
3	Walkways	3,000				
4	Concrete Curb	3,000				
5	Landscaping					
6	Garbage Bins					
7	Patios					
8	Entrance Steps	3,000	3,000	3,000	3,000	
9	Retaining Walls					28,000
10	Fencing					
11	Foundations	1,200	1,200	1,200	17,200	1,200
12	Window Wells					
13	Paving					15,000
14	Exterior Walls					
15	Floors	13,500	13,500			
16	Insulation					
17	Flat Roof Covers					
18	Mansard Roof Covers					
19	Chimneys			8,000		
20	Vent Covers			6,500		
21	Brick Veneer		4,000			
22	Vinyl Siding	500	500	500	500	500
23	Caulking	6,200	1,200	1,200	1,200	1,200
24	Windows					
25	Exterior Doors					
26	Fire Alarm, Detection, & Suppression					
27	Common Hallways	10,000		10,000		
28	Plumbing	3,800	3,800	3,800	3,800	3,800
29	Hose Bibs	20,000	30,000			
30	Electrical distribution System	5,500	500	500	500	500
31	Bollards - Electrical Outlets					
32	Lighting				6,000	
33	Structural Elements	1,200	1,200	1,200	1,200	1,200
34	General Contingency	1,500	1,500	1,500	1,500	1,500
35	Reserve Fund Studies		5,000			3,000
A	EXPENSE TOTALS (Current Canadian Dollars)	77,400	66,400	38,400	35,900	60,900
B	EXPENSE TOTALS (Adjusted for 2% Inflation)	85,456	74,777	44,110	42,063	72,781
C	CONTRIBUTIONS TO RESERVE FUND	150,812	153,828	156,905	160,043	163,244
D	CONTRIBUTION CHANGE FROM PREVIOUS YEAR	2.00%	2.00%	2.00%	2.00%	2.00%
E	INTEREST INCOME	141	789	1,580	2,712	3,907
F	RESERVE FUND BALANCE (Fiscal Year End)	79,711	159,552	273,926	394,618	488,988

6.4 Capital Expenditure and Cash Flow Charts

OCSCC #750 - Merivale Gardens Reserve Fund Study - 2017

YEARS 11-15

NO	RESERVE FUND EXPENSES	YEAR 11-2027	YEAR 12-2028	YEAR 13-2029	YEAR 14-2030	YEAR 15-2031
1	Site Services	1,000	1,000	1,000	1,000	1,000
2	Asphalt Laneway & Parking Spaces					190,000
3	Walkways		50,000			
4	Concrete Curb					27,000
5	Landscaping					
6	Garbage Bins			8,500		
7	Patios					
8	Entrance Steps				3,000	
9	Retaining Walls					
10	Fencing				115,000	
11	Foundations	1,200	1,200	17,200	1,200	1,200
12	Window Wells					
13	Paving					
14	Exterior Walls					
15	Floors	13,500	13,500			
16	Insulation					
17	Flat Roof Covers	75,000	75,000	75,000	75,000	75,000
18	Mansard Roof Covers					
19	Chimneys			8,000		
20	Vent Covers					
21	Brick Veneer		4,000			
22	Vinyl Siding	500	500	500	500	500
23	Caulking	6,200	1,200	1,200	1,200	1,200
24	Windows					
25	Exterior Doors					
26	Fire Alarm, Detection, & Suppression		27,000			
27	Common Hallways					
28	Plumbing	3,800	3,800	3,800	3,800	3,800
29	Hose Bibs					
30	Electrical distribution System	500	500	500	500	500
31	Bollards - Electrical Outlets					
32	Lighting					
33	Structural Elements	1,200	1,200	1,200	1,200	1,200
34	General Contingency	1,500	1,500	1,500	1,500	1,500
35	Reserve Fund Studies			5,000		
A	EXPENSE TOTALS (Current Canadian Dollars)	104,400	180,400	123,400	203,900	302,900
B	EXPENSE TOTALS (Adjusted for 2% Inflation)	127,263	224,305	156,501	263,766	399,670
C	CONTRIBUTIONS TO RESERVE FUND	166,509	169,839	173,236	176,701	180,235
D	CONTRIBUTION CHANGE FROM PREVIOUS YEAR	2.00%	2.00%	2.00%	2.00%	2.00%
E	INTEREST INCOME	4,841	5,277	4,790	5,004	4,191
F	RESERVE FUND BALANCE (Fiscal Year End)	533,075	483,886	505,412	423,350	208,106

6.5 Capital Expenditure and Cash Flow Charts

OCSCC #750 - Merivale Gardens Reserve Fund Study - 2017

YEARS 16-20

NO	RESERVE FUND EXPENSES	YEAR 16-2032	YEAR 17-2033	YEAR 18-2034	YEAR 19-2035	YEAR 20-2036
1	Site Services	1,000	1,000	1,000	1,000	1,000
2	Asphalt Laneway & Parking Spaces					
3	Walkways					
4	Concrete Curb					
5	Landscaping					
6	Garbage Bins					
7	Patios					
8	Entrance Steps				3,000	
9	Retaining Walls					35,000
10	Fencing					
11	Foundations	1,200	17,200	1,200	1,200	1,200
12	Window Wells					
13	Parging					
14	Exterior Walls					
15	Floors	13,500	13,500			
16	Insulation					
17	Flat Roof Covers	75,000	75,000	75,000		
18	Mansard Roof Covers					
19	Chimneys			8,000		
20	Vent Covers					
21	Brick Veneer		4,000			
22	Vinyl Siding	500	500	500	500	500
23	Caulking	6,200	1,200	1,200	1,200	1,200
24	Windows					
25	Exterior Doors					100,000
26	Fire Alarm, Detection, & Suppression					
27	Common Hallways					
28	Plumbing	3,800	3,800	3,800	3,800	3,800
29	Hose Bibs					
30	Electrical distribution System	500	500	500	500	500
31	Bollards - Electrical Outlets					
32	Lighting				6,000	
33	Structural Elements	1,200	1,200	1,200	1,200	1,200
34	General Contingency	1,500	1,500	1,500	1,500	1,500
35	Reserve Fund Studies	3,000			5,000	
A	EXPENSE TOTALS (Current Canadian Dollars)	107,400	119,400	93,900	24,900	145,900
B	EXPENSE TOTALS (Adjusted for 2% Inflation)	144,546	163,911	131,483	35,563	212,549
C	CONTRIBUTIONS TO RESERVE FUND	183,839	187,516	191,266	195,092	198,993
D	CONTRIBUTION CHANGE FROM PREVIOUS YEAR	2.00%	2.00%	2.00%	2.00%	2.00%
E	INTEREST INCOME	2,060	2,470	2,728	3,347	4,959
F	RESERVE FUND BALANCE (Fiscal Year End)	249,459	275,534	338,045	500,920	492,324

6.6 Capital Expenditure and Cash Flow Charts

OCCSC #750 - Merivale Gardens Reserve Fund Study - 2017

YEARS 21-25

NO	RESERVE FUND EXPENSES	YEAR 21-2037	YEAR 22-2038	YEAR 23-2039	YEAR 24-2040	YEAR 25-2041
1	Site Services	1,000	1,000	1,000	1,000	1,000
2	Asphalt Laneway & Parking Spaces				5,000	
3	Walkways				3,000	
4	Concrete Curb				2,000	
5	Landscaping					
6	Garbage Bins					8,500
7	Patios					
8	Entrance Steps				3,000	
9	Retaining Walls					
10	Fencing					
11	Foundations	17,200	1,200	1,200	1,200	17,200
12	Window Wells					
13	Paving					
14	Exterior Walls					
15	Floors					
16	Insulation					
17	Flat Roof Covers					
18	Mansard Roof Covers					
19	Chimneys			8,000		
20	Vent Covers	6,500				
21	Brick Veneer		4,000			
22	Vinyl Siding	500	500	500	500	500
23	Caulking	6,200	1,200	1,200	1,200	1,200
24	Windows				330,000	
25	Exterior Doors					197,000
26	Fire Alarm, Detection, & Suppression					
27	Common Hallways	30,000		20,000		
28	Plumbing	3,800	3,800	3,800	3,800	3,800
29	Hose Bibs					
30	Electrical distribution System	500	500	500	500	500
31	Bollards - Electrical Outlets					
32	Lighting					
33	Structural Elements	1,200	1,200	1,200	1,200	1,200
34	General Contingency	1,500	1,500	1,500	1,500	1,500
35	Reserve Fund Studies		3,000			5,000
A	EXPENSE TOTALS (Current Canadian Dollars)	68,400	17,900	38,900	353,900	237,400
B	EXPENSE TOTALS (Adjusted for 2% Inflation)	101,639	27,130	60,139	558,065	381,843
C	CONTRIBUTIONS TO RESERVE FUND	202,973	207,033	211,173	215,397	219,705
D	CONTRIBUTION CHANGE FROM PREVIOUS YEAR	2.00%	2.00%	2.00%	2.00%	2.00%
E	INTEREST INCOME	4,874	5,925	7,765	9,337	6,037
F	RESERVE FUND BALANCE (Fiscal Year End)	598,532	784,360	943,160	609,829	453,728

6.7 Capital Expenditure and Cash Flow Charts

OCSCC #750 - Merivale Gardens Reserve Fund Study - 2017

YEARS 26-30

NO	RESERVE FUND EXPENSES	YEAR 26-2042	YEAR 27-2043	YEAR 28-2044	YEAR 29-2045	YEAR 30-2046
1	Site Services	1,000	1,000	1,000	1,000	1,000
2	Asphalt Laneway & Parking Spaces					
3	Walkways					
4	Concrete Curb					
5	Landscaping					
6	Garbage Bins					
7	Patios					
8	Entrance Steps				3,000	
9	Retaining Walls					
10	Fencing					
11	Foundations	1,200	1,200	1,200	17,200	1,200
12	Window Wells			50,000		
13	Paving				15,000	
14	Exterior Walls					
15	Floors		13,500	13,500		
16	Insulation					
17	Flat Roof Covers					
18	Mansard Roof Covers					
19	Chimneys					
20	Vent Covers					
21	Brick Veneer		4,000			
22	Vinyl Siding	500	500	500	500	500
23	Caulking	6,200	1,200	1,200	1,200	1,200
24	Windows	330,000				
25	Exterior Doors					
26	Fire Alarm, Detection, & Suppression					
27	Common Hallways		20,000			
28	Plumbing	3,800	3,800	3,800	3,800	3,800
29	Hose Bibs					
30	Electrical distribution System	500	500	500	500	500
31	Bollards - Electrical Outlets					
32	Lighting				6,000	
33	Structural Elements	1,200	1,200	1,200	1,200	1,200
34	General Contingency	1,500	1,500	1,500	1,500	1,500
35	Reserve Fund Studies			3,000		
A	EXPENSE TOTALS (Current Canadian Dollars)	345,900	48,400	77,400	50,900	10,900
B	EXPENSE TOTALS (Adjusted for 2% Inflation)	567,486	80,993	132,113	88,618	19,357
C	CONTRIBUTIONS TO RESERVE FUND	224,099	228,581	233,153	237,816	242,572
D	CONTRIBUTION CHANGE FROM PREVIOUS YEAR	2.00%	2.00%	2.00%	2.00%	2.00%
E	INTEREST INCOME	4,492	1,137	2,609	3,635	5,148
F	RESERVE FUND BALANCE (Fiscal Year End)	114,833	263,558	367,207	520,040	748,403

6.8 Capital Expenditure and Cash Flow Charts

OCSCC #750 - Merivale Gardens Reserve Fund Study - 2017

YEAR 1-30 TOTALS

NO	RESERVE FUND EXPENSES	YEARS 1-5	YEARS 6-10	YEARS 11-15	YEARS 16-20	YEARS 21-25	YEARS 26-30	ALL YEARS 1-30
1	Site Services	5,000	5,000	5,000	5,000	5,000	5,000	30,000
2	Asphalt Laneway & Parking Spaces	4,000	8,000	190,000		5,000		207,000
3	Walkways	3,000	3,000	50,000		3,000		59,000
4	Concrete Curb		3,000	27,000		2,000		32,000
5	Landscaping							
6	Garbage Bins	12,000		8,500		8,500		29,000
7	Patios							
8	Entrance Steps	9,000	12,000	3,000	3,000	3,000	3,000	33,000
9	Retaining Walls		28,000		35,000			63,000
10	Fencing			115,000				115,000
11	Foundations	33,800	22,000	22,000	22,000	38,000	22,000	159,800
12	Window Wells	45,000					50,000	95,000
13	Paving		15,000				15,000	30,000
14	Exterior Walls							
15	Floors		27,000	27,000	27,000		27,000	108,000
16	Insulation	310,000						310,000
17	Flat Roof Covers			375,000	225,000			600,000
18	Mansard Roof Covers	250,000						250,000
19	Chimneys		8,000	8,000	8,000	8,000		32,000
20	Vent Covers	9,500	6,500			6,500		22,500
21	Brick Veneer	4,000	4,000	4,000	4,000	4,000	4,000	24,000
22	Vinyl Siding	2,500	2,500	2,500	2,500	2,500	2,500	15,000
23	Caulking	11,000	11,000	11,000	11,000	11,000	11,000	66,000
24	Windows					330,000	330,000	660,000
25	Exterior Doors				100,000	197,000		297,000
26	Fire Alarm, Detection, & Suppression			27,000				27,000
27	Common Hallways		20,000			50,000	20,000	90,000
28	Plumbing	19,000	19,000	19,000	19,000	19,000	19,000	114,000
29	Hose Bibs		50,000					50,000
30	Electrical distribution System	7,500	7,500	2,500	2,500	2,500	2,500	25,000
31	Bollards - Electrical Outlets							
32	Lighting	10,000	6,000		6,000		6,000	28,000
33	Structural Elements	6,000	6,000	6,000	6,000	6,000	6,000	36,000
34	General Contingency	7,500	7,500	7,500	7,500	7,500	7,500	45,000
35	Reserve Fund Studies	8,000	8,000	5,000	8,000	8,000	3,000	40,000
A	EXPENSE TOTALS (Current Canadian Dollars)	756,800	279,000	915,000	491,500	716,500	533,500	3,692,300
B	EXPENSE TOTALS (Adjusted for 2% Inflation)	806,999	319,187	1,171,505	688,052	1,128,816	888,567	5,003,126
C	CONTRIBUTIONS TO RESERVE FUND	706,772	784,833	866,519	956,707	1,056,282	1,166,220	5,537,332



7. Executive Summary

The authors conducted a Reserve Fund for OCSCC #750, 35 Glenridge Road which has been compiled into this Reserve Fund Study for the starting year of 2017. The report must be read in its entirety to fully understand the process taken to produce this study. The report must be updated every three years in accordance with the Condominium Act. The following three sections are a summary of our findings.

7.1 Document Review

From our review of documentation, we have the following summary comments on the elements:

- It was interpreted by the authors that the patios in the rear yards are the responsibility of the Unit owner and must be maintained by the Unit owners.
- The Horizontal and Vertical Boundaries are mislabeled in the Declaration, this should be amended.

7.2 Summary of Examination of Common Elements

Our discussions with the current Board confirmed that items are being maintained, repaired and replaced as needed.

We have the following summary comments regarding the chart provided in Section 5, Examination of common elements:

- The asphalt walkways and laneways are scheduled to be re-surfaced in 2028 and 2031, respectively. The concrete curbs would be replaced with the laneway in 2031.
- \$12,000 has been allocated to repair /improve the garbage bins in 2017.
- A budget has been provided to replace 45 window wells in 2017, 2018.
- The steel decking supporting the concrete floor slabs at the entrances of the TH blocks are budgeted for repairs in 2019 and continuing throughout the study.



- The asphalt shingles on the mansard roof are in poor condition. It is expected the mansard roofs will require new insulation, the replacement of the shingles has been postponed to 2021 to occur simultaneously with the mansard insulation installation. A budget of \$10,000 has been provided to repair sections of the shingles as needed, and for professional fees to investigate the issues with the mansard roofs. This is a major expense.
- During the site inspection exhaust vent covers on the walls were noted to be missing or damaged. A budget has been provided to replace the missing/damaged vent covers.
- The next window replacement is expected in 2040. The cost to replace the windows has been spread out over three years. The glass patio doors are to be replaced during this time frame.
- A budget has been provided in 2017 to replace the lighting fixtures in the basement hallway of each TH block. In 2022 and 2024, \$20,000 has been allocated for flooring and painting the hallways.
- Most of the hose bibs were observed to be in poor condition. A budget has been provided in 2017 to replace the most damaged bibs and to seal around the taps with caulking. A budget is available in 2023 to replace the remainder of the bibs.



7.3 Reserve Fund

The reserve fund is recorded to having a balance of \$101,463.00 as of April 30, 2017. The authors of this study based the annual reserve fund contribution of \$135,000.00 in 2017, as confirmed by the Property Manager. The reserve fund account must be independent from the maintenance account and earn interest, as the authors have assumed 1.0% interest on the balance of the reserve fund. There is a proposed annual increase of 2.3% to the reserve fund contributions to maintain a positive reserve fund balance beginning January 2018 until 2022 where there is a reduction in increase from 2.3% to 2.0% for the remainder of the study period.

The Board of Directors has the responsibility and discretion to set annual reserve fund contribution levels, as they see fit. It may be decided to begin larger increases to the annual contribution levels within the shorter term to lessen the later increases that are expected in this study.

We trust this report contains the information you desire. Should you have any questions, please do not hesitate to contact the undersigned at your convenience.

Yours very truly

OAKTREE ENGINEERING LIMITED

Phil Botttriell, P.Eng. RHI
Civil Engineer



Patrick Baggott
Engineer In Training