
Technical Memorandum

To: Asad Yousfani
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From: Andrew Harte

Date: 20 March 2018
Project: 476621 - 01000

Re: Minto Avalon Isgar – Transportation Impact Assessment Update and Screening

1. INTRODUCTION

Minto is re-submitting the plan of subdivision for the Avalon Isgar community, located between Tenth Line Road and Portobello Boulevard, south of the existing Avalon community. The site has been revised to reflect City comments and receive approval to initiate the hydro corridor review and approval.

City staff were contacted on November 10, 2017 to discuss a reduction in the scope of work for the Transportation Impact Assessment (TIA), as there was a previously submitted Community Transportation Study completed in 2014. As a result of the conversation, it was agreed that Parsons would submit the screening form and a trip generation comparison of the 2014 CTS and the revised Plan of Subdivision to note any differences. After reviewing the effective change in forecasted trips, and if there was a negligible impact, the update memo would end the TIA process without the need for a full TIA submission.

1.1. ISGAR 2014 COMMUNITY TRANSPORTATION STUDY

A Community Transportation Study (CTS) was prepared in March 2014 for the Avalon Isgar subdivision and submitted to the City. At the time, the comments were addressed for the CTS. The study included a unit count of 190 single family homes, 230 townhomes, and 192 stacked townhomes. In total, the projected trip generation forecasted approximately 240 and 300 new two-way vehicle trips during the AM and PM peak hours, respectively. The access configuration was proposed via a new access on Tenth Line Road and Portobello Boulevard, and through connections to existing Lakeridge Drive, Esprit Drive and Lakebreeze Circle.

The key recommendations from the CTS included:

- Traffic signal control at Brian Coburn and Portobello for background operations;
 - *Note: This intersection has since been upgraded to a roundabout intersection;*
- Traffic signal control at Brian Coburn and Esprit for background operations, including auxiliary east/westbound left-turn lanes;
- Auxiliary eastbound right-turn lane at Brian Coburn and Esprit for the build-out horizon;
- Minor stop-controlled intersection at Tenth Line and Street No. 11; and
- Internal subdivision intersections would be stop-controlled along the minor approaches.

1.2. SITE PLAN UPDATE

Subject to comments from the City, the site plan was revised, primarily to address Building Better and Smarter Suburbs policy directives and potential OC Transpo operations along Lakeridge Drive. As such, the blocks have been realigned to provide a wider right-of-way for Lakeridge, shorter block lengths for local roads, window streets along Tenth Line and Portobello, two (2) local road connections to Portobello replacing a single collector road connection and shifting of the park lot to be adjacent to the stormwater management pond.

The unit count has been updated to include 372 single family homes and 194 townhomes/back-to-back lots. This represents an overall reduction from 612 total units to 566 total units in the revised site plan.

The revised site plan has been provided in Attachment A.

2. SCREENING FORM

As part of the consultation with City Staff, it was recommended that a screening form be prepared to document the revised plan and comply with the updated TIA Guidelines. While this file is part of the old process, the screening form has been prepared to provide a concise summary of the development and a point of contact with City Staff to review the update memo. Within the context of the site plan revisions and previously completed CTS, no triggers were met for a Transportation Impact Assessment.

The screening form has been provided in Attachment B.

3. TRIP GENERATION COMPARISON

3.1. 2014 CTS TRIP GENERATION

The trip generation for the 2014 CTS is summarized below in Table 1 and the assumed modal split is summarized in Table 2. In total, the CTS projected 398 two-way trips during the AM peak and 497 trips during the PM peak. Of these, the auto drivers would be approximately 240 of the two-way trips during the AM and 299 of the two-way trips during the PM peak.

Table 1: Modified Person Trip Generation (2014 CTS)

Land Use	Units	AM Peak (persons/h)			PM Peak (persons/h)		
		In	Out	Total	In	Out	Total
Single Family Home	190 du	46	140	186	153	90	243
Townhouse/Stacked Townhouse	422 du	36	176	212	170	84	254
Total Person Trips		82	316	398	323	174	497

Table 2: Site Trip Generation (2014 CTS)

Travel Mode	Mode Share	AM Peak (persons/h)			PM Peak (persons/h)		
		In	Out	Total	In	Out	Total
Auto Driver	60%	50	190	240	194	105	299
Auto Passenger	10%	8	32	40	33	18	51
Transit	25%	20	79	99	80	43	123
Non-motorized	5%	4	15	19	16	8	24
Total Person Trips	100%	82	316	398	323	174	497
Total 'New' Auto Trips		50	190	240	194	105	299

3.2. REVISED SITE PLAN TRIP GENERATION

Using the same methodology to generate the forecasted trips for the revised site plan, Table 3 summarizes the revised trip generation and Table 4 summarizes the modal splits from the TRANS O-D Survey for the Orleans area.

Table 3: Revised Modified Person Trip Generation (ITE)

Land Use	Units	AM Peak (persons/h)			PM Peak (persons/h)		
		In	Out	Total	In	Out	Total
Single Family Home	372 du	108	243	351	294	152	446
Townhouse/Stacked Townhouse	194 du	19	95	114	90	45	135
Total Person Trips		127	338	465	384	197	581

Table 4: Revised Site Trip Generation (ITE)

Travel Mode	Mode Share	AM Peak (persons/h)			PM Peak (persons/h)		
		In	Out	Total	In	Out	Total
Auto Driver	55%	70	186	256	212	109	321
Auto Passenger	15%	20	51	71	58	30	88
Transit	20%	25	68	93	76	39	115
Non-motorized	10%	12	33	45	38	19	57
Total Person Trips	100%	127	338	465	384	197	581
Total 'New' Auto Trips		70	186	256	212	109	321

The trip generation for the revised site plan forecasts an additional 67 two-way people trips during the AM peak and 84 two-way people trips during the PM peak. Of these trips, the updated modal splits will see an additional 20 inbound auto trips and a reduction of 4 outbound auto trips during the AM peak, and 18 additional inbound auto trips and 4 outbound auto trips during the PM peak.

Transit trips are noted to increase during the AM Peak for inbound service, and reduce for the AM outbound trips and both inbound and outbound trips during the PM peak.

4. TRIP ASSIGNMENT

The trip assignment assumptions in the 2014 CTS outlined an assignment of 40% auto trips to Tenth Line, 45% auto trips to Espirit, and 15% auto trips to Portobello. The application of these trip assignment assumptions would result in the following changes to each of the boundary road intersections:

- Tenth Line at Street 1 (previously Street No. 11):
 - AM Peak: 8 inbound auto trips, -2 outbound auto trips
 - PM Peak: 7 inbound auto trips, 2 outbound auto trips.
- Espirit at Brian Coburn (from Street 9, previously Street No. 2):
 - AM Peak: 9 inbound auto trips, -2 outbound auto trips
 - PM Peak: 8 inbound auto trips, 2 outbound auto trips.
- Portobello at Brian Coburn (from Streets 13 and 15, previously Street No. 4)
 - AM Peak: 3 inbound auto trips, 0 outbound auto trips
 - PM Peak: 3 inbound auto trips, 0 outbound auto trips.

The resulting trips would see an increase for inbound trips during the AM peak (e.g. the off-peak direction) and an increase for the inbound trips during the PM peak (e.g. the peak direction). Overall, the impact of the additional trips on each of these intersections is minimal and not anticipated to impact the level of service at these intersections.

5. CONCLUSION

In summary, while the unit count has been reduced, the change in unit mix has resulted in an increase in overall people trips forecasted for the Avalon Isgar subdivision. Applying the modal split for Orleans notes a negligible increase in auto trips during the peak periods at the study area intersections and a general decrease in the forecasted transit trips.

Therefore, the conclusions and recommendations from the previously approved 2014 CTS for the Avalon Isgar subdivision remain valid and an updated TIA is not required for the resubmission of the plan of subdivision.

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