

May 25, 2015  
4529.22

Stephen Toth, P.Eng. (AB)  
Beedie Construction Ltd.  
3030 Gilmore Diversion  
Burnaby, BC V5G 3B4

Dear Stephen:

**Re: 415 Boyne Street, New Westminster, BC  
Transportation Study Review**

As requested, we have prepared a letter report to confirm the conclusions and recommendations outlined in the reports titled "501 Boyd Street, New Westminster Transportation Review" and "549 Duncan Street, New Westminster, BC Transportation Review Update", both prepared by Bunt & Associates (Bunt) in September 2012 and February 2014 respectively to support the development of the DAMCO Building and Building 2 of the site.

The review is required as part of the requirements for the development of Building on the site. This letters summarizes the findings of our review, and serves as an update to the previous transportation reports prepared in 2012 and 2014.

Please do not hesitate to contact us should you have questions or comments.

Yours truly,  
**Bunt & Associates**

A handwritten signature in blue ink that reads "Christephen Cheng".

Christephen Cheng, P.Eng.  
Senior Transportation Engineer

A handwritten signature in blue ink that reads "Billy Dong".

Billy Dong, P. Eng.  
Transportation Engineer

## 1. INTRODUCTION

In September 2012, Bunt & Associates prepared a report to support the proposed industrial development on the Port of Metro Vancouver property at 501 Boyd Street in New Westminister, BC. The development plan consisted of a cross-dock facility (DAMCO Building) and two large-format industrial buildings which are referred as Building 2 and Building 3.

The DAMCO building has vehicle access from Boyd Street & Duncan Street, while Buildings 2 & 3 has vehicle access from Boyd Street & Boyne Street. The DAMCO building has been in operation since July 2013.

The February 2014 study update prepared by Bunt & Associates confirmed that there has not been any observed traffic or operational issues associated with the DAMCO Building.

Since the production of the February 2014 report, Building 2 has now been constructed. However, it is still currently vacant with no tenant and therefore it is not possible to conduct any vehicle trip generation study for Building 2.

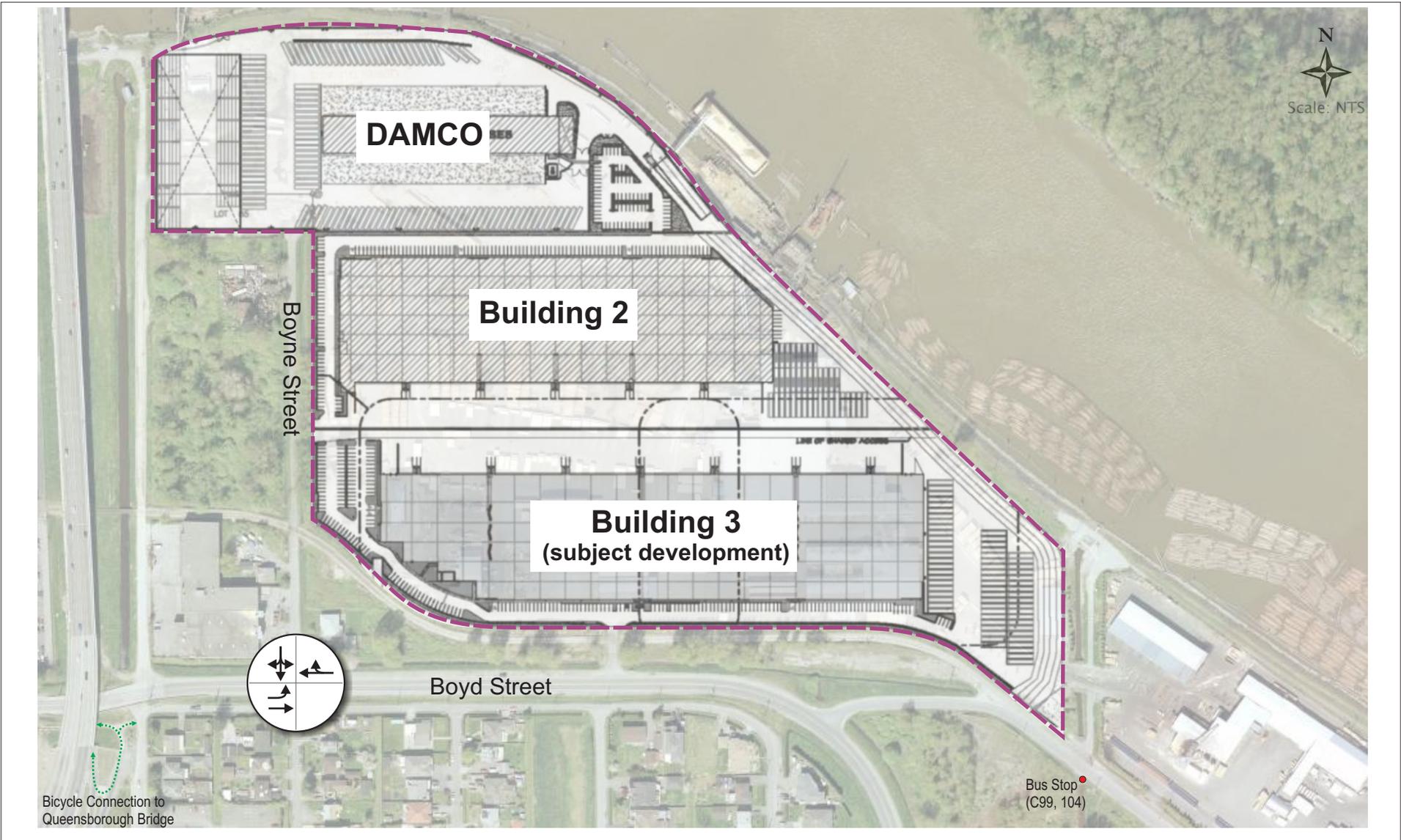
As part of the approval requirements for the construction of the last large format industrial building proposed on-site (Building 3), a report is required to confirm the previous assumptions, conclusions and recommendations outlined in the previous studies prepared in 2012 and 2014.

This study focuses on the proposed Building 3 development which is the building located furthest to the south of the site. **Exhibit 1** shows the proposed building in the context of the site and the local street network.

The report has been set out in the following manner:

- **Section 2** provides an update of the existing vehicle movement counts collected in the study area.
- **Section 3** presents the development contents for Building 3, along with the projected site vehicle movements for these two buildings. Vehicle trip generation data from a comparable industrial site will also be presented to validate the vehicle trip generation assumptions for Building 3.

Overall, this letter report aims to demonstrate that the site vehicle movements generated from Building 3 can satisfactorily be accommodated on the adjacent street network, and that the assumptions and conclusions in the original Transportation Review are still valid.



### Exhibit 1 Site Location Context

415 Boyne Street, New Westminster, BC  
4529.22 May 25th, 2015



## 2. EXISTING CONDITIONS

### 2.1 Street Network Volumes

Updated vehicle movement counts were collected at the Boyd Street & Boyne Street on May 12<sup>th</sup> 2015 (Tuesday) for the AM and PM peak-hour periods as this is the only intersection that has access to Building 2 and Building 3.

**Table 2.1** provides a comparison of the intersection volumes to the data collected for the original report in 2012, the traffic data collected in 2014, and also the data collected in May 2015.

**Table 2.1 Comparison of Intersection Volumes Adjacent to the Site**

Intersection	Intersection Total Volumes			Percent Change (2015 vs. 2012)
	2012	2014	2015	
<b>Weekday AM Peak Hour</b>				
Boyd St & Boyne St	442	483	516	+17%
<b>Weekday PM Peak Hour</b>				
Boyd St & Boyne St	821	543	547	-33%

When comparing 2015 to 2012 data, vehicle movement counts for the Boyd Street & Boyne Street intersection show a 17% increase in vehicle volume during weekday AM Peak hour period. For the PM peak-hour period, there is a significant decrease as the Boyd Street & Boyne Street intersection surveyed show a 33% decline in vehicle volumes. There is no particular indication of any unusual traffic operating conditions in the local area during the data collection period that would lead to this decrease in vehicle volumes. However, the 2015 traffic volumes are relatively consistent with the 2014 data for both the AM and PM peak hour periods.

### 3. BUILDING 3

The remainder of the site will house the final large format industrial building, referred as Building 3. As previously mentioned, Building 2 has been completed already, but currently does not have any tenants. Therefore it is not possible to conduct a vehicle trip generation study to confirm if the vehicle trips associated with Building 2 would be consistent with that predicted in the previous reports.

Building 3 is currently seeking approval before construction. And as part of approval requirements, site vehicle trip generation estimates, access arrangements, and the associated off-site road works would need to be confirmed.

#### 3.1 Proposed Development

Building 3 is expected to be built with the same form and footprint as presented in the original Transportation Review conducted in 2012. **Table 3.1** summarizes floor area and expected timeline for the building. The floor area for Building 3 is slightly higher than what assumed in the 2012 and 2014 studies (297,611 sq ft).

**Table 3.1: Proposed Development**

Building	Location	Building Footprint	Vehicle Access	Opening (Estimate)
Building 3	Southern portion of the site	299,389 sq ft	Via Boyne St and Boyd St (Passenger Car only)	2017

The site is currently zoned for Heavy Industrial use, consistent with the City of New Westminster’s M-2 Zoning. The primary vehicle access for Building 3 is proposed to be off Boyne Street & Boyd Street. As part of the off-site work requirements for Building 2, an eastbound left-turn lane has been provided at the intersection, as shown in **Figure 1**.

**Figure 1: Boyne & Boyd Street Intersection**



The section of Boyne Street between the existing railway tracks up to the site access (located 160 metres north of Boyd Street) has also been upgraded to an industrial standard at 10-metres wide curb-to-curb with the completion of Building 2. A hammerhead turnaround area has also been provided at site entrance on Boyne Street, as shown in **Figure 2**.

**Figure 2: Road Improvements on Boyne Street**



A secondary access is also provided at the existing site driveway on Boyd Street. This driveway access is restricted for right-in/right-out, and limited for passenger car (employee) access only.

Both of these access points have existing crossings with the railway track, operated by Southern Railway, and would be upgraded to the required standard based on discussion with the relevant parties.

### 3.2 Site Vehicle Trip Generation Estimate

Vehicle trip estimates for Buildings 3 were presented in the original Transportation Review. The vehicle trip estimates were based on locally collected vehicle trip generation data, using the highest value for truck movements and passenger car trips for each local site to provide robustness as the final tenants for the building are currently still unknown at this stage.

In 2014 study, a vehicle trip generation study was conducted for a logistics centre, but it was found to have significant lower vehicle trip rates than the ones assumed in the original study. Therefore, for the purpose of estimating the number of vehicle trips expected for Building 3, the vehicle trip rates from the original Transportation Review are being used and they are presented in **Table 3.2**.

**Table 3.2: Vehicle Trip Rates**

Source	Passenger Car Rate			Truck Rate			Total Rate		
	In	Out	Total	In	Out	Total	In	Out	Total
<b>AM Peak Hour</b>									
Trip Rates from 2012 Study	0.06	0.08	0.14	0.11	0.03	0.14	0.17	0.11	0.28
<b>PM Peak Hour</b>									
Trip Rates from 2012 Study	0.10	0.08	0.18	0.04	0.15	0.19	0.14	0.23	0.37

Using the vehicle trip rates from the 2012 study, the vehicle trips for Building 3 are being estimated and they are presented in **Table 3.3**. For comparison purposes, the trip estimates from the 2012 report is included in the table.

**Table 3.3: Building 3 Vehicle Trip Generation Comparisons**

Vehicle Trip Estimates	Passenger Car Trips			Truck Trips			All Trips		
	In	Out	Total	In	Out	Total	In	Out	Total
<b>Weekday AM Peak Hour</b>									
Proposed Building 3 (299,389 sq ft)	18	24	42	33	9	42	51	33	84
Assumed Building 3 Floor Area in 2012 Study (297,611 sq ft)	18	24	42	33	9	42	51	33	83
<b>Differences</b>	-	-	-	-	-	-	-	-	+1
<b>Weekday PM Peak Hour</b>									
Proposed Building 3 (299,389 sq ft)	30	24	54	12	45	57	42	69	111
Assumed Building 3 Floor Area in 2012 Study (297,611 sq ft)	30	24	54	12	45	57	42	68	110
<b>Differences</b>	-	-	-	-	-	-	-	+1	+1

Based on the latest floor area provided, Building 3 is expected to generate 1 additional vehicle trip during the peak-hour periods comparing to what was assumed in the 2012 study. The additional vehicle trip is not expected to materially change the recommendations and conclusions from the 2012 study.

#### 4. SUMMARY

Beedie Construction Ltd. is planning to construct the final large-format industrial building (Building 3) on the Port Metro Vancouver land, located at 415 Boyne Street (formerly 501 Boyd Street/549 Duncan Street).

The first phase of the development (DAMCO Cross-dock facility) has been in operation since July 2013. As part of the approval requirements for the remainder of the site development, Beedie requested Bunt to provide a review of the previous assumptions, conclusions and recommendations outlined in the studies that were previously submitted in 2012 and 2014.

Vehicle movement surveys were conducted in the study street network in May 2015 in order to verify the results of the previous study. When comparing the 2015 to 2012 data, the collected data suggested that there were no significant increase in vehicle movements in the study street network during the weekday AM Peak-hour period. For the PM peak-hour period, there is a significant decrease in vehicle volume compared to the data collected in 2012, but there were not any known issues or problems with the intersection that would cause the fluctuation in volumes. However, the results from the 2015 traffic counts are consistent with the traffic counts conducted in 2014.

Vehicle trip rates from the 2012 report were still considered valid, since these trip rates are still considered conservative and will be able to account for multiple tenant types since the final tenants have not been finalized yet. Comparing to the 2012 study, given the slight increase in floor area for Building 3, it is estimated that the development would generate 1 additional vehicle trip during the peak-hour periods comparing to what was assumed in the 2012 Study.

Given the above, it is concluded the traffic analysis conclusions outlined in the report titled "501 Boyd Street, New Westminster Transportation Review" prepared by Bunt & Associates in September 2012 were still valid, and that the development and construction of Buildings 3 is recommended to proceed as planned.