



BUILDING CONDITION ASSESSMENT

FOR

QUEEN ANNE APARTMENTS

12184, 12186, 12188 &
12190 224TH STREET
MAPLE RIDGE, BC

PREPARED FOR:

Canadian Apartment Properties REIT
11 Church Street
Toronto ON M5E 1W1

*Attention: Tonia Kagiannis,
Senior Director, Capital Planning & Administration*

PREPARED BY:

Sense Engineering Ltd.
104 – 788 Copping Street
North Vancouver, BC V7M 3G6

Attention: Chris Love, B.Tech., LEED AP

November 29, 2022

Project No. 22vA094-42



EXECUTIVE SUMMARY

Canadian Apartment Properties REIT retained *Sense Engineering* to prepare this Building Condition Assessment report for Queen Anne Apartments at 12184, 12186, 12188 and 12190 224th Street, Maple Ridge to assist in the long-term capital planning for the property.

Queen Anne Apartments includes four 4-storey buildings, each with a single level parking garage on the first floor. The buildings contain 147 residential units.

Construction of the buildings was reported to have been completed circa 1977.

The buildings have been well maintained over the years.

As per our proposal, our reviews and reporting were only to include the building structure, building envelope, roofs and hard landscape surfaces at the property; so, no life safety, HVAC, plumbing, electrical or general site related components or systems are included.

The Building Components section of this report (see Appendix A) details each reviewed component of the buildings, listed under a system heading. Under each component, there is a brief description of the element, a section on known history of repairs and renewals (where information was available), a section dedicated to our analysis of existing conditions, and then our recommended repair and renewal projects, including costs and timing.

Recommended projects from the Building Component information are included in Table 1 below. This table summarizes our opinion of budgets for capital projects identified in the report that are above the annual threshold of \$25,000 per building. Expenditures that are expected to be managed as operating expenses are not shown. The budgets assume a prudent level of ongoing maintenance. Dollars are inflated by 3% per year and include contingencies (typically 5 to 15%). Project bonding and permit fees and consulting fees related to evaluations, design, tender and project management services have not been included. GST also has not been included.

Classifications have been provided for each project as follows:

- 1 - Immediate and/or Life Safety Repair
- 2 - Deferred Maintenance Repair
- 3 - Normal Life Cycle Renewal
- 4 - Discretionary Repair or Upgrade

No part of this report should be read in isolation. This report is intended to be read in its entirety, including the scope of work and limitations.



Table 1: Building Expenditures

Inflation Rate (%) = 3.0%

Analysis Timeframe (yrs) = 11

Item No.	Component	Project Description	Class	Present Cost	Occurrences	Cycle	Projected Expenditures																					
							2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033											
1 STRUCTURE																												
1.2	Balconies and Eyebrows	Concrete Balcony Slab Repairs and Waterproofing.	2	\$225,000	2030	20											\$	276,722										
1.3	Parking Garages	Garage Roof Deck Concrete Repairs and Waterproofing.	2	\$772,000	2024	30	\$	795,160																				
2 BUILDING ENVELOPE																												
2.1	Exterior Walls	Sealant Replacement	3	\$250,000	2028	20											\$	289,819										
2.3	Roofs	Replace Roof at Building B	3	\$743,000	2024	20	\$	765,290																				
		Replace Roof at Building D	3	\$611,000	2025	20		\$	648,210																			
		Replace Roof at Building A	3	\$611,000	2029	20											\$	729,566										
3 SITE																												
3.1	Hard Landscaping Surfaces	Phased Replacement of Asphalt Pavements (30%/phase)	3	\$60,000	2025, 2028, 2031	3											\$	63,654	\$	69,556			\$	76,006				
Total:							\$	-	\$	1,560,450	\$	711,864	\$	-	\$	-	\$	359,375	\$	729,566	\$	276,722	\$	76,006	\$	-	\$	-



TABLE OF CONTENTS

1. SENSE'S SCOPE OF WORK	1
2. INFORMATION PROVIDED	2
2.1 Questionnaire	2
2.2 Drawings	2

APPENDICES

- A Building Components
- B Owner's Questionnaire
- C Limitations



1. SENSE'S SCOPE OF WORK

Canadian Apartment Properties REIT retained *Sense Engineering* to prepare this Building Condition Assessment report in accordance with our proposal dated July 5, 2022.

The purpose of our report was to provide a general indication of the present physical condition of the visually accessible building structure, building envelope, roofs and hard landscape surfaces at the property. As per our proposal, we were to record deficiencies and conditions which would likely require capital expenditures greater than \$25,000 per year within the next 11 years. Expenditures associated with normal operations, routine maintenance, or where costs are less than \$25,000, are not included as they are expected to be covered by operating budgets. We were not to review or report on the life safety, HVAC, plumbing, electrical or general site related components or systems.

Our review was intended to identify conditions resulting from past and current use of the property. Should change of use, renovations or additions be anticipated, additional evaluations may be required. Our review was not intended to compare against past or current (retroactive or not) codes, by-laws, regulations, or similar; unless information is provided, we also have not checked for, or the status of, outstanding building or occupancy permits, work orders, citations, or similar. We assume that the property is generally compliant; while we did not specifically check statutory requirements that applied at the time of construction, or that may retroactively apply now, our review may have identified some potential compliance and/or design concerns and the identification of these concerns should not be taken to mean that an exhaustive review has been completed.

Concealed deficiencies and design flaws, and identification of environmental issues, are specifically excluded from our mandate. Our scope of review should not be considered exhaustive or be considered to eliminate all risks associated with owning this property. Only conditions seen during our review of sample areas can be said to have been appraised, and our general comments on the components and systems are assumptions based upon extrapolations.

Our interviews with building personnel attempt to uncover concerns with the building components being reviewed. However, we cannot attest to the integrity of the information provided, nor can we attest to the accuracy or completeness of the information or data provided for our review and incorporation into our report. See Appendix B for the Owner's Questionnaire Completed on Site.

Repair and replacement costs are based on past and current uses and layouts. Opinions of costs are determined based on our past experience with similar projects and should be considered as preliminary budgets only.

This Building Condition Assessment report is intended to be a useful tool in supporting your ongoing planning for capital needs related to the property. As part of this, we were to:

- complete a top-to-bottom review of the building structure, exterior wall, roof and hard landscaping components so that you can prioritize the various capital projects competing for funds;
- provide a plan that is neither too conservative nor too aggressive, but is rather based on most probable and reasonable scenarios, based on your specific ownership / management strategy, when this is communicated to us;
- provide various repair / replacement options and strategies, wherever possible, rather than just presenting default (and often most conservative) solutions; and
- capture expenditures exceeding an annual threshold cost of \$25,000 per building, over the next 11-year period.



In preparing this report, we have:

- Reviewed the information provided (see Section 2 below) to assist in understanding the:
 - general construction of the buildings;
 - type and level of maintenance and repairs carried out in the past and planned for the future; and
 - nature and extent of any problem conditions.
- Completed a sample review of the building structure and exterior wall components, where visually accessible, to check existing conditions on November 15, 2022. Specifically, we:
 - reviewed balconies, parking garages, exteriors walls, windows, exterior doors, roofs and hard landscaping surfaces. Our observations were made from the ground, accessible roofs, apartment units (see below), and common and service areas; and
 - gained access to apartment Units 102, 211, 305 (Building A – 12190 224th St), Units 101, 209, 303 (Building B – 12188 224th St.), Units 103, 201, 306 (Building C – 12186 224th St.), and Units 101, 205, 304 (Building D – 12184 224th St.).

Chris Love, B.Tech., LEED AP reviewed the site and prepared this report on behalf of *Sense Engineering*. Nichole Brackett, M.Eng., P.Eng. reviewed this report.

This report is subject to the Limitations forming Appendix B.

2. INFORMATION PROVIDED

Information was provided from the following sources, which in part form the basis of our report.

2.1 Questionnaire

There was no response to our property information and performance history questionnaire.

2.2 Drawings

No drawings were available.

Should you have any questions regarding this report, please feel free to contact us.

Yours Truly,
Sense Engineering



Chris Love, B.Tech., LEED AP
Project Manager (250) 863-8159

Nichole Brackett, M.Eng., P.Eng.,
Project Principal (604) 374-5643



APPENDIX A – BUILDING COMPONENTS

Table of Contents

1. STRUCTURE	2
1.1 Structural Frame	2
1.2 Balconies and Eyebrows	3
1.3 Parking Garages.....	6
2. BUILDING ENVELOPE	8
2.1 Exterior Walls	8
2.2 Windows and Exterior Doors	10
2.3 Roofs	12
3. SITE	14
3.1 Hard Landscaping Surfaces.....	14



1. STRUCTURE

1.1 STRUCTURAL FRAME

BRIEF DESCRIPTION:

The 1st floor structure is conventionally reinforced cast-in-place concrete.

The 2nd floor is a suspended concrete slab supported on reinforced concrete columns and shear walls.

The structure from the 2nd floor slab up is wood-framed and consists of wood sub-floors on wood joists, supported primarily by wood-framed walls. The elevator cores are load bearing concrete block construction. The roofs have engineered wood roof trusses with plywood sheathing.

MAINTENANCE, REPAIR AND RENEWAL HISTORY:

No significant capital projects were reported to have been completed in relation to the structural frame of the buildings.

PRESENT CONDITIONS AND RECOMMENDATIONS:

Most of the structural components are concealed from view. We did not see any evidence of unusual settlement, displacement or structural cracking in the areas we reviewed.

The interior portions of the structure are generally protected from weather and are not expected to require major repair within the report term. Expected repairs to the structural elements exposed to weather are discussed in other sections of this report.

The buildings are in an area with a relatively high risk of strong seismic activity. *Sense Engineering* has not completed a structural analysis to confirm whether the buildings meet current earthquake resistance requirements. Upgrading to meet current Code requirements is not mandatory, so we have not budgeted for any structural retrofits. However, retrofits could be required if there is a major loss to the buildings, (e.g., due to a fire or flood), or if a major renovation is carried out in the future.



Photo 1: Structure on the 1st floor (parking garage) at Building A – Typical.



1. STRUCTURE

1.2 BALCONIES AND EYEBROWS

BRIEF DESCRIPTION:

There are balconies on north and south elevations of each of the buildings.

The balconies on the 2nd floor are formed by cantilevered extensions of the concrete floor slabs. The balconies on the 3rd and 4th floors are formed by cantilevered extensions of the interior floor joists and have plywood deck sheathing.

The top surface of the 2nd floor balconies is not waterproofed and edges and soffits are unfinished.

The 3rd and 4th floor balconies are waterproofed with a vinyl (PVC) sheet membrane. The balcony edges have painted wood fascia and soffits are vented aluminum panels.

Balcony guards are prefinished aluminum railings with pickets, mounted to the top of the concrete slab balconies and to the front edge of the wood balcony framing and also fastened to the exterior walls at the ends of the railings in both cases.

There are prefinished aluminum dividers with metal in-fill panels between adjacent balconies.

The balconies drain off the outer edge.

There are small concrete eyebrows over exit doors. Similar to the 2nd floor balconies these are not waterproofed or painted.

MAINTENANCE, REPAIR AND RENEWAL HISTORY:

2022: Balcony repairs completed including replacement of waterproofing on 3rd and 4th floors, railings, soffits, privacy dividers and repairs to the structure based on our observations on site.



Photo 2: Typical balconies including concrete slab at the 2nd floor and wood structures on the 3rd and 4th floors.

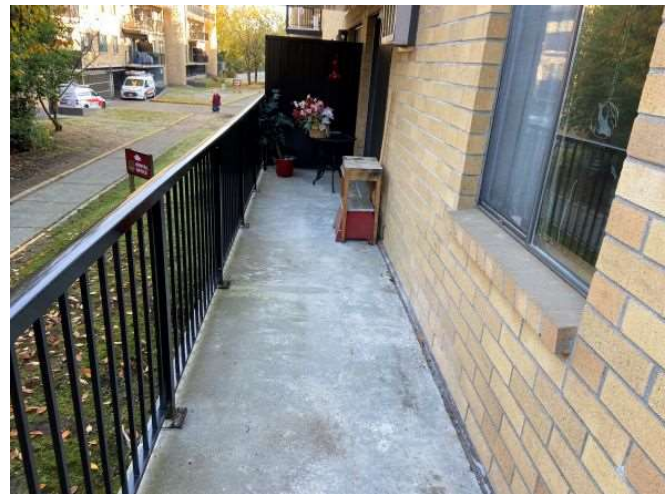


Photo 3: Typical concrete balcony slab.

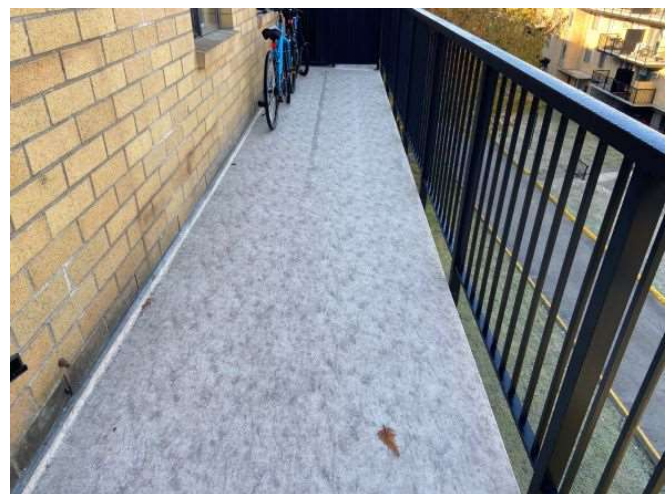


Photo 4: Typical wood frame balcony.



PRESENT CONDITIONS AND RECOMMENDATIONS:

Concrete Balcony Slabs

There is localized cracking in the concrete balcony slabs with some staining and evidence of leakage on the soffits. We noted one location where the concrete has spalled off the soffit and requires removal and repair at this time at a cost below the report threshold. No issues were identified with the concrete eyebrows.

The balconies are not waterproofed to protect the concrete and prevent leakage to the areas below. If water is allowed to leak into the concrete, then, depending on the extent of carbonation and/or chlorides within the concrete, there is a chance that the moisture in the concrete will cause the steel reinforcing embedded in the concrete to corrode. This can cause the concrete to deteriorate, resulting in more costly repairs in the future.

The current deterioration is isolated. The concrete balcony slabs should be checked regularly to identify and remove any loose concrete that may form at the slab edges or soffits. We assume this will be done as part of ongoing maintenance. At some point the extent of leakage and concrete deterioration may warrant installation of a waterproofing membrane. The timing for this work should be dependent upon an evaluation of the concrete balconies; pending the results of that evaluation, we have budgeted for balcony waterproofing toward the end of this report term.

Wood Frame Balconies

No major structural concerns related to the balconies were noted or reported.

No evidence of leakage was recorded during our review and the site representative reported no issues.



Photo 5: Leaking cracks in balcony slab, north elevation of Building A.



Photo 6: Leaking crack and spalled concrete on 2nd floor slab soffit, south elevation of Building C.

It is imperative that the balcony waterproofing remain watertight to prevent the wood structure below from deteriorating. As such, it should be replaced well before the waterproofing loses its effectiveness. If structural damage to the wood framing is allowed to occur, this can significantly increase the cost of repairs. Given that the balcony waterproofing is new, we do not anticipate replacement being required within the report term. We assume that local repairs to address leaks will be carried out on an as-needed basis funded out of operating budgets.



CAPITAL PROJECTS:

Description	Classification	Present Cost	Timing (Year)	Cycle (Years)
Concrete Balcony Slab Repairs and Waterproofing.	2	\$225,000	2030	20



1. STRUCTURE

1.3 PARKING GARAGES

BRIEF DESCRIPTION:

There are open air, single story parking garages occupying the majority of the 1st floor at each building.

The garages are accessed by grade-level entrances. The entrance for Building A is on the south elevation of the building and is accessed from the garage of Building B, which in turn is accessed from the east side off of Edge Street. The garages for Buildings C and D are connected and access is at the west side of Building C off of 224th Street.

The garage floors are concrete slab-on-grade.

The garages at Buildings A and B extend beyond the building footprint (east end of Building A and west end of Building B) leaving the roof deck exposed. Similarly, an exposed roof deck is formed where the garages at Buildings C and D extend between both buildings.

MAINTENANCE, REPAIR AND RENEWAL HISTORY:

No significant capital projects were reported to have been completed in relation to the parking garages.

PRESENT CONDITIONS AND RECOMMENDATIONS:

Garage Roof Slabs

The garage roof slabs are not protected by a waterproofing membrane. During our review we noted active water leakage to varying extents below all three areas of exposed roof slab. Spalled concrete was noted at several soffit locations at Buildings A and B. The soffit at Building C showed extensive concrete delamination, exposed and corroded reinforcing steel. The top surfaces of the roof slabs were chain dragged and only localized areas of “hollow” sounding concrete were encountered. These were typically associated with exposed reinforcing steel that appears to have been laid within insufficient cover.



Photo 7: Building B garage roof deck overview.



Photo 8: Buildings C/D Garage roof deck overview.



Photo 9: Active water leakage through roof deck at Building A maintenance space



The lack of waterproofing and uncontrolled water leakage has resulted in concrete deterioration ranging from moderate at Buildings A and B to severe at Buildings C and D. Repairs are required to address the current level of concrete deterioration, and should be completed soon to limit ongoing structural deterioration. In the interim, loose concrete at risk of falling should be immediately removed from the underside of the slabs to mitigate the safety risk. The application of a pedestrian waterproofing membrane has also been budgeted in order to mitigate future leakage and deterioration. A condition assessment including chain drag, half cell survey and chloride testing should be completed in 2023 prior to the work in order to clarify conditions and budgets, and to confirm that the slab can continue to be safely used until repairs are completed.

Slab-On-Grade

There are some cracks in the concrete slabs-on-grade. However, we noted only limited differential settlement. This suggests that there are no significant sub-grade problems. As the cracking is not affecting use, we have not budgeted for repair.

CAPITAL PROJECTS:

Description	Classification	Present Cost	Timing (Year)	Cycle (Years)
-------------	----------------	--------------	---------------	---------------

Garage Roof Deck Concrete Repairs and Waterproofing.	2	\$772,000	2024	30
--	---	-----------	------	----



Photo 10: Building B – Soffit delamination and spalling.



Photo 11: Buildings C/D – Active water leakage.



Photo 12: Building A maintenance space - Active water leakage through roof deck and spalling concrete.



2. BUILDING ENVELOPE

2.1 EXTERIOR WALLS

BRIEF DESCRIPTION:

The exterior walls are clad in a masonry veneer. The bricks are vertically supported by metal shelf angles. The method of lateral connection is unknown. Weep holes located at the base of each masonry panel suggest that the walls are intended to function as a drained system. There are vertical control joints to accommodate thermal movement. No architectural drawings were available, but we assume that the interior of the exterior walls are insulated.

Prefinished sheet metal spandrel panels have been installed below windows in the stairwells and ends of corridors.

The joints at the perimeter of windows and exterior doors are typically sealed with a flexible caulking material.

MAINTENANCE, REPAIR AND RENEWAL HISTORY:

No significant capital projects were reported to have been completed in relation to the exterior walls.

PRESENT CONDITIONS AND RECOMMENDATIONS:

We were not made aware of any reports of active water leakage through the exterior walls. We noted no evidence of water leakage (staining and deterioration) on interior surfaces in areas reviewed.

We noted the following deterioration:

- There is some visible mortar joint deterioration at the knee walls adjacent the south-west stair from the Building C/D garage roof deck to grade. There is no cap stone on the wall at the stairs and no overhang on the adjacent wall which is concentrating water at this location.
- There are vertical and step cracks between window openings, in the field of the wall and at some corner locations.



Photo 13: Typical exterior masonry clad walls.



Photo 14: Step cracking at window opening.

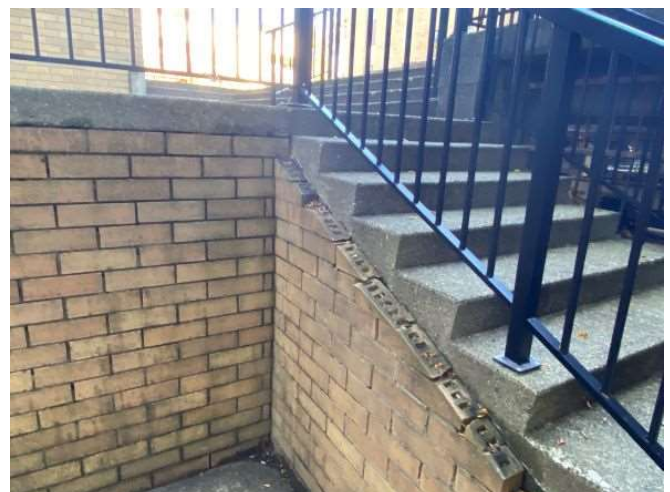


Photo 15: Deteriorated masonry at stairs with missing cap stone.



Where checked, the exterior sealants are in poor condition or appear to have never been installed (vertical control joints).

The current masonry deterioration is generally limited and can be addressed in a phased approach as part of regular maintenance at a cost below the report threshold.

Despite the majority of joint sealants appearing to have never been installed there is very little evidence that this has been detrimental to the cladding performance. We assume that this is largely due to the cladding being a drained system which means the outer surface does not need to be perfectly watertight to perform satisfactorily. However, based on the age of the building and current conditions we have budgeted for general sealant replacement within the report term.

CAPITAL PROJECTS:

Description	Classification	Present Cost	Timing (Year)	Cycle (Years)
Sealant Replacement	3	\$250,000	2028	20



Photo 16: Unsealed masonry control joint.



Photo 17: Poor sealant application at door jamb and no sealant at control joint.



2. BUILDING ENVELOPE

2.2 WINDOWS AND EXTERIOR DOORS

BRIEF DESCRIPTION:

There are aluminum framed windows with both fixed and operable (horizontal sliding) double-glazed lites in non-thermally broken frames. Sliding windows have pile weatherstripping.

With the exception of Building A there are aluminum-framed “storefront” glazing system with single-glazed lites at the 1st floor main entrance to the buildings. Several of these are wired glass.

The exterior doors include:

- *Balconies:* Aluminum framed sliding doors with double-glazed lites.
- *Main Entrances:* Double aluminum framed doors with single-glazed lites. With the exception of two panes at each of Buildings C and D, all the doors have wired glass.
- *Garage Entrances:* Overhead metal picket doors with mechanical operators.
- *Secondary Exits:* Steel doors in steel frames.

MAINTENANCE, REPAIR AND RENEWAL HISTORY:

No significant capital projects were reported to have been completed in relation to the windows or exterior doors.

PRESENT CONDITIONS AND RECOMMENDATIONS:

We understand that there are no reports of active water leaks at the windows or exterior doors. However, moderate to severe condensation was noted on a number of the window and balcony door glazing and frame surfaces during our review. The tenants we interviewed reported that this is a typical problem that requires daily attention to keep the moisture under control. Despite this, only local paint deterioration was noted on the interior window sills.



Photo 18: Typical balcony sliding door.



Photo 19: Typical operable window.



Photo 20: Storefront glazing and entrance door at Building B.



Failed IGUs were noted throughout the complex and replacements are required at a cost below the report threshold. Based on seal dates observed in the mid to late 2000's the practice has been to replace as needed as part of regular maintenance. We assume that this practice will continue and have not budgeted for wholesale replacement.

The windows and doors in the apartment units appear to be original and have exceeded their typical life expectancy. The windows and doors do not provide the same insulating and water/air leakage performance as modern units. Replacing the windows and doors with thermally-broken or vinyl-framed double-glazed units with low-e coatings would help improve resistance to condensation, limit air and water leakage and reduce heat loss and energy costs.

As we understand there is no plan for broad scale replacement of the apartment windows or doors, we assume the windows could likely be maintained as-is over the report term with replacements completed as-needed at a cost below the report threshold. This strategy should be revisited by the Owner, particularly since it may be more cost effective to replace the windows and doors in greater number due to mobilization costs and economies in scale. We assume that local repairs to address leaks and broken hardware will be carried out as-needed funded out of operating budgets.

The storefront glazing and other exterior doors were operable where checked. Corrosion of the steel frame and door was recorded at one exit location (NW stair exit Building C). We assume that exterior doors will be repaired or replaced on an as-needed basis funded out of operating budgets. Capital expenditures are not anticipated within the report term.

Wired glass does not safely withstand human impact. The wire embedded in the glass is meant to hold the material together after it breaks in a fire, reducing the spread of flames, smoke and hot gasses. The wire accomplishes this, but when the assembly breaks from human contact, the resulting jagged glass shards and strong wire can cause lacerations to anyone moving forcefully through the broken material.

In February 2017, the Canadian General Standards Board withdrew the previous standard for wired glass and replaced it with CAN/CGSB 12.1–2017, Safety Glazing. The updated standard now covers all forms of safety glazing, including tempered and laminated glass as well as glass products with a safety film.

While the wired glass used in this building does not meet the current standard, CGSB Standards are not mandatory until adopted by Code. The new Standard will come into effect in the 2020 National Building Code which was expected to be issued in December 2021 and has been reportedly delayed until sometime in 2022. Even then it will be some time before it is adopted by the Province of British Columbia and then it still only impacts new construction. Given the safety aspects involved, municipalities may adopt retroactive measures for existing buildings at any time after the 2020 NBC is issued.

The wired glass is likely to require replacement with glazing that meets CAN/CGSB 12.1–2017 at some point in the future, but the timing/details cannot be predicted. In the interim, we have not budgeted for replacement at this time as the retroactive requirements are not likely to come into effect during the reporting term.



2. BUILDING ENVELOPE

2.3 ROOFS

BRIEF DESCRIPTION:

Roofs on each building include the main and elevator penthouse as well as main entrance canopies and sloped roofs over smaller 2nd floor auxiliary spaces on each building including management office, storage spaces and units. The roofs are all conventional systems with a modified bituminous membrane.

The membrane flashings at the perimeter of the roofs are covered with sheet metal flashing.

Internal area drains provide drainage at the main roofs. The exception to this is one location on Building D where a retrofit drain has been added to a low spot which drains through the parapet overhang to a downspout discharging onto the deck below. The elevator penthouse roofs have scupper drains and downspouts which drain onto the lower main roof. The auxiliary space roofs typically drain to a perimeter gutter and downspout that discharges to the garage roof deck. There are overflow scuppers through the parapets on the main roofs.

There is a metal roof access hatch with a metal ladder accessed from the 3rd floor stair landing in each building.

MAINTENANCE, REPAIR AND RENEWAL HISTORY:

~2015: Overlaid Building C roof with new modified bituminous system based on our observations on site.

PRESENT CONDITIONS AND RECOMMENDATIONS:

There have been localized issues with water leakage at the roofs resulting in local repairs. From our review, much of this may be the result of blocked drains leading to water depths in excess of penetration flashings. The roofs should be checked regularly and debris (leaves and moss) removed to ensure drainage remains clear.



Photo 21: Widespread blisters, ridges and worn membrane on Building B roof.



Photo 22: Patches at ridges on Building D.



Photo 23: Extreme ponding water on Building A roof. Note that water level has dropped 3" from max height.



BUILDING CONDITION ASSESSMENT

There are blisters, ridges and cracks, and open seams in the older modified bitumen roofs. There are also areas where water ponds and vegetation growth.

The membrane on Roofs C and D have been installed perpendicular to the drainage slope which is contrary to roofing standards. The membrane seams are not shingled as a result and do not shed water as easily. It may also have something to do with movement (up slope slumping) observed in the Building D membrane.

Exposed modified bitumen roofs in the Lower Mainland climate tend to have a serviceable life of 20 years before they need to be replaced. This life expectancy assumes that proper materials were installed at the time of construction and proper application procedures were followed. The main and lower roofs at Buildings A, B and D will require replacement within the report term.

The roofs should be evaluated before replacement. This will provide for a more accurate replacement scope and budget as roofing prices can fluctuate significantly from year to year. The entrance canopy eave framing is sagging. Building D is the worst with the eave framing rotted and the gutter sagging. We assume that local repairs to the roofs will be carried out as needed funded out of operating budgets.

CAPITAL PROJECTS:

Description	Classification	Present Cost	Timing (Year)	Cycle (Years)
Replace Roof at Building B	3	\$743,000	2024	20
Replace Roof at Building D	3	\$611,000	2025	20
Replace Roof at Building A	3	\$611,000	2029	20



Photo 24: Overview of Building C roof.



Photo 25: Sloped roof over office space and Unit 115 at Building B.



Photo 26: Sagging eave at Building D canopy.



3. SITE

3.1 HARD LANDSCAPING SURFACES

BRIEF DESCRIPTION:

The hard landscaping surfaces include the following:

- *Roadways and Parking Areas:* There is an asphalt paved roadway that runs through the complex extending from 224th Street on the west side to Edge Street on the east. The west end includes parking for approximately 30 vehicles. Curbs include precast concrete and asphalt, depending on location. The garage entrances at the east and west sides of the site are concrete paved as is the drive between the A and B building garages.
- *Building Entrances:* Quarry tile on concrete
- *Walkways:* There are typically concrete paved walkways throughout the complex with some areas of concrete and interlocking pavers and asphalt paving.
- *Stairs:* There are concrete stairs from grade level to the garage roof decks.

MAINTENANCE, REPAIR AND RENEWAL HISTORY:

No significant capital projects were reported to have been completed in relation to the hard landscaping surfaces.

PRESENT CONDITIONS AND RECOMMENDATIONS:

Local repairs and some replacement work has been carried out to the hard landscape surfaces throughout the complex over the years.

Most of the hard landscaped surfaces are in poor to fair condition with:

- Extensive cracking and deterioration throughout many asphalt paved areas,
- Cracked and broken curbs, and
- Uneven walking surfaces creating potential trip hazards throughout the complex.



Photo 27: Asphalt pavements at east end of main drive.



Photo 28: Asphalt pavements at west end of main drive.



Photo 29: Concrete pavements between Building A and B garages.



Immediate patch repairs are required at some locations to maintain safe conditions, which we assume will be carried out as maintenance at costs below the report threshold.

As we understand there is no plan for broad scale replacement of the asphalt or concrete paved surfaces, we have budgeted for phased replacement of the paved surface.

Repairs to the concrete stairs to the garage roof deck have been included in the waterproofing and concrete repairs outlined in the Garage Section of this report.

CAPITAL PROJECTS:

Description	Classification	Present Cost	Timing (Year)	Cycle (Years)
Phased Replacement of Asphalt Pavements (30%/phase)	3	\$60,000	2025 2028 2031	3



BUILDING CONDITION ASSESSMENT QUESTIONNAIRE (COMPLETED ON SITE)

SENSE ENGINEERING'S
CONTACT AND FIELD
REVIEWER

CHRIS LOVE

SCHEDULED SITE REVIEW
DATE/TIME

TUESDAY, NOVEMBER 15, 2022 AT
8:30AM

PROJECT NO.: 22VA094-42

QUESTIONNAIRE RESPONSES
BY:

MARIA TROTEA, CAPREIT
ASSOCIATE PROPERTY MANAGER

YEARS AT BUILDING:

BUILDING DRAWINGS:

ARCHITECTURAL:
PAPER/ELECTRONIC/LIMITED/NONE

STRUCTURAL:
PAPER/ELECTRONIC/LIMITED/NONE

BUILDING NAME:	QUEEN ANNE APARTMENTS	
BUILDING ADDRESS(ES):	12184, 12186, 12188 AND 12190 224TH STREET, MAPLE RIDGE	
DATE CONSTRUCTED:		# OF BUILDINGS: 4
# OF FLOORS:	3	# OF UNITS:
# OF GARAGE LEVELS:		ROOF ANCHORS:
ANY CRAWL SPACES?		ANY FOUNDATION SUPPORT PILES, OR SIMILAR?
ANY EXTERIOR MEANS OF EGRESS AND THE BUILDING IS OVER 3 STOREYS HIGH?		

Active leaks into the parking garage?

Structural deterioration or inadequacies?

Exterior wall leaks?

Window leaks?

Exterior door leaks?

Roof leaks?

History of Past Repairs:

Balconies:	2020-2021: Rebuilt balconies, including new waterproofing and railings
Balcony Guards:	
Suspended Access:	
Parking Garage:	
Exterior Walls:	
Windows:	
Exterior Doors:	
Roofs:	



APPENDIX C – LIMITATIONS

No party other than the Client (*Canadian Apartment Properties REIT*) shall rely on the Consultant's work without the express written consent of the Consultant (*Sense Engineering Ltd.*). The scope of work and related responsibilities are defined in the Consultant's proposal and Conditions of Assignment. Any use which a third party makes of this work, or any reliance on or decisions to be made based on it, are the responsibility of such third parties. Decisions made or actions taken as a result of our work shall be the responsibility of the parties directly involved in the decisions or actions. Any third party user of this report specifically denies any right to any claims, whether in contract, tort and/or any other cause of action in law, against the Consultant (including Sub-Consultants, their officers, agents and employees).

The work reflects the Consultant's best judgement in light of the information reviewed by them at the time of preparation. Unless otherwise agreed in writing by the Consultant, it shall not be used to express or imply warranty as to the fitness of the property for a particular purpose. This is not a certification of compliance with past or present regulations. No portion of this report may be used as a separate entity; it is written to be read in its entirety.

This work does not wholly eliminate uncertainty regarding the potential for existing or future costs, hazards or losses in connection with a property. No physical or destructive testing and no design calculations have been performed unless specifically recorded. Conditions existing, but not recorded, were not apparent given the level of study undertaken. Only conditions actually seen during examination of representative samples can be said to have been appraised and comments on the balance of the conditions are assumptions based upon extrapolation. We can perform further investigation on items of concern, if so directed.

Only the specific information identified has been reviewed. The Consultant is not obligated to identify mistakes or insufficiencies in the information obtained from the various sources or to verify the accuracy of the information.

The Consultant was not to investigate or provide advice, and is not investigating or providing advice, about pollutants, contaminants, hazardous materials or communicable diseases/viruses.

The Client and other users of this report expressly deny any right to any claim, including personal injury claims, which may arise out of pollutants, contaminants or hazardous materials, including but not limited to asbestos, mould, mildew or other fungus.

Budget figures are our opinion of a probable current dollar value of the work and are provided for approximate budget purposes only. Accurate figures can only be obtained by establishing a scope of work and receiving quotes from suitable contractors.

Time frames given for undertaking work represent our opinion of when to budget for the work. Failure of the item, or the optimum repair/replacement process, may vary from our estimate.

The liability of Sense Engineering is limited to the Client in Contract and Tort to the extent and time period identified in our proposal. The Client expressly agrees that the individuals engaged by the Consultant shall have no personal liability to the Client in respect of a claim, whether in contract, tort and/or any other cause of action in law. The Client expressly agrees that it will bring no proceedings and take no action in any court of law against any of the individuals in their personal capacity.

