
To:	Margaret Knowles Morguard Investments Limited	From:	Bob Kurylko Stantec Consulting Ltd. 500-311 Portage Avenue Winnipeg, MB R3B 2B9
File:	Brandon Shoppers Mall Redevelopment Traffic Impact Study	Date:	March 8, 2017

**Reference: Brandon Shoppers Mall Redevelopment
Traffic Impact Study – Updated Site Plan (SP-100)**

As of December 21st, 2016, the traffic impact study (TIS) for the redevelopment of Brandon Shoppers Mall was based on redevelopment site plans labelled SK-034 and SK-035A. The March 7th, 2017, site plan (SP-100) includes some changes to the layout of the proposed development. This memo documents the effects on the traffic study conclusions and recommendations resulting from the changes in the SP-100 site plan.

The in-mall components of the redevelopment are essentially unchanged between the SK-034/035A site plans and the SP-100 site plan. However, there are substantial differences in the outparcel pad sites in the SP-100 site plan. Differences include:

- Pad A from SK-034/035A was split into Pads A1 and A2 in SP-100. This had no effect on the total pad area, as the combined area of Pads A1 and A2 was the same as the area of Pad A. The intended uses of the pads (sit-down restaurant) were unchanged.
- Pad B was 110 square feet larger in SP-100 than in SK-034/035A. The pad use (drive-thru restaurant) was unchanged.
- Pad C from SK-034/035A was deleted in SP-100.
- Pad D from SK-034/035A was deleted in SP-100.

In the TIS trip generation from the pads was reduced by 20% to account for some trips occurring between the pad site and the rest of the mall, and thus having no impact on the study intersections. In the TIS the pad trips remaining after the 20% reduction were added to the estimated trip generation from the new and repurposed in-mall components to provide the final estimate of new trips at the study intersections on 18th Street and Richmond Avenue.

Table 1 shows how the changes to the pads in the SP-100 site plan effect the gross trip generation, the net trip generation after the 20% reduction, and the percentage change (compared to the TIS) on the total new trip generation at the study intersections.

**Reference: Brandon Shoppers Mall Redevelopment
 Traffic Impact Study – Updated Site Plan (SP-100)**

Table 1: Trip Generation Comparison

Use (ITE Land Use Category)	Average Trip Generation Rate ¹ (Weekday PM) (Saturday Peak) (Weekday ADT)	Pad Floor Area Difference (SP-100 from SK-034/035A)	Trip Generation Difference (SP-100 from SK-034/035A)		
			Gross Trip Generation	Net Trip Generation	Percentage of Total External Trip Generation
Sit-Down Restaurant Pad Unit (932)	9.85 14.07 127.15	None	None	None	None
Fast Food Drive- Thru Restaurant Pad Unit (934)	32.65 59.00 496.12	+110 ft ²	+4 +6 +55	+3 +5 +44	-
Service Retail Pad Unit (826)	2.71 4.82 ² 44.32	-9,238 ft ²	-25 -45 -410	-20 -36 -328	-
Drive-Thru Coffee Shop Pad Unit (937)	42.80 84.52 818.58	-1,650 ft ²	-71 -139 -1,352	-57 -111 -1,082	-
Total		-10,778 ft²	-92 -178 -1,707	-74 -142 -1,366	-8% -11% -13%

¹ Rates per 1,000 ft² floor area

² No rate provided for Land Use 826. Rate taken from related Land Use 820: Shopping Center.

The changes to the pads in the SP-100 site plan are projected to decrease the total new trips generated by the mall redevelopment by 8% in the weekday PM peak hour, 11% in the Saturday peak hour, and 13% during an average weekday.

The TIS found that growth in background traffic to 2026 would cause some of the study intersections to fail to achieve the target of Level of Service (LOS) C during the peak hours. Additionally, background traffic growth to 2021 was projected to cause 95th percentile queues that exceeded available queue storage. Traffic from the redevelopment of Brandon Shoppers Mall (based on the SK-034/035A site plans) was projected to accelerate these issues.

With the SP-100 site plan the mall trip generation is projected to be approximately 10% less than documented in the TIS. This will lessen the impact of the mall redevelopment on the study intersections, but the final conclusions remain valid: background traffic growth is anticipated to lead to LOS and queueing issues in 2021 and 2026, and traffic from the mall redevelopment is anticipated to accelerate these issues.

**Reference: Brandon Shoppers Mall Redevelopment
Traffic Impact Study – Updated Site Plan (SP-100)**

The recommendations from the TIS are unchanged and are re-stated here. Note that section numbers refer to sections in the TIS report:

- Be aware that the intersection of 18th Street and Richmond Avenue is projected to fail to meet the City of Brandon's target of LOS D given existing traffic growth to 2026. This is projected with or without the proposed Brandon Shoppers Mall Redevelopment.
- Also consider that the northbound left-turn at the intersection of 18th Street and Richmond Avenue is projected to have queue lengths exceeding the available storage given existing traffic growth to 2021. This is projected with or without the proposed Brandon Shoppers Mall Redevelopment.
- Redevelop Brandon Shoppers Mall as discussed in Section 1.4. Consider that this redevelopment (anticipated to be complete by 2021) will accelerate the traffic operations and queuing issues identified in Sections 5.2 and 5.3.
- If background traffic grows as projected and traffic operations are unacceptable, conduct a functional design study to determine how to address traffic operations issues along the 18th Street corridor. Projected background traffic growth—before the addition of traffic growth from the mall redevelopment—is anticipated to create traffic operations issues warranting a functional design study. The traffic operations issues are projected to be accelerated by the addition of traffic from the mall redevelopment.

STANTEC CONSULTING LTD.



Bob Kurylko, P. Eng.
Associate, Transportation
Phone: (204) 928-8823
Fax: (204) 453-9012
bob.kurylko@stantec.com