

### Attachment E Owner Submissions

### **Kathleen Stevens**

From: Bernita Boersma <bernitaboersma@hotmail.com>

Sent: Thursday, January 13, 2022 12:44 PM

**To:** Kathleen Stevens

**Subject:** [EXTERNAL] Letter for LUPC

**Attachments:** 4b6ba981-acf3-471b-b9f4-9ca49d83dbcc.png; 349 Cumberland St Demolition

Retention Letter.pdf

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### Attention LUPC

I have evaluated the retention of the home. The contractor's I have spoken to with regards to retaining and renovating the building, all recommend adding a second floor, and are unable to give a concrete cost per square foot due the large number of deficiencies and items that are not to current code.

The quotes I have received for entering the HRA and renovating the building and adding a second floor will cost 25% more than a new build

As per quote from the attached document:

"The building was built in the Mission Revival style and retains many of its original features including the symmetrical shaped roof parapet, the narrow tile roof segment cantilevered from the roughcast smooth stuccoed wall surface, arched front door openings and windows with a segmented upper portion. Together these create heritage value, which is considered an asset to the community."

A heritage agreement may not accomplish the above as the features may not be maintained with a second floor and modifications to bring the building to code.

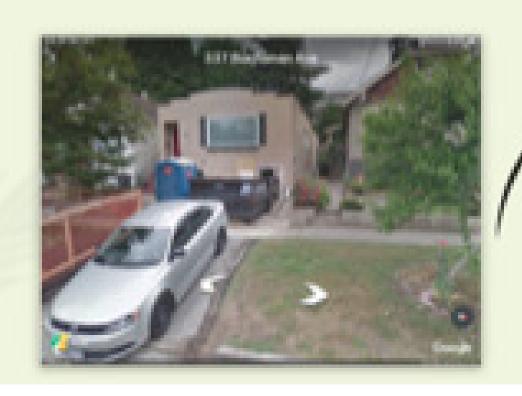
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I have seen another mission revival home in New Westminster enter into an HRA; if I use the Buchanan street home as a "standard" of what can be done, they were able to remove all the features given as the reason for heritage status (in the attached document). The Buchanan home removed the:

- -Symmetrical shaped roof parapets
- -the stucco

-Added a very modern looking second floor addition.

I am not clear on how the Buchanan HRA is an example of retaining a home of heritage interest, when the heritage features were removed. The Buchanan home does not appear to add heritage value and actually looks like a very modern home. The Buchanan home set a precedent and essentially the city allowed the owner to enter an HRA and allowed removal of all aspects that made it have heritage value. Given, the choice of renovating my home to make it look like a modern home under an HRA, I would prefer to build a craftsman home.







2021 April 14 File: 13.2606.06 Doc No.: 1805943

Bernita Boersma 349 Cumberland Street New Westminster BC V3L 3G4

Dear Ms. Boersma:

Re: Heritage Retention at 349 Cumberland Street, New Westminster

Your application for heritage review, received on March 22, 2021 indicates that you are considering the demolition of the 82 year old building at 349 Cumberland Street (constructed in 1939). Although not a formally protected heritage building, it has been identified as having heritage value with its inclusion on the City's Heritage Resource Inventory. The building was built in the Mission Revival style and retains many of its original features including the symmetrical shaped roof parapet, the narrow tile roof segment cantilevered from the roughcast smooth stuccoed wall surface, arched front door openings and windows with a segmented upper portion. Together these create heritage value, which is considered an asset to the community.

The site is currently zoned Duplex Districts (RT-1) and development beyond that, such as additional density, subdivision or stratification would require a development application. It is the City's expectation that redevelopment on properties with an identified heritage asset is managed through a <a href="Heritage Revitalization Agreement">Heritage Revitalization Agreement</a> (HRA). In exchange for retention of a heritage building and some restoration work, an HRA allows the City to provide non-financial incentives in order to make it viable to conserve the property.

As outlined in previous correspondence from Planning staff, there are multiple development options available to you thorough an HRA. These would not be available without retention of the historic asset. The HRA options could vary based on lot configuration, density, unit count, tenure (e.g., stratification or rental), and the form of infill housing. If the eventual intent is for a project which includes three or more units, and/or a subdivision, that could only be considered through an HRA.

Should you choose to proceed with demolition, the heritage value of the house means that the demolition application would be reviewed by the Community Heritage Commission (CHC) and City Council. Council could choose to issue a Temporary Protection Order. However, there is no legal protection on the site, and a demolition permit cannot be indefinitely withheld without Council approval. Given the current volume of applications, the next available CHC meeting that we could bring forward your item on is Wednesday, June 2, 2021 at 6pm. Should you wish to provide further information for the CHC to consider, the applicant submission deadline is May 19, 2021.



If you have any questions about the Heritage Review Process or for a Heritage Revitalization Agreement, please feel free to contact me by email at <a href="mailto:kstevens@newwestcity.ca">kstevens@newwestcity.ca</a>.

Kind Regards,

Kathleen Stevens,

Heritage Planning Analyst

cc. Rupinder Basi, Supervisor of Development Planning



### ABOUT

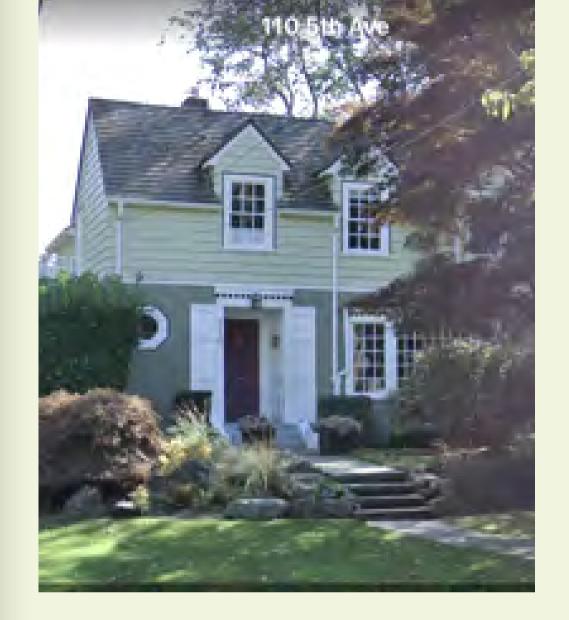
# Bernita Boersma

Bernita Boersma has been a resident of New Westminster for for 40 years having lived in 3 homes in various neighbourhoods





# Agenda





Rationale Statement
Condition Report
Overall Findings
Plan for the Site
Appendix

## Rationale Statement



349 and 351 Cumberland St home is at end of life and would require significant investment to continue to live in the home.

### 349 AND 351 CUMBERLAND ST

# Engineering & inspection report









### Facility condition index at 38.18%

A facility condition between 10% and 30% is poor condition, and anything over 30% is critical condition normally requiring replacement.

## Expenditures to maintain property would be over \$200K

This would include foundation work, new windows, new stucco, resurface roof, and new skylights.

## Capital costs are 300% of the building's value

There is significant investment required to make the building habitable over the next 10 years

### Building is not up to seismic code

It is likely that any major seismic activity will damage the structural elements of the home, placing me and my tenants at risk

# Overall Findings







ENGINEERING
REPORT
RECOMMENDS
DEMOLITION

NICKEL BROTHERS
IS UNABLE TO
MOVE STRUCTURE

THE PROPERTY IS
UNDERUTILIZED,
WITH EACH UNIT
ONLY HAVING 2 BED
AND 1 BATHROOM



### MY Plan

Craftsman style home to align with the look and feel of the community. It will include some key features such as veranda to retain the historical look and feel.

Additionally, this home will provide key benefits with regards to energy efficiency ensuring that the environmental footprint is minimized.





# Appendix

# PANISH REVIVAL DOTTOLIO

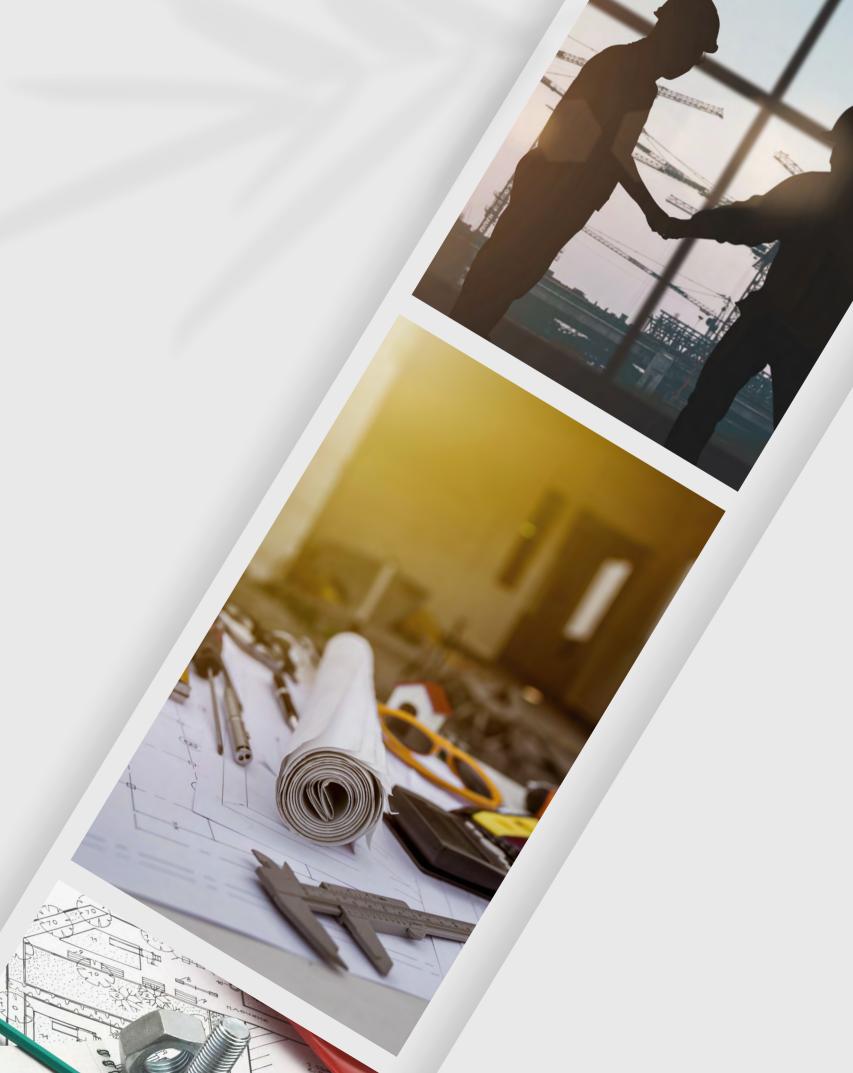








- Engineering report
- Nickel Brother report
- Building drawings





September 8, 2021

Ms Bernita Boersma 349 Cumberland St New Westminster, BC V3L 3G4

Re: Relocation Assessment for house located at 349 Cumberland Street, New Westminster

Dear Ms. Boersma,

Thank you for your consideration to repurpose this heritage duplex rather than demolishing it. Unfortunately, our Operations Team has assessed the house and concluded the house is not moveable due to the following:

- 1. The grade on Cumberland is too steep for too great a distance to transport such a heavy structure safely
- 2. The dimensions of the structure are surpassing what roadways and other immovable obstacles can accommodate on route to a barge location

All the best with your project, and please call on us again if the opportunity arises in the future.

Sincerely,

**Ronel Drever** Nickel Bros House Moving Ltd.



### **ENGINEERING INSPECTION & REPORT**

on

### 349 and 351 CUMBERLAND ST NEW WESTMINSTER BC,

for

Bernita Boersma



September 2021

### **CMG Engineering Services Corporation**

1500 West Georgia Street, 13th Floor Vancouver BC V6G 2Z6 CALGARY: 403 800 0399 VANCOUVER 778 800 2099 VERNON: 250 800 2095

EDMONTON: 780 800 0040

email: engineering@inspectionengineers.ca

### CMG ENGINEERING SERVICES CORPORATION ENGINEERING PROPERTY / BUILDING CONDITION ASSESSMENT

### **ES.1 EXECUTIVE SUMMARY**

CMG ENGINEERING SERVICES CORPORATION (hereinafter known as CMG) was commissioned by Bernita Boersma to conduct a Property / Building Condition Assessment (PCA) of the multi-family residential property located at 349 and 351 CUMBERLAND ST NEW WESTMINSTER BC (hereinafter known as the Site). The PCA was undertaken for general due diligence purposes and was completed in general accordance with current industry standards [American Society for Testing and Materials (ASTM) E-2018-15].

This PCA is intended for due diligence purposes only, and does not constitute a building inspection, guarantee, warranty, or code compliance review. As requested, this PCA will not include an assessment of the non-structural elements such as the asphalt and concrete paved areas, curbing, concrete walkways, landscaping, and hydrants, etc.

Selected photographs can be found in the photographic annex in Appendix B.

### ES.1.1 PROPERTY DESCRIPTION

The Subject Property is located on the north side of CUMBERLAND ST in a predominately residential neighbourhood of Sapperton in New Westminster BC. For the purposes of this report it is assumed that CUMBERLAND ST is aligned in an east-west orientation although this may not exactly be the case.

The Subject Property is approximately rectangular in shape. CMG used Google Earth to calculate the area of the Subject Property, and found it to be approximately 850m² in area. BC assessment lists the property as being 10281 sqft or 944m². The Subject Property has a down gradient from the north-west to south-east and is graded approximately evenly with the neighbouring properties in all directions with the exception of a small retaining wall on the west perimeter. The exterior ground surfaces at the Site are covered by vegetation on all sides of the property with a concrete covered parking area on the north side of unit 351, and a gravel surface parking area north of unit 349 on the north side the front of the property. CMG observed landscaped areas around the other areas of the Subject Property. Neither snow nor ice limied the viewing of the exterior features of the Subject Building and Subject Property.

For the purposes of this report, the multi-tenant duplex was divided into two sections – unit 349, or 349 CUMBERLAND ST, on the east side of the Subject Building, and unit 351, or 351 CUMBERLAND ST, on the west side of the Subject Building. Each unit is a single-family dwelling. Based on information from BC Assessment, the original portions of the Subject Building were reportedly constructed in 1940, and are comprised of one storey with a walk-out lower level on the north side of both units that was approximately half the area of the upper levels. CMG used Google Earth to measure the approximate building footprint, and this was calculated to be approximately 170m² including overhangs. CMG measured the wall lengths and same up with a similar number. BC Assessment lists unit 349 as being 80.45m² in area with the lower level at 43.48m². CMG could not find a similar assessment for unit 351, and we shall assume it is similar for the purposes of cost estimation.

All construction on this property is above grade on the east side, and approximately 1.5m below grade on the west side. No underground parking exists at the Subject Property. An estimated 4 parking spaces service the Subject Property.

CMG had no access to the original blueprints for the Subject Building, and all assessment was made by visual observation and from experience with similar buildings.

The construction of the original portions of the building was likely wood framed construction, likely supported by a shallow concrete foundation on a strip footing. CMG observed evidence of a poured concrete floor slab in the lower levels. The roof system was an approximately 2 in 12 sloped, rolled asphalt surface with metal counter and cap flashing that give the front of the Subject Building a castle-like appearance. The roof surface is likely supported by a wood deck and wood joists. CMG observed a painted stucco exterior finishes on the building.

### ES 1.2 Assessment

Maintenance Programs: The building is generally in good condition and appears to be well maintained. CMG observed evidence that repairs are generally completed as deficiencies occur. CMG assessed the facility and based on BC assessment rated floorspace area and from the basic replacement rate of \$2 200 (2021) CAD we estimate the replacement cost of the Subject Building to be approximately \$545 303 (2021) CAD. This is much higher than the rated current value of the building by BC assessment of \$70 800 (2021) CAD. With an estimated 10 year capital investment cost of \$208 200 (2021) CAD, we can calculate the approximate facility condition index at 38.18%. A facility condition less than 10% indicates the facility is in good condition, between 10% and 30% is poor condition, and anything over 30% is critical condition normally requiring replacement. In spite of conservative square footage calculations, and a higher than normal replacement cost rate, we still get an FCI well over 30%. It should also be noted that the recommended capital replacement costs are 300% of the building's value. Based on these figures, and from a financial and engineering perspective, CMG recommends the building be demolished and rebuilt.

There were no major repairs that were reportedly completed at the Subject Property within the past three years:

### **CATEGORY I: Immediate Repairs**

Immediate repairs are defined as actions necessary to prevent further significant deterioration or to correct an unsafe situation. Based on CMG's observations during the Site Visit, review of maintenance and repair documents, and the age of the building systems, no immediate repair items have been identified.

### ES 1.3 Capital Expenditures

Capital Expenditures required to maintain the property value over a 10 year term have a total dollar amount of \$208 200 (2021) CAD. The costs presented do not necessarily reflect routine maintenance items that typically would be covered under operating expenses [e.g. landscaping contracts or routine heating, ventilation, and air conditioning (HVAC) maintenance], but rather estimates for conventional item replacement costs.

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### 10 year Capital Repair and Replacement **Budget**

Description	Area(m²) or Length (m)	unit cost / m <sup>2</sup>	Туре	Life left (yrs)	Appx Repl Cost
Flatwork around Subject Building exterior	120	\$75.00		1	\$9,000.00
Add Retaining wall and catch basin on north side				1	\$6,000.00
Underpinning the foundation walls				1	\$90,000.00
Replace stucco walls, and wall sheeting	200	\$100.00		1	\$20,000.00
Replace 11 windows and one door				1	\$12,000.00
Resurface rooftop	170	\$200.00		1	\$34,000.00
Replace Counter and Cap Flashing	64	\$50.00		1	\$3,200.00
Skylight replacement				1	\$10,000.00
Replace Sanitary Sewer				1	\$10,000.00
Replace water supply				1	\$10,000.00
Replace Rheme Hot Water Heater (unit 349)				4	\$2,000.00
Replace Bradford White Hot Water Heater (351)				5	\$2,000.00

Total estimated approximate 10 year capital replacement budget

\$208,200.00

Unit 349 upper level area from BC Assessment

80.45

Unit 349 lower level area from BC Assessment

43.48

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Unit 351 upper level area from BC

Assessment 80.45

Unit 351 lower level area from BC

Assessment 43.48

Total internal building area (m2) 247.87

Facility replacement based on \$2200 / m2 247.87 \$2,200.00 \$545,303.68

### **Facility Condition Index (FCI)**

38.18%

The cost estimates provided are based on the condition of the Subject Property observed during the site reconnaissance on 2021/09/08 (Site Visit). Estimates of quantities and areas are based on field observations and site interviews. Item repair or replacement costs are approximate only, and are based on site assessor experience with similar structures. Quotations from qualified contractors should be obtained if and when a specific item is to be addressed.

For CMG Engineering Services: Blair Lowe, P. Eng., Principal and Chief Engineer



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### **INTRODUCTION:**

The sections that follow present a brief overview of the assessment methodology, property/facility description, observations, and conclusions regarding the facility elements conditions and required maintenance items. This Building/Property Condition Assessment (PCA) is intended for due diligence purposes only and does not constitute a building inspection, guarantee, warranty, or code compliance review.

CMG ENGINEERING SERVICES CORPORATION (hereinafter known as CMG) was commissioned by Bernita Boersma to conduct a PCA of the multi-family residential property located at 349 and 351 CUMBERLAND ST NEW WESTMINSTER BC (hereinafter known as the Site). The PCA was undertaken for general due diligence purposes and was completed in general accordance with current industry standards [American Society for Testing and Materials (ASTM) E-2018-15].

The building assessment was conducted by Mr. Blair Lowe P.Eng. on 2021/09/08 (hereinafter known as the Site Visit). During the Site Visit, Mr. Lowe was accompanied by Ms Boersma, Property Maintenance Manager and Owner who has been working at the Subject Property for approximately 15 years. The purpose of the assessment was to visually assess the present condition of the on-site property elements, buildings and related structures, providing capital expenditure estimates to be considered in the completion of a financial transaction.

As requested, this PCA does not include an assessment of the non-building elements including the asphalt covered areas, curbing, concrete walkways, landscaping, hydrants, etc.

Weather around the start of the site visit was 24 degrees Celsius with a barometric pressure of 101.7kPa and a relative humidity of 51% as measured at Pitt Meadows BC at 15:00 on 2021/09/08 for Environment Canada.

### PROPERTY DESCRIPTION:

The Subject Property is located on the north side of CUMBERLAND ST in a predominately residential neighbourhood of Sapperton in New Westminster BC. For the purposes of this report it is assumed that CUMBERLAND ST is aligned in an east-west orientation although this may not exactly be the case.

The Subject Property is approximately rectangular in shape. CMG used Google Earth to calculate the area of the Subject Property, and found it to be approximately 850m<sup>2</sup> in area. BC assessment lists the property as being 10281 sqft or 944m<sup>2</sup>. The Subject Property has a down gradient from the north-west to south-east and is graded approximately evenly with the neighbouring properties in all directions with the exception of a small retaining wall on the west perimeter. The exterior ground surfaces at the Site are covered by vegetation on all sides of the property with a concrete covered parking area on the north side of unit 351, and a gravel surface parking area north of unit 349 on the north side the front of the property. CMG observed landscaped areas around the other areas of the Subject Property. Neither snow nor ice limied the viewing of the exterior features of the Subject Building and Subject Property.

For the purposes of this report, the multi-tenant duplex was divided into two sections – unit 349, or 349 CUMBERLAND ST, on the east side of the Subject Building, and unit 351, or 351 CUMBERLAND ST, on the west side of the Subject Building. Each unit is a single-family dwelling. Based on information from BC Assessment, the original portions of the

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Subject Building were reportedly constructed in 1940, and are comprised of one storey with a walk-out lower level on the north side of both units that was approximately half the area of the upper levels. CMG used Google Earth to measure the approximate building footprint, and this was calculated to be approximately 170m² including overhangs. CMG measured the wall lengths and same up with a similar number. BC Assessment lists unit 349 as being 80.45m² in area with the lower level at 43.48m². CMG could not find a similar assessment for unit 351, and we shall assume it is similar for the purposes of cost estimation.

All construction on this property is above grade on the east side, and approximately 1.5m below grade on the west side. No underground parking exists at the Subject Property. An estimated 4 parking spaces service the Subject Property.

CMG had no access to the original blueprints for the Subject Building, and all assessment was made by visual observation and from experience with similar buildings.

The construction of the original portions of the building was likely wood framed construction, likely supported by a shallow concrete foundation on a strip footing. CMG observed evidence of a poured concrete floor slab in the lower levels. The roof system was an approximately 2 in 12 sloped, rolled asphalt surface with metal counter and cap flashing that give the front of the Subject Building a castle-like appearance. The roof surface is likely supported by a wood deck and wood joists. CMG observed a painted stucco exterior finishes on the building.

### **3 SCOPE OF WORK:**

The work carried out by CMG in the completion of this undertaking was developed to reflect the requirements of the ASTM E-2018-15 protocol. Based on the requirements of the ASTM protocol, the subject assessment consisted of the following activities:

- Review of the building/property management relevant records, if provided prior to the site visit or on-site at the time of the site visit;
- Interviews (attempted) with regulatory officials, written approval from the property owner may be required, and personnel associated with the Subject Property;
- Site visit; and
- Evaluation of information and preparation of the report.

### 3.1 LIMITATIONS:

a. This inspection is subject to the usual limitations imposed by ownership of the property by another party, which restrict how we can examine structural detail and services hidden behind wall coverings, ceilings and other fabric. By its nature such an inspection is in some measure partial, covering only those spaces which were unlocked or otherwise open at the time of our inspection. What has been reported is taken as representative of the whole, even though not every square inch can be seen with the same degree of rigour. The report does not warrant absence of PCBs, UFFI, radon gas or asbestos at the property. We make no representation that we have examined the legal status of the property or any part of it or its

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boundaries, nor that we have drawn your attention to all the formalities of all possible compliance to Building Codes and Bylaws.

- b. The Use of this report is subject to the Statement of Limitations presented below. This report was prepared for the exclusive use of Bernita Boersma and to be determined. This report is based on information and data collected during the completion of a Building Condition Assessment of the site carried by CMG Engineering Services Corporation outlined in the scope section above and is based solely on the site conditions encountered at the time of the assessment and the applicable guidelines and standards in place at the time of this investigation. Any use which a Third Party makes of this report, or any reliance on discussions to be made based on it, is the responsibility of such Third Parties. CMG Engineering Services Corporation accepts no responsibility for damages, if any, suffered by any Third Party because of decisions made or actions taken by the report.
- c. The material in this report reflects the judgement of CMG Engineering Services Corporation makes no guarantee for the accuracy or completeness of any third party information. If new information is discovered during future work, CMG Engineering Services Corporation should not be requested to re-evaluate the conclusions presented in this report and to provide amendments as required without renumeration and without being pre-approved by CMG Engineering Services Corporation.
- d. This Assessment does not include, nor is it intended to include, any opinion regarding the suitability of any other structure on the site not in the Scope of this document for any particular function, the integrity of any other on-site buildings not in the Scope of this document or the geotechnical conditions on the site. Inspections of buildings, do not provide compliance with any environmental concerns. Should concerns regarding any issue other than structural matters that arise as a result of investigations, appropriately qualified professionals should address them.
- e. STRUCTURAL: No physical tests were conducted and no samples of building materials were collected. If there is a requirement to assess structural integrity, further analysis of the structural elements should be conducted by a specialist, including physical tests of the materials in accordance with the current applicable Canadian Standards Association (CSA) and ASTM test procedures, where appropriate, to allow determination of the load carrying capacity of the structural elements.
- f. MECHANICAL: The evaluation of the mechanical, plumbing, and electrical systems at the property, such as heating, ventilation and air conditioning (HVAC) systems, included discussions with the site contact, review of maintenance/servicing records for the systems, if provided, and a visual assessment of the units was conducted at the time of the site reconnaissance. The assessment did not include an intrusive investigation of wall and ceiling cavities, and mechanical, plumbing, and electrical systems. No physical tests were conducted on the mechanical, plumbing, and electrical operating systems.
- g. Code Compliance: A detailed code compliance review was not included as part of the scope of work. However, obvious deficiencies and hazardous or dangerous building or construction situations to the best of our knowledge were noted, if and where applicable.
- h. Cost/Quantity Estimates: The estimated costs outlined in this report are based on the conditions observed during the date of the site reconnaissance, and a minimum item repair cost threshold of \$1 000. Estimates of quantities are based on field observations and site interviews. Item repair and replacement costs are approximate only and based on the assessors past

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experience with similar facilities and issues and where applicable, from other knowledgeable sources (i.e. general contractor, licensed electrician, etc.). Quotations from qualified contractors should be obtained if or when a specific item or recommendation is to be addressed.

- i. This investigation did not constitute a detailed audit of Asbestos Containing Materials (ACM's). A more in depth examination of building materials may be required if future renovation, construction, or demolition would cause any potential ACM's to become damaged and/or airborne.
- j. This assessment is subject to any restrictions places by physical obstructions, precipitation, denied access, inaccessible areas, time constraints, cost constraints, readily available documentation, safety considerations, confidentiality, and availability of knowledgable individuals for interview purposes. A building condition assessment is not intended to identify any contamination although we may recommend a Phase I or II Environmental Site Assessment if we happen to see the potential for contamination. Information in this assessment may also change with time and information in this report is only accurate on the inspection date. This building assessment is a compilation and assessment of available data regarding the subject site and in no way should be considered as a recommendation or rejection of a potential property purchase but more a tool to make an informed decision.

k. This report is not to be reproduced or released to any other party in whole or in part, without the express written consent of CMG Engineering Services Corporation.

### **4 OBSERVATIONS:**

### 4.1 Site Observations:

CMG observed main vehicular access to the Subject Property with street parking on CUMBERLAND ST, just south of the Subject Property and municipal sidewalk perimeter. CMG also observed what was likely a municipal laneway on the north perimeter of the Subject Property that provided vehicular access to the driveways for each unit. CMG observed pedestrian access to the Subject Building on one of two concrete walkways. The central walkway had an approximately 600mm long exposed aggregate concrete walkway adjacent and perpendicular to the municipal sidewalk that connected to a concrete stairway under a wrought iron vine arch. The concrete walkway continued to the south side of the Subject Building where it forked to the two curved concrete stairways up to the main entrances to each unit of the Subject Building. The concrete walkway continued east and west of the two stairways to the north and south perimeters of the Subject Building. The north exposed aggregate sidewalk block (likely 600mm x 600mm patio slabs) walkway was adjacent and perpendicular to the municipal sidewalk. This concrete walkway adjoined the east west running walkway by the south perimeter of the Subject Building, and continued northward lined with paving stones to the north-west corner of the Subject Building, A similar but wider (approximately 1200mm x1200mm) concrete patio slab walkway was observed on the east perimeter of the Subject Building that also joined the north-south running walkway by the south perimeter of the Subject Building. The east side walkway continued to the wooden stairway that leads northward, then turned eastward up to the north unit 349 egress doorway. The walkway widened to approximately 1800mm before the stairway to continue around it to a walkway around the north side of the Subject Building. The exposed aggregate patio slabs transitioned to interlocking paving stones westward to an intersection with a north-south running paving stone walkway that led to the lower level unit 349 egress door, that continued northward to the unit 349 gravel surfaced parking area and shed. CMG observed the walkway continuing past a pergola sitting area next to the Subject Building to an approximately 800m high wrought iron gate that



entered the unit 351 property. On the south-east corner of the Subject Building, the walkway transitioned southward to circular, exposed aggregate paving stones that hopped towards the municipal sidewalk in a somewhat diagonal fashion. On the north-west corner of the Subject Building, a timber-lined mixed patio slab and paving stone area led to a wooden stairway to the unit 351 north egress doorway. On the north side of the patio was a circular paving stone path that hopped to the exposed aggregate, likely poured concrete, parking area for unit 351. On the east side of the patio was a timber-nosed paving stone stairway down to the wrought iron outer gate between the units. CMG observed an at-grade egress door on the south side of the east wall that likely gives access to a crawl space/storage area there. CMG observed several stone-lined, approximately north-south running, landscaped retaining walls that stepped the elevation of the Subject Property down from north-west to south-east. CMG observed an approximately 2.5m high hedge on the east perimeter of the Subject Property. On the west perimeter CMG observed shrubs and trees south of the Subject Building, transitioning to a rock garden style retaining wall along the west side of the Subject Building that also included a wooden hatched privacy fence just north of the Subject Building. It is not clear whether the fence is owned by the Client or the neighbour to the west. The Subject Property has a down gradient from the north-west to south-east and is graded approximately evenly with the neighbouring properties in all directions, with the exception of a small retaining wall on the west perimeter.

### 4.1.1 Topography:

The Subject Property has a down gradient from the north-west to south-east and is graded approximately evenly with the neighbouring properties in all directions, with the exception of a small retaining wall on the west perimeter.

### **Storm Water Drainage:** 4.1.2

CMG observed the rooftop eavestrough system go through downspouts into piping in the ground that likely carries it to the weeping/drainage tile system that was installed around the house within the past 10 years. The weeping tile was reportedly connected to the municipal storm drain system around the same time as installation. No catchment basins were observed on the Subject Property, and surface drainage likely travels overland to the neighbouring properties and municipal streets.

### 4.1.3 **Ingress and Egress:**

CMG observed main vehicular access to the Subject Property with street parking on CUMBERLAND ST, just south of the Subject Property and municipal sidewalk perimeter. CMG also observed what was likely a municipal laneway on the north perimeter of the Subject Property that provided vehicular access to the driveways for each unit. CMG observed pedestrian access to the Subject Building on one of two concrete walkways. The central walkway has an approximately 600mm long, exposed aggregate concrete walkway adjacent and perpendicular to the municipal sidewalk that connects to a concrete stairway under a wrought iron vine arch. The concrete walkway continued northward to the south side of the Subject Building where it forked to the two curved concrete stairways up to the main entrances to each unit of the Subject Building. The concrete walkway continued east and west of the two stairways to the north and south perimeters of the Subject Building. The north exposed aggregate sidewalk block (likely 600mm x 600mm patio slabs) walkway was adjacent and perpendicular to the municipal sidewalk and this concrete walkway, adjoined the east west running walkway by the south perimeter of the Subject Building, and continued northward lined with paving stones to the north-west corner of the Subject Building. A similar but wider (approximately 1200mm x1200mm) concrete patio slab walkway was observed on the east perimeter of the Subject Building that also joined the north-south running walkway by the south perimeter of the Subject Building. The east side walkway continued to the wooden stairway that led northward, then turned eastward up to the north unit 349 egress doorway. The walkway widened to approximately 1800mm before the stairway continued around it to a walkway around the north side of the Subject Building. The exposed aggregate patio slabs transitioned to interlocking

paving stones westward to an intersection with a north-south running paving stone walkway that led to the lower level unit 349 egress door, that continued northward to the unit 349 gravel surfaced parking area and shed. CMG observed the walkway continuing past a pergola sitting area next to the Subject Building to an approximately 800m high wrought iron gate that entered the unit 351 property. On the south-east corner of the Subject Building, the walkway transitioned southward to circular, exposed aggregate paving stones that hopped towards the municipal sidewalk in a somewhat diagonal fashion. On the north-west corner of the Subject Building, a timber-lined mixed patio slab and paving-stone area led to a wooden stairway to the unit 351 north egress doorway. On the north side of the patio was a circular paving stone path that hopped to the exposed aggregate, likely poured concrete, parking area for unit 351. On the east side of the patio was a timber-nosed paving stone stairway down to the wrought iron outer gate between the units. CMG observed an at-grade egress door on the south side of the east wall that likely gives access to a crawl space/storage area there.

### 4.1.4 Paving, Curbing, and Parking:

CMG observed an exposed aggregate poured concrete parking area on the north side of the unit 351 property, suitable for two cars to park there. CMG observed a gravel-surfaced and slightly larger parking area on the north side of the unit 349 property. No major defects were observed in the parking facilities for the Subject Property. The approximately 100m<sup>2</sup> (measured from Google Earth) gravel-surfaced parking could be converted to a concrete surface for approximately \$75 / m<sup>2</sup> for a total cost of \$7 500 (2021) CAD.

### 4.1.5 Flatwork:

CMG observed pedestrian access to the Subject Building on one of two concrete walkways. The central walkway had an approximately 600mm-long exposed aggregate concrete walkway, adjacent and perpendicular to the municipal sidewalk that connects to a concrete stairway under a wrought iron vine arch. The concrete walkway continued northward to the south side of the Subject Building where it forked to the two curved concrete stairways up to the main entrances to each unit of the Subject Building. The concrete walkway continued east and west of the two stairways to the north and south perimeters of the Subject Building. The north exposed aggregate sidewalk block (likely 600mm x 600mm patio slabs) walkway was adjacent and perpendicular to the municipal sidewalk and this concrete walkway adjoined the east-west running walkway by the south perimeter of the Subject Building, and continued northward lined with paving stones to the north-west corner of the Subject Building. A similar but wider (approximately 1200mm x1200mm) concrete patio slab walkway was observed on the east perimeter of the Subject Building that also joined the north-south running walkway by the south perimeter of the Subject Building. The east side walkway continued to the wooden stairway that led northward, then turned eastward up to the north unit 349 egress doorway. The walkway widened to approximately 1800mm before the stairway to continue around it to a walkway around the north side of the Subject Building. The exposed aggregate patio slabs transitioned to inter locking paving stones westward to an intersection with a north-south running paving stone walkway that led to the lower level unit 349 egress door, that continued northward to the unit 349 gravel surfaced parking area and shed. CMG observed the walkway continuing past a pergola sitting area next to the Subject Building to an approximately 800m high wrought iron gate that entered the unit 351 property. On the south-east corner of the Subject Building, the walkway transitioned southward to circular exposed aggregate paving stones that hopped towards the municipal sidewalk in a somewhat diagonal fashion. On the north-west corner of the Subject Building, a timber lined mixed patio slab and paving stone area led to a wooden stairway to the unit 351 north egress doorway. On the north side of the patio was a circular paving stone path that hopped to the exposed aggregate, likely poured concrete, parking area for unit 351. On the east side of the patio was a timber-nosed paving stone stairway down to the wrought iron outer gate between the units.



Many of the patio slabs next to the Subject Building were not graded away from the Subject Building. Similarly, the paving stone walkways on the north side of the Subject Property were also graded towards the Subject Building. These conditions facilitate a large amount of storm water that can flow towards the foundation walls and create favourable conditions for differential settlement. The settlement issues will be discussed in the structural section below. Graded poured concrete paths and patios would be the best way to reduce the amount of water next to the foundation, and this could be completed for approximately \$9 000 (2021) CAD, assuming a  $120\text{m}^2$  total area in the flatwork on the east, west and north sides of the Subject Property. A 600mm-high retaining wall with the flatwork directing water to a catch basin north of the north outer perimeter of the Subject Building could also virtually eliminate all storm water from flowing against the north foundation wall for a total approximate cost of \$6 000 (2021) CAD.

### 4.1.6 Landscaping and Appurtenances:

CMG observed several stone lined approximately north-south running landscaped retaining walls that stepped the elevation of the Subject Property down from north-west to south-east. CMG observed an approximately 2.5m-high hedge on the east perimeter of the Subject Property. On the west perimeter CMG observed shrubs and trees south of the Subject Building, transitioning to a rock garden style retaining wall along the west side of the Subject Building that also included a wooden hatched privacy fence just north of the Subject Building. It is not clear whether the fence is owned by the Client or the neighbour to the west. The Subject Property has a down gradient from the north-west to south-east and is graded approximately evenly with the neighbouring properties in all directions with the exception of a small retaining wall on the west perimeter. CMG also observed shrubs and plants next to the Subject Building's foundation walls.

### 4.1.7 Recreational Facilities:

No on-site recreational facilities were observed on the Subject Property.

### 4.1.8 Special Utility Systems:

No special on-site utility systems were observed on the Subject Property.

### 4.2 Structural Frame and Building Envelope:

### **4.2.1** Structural Frame:

CMG had no access to the original blueprints for the Subject Building, and all assessment was made by visual observation and from experience with similar buildings. The usual finishings prevented CMG from observing structural detail within the Subject Building.

The construction of the building was likely wood framed construction, likely supported by a shallow concrete foundation on a strip footing. CMG observed evidence of a poured concrete floor slab in the lower levels. The BC assessment identified the original construction date to be sometime around 1940, and this is likely the case based on the architecture.

CMG observed evidence all around the Subject Building that would suggest that there is extensive differential settlement in the Subject Building. The water flowing around the foundation walls over the years likely softened the soil in various locations that caused the strip footings to settle, and likely crack. This has adversely affected the foundation so that vertical cracks are all over the walls on the inside and outside of the Subject Building. The south-east corner showed the most

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evidence. In an interview with the Client, CMG learned that many of the cracks in and on the outside of the Subject Building opened up in the past three to five years after paint was applied to the stucco in an attempt to seal older cracks.

Internal cracks were also observed in the walls in spite of the Client's continual maintenance and care. Two in particular were observed in the south wall in unit 349 that are further evidence of differential settlement.

This condition will not likely ever change, and the structure will continue to move and shift over time causing water and animal ingress issues. The cracks also affect the stucco's ability to keep water away from the inner walls and CMG observed recent evidence of moisture damage to internal walls in unit 351 lower level.

Underpinning the foundation would be the only permanent way to fix this issue at approximate cost of \$90 000 (2021) CAD.

### 4.2.2 **Building Envelope:**

CMG observed a painted stucco exterior finishes on the building. As discussed in the previous structural section, the stucco walls were in poor condition. Stucco walls will normally last 40 to 60 years, and the likely original stucco walls are now more than 80 years old. Stucco normally becomes wet after rain, and then dries again. The tar paper in this type of building would create a barrier between the outer stucco application, the inner wall sheeting, and studs. Over time the tar paper would eventually degrade, and the moisture would eventually rot the wall sheeting. This can create mould and weaken the wall studs on the Subject Building should they also become wet. CMG learned from an interview with the Client that some previous work on the stucco had already revealed rotten wall sheeting, and the evidence of the internal moisture in the above grade walls of the lower level of unit 349 are also evidence that this condition is likely. CMG used a laser measurement tool to measure the approximate wall heights and widths around the Subject Building. Based on CMG's measurements, the total wall area, not including windows and doors, would be approximately 200m<sup>2</sup>. The cost to replace this would likely be approximately \$100 / m<sup>2</sup> for a total of \$20 000 (2021) CAD including replacement of rotten sheeting. An EIFS (exterior insulated finishing system) would likely be a similar cost, but would also include much higher levels of insulation around the perimeter.

CMG observed 7 wood framed windows in unit 351 and 4 wood framed windows in unit 349. These windows were all in poor condition- not able to be opened and providing poor insulation quality. The main entryway door to unit 349 was also in poor condition and was binding, likely due to differential settlement. The cost to replace the 11 windows and a door would likely be approximately \$12 000 (2021) CAD and this should be completed before the reapplication of the outer wall envelope system so that the windows are properly detailed with drip guards and weep screeds to reduce the chance of moisture ingress around the windows.

### 4.3 **Roofing:**

The roof system was an approximately 2 in 12 slopped rolled asphalt surface with a metal counter and cap flashing over the south, east and west perimeter parapets that give the front of the Subject Building a castle like appearance. The roof surface was likely supported by a wood deck and wood joists.

In an interview during the Site Visit, the Client indicated the slope of the roof was causing heavier rain to travel over the north side eavestroughs and directly onto the ground below. Based on this testimony the roof slope should be reduced.

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CMG observed a lack of granular material on the rolled asphalt surface. The surface also had raised folds in it that was evidence of further degradation. Based on this evidence, the roof surface was in critical condition and should be replaced in the next year at a rate of \$200 / m<sup>2</sup> that will also add an insulation package to reduce the slope of the roof so that the eavestroughs can do their job and reduce storm water next to the north foundation wall. The rate will also include replacement of any rotten roof sheeting and any rotting structural wood in the roof support system. Based on an approximate rooftop surface of 170m<sup>2</sup>, the cost to resurface the roof will be \$200/m<sup>2</sup> \* 170m<sup>2</sup> = \$34 000 (2021) CAD.

The fasteners on the cap flashing were rusted, and this should also be replaced at an approximate cost of \$2 500.

The skylights were cracked, and this will likely continue as long as the building keeps shifting. The cost to replace the 2 central skylights with a similar vented style after underpinning has been completed would be approximately \$10 000 (2021) CAD.

### 4.4 **Building Interior:**

During the Site Visit, CMG observed a well maintained and clean interior.

The upper levels in both units were mostly a hardwood flooring typical of the original construction. WC areas had been upgraded to slate and/or ceramic tile.

The Client indicated the walls were lathe and plaster style walls, and CMG observed a painted surface. The lower level showed some degradation in the east wall as discussed above in the building envelope area. Ceilings were a popcorn style painted texture. Some cracks were observed in the ceiling indicating evidence of either roof or foundation settlement.

The lower level had experienced a large influx of water in the past 10 years, and the Client had dried and reinstalled the wood style flooring there in unit 349 with only minor defects. Unit 351 also had a newer likely polyvinyl chloride (PVC) flooring with the exposed concrete floor slab visible in the mechanical room.

### 4.5 **Mechanical / Electrical:**

### 4.5.1 **Plumbing:**

### 4.5.1.1 Storm Sewer:

See stormwater and roofing sections above for more information.

### 4.5.1.2 Sanitary Sewer:

The sanitary sewer system is likely provided by the greater Vancouver area's municipal sanitary sewer system. The system connects to several large sanitary sewers that are owned and operated by Metro Vancouver. These pipes likely carry wastewater to the Iona Island Wastewater Treatment Plant.

CMG did not see any evidence of sewer back-ups during the Site Visit. Having said that, the sanitary sewer is likely at the end of its life and should be replaced in the next 5 years at a cost of \$10 000 (2021) CAD.

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### 4.5.1.3 Water Supply and Waste Piping:

According to the https://vancouver.ca website, the water in the greater Vancouver area, including New Westminster, is drawn from the watersheds in the North Shore Mountains to be filtered in the Capilano, Seymour, and Coquitlam reservoirs and is delivered to the City by the Metro Vancouver water supply system. The https://vancouver.ca website suggests that some chlorine may be added to the water.

During the Site Visit, CMG observed what was likely the main water supply in the south-east corner of the lower level of unit 349. No water meter was observed there, and the service is not likely metered. The piping that came out of the flooring was a dull grey colour, a possible indicator of lead piping. Besides the evidence of possible lead piping, the piping is likely at an end-of-life condition, and should be replaced at an approximate cost of \$10 000 (2021) CAD.

During the Site Visit CMG observed two hot water heaters – one in each unit's lower level.

In unit 349, CMG observed a Rheme style HW heater that was likely installed in 2011. This unit is likely near the end of its life, and should be replaced likely in no less than 4 years.

In unit 351, CMG observed a Bradford White HW heater that was manufactured in October 2012. This unit should likely have a lifespan of 5 more years.

### 4.5.2 Gas Service and Supply:

CMG observed two FORTIS BC labelled natural gas meters just south of crawl space access door on the east wall. The exposed piping was in satisfactory condition and did not need to be painted. CMG was not aware of any leaks, and did not smell any fumes that might indicate a leak during the Site Visit.

### 4.5.3 Heating Ventilation and Air Conditioning (HVAC):

### 4.5.3.1 Heating:

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CMG observed two natural gas forced heaters in each unit's lower level.

Unit 349 had a mid efficiency furnace that was near its end-of-life. As long as a plumbing and heating company inspects this unit for safety every year, it can be continued to be used until it fails, or the heat exchangers start to rust or any other unsafe condition.

Unit 351 had a high efficiency Goodman furnace. If the goodman unit has a 120V AC motor, it will likely have a lifespan of another 8 to 10 years. The low voltage inductive motors such as those on the Lennox high efficiency furnaces tend to fail within a 5 year period, and are expensive to replace. The circuit boards are the main point of failure in high efficiency furnaces.

### 4.5.3.2 Air Conditioning and Ventilation:

No air conditioning or ventilation units were observed on the Subject Property by CMG during the Site Visit.



### 4.5.4 **Electrical:**

### 4.5.4.1 Electrical Supply:

CMG observed overhead wire emanating from a pole across Cumberland St that was attached to the Subject Building on the east side of the South wall. The wire then went into a conduit, around to the east side of the Subject Building, and down to two 240V single phase electrical meters in the lower central section of the east wall.

CMG performed random electrical tests on the 110V outlets in the Subject Building, and saw no evidence of any defects. The Client indicated that an electrician came in and replaced all the original electrical wiring, and the new system should have a lifespan of approximately another 50 years.

### 4.5.4.2 Lighting System:

Standard incandescent and LED lighting receptacles were observed inside the Subject Building during the Site Visit. CMG observed wall-mounted motion-activated LED lighting on the east and south upper walls, and outside the entryways of the Subject Building. Municipal lighting on the south side of Cumberland St likely provides additional lighting to the south side of the Subject Building during darker hours. The daylight conditions during the Site Visit meant that the outside lighting was not on, so its operation was not verified during the Site Visit.

### 4.5.5 **Vertical Transportation:**

There was no form of vertical transportation observed during the Site Visit.

### 4.5.6 **Life Safety/Fire Protection:**

Fire safety is not in the scope of this inspection.

### 4.6 **Additional Considerations:**

There are additional issues or conditions at the property in connection with commercial real estate that are outside the scope of the standard but we include them here:

### 4.6.1 **Outside Standard Practices:**

No non-scope considerations were considered in this PCA.

### 4.6.2 Other Standards:

No other standards were considered in this PCA.

### 4.6.3 **Additional Issues:**

Following are several non-scope considerations that users may want to assess in connection with commercial real estate. No implication is intended as to the relative importance of inquiry into such non-scope considerations, and this list of non-scope considerations is not intended to be all-inclusive:

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### ENGINEERING INSPECTION of 349 and 351 CUMBERLAND ST NEW WESTMINSTER BC for Bernita Boersma

### 4.6.3.1 Seismic Considerations:

The Seismic zone for the Subject Property is high, and the construction is likely grandfathered from the current seismic related building code issues. It should be noted that no evidence of damage from seismic activity was observed during the Site Visit in spite of the 80 year approximate age of the Subject Building. In spite of this, it is likely that any major seismic activity will damage the structural elements of the Subject Building.

### 4.6.3.2 Design Consideration for Natural Disasters (Hurricanes, Tornadoes, High Winds, Floods, Snow, etc.):

CMG did not get access to any design documents for the Site that document design considerations for natural disasters. These matters are covered in the local building code. CMG did not see any evidence during the Site Visit that could indicate that these standard design considerations were not met.

#### 4.6.3.3 **Animal Infestation:**

CMG observed ant traps next to the south side of the main level of unit 349. This is evidence of animal infestation, and the likely cause would be cracked structural foundation elements that allow for the insects to enter the Subject Building.

#### 4.6.4 **Environmental Considerations:**

### 4.6.4.1 Mould:

CMG did not see any evidence of mould during the Site Visit.

### 4.6.4.2 Indoor Air Quality:

The indoor air quality was satisfactory at the time of the Site Visit.

### 4.6.4.3 Property Security Systems:

CMG did not test any of the cameras or security equipment on the Subject Property.

### 4.6.5 **Long Term Costs:**

No long term costs were identified in this assessment.

## CODE COMPLIANCE OVERVIEW:

A detailed code compliance review was not included as part of the scope of work.

## **CLOSURE:**

Information reported herein is based on the interpretation of data collected and has been accepted in good faith as being accurate and valid. This report is only valid for the point in time the observations and research were conducted.

Page 19 of 21 2021-09-08 CMG File: 20210908-PCA-349\_CUMBERLAND\_ST\_NEW\_WESTMINSTER\_BC Rev 175 Copyright © 2021 CMG Engineering Services Corporation All Rights Reserved

### ENGINEERING INSPECTION of 349 and 351 CUMBERLAND ST NEW WESTMINSTER BC for Bernita Boersma

The activities listed below generally are excluded from, or otherwise represent limitations to, the scope of a PCA prepared in accordance with the ASTM E 2018-15 guidelines. These should not be construed as all-inclusive or imply that any exclusion not specifically identified is a PCA requirement under the ASTM guide.

- a. Removing or relocating materials, furniture, storage containers, personal effects, debris material or finishes: conducting exploratory probing or testing; dismantling or operating of equipment or appliances; or disturbing personal items or property, that obstructs access or visibility.
- b. Preparing engineering calculations (civil, structural, mechanical, electrical, etc.) to determine any system's, component's, or equipment's adequacy or compliance with any specific or commonly accepted design requirements or building codes, or preparing designs or specifications to remedy any physical deficiency.
- c. Taking measurements or quantities to establish or confirm any information or representations provided by the owner or user, such as size and dimensions of the Subject Property or building; any legal encumbrances, such as easements; dwelling unit count and mix; building property line setbacks or elevations; number and size of parking spaces; etc.
- d. Reporting on the presence or absence of pests, such as wood-damaging organisms, rodents, or insects, unless evidence of such presence is readily apparent during the course of the field observer's walk-through survey, or such information is provided by the owner, user, property manager, etc. CMG is not required to provide a suggested remedy for treatment or remediation, determine the extent of infestation, nor provide opinions of probable costs for treatment or remediation of any deterioration that may have resulted.
- e. Reporting on the condition of subterranean conditions, such as underground utilities, separate sewage disposal systems, wells; systems that are either considered process-related or peculiar to a specific tenancy or use; wastewater treatment plants; or items or systems that are not permanently installed.
- f. Entering or accessing any area of the premises deemed to pose a threat of dangerous or adverse conditions with respect to the field observer or to perform any procedure that may damage or impair the physical integrity of the property, any system, or component.
- g. Providing an opinion on the condition of any system or component that is shut down, or whose operation by the field observer may increase significantly the registered electrical demand-load; however, CMG will provide an opinion of its physical condition to the extent reasonably possible considering its age, obvious condition, manufacturer, etc.
- h. Evaluating acoustical or insulating characteristics of systems or components.
- i. Providing an opinion on matters regarding security of the Subject Property and protection of its occupants or users from unauthorized access.
- j. Operating or witnessing the operation of lighting or other systems typically controlled by time clocks, or that are normally operated by the building's operation staff or service companies.
- k. Providing an environmental assessment or opinion on the presence of any environmental issues such as asbestos, hazardous wastes, toxic materials, the location and presence of designated wetlands, indoor air quality (IAQ), etc.

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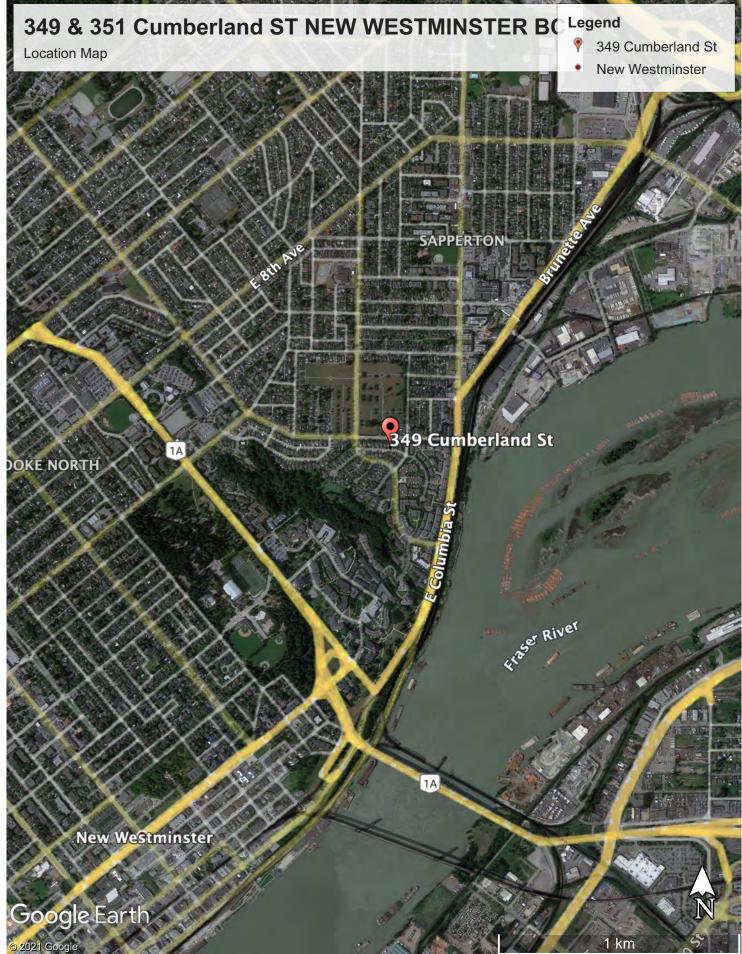
## ENGINEERING INSPECTION of 349 and 351 CUMBERLAND ST NEW WESTMINSTER BC for Bernita Boersma

### **APPENDICES** 7

Appendix A – Site Location, BC Assessment Appendix B – Photo Galleria



APPENDIX A — Location Map, BC Assessment Info



9/10/2021

BC Assessment - Independent, uniform and efficient property assessment

## 349 CUMBERLAND ST NEW WESTMINSTER V3L 3G4

Area-Jurisdiction-Roll: 10-220-03799.001



1	0	-220	1-03	7990	01 1	12/1	7/2012

Total value	\$1,310,800				
2021 assessment as of July 1, 2020					
Land	\$1,240,000				
Buildings	\$70,800				
Previous year value	\$1,052,900				
Land	\$994,000				
Buildings	\$58,900				

_				
Prope	ertv.	infor	ma	tıon

Are the property details correct?				
Year built	1940			
Description	1 STY Duplex - Basic			
Bedrooms	2			
Baths	1			
Carports				
Carages				
Land size	10281 Sq Ft			
First floor area	866			
Second floor area				
Basement finish area	468			
Strata area				
Building storeys				

### Legal description and parcel ID

Lot 6 Sub Block3 Plan NWP27408 Land District 1 Land District 36 PID: 002-393-328

## Sales history (last 3 full calendar years)

No sales history for the last 3 full calendar years

Manufactured home

## APPENDIX B — Photo Galleria

- 4.1.2 Storm Drainage
- 4.1.4 Paving, Curbing, and Parking 4.1.5 Flatwork
- 4.1.6 Landscaping and Appurtenances
- 4.1.7 Recreational Facilities
- 4.1.8 Special Utility Systems
- **4.2.1 Structural Frame**
- **4.2.2 Building Envelope**
- 4.3 Roofing
- 4.4 Building Interior
- 4.5.1 Plumbing
- 4.5.2 Natural Gas
- 4.5.3 Heating Ventilation and Air Conditioning (HVAC)
- 4.5.4 Electrical
- 4.5.5 Vertical Transportation
- 4.5.6 Life Safety/Fire Protection
- 4.6.3 Additional Issues
- 4.6.4 Environmental Considerations

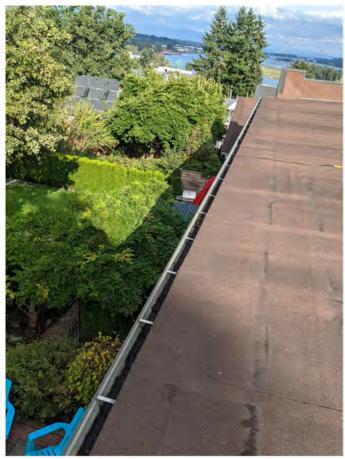
# 4.1.2 Storm Drainage



north wall eavestrough downspouts.jpg



unit 349 - eavestrough downspout on north wall east side.jpg



view looking east along north eavestrough.jpg

# 4.1.4 Paving, Curbing, and Parking

## 4.1.5 Flatwork



unit 349 - concrete pad for refuse bins.jpg



unit 349 - gravel parking pad.jpg



unit 349 - south entryway stairway cracks have increased in depth over the past 15 years.jpg



unit 351 - concrete parking pad on north side.jpg



unit 351 - view looking north-east from parking pad.jpg

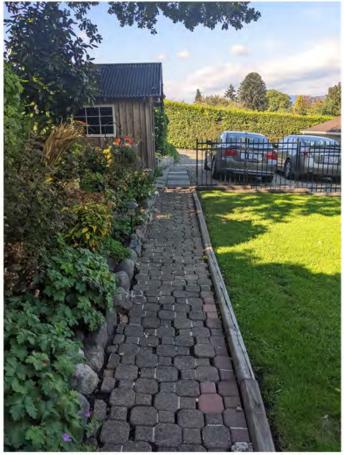
# 4.1.6 Landscaping and Appurtenances



unit 349 - pergola north of Subject Building.jpg



unit 349 - pergola with evidence of extensive rot.jpg



unit 349 - shifted paving stone path to shed and parking area.jpg



unit 349 - stairway wood near end-of-life.jpg



unit 351 - view looking south at parking pad shed and building.jpg

# 4.1.7 Recreational Facilities

# 4.1.8 Special Utility Systems

## 4.2.1 Structural Frame



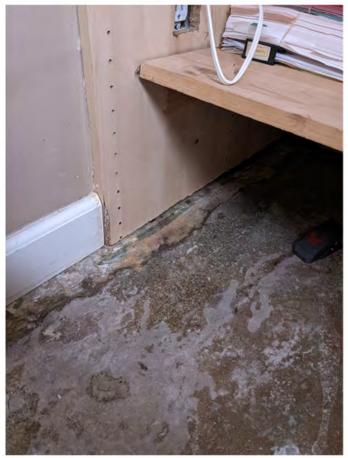
unit 349 - cracks under window in south wall shows evidence of settlement.jpg



unit 351 - concrete floorslab in lower level.jpg



unit 351 - evidence of foundation settlement on south wall below window on main level.jpg



unit 351 - location of major water ingress in lower level on north wall east side.jpg



unit 351 - new crack on ceiling outside WC on main level.jpg



unit 351 - settlement in north entryway stairway.jpg



unit 351 - skylight with cracking.jpg



unit 351 - weeping tile clean-out on west outer wall.jpg

# 4.2.2 Building Envelope



crack in stucco on east wall just north of lower level crawl space door.jpg



crack in stucco on east wall south side.jpg



crack in stucco on south wall east side.jpg



crack in stucco on west wall central area.jpg



crack in stucco on west wall north side.jpg



recently opened crack in stucco on east wall above crawl space access door.jpg



south wall.jpg



unit 349 - cracks in stairwell up to south egress doorway.jpg



unit 349 - cracks in stucco above window.jpg



unit 349 - cracks in stucco on south wall justt west of entryway door.jpg



unit 349 - cracks in wall above east wall entryway.jpg



unit 349 - east wall window with no drip guard flashing above or below.jpg



unit 349 - evidence of moisture ingress above stove in lower level likely from building envelope failure.jpg



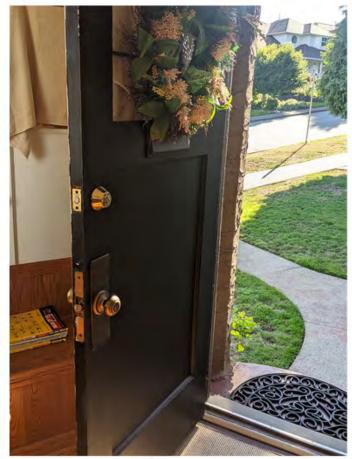
unit 349 - north wall.jpg



unit 349 - outer east wall stairway with evidence of settlement cracks.jpg



unit 349 - south doorway binding on open and closure.jpg



unit 349 - south doorway needs to be replaced due to settlement and faulty hardware.jpg



unit 351 - north entryway door.jpg



unit 351 - north wall upper level on west side.jpg



unit 351 - PVC framed window in kitchen on north wall.jpg



unit 351 - wood framed window in lower level.jpg



unit 351 - wood framed window in sitting area on west wall.jpg

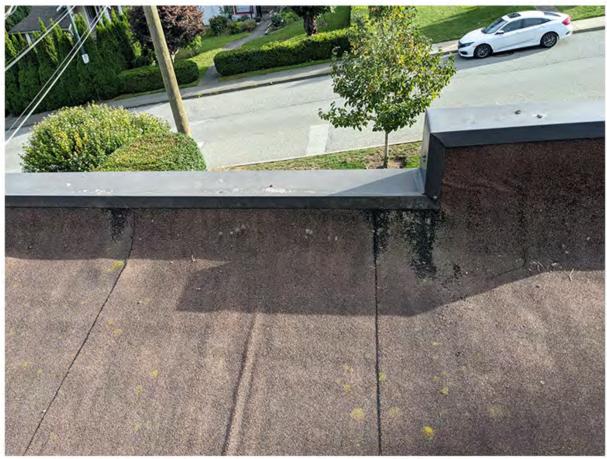
# 4.3 Roofing



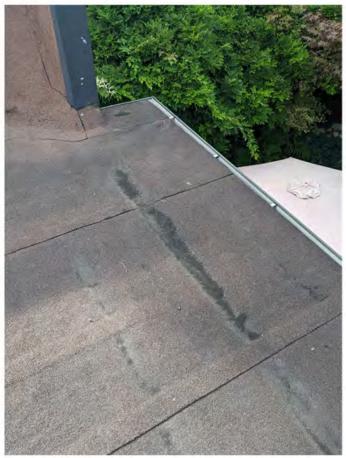
attic venting on south side.jpg



cap flashing fasteners rusting and at end-of-life.jpg



degraded granular material on south parapet.jpg



degraded rolled asphalt due to ice damming.jpg



recent crack in skylight above unit 351.jpg



rolled asphalt no longer laying flat.jpg



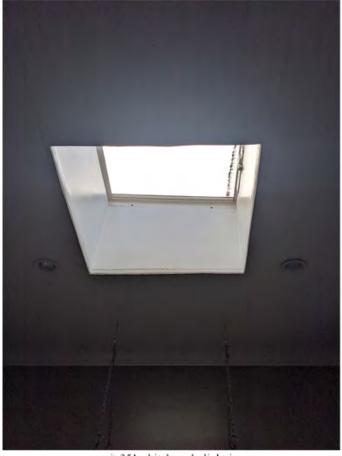
rolled asphalt seams degraded.jpg



roof surface with degraded granular material.jpg



unit 349 - sky light in upper level WC with cracks.jpg



unit 351 - kitchen skylight.jpg



view of degraded rolled asphalt surface looking east.jpg



WC skylights for both units.jpg

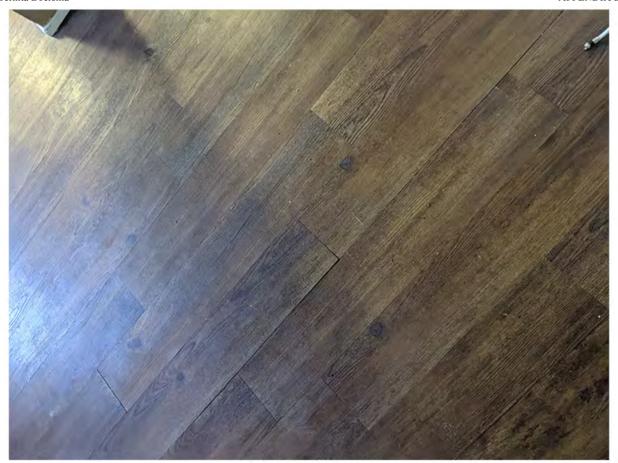
# **4.4 Building Interior**



unit 349 - ceiling cracks.jpg



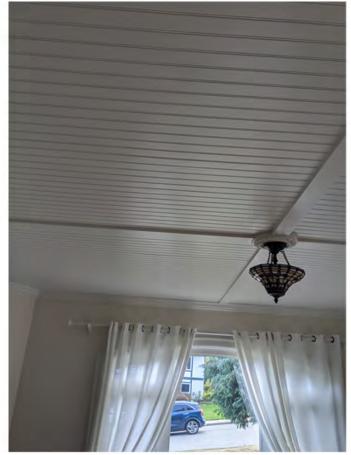
unit 349 - lower level bathroom sink needs replacement.jpg



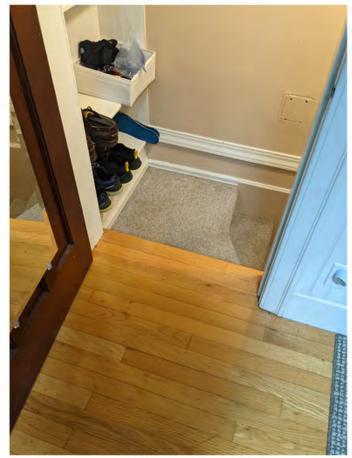
unit 349 - lower level flooring.jpg



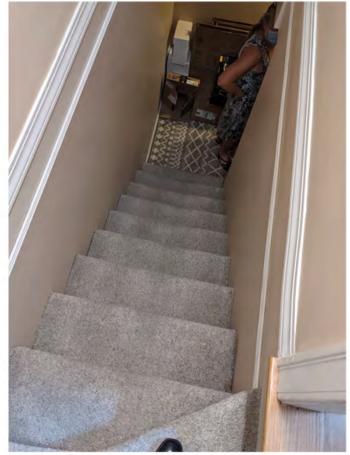
unit 349 - lower level WC finishings.jpg



unit 351 - ceiling in sitting room.jpg



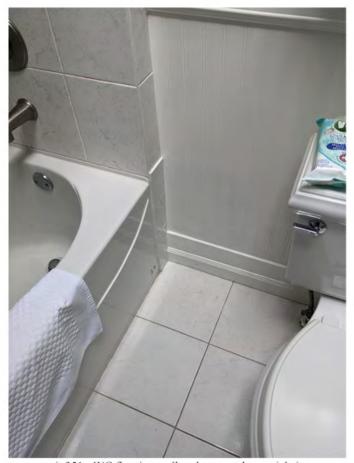
unit 351 - flooring in upper level and stairwell to lower level.jpg



unit 351 - lower level stairway.jpg



unit 351 - main level sink.jpg



unit 351 - WC flooring wall and surround materials.jpg

## 4.5.1 Plumbing



unit 349 - water heater installed in 2011.jpg



unit 349 - water supply to Subject Building with no meter and potential lead piping.jpg



unit 351 - Bradford White HW heater MD 201210.jpg

#### 4.5.2 Natural Gas



natural gas meters just south of crawl space access door on east wall.jpg

# 4.5.3 Heating Ventilation and Air Conditioning (HVAC)



unit 349 - lower level baseboard heater.jpg



unit 349 - mid efficiency furnace likely at end-of-life with no replacement heat exchanger possible.jpg



unit 351 - likely high efficiency goodman furnace.jpg



unit 351 kitchen skylight and chimney.jpg

#### 4.5.4 Electrical



single phase electrical meters for both units on central east wall.jpg



unit 349 - one of several random electrical tests.jpg



unit 349 - 100Amp electrical panel in lower level on east wall - south side.jpg



unit 351 - electrical panel west of WC on main level.jpg



unit 351 - light switch likely requires replacement.jpg

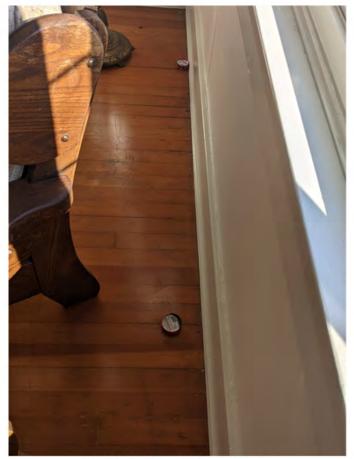


unit 351 electric dryer.jpg

## 4.5.5 Vertical Transportation

## 4.5.6 Life Safety/Fire Protection

#### 4.6.3 Additional Issues



unit 349 - evidence of insect ingress.jpg

#### 4.6.4 Environmental Considerations