

City of Prince George 1100 Patricia Boulevard Prince George, BC, V2L 3V9 Date: September 4th, 2024 L&M Project: 1541-15

Attention: Chris Vliegenthart

Supervisor, Transportation Services

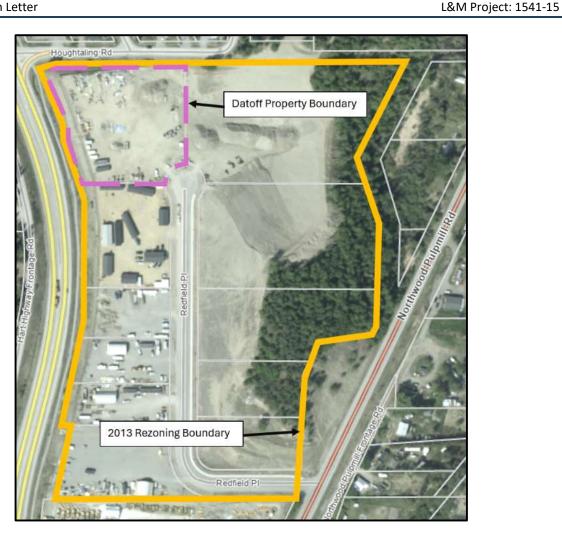
Reference: 2819 Redfield Place Rezoning

Trip Generation Letter

Dear Chris,

On behalf of Datoff Bros Construction Ltd., L&M Engineering is pleased to submit this Trip Generation Letter in support of the recently submitted covenant modification application for 2819 Redfield Place. The existing Covenant CA3840299 (on the property) is proposed to be modified on the subject property in order to allow "consulting, scientific and technical" as a permitted principal use. At the time of rezoning the lands in 2013, this specific use did not exist in the M1: Light Industrial zone and it appears that it was added into the M1 zone several years later.

Datoff proposes to construct a Consulting Office on the property with a gross floor area of 2,154 m² (23,190 ft²). This letter is being written to summarize the difference in traffic generation between the proposed development and the trip generation assumed in 2013.



In 2013, L&M submitted a Trip Generation Letter for the rezoning of the Acme Industrial Subdivision. The trip generation was calculated using the Institute of Transportation Engineer's Trip Generation Manual. The trip-generating use that best represented the M1 uses was Light Industrial (ITE Code: 110). To calculate the trip generation, it was assumed that the property would be subdivided into 7 lots, with a total lot area of 9.3ha, and the site coverage would be 12%.

In 2019 the rezoned area was subdivided into 11 lots with a total lot area of 8.5ha. Of the 11 lots, 5 lots have been developed and are currently occupied. The average site coverage of those five lots is less than 5%, which is less than half of the originally assumed 12%.

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1.0 TRIP GENERATION COMPARISON

Table 1 summarizes the trip generation used in the 2013 Trip Generation Letter.

Table 1 – 2013 Trip Generation												
Peak Period	Trip Gen. Variable	Projected Trip Gen. Variable Value	Fitted Equation/ Average Rate	Total Trip Gen.	In %	Out %	In (vph)	Out (vph)				
Light Industrial (ITE Code: 110)												
AM	Per 1000 sq. ft.	120.225*	0.92	110	83	17	92	18				
PM			0.97	116	22	78	26	90				

^{*}Calculated based on 12% site coverage

The Datoff Bros Construction Ltd. property located at 2819 Redfield Place is 1.2 hectares in size. Therefore, the remaining 10 lots in the subdivision equate to 7.3 hectares. Since the existing developments have site coverages less than 5%, it is reasonable to assume that once all 11 lots are developed the average site coverage will be less than the originally estimated 12%. To remain conservative, the revised trip generation has been calculated using an 8% site coverage (building area = $5,840 \text{ m}^2/62,860 \text{ ft2}$). Table 2 summarizes the revised trip generation, which includes the covenant modification for 2819 Redfield Place and the revised site coverage for the Light Industrial properties.

Table 2 – Proposed Trip Generation (with Covenant Modification)												
Peak Period	Trip Gen. Variable	Projected Trip Gen. Variable Value	Fitted Equation/ Average Rate	Total Trip Gen.	In %	Out %	In (vph)	Out (vph)				
Light Industrial (ITE Code: 110)												
AM	Per	62.860	0.92	58	83	17	48	10				
PM	1000 sq. ft.		0.97	61	22	78	13	48				
General Office Building (ITE Code: 710) – 2819 Redfield Place												
AM	Per 1000 sq. ft.	23.190	1.15	27	86	14	23	4				
PM			1.16	27	16	84	4	23				
Summary												
AM Peak					84	16	71	14				
PM Peak					19	81	17	71				

^{*} Trip Generation for AM & PM Peaks was calculated using the methods and equations outlined in the ITE Trip Generation Manual (10^{Th} Ed).

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As shown in Table 1, the 2013 AM and PM peak trip generation volumes were 110 vph and 116 vph, respectively. Table 2 indicates that the revised AM and PM peak trip generation volumes are 85 vph and 88 vph, respectively. Due to lower site coverages than originally assumed and a smaller overall lot area within the rezoned area, the trip generation should be less than the original estimate.

Sincerely,

L&M ENGINEERING LIMITED

Tanner Fulltrom

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Associate

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