

NW1389 THE WILLOWS

1103 and 1121 Howie Avenue, Coquitlam, BC



**DEPRECIATION REPORT
MAY 2014**

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Executive Summary

This Depreciation Report was prepared for NW1389 The Willows, located at 1103 and 1121 Howie Street, Coquitlam, BC. The three story wood frame buildings were built in 1979. There are sixty units in the complex.

This report is based on visual inspections and the current financial statements. A survey of all mechanical and electrical components was conducted on January 28, 2014 and a survey of the building components was conducted on January 30, 2014.

The physical component inventory provides summaries, photographs and projected life expectancies with budget estimates for those components due for replacement. The financial analysis shows all capital expenses projected over thirty years. One of the funding models shows the results of continuing the current CRF strategy. The remaining funding models provide potential strategies for meeting all capital expenditures.

The Contingency Reserve Fund for VR1389 The Willows is currently at more than 67% of the operating budget. This fulfills the minimum set by legislation (25%). Based on the 2013 annual operating budget of \$204,218, the CRF should not be allowed to fall below approximately \$51,055.

The current annual contribution to the CRF is \$40,000. At present, the current CRF funding levels are not sufficient to meet upcoming expenses.

There are many ways to meet the financial requirements of NW1389. The recommendations provided in this report are examples that may be modified based on the needs of the strata corporation and individual unit holders.



Fig 1. A view of the front side of Building A from Howie Avenue (left). A view of the front side of Building B from Howie Avenue (right).

Format of this Report

This report consists of three sections:

1. Physical Component Inventory Summaries
2. Physical Component Inventory Costs
3. Financial Analysis.

The two Physical Component Inventory sections list all building components, grouped by category.

- The Summary section provides a description of the component, observations from the visual inspection and a photograph.
- The Costs section provides the inventory list presented in table format, showing the projected life span and estimated replacement costs for each applicable building component.

The Financial Analysis section summarizes the cost breakdowns and projects the estimated capital expenditures over 30 years. The analysis is based on the current Contingency Reserve Fund (CRF) status and includes suggested strategies for future contributions, with the goal of meeting all capital expenditures. This section includes four cash flow funding models.

How to Read This Report

The Executive Summary provides a quick overview of the whole report. It also contains a Recommendations section if there are components that require attention.

The Physical Component Inventory Summary section is written in a narrative style, in laymen's terms. Each physical component is described along with an assessment of its current condition. Photographs are included for identification purposes and to provide a visual record of the current condition. All recommendations regarding specific components are included in the Summary section while the associated cost estimates are presented in the Costs section.

The Physical Component Inventory Costs section details the number of units, the projected lifespan, and the years remaining for each component.

- There is no set lifespan for building components in the construction industry. The lifespan of building components shown in this section is based on age, manufacturers' recommendations and the observed condition of the components at the time of inspection. The lifespan numbers are approximated to assist in calculations for future component replacement costs. Lifespan of building components will change over time as they are dependent on many factors.

We provide replacement estimates for all components that will require replacement within the 30 year reporting period. If immediate repairs or maintenance are required, we include an estimate for the maintenance.

- Please note that all maintenance costs included in this section are for costs that occur one time only (to correct an issue) or less than once per year. No annual costs are included in this section.

- Costs that occur annually are outside the scope of this report. However, for the reader's convenience, we provide a list of components that require annual maintenance in Appendix A.

The Costs section is the basis of the Financial Analysis section.

The Financial Analysis section provides an assessment of the strata's current CRF status in relation to the capital expenditures coming due over a 30 year timeframe.

Capital Expenditures and Cashflow (Adjusted for Inflation) is a set of tables that show all capital expenses, adjusted for inflation, over 30 years. All of the numbers in this table correspond with the replacement and maintenance costs found in the Physical Component Inventory Costs section.

- If you need to trace all capital expenses back to the 2013 dollar amounts in the Costs section, please contact MBI. We can provide the same tables with no adjustment for inflation.

Cash Flow Funding Models are a key aspect of this section. We provide four models. The first typically illustrates the strata's current CRF strategy, adjusted for inflation. The intention is to provide a baseline and show how well the current strategy will meet future capital expenses.

The remaining three cash flow funding models are prepared to assist in planning. They are suggestions based on the information we have about the strata and are not intended to be prescriptive. There are many ways to meet the financial needs of the strata—the funding models are a way to explore different strategies.

Each funding model shows the amount in the CRF, the amount of the annual contribution, the amount of capital expenses in that year and possible special levies (if required).

- Our goal with the funding models is to provide example strategies which strata councils can use to plan their CRF strategy. Please use these models as a starting point for your planning.

Appendices

Appendices are provided when we have collected information that may be helpful to the strata but is outside the scope of the depreciation report sections described above. For instance, we will provide estimates for work that is required in the near term if applicable.

Please consult the Table of Contents of this report to determine the appendices included in this report.

Physical Component Inventory Summary

Overview

Building A is at 1103 Howie Street. Building B is at 1121 Howie Street. The buildings are essentially identical. The strata completed an extensive building envelope remediation in 2012.

Building Envelope Components

Balconies, Open

Each building has twenty wood frame balconies. The plywood decks are covered in vinyl membrane. The membrane was replaced in 2012 and has an estimated remaining lifespan of eighteen years.

Bandboard

Painted fir/hem bandboard provides expansion separation between floors. The bandboard was installed in 2012. We recommend painting exterior wood components every ten years to extend the lifespan.



Fig 2. A view of one of the balconies (left). A section of bandboard (right).

Doors, Glass

The front entrance door for both buildings is single glazed aluminum. They have side lites and closers.

Doors, Metal

There are four painted metal doors, one at each of the first floor exits on the east and west ends of both buildings.

Doors, Sliding Glass

Each balcony and patio is accessed through a vinyl sliding glass door. These doors were installed in 2012 as part of the building envelope refurbishment project.



Fig 3. The glass front entrance door of Building A (left). A metal exterior side door (right).

Exterior Walls, HardiePlank® Siding

In 2012 all of the exterior walls were clad in HardiePlank® siding installed over a rainscreen assembly. We recommend caulking and painting the siding every twenty years.



Fig 4. A vinyl double glazed sliding glass door (left). HardiePlank® siding covers the exterior walls (right).

Flashings

Flashings were installed as part of the building envelope project in 2012. They are above and below windows and doors, over the bandboard and foundations.

Foundations

The building foundations are visible above grade. They are cast in place concrete.

Gutter System

Aluminum gutters are installed at the edge of the balconies. They direct rainwater from the balcony surface to downspouts.

Railings, Balconies

There are black picket style metal railings on the balconies.



Fig 5. A close up view of the HardiePlank® siding (left). Flashings are visible at the top and bottom of the vinyl windows (right).



Fig 6. A section of the concrete foundation (left). The gutter system at balconies (right).

Soffits

There are vented vinyl soffits under the balconies. The soffits provide air circulation for the wood frame components of the balconies. The soffits were installed in 2012.



Fig 7. Balcony railings are black metal (left). A view of the vinyl soffits over a building front entrance (right).

Trim Boards

The painted fir/hem trim boards around windows and doors were installed in 2012 as part of the building envelope project.

Windows

The windows are double glazed with vinyl frames. Operable panels are sliding. The windows were replaced as part of the building envelope project in 2012.



Fig 8. Painted fir/hem trim boards are around the windows (left). A view of upper floor windows (right).

Building Interior Components

Closets

There are closets on the first floor of each building that house cable equipment and breaker panels. Electrical closets that house individual unit meter stacks are on the second floors.

Doors, Fire

There are double fire doors in the interior hallways at the firewall. The doors have automatic closers installed and are rated to protect against fire for four hours.



Fig 9. One of the electrical closets (left). A set of double fire doors (right).

Doors, Metal

The utility rooms in the basement have painted metal doors.

Doors, Wood

Unit entries and stairwells have wood doors. Cable and electrical closets and some of the common rooms in the basement also have wood doors. The stairwell doors have closers.



Fig 10. A wood unit entry door (left). A wood door at a stairwell (right).

Hallways

There are three residential hallways in each building. These hallways have textured drywall walls with baseboards. The first floor has a suspended ceiling. On the second and third floors the hallway ceilings are textured drywall. The third floor hallways have vaulted ceilings and windows at the top of one wall. All of the hallway floors have Berber style carpets.



Fig 11. A third floor hallway with a vaulted ceiling (left). A first floor hallway with suspended ceiling (right).

Both buildings have a basement hallway that provides access to the parkades and some of the common and utility rooms. The walls and ceilings in these hallways are textured drywall and the flooring is ceramic tile.



Fig 12. The basement hallways have ceramic tile (left). A metal ladder for roof access (right).

Ladders

Metal ladders provide access to the roofs from the stairwells on the third floor.

Lobbies

The lobbies in each building have painted walls with chair rails and baseboards. There is Berber carpet on the floors and the ceilings are textured drywall.

Mailboxes

Each building has mailboxes on one side of the lobby.



Fig 13. A view of the lobby in Building B (left). A view of the elevator room (right).

Rooms, Elevator

There is an elevator room in the basement of each building. The hydraulic tank and control panel for the elevators are located there. These rooms have concrete block walls and concrete slab floors.

Rooms, Laundry

There is a laundry room in each basement. They contain two washers, two dryers and a sink. The walls and ceilings are painted and the flooring is vinyl.



Fig 14. One of the laundry rooms (left). A view of one of the mechanical rooms (right).

Rooms, Mechanical

There is a mechanical room in each basement. The rooms house equipment for the domestic water supply and the dry pipe sprinkler system. These rooms are concrete.

Rooms, Storage

Both buildings have a storage room in the basement. These rooms contain supplies and materials used by the strata. The storage rooms have painted drywall and concrete block walls. The flooring is vinyl tile.



Fig 15. One of the storage rooms (left). A view of a stairwell (right).

Stairwells

There is a stairwell on the east and west end of each building. The ceilings and walls are textured drywall. The steps and landings are carpeted.

Vestibules

There is a vestibule in each building between the parkade and the basement hallway. The walls are painted concrete block and the floor is vinyl tile.

Washrooms

There is a washroom located inside each laundry room. They have a toilet and sink.

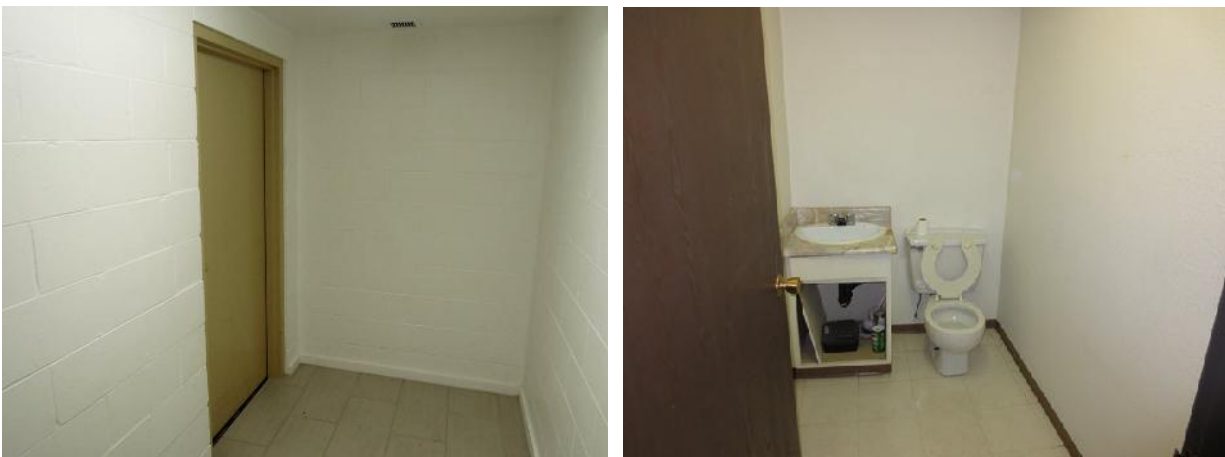


Fig 16. The vestibule between one basement hallway and the parkade (left). A washroom with toilet and sink (right).

Electrical Components

Contactors

There is a contactor in each electrical room. The contactors control the parkade exhaust fans.

Disconnects, Elevator

Disconnects provide isolation and fuse protection. There are two disconnect panels in each elevator room. One services the elevator main power. The other is for the elevator controls.



Fig 17. A contactor (left). The elevator disconnects (right).

Disconnects, House

There is a Federal Pioneer 200 amp house disconnect in each electrical room. They provide fuse protection for the house panels.

Disconnects, Meter Stacks

There is a Federal Pioneer 400 amp and 200 amp disconnect in each electrical room. They service the individual unit meter stacks. We recommend annual tightening of all electrical connections.



Fig 18. A 200 amp house disconnect (left). A 400 amp unit meter stack disconnect (right).

Enterphones

Both buildings have Enterphone IIS panels at the front entrance. They provide communication to in-unit telephones. The enterphone system was replaced in 2012. The control relay modules are in the electrical rooms. These systems have a fifteen year estimated lifespan. See the Costs section for a budget estimate.



Fig 19. The enterphones are outside the main entrance (left). An enterphone control relay (right).

Exit Signs

Exit signs with LED lights are located throughout the buildings.

Fire Alarm System

The fire alarm system for the buildings are a Conventional system. It includes the pulls, bells and the annunciator panel. The fire system is maintained regularly by Fairlane Fire Prevention Ltd.

These systems have an estimated lifespan of twenty-five years. The most cost effective way to modernize is to replace the system with another Conventional system. The budget estimate provided in the Costs section is for planning purposes only. For more information about fire safety systems see Appendix B – Fire Safety Systems.



Fig 20. An LED exit sign (left). A fire alarm annunciator panel (right).

Fire Alarm Annunciator Panels

A Mircom FA-1000 fire alarm annunciator panel is located in each lobby. The panels are nine years old.

Heat Detectors

Heat detectors sense changes in heat to provide early warning of a fire. They are in some of the common and utility rooms.

Heaters, Baseboard

There are electric baseboard heaters in the stairwells, lobbies and laundry rooms.



Fig 21. A heat detector (left). An electric baseboard heater in the basement (right).

House Panels

House panels in the electrical rooms and closets serve as a central point for all common use electrical loads. There are no moving parts to this equipment. Wear is commonly caused by loose connections that occur over time from natural expansion and contraction. We recommend annual tightening of all electrical connections.



Fig 22. One of the house panels (left). A house meter in one of the electrical rooms (right).

House Meters

There is a house meter in each electrical room. The meters measure the amount of electricity used in common areas.

Lighting, Emergency

Ready-Lite battery backups with dual lamps are located in the stairwells, basements and second floor hallways. These provide emergency power to remote heads in the event of a prolonged power outage. Remote heads are located throughout the buildings and parkades. There are both single and dual heads. They are inspected and maintained annually by Fairlane Fire Prevention Ltd.



Fig 23. A dual head emergency light battery backup (left). A dual remote head (right).

Lighting, Exterior

There are several different types of lights around the building exterior. High bay lights are mounted over the parkade overhead doors. A marine light is in each parkade stairwell. A cylindrical spot light is also at the top of the parkade stairwell at Building A.



Fig 24. A high bay light over a parkade entrance (left). A marine light in one of the parkade stairwells (right).

Halogen spot lights provide lighting for sidewalks at the east and west sides. Photocells are mounted with the halogen lights over the exterior side doors. New post lamps illuminate the front entrance steps at both buildings. There are pot lights over the front entrance doors.



Fig 25. Halogen spot lights at the side of a building (left). A front entrance post lamp (right).

Lighting, Interior

Single and twin fixtures with fluorescent T12 or T5 lights provide lighting in the parkades, basements and some common rooms. Keyless fixtures with a bare bulb are in some utility rooms. There are globe lights in the stairwells, small pot lights in the lobbies and wall sconces in the hallways.



Fig 26. A globe ceiling light in one of the stairwells (left). A pot light in the lobby (centre). A hallway wall sconce (right).

Main Building Disconnects

There is a Federal Pioneer 600 amp main building disconnect in each electrical room. This disconnect is the initial point at which electricity enters end-user equipment. We recommend annual tightening of all electrical connections.

Main Splitter

There is a BEL 600 amp main splitter in each electrical room. The panels split and distribute power to the house panels and unit meter stacks. We recommend annual tightening of all electrical connections.



Fig 27. One of the main building disconnects (left). A main splitter (right).

Meter Stacks, Unit

There are ten unit meter stacks with six meters per stack. The stacks are located in the second floor electrical closets. The unit meter stacks are the point at which building power becomes the end users' responsibility. We recommend annual tightening of all electrical connections.

Overhead Door Opener

Manaras door openers operate the parkade overhead doors. The opener for Building A was replaced in 2013. These devices are serviced by Overhead Door Co. Overhead door openers have an estimated lifespan of fifteen years. A budget estimate is provided in the Costs section.



Fig 28. A set of unit meter stacks (left). The new overhead door opener in Building A (right).

Security System

A security system consisting of two dome cameras and a monitoring station is located in Building A. Both cameras are mounted near the overhead door. The monitoring station is in the electrical room. The strata has plans to expand the security system to Building B.

Smoke Detectors

Smoke detectors are located throughout the buildings. They are inspected and serviced by Fairlane Fire Prevention Ltd.

Timer

There is a Paragon 4001 timer in the electrical room at Building A.



Fig 29. A video camera in the Building A parking area (left). A smoke detector (centre). A timer (right).

Landscaping Components

Fencing, Cedar

Cedar privacy panels are between the unit patios. The panels appeared to be recently installed. Cedar fencing is also beside the parkade entrance ramp at Building B. This fence was installed in 2011. We recommend all cedar fencing be stained every ten years to extend the lifespan. A budget estimate is provided in the Costs section.



Fig 30. A patio privacy panel (left). The cedar fencing at the parkade entrance ramp to Building B (right).

Fencing, Cedar Lattice

Cedar lattice fencing is at the north and east perimeter of the property. This fencing is weathered. A budget estimate for replacement and staining is provided in the Costs section. We recommend staining every ten years to extend the lifespan.

There is also cedar lattice fencing panels at the front of the buildings. This fencing has been painted recently. We recommend painting every ten years.



Fig 31. Cedar lattice fencing on the north side of the property (left). Painted cedar lattice fencing near one of the front entrances (right).

Garden Beds

There are well maintained garden beds around the grounds. The garden beds are maintained by professional landscapers. Maintenance is funded through the annual operating budget.



Fig 32. A garden bed with trimmed shrubs at the front of Building B (left). The cedar gate at the north laneway (right).

Gate, Cedar

There is a padlocked cedar and metal gate behind Building A at the laneway. The gate appeared to be new.



Fig 33. A view of the grounds behind Building B (left). A grassy front section of the grounds (right).

Grounds

The grounds are well maintained with lawn, garden beds and trees. They are maintained by professional landscapers. Maintenance costs are included in the annual operating budget.

The landscaping on the north side is located over the parkades. A membrane seals the parkades. This type of membrane has a twenty year estimated lifespan. Replacing membrane under landscaping may be cost prohibitive. If leaks occur in the parkade, negative side repairs are recommended.

Handrails

Black metal handrails are installed at the steps on the east side.

Patios

All ground floor units have patios. The patios have concrete slabs or pavers at grade.



Fig 34. A handrail at a set of east steps (left). A patio with concrete pavers (right).

Railings, Metal

There are new metal picket style railings at the front entrance and at the west steps. There are rail style railings on top of the concrete retaining wall on the east side.



Fig 35. New metal railings at one of the front entrance steps (left). A sidewalk with concrete pavers (right).

Sidewalks

There are concrete and concrete paver sidewalks on both sides of the buildings. They provide access to the parkade stairwells and building exits. Short gravel sidewalks are on the west sides of both buildings.



Fig 36. A gravel sidewalk (left). These steps are on the west side (right).

Steps

There are three sets of concrete steps at the front of each building. These lead to the front entrances and to sidewalks at the east and west sides.



Fig 37. A set of steps on the east side of a building (left). Evergreen trees on the northeast side of Building B (right).

Walls, Concrete

There are concrete walls covered with parging on the east side of the parkade entrances. There are similar walls at the parkade stairwells.

Walls, Retaining

Retaining walls stabilize the ground elevation and provide structured boundaries for the area. There are cast in place concrete retaining walls in several areas on the grounds. There is parging on some of these. There is an Allan Block retaining wall at the northeast corner of the grounds behind Building B.



Fig 38. A concrete wall with parking on the east side of a parkade entrance (left). These concrete walls surround the parkade stairwells (right).



Fig 39. A concrete retaining wall and a drainage corridor (left). Concrete retaining walls at the border of a sidewalk (right).



Fig 40. A concrete retaining wall at the front of the property (left). The Allen block retaining wall behind Building B (right).

Mechanical Components

Backflow Preventers

There is a FEBCO backflow preventer in the mechanical room of each building. They ensure that no liquid, gas or solid contaminants can enter the potable water supply from ground, storage or other sources if a backflow situation occurs. Backflow preventers rarely need replacement when they are rebuilt regularly. These devices require annual certification. See Appendix A for costs.

Boilers, Domestic Hot Water (DHW)

The Laars Mighty Therm boilers service the unit owners' domestic hot water needs. There is one in each mechanical room. The boilers heat and then transfer water to storage tanks for use when needed.



Fig 41. One of the backflow preventers (left). A domestic hot water boiler (right).

Carbon Monoxide Sensors

There is a QEL carbon monoxide sensor in each parkade. The devices were installed in 2013. The sensors detect hazardous gasses and activate the exhaust fans if unsafe levels are reached.



Fig 42. A carbon monoxide sensor (left). An electronic boiler controller (right).

Controllers, Boiler

A Tekmar electronic controller is located in each mechanical room. They regulate the DHW boilers.

Drains

There are four drains located on the grounds. They are part of the perimeter drainage and storm system.

Elevators

Each building has a hydraulic elevator. They are maintained monthly by West Coast Elevator. The elevators were built in 1979 and are thirty-five years old. In general hydraulic elevators have approximately thirty years of reliable operation. Both usage levels and the regularity of maintenance will affect the actual lifespan. After thirty years full modernization is recommended. West Coast Elevator noted that the cylinder for each elevator is past the end of life. See the Costs section for a budget estimate.

We recommend the strata budget for the cylinder replacement and modernization over the next ten years. However there is no way to predict when a failure may occur. For more detailed information, contact West Coast Elevator.

In some cases upgrades to the fire alarm system may be required to complete the elevator modernization. Please consult with Fairlane Fire Prevention Ltd. for more information about the requirements for your fire alarm system.



Fig 43. A view of the cab of one of the elevators (left). A view of an elevator call station in a basement hallway (right).

Expansion Tanks

There is a Watts expansion tank in each mechanical room that protects the domestic hot water system. The tanks cushion against shock caused by water hammer. They also absorb excess water pressure caused by thermal expansion.

Fans, Exhaust

Exhaust fans maintain a negative airflow to ensure no noxious gasses are present. They also help keep the air fresh and prevent moisture build up. Two belt driven exhaust fans service each parkade. The fans have dome exteriors and are situated on the west sides of the grounds. A Delhi exhaust fan is also in the electrical room in Building A. There are generic extractor fans in the storage rooms and bathrooms. These fans were not functional at the time of the site visit.



Fig 44. A water pressure expansion tank (left). A domed parkade exhaust fan situated on the grounds (right).

Fire Extinguishers

There are fire extinguishers on all floors and in some of the utility rooms. The extinguishers are maintained by Fairlane Fire Prevention Ltd.



Fig 45. The Delhi inline exhaust fan (left). One of the fire extinguishers (right).

Heaters, Duct

There are two duct heaters on the roof of each building. The ducts heaters heat the incoming make up air for the hallways.

Make Up Air Units

Make up air units pressurize the hallways to keep odors and contaminants from escaping individual units. There are two Delhi make up air units on the roof of each building. This type of unit has a thirty year lifespan. See the Costs section for a budget estimate.



Fig 46. A duct heater (left). One of the make up air units (right).

Perimeter Drainage and Storm System

The perimeter drainage and storm system around the property directs rainwater and runoff away from the building to the city storm system. This drainage system is below ground making visual inspection impractical. To maintain this system and prevent problems, we recommend taking the following steps as part of annual maintenance: 1. Inspect the drainage system every two years. This is done with video technology. 2. Clean out storm drains every two years. 3. Have any blockages or overgrowth in drain tile cleared as needed.

These maintenance protocols are normally part of the annual operating budget for strata properties and are not considered to be capital expenditures. We have not added the cost to replace perimeter drainage and storm systems as they are expected to last the lifetime of the property if maintained on a regular basis. See Appendix A for cost estimates for the annual budget to maintain perimeter drainage and storm systems.



Fig 47. A building perimeter storm drain (left). A pressure reducing valve (right).

Pressure Reducing Valves (PRVs)

Each building has a two-inch Watts Type 5 PRV. They reduce city water pressure from 52 – 100 psi to a more end user friendly pressure. Common set points are 50 – 65 psi depending on build design. PRVs that are rebuilt regularly rarely need replacement. We recommend a full rebuild every three years.

Pumps, Circulation

There is a Bell & Gossett circulation pump in each mechanical room that provides constant water flow to the DHW boiler loop. The pumps are an integral part of the hot water system and must be operating for the boilers to work properly.

Pumps, Recirculation

There is a hot water recirculation pump in each of the mechanical rooms. The pumps ensure users farthest away from the hot water tanks do not wait a prolonged time for hot water to arrive.



Fig 48. A circulation pump (left). A recirculation pump (right).

Re-piping, Building Water Lines

The building water lines are the main source of water for all residents. The copper piping is subject to soft water corrosion and pinhole leaks due to the mineral-poor water quality in Metro Vancouver. For this reason the lifespan of the building water lines is between ten and twenty years.

A small section of piping from the mechanical room to the first floor in Building B has been replaced with Wirsbo (Aqua PEX) piping. This type of piping has a forty year estimated lifespan.

We recommend the strata budget for full replacement of the common water lines in both buildings in ten years' time. Starting in 2014, we recommend contributing \$20,000 per year for this replacement. This will ensure funds are also available to support proactive repairs as needed. See the Costs section for a budget estimate.

Sprinkler System, Dry Pipe

There is a dry pipe sprinkler system in each mechanical room. The systems service the parkades. Each system consists of a compressor, a three-inch Firematic dry valve and the piping throughout the parkade. These systems are inspected annually by Fairlane Fire Prevention Ltd.

The compressor in Building B was replaced in 2013. The budget estimates provided in the Costs section are for budget planning only. For an assessment of your system, contact Fairlane Fire Prevention Ltd. For more information see Appendix B – Fire Safety Systems.



Fig 49. The compressor in the mechanical room at Building A (left). One of the dry pipe valves (right).

Storage Tanks

There are two Bradford-White hot water storage tanks in each mechanical room. The tanks store hot water from the boilers until needed.

Sumps, Gravity

There are gravity sumps for building drainage at the entrance ramps, in the parkades and in storage rooms. The sumps facilitate excess groundwater removal to the city water system through a pipe by gravity. There are no mechanical components or moving parts to these systems. We recommend the sumps be inspected regularly and cleaned at least every two years.



Fig 50. A set of hot water storage tanks (left). This gravity sump is on one of the entrance ramps (right).

Roof System Components

Firewalls

A firewall runs north and south at the midpoint of the buildings. The walls are designed to slow the spread of fire.

Flashings

There are enamel coated metal cap flashings on the parapet walls at the edge of the flat roofs, on the firewalls and on the elevator penthouse. There are flashings above the windows in the vaulted roofs.



Fig 51. A firewall runs north and south at the midpoint of each building (left). Cap flashings on the parapet walls (right).

Flat Roofs

Both buildings have a two-ply SBS membrane flat roof system. They were installed in 2011. The roofs have twelve years of estimated life remaining. A budget estimate is provided in the Costs section.



Fig 52. A view of the flat roof on Building A (left). A view of the flat roof on Building B (right).

Gutter System

There are new aluminum gutters and downspouts under the metal panel sloped roofs at Building A.



Fig 53. Gutters under a metal panel sloped roof (left). An elevator penthouse (right).

Parapet Walls

There are parapet walls at the edges of the flat roofs.

Penthouse, Elevator

There is an elevator penthouse on the roof of each building. The penthouses have concrete block and cedar siding exterior walls. There is a flat roof system with a scupper drain and downspout. Pooling was observed on both roofs.

Roof Drains/Scuppers

Four three-inch spun copper drains provide rainwater drainage. There are also scupper drains at the roof edge on the east and west sides. Roof drains and scuppers require regular cleaning. We recommend roof maintenance once per year as part of the annual R&M budget.



Fig 54. A roof drain (left). A roof hatch and parapet walls (right).

Roof Hatch

Roof hatches provide access to the roofs. There are two hatches on each building. They have hinged wood covers with an interior latch.

Sloped Roofs

There are ten metal panel sloped roof sections on Building A. These extend from the edge of the flat roof over some of the windows and both stairwells. These roofs can be expected to last the lifetime of the building.



Fig 55. The metal panels extend from the edge of the flat roof (left). A metal panel sloped roof over the west stairwell at Building A (right).

Vaulted Roofs

Each building has two vaulted roofs. Laminate asphalt shingles cover the vaulted roofs. The shingles were installed in 2011 and have an estimated lifespan of forty years.

On Building A, the vertical exterior walls are clad in Hardiplank™ siding. On Building B, the cladding is cedar siding. The cedar siding is in need of replacement. See the Costs section for a budget estimate.



Fig 56. A view of the vaulted roofs on Building B (left). Laminate asphalt shingles on a vaulted roof (right).

Windows

The vaulted roofs have windows facing the south. These windows provide natural light to the third floor hallways. On Building A the windows were upgraded to double glazed with vinyl frames in 2011. On Building B the windows are the original double glazed with aluminum frames.



Fig 57. The windows in the vaulted roofs on Building A are double glazed with vinyl frames.

Underground Parking Components

Doors, Metal

There are painted metal doors in the parkades. The doors provide access into the buildings, some common rooms and to the parkade stairwells and exits.

Doors, Overhead

A metal overhead door provides vehicle access into the parkades. This type of door has an estimated lifespan of thirty years. A budget estimate is provided in the Costs section.



Fig 58. A metal exterior exit door from the parkade (left). An overhead door (right).

Driveways, Asphalt

There are two asphalt driveways that provide vehicle access to the parkades. They are located on the east side of each building.



Fig 59. An asphalt driveway (left). Cast in place concrete foundation walls (right).

Foundation Walls

Foundation walls in the parkades are cast in place reinforced concrete. Some active leaks were observed along the north walls at Building A. Repairs are recommended. For a detailed

assessment with a breakdown of recommended repairs, see the Sealright Concrete Restoration budget estimate in Appendix C.

Handrails

A metal handrail is installed in each parkade stairwell.



Fig 60. A metal stairwell handrail (left). A view of an electrical room (right).

Rooms, Electrical

There is an electrical room in each building. The rooms house the common electrical components. The walls are concrete block and the floors and ceiling are concrete.

Rooms, Locker

There is one locker room in each building. The rooms contain wood lockers. The rooms are concrete and concrete block.

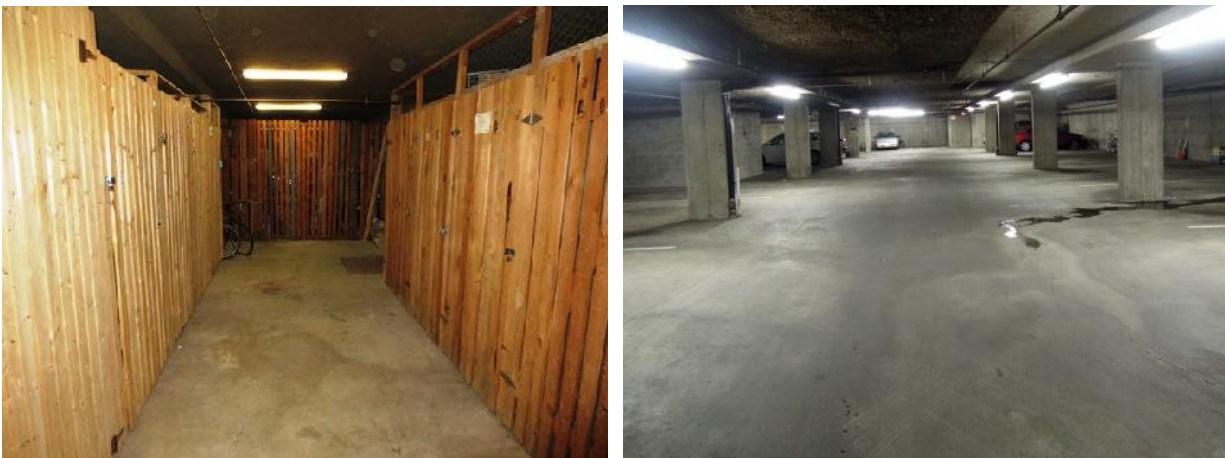


Fig 61. A locker room (left). A view of the concrete slab on grade (right).

Slabs on Grade

The floor of both parkades is concrete slab on grade. The slab has been sealed.

Slabs, Suspended

The suspended or overhead slab of the parkades are structural components that support the buildings and landscaping above. The slab is formed with cast in place concrete and steel and consists of slab bands sitting on concrete columns. The underside of the slab is sprayed with insulation below occupied spaces.



Fig 62. Another view of the slab on grade (left). An insulated section of the suspended slab (right).

There are a few active leaks including a leaking vent stack at Building B. A budget estimate for repairs is included in the Costs section. For a detailed assessment with a breakdown of recommended repairs, see the Sealright Concrete Restoration budget estimate in Appendix C.

Stairwells

Stairwells on the northwest side of the grounds provide exit from the parkades. The stairwells have parge coated concrete walls and concrete steps. .



Fig 63. An uninsulated area of suspended slab (left). A view down one of the parkade stairwells (right).

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Physical Component Inventory Costs

Building Envelope Components

Component	Description	Units	Age	Life Span	Years Left	Cost per Unit	Replacement Cost	Maintenance Cost
Balconies, Open	Plywood deck with vinyl membrane	40	2	70	68	-	-	-
	Membrane	40	2	20	18	1,000	\$ 40,000	-
Bandboard	Fir/hem, at floor transitions	2	2	70	68	-	-	-
	Paint	2	2	10	8	5,900	\$ 11,800	-
Doors, Glass	Aluminum, single glazed	2	35	70	35	-	-	-
Doors, Metal	Painted, at stairwell exits	4	35	70	35	-	-	-
Doors, Sliding Glass	Vinyl frames, double glazed	60	2	70	68	-	-	-
Exterior Walls, Rain Screen	HardiePlank® siding	2	2	70	68	-	-	-
	Paint	2	2	20	18	13,600	\$ 27,200	-
Flashings	Enamel coated 24g	2	2	70	68	-	-	-
Foundations	Cast in place concrete	2	35	70	35	-	-	-
Gutter System	Aluminum, 3 x 4 inch downspouts	2	2	30	28	3,500	\$ 7,000	-
Railings, Balconies	Metal, picket style	40	2	70	68	-	-	-
Soffits	Vinyl, vented	2	2	70	68	-	-	-
Trim Boards	Fir/hem, around windows and doors	2	2	70	68	-	-	-
	Paint	2	2	10	8	-	-	- ¹
Windows	Vinyl frames, double glazed	104	2	70	68	-	-	-

1. The cost of painting is included in the budget estimate for Bandboard - Paint.

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Physical Component Inventory Costs

Building Interior Components

Component	Description	Units	Age	Life Span	Years Left	Cost per Unit	Replacement Cost	Maintenance Cost
Closets	Cable and electrical	8	35	70	35	-	-	-
Doors, Fire	Located at the middle of buildings	12	35	70	35	-	-	-
Doors, Metal	Painted, in basement	6	35	70	35	-	-	-
Doors, Wood	At unit entries, stairwells and closets	80	35	70	35	-	-	-
Hallways, Ceilings	Textured drywall, suspended	8	35	70	35	-	-	-
Floorings	Berber carpet, ceramic tile	8	35	70	35	-	-	-
Walls	Textured drywall, concrete block	8	35	70	35	-	-	-
Ladders	Metal, in third floor stairwells	4	35	70	35	-	-	-
Lobbies, Ceilings	Textured drywall, painted	2	35	70	35	-	-	-
Floorings	Carpet, Berber	2	35	70	35	-	-	-
Walls	Drywall, painted	2	35	70	35	-	-	-
Mailboxes	In lobby	2	35	70	35	-	-	-
Rooms, Elevator	In basement	2	35	70	35	-	-	-
Rooms, Laundry	In basement	2	35	70	35	-	-	-
Rooms, Mechanical	In basement	2	35	70	35	-	-	-
Rooms, Storage	In basement	2	35	70	35	-	-	-
Stairwells, Ceilings	Textured drywall, painted	4	35	70	35	-	-	-
Floorings	Carpet, low-pile	4	35	70	35	-	-	-
Railings	Metal	4	35	70	35	-	-	-
Walls	Textured drywall, painted	4	35	70	35	-	-	-
Vestibules	Between basement hallways and parkades	2	35	70	35	-	-	-
Washrooms	Toilet and sink, beside laundry rooms	2	35	70	35	-	-	-

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Physical Component Inventory Costs

Electrical Components

Component	Make/Model/Description	Units	Age	Life Span	Years Left	Cost per Unit	Replacement Cost	Maintenance Cost
Contactors	For parkade fans	2	35	15	0	150	\$ 300	-
Disconnects, Elevator	CEB 30 amp, elevator controls	2	35	50	15	600	\$ 1,200	- 2
	Generic 100 amp, main power	2	35	50	15	900	\$ 1,800	- 2
Disconnects, House	Federal Pioneer, 200 amp	2	35	50	15	850	\$ 1,700	-
Disconnects, Meter Stacks	Federal Pioneer, 400 amp	3	35	50	15	950	\$ 2,850	-
	Federal Pioneer, 200 amp	1	35	50	15	850	\$ 850	-
Enterphones	Enterphone IIIS	2	2	15	13	6,000	\$ 12,000	-
Exit Signs	At fire exits	36	35	30	0	240	\$ 8,640	- 0
Fire Alarm System	Conventional	2	9	25	16	7,500	\$ 15,000	- 3
Annunciator Panels	Mircom FA-1000	2	9	25	16	-	-	- 4, 5
Heat Detectors	Ceiling mounted	20	35	35	0	240	\$ 4,800	- 0
Heaters, Baseboard	Electric, in stairwells	14	35	35	0	950	\$ 13,300	- 0
House Panels	Breaker panels for common areas	6	35	35	0	3,000	\$ 18,000	- 0
House Meters	Measures common use power	2	35	50	15	475	\$ 950	-
Lighting, Emergency	Ready-Lite battery packs	10	35	30	0	400	\$ 4,000	- 0, 5
	Remote heads	24	35	30	0	120	\$ 2,880	- 0
Lighting Exterior	High bay lights	2	35	30	0	150	\$ 300	-
	Marine lights, globe	2	35	30	0	85	\$ 170	-
	Photocells	4	35	15	0	85	\$ 340	-
	Post lamps	2	2	25	23	175	\$ 350	-
	Pot lights	6	35	30	0	180	\$ 1,080	- 0
	Spot lights, halogen	12	35	30	0	95	\$ 1,140	- 0
	Spot light, cylindrical	1	35	30	0	75	\$ 75	-

0. These components are past their life expectancy. Replacement costs have been allocated to the CRF in a workable timeframe.
2. Replacement cost is included in Elevator modernization (see Mechanical Components).
3. Budget estimate to replace the conventional system. This cost is for planning purposes only. For more information see Appendix B.
4. Replacement cost is included in the cost of the fire alarm system.
5. Maintained by Fairlane Fire Prevention Ltd.

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Physical Component Inventory Costs

Electrical Components, Continued

Component	Make/Model/Description	Units	Age	Life Span	Years Left	Cost per Unit	Replacement Cost	Maintenance Cost
Lighting, Interior	Fluorescent overhead fixtures	68	35	30	0	85	\$ 5,780	- 0
	Globe ceiling fixtures	18	35	30	0	75	\$ 1,350	- 0
	Keyless fixtures	24	35	30	0	45	\$ 1,080	- 0
	Pot lights	14	15	30	15	180	\$ 2,520	-
	Wall sconces	72	35	30	0	85	\$ 6,120	- 0
Main Building Disconnects	Federal Pioneer 600 amp	2	35	50	15	2,200	\$ 4,400	-
Main Splitter	BEL 600 amp	2	35	60	25	1,800	\$ 3,600	-
Meter Stacks, Unit	Six meters per stack	10	35	50	15	5,700	\$ 57,000	-
Overhead Door Openers	Manaras OTBH, Bldg. A	1	1	15	14	1,800	\$ 1,800	-
	Manaras MTBH, Bldg. B	1	35	15	0	1,800	\$ 1,800	- 0
Security System	Cameras with video monitoring	1	2	10	8	1,500	\$ 1,500	-
Smoke Detectors	Ceiling mounted	30	5	10	5	250	\$ 7,500	- 6
Timer	Paragon 4001	1	35	25	0	450	\$ 450	-

0. These components are past their life expectancy. Replacement costs have been allocated to the CRF in a workable timeframe.

6. Lifespan is estimated based on the annual contract with Fairlane Fire Prevention Ltd.

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Physical Component Inventory Costs

Landscaping Components

Component	Description	Units	Age	Life Span	Years Left	Cost per Unit	Replacement Cost	Maintenance Cost
Fencing, Cedar	Between patios, half panels	36	2	40	38	-	-	-
	Stain	36	0	10	10	80	\$ 2,880	-
Fencing, Cedar Lattice	Around perimeter	113	35	40	5	359	\$ 40,570	-
	Stain	113	35	10	5	100	\$ 11,300	- 7
Fencing, Cedar Lattice	At front steps	12	35	40	5	359	\$ 4,308	-
	Paint	12	5	10	5	125	\$ 1,500	- 8
Garden Beds	Around buildings and property	2	35	70	35	-	-	-
Gate, Cedar	Metal frame	1	2	70	68	-	-	-
Grounds	Grassy treed areas around buildings	2	35	70	35	-	-	-
	Membrane over underground parking	2	35	20	0	-	-	- 9
Handrails	Metal, at east steps	2	35	70	35	-	-	-
Patios	Concrete slab or pavers, at grade	20	35	70	35	-	-	-
Railings, Metal	Picket style, at steps	4	2	70	68	-	-	-
	Bars, above concrete retaining walls	2	35	70	35	-	-	-
Sidewalks	Concrete and concrete pavers	4	35	70	35	-	-	-
	Gravel	2	35	70	35	-	-	-
Steps	Concrete	6	35	70	35	-	-	-
Walls, Concrete	Parge coated, at parkades/stairwells	4	35	70	35	-	-	-
Walls, Retaining	Allen Block, at Bldg. B	1	35	70	35	-	-	-
	Concrete	8	35	70	35	-	-	-

7. We recommend staining the panels when they are replaced.

8. Age of the paint is estimated base on the current condition.

9. We recommend addressing leaks with negative side repairs.

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Physical Component Inventory Costs

Mechanical Components

Component	Make/Model/Description	Units	Age	Life Span	Years Left	Cost per Unit	Replacement Cost	Maintenance Cost
Backflow Preventers	Febco 850	2	35	35	0	-	-	\$ 1,800 ¹⁰
Boilers, Domestic Hot Water	Laars Mighty Therm	2	8	25	17	15,000	\$ 30,000	-
Carbon Monoxide Sensors	QEL QAS-200	2	1	35	34	750	\$ 1,500	-
Controllers, Boiler	Tekmar 152	2	8	30	22	450	\$ 900	-
Drains	Part of perimeter/storm system	4	35	35	0	-	-	-
Elevators	Northern West, hydraulic	2	35	30	0	65,000	\$ 130,000	- ^{0, 11}
	Cylinder replacement	2	35	30	0	50,000	\$ 100,000	- ⁰
Expansion Tanks	Watts PET12M1	2	35	25	0	600	\$ 1,200	- ⁰
Fans, Exhaust	Domed belt drive, for parkades	4	35	25	0	1,300	\$ 5,200	- ⁰
	Delhi	1	35	25	0	600	\$ 600	- ⁰
	Generic, extractor	4	35	25	0	600	\$ 2,400	- ⁰
Fire Extinguishers	Fire control system	21	5	12	7	180	\$ 3,780	- ⁶
Heaters, Duct	Heat incoming air	4	35	30	0	1,100	\$ 4,400	- ⁰
Make Up Air Units	Delhi, supply air to hallways	4	35	30	0	1,800	\$ 7,200	- ⁰
Perimeter/ Storm System	Removes ground/surface water	1	35	70	35	-	-	-
Pressure Reducing Valve (PRV)	Watts 2-inch Type 5	2	35	25	0	-	-	\$ 1,080 ^{0, 12}
Pumps, Circulation	Bell & Gossett 189763E56	2	8	25	17	1,250	\$ 2,500	-
Pumps, Recirculation	Taco 007-BF5, in Bldg. A	1	35	25	0	540	\$ 540	- ⁰
	Armstrong, in Bldg. B	1	35	25	0	1,250	\$ 1,250	- ⁰
Re-piping	Building water lines, copper	2	35	20	0	93,000	\$ 186,000	- ^{0, 13}

0. These components are past their life expectancy. Replacement costs have been allocated to the CRF in a workable timeframe.

6. Lifespan is estimated based on the annual contract with Fairlane Fire Prevention Ltd.

10. Cost is for rebuild. Recommend rebuild every five years.

11. Cost is for modernization. For more information see Appendix D - Elevators.

12. PRVs rarely need replacement when rebuilt on a regular basis. Recommend rebuild every three years.

13. This replacement cost is for common water lines only. This does not include repiping of individual units.

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Physical Component Inventory Costs

Mechanical Components, Continued

Component	Make/Model/Description	Units	Age	Life Span	Years Left	Cost per Unit	Replacement Cost	Maintenance Cost
Sprinkler System, Dry Pipe, Bldg. A	Compressor A	1	35	30	0	2,000	\$ 2,000	- 0
Bldg. B	Compressor B	1	1	30	29	2,000	\$ 2,000	
Dry Pipe Valves	Firematic 3-inch	2	35	30	0	5,000	\$ 10,000	- 0
Piping	Throughout parkades	2	35	30	0	15,000	\$ 30,000	- 0
Storage Tanks	Bradford-White M3ST120R5	4	8	18	10	2,200	\$ 8,800	-
Sumps, Gravity	Building drainage	8	35	70	35	-	-	-

o. These components are past their life expectancy. Replacement costs have been allocated to the CRF in a workable timeframe.

Roof System Components

Component	Description	Units	Age	Life Span	Years Left	Cost per Unit	Replacement Cost	Maintenance Cost
Firewalls	At roof centers	2	35	70	35	-	-	-
Flashings	Metal, enamel coated	2	3	15	12	-	-	- 14
Flat Roof	SBS 2-ply membrane	2	3	15	12	80,000	\$ 160,000	-
Gutter System	Aluminum, at Bldg. A only	1	2	30	28	3,000	\$ 3,000	-
Parapet Walls	At edge of flat roofs	2	35	70	35	-	-	-
Penthouse, Elevator	Concrete block and cedar siding	2	35	70	35	-	-	-
Roof Drains/Scuppers	3-inch spun copper	8	3	15	12	-	-	- 14
Roof Hatch	Wood with latch	4	35	70	35	-	-	-
Sloped Roofs	Metal panel, Bldg. A	10	35	70	35	-	-	-
Vaulted Roofs	Asphalt shingles, cedar siding, Bldg. B	2	35	30	0	1,900	\$ 3,800	- 15
	Asphalt singles, HardiePlank®, Bldg. A	2	2	70	68	-	-	-
	Paint, for HardiePlank® at Bldg. A	2	2	20	18	-	-	- 16
Windows	Aluminum frames, double glazed, Bldg. B	24	35	70	35	-	-	-
	Vinyl frames, double glazed, Bldg. A	24	3	70	67	-	-	-

14. Replacement cost included in the cost of the flat roof system.

15. Cost is to replace with cedar siding and stain. Cost may be higher for other materials.

16. Included in cost for Building Envelope, HardiePlank

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Physical Component Inventory Costs

Underground Parking Components

Component	Description	Units	Age	Life Span	Years Left	Cost per Unit	Replacement Cost	Maintenance Cost
Doors, Metal	Exterior and interior, painted	12	35	70	35	-	-	-
Doors, Overhead	Metal, vehicle door	2	35	30	0	8,000	\$ 16,000	-
Driveways, Asphalt	Asphalt	2	35	70	35	-	-	-
Foundation Walls	Cast in place concrete	2	35	70	35	-	-	-
	Repairs	1	-	-	-	76,541	\$ 76,541	- ¹⁷
Handrails	Metal, in parkade stairwells	2	35	70	35	-	-	-
Rooms, Electrical	Houses building electrical equipment	2	35	70	35	-	-	-
Rooms, Locker	Houses storage lockers for unit owners	2	35	70	35	-	-	-
Slabs on Grade	Unsealed concrete	2	35	70	35	-	-	-
Slabs, Suspended	Cast concrete, insulated	2	35	70	35	-	-	-
Stairwells	Concrete steps, concrete walls	2	35	70	35	-	-	-

17. See Appendix C for an assessment and budget estimate for the recommended repairs.

Financial Analysis

The analysis of capital expenditures covers a thirty year time period. The expenses have been adjusted for inflation. The annual rate of inflation used has been determined from the most recent five year average for the province of British Columbia as presented by Statistics Canada. The rate used for this report is 0.94%.

The report begins with the contingency reserve fund balance as at April 31, 2014 of \$137,589. (This beginning balance includes the \$120,922 CRF balance at November 30, 2013, plus five months' CRF contributions of \$3333 from December 2013 to April 2014.)

The savings rate of interest used for funds in the Contingency Reserve Fund is 1.15% (as provided by management).

No annual maintenance expenses have been included in the financial analysis. Annual expenses are for inclusion in the annual operating budget. The focus of this report is capital expenditures that generally occur less frequently than a one year time period. Please refer to Appendix A for a list that identifies which building components require annual maintenance for annual operating budget planning.

For the purposes of this report, the figures are calculated as though all expenses and interest earned are incurred at the end of each fiscal year. As it is difficult to determine the exact timing of the expenses each year, it was necessary to determine a specific point in time for the occurrence of expenses and interest.

In some instances, large expenses have been broken down and allocated to a series of years. This is to help to smooth the fundraising while ensuring that enough funds are on hand when expenses come due.

The Contingency Reserve Fund for VR1389 The Willows is currently at more than 67% of the operating budget. This fulfills the minimum set by legislation (25%). Based on the 2013 annual operating budget of \$204,218, the CRF should not be allowed to fall below approximately \$51,055. (Note: There is a surplus from the current year and from prior years on the Balance Sheet for \$867.53. These funds may or may not be available to offset some of the anticipated capital expenditures.)

The current annual contribution to the CRF is \$40,000.

At present, the current CRF funding levels are not sufficient to meet upcoming expenses. Due to anticipated capital expenditure requirements over the thirty year time frame, it is recommended that the funding level be increased to meet all expenses.

Cash Flow Funding Models Overview

Cash Flow Funding Model #1: Increase CRF Contribution Based on Inflation

This model proposes increasing the current funding level based on the rate of inflation each year. (The inflation rate will fluctuate over the years. The rate used for this report is 0.94% as stated previously.) Keeping the current level of CRF funding and increasing for inflation does not meet all expenses.

Cash Flow Funding Model #2: Increase Annual CRF Contribution to Meet Costs

Model #2 proposes increasing the annual contingency reserve fund contribution to offset future costs. An additional annual CRF contribution in the amount of \$35,500 from 2014 to 2023, \$6,100 from 2024 to 2032, and a reduction of \$20,000 from 2033 to 2043 is suggested over the thirty year time frame. Based on the new annual operating budget of \$210,548 (current annual operating budget of \$204,218 plus an average additional CRF contribution amount over the thirty years of \$6,330), the CRF should not be allowed to fall below approximately \$52,638. This model enables all expenditures to be covered and allows the minimum CRF requirements to be met.

Cash Flow Funding Model #3: Meet Costs Through Special Levies

Model #3 proposes using only special levies to meet the shortfalls in cash requirements. In order to meet all the projected expenditures over the thirty year time period, the following special levies could be used: \$45,000 from 2016 to 2023, \$15,000 in 2029, and \$37,000 in 2032. This model enables all expenditures to be covered and allows the minimum CRF requirements to be met.

Cash Flow Funding Model #4: Increase Annual CRF Contribution and Special Levies

Model #4 proposes increasing the current annual CRF contribution to \$59,000 from 2014 to 2023 (an increase of \$19,000 per year) and \$46,000 from 2024 to 2032 (an increase of \$6,000 per year). It suggests reducing the CRF contribution to \$20,000 from 2033 to 2043 (a decrease of \$20,000 per year). It also suggests using a special levy of \$24,000 from 2017 to 2023. Based on the new annual operating budget amount of \$205,018 (current annual operating budget of \$204,218 plus an average additional annual CRF contribution of \$800), the CRF should not be allowed to fall below approximately \$51,255 to meet the minimum CRF balance requirement.

Other Considerations

It may be possible to secure a higher interest rate on CRF funds. Safe investment vehicles are available to maximize earnings on funds held.

Bank financing is also an alternative. There are very stringent rules and loans are dependent on a variety of factors:

- relationship with the financial institution
- financial history of the strata corporation
- level of planning and projections by the strata corporation
- number of units in the property
- type of units in the property (commercial versus residential)

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- reputation of the property management company
- percentage of units that are owner occupied
- location and age of the building
- number of units for sale.

The interest rate charged by the financial institution would depend on the strength of the finances of the strata corporation. Five year fixed rates could range from approximately 5% to 8% based on current rates of interest (Royal Bank of Canada, May, 2013).

Financial institutions may also require outside legal counsel for executing bank loan documents which would also be at the borrower's cost.

There are many ways to achieve the financial requirements of the strata. The recommendations provided in this report are only examples that may be modified based on the needs of the individual unit holders.

Capital Expenditures and Cash Flow (Adjusted for Inflation)

Building Envelope	2014	2015	2016	2017	2018	2019
Balconies, Open	-	-	-	-	-	-
Membrane	-	-	-	-	-	-
Bandboard	-	-	-	-	-	-
Paint	\$ 1,191	\$ 1,202	\$ 1,214	\$ 1,225	\$ 1,237	\$ 1,248
Doors, Glass	-	-	-	-	-	-
Doors, Metal	-	-	-	-	-	-
Doors, Sliding Glass	-	-	-	-	-	-
Exterior Walls, Rain Screen	-	-	-	-	-	-
Paint	-	-	-	-	-	-
Flashings	-	-	-	-	-	-
Foundations	-	-	-	-	-	-
Gutter System	-	-	-	-	-	-
Railings, Balconies	-	-	-	-	-	-
Soffits	-	-	-	-	-	-
Trim Boards	-	-	-	-	-	-
Paint	-	-	-	-	-	-
Windows	-	-	-	-	-	-
Subtotal	\$ 1,191	\$ 1,202	\$ 1,214	\$ 1,225	\$ 1,237	\$ 1,248

Capital Expenditures and Cash Flow (Adjusted for Inflation)

Building Interior	2014	2015	2016	2017	2018	2019
Closets	-	-	-	-	-	-
Doors, Fire	-	-	-	-	-	-
Doors, Metal	-	-	-	-	-	-
Doors, Wood	-	-	-	-	-	-
Hallways, Ceilings	-	-	-	-	-	-
Floorings	-	-	-	-	-	-
Walls	-	-	-	-	-	-
Ladders	-	-	-	-	-	-
Lobbies, Ceilings	-	-	-	-	-	-
Floorings	-	-	-	-	-	-
Walls	-	-	-	-	-	-
Mailboxes	-	-	-	-	-	-
Rooms, Elevator	-	-	-	-	-	-
Rooms, Laundry	-	-	-	-	-	-
Rooms, Mechanical	-	-	-	-	-	-
Rooms, Storage	-	-	-	-	-	-
Stairwells, Ceilings	-	-	-	-	-	-
Floorings	-	-	-	-	-	-
Railings	-	-	-	-	-	-
Walls	-	-	-	-	-	-
Vestibules	-	-	-	-	-	-
Washrooms	-	-	-	-	-	-
Subtotal	-	-	-	-	-	-

Capital Expenditures and Cash Flow (Adjusted for Inflation)

Electrical	2014	2015	2016	2017	2018	2019
Contactors	\$ 303	-	-	-	-	-
Disconnects, Elevator, CEB	-	-	-	-	-	-
Generic	-	-	-	-	-	-
Disconnects, House	-	-	-	-	-	-
Disconnects, Meter Stacks, 400 Amp	-	-	-	-	-	-
200 Amp	-	-	-	-	-	-
Enterphones	-	-	-	-	-	-
Exit Signs	\$ 872	\$ 880	\$ 889	\$ 897	\$ 905	\$ 914
Fire Alarm System	-	-	-	-	-	-
Annunciator Panels	-	-	-	-	-	-
Heat Detectors	\$ 485	\$ 489	\$ 494	\$ 498	\$ 503	\$ 508
Heaters, Baseboard	\$ 1,343	\$ 1,355	\$ 1,368	\$ 1,381	\$ 1,394	\$ 1,407
House Panels	\$ 1,817	\$ 1,834	\$ 1,851	\$ 1,869	\$ 1,886	\$ 1,904
House Meters	-	-	-	-	-	-
Lighting, Emergency, Battery Packs	\$ 808	\$ 815	\$ 823	\$ 831	\$ 838	-
Remote Heads	\$ 291	\$ 293	\$ 296	\$ 299	\$ 302	\$ 305
Lighting Exterior, High Bay Lights	\$ 303	-	-	-	-	-
Marine Lights	\$ 172	-	-	-	-	-
Photocells	\$ 343	-	-	-	-	-
Post Lamps	-	-	-	-	-	-
Pot Lights	\$ 109	\$ 110	\$ 111	\$ 112	\$ 113	\$ 114
Spot Lights, Halogen	\$ 115	\$ 116	\$ 117	\$ 118	\$ 119	\$ 121
Spot Light, Cylindrical	\$ 76	-	-	-	-	-
Lighting, Interior, Fluorescent Fixtures	\$ 583	\$ 589	\$ 594	\$ 600	\$ 606	\$ 611
Globe Ceiling Fixtures	\$ 136	\$ 138	\$ 139	\$ 140	\$ 141	\$ 143
Keyless Fixtures, Incandescent	\$ 109	\$ 110	\$ 111	\$ 112	\$ 113	\$ 114
Pot Lights	-	-	-	-	-	-
Wall Sconces	\$ 618	\$ 624	\$ 629	\$ 635	\$ 641	\$ 647
Main Building Disconnects	-	-	-	-	-	-
Main Splitter	-	-	-	-	-	-
Meter Stacks, Unit	-	-	-	-	-	-

Capital Expenditures and Cash Flow (Adjusted for Inflation)

Electrical, Continued	2014	2015	2016	2017	2018	2019
Overhead Door Openers, Bldg. A	-	-	-	-	-	-
Bldg. B	\$ 182	\$ 183	\$ 185	\$ 187	\$ 189	\$ 190
Security System	-	-	-	-	-	-
Smoke Detectors	-	-	-	-	-	\$ 7,933
Timer	\$ 454	-	-	-	-	-
Subtotal	\$ 11,131	\$ 9,552	\$ 9,624	\$ 9,696	\$ 9,769	\$ 16,930

Landscaping	2014	2015	2016	2017	2018	2019
Fencing, Cedar	-	-	-	-	-	-
Stain	-	-	-	-	-	-
Fencing, Cedar Lattice	-	\$ 8,267	\$ 8,345	\$ 8,423	\$ 8,503	\$ 8,583
Stain	-	\$ 2,303	\$ 2,324	\$ 2,346	\$ 2,368	\$ 2,390
Fencing, Cedar Lattice	-	\$ 878	\$ 886	\$ 894	\$ 903	\$ 911
Paint	-	-	-	-	-	\$ 1,587
Garden Beds	-	-	-	-	-	-
Gate, Cedar	-	-	-	-	-	-
Grounds	-	-	-	-	-	-
Membrane	-	-	-	-	-	-
Handrails	-	-	-	-	-	-
Patios	-	-	-	-	-	-
Railings, Metal, Picket	-	-	-	-	-	-
Bar	-	-	-	-	-	-
Sidewalks, Concrete	-	-	-	-	-	-
Gravel	-	-	-	-	-	-
Steps	-	-	-	-	-	-
Walls, Concrete	-	-	-	-	-	-
Walls, Retaining, Allen Block	-	-	-	-	-	-
Concrete	-	-	-	-	-	-
Subtotal	-	\$ 11,448	\$ 11,555	\$ 11,664	\$ 11,774	\$ 13,471

Capital Expenditures and Cash Flow (Adjusted for Inflation)

Mechanical	2014	2015	2016	2017	2018	2019
Backflow Preventers	\$ 1,817	-	-	-	-	\$ 1,904
Boilers, Domestic Hot Water	-	-	-	-	-	-
Carbon Monoxide Sensors	-	-	-	-	-	-
Controller, Boiler	-	-	-	-	-	-
Drains	-	-	-	-	-	-
Elevators	\$ 13,122	\$ 13,246	\$ 13,370	\$ 13,496	\$ 13,623	\$ 13,751
Cylinder Replacement	\$ 10,094	\$ 10,189	\$ 10,285	\$ 10,381	\$ 10,479	\$ 10,577
Expansion Tanks	\$ 121	\$ 122	\$ 123	\$ 125	\$ 126	\$ 127
Fans, Exhaust, Parkade	\$ 525	\$ 530	\$ 535	\$ 540	\$ 545	\$ 550
Delhi	\$ 61	\$ 61	\$ 62	\$ 62	\$ 63	\$ 63
Generic	\$ 242	\$ 245	\$ 247	\$ 249	\$ 251	\$ 254
Fire Department Connection	-	-	-	-	-	-
Fire Extinguishers	-	-	-	-	-	-
Heaters, Duct	\$ 444	\$ 448	\$ 453	\$ 457	\$ 461	\$ 465
Make Up Air Units	\$ 727	\$ 734	\$ 740	\$ 747	\$ 754	\$ 762
Perimeter/ Storm System	-	-	-	-	-	-
Pressure Reducing Valve (PRV)	\$ 1,090	-	-	\$ 1,121	-	-
Pumps, Circulation	-	-	-	-	-	-
Pumps, Recirculation, Taco	\$ 55	\$ 55	\$ 56	\$ 56	\$ 57	\$ 57
Armstrong	\$ 126	\$ 127	\$ 129	\$ 130	\$ 131	\$ 132
Re-piping	\$ 18,775	\$ 18,951	\$ 19,129	\$ 19,309	\$ 19,491	\$ 19,674
Sprinkler System, Dry Pipe, Compressor A	\$ 202	\$ 204	\$ 206	\$ 208	\$ 210	\$ 212
Compressor B	-	-	-	-	-	-
Dry Pipe Valves	\$ 1,009	\$ 1,019	\$ 1,028	\$ 1,038	\$ 1,048	\$ 1,058
Piping	\$ 3,028	\$ 3,057	\$ 3,085	\$ 3,114	\$ 3,144	\$ 3,173
Storage Tanks	-	-	-	-	-	-
Sumps, Gravity	-	-	-	-	-	-
Subtotal	\$ 51,438	\$ 48,987	\$ 49,448	\$ 51,034	\$ 50,382	\$ 52,759

Capital Expenditures and Cash Flow (Adjusted for Inflation)

Roof Systems	2014	2015	2016	2017	2018	2019
Firewalls	-	-	-	-	-	-
Flashings	-	-	-	-	-	-
Flat Roof	-	-	-	-	-	-
Gutter System	-	-	-	-	-	-
Parapet Walls	-	-	-	-	-	-
Penthouse, Elevator	-	-	-	-	-	-
Roof Drains/Scuppers	-	-	-	-	-	-
Roof Hatch	-	-	-	-	-	-
Sloped Roofs, Metal Panel, Bldg. A	-	-	-	-	-	-
Vaulted Roofs, Bldg. B	\$ 1,918	-	-	-	-	-
Bldg. A	-	-	-	-	-	-
Paint, for Bldg. A	-	-	-	-	-	-
Windows, Aluminum Double Glazed	-	-	-	-	-	-
Vinyl Double Glazed	-	-	-	-	-	-
Subtotal	\$ 1,918	-	-	-	-	-

Capital Expenditures and Cash Flow (Adjusted for Inflation)

Underground Parking	2014	2015	2016	2017	2018	2019
Doors, Metal	-	-	-	-	-	-
Doors, Overhead	\$ 1,615	\$ 1,630	\$ 1,646	\$ 1,661	\$ 1,677	\$ 1,692
Driveways, Asphalt	-	-	-	-	-	-
Foundation Walls	-	-	-	-	-	-
Repairs	\$ 7,726	\$ 7,799	\$ 7,872	\$ 7,946	\$ 8,021	\$ 8,096
Handrails	-	-	-	-	-	-
Rooms, Electrical	-	-	-	-	-	-
Rooms, Locker	-	-	-	-	-	-
Slabs on Grade	-	-	-	-	-	-
Slabs, Suspended	-	-	-	-	-	-
Stairwells	-	-	-	-	-	-
Subtotal	\$ 9,341	\$ 9,429	\$ 9,518	\$ 9,607	\$ 9,697	\$ 9,788

Total Expenses	2014	2015	2016	2017	2018	2019
	\$ 75,019	\$ 80,618	\$ 81,358	\$ 83,226	\$ 82,858	\$ 94,197

CURRENT PLANNED CASH FLOW

Opening CRF Balance	\$ 137,589	\$ 90,819	\$ 51,246	\$ 10,477	-\$ 32,628	-\$ 75,486
Less Expenses for the Year	-\$ 75,019	-\$ 80,618	-\$ 81,358	-\$ 83,226	-\$ 82,858	-\$ 94,197
Plus Investment Income	\$ 1,582	\$ 1,044	\$ 589	\$ 120	-	-
Planned CRF Contribution	\$ 26,667	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000
Closing Balance	\$ 90,819	\$ 51,246	\$ 10,477	-\$ 32,628	-\$ 75,486	-\$ 129,683

Capital Expenditures and Cash Flow (Adjusted for Inflation)

Building Envelope	2020	2021	2022	2023	2024	2025
Balconies, Open	-	-	-	-	-	-
Membrane	-	-	-	-	-	-
Bandboard	-	-	-	-	-	-
Paint	\$ 1,260	\$ 1,272	\$ 1,284	\$ 1,296	-	-
Doors, Glass	-	-	-	-	-	-
Doors, Metal	-	-	-	-	-	-
Doors, Sliding Glass	-	-	-	-	-	-
Exterior Walls, Rain Screen	-	-	-	-	-	-
Paint	-	-	-	-	-	-
Flashings	-	-	-	-	-	-
Foundations	-	-	-	-	-	-
Gutter System	-	-	-	-	-	-
Railings, Balconies	-	-	-	-	-	-
Soffits	-	-	-	-	-	-
Trim Boards	-	-	-	-	-	-
Paint	-	-	-	-	-	-
Windows	-	-	-	-	-	-
Subtotal	\$ 1,260	\$ 1,272	\$ 1,284	\$ 1,296	-	-

Capital Expenditures and Cash Flow (Adjusted for Inflation)

Building Interior	2020	2021	2022	2023	2024	2025
Closets	-	-	-	-	-	-
Doors, Fire	-	-	-	-	-	-
Doors, Metal	-	-	-	-	-	-
Doors, Wood	-	-	-	-	-	-
Hallways, Ceilings	-	-	-	-	-	-
Floorings	-	-	-	-	-	-
Walls	-	-	-	-	-	-
Ladders	-	-	-	-	-	-
Lobbies, Ceilings	-	-	-	-	-	-
Floorings	-	-	-	-	-	-
Walls	-	-	-	-	-	-
Mailboxes	-	-	-	-	-	-
Rooms, Elevator	-	-	-	-	-	-
Rooms, Laundry	-	-	-	-	-	-
Rooms, Mechanical	-	-	-	-	-	-
Rooms, Storage	-	-	-	-	-	-
Stairwells, Ceilings	-	-	-	-	-	-
Floorings	-	-	-	-	-	-
Railings	-	-	-	-	-	-
Walls	-	-	-	-	-	-
Vestibules	-	-	-	-	-	-
Washrooms	-	-	-	-	-	-
Subtotal	-	-	-	-	-	-

Capital Expenditures and Cash Flow (Adjusted for Inflation)

Electrical	2020	2021	2022	2023	2024	2025
Contactors	-	-	-	-	-	-
Disconnects, Elevator, CEB	-	-	-	-	-	-
Generic	-	-	-	-	-	-
Disconnects, House	-	-	-	-	-	-
Disconnects, Meter Stacks, 400 Amp	-	-	-	-	-	-
200 Amp	-	-	-	-	-	-
Enterphones	-	-	-	-	-	-
Exit Signs	\$ 922	\$ 931	\$ 940	\$ 949	-	-
Fire Alarm System	-	-	-	-	-	-
Annunciator Panels	-	-	-	-	-	-
Heat Detectors	\$ 512	\$ 517	\$ 522	\$ 527	-	-
Heaters, Baseboard	\$ 1,420	\$ 1,433	\$ 1,447	\$ 1,460	-	-
House Panels	\$ 1,922	\$ 1,940	\$ 1,958	\$ 1,977	-	-
House Meters	-	-	-	-	-	-
Lighting, Emergency, Battery Packs	-	-	-	-	-	-
Remote Heads	\$ 307	\$ 310	\$ 313	\$ 316	-	-
Lighting Exterior, High Bay Lights	-	-	-	-	-	-
Marine Lights	-	-	-	-	-	-
Photocells	-	-	-	-	-	-
Post Lamps	-	-	-	-	-	-
Pot Lights	\$ 115	\$ 116	\$ 117	\$ 119	-	-
Spot Lights, Halogen	\$ 122	\$ 123	\$ 124	\$ 125	-	-
Spot Light, Cylindrical	-	-	-	-	-	-
Lighting, Interior, Fluorescent Fixtures	\$ 617	\$ 623	\$ 629	\$ 635	-	-
Globe Ceiling Fixtures	\$ 144	\$ 145	\$ 147	\$ 148	-	-
Keyless Fixtures, Incandescent	\$ 115	\$ 116	\$ 117	\$ 119	-	-
Pot Lights	-	-	-	-	-	-
Wall Sconces	\$ 653	\$ 660	\$ 666	\$ 672	-	-
Main Building Disconnects	-	-	-	-	-	-
Main Splitter	-	-	-	-	-	-
Meter Stacks, Unit	-	-	-	-	-	-

Capital Expenditures and Cash Flow (Adjusted for Inflation)

Electrical, Continued	2020	2021	2022	2023	2024	2025
Overhead Door Openers, Bldg. A	-	-	-	-	-	-
Bldg. B	\$ 192	\$ 194	\$ 196	\$ 198	-	-
Security System	-	-	\$ 1,632	-	-	-
Smoke Detectors	-	-	-	-	-	-
Timer	-	-	-	-	-	-
Subtotal	\$ 9,064	\$ 9,131	\$ 10,830	\$ 9,267	\$ 2,024	\$ 2,025

Landscaping	2020	2021	2022	2023	2024	2025
Fencing, Cedar	-	-	-	-	-	-
Stain	-	-	-	-	\$ 3,192	-
Fencing, Cedar Lattice	-	-	-	-	-	-
Stain	-	-	-	-	-	-
Fencing, Cedar Lattice	-	-	-	-	-	-
Paint	-	-	-	-	-	-
Garden Beds	-	-	-	-	-	-
Gate, Cedar	-	-	-	-	-	-
Grounds	-	-	-	-	-	-
Membrane	-	-	-	-	-	-
Handrails	-	-	-	-	-	-
Patios	-	-	-	-	-	-
Railings, Metal, Picket	-	-	-	-	-	-
Bar	-	-	-	-	-	-
Sidewalks, Concrete	-	-	-	-	-	-
Gravel	-	-	-	-	-	-
Steps	-	-	-	-	-	-
Walls, Concrete	-	-	-	-	-	-
Walls, Retaining, Allen Block	-	-	-	-	-	-
Concrete	-	-	-	-	-	-
Subtotal	-	-	-	-	\$ 3,192	-

Capital Expenditures and Cash Flow (Adjusted for Inflation)

Mechanical	2020	2021	2022	2023	2024	2025
Backflow Preventers	-	-	-	-	\$ 1,995	-
Boilers, Domestic Hot Water	-	-	-	-	-	-
Carbon Monoxide Sensors	-	-	-	-	-	-
Controller, Boiler	-	-	-	-	-	-
Drains	-	-	-	-	-	-
Elevators	\$ 13,880	\$ 14,010	\$ 14,142	\$ 14,275	-	-
Cylinder Replacement	\$ 10,677	\$ 10,777	\$ 10,879	\$ 10,981	-	-
Expansion Tanks	\$ 128	\$ 129	\$ 131	\$ 132	-	-
Fans, Exhaust, Parkade	\$ 555	\$ 560	\$ 566	\$ 571	-	-
Delhi	\$ 64	\$ 65	\$ 65	\$ 66	-	-
Generic	\$ 256	\$ 259	\$ 261	\$ 264	-	-
Fire Department Connection	-	-	-	-	-	-
Fire Extinguishers	-	\$ 4,074	-	-	-	-
Heaters, Duct	\$ 470	\$ 474	\$ 479	\$ 483	-	-
Make Up Air Units	\$ 769	\$ 776	\$ 783	\$ 791	-	-
Perimeter/ Storm System	-	-	-	-	-	-
Pressure Reducing Valve (PRV)	\$ 1,153	-	-	\$ 1,186	-	-
Pumps, Circulation	-	-	-	-	-	-
Pumps, Recirculation, Taco	\$ 58	\$ 58	\$ 59	\$ 59	-	-
Armstrong	\$ 133	\$ 135	\$ 136	\$ 137	-	-
Re-piping	\$ 19,859	\$ 20,046	\$ 20,234	\$ 20,424	-	-
Sprinkler System, Dry Pipe, Compressor A	\$ 214	\$ 216	\$ 218	\$ 220	-	-
Compressor B	-	-	-	-	-	-
Dry Pipe Valves	\$ 1,068	\$ 1,078	\$ 1,088	\$ 1,098	-	-
Piping	\$ 3,203	\$ 3,233	\$ 3,264	\$ 3,294	-	-
Storage Tanks	-	-	-	-	\$ 9,754	-
Sumps, Gravity	-	-	-	-	-	-
Subtotal	\$ 52,486	\$ 55,890	\$ 52,303	\$ 53,980	\$ 11,749	-

Capital Expenditures and Cash Flow (Adjusted for Inflation)

Roof Systems	2020	2021	2022	2023	2024	2025
Firewalls	-	-	-	-	-	-
Flashings	-	-	-	-	-	-
Flat Roof	-	\$ 17,244	\$ 17,406	\$ 17,569	\$ 17,734	\$ 17,901
Gutter System	-	-	-	-	-	-
Parapet Walls	-	-	-	-	-	-
Penthouse, Elevator	-	-	-	-	-	-
Roof Drains/Scuppers	-	-	-	-	-	-
Roof Hatch	-	-	-	-	-	-
Sloped Roofs, Metal Panel, Bldg. A	-	-	-	-	-	-
Vaulted Roofs, Bldg. B	-	-	-	-	-	-
Bldg. A	-	-	-	-	-	-
Paint, for Bldg. A	-	-	-	-	-	-
Windows, Aluminum Double Glazed	-	-	-	-	-	-
Vinyl Double Glazed	-	-	-	-	-	-
Subtotal	-	\$ 17,244	\$ 17,406	\$ 17,569	\$ 17,734	\$ 17,901

Capital Expenditures and Cash Flow (Adjusted for Inflation)

Underground Parking	2020	2021	2022	2023	2024	2025
Doors, Metal	-	-	-	-	-	-
Doors, Overhead	\$ 1,708	\$ 1,724	\$ 1,741	-	-	-
Driveways, Asphalt	-	-	-	-	-	-
Foundation Walls	-	-	-	-	-	-
Repairs	\$ 8,172	\$ 8,249	\$ 8,327	-	-	-
Handrails	-	-	-	-	-	-
Rooms, Electrical	-	-	-	-	-	-
Rooms, Locker	-	-	-	-	-	-
Slabs on Grade	-	-	-	-	-	-
Slabs, Suspended	-	-	-	-	-	-
Stairwells	-	-	-	-	-	-
Subtotal	\$ 9,880	\$ 9,973	\$ 10,067	-	-	-

Total Expenses	2020	2021	2022	2023	2024	2025
	\$ 72,690	\$ 93,509	\$ 91,890	\$ 82,112	\$ 34,700	\$ 19,926

CURRENT PLANNED CASH FLOW

Opening CRF Balance	-\$ 129,683	-\$ 162,373	-\$ 215,882	-\$ 267,772	-\$ 309,884	-\$ 304,584
Less Expenses for the Year	-\$ 72,690	-\$ 93,509	-\$ 91,890	-\$ 82,112	-\$ 34,700	-\$ 19,926
Plus Investment Income	-	-	-	-	-	-
Planned CRF Contribution	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000
Closing Balance	-\$ 162,373	-\$ 215,882	-\$ 267,772	-\$ 309,884	-\$ 304,584	-\$ 284,510

Capital Expenditures and Cash Flow (Adjusted for Inflation)

Building Envelope	2026	2027	2028	2029	2030	2031
Balconies, Open	-	-	-	-	-	-
Membrane	-	-	-	-	-	-
Bandboard	-	-	-	-	-	-
Paint	-	-	-	-	-	-
Doors, Glass	-	-	-	-	-	-
Doors, Metal	-	-	-	-	-	-
Doors, Sliding Glass	-	-	-	-	-	-
Exterior Walls, Rain Screen	-	-	-	-	-	-
Paint	-	-	-	-	-	-
Flashings	-	-	-	-	-	-
Foundations	-	-	-	-	-	-
Gutter System	-	-	-	-	-	-
Railings, Balconies	-	-	-	-	-	-
Soffits	-	-	-	-	-	-
Trim Boards	-	-	-	-	-	-
Paint	-	-	-	-	-	-
Windows	-	-	-	-	-	-
Subtotal	-	-	-	-	-	-

Capital Expenditures and Cash Flow (Adjusted for Inflation)

Building Interior	2026	2027	2028	2029	2030	2031
Closets	-	-	-	-	-	-
Doors, Fire	-	-	-	-	-	-
Doors, Metal	-	-	-	-	-	-
Doors, Wood	-	-	-	-	-	-
Hallways, Ceilings	-	-	-	-	-	-
Floorings	-	-	-	-	-	-
Walls	-	-	-	-	-	-
Ladders	-	-	-	-	-	-
Lobbies, Ceilings	-	-	-	-	-	-
Floorings	-	-	-	-	-	-
Walls	-	-	-	-	-	-
Mailboxes	-	-	-	-	-	-
Rooms, Elevator	-	-	-	-	-	-
Rooms, Laundry	-	-	-	-	-	-
Rooms, Mechanical	-	-	-	-	-	-
Rooms, Storage	-	-	-	-	-	-
Stairwells, Ceilings	-	-	-	-	-	-
Floorings	-	-	-	-	-	-
Railings	-	-	-	-	-	-
Walls	-	-	-	-	-	-
Vestibules	-	-	-	-	-	-
Washrooms	-	-	-	-	-	-
Subtotal	-	-	-	-	-	-

Capital Expenditures and Cash Flow (Adjusted for Inflation)

Electrical	2026	2027	2028	2029	2030	2031
Contactors	-	-	-	\$ 348	-	-
Disconnects, Elevator, CEB	-	-	-	\$ 1,394	-	-
Generic	-	-	-	\$ 2,091	-	-
Disconnects, House	-	-	-	\$ 1,975	-	-
Disconnects, Meter Stacks, 400 Amp	-	-	-	\$ 3,310	-	-
200 Amp	-	-	-	\$ 987	-	-
Enterphones	-	\$ 13,679	-	-	-	-
Exit Signs	-	-	-	-	-	-
Fire Alarm System	-	-	-	-	\$ 17,586	-
Annunciator Panels	-	-	-	-	-	-
Heat Detectors	-	-	-	-	-	-
Heaters, Baseboard	-	-	-	-	-	-
House Panels	-	-	-	-	-	-
House Meters	-	-	-	\$ 1,103	-	-
Lighting, Emergency, Battery Packs	-	-	-	-	-	-
Remote Heads	-	-	-	-	-	-
Lighting Exterior, High Bay Lights	-	-	-	-	-	-
Marine Lights	-	-	-	-	-	-
Photocells	-	-	-	\$ 395	-	-
Post Lamps	-	-	-	-	-	-
Pot Lights	-	-	-	-	-	-
Spot Lights, Halogen	-	-	-	-	-	-
Spot Light, Cylindrical	-	-	-	-	-	-
Lighting, Interior, Fluorescent Fixtures	-	-	-	-	-	-
Globe Ceiling Fixtures	-	-	-	-	-	-
Keyless Fixtures, Incandescent	-	-	-	-	-	-
Pot Lights	-	-	-	\$ 2,927	-	-
Wall Sconces	-	-	-	-	-	-
Main Building Disconnects	-	-	-	\$ 5,111	-	-
Main Splitter	-	-	-	-	-	-
Meter Stacks, Unit	-	-	-	\$ 66,205	-	-

Capital Expenditures and Cash Flow (Adjusted for Inflation)

Electrical, Continued	2026	2027	2028	2029	2030	2031
Overhead Door Openers, Bldg. A	-	-	\$ 2,071	-	-	-
Bldg. B	-	-	-	-	-	-
Security System	-	-	-	-	-	-
Smoke Detectors	-	-	-	\$ 8,711	-	-
Timer	-	-	-	-	-	-
Subtotal	\$ 2,026	\$ 15,706	\$ 4,099	\$ 96,585	\$ 19,616	\$ 2,031

Landscaping	2026	2027	2028	2029	2030	2031
Fencing, Cedar	-	-	-	-	-	-
Stain	-	-	-	-	-	-
Fencing, Cedar Lattice	-	-	-	-	-	-
Stain	-	-	\$ 13,003	-	-	-
Fencing, Cedar Lattice	-	-	-	-	-	-
Paint	-	-	-	-	-	-
Garden Beds	-	-	-	-	-	-
Gate, Cedar	-	-	-	-	-	-
Grounds	-	-	-	-	-	-
Membrane	-	-	-	-	-	-
Handrails	-	-	-	-	-	-
Patios	-	-	-	-	-	-
Railings, Metal, Picket	-	-	-	-	-	-
Bar	-	-	-	-	-	-
Sidewalks, Concrete	-	-	-	-	-	-
Gravel	-	-	-	-	-	-
Steps	-	-	-	-	-	-
Walls, Concrete	-	-	-	-	-	-
Walls, Retaining, Allen Block	-	-	-	-	-	-
Concrete	-	-	-	-	-	-
Subtotal	-	-	\$ 13,003	-	-	-

Capital Expenditures and Cash Flow (Adjusted for Inflation)

Mechanical	2026	2027	2028	2029	2030	2031
Backflow Preventers	-	-	-	\$ 2,091	-	-
Boilers, Domestic Hot Water	-	-	-	-	-	\$ 35,503
Carbon Monoxide Sensors	-	-	-	-	-	-
Controller, Boiler	-	-	-	-	-	-
Drains	-	-	-	-	-	-
Elevators	-	-	-	-	-	-
Cylinder Replacement	-	-	-	-	-	-
Expansion Tanks	-	-	-	-	-	-
Fans, Exhaust, Parkade	-	-	-	-	-	-
Delhi	-	-	-	-	-	-
Generic	-	-	-	-	-	-
Fire Department Connection	-	-	-	-	-	-
Fire Extinguishers	-	-	-	-	-	-
Heaters, Duct	-	-	-	-	-	-
Make Up Air Units	-	-	-	-	-	-
Perimeter/ Storm System	-	-	-	-	-	-
Pressure Reducing Valve (PRV)	\$ 1,220	-	-	\$ 1,254	-	-
Pumps, Circulation	-	-	-	-	-	\$ 2,959
Pumps, Recirculation, Taco	-	-	-	-	-	-
Armstrong	-	-	-	-	-	-
Re-piping	-	-	-	-	-	-
Sprinkler System, Dry Pipe, Compressor A	-	-	-	-	-	-
Compressor B	-	-	-	-	-	-
Dry Pipe Valves	-	-	-	-	-	-
Piping	-	-	-	-	-	-
Storage Tanks	-	-	-	-	-	-
Sumps, Gravity	-	-	-	-	-	-
Subtotal	\$ 1,220	-	-	\$ 3,345	-	\$ 38,461

Capital Expenditures and Cash Flow (Adjusted for Inflation)

Roof Systems	2026	2027	2028	2029	2030	2031
Firewalls	-	-	-	-	-	-
Flashings	-	-	-	-	-	-
Flat Roof	\$ 18,069	\$ 18,239	\$ 18,411	\$ 18,584	\$ 18,758	-
Gutter System	-	-	-	-	-	-
Parapet Walls	-	-	-	-	-	-
Penthouse, Elevator	-	-	-	-	-	-
Roof Drains/Scuppers	-	-	-	-	-	-
Roof Hatch	-	-	-	-	-	-
Sloped Roofs, Metal Panel, Bldg. A	-	-	-	-	-	-
Vaulted Roofs, Bldg. B	-	-	-	-	-	-
Bldg. A	-	-	-	-	-	-
Paint, for Bldg. A	-	-	-	-	-	-
Windows, Aluminum Double Glazed	-	-	-	-	-	-
Vinyl Double Glazed	-	-	-	-	-	-
Subtotal	\$ 18,069	\$ 18,239	\$ 18,411	\$ 18,584	\$ 18,758	-

Capital Expenditures and Cash Flow (Adjusted for Inflation)

Underground Parking	2026	2027	2028	2029	2030	2031
Doors, Metal	-	-	-	-	-	-
Doors, Overhead	-	-	-	-	-	-
Driveways, Asphalt	-	-	-	-	-	-
Foundation Walls	-	-	-	-	-	-
Repairs	-	-	-	-	-	-
Handrails	-	-	-	-	-	-
Rooms, Electrical	-	-	-	-	-	-
Rooms, Locker	-	-	-	-	-	-
Slabs on Grade	-	-	-	-	-	-
Slabs, Suspended	-	-	-	-	-	-
Stairwells	-	-	-	-	-	-
Subtotal	-	-	-	-	-	-

Total Expenses	2026	2027	2028	2029	2030	2031
	\$ 21,315	\$ 33,946	\$ 35,512	\$ 118,514	\$ 38,374	\$ 40,492

CURRENT PLANNED CASH FLOW

Opening CRF Balance	-\$ 284,510	-\$ 265,825	-\$ 259,770	-\$ 255,283	-\$ 333,797	-\$ 332,171
Less Expenses for the Year	-\$ 21,315	-\$ 33,946	-\$ 35,512	-\$ 118,514	-\$ 38,374	-\$ 40,492
Plus Investment Income	-	-	-	-	-	-
Planned CRF Contribution	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000
Closing Balance	-\$ 265,825	-\$ 259,770	-\$ 255,283	-\$ 333,797	-\$ 332,171	-\$ 332,664

Capital Expenditures and Cash Flow (Adjusted for Inflation)

Building Envelope	2032	2033	2034	2035	2036	2037
Balconies, Open	-	-	-	-	-	-
Membrane	\$ 47,782	-	-	-	-	-
Bandboard	-	-	-	-	-	-
Paint	-	\$ 14,228	-	-	-	-
Doors, Glass	-	-	-	-	-	-
Doors, Metal	-	-	-	-	-	-
Doors, Sliding Glass	-	-	-	-	-	-
Exterior Walls, Rain Screen	-	-	-	-	-	-
Paint	\$ 32,492	-	-	-	-	-
Flashings	-	-	-	-	-	-
Foundations	-	-	-	-	-	-
Gutter System	-	-	-	-	-	-
Railings, Balconies	-	-	-	-	-	-
Soffits	-	-	-	-	-	-
Trim Boards	-	-	-	-	-	-
Paint	-	-	-	-	-	-
Windows	-	-	-	-	-	-
Subtotal	\$ 80,273	\$ 14,228	-	-	-	-

Capital Expenditures and Cash Flow (Adjusted for Inflation)

Building Interior	2032	2033	2034	2035	2036	2037
Closets	-	-	-	-	-	-
Doors, Fire	-	-	-	-	-	-
Doors, Metal	-	-	-	-	-	-
Doors, Wood	-	-	-	-	-	-
Hallways, Ceilings	-	-	-	-	-	-
Floorings	-	-	-	-	-	-
Walls	-	-	-	-	-	-
Ladders	-	-	-	-	-	-
Lobbies, Ceilings	-	-	-	-	-	-
Floorings	-	-	-	-	-	-
Walls	-	-	-	-	-	-
Mailboxes	-	-	-	-	-	-
Rooms, Elevator	-	-	-	-	-	-
Rooms, Laundry	-	-	-	-	-	-
Rooms, Mechanical	-	-	-	-	-	-
Rooms, Storage	-	-	-	-	-	-
Stairwells, Ceilings	-	-	-	-	-	-
Floorings	-	-	-	-	-	-
Railings	-	-	-	-	-	-
Walls	-	-	-	-	-	-
Vestibules	-	-	-	-	-	-
Washrooms	-	-	-	-	-	-
Subtotal	-	-	-	-	-	-

Capital Expenditures and Cash Flow (Adjusted for Inflation)

Electrical	2032	2033	2034	2035	2036	2037
Contactors	-	-	-	-	-	-
Disconnects, Elevator, CEB	-	-	-	-	-	-
Generic	-	-	-	-	-	-
Disconnects, House	-	-	-	-	-	-
Disconnects, Meter Stacks, 400 Amp	-	-	-	-	-	-
200 Amp	-	-	-	-	-	-
Enterphones	-	-	-	-	-	-
Exit Signs	-	-	-	-	-	-
Fire Alarm System	-	-	-	-	-	-
Annunciator Panels	-	-	-	-	-	-
Heat Detectors	-	-	-	-	-	-
Heaters, Baseboard	-	-	-	-	-	-
House Panels	-	-	-	-	-	-
House Meters	-	-	-	-	-	-
Lighting, Emergency, Battery Packs	-	-	-	-	-	-
Remote Heads	-	-	-	-	-	-
Lighting Exterior, High Bay Lights	-	-	-	-	-	-
Marine Lights	-	-	-	-	-	-
Photocells	-	-	-	-	-	-
Post Lamps	-	-	-	-	-	\$ 438
Pot Lights	-	-	-	-	-	-
Spot Lights, Halogen	-	-	-	-	-	-
Spot Light, Cylindrical	-	-	-	-	-	-
Lighting, Interior, Fluorescent Fixtures	-	-	-	-	-	-
Globe Ceiling Fixtures	-	-	-	-	-	-
Keyless Fixtures, Incandescent	-	-	-	-	-	-
Pot Lights	-	-	-	-	-	-
Wall Sconces	-	-	-	-	-	-
Main Building Disconnects	-	-	-	-	-	-
Main Splitter	-	-	-	-	-	-
Meter Stacks, Unit	-	-	-	-	-	-

Capital Expenditures and Cash Flow (Adjusted for Inflation)

Electrical, Continued	2032	2033	2034	2035	2036	2037
Overhead Door Openers, Bldg. A	-	-	-	-	-	-
Bldg. B	-	-	-	-	-	-
Security System	\$ 1,792	-	-	-	-	-
Smoke Detectors	-	-	-	-	-	-
Timer	-	-	-	-	-	-
Subtotal	\$ 3,824	\$ 2,033	\$ 2,034	\$ 2,035	\$ 2,036	\$ 2,475

Landscaping	2032	2033	2034	2035	2036	2037
Fencing, Cedar	-	-	-	-	-	-
Stain	-	-	\$ 3,505	-	-	-
Fencing, Cedar Lattice	-	-	-	-	-	-
Stain	-	-	-	-	-	-
Fencing, Cedar Lattice	-	-	-	-	-	-
Paint	-	-	-	-	-	-
Garden Beds	-	-	-	-	-	-
Gate, Cedar	-	-	-	-	-	-
Grounds	-	-	-	-	-	-
Membrane	-	-	-	-	-	-
Handrails	-	-	-	-	-	-
Patios	-	-	-	-	-	-
Railings, Metal, Picket	-	-	-	-	-	-
Bar	-	-	-	-	-	-
Sidewalks, Concrete	-	-	-	-	-	-
Gravel	-	-	-	-	-	-
Steps	-	-	-	-	-	-
Walls, Concrete	-	-	-	-	-	-
Walls, Retaining, Allen Block	-	-	-	-	-	-
Concrete	-	-	-	-	-	-
Subtotal	-	-	\$ 3,505	-	-	-

Capital Expenditures and Cash Flow (Adjusted for Inflation)

Mechanical	2032	2033	2034	2035	2036	2037
Backflow Preventers	-	-	\$ 2,191	-	-	-
Boilers, Domestic Hot Water	-	-	-	-	-	-
Carbon Monoxide Sensors	-	-	-	-	-	-
Controller, Boiler	-	-	-	-	\$ 1,116	-
Drains	-	-	-	-	-	-
Elevators	-	-	-	-	-	-
Cylinder Replacement	-	-	-	-	-	-
Expansion Tanks	-	-	-	-	-	-
Fans, Exhaust, Parkade	-	-	-	-	-	-
Delhi	-	-	-	-	-	-
Generic	-	-	-	-	-	-
Fire Department Connection	-	-	-	-	-	-
Fire Extinguishers	-	\$ 4,558	-	-	-	-
Heaters, Duct	-	-	-	-	-	-
Make Up Air Units	-	-	-	-	-	-
Perimeter/ Storm System	-	-	-	-	-	-
Pressure Reducing Valve (PRV)	\$ 1,290	-	-	\$ 1,327	-	-
Pumps, Circulation	-	-	-	-	-	-
Pumps, Recirculation, Taco	-	-	-	-	-	-
Armstrong	-	-	-	-	-	-
Re-piping	-	-	-	-	-	-
Sprinkler System, Dry Pipe, Compressor A	-	-	-	-	-	-
Compressor B	-	-	-	-	-	-
Dry Pipe Valves	-	-	-	-	-	-
Piping	-	-	-	-	-	-
Storage Tanks	-	-	-	-	-	-
Sumps, Gravity	-	-	-	-	-	-
Subtotal	\$ 1,290	\$ 4,558	\$ 2,191	\$ 1,327	\$ 1,116	-

Capital Expenditures and Cash Flow (Adjusted for Inflation)

Roof Systems	2032	2033	2034	2035	2036	2037
Firewalls	-	-	-	-	-	-
Flashings	-	-	-	-	-	-
Flat Roof	-	-	-	-	-	-
Gutter System	-	-	-	-	-	-
Parapet Walls	-	-	-	-	-	-
Penthouse, Elevator	-	-	-	-	-	-
Roof Drains/Scuppers	-	-	-	-	-	-
Roof Hatch	-	-	-	-	-	-
Sloped Roofs, Metal Panel, Bldg. A	-	-	-	-	-	-
Vaulted Roofs, Bldg. B	-	-	-	-	-	-
Bldg. A	-	-	-	-	-	-
Paint, for Bldg. A	-	-	-	-	-	-
Windows, Aluminum Double Glazed	-	-	-	-	-	-
Vinyl Double Glazed	-	-	-	-	-	-
Subtotal	-	-	-	-	-	-

Capital Expenditures and Cash Flow (Adjusted for Inflation)

Underground Parking	2032	2033	2034	2035	2036	2037
Doors, Metal	-	-	-	-	-	-
Doors, Overhead	-	-	-	-	-	-
Driveways, Asphalt	-	-	-	-	-	-
Foundation Walls	-	-	-	-	-	-
Repairs	-	-	-	-	-	-
Handrails	-	-	-	-	-	-
Rooms, Electrical	-	-	-	-	-	-
Rooms, Locker	-	-	-	-	-	-
Slabs on Grade	-	-	-	-	-	-
Slabs, Suspended	-	-	-	-	-	-
Stairwells	-	-	-	-	-	-
Subtotal	-	-	-	-	-	-

Total Expenses	2032	2033	2034	2035	2036	2037
	\$ 85,387	\$ 20,819	\$ 7,730	\$ 3,362	\$ 3,152	\$ 2,475

CURRENT PLANNED CASH FLOW

Opening CRF Balance	-\$ 332,664	-\$ 378,051	-\$ 358,870	-\$ 326,600	-\$ 289,962	-\$ 253,114
Less Expenses for the Year	-\$ 85,387	-\$ 20,819	-\$ 7,730	-\$ 3,362	-\$ 3,152	-\$ 2,475
Plus Investment Income	-	-	-	-	-	-
Planned CRF Contribution	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000
Closing Balance	-\$ 378,051	-\$ 358,870	-\$ 326,600	-\$ 289,962	-\$ 253,114	-\$ 215,589

Capital Expenditures and Cash Flow (Adjusted for Inflation)

Building Envelope	2038	2039	2040	2041	2042	2043
Balconies, Open	-	-	-	-	-	-
Membrane	-	-	-	-	-	-
Bandboard	-	-	-	-	-	-
Paint	-	-	-	-	-	\$ 15,624
Doors, Glass	-	-	-	-	-	-
Doors, Metal	-	-	-	-	-	-
Doors, Sliding Glass	-	-	-	-	-	-
Exterior Walls, Rain Screen	-	-	-	-	-	-
Paint	-	-	-	-	-	-
Flashings	-	-	-	-	-	-
Foundations	-	-	-	-	-	-
Gutter System	-	-	-	-	\$ 9,182	-
Railings, Balconies	-	-	-	-	-	-
Soffits	-	-	-	-	-	-
Trim Boards	-	-	-	-	-	-
Paint	-	-	-	-	-	-
Windows	-	-	-	-	-	-
Subtotal	-	-	-	-	\$ 9,182	\$ 15,624

Capital Expenditures and Cash Flow (Adjusted for Inflation)

Building Interior	2038	2039	2040	2041	2042	2043
Closets	-	-	-	-	-	-
Doors, Fire	-	-	-	-	-	-
Doors, Metal	-	-	-	-	-	-
Doors, Wood	-	-	-	-	-	-
Hallways, Ceilings	-	-	-	-	-	-
Floorings	-	-	-	-	-	-
Walls	-	-	-	-	-	-
Ladders	-	-	-	-	-	-
Lobbies, Ceilings	-	-	-	-	-	-
Floorings	-	-	-	-	-	-
Walls	-	-	-	-	-	-
Mailboxes	-	-	-	-	-	-
Rooms, Elevator	-	-	-	-	-	-
Rooms, Laundry	-	-	-	-	-	-
Rooms, Mechanical	-	-	-	-	-	-
Rooms, Storage	-	-	-	-	-	-
Stairwells, Ceilings	-	-	-	-	-	-
Floorings	-	-	-	-	-	-
Railings	-	-	-	-	-	-
Walls	-	-	-	-	-	-
Vestibules	-	-	-	-	-	-
Washrooms	-	-	-	-	-	-
Subtotal	-	-	-	-	-	-

Capital Expenditures and Cash Flow (Adjusted for Inflation)

Electrical	2038	2039	2040	2041	2042	2043
Contactors	-	-	-	-	-	-
Disconnects, Elevator, CEB	-	-	-	-	-	-
Generic	-	-	-	-	-	-
Disconnects, House	-	-	-	-	-	-
Disconnects, Meter Stacks, 400 Amp	-	-	-	-	-	-
200 Amp	-	-	-	-	-	-
Enterphones	-	-	-	-	\$ 15,740	-
Exit Signs	-	-	-	-	-	-
Fire Alarm System	-	-	-	-	-	-
Annunciator Panels	-	-	-	-	-	-
Heat Detectors	-	-	-	-	-	-
Heaters, Baseboard	-	-	-	-	-	-
House Panels	-	-	-	-	-	-
House Meters	-	-	-	-	-	-
Lighting, Emergency, Battery Packs	-	-	-	-	-	-
Remote Heads	-	-	-	-	-	-
Lighting Exterior, High Bay Lights	-	-	-	-	-	-
Marine Lights	-	-	-	-	-	-
Photocells	-	-	-	-	-	-
Post Lamps	-	-	-	-	-	-
Pot Lights	-	-	-	-	-	-
Spot Lights, Halogen	-	-	-	-	-	-
Spot Light, Cylindrical	-	-	-	-	-	-
Lighting, Interior, Fluorescent Fixtures	-	-	-	-	-	-
Globe Ceiling Fixtures	-	-	-	-	-	-
Keyless Fixtures, Incandescent	-	-	-	-	-	-
Pot Lights	-	-	-	-	-	-
Wall Sconces	-	-	-	-	-	-
Main Building Disconnects	-	-	-	-	-	-
Main Splitter	-	\$ 4,591	-	-	-	-
Meter Stacks, Unit	-	-	-	-	-	-

Capital Expenditures and Cash Flow (Adjusted for Inflation)

Electrical, Continued	2038	2039	2040	2041	2042	2043
Overhead Door Openers, Bldg. A	-	-	-	-	-	\$ 2,383
Bldg. B	\$ 2,274	-	-	-	-	-
Security System	-	-	-	-	\$ 1,968	-
Smoke Detectors	-	\$ 9,565	-	-	-	-
Timer	-	\$ 574	-	-	-	-
Subtotal	\$ 4,312	\$ 16,770	\$ 2,040	\$ 2,041	\$ 19,750	\$ 4,426

Landscaping	2038	2039	2040	2041	2042	2043
Fencing, Cedar	-	-	-	-	-	-
Stain	-	-	-	-	-	-
Fencing, Cedar Lattice	-	-	-	-	-	-
Stain	\$ 14,278	-	-	-	-	-
Fencing, Cedar Lattice	-	-	-	-	-	-
Paint	-	-	-	-	-	-
Garden Beds	-	-	-	-	-	-
Gate, Cedar	-	-	-	-	-	-
Grounds	-	-	-	-	-	-
Membrane	-	-	-	-	-	-
Handrails	-	-	-	-	-	-
Patios	-	-	-	-	-	-
Railings, Metal, Picket	-	-	-	-	-	-
Bar	-	-	-	-	-	-
Sidewalks, Concrete	-	-	-	-	-	-
Gravel	-	-	-	-	-	-
Steps	-	-	-	-	-	-
Walls, Concrete	-	-	-	-	-	-
Walls, Retaining, Allen Block	-	-	-	-	-	-
Concrete	-	-	-	-	-	-
Subtotal	\$ 14,278	-	-	-	-	-

Capital Expenditures and Cash Flow (Adjusted for Inflation)

Mechanical	2038	2039	2040	2041	2042	2043
Backflow Preventers	-	\$ 2,296	-	-	-	-
Boilers, Domestic Hot Water	-	-	-	-	-	-
Carbon Monoxide Sensors	-	-	-	-	-	-
Controller, Boiler	-	-	-	-	-	-
Drains	-	-	-	-	-	-
Elevators	-	-	-	-	-	-
Cylinder Replacement	-	-	-	-	-	-
Expansion Tanks	-	-	-	-	-	-
Fans, Exhaust, Parkade	-	-	-	-	-	-
Delhi	-	-	-	-	-	-
Generic	-	-	-	-	-	-
Fire Department Connection	-	-	-	-	-	-
Fire Extinguishers	-	-	-	-	-	-
Heaters, Duct	-	-	-	-	-	-
Make Up Air Units	-	-	-	-	-	-
Perimeter/ Storm System	-	-	-	-	-	-
Pressure Reducing Valve (PRV)	\$ 1,365	-	-	\$ 1,403	-	-
Pumps, Circulation	-	-	-	-	-	-
Pumps, Recirculation, Taco	-	-	-	-	-	-
Armstrong	-	-	-	-	-	-
Re-piping	-	-	-	-	-	-
Sprinkler System, Dry Pipe, Compressor A	-	-	-	-	-	-
Compressor B	-	-	-	-	-	\$ 2,648
Dry Pipe Valves	-	-	-	-	-	-
Piping	-	-	-	-	-	-
Storage Tanks	-	-	-	-	\$ 11,543	-
Sumps, Gravity	-	-	-	-	-	-
Subtotal	\$ 1,365	\$ 2,296	-	\$ 1,403	\$ 11,543	\$ 2,648

Capital Expenditures and Cash Flow (Adjusted for Inflation)

Roof Systems	2038	2039	2040	2041	2042	2043
Firewalls	-	-	-	-	-	-
Flashings	-	-	-	-	-	-
Flat Roof	-	-	-	-	-	-
Gutter System	-	-	-	-	\$ 3,935	-
Parapet Walls	-	-	-	-	-	-
Penthouse, Elevator	-	-	-	-	-	-
Roof Drains/Scuppers	-	-	-	-	-	-
Roof Hatch	-	-	-	-	-	-
Sloped Roofs, Metal Panel, Bldg. A	-	-	-	-	-	-
Vaulted Roofs, Bldg. B	-	-	-	-	-	-
Bldg. A	-	-	-	-	-	-
Paint, for Bldg. A	-	-	-	-	-	-
Windows, Aluminum Double Glazed	-	-	-	-	-	-
Vinyl Double Glazed	-	-	-	-	-	-
Subtotal	-	-	-	-	\$ 3,935	-

Capital Expenditures and Cash Flow (Adjusted for Inflation)

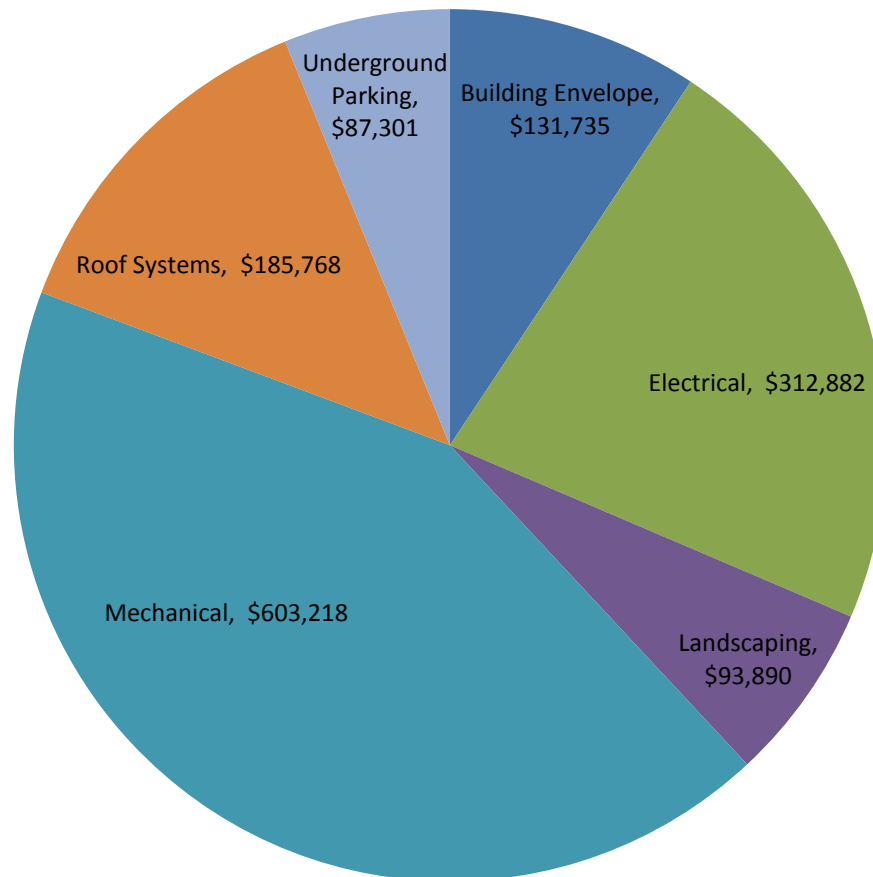
Underground Parking	2038	2039	2040	2041	2042	2043
Doors, Metal	-	-	-	-	-	-
Doors, Overhead	-	-	-	-	-	-
Driveways, Asphalt	-	-	-	-	-	-
Foundation Walls	-	-	-	-	-	-
Repairs	-	-	-	-	-	-
Handrails	-	-	-	-	-	-
Rooms, Electrical	-	-	-	-	-	-
Rooms, Locker	-	-	-	-	-	-
Slabs on Grade	-	-	-	-	-	-
Slabs, Suspended	-	-	-	-	-	-
Stairwells	-	-	-	-	-	-
Subtotal	-	-	-	-	-	-

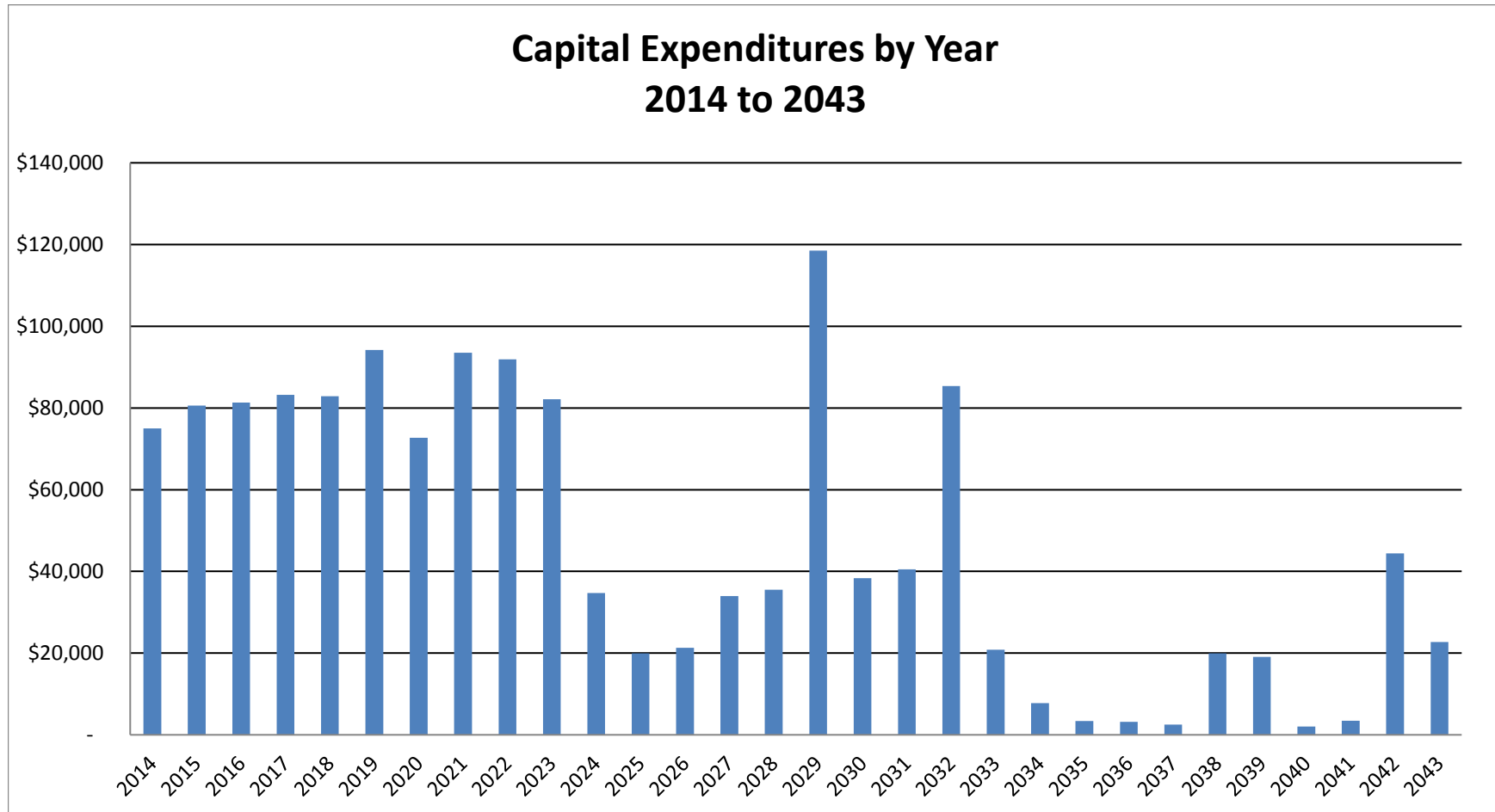
Total Expenses	2038	2039	2040	2041	2042	2043
	\$ 19,955	\$ 19,066	\$ 2,040	\$ 3,444	\$ 44,410	\$ 22,698

CURRENT PLANNED CASH FLOW

Opening CRF Balance	-\$ 215,589	-\$ 195,544	-\$ 174,609	-\$ 136,649	-\$ 100,094	-\$ 104,504
Less Expenses for the Year	-\$ 19,955	-\$ 19,066	-\$ 2,040	-\$ 3,444	-\$ 44,410	-\$ 22,698
Plus Investment Income	-	-	-	-	-	-
Planned CRF Contribution	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000
Closing Balance	-\$ 195,544	-\$ 174,609	-\$ 136,649	-\$ 100,094	-\$ 104,504	-\$ 87,202

Capital Expenditures By Category 2014 to 2043





Cash Flow Funding Model #1 - Increase CRF Contribution Based on Inflation Rate

This model proposes increasing the current funding level based on the rate of inflation each year.

	2014	2015	2016	2017	2018	2019	2020
CRF Opening Balance	\$ 137,589	\$ 91,126	\$ 52,037	\$ 11,767	-\$ 30,839	-\$ 73,211	-\$ 126,915
Less Annual Expenses	-\$ 75,019	-\$ 80,618	-\$ 81,358	-\$ 83,226	-\$ 82,858	-\$ 94,197	-\$ 72,690
Plus Investment Income	\$ 1,582	\$ 1,062	\$ 615	\$ 141	-	-	-
Plus Planned CRF Contribution	\$ 26,667	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000
Plus Proposed Contribution	\$ 307	\$ 466	\$ 473	\$ 479	\$ 486	\$ 493	\$ 499
Plus Proposed Special Levy							
Closing Balance	\$ 91,126	\$ 52,037	\$ 11,767	-\$ 30,839	-\$ 73,211	-\$ 126,915	-\$ 159,106

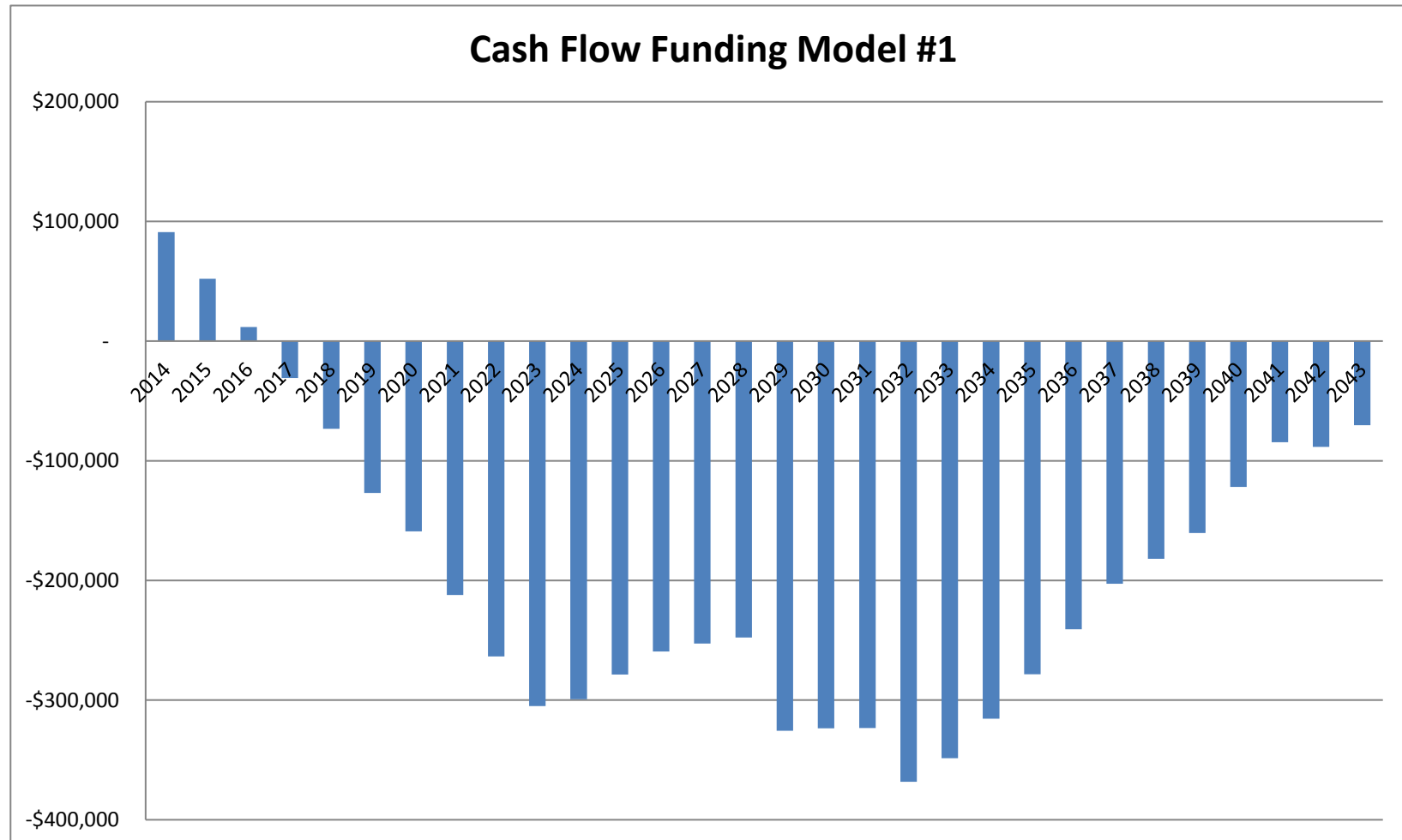
	2021	2022	2023	2024	2025	2026	2027
CRF Opening Balance	-\$ 159,106	-\$ 212,109	-\$ 263,485	-\$ 305,077	-\$ 299,249	-\$ 278,640	-\$ 259,413
Less Annual Expenses	-\$ 93,509	-\$ 91,890	-\$ 82,112	-\$ 34,700	-\$ 19,926	-\$ 21,315	-\$ 33,946
Plus Investment Income	-	-	-	-	-	-	-
Plus Planned CRF Contribution	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000
Plus Proposed Contribution	\$ 506	\$ 513	\$ 520	\$ 528	\$ 535	\$ 542	\$ 550
Plus Proposed Special Levy							
Closing Balance	-\$ 212,109	-\$ 263,485	-\$ 305,077	-\$ 299,249	-\$ 278,640	-\$ 259,413	-\$ 252,809

	2028	2029	2030	2031	2032	2033	2034
CRF Opening Balance	-\$ 252,809	-\$ 247,764	-\$ 325,713	-\$ 323,515	-\$ 323,426	-\$ 368,225	-\$ 348,447
Less Annual Expenses	-\$ 35,512	-\$ 118,514	-\$ 38,374	-\$ 40,492	-\$ 85,387	-\$ 20,819	-\$ 7,730
Plus Investment Income	-	-	-	-	-	-	-
Plus Planned CRF Contribution	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000
Plus Proposed Contribution	\$ 557	\$ 565	\$ 573	\$ 581	\$ 589	\$ 597	\$ 605
Plus Proposed Special Levy							
Closing Balance	-\$ 247,764	-\$ 325,713	-\$ 323,515	-\$ 323,426	-\$ 368,225	-\$ 348,447	-\$ 315,572

Cash Flow Funding Model #1 - Increase CRF Contribution Based on Inflation Rate

	2035	2036	2037	2038	2039	2040	2041
CRF Opening Balance	-\$ 315,572	-\$ 278,320	-\$ 240,851	-\$ 202,695	-\$ 182,011	-\$ 160,428	-\$ 121,811
Less Annual Expenses	-\$ 3,362	-\$ 3,152	-\$ 2,475	-\$ 19,955	-\$ 19,066	-\$ 2,040	-\$ 3,444
Plus Investment Income	-	-	-	-	-	-	-
Plus Planned CRF Contribution	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000
Plus Proposed Contribution	\$ 613	\$ 622	\$ 630	\$ 639	\$ 648	\$ 657	\$ 666
Plus Proposed Special Levy							
Closing Balance	-\$ 278,320	-\$ 240,851	-\$ 202,695	-\$ 182,011	-\$ 160,428	-\$ 121,811	-\$ 84,590

	2042	2043
CRF Opening Balance	-\$ 84,590	-\$ 88,325
Less Annual Expenses	-\$ 44,410	-\$ 22,698
Plus Investment Income	-	-
Plus Planned CRF Contribution	\$ 40,000	\$ 40,000
Plus Proposed Contribution	\$ 675	\$ 685
Plus Proposed Special Levy		
Closing Balance	-\$ 88,325	-\$ 70,338



Cash Flow Funding Model #2 - Increase CRF Contributions

This model proposes increasing the annual contingency reserve fund contribution in the amount of \$35,500 from 2014 to 2023, \$6,100 from 2024 to 2032, and a reduction of \$20,000 from 2033 to 2043.

	2014	2015	2016	2017	2018	2019	2020
CRF Opening Balance	\$ 137,589	\$ 126,319	\$ 122,654	\$ 118,207	\$ 111,840	\$ 105,768	\$ 88,288
Less Annual Expenses	-\$ 75,019	-\$ 80,618	-\$ 81,358	-\$ 83,226	-\$ 82,858	-\$ 94,197	-\$ 72,690
Plus Investment Income	\$ 1,582	\$ 1,453	\$ 1,411	\$ 1,359	\$ 1,286	\$ 1,216	\$ 1,015
Plus Planned CRF Contribution	\$ 26,667	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000
Plus Proposed Contribution	\$ 35,500	\$ 35,500	\$ 35,500	\$ 35,500	\$ 35,500	\$ 35,500	\$ 35,500
Plus Proposed Special Levy							-
Closing Balance	\$ 126,319	\$ 122,654	\$ 118,207	\$ 111,840	\$ 105,768	\$ 88,288	\$ 92,113

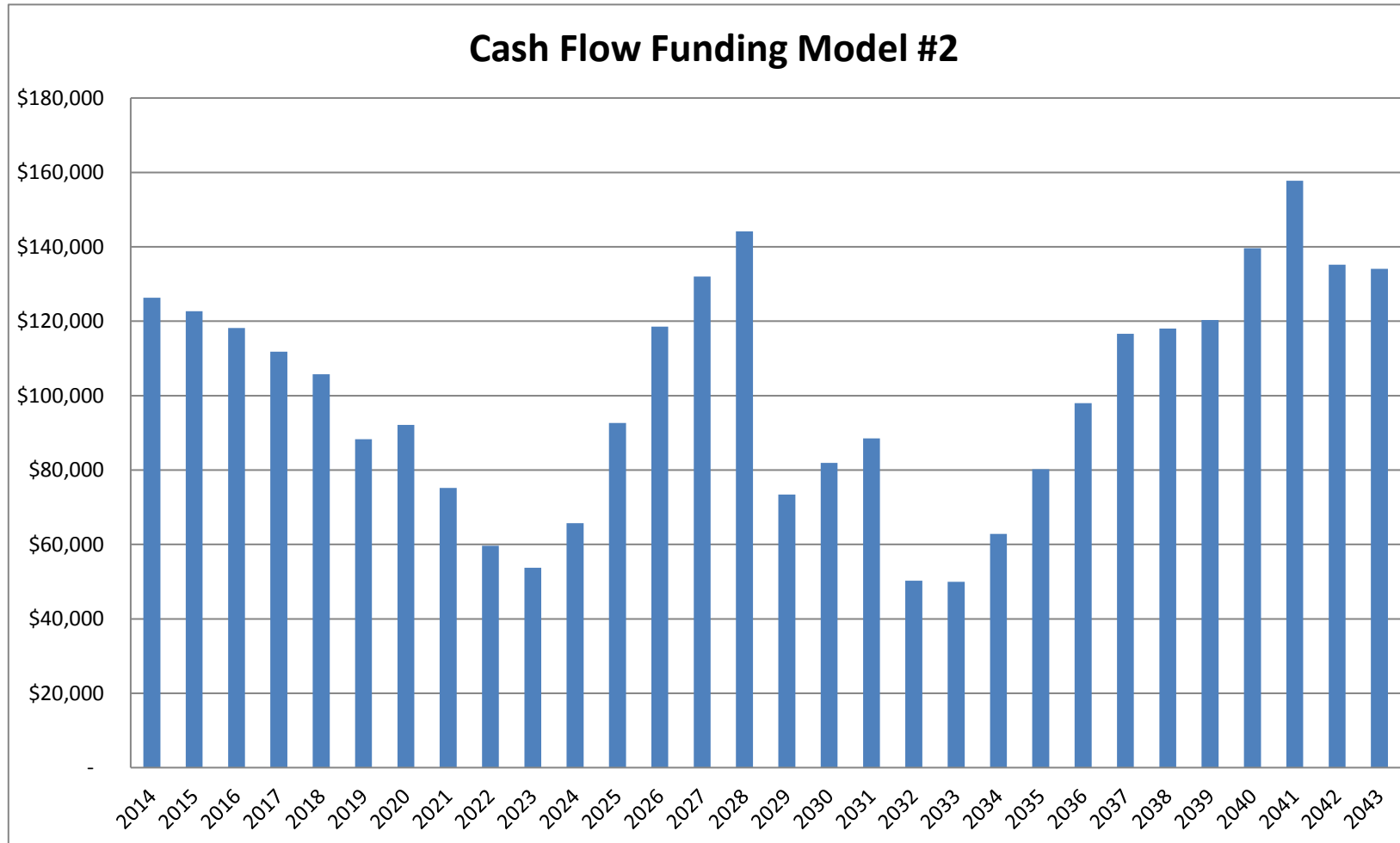
	2021	2022	2023	2024	2025	2026	2027
CRF Opening Balance	\$ 92,113	\$ 75,163	\$ 59,638	\$ 53,712	\$ 65,730	\$ 92,659	\$ 118,510
Less Annual Expenses	-\$ 93,509	-\$ 91,890	-\$ 82,112	-\$ 34,700	-\$ 19,926	-\$ 21,315	-\$ 33,946
Plus Investment Income	\$ 1,059	\$ 864	\$ 686	\$ 618	\$ 756	\$ 1,066	\$ 1,363
Plus Planned CRF Contribution	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000
Plus Proposed Contribution	\$ 35,500	\$ 35,500	\$ 35,500	\$ 6,100	\$ 6,100	\$ 6,100	\$ 6,100
Plus Proposed Special Levy							
Closing Balance	\$ 75,163	\$ 59,638	\$ 53,712	\$ 65,730	\$ 92,659	\$ 118,510	\$ 132,027

	2028	2029	2030	2031	2032	2033	2034
CRF Opening Balance	\$ 132,027	\$ 144,133	\$ 73,377	\$ 81,946	\$ 88,496	\$ 50,226	\$ 49,985
Less Annual Expenses	-\$ 35,512	-\$ 118,514	-\$ 38,374	-\$ 40,492	-\$ 85,387	-\$ 20,819	-\$ 7,730
Plus Investment Income	\$ 1,518	\$ 1,658	\$ 844	\$ 942	\$ 1,018	\$ 578	\$ 575
Plus Planned CRF Contribution	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000
Plus Proposed Contribution	\$ 6,100	\$ 6,100	\$ 6,100	\$ 6,100	\$ 6,100	-\$ 20,000	-\$ 20,000
Plus Proposed Special Levy							
Closing Balance	\$ 144,133	\$ 73,377	\$ 81,946	\$ 88,496	\$ 50,226	\$ 49,985	\$ 62,830

Cash Flow Funding Model #2 - Increase CRF Contributions

	2035	2036	2037	2038	2039	2040	2041
CRF Opening Balance	\$ 62,830	\$ 80,191	\$ 97,961	\$ 116,612	\$ 117,998	\$ 120,290	\$ 139,633
Less Annual Expenses	-\$ 3,362	-\$ 3,152	-\$ 2,475	-\$ 19,955	-\$ 19,066	-\$ 2,040	-\$ 3,444
Plus Investment Income	\$ 723	\$ 922	\$ 1,127	\$ 1,341	\$ 1,357	\$ 1,383	\$ 1,606
Plus Planned CRF Contribution	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000
Plus Proposed Contribution	-\$ 20,000	-\$ 20,000	-\$ 20,000	-\$ 20,000	-\$ 20,000	-\$ 20,000	-\$ 20,000
Plus Proposed Special Levy							
Closing Balance	\$ 80,191	\$ 97,961	\$ 116,612	\$ 117,998	\$ 120,290	\$ 139,633	\$ 157,794

	2042	2043
CRF Opening Balance	\$ 157,794	\$ 135,199
Less Annual Expenses	-\$ 44,410	-\$ 22,698
Plus Investment Income	\$ 1,815	\$ 1,555
Plus Planned CRF Contribution	\$ 40,000	\$ 40,000
Plus Proposed Contribution	-\$ 20,000	-\$ 20,000
Plus Proposed Special Levy		
Closing Balance	\$ 135,199	\$ 134,056



Cash Flow Funding Model #3

This model proposes using the following special levies: \$45,000 from 2016 to 2023, \$15,000 in 2029 and \$37,000 in 2032.

	2014	2015	2016	2017	2018	2019	2020
CRF Opening Balance	\$ 137,589	\$ 91,108	\$ 51,729	\$ 56,075	\$ 58,612	\$ 61,551	\$ 53,191
Less Annual Expenses	-\$ 75,019	-\$ 80,618	-\$ 81,358	-\$ 83,226	-\$ 82,858	-\$ 94,197	-\$ 72,690
Plus Investment Income	\$ 1,871	\$ 1,239	\$ 704	\$ 763	\$ 797	\$ 837	\$ 723
Plus Planned CRF Contribution	\$ 26,667	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000
Plus Proposed Contribution	-	-	-	-	-	-	-
Plus Proposed Special Levy			\$ 45,000	\$ 45,000	\$ 45,000	\$ 45,000	\$ 45,000
Closing Balance	\$ 91,108	\$ 51,729	\$ 56,075	\$ 58,612	\$ 61,551	\$ 53,191	\$ 66,224

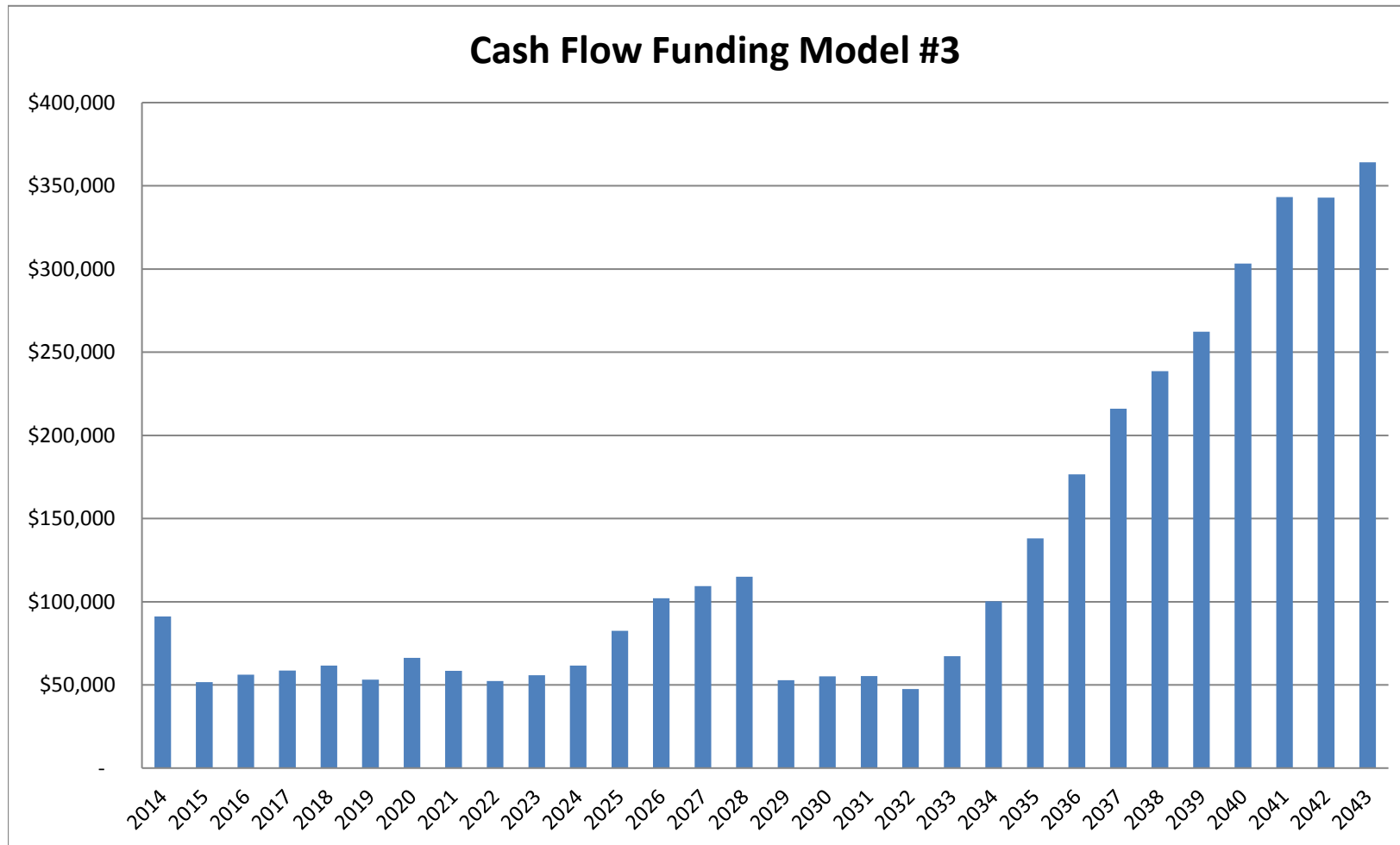
	2021	2022	2023	2024	2025	2026	2027
CRF Opening Balance	\$ 66,224	\$ 58,477	\$ 52,260	\$ 55,748	\$ 61,690	\$ 82,473	\$ 102,107
Less Annual Expenses	-\$ 93,509	-\$ 91,890	-\$ 82,112	-\$ 34,700	-\$ 19,926	-\$ 21,315	-\$ 33,946
Plus Investment Income	\$ 762	\$ 672	\$ 601	\$ 641	\$ 709	\$ 948	\$ 1,174
Plus Planned CRF Contribution	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000
Plus Proposed Contribution	-	-	-	-	-	-	-
Plus Proposed Special Levy	\$ 45,000	\$ 45,000	\$ 45,000				
Closing Balance	\$ 58,477	\$ 52,260	\$ 55,748	\$ 61,690	\$ 82,473	\$ 102,107	\$ 109,335

	2028	2029	2030	2031	2032	2033	2034
CRF Opening Balance	\$ 109,335	\$ 115,080	\$ 52,890	\$ 55,123	\$ 55,265	\$ 47,513	\$ 67,241
Less Annual Expenses	-\$ 35,512	-\$ 118,514	-\$ 38,374	-\$ 40,492	-\$ 85,387	-\$ 20,819	-\$ 7,730
Plus Investment Income	\$ 1,257	\$ 1,323	\$ 608	\$ 634	\$ 636	\$ 546	\$ 773
Plus Planned CRF Contribution	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000
Plus Proposed Contribution	-	-	-	-	-	-	-
Plus Proposed Special Levy		\$ 15,000			\$ 37,000		
Closing Balance	\$ 115,080	\$ 52,890	\$ 55,123	\$ 55,265	\$ 47,513	\$ 67,241	\$ 100,284

Cash Flow Funding Model #3

	2035	2036	2037	2038	2039	2040	2041
CRF Opening Balance	\$ 100,284	\$ 138,075	\$ 176,511	\$ 216,066	\$ 238,596	\$ 262,274	\$ 303,250
Less Annual Expenses	-\$ 3,362	-\$ 3,152	-\$ 2,475	-\$ 19,955	-\$ 19,066	-\$ 2,040	-\$ 3,444
Plus Investment Income	\$ 1,153	\$ 1,588	\$ 2,030	\$ 2,485	\$ 2,744	\$ 3,016	\$ 3,487
Plus Planned CRF Contribution	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000
Plus Proposed Contribution	-	-	-	-	-	-	-
Plus Proposed Special Levy							
Closing Balance	\$ 138,075	\$ 176,511	\$ 216,066	\$ 238,596	\$ 262,274	\$ 303,250	\$ 343,293

	2042	2043
CRF Opening Balance	\$ 343,293	\$ 342,831
Less Annual Expenses	-\$ 44,410	-\$ 22,698
Plus Investment Income	\$ 3,948	\$ 3,943
Plus Planned CRF Contribution	\$ 40,000	\$ 40,000
Plus Proposed Contribution	-	-
Plus Proposed Special Levy		
Closing Balance	\$ 342,831	\$ 364,076



Cash Flow Funding Model #4

This model proposes increasing the current annual CRF contribution to \$59,000 from 2014 to 2023 (an increase of \$19,000 per year) and \$46,000 from 2024 to 2032 (an increase of \$6,000 per year). From 2033 to 2043, it suggests reducing the CRF contribution to \$20,000 (a decrease of \$20,000 per year). It also suggests using a special levy of \$24,000 from 2017 to 2023.

	2014	2015	2016	2017	2018	2019	2020
CRF Opening Balance	\$ 137,589	\$ 109,819	\$ 89,464	\$ 68,135	\$ 68,693	\$ 69,625	\$ 59,229
Less Annual Expenses	-\$ 75,019	-\$ 80,618	-\$ 81,358	-\$ 83,226	-\$ 82,858	-\$ 94,197	-\$ 72,690
Plus Investment Income	\$ 1,582	\$ 1,263	\$ 1,029	\$ 784	\$ 790	\$ 801	\$ 681
Plus Planned CRF Contribution	\$ 26,667	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000
Plus Proposed Contribution	\$ 19,000	\$ 19,000	\$ 19,000	\$ 19,000	\$ 19,000	\$ 19,000	\$ 19,000
Plus Proposed Special Levy				\$ 24,000	\$ 24,000	\$ 24,000	\$ 24,000
Closing Balance	\$ 109,819	\$ 89,464	\$ 68,135	\$ 68,693	\$ 69,625	\$ 59,229	\$ 70,220

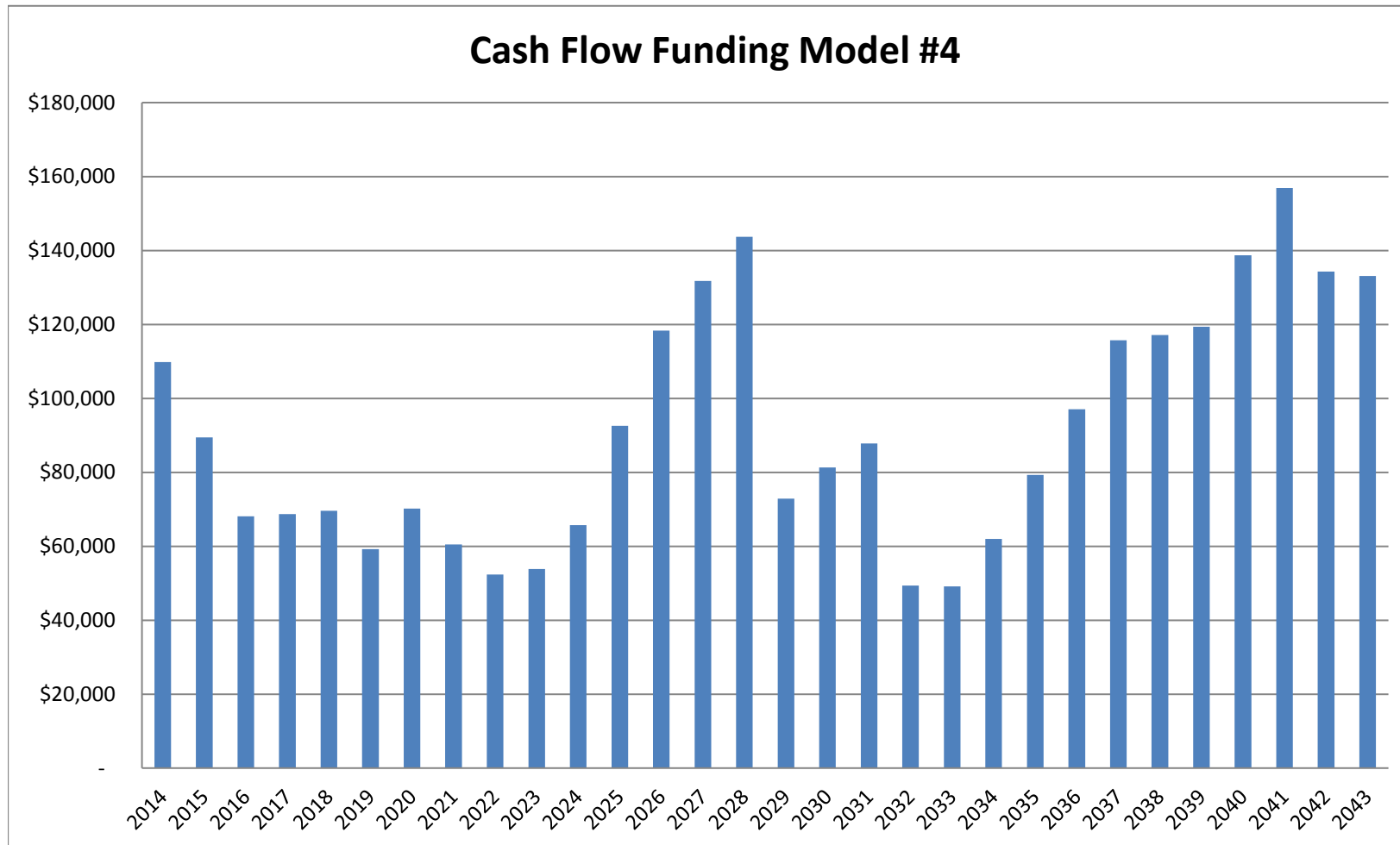
	2021	2022	2023	2024	2025	2026	2027
CRF Opening Balance	\$ 70,220	\$ 60,518	\$ 52,325	\$ 53,814	\$ 65,733	\$ 92,563	\$ 118,313
Less Annual Expenses	-\$ 93,509	-\$ 91,890	-\$ 82,112	-\$ 34,700	-\$ 19,926	-\$ 21,315	-\$ 33,946
Plus Investment Income	\$ 808	\$ 696	\$ 602	\$ 619	\$ 756	\$ 1,064	\$ 1,361
Plus Planned CRF Contribution	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000
Plus Proposed Contribution	\$ 19,000	\$ 19,000	\$ 19,000	\$ 6,000	\$ 6,000	\$ 6,000	\$ 6,000
Plus Proposed Special Levy	\$ 24,000	\$ 24,000	\$ 24,000				
Closing Balance	\$ 60,518	\$ 52,325	\$ 53,814	\$ 65,733	\$ 92,563	\$ 118,313	\$ 131,727

	2028	2029	2030	2031	2032	2033	2034
CRF Opening Balance	\$ 131,727	\$ 143,730	\$ 72,869	\$ 81,332	\$ 87,775	\$ 49,397	\$ 49,147
Less Annual Expenses	-\$ 35,512	-\$ 118,514	-\$ 38,374	-\$ 40,492	-\$ 85,387	-\$ 20,819	-\$ 7,730
Plus Investment Income	\$ 1,515	\$ 1,653	\$ 838	\$ 935	\$ 1,009	\$ 568	\$ 565
Plus Planned CRF Contribution	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000
Plus Proposed Contribution	\$ 6,000	\$ 6,000	\$ 6,000	\$ 6,000	\$ 6,000	-\$ 20,000	-\$ 20,000
Plus Proposed Special Levy							
Closing Balance	\$ 143,730	\$ 72,869	\$ 81,332	\$ 87,775	\$ 49,397	\$ 49,147	\$ 61,982

Cash Flow Funding Model #4

	2035	2036	2037	2038	2039	2040	2041
CRF Opening Balance	\$ 61,982	\$ 79,333	\$ 97,093	\$ 115,734	\$ 117,111	\$ 119,392	\$ 138,725
Less Annual Expenses	-\$ 3,362	-\$ 3,152	-\$ 2,475	-\$ 19,955	-\$ 19,066	-\$ 2,040	-\$ 3,444
Plus Investment Income	\$ 713	\$ 912	\$ 1,117	\$ 1,331	\$ 1,347	\$ 1,373	\$ 1,595
Plus Planned CRF Contribution	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000
Plus Proposed Contribution	-\$ 20,000	-\$ 20,000	-\$ 20,000	-\$ 20,000	-\$ 20,000	-\$ 20,000	-\$ 20,000
Plus Proposed Special Levy							
Closing Balance	\$ 79,333	\$ 97,093	\$ 115,734	\$ 117,111	\$ 119,392	\$ 138,725	\$ 156,876

	2042	2043
CRF Opening Balance	\$ 156,876	\$ 134,270
Less Annual Expenses	-\$ 44,410	-\$ 22,698
Plus Investment Income	\$ 1,804	\$ 1,544
Plus Planned CRF Contribution	\$ 40,000	\$ 40,000
Plus Proposed Contribution	-\$ 20,000	-\$ 20,000
Plus Proposed Special Levy		
Closing Balance	\$ 134,270	\$ 133,116



Contributors

At Marsh Building Inspections we recognize that no one person has all of the skills and knowledge required to prepare an accurate and complete depreciation report. Our team of experienced professionals combines all of the technical knowledge, financial planning expertise and the writing and management skills that are necessary to develop a comprehensive report.

Financial Analysis

The accountant provides financial evaluation, budget analysis and cash flow models in your report.

Janet McRoberts (formerly Southam)

Certified Management Accountant

B. Ed.



Janet Southam Consulting

650 - 943 West Broadway, Vancouver, BC

<http://www.jfsoutham.com/>

Inspections

The inspectors provide the building component inventory, condition summary and inspection data.

Rick Buchamer

Home Inspector

RHI #173 - BPCPA # 47203



Rick Buchamer Inspection Services

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<http://www.rickbuchamerinspectionsservices.com>

Gwyn Jones

Mechanical Electrical Inspector



C & C Electrical Mechanical

#F 2288 Elgin Street, Port Coquitlam, BC

dave@ccelectricalmechanical.com

C&C Qualifications

Certified Red Seal Electrical

Certified Red Seal Plumbing

Certified Red Seal Refrigeration and Air
Conditioning

Class 'B' Gas fitter

Class 'B' Field Safety Representative (Electrical)

Association Memberships

The Thermal Environmental Comfort Association (TECA)

The British Columbia Electrical Association (BCEA)

BC Hydro Powersmart Alliance Member

BBB (membership application in process)

CHOA (membership application in process)

Report Administration

These team members oversee all aspects of the report from quotation to delivery.

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Nancy Marsh Consulting

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Duane Veale

Report Administrator / Technical Writer

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Estimates

The following professionals provided pricing solutions for this report.

Bryan Altenburg



Altenburg Painting Ltd

<http://altenburgpainting.com/>

Estimates

The following professionals provided pricing solutions for this report.

Joshua Gibson



Benchmark Roofing

<http://www.benchmarkroofing.ca/>

Hans Weissig



Richmond Elevator

<http://www.richmond-elevator.com/>

Eric Mott



Sealright Concrete Restorations

<http://www.sealright.ca/>

Stan Sedlacek

Abeam Contracting Inc.

Abeam Contracting Inc.

<http://abeam.ca/>

Koreen Dyke



Advantage Gutters Inc.

sales@advantagegutters.ca / www.guttersbc.ca

Terms and Conditions

Acceptance of this report constitutes agreement to the following terms and conditions:

- This report was prepared in accordance with commonly accepted inspection and consulting services in British Columbia. No other warranty, express or implied, is made on the condition of the building(s) or any building components.
- Contents of this report are based on visual inspections and the expertise of MBI's team members. While cost estimates contained in this report are based on current market pricing, they are estimates only and are provided for budgetary planning purposes. Strata's choosing to act on these estimates agree to obtain quotations from at least three (3) contractors.
- There is no set lifespan for building components in the construction industry. The lifespan of building components shown in this report is based on age, manufacturers' recommendations and the observed condition of the components at the time of inspection. The lifespan numbers are approximated to assist in calculations for future component replacement costs. Lifespan of building components will change over time as they are dependent on many factors.
- Where the lifespan of a building or mechanical component exceeds the 30 year term of reference for this report, a replacement cost is not included. Replacement cost is only provided for those components that will be replaced during the 30 year analysis period.
- The evaluation and conclusions contained in the Report have been prepared on the basis of conditions at the time of the visual inspections and on the basis of information provided to us. We have relied in good faith on information provided by the Client and the Client's property manager. Accordingly, we accept no responsibility for any misstatement or inaccuracy contained in the report resulting from any misstatements, omissions, or misrepresentations from persons providing information.
- All recommendations concerning components requiring annual maintenance are included strictly as a convenience to the Strata to assist in planning their annual operating budget and are based on a holistic approach to building maintenance. Estimates for these costs are not included in any of the financial analysis.
- Both the electronic PDF file and any hard copy versions of this report are copyright property of MBI and shall not, under any circumstances, be altered by any party except MBI.

Scope of Services

MBI was retained by Strata Plan NW1389 to prepare a Depreciation Report for The Willows, located at 1103 and 1121 Howie Street, Coquitlam, BC. The service was provided in accordance with the BC Strata Corporation Act requirements.

PDF Format and Updates

This report is provided electronically in PDF format on DVD, along with one bound hard copy. If additional bound hard copies are desired, they may be requested for a disbursement fee of \$50.00 per copy (postage and GST not included). Please allow 2 weeks for delivery.

Order hard copy or request updates to this report through Marsh Building Inspections:

- info@marshbuildinginspections.ca
- or fill in the form at <http://marshbuildinginspections.ca/request-depreciation-report.html>

Appendix A

Building Components Requiring Annual Maintenance

Component	Description and Function	Annual Maintenance Cost	
General			
		-	
Janitorial Services	Annual contract	\$ 10,000.00	1
Roof Maintenance	Includes roof drain and cleaning/maintenance	\$ 600.00	2
Landscaping	Garden beds, trees and shrubs	\$ 10,500.00	1
Mechanical Systems			
Inspect Perimeter Drainage System	Video inspection of perimeter drainage and storm system	\$ 3,000.00	3
Gravity Sumps/Drains	Clear debris from 8 gravity sumps/4 drains	\$ 1,200.00	3
Elevator	Contract, license, repairs	\$ 6,400.00	1
Fire Safety Inspections	Fairlane Fire Prevention Ltd.	\$ 3,500.00	1
Backflow Preventer	Annual certification	\$ 800.00	2

1. Budgeted amount from NW1389 2013 Operating Budget.
2. Recommend including in R&M every year.
3. Recommend including in R&M every two years.

Appendix B – Fire Safety Systems

There are two general types of fire safety systems in most buildings:

1. Fire Alarm Systems
2. Sprinkler Systems.

Fire alarm systems detect and warn of fire while sprinkler systems suppress fire. As with all integrated systems, they are complex. The types of components, system design and installation methods vary widely from building to building. Both systems require regular maintenance and oversight by a fire safety systems professional to ensure they function correctly in an emergency.

It is not possible to provide a precise estimate of either lifespan or replacement costs for either type of system without a complete assessment of the systems in your building. The replacement costs provided in this report are averaged based on the size of the building and are provided strictly for budgeting purposes. In order to obtain a more precise estimate for upgrade of these systems, please contact your fire safety systems professional for details.

Due to the complexity of the systems and the thoroughness such an assessment requires, there is a cost to this assessment. Most firms will provide a rebate of the same amount of the assessment when you engage them to complete the upgrades. However many fire safety companies will not provide a firm quote and will only perform this work on a cost plus basis.

Fire Alarm Systems

Fire alarm systems include a control or annunciator panel, bells, pulls, smoke detectors and other visual warning devices such as beacons. There are two general types of fire alarm systems currently:

1. Conventional
2. Addressable.

Conventional Fire Alarm Systems

Conventional systems divide the building into zones. The detectors and pulls in each zone are wired on a dedicated circuit. These systems were installed in most buildings prior to 1998. A conventional system reports the location of a fire by zone.

Costs to upgrade or replace conventional systems tend to be higher due to the way they are wired. The original design, installation and types of components used in these systems will also affect the cost of upgrading.

Addressable Fire Alarm Systems

An addressable system takes advantage of digital encoding so that each device in the system is programmed with a unique address. In the event of a fire, it is possible to determine the exact device that was activated.

In general, addressable systems are far more flexible in terms of upgrading and installing. While design and installation are always important considerations, the lack of the extensive wiring that is required to support a conventional system make addressable systems more economical.

Estimates provided in this report for upgrading a conventional fire alarm system reflect the averaged cost of retrofitting with an addressable system.

Sprinkler Systems

There are two common types of sprinkler systems found in residential buildings:

1. Dry Pipe Systems
2. Wet Pipe Systems.

Dry Pipe Sprinkler Systems

Dry pipe systems are used in areas that are subject to freezing. Most commonly, they are found in underground parking areas. In this type of system, the pipes are filled with air under pressure. The water is held back by the control valve. If a sprinkler head opens due to fire, the drop in air pressure opens the valve and water flows through the pipes.

Dry pipe systems that are maintained regularly have a lifespan of 50 years or more. Often the first part needing replacement is the gasket on the valve. If the unit is more than 10 to 15 years old, gaskets are often no longer available and the valve itself has to be replaced.

Wet Pipe Sprinkler Systems

Wet pipe systems are typically used in areas that where freezing is not an issue. In residential buildings, this includes areas above ground. In a wet pipe system, water is always present in the pipes that supply the sprinkler heads. This provides very fast flow of water in the event of a fire.

Wet pipe systems that are maintained regularly have an expected lifespan of 25 years. The type of upgrade required varies from building to building depending on many factors.

Sprinkler Heads

Both types of systems rely on sprinkler heads. The lifespan of sprinkler heads varies from 25 to 50 years. There are thousands of different sprinkler heads currently available and in service. Identification should only be attempted by a qualified individual.

The cost of sprinkler head replacement varies from building to building. The retrofit can involve interior drywall repair and exterior building envelope repair. For the most accurate pricing, it is best to request a sprinkler head survey. Your fire safety professional will complete a complete inventory and replacement schedule. This should include checking for sprinkler heads that have been identified by the manufacturer for recall.



BUDGET ESTIMATE

Client's Name : The Willows, NW1389
Client's Address : 1103 and 1121 Howie Street, Vancouver.
Job Address : S/A.
Expiration Date : For budget purposes. Call 604-988-3623 for a quote.

Date: March 25, 2014.

HardiPlank Siding. Exterior preparation and painting includes:

- Pressure wash using fungicide.
- Scrape all loose surfaces.
- Caulk where necessary using "Titebond" caulking.
- Apply two coats of 100 % acrylic exterior coating.

Estimated cost per building (not including G.S.T.): \$ 13,600.00

Wood trim boards and bandboard. Exterior preparation and painting includes:

- Pressure wash using fungicide.
- Scrape all loose surfaces.
- Sand all surfaces.
- Prime all bare wood.
- Caulk where necessary using "Titebond" caulking.
- Apply two coats of 100 % acrylic semi gloss exterior coating.

Estimated cost per building (not including G.S.T.): \$ 5,900.00



Since 1987

Please review our budget for re-roofing for the following Roof located at:
1103 and 1121 Howie Street, Coquitlam



GST# 10025 1602 RT0001 - WCB# 371409

ADVANTAGE GUTTERS INC

sales@advantagegutters.ca / www.guttersbc.ca

23018 24th Avenue, Langley, BC V2Z 2Z5

Phone: 604-514-9886 Fax: 604-534-4250

Abbt: 604-853-9882 Toll Free: 1-877-888-1233

Estimate

Date	Estimate #
3/24/2014	57957

Marsh Building Inspections
4396 Garden Grove Drive
Burnaby, BC V5G 4G6

Phone: 604-417-7950

Cell: 604-764-1186

Contact: Nancy Marsh

Fax:

E-mail: nancy@marshbuildinginspections....

Job Address 1103 & 1121 Howie Ave Coquitlam

The Willows

Thank you for the opportunity to quote on this project for you. Please review the following:

Description	Amount (excluding all Taxes)	Please tick items accepted
BUDGET ESTIMATE ONLY, BASED ON IMAGES AND MEASUREMENTS TAKEN FROM GOOGLE		
1) Remove and dispose of existing gutter and downpipe.		
2) Supply and install continuous 5" colonial gutter to sloped roof areas and balconies in .025" aluminum painted stock color both sides with extruded brackets at approximately 18" o/c, fastened with #10 x 1 1/2" WT1000 corrosion resistant deep rooted wood screws, outlets to be 2 3/4" diameter high capacity flush mount aluminum.		
3) Supply and install 2 x 3" aluminum downpipe to service new gutter, fastened with stainless steel screws.		
#1103 - Sloped Roof Areas	\$ 3,000.00	
#1103 - Balconies	\$ 3,500.00	
#1121 - Balconies	\$ 3,500.00	
Note: Building #1121 does not appear to have any sloped roof areas and did not have gutter on balconies in images we've seen online. As railings are face mounted we cannot guarantee that gutters would be effective in these areas, however Building #1103 appears to have the same railings and there are gutters in place on the balconies.		
Look forward to working with you,		
Regards		
Koreen Dyke		
NOTE: Due to unstable aluminum prices, this quote is valid for 60 days.		
Warranty: 5 years limited warranty on labour 40 year pro rated on materials provided by Gentek Building Products Limited		
To accept proposal please sign and return via fax or send email stating acceptance and colors.		
Signature: _____ Date: _____		
Gutter Color: _____ Downpipe Color: _____		

Experience the ADVANTAGE of Quality, Personalized Service!

Abeam Contracting Inc.

Abeam Contracting Inc.

February 19, 2014

214-130 W 5th Street
North Vancouver, V7M 1J8
T: 778 988 7454
services@abeam.ca

Estimate for:

The Willows
1103 1121 Howie Ave.
Coquitlam

Description:

1. **Cedar fencing** – North and East side yard
2. **Cedar siding** on roof structure has moisture damage/rot -East side building only

Includes:

- Removal and disposal of lattice panels, fence posts and top rail
- Installing new pressure treated posts, lattice panels and top rail
- Staining
- Replacing damaged cedar channel siding and cedar trim on roof structure

* All fence panels and post on North And East side need to be replaced -113 panels and 120 posts (560 linear ft.).
Siding quote based on approx..460 ln.ft. siding and 70 ln.ft of trim.

Abeam Contracting Inc.

1. CEDAR FENCING

• Demo-removal and disposal	\$2,250
• Dump fees	\$800
• Fence posts, panels and top rail install labor	\$18,720
• Material (posts, concrete fence panels, top rail)	\$12,400

Total: **\$34,170***

* Additional charge for pruning of overgrown cedar trees to access fence will apply unless service provided by landscaping contractor

2. CEDAR SIDING

• Labor	\$2,340
• Material	\$1,450

Total: **\$3,790**

Prices do not include tax

Bill To:	
Client:	Pacific Quorum Properties
Address:	c/o The Willows NW 1389
:	430-1200 West 73 Ave
	Vancouver BC V6P 6G5
Contact:	Christine Turner
Phone:	604-685-3828
Email:	christine@pacificquorum.com

Site Location	
Site Name:	The Willows NW1389
Address:	Building A
	1103 Howie Avenue
	Coquitlam
Site Contact:	Ray Ojansivu
Phone:	604-837-5400
Email:	

Quotation # 1129.0-EST
 Date 4/12/2014
 Expiry Date 6/30/2014

 Quotation Issued by:
 Sealright Concrete Restorations
 774 E28th Ave Vancouver V5V2N7
 Phone: 604-424-4166
 Website: www.sealright.ca

Job		Payment Terms	
Parkade Restoration Bldg. A		50%5days Prior 50%upon Complete	
Description			Total
<p>REPORT AND OBSERVATIONS</p> <p>We have been asked by MBI Inspection Services to submit a report and quotation for the restoration of deficiencies at the Strata Plan NWS1389- The Willows Building A located at 1103 Howie Avenue, Central Coquitlam B.C. From our understanding the building has 30 units and is part of a 60 unit strata complex. The 3 floor apartment complex was built in 1979.</p> <p>In our opinion The Willows Building A Parkade is in need of some (urgent) concrete restoration work in order to maintain its original structural specifications and upgrade the present condition to current parkade construction standards. We have observed the following items requiring restoration.</p> <p>ITEM A DRAINAGE PROBLEM IN PARKADE STAIRWELL We observed heavily pooled water in the exterior exit door stair well landing at the North West corner of the parkade. A drain was observed, installed in the exterior exit door landing; however the drain seems ineffective as there is a ongoing water pooling problem. We were told by the strata contact that the drain had been professionally cleared and it still did not drain properly. This would indicate that the drain has collapsed and is no longer working effectively. When excess rain water pools in the exterior stairwell landing area it over flows into the underground parkade through the stairwell access door and flows along the parkade floor and in to the nearest parkade sump drain. This flow of water on the parkade floor is a nuisance as well as a potential liability problem if a person were to slip in this area.</p> <p>In our opinion the stairwell landing drain needs to be addressed as an urgent restoration. A budget minded solution would be to scope the existing drain to determine if the existing drain is serviceable or is in need of replacement. If the drain is deemed un-serviceable after the scoping inspection we recommend the installation of a new drain, partial or entire concrete landing area and a new pipe connection installed to the nearest parkade sump drain.</p>			
Thank you for considering Sealright for your project!			Subtotal
PAYMENT TERMS: Please make cheques payable to SEALRIGHT CONTRACTING. All material is guaranteed to be as specified. All work to be completed in a professional manner according to standard practices. Any customer authorized alteration from above specifications will become an extra charge over and above the estimate. The above prices, specifications and conditions are satisfactory and are hereby accepted. Sealright Concrete Restorations is authorized to do the work as specified.			GST#84239 5410
			Total

Date of Acceptance

Signature

Title

Bill To:	
Client:	Pacific Quorum Properties
Address	c/o The Willows NW 1389
:	430-1200 West 73 Ave
	Vancouver BC V6P 6G5
Contact:	Christine Turner
Phone:	604-685-3828
Email:	christine@pacificquorum.com

Site Location	
Site Name:	The Willows NW1389
Address:	Building A
	1103 Howie Avenue
	Coquitlam
Site Contact:	Ray Ojansivu
Phone:	604-837-5400
Email:	

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Description			Total
<p>ITEM B WATER INGRESS ALONG NORTH FACING PARKADE WALL, SLAB TO WALL INTERFACE We observed water welling up and through cold joint between north facing foundation wall and slab on grade parkade floor along the majority of the approx 170 linear foot wall. This type of water ingress is consistent with damaged or deteriorated perimeter drainage. When the perimeter drainage system is not working effectively, groundwater will pool around and below the building structure and a hydrostatic pressure is created. This hydrostatic pressure forces the groundwater through any voids joints or cracks in the parkade. We recommend the replacement of the perimeter drainage to reduce the hydrostatic pressure around the building. We however understand the large cost and inconvenience of installing a new drainage system can be cost prohibitive as well as inconvenient requiring the removal of the surrounding landscaping and soil around the building. We investigated the wall area further and saw what we believe to be a previously installed internal drainage system along the wall. From what we can determine a section of the slab next to the wall was removed and a weeping tile drain was installed. We also observed the weeping tile termination point near stall 44 and it seems as though the weeping tile is not connected to the parkade sump drain.</p> <p>As a budget minded solution to solve the water ingress issues we suggest to replace the existing weeping drain system currently installed along the north wall with a new system that is connected directly to the existing parkade sump. This new drain system would manage the hydrostatic pressure beneath the parkade slab and for greater certainty the system would be installed with proper cleanout access ports so the weeping drain can be maintained and cleaned out on a scheduled basis.</p> <p>ITEM C WATER INGRESS THROUGH WALL CRACKS, TIE ROD HOLES, PIPE PENETRATION AND CEILING CRACKS We observed a variety of common water ingress areas in the parkade walls and ceiling.</p> <p>Prior to installing the landscaping, a waterproofing membrane is installed on the topside of the parkade ceiling slab and the outside face of the exterior walls. This membrane is designed and installed to protective barrier for the concrete against moisture. We believe that this protective barrier or membrane has now deteriorated to the point where it may no longer be serving as a concrete waterproofing layer. This problem is not uncommon as the waterproofing products used at the time of construction generally had a 20 to 25 year life cycle.</p> <p>The resulting problems of the deteriorated concrete membrane can be seen throughout the parkade as:</p> <ul style="list-style-type: none"> -Water seeping through concrete cracks -White powdery efflorescence indicating the concrete has been saturated with water. -Calcite nodules and stalactites created by water dripping through the cracks. -Rust coloured stains emanating from the cracks, pipe penetrations, concrete ties in both the walls and ceilings. <p>These problems can be dismissed as an eyesore or a nuisance however they are key indicators of a much bigger concern regarding the structural integrity of the building. The main objective for protecting concrete from water is to ensure the reinforcing steel or rebar inside all the concrete structures does not corrode or rust. Rebar is what structurally ties the concrete together and if this reinforcement is compromised so is the structure of the building. In order to stop any further deterioration of the rebar inside the concrete the concrete must be protected from the water.</p>			
Thank you for considering Sealright for your project!			Subtotal
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Contact:	Christine Turner
Phone:	604-685-3828
Email:	christine@pacificquorum.com

Site Location	
Site Name:	The Willows NW1389
Address:	Building A
	1103 Howie Avenue
	Coquitlam
Site Contact:	Ray Ojansivu
Phone:	604-837-5400
Email:	

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Description			Total
<p>***This protection can be restored by removing the deteriorated waterproofing and installing a new membrane on the topside and exterior wall surface of the concrete. This is always the preferred solution for restoring the protective coating but it is the more difficult and costly solution, as it requires the removal and replacement of all the landscaping.</p> <p>If a topside or exterior wall membrane restoration is not practical, the second option is to address the leaking cracks and voids with negative side repairs using a high pressure urethane injection system. This high pressure urethane injection system can be installed from the underside of the concrete slab and is designed to fill the leaking cracks and voids with expanding Poly-Urethane foam. This product will expand up to 300% when it comes into contact with water, meaning that over the years if the crack expands the urethane will also expand to prevent leaks. Once the urethane foam is installed water can no longer penetrate the crack and the structural rebar inside the concrete is protected from any further corrosion damage.</p> <p>We recommend addressing the following leaking wall and ceiling cracks with a high pressure urethane injection system:</p> <p>Stall # 4-5 (Active) 8 lf of wall cracks Crack from base to the upper end of the wall. The crack is actively leaking from the mid wall, the concrete tie left from construction is creating a rusty stain.</p> <p>Stall # 6 (Active) 8 lf of wall cracks Crack from base to the upper end of the wall. The crack is actively leaking from the mid wall.</p> <p>Stall # 7 (Active) 8 lf of wall cracks Multiple crack branches from base to the upper end of the wall. The crack is actively leaking from the mid wall; the concrete tie left from construction is creating a rusty stain.</p> <p>Stall # 8 (Active) 9 lf of wall cracks Actively leaking from the mid wall, the ties left from construction is creating a rusty stain which makes it difficult to see the state of the leaky crack.</p> <p>Stall # 14 (Active) 16 lf of wall cracks. North West wall has a crack located from the base of the wall, expanding 9ft upwards in diagonal with a Y split ending of 3ft per branch. Portions of the crack show honeycomb which needs to be chiselled. A 1ft crack is also apparent behind the wood frame supporting the piping adjacent to the wall.</p> <p>Stall # 14 (Active) 16 lf of ceiling cracks. A 10ft crack expanding in diagonal from the West wall of the stall to the Northern Wall and a few branching cracks (3ft).</p>			
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			Total

Date of Acceptance

Signature

Title



Site Location	
Site Name:	The Willows NW1389
Address:	Building A 1103 Howie Avenue Coquitlam
Site Contact:	Ray Ojansivu
Phone:	604-837-5400
Email:	

Quotation # 1129.0-EST
Date 4/12/2014
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Job		Payment Terms	
Parkade Restoration Bldg. A		50%5days Prior 50%upon Complete	
Description		Total	
<p>ITEM D</p> <p>ADDITIONAL PREVIOUSLY LEAKING CRACKS</p> <p>Water Ingress through wall cracks, concrete voids, pipe penetration and ceiling cracks.</p> <p>We observed a variety of water ingress areas in the parkade walls and ceiling that show previous evidence of water ingress. These water ingress areas are currently not leaking when observed, though in our experience, these areas generally continue to have water ingress issues after periods of heavier than normal rain fall.</p>		3,000.00	
<p>PROPOSED SCOPE OF PARKADE RESTORATION WORK</p> <p>We have broken the recommended restoration scope of this project into two phases:</p> <p>Urgent Repairs (Actively Leaking cracks showing water ingress when visited)</p> <p>Priority Repairs (Non Active cracks showing evidence of water ingress or previous water activity, but not actively leaking at time of visit)</p>			
<p>SCOPING EXISTING DRAINS WITH PLUMBING CAMERA</p> <p>Due to the expense of restoring the following drains, we recommend scoping the following drains in order to confirm their present condition and assessing if they can be rooted out or if they are in need of restoration.</p> <p>-Buildings exterior perimeter drain.</p> <p>-Stairwell landing drain</p> <p>-Weeping drain along north wall</p>			
<p>ITEM A - URGENT REPAIR</p> <p>NEW DRAIN AND PLUMBING INSTALLATION</p> <p>Drainage Problem in Parkade Stairwell Landing</p> <p>Install new drain and drain pipe connection to connect to parkade sump drain.</p> <p>-Remove existing drain and expose existing drain connection.</p> <p>-Dig a trench 1ft wide by 60ft long from the North West Exit door, creating a slope to the South West drain basin.</p> <p>-Install new drain and plumb in pipes (perforated PVC pipes) and connect to sump drain.</p> <p>-Fill trench with substrate to cover pipe and fill trench in with concrete, level with existing floor slab.</p> <p>-Replace exterior stairwell concrete floor that was removed for drain installation.</p>		15,600.00	
Thank you for considering Sealright for your project!		Subtotal	
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		Total	

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Address	c/o The Willows NW 1389
:	430-1200 West 73 Ave
	Vancouver BC V6P 6G5
Contact:	Christine Turner
Phone:	604-685-3828
Email:	christine@pacificquorum.com

Site Location	
Site Name:	The Willows NW1389
Address:	Building A
	1103 Howie Avenue
	Coquitlam
Site Contact:	Ray Ojansivu
Phone:	604-837-5400
Email:	

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Job	Payment Terms	
Parkade Restoration Bldg. A	50%5days Prior 50%upon Complete	
Description		Total
ITEM B - URGENT REPAIR INSTALL NEW INTERNAL AUXILARY DRAINAGE SYSTEM To address water ingress along North facing slab to wall interface - Remove existing drain and install new perforated weeping pipe along interior foundation of north wall and connect to parkade sump drain. -Break the floor concrete 1ft wide (6" from the wall to avoid the footing) along the north wall and floor joint of the parkade floor as well as the West wall of stall 14. - Break the floor concrete 1ft wide by 26ft long from stall #1 north wall to the drainage basin right in front (North East of the parkade). - Dig adjacent the footing of the Wall of the parkade and create a slope towards the West end of the parkade. - Dig a trench 1ft wide by 26ft long from stall #1 North wall, creating a slope to the drainage basin right in front (North East of the parkade). - Lay gravel and approx 200 linear feet of perforated PVC pipe in the trench. -Fill trench with substrate to cover pipe and fill trench in with concrete, level with existing floor slab. -Finish details, clean-up & clear area of debris left from repairs.		31,200.00
ITEM C - URGENT REPAIR INJECT ACTIVELY LEAKING WALL AND CEILING DEFFICIENCIES Water ingress through wall cracks, tie rod holes, pipe penetration and ceiling cracks. Inject Poly-Urethane Foam in to specified cracks below - 59 linear feet total - Specify cracks to be injected - Flushing of crack in concrete - Installing high-pressure urethane injection foam into associated cracks - Parging associated cracks with concrete - Upon completion of the work, remove all injection-related materials from the work area, and remove all debris from the site. Stall # 4-5 (Active) 8 lf of wall cracks Stall # 6 (Active) 8 lf of wall cracks Stall # 7 (Active) 8 lf of wall cracks Stall # 8 (Active) 9 lf of wall cracks Stall # 14 (Active) 16 lf of wall cracks. Stall # 14 (Active) 11 lf of ceiling cracks.		4,521.00
Thank you for considering Sealright for your project!		Subtotal
PAYMENT TERMS: Please make cheques payable to SEALRIGHT CONTRACTING. All material is guaranteed to be as specified. All work to be completed in a professional manner according to standard practices. Any customer authorized alteration from above specifications will become an extra charge over and above the estimate. The above prices, specifications and conditions are satisfactory and are hereby accepted. Sealright Concrete Restorations is authorized to do the work as specified.		GST#84239 5410
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	Vancouver BC V6P 6G5
Contact:	Christine Turner
Phone:	604-685-3828
Email:	christine@pacificquorum.com

Site Location	
Site Name:	The Willows NW1389
Address:	Building A
	1103 Howie Avenue
	Coquitlam
Site Contact:	Ray Ojansivu
Phone:	604-837-5400
Email:	

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 Website: www.sealright.ca

Job		Payment Terms	
Parkade Restoration Bldg. A		50%5days Prior 50%upon Complete	
Description			Total
ITEM D - PRIORITY REPAIRS INJECT NON-ACTIVELY LEAKING WALL AND CEILING DEFFICIENCIES A variety of (Non-Active) previously leaking wall cracks approx 32 linear feet were observed. These cracks can be addressed with Injection Poly-Urethane Foam if requested by the client. Inject Poly-Urethane Foam in to specified cracks below. - Total of 32 linear feet of cracks to inject. - Specify cracks to be injected - Flushing of crack in concrete - Installing high-pressure urethane injection foam into associated cracks - Parging associated cracks with concrete - Upon completion of the work, remove all injection-related materials from the work area, and remove all debris from the site. Note: Injecting the Priority Non Active Cracks will ensure any further degradation of the internal structural rebar is stopped. This Priority restoration is highly recommended. Furnish all labour, materials, tools and equipment, disposal and perform all operations necessary.			2,411.20
GST on sales			2,836.61
Thank you for considering Sealright for your project!			Subtotal
PAYMENT TERMS: Please make cheques payable to SEALRIGHT CONTRACTING. All material is guaranteed to be as specified. All work to be completed in a professional manner according to standard practices. Any customer authorized alteration from above specifications will become an extra charge over and above the estimate. The above prices, specifications and conditions are satisfactory and are hereby accepted. Sealright Concrete Restorations is authorized to do the work as specified.			\$56,732.20
			GST#84239 5410 \$2,836.61
			Total
			\$59,568.81

Date of Acceptance

Signature

Title



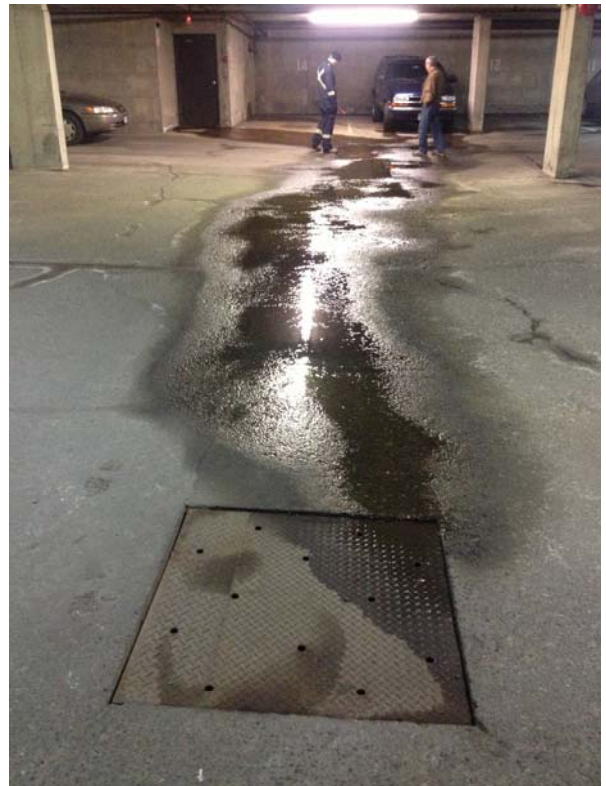
1. Item A.Drainage Problem in Parkade Stairwell. Water pooling in stairwell landing behind door.



2..Drainage Problem in Parkade Stairwell. Water pooling in stairwell landing is saturated with soil.



3..Drainage Problem in Parkade Stairwell. Water pooling in stairwell landing behind door and streaming down parkade interior slab to the sump drain.



4..Drainage Problem in Parkade Stairwell. Water pooling in stairwell landing behind door and streaming down parkade interior slab to the sump drain. Sump drain cover seen in front.

The Willows

Building A 1103 Howie Ave, Coquitlam

Parkade Restoration

Project ID #1129



5. Item B. Water ingress along north facing slab to wall interface. Water seeping up through cold joint from below the floor slab.



6. Item B. Water ingress along north facing slab to wall interface. Water seeping up through cold joint from below the floor slab. Slight difference in newer concrete installed along wall.



7. Item B. Water ingress along north facing slab to wall interface. Water seeping up through cold joint from below the floor slab. Slight difference in newer concrete installed along wall. Partial length of the wall. Showing the water coming up through the floor.



8. The rest of the same wall. It is about 200 feet long. There is evidence that there has been a drain system made along this wall at some point in the past.



9. Location of sump drain A west side of building



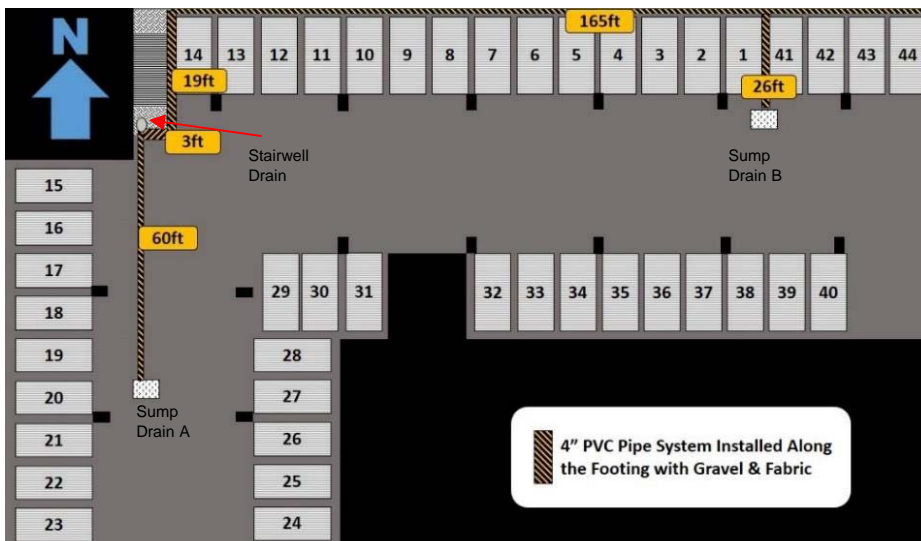
10. Location of sump drain B east side of building.



11. Sump Drain A on the west side of the building. We suggest scoping the associated drain pipes to verify their condition.



12. Sump Drain B on the east side of the building. We suggest scoping the associated drain pipes to verify their condition.



13. Drainage map proposal installing perforated weeping drain pipe to relieve hydrostatic water pressure beneath the parkade slab. will effectively move ground water from the areas in question to the associated sump drains.



14.Item B. Water ingress along north facing slab to wall interface. Water seeping up through cold joint from below the floor slab.



15.Item C stall 4-5. Water seeping up through cold joint void in wall.



15.Item C stall #7 Water seeping up through cold joint crack void in wall.



16.Item C stall #8 Water seeping up through cold joint crack and concrete tie void in wall.



17.Item C stall #14 Water seeping up through crack and concrete honeycomb void in wall. Note crack contours staircase adjacent to exterior wall



18.Item C stall #14 west wall Water seeping up through crack and concrete honeycomb void in wall. Note crack contours staircase adjacent to exterior wall



19.Item C stall #14 Water seeping up through crack. A 1ft crack is also apparent behind the wood frame supporting the piping adjacent to the wall.



20.Item C stall #14 Water seeping down through ceiling crack. A 10ft crack expanding in diagonal from the West wall of the stall to the Northern Wall and a few branching cracks.



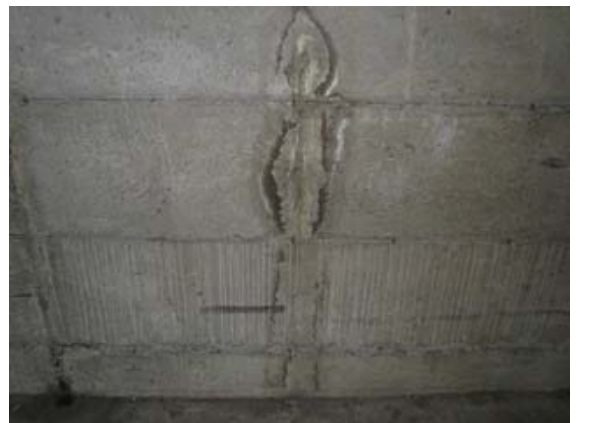
21.Item C-1 stall #9 Additional non active cracks.



22.Item C-1 stall #10 Additional non active cracks.



23.Item C-1 stall #42 Additional non active cracks.



24.Item C-1 stall # Additional non active cracks.

Bill To:	
Client:	Pacific Quorum Properties
Address:	c/o The Willows NW 1389
:	430-1200 West 73 Ave
	Vancouver BC V6P 6G5
Contact:	Christine Turner
Phone:	604-685-3828
Email:	christine@pacificquorum.com

Site Location	
Site Name:	The Willows NW1389
Address:	Building B
	1121 Howie Avenue
	Coquitlam
Site Contact:	
Phone:	
Email:	

Quotation # 1133.0-QTE
 Date 4/17/2014
 Expiry Date 5/31/2014

 Quotation Issued by:
 Sealright Concrete Restorations
 774 E28th Ave Vancouver V5V2N7
 Phone: 604-424-4166
 Website: www.sealright.ca

Job		Payment Terms	
Parkade Restoration		50/50 (5 days prior/completion)	
Description			Total
<p>We have been asked by MBI Inspection Services to submit a report and quotation for the restoration of deficiencies at the Strata Plan NWS1389- The Willows Building A located at 1121 Howie Avenue, Central Coquitlam B.C. From our understanding the building has 30 units and is part of a 60 unit strata complex.</p> <p>The 3 floor apartment complex was built in 1979.</p> <p>In our opinion The Willows Building A Parkade is in need of some (urgent) concrete restoration work in order to maintain its original structural specifications and upgrade the present condition to current parkade construction standards.</p> <p>OBSERVATIONS AND RECOMMENDATIONS</p> <p>Item A.</p> <p>ACTIVELY LEAKING PARKADE CEILING AND WALL CRACKS</p> <p>We observed a variety of common water ingress areas in the parkade walls and ceiling.</p> <p>Prior to installing the landscaping, a waterproofing membrane is installed on the topside of the parkade ceiling slab and the outside face of the exterior walls. This membrane is designed and installed to protective barrier for the concrete against moisture. We believe that this protective barrier or membrane has now deteriorated to the point where it may no longer be serving as a concrete waterproofing layer. This problem is not uncommon as the waterproofing products used at the time of construction generally had a 20 to 25 year life cycle. The resulting problems of the deteriorated concrete membrane can be seen in some areas of the parkade as:</p> <ul style="list-style-type: none"> -Water seeping through concrete wall and ceiling cracks -White powdery efflorescence indicating the concrete has been saturated with water. -Calcite nodules and stalactites created by water dripping through the cracks. -Rust colored stains emanating from the cracks, pipe penetrations, concrete ties in both the walls and ceilings. <p>These problems can be dismissed as an eyesore or a nuisance however they are key indicators of a much bigger concern regarding the structural integrity of the building. The main objective for protecting concrete from water is to ensure the reinforcing steel or rebar inside all the concrete structures does not corrode or rust. Rebar is what structurally ties the concrete together and if this reinforcement is compromised so is the structure of the building. In order to stop any further deterioration of the rebar inside the concrete the concrete must be protected from the water.</p> <p>***This protection can be restored by removing the deteriorated waterproofing and installing a new membrane on the topside and exterior wall surface of the concrete. This is always the preferred solution for restoring the protective coating but it is the more difficult and costly solution, as it requires the removal and replacement of all the landscaping.</p> <p>If a topside membrane restoration is not practical, the second option is to address the leaking cracks and voids with negative side repairs using a high pressure urethane injection system.</p> <p>This high pressure urethane injection system can be installed from the underside of the concrete slab and interior of the parkade walls is designed to fill the leaking cracks and voids with expanding Poly-Urethane foam. This product will expand up to 300% when it comes into contact with water, meaning that over the years if the crack expands the urethane will also expand to prevent leaks. Once the urethane foam is installed water can no longer penetrate the crack and the structural rebar inside the concrete is protected from any further corrosion damage.</p>			
Thank you for considering Sealright for your project!			Subtotal
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			Total

Date of Acceptance

Signature

Title

Bill To:	
Client:	Pacific Quorum Properties
Address:	c/o The Willows NW 1389
:	430-1200 West 73 Ave
	Vancouver BC V6P 6G5
Contact:	Christine Turner
Phone:	604-685-3828
Email:	christine@pacificquorum.com

Site Location	
Site Name:	The Willows NW1389
Address:	Building B
	1121 Howie Avenue
	Coquitlam
Site Contact:	
Phone:	
Email:	

Quotation # 1133.0-QTE
 Date 4/17/2014
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 Sealright Concrete Restorations
 774 E28th Ave Vancouver V5V2N7
 Phone: 604-424-4166
 Website: www.sealright.ca

Job	Payment Terms
Parkade Restoration	50/50 (5 days prior/completion)
Description	Total
<p>We have observed the following leaking wall and ceiling cracks and recommend addressing these cracks with a high pressure urethane injection system:</p> <p>Stall # 4-5 (Active) 15 lf of ceiling cracks We inspected the northern ceiling of parkade between stall # 4 & #5 and located a 15ft crack from the north wall and ceiling joint expanding outward. We can assume this crack has been leaking for a long period of time as calcite nodules have built up along the crack and a corrugated panel has been installed below the leaking area of the crack to divert the leaking water away from the parking stall.</p> <p>Stall # 4-5 (Active) 8 lf of wall cracks Crack from base to the upper end of the wall. The crack is actively leaking from the mid wall.</p> <p>Stall # 14 (Active) 5 lf of wall cracks Crack from base to the upper end of the wall. The crack is actively leaking from the mid wall.</p> <p>Item B. LEAKING PARKADE VENT STACK We observed water emanating from the parkade vent stack above stall #14. The topside if the vent stack is covered by landscaping and we assume water is pooling on the topside wall of the stack and ingressing through a deteriorated point in the waterproofing. These deficiencies are not uncommon as the construction of such vent stacks, often have cold joints voids in the concrete and such areas are prone to movement and eventual fail points in the associated waterproofing. A closer inspection of the topside waterproofing is required to determine the specific point of water ingress after the surrounding landscaping is removed. Once the membrane is revealed a full waterproofing restoration is recommended to seal all areas of the vent stack connection to the parkade slab.</p>	
Thank you for considering Sealright for your project!	Subtotal
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	Total

Date of Acceptance

Signature

Title



Date of Acceptance

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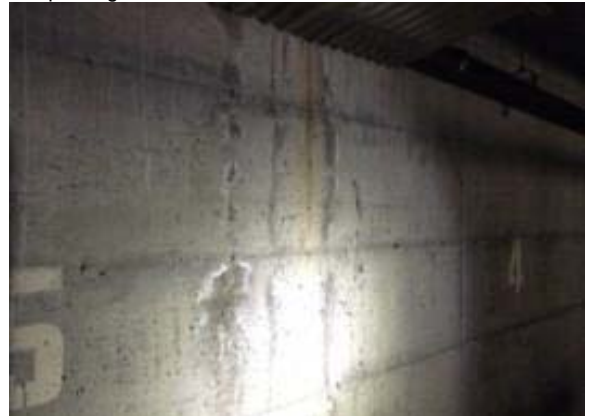
01. Item A Stall # 4-5 15ft ceiling crack emanating from the north wall and ceiling joint expanding outward. We can assume this crack has been leaking for a long period of time as calcite nodules have built up along the



02. Item A stall # 4-5 01. Stall # 4-5 15ft ceiling crack a corrugated panel has been installed below the leaking area of the crack to divert the leaking water away from the parking stall.



03. Item A Stall # 4-5 15ft ceiling crack emanating from the north wall and ceiling joint expanding outward.



04. Item A Stall # 4-5 8ft wall crack from base to the upper end of the wall. The crack is actively leaking from the mid wall.



05. Item A Stall # 4-5 15ft ceiling crack emanating from the north wall and ceiling joint expanding outward.



06. Item A Stall # 14 (Active) 5 lf of wall cracks Crack from base to the upper end of the wall. The crack is actively leaking from the mid wall.



07.Item B topside of vent stack and surrounding landscaping. Location of sump drain A west side of building



08.Item B topside of vent stack and surrounding landscaping. Location of sump drain A west side of building



09.Item B topside of vent stack wall and adjacent stairwell corridor.



10.Item B underside of vent stack and surrounding insulation.