

WESTBROOK Consulting Ltd.

October 6, 2017

3075-02

City of Victoria
1 Centennial Square
Victoria, BC
V8W 1P6

Attn: Mr. Rich Allen / Mr. Randy Chang

Re: Sewer Attenuation Calculations – 71-75 Montreal Street

Dear Sirs:

Introduction

Westbrook Consulting Ltd. has been engaged by Urban Core Ventures to investigate the requirement of sewage attenuation for the proposed development of 71/75 Montreal Street.

The following letter compares the sewage flows of the current zoning to that of the proposed density.

Background

The developer is currently seeking to rezone the subject properties to permit the construction of a **12 unit residential** building.

The subject properties are currently zoned as R-2 and have a combined/consolidated lot area of approximately **930 m² (2 x 465)**. The R-2 zoning permits a maximum floor space ratio (FSR) of **0.5:1 and a site coverage of 40%**.

The R-2 zone allows for the option of utilizing the permitted uses of the R1-B zone (Item 2.1.1 b). One of which permits additional space for up to 4 Roomers/Boarders.

Current versus Proposed Zoning

To compare the resultant sewage flows we have reviewed the project data summary on the August 2017 architectural drawings, and have calculated the maximum sanitary flow permitted.

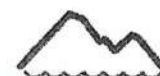
Sanitary flows were calculated in accordance with the Sewerage System Standard Practice Manual Version 3.

The following tabulates the maximum number of units/spaces permitted under the current zoning for 71 and 75 Montreal Street.

Current Zoning Criteria	Subject Properties
Site area (m ²)	2 x 465 m ²
Site Coverage	40%
Floor area (m ²)	300
Single Family Bedrooms / Lot	4
Single Family People / Lot	4.5
Boarder Units / Lot	4
Boarders / Lot	4
People / Lot	8.5
Total People	17

The following tabulates the minimum daily design flow for the property for the current and proposed zonings.

	Current				Proposed			
People Permitted	17				-			
People Proposed	-				37.5			
Daily Design Flow (DDF)	Units/ Bed/r	People Per Unit	DDF	Total	Units	People Per Unit	DDF	Total
SF Dwelling	8	9	330	2,970	-	-	-	-
1 Bedroom	-	-	-	-	3	2	300	1,800
2 Bedroom	-	-	-	-	3	3	300	2,700
3 Bedroom	-	-	-	-	6	3.75	300	6,750
Boarders	8	8	330	2,640	-	-	-	-
Total DDF (L/Day)				5,610				11,250



Summary

As indicated in the above table the combined daily sewer flow for the subject properties under the existing zoning is **5,610 L/Day**, and the proposed sewer flow is **11,250 L/Day**.

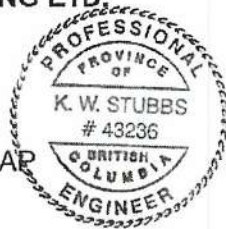
Based on the above, it is anticipated there will be an increase of daily sanitary loading from the current zoning to the proposed zoning, therefore requiring attenuation.

Yours truly,

WESTBROOK CONSULTING LTD.



Kyle Stubbs, P.Eng, LEED AP
Project Engineer



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