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**Stantec**

November 21, 2012  
File: 163808203

Robinson Park Development Corp.  
5699 Power Road  
Ottawa, ON, K1G 3N4

**Attention: Americo Rego, President**

Dear Sir:

**Reference: 17, 19, and 23 Robinson Avenue, Proposed Development  
Trip Generation**

The proposed development at 17, 19, and 23 Robinson Avenue is a 6-storey, 37-unit mid-rise apartment building. Of the 37 units, 11 units are one-bedroom units, and the remaining 26 units are two-bedroom units. In total, 46 parking spaces will be provided in a two-level underground parking structure.

As this development proposes less than 75 units, a community transportation study is not required by the City of Ottawa Traffic Impact Assessment Guidelines. However this letter has been prepared to comment on the expected trip generation of the proposed site in order to address any potential concerns.

The City's threshold level of 75 units (and associated 75 trips) is typical of other municipalities in Ontario:

- City of Hamilton (100 trips);
- Municipality of Chatham-Kent (100 trips);
- Durham Region (100 trips);
- Essex County (50 trips);
- Halton Region (100 trips);
- City of London (100 trips);
- City of Toronto (10 trips);
- York Region (100 trips); and
- Regional Municipality of Waterloo (100 trips).

This threshold is also consistent with the Institute of Transportation Engineer's (ITE) *Transportation Impact Analyses for Site Development – Recommended Practice* threshold of 100 trips. This literature identifies this threshold as appropriate for the following two reasons.

1. Site generated peak hour traffic volumes less than 100 vehicles per hour typically do not have an appreciable effect on the level of service or volume to capacity ratio of an intersection approach.
2. Site generated peak hour traffic volumes less than 100 vehicles per hour typically can be accommodated without the need for auxiliary left or right-turn lanes and without adversely affecting through (non-site) traffic.

The vehicular traffic that would be generated by the subject site during the peak a.m. and p.m. peak hours was based on the ITE *Trip Generation Manual, 8<sup>th</sup> Edition (2008)*. Information in this manual is widely

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accepted by municipalities in Canada and the United States for use in estimating the number of trips that may be generated by a specific land use.

The most appropriate land use type for this development is residential condominium/townhouse, land use code #230. Data for this land use is based off of approximately 60 sites typically averaging 200 dwelling units surveyed between the mid-1970s and the 2000s throughout the United States and Canada.

For the proposed residential development the resultant peak hour site trip generation is shown in **Table 1**. Details of the trip generation calculation sheet have been attached for reference.

Table 1 17, 19, and 23 Robinson Avenue Trip Generation <sup>1</sup> Residential Condominium/Townhouse Land Use						
# of Units	AM Peak Hour <sup>2</sup>			PM Peak Hour <sup>2</sup>		
	In	Out	Total	In	Out	Total
37	4	19	23	18	9	27

<sup>1</sup>Source: ITE Trip Generation Manual, 8<sup>th</sup> Edition  
<sup>2</sup>Trip estimates generated from trip equation

It should be noted that no adjustments/reductions have been made to account for public transit or alternative travel modes.

As shown in **Table 1**, it is expected that 23 and 27 trips would be generated by the proposed development during the a.m. and p.m. peak hours, respectively. The addition of less than 30 peak hour vehicle trips to Robinson Avenue would have a negligible effect on traffic operations.

Robinson Avenue is classified as an urban local road by the City of Ottawa's Official Plan. It is expected that even with the addition of the proposed development, traffic volumes on Robinson Avenue would continue to be less than 1000 vehicles per day, well within the typical daily volumes for local roads.

Sincerely,

**STANTEC CONSULTING LTD.**



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Project: 17, 19, 23 Robinson Avenue - Proposed Development  
 Project #: 163808203  
 Task: Trip Generation

Apartment Dwelling, Mid Rise      37 Units      11 - 1 Bedroom Units  
 6 Storey Building                    46 Parking Spaces      26 - 2 Bedroom Units

Land Use: Residential Condominium/Townhouse  
 LUC Code 230

Average Vehicle Trip Ends vs: Dwelling Units  
 On a: Weekday

Peak Hour of Adjacent Street Traffic,  
 One Hour between 7 and 9 a.m.

Directional Distribution:    17%    Entering  
     83%    Exiting

Average Rate: 0.44  
 Equation:  $\ln(T) = 0.80 \ln(X) + 0.26$   
 Where T = Average Vehicle Trip Ends  
 Where X = Number of Dwelling Units

		In	Out
<b>Total Trips</b>	16	3	13
	23	4	19

Average Vehicle Trip Ends vs: Dwelling Units  
 On a: Weekday

Peak Hour of Adjacent Street Traffic,  
 One Hour between 4 and 6 p.m.

Directional Distribution:    67%    Entering  
     33%    Exiting

Average Rate: 0.52  
 Equation:  $\ln(T) = 0.82 \ln(X) + 0.32$   
 Where T = Average Vehicle Trip Ends  
 Where X = 1000 SF of G.F.A.

		In	Out
<b>Total Trips</b>	19	13	6
	27	18	9