

September 14, 2012

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BY EMAIL: jparkes@taggart.ca

Taggart Realty Management
225 Metcalfe Street, Suite 708
Ottawa, ON K2P 1P9

Attention: Jeff Parkes

Dear Jeff:

**RE: Kanata West Retail/Business Park
Community Transportation Study/Transportation Impact Study
Addendum #2**

BACKGROUND AND CONTEXT

This Addendum to the above-noted, December 2011 Traffic Impact Assessment is in response to the City's recent proposal to consider roundabouts at the proposed intersections along the Campeau Drive westerly extension with each of Huntmar Drive, Palladium Drive and the Tanger site's main site driveway connection.

In all previous plans and documentation and as identified in the Kanata West Transportation Master Plan, these three intersections were planned as four-legged signalized intersections. Therefore, a four-legged signalized configuration was assumed for the subject intersections in the above-noted CTS/TIS (see attached Tanger Site Plan).

Following the City's design exercise for Campeau Drive from Didsbury west to Huntmar Drive, the City (and their consultant) has determined that all full-movement intersections from the planned Carp River Bridge west, to and including Huntmar Drive, should be configured as roundabouts, as opposed to traditional traffic signal control. They have made this determination based on their review of both weekday commuter peak hour traffic projections and traffic activity associated with major events at the Scotiabank Place.

Although, beyond the study area of the City's current design assignment, the City has also indicated that the Huntmar/Tanger and Huntmar/Palladium intersections could be candidate roundabout locations as well.

From our discussion with Taggart and Tanger (our clients) we are advised that with regard to the Campeau/Huntmar and Campeau/Palladium intersections, Taggart and Tanger have no concerns with either a signalized or roundabout configuration at these locations. In addition, if there are property requirements for a roundabout configuration that exceed those of a typical signalized intersection (which there are), Taggart and Tanger are willing to provide the required additional right-of-way at these two locations, if that is the City's preferred choice.

However, regarding the possibility of a roundabout configuration being the primary Tanger site access, both Taggart and Tanger have significant reservations and do not support a roundabout at this location.

Reviewing the requirements for the Tanger site, the types of projected traffic flow at the primary site access and the operating characteristics of both a signalized intersection versus a roundabout, the following comments are offered:

- Senator's hockey games hosted at the Scotiabank Place, including preseason and playoffs can total over 50 games a year. Combined with concerts and other large events, the Scotiabank Place has the potential to host 65 to 75 afternoon/evening events a year, which attract high traffic volumes;
- To capture activity related to Scotiabank Place events, traffic counts were conducted by the City in spring 2012, specifically during Senator's game nights. The traffic counts indicate that Palladium Drive carries peak directional volumes in the range of 800 vph to 1000 vph. This being 800 vph to 1000 vph headed eastbound between 6PM and 7PM prior to the game, and 800 vph to 1000 vph headed westbound between 10PM and 11PM post game. In the counter peak direction, traffic during both peak hour time periods (6PM to 7PM and 10PM to 11PM) is very low;
- Based on several peak hour observations during Senator's game nights (pre-game time), a queue has been observed extending from the Huntmar/Cyclone Taylor intersection back to the signalized Palladium/Highway 417 westbound off-ramp (a southbound queue on Huntmar Drive/an eastbound queue on Palladium Drive surrounding the Tanger site). This queue develops as a result of parking kiosks along Cyclone Taylor Drive unable to process the number of arriving vehicles attempting to access the Scotiabank Place parking. The access to the Scotiabank Place Valet Parking and the pedestrian crossing zone also contributes to the queue on Huntmar Drive/Palladium Drive. It should be noted that this queue is not a result of insufficient capacity on the Palladium Drive loop;
- During the peak one hour post-game, the issue is then on-site queuing. Once a vehicle exits a Scotiabank Place parking lot and continues through the Huntmar/Cyclone Taylor intersection, there is very little delay on the Palladium Drive loop west of Huntmar Drive, where access is provided to both eastbound and westbound Highway 417 on-ramps;
- Regular commuter peak hour volumes (excluding days where the Scotiabank Place is hosting an event) are currently quite low on the Palladium loop adjacent to the Tanger site (i.e. less than 100 vph per direction). However, these daily peak hour volumes are projected to increase significantly as the subject area develops. For example, the Tanger Retail site (Phase 1) is projected to generate an approximate two-way total of 270 vph and 615 vph during the weekday morning and afternoon peak hours, respectively. The subsequent Phase 2/3 Office/Industrial site (fronting the west side of Palladium Drive) is projected to generate an approximate two-way total of 810 vph and 830 vph during the weekday morning and afternoon peak hours, respectively.

Other area developments, including the Denison lands to the north, Minto's Arcadia subdivision/Broccolini lands to the east and all the planned retail projects between the Carp River/Didsbury, will also generate significant traffic volumes. As indicated on Figure 11, of the subject CTS/TIS, traffic from these planned developments, combined with existing peak hour traffic, is projected to result in two-way background traffic volumes of 750 vph to 850 vph passing through the Campeau Drive Extension/Tanger Site Driveway.

Adding the projected Tanger site-generated traffic to the projected background traffic, the two-way traffic volumes on the subject section of the Campeau Drive Extension is projected to be in the order of 1000 to 1150 vph respectively (Figure 17 of the CTS/TIS).

- With the combination of projected background traffic, Tanger site-generated traffic and special event Scotiabank Place traffic during the afternoon/early evening peak hours, two-way total traffic volumes on the Campeau Drive Extension and Palladium Drive has the potential to reach approximately 1500 vph. With these projected volumes and given the previously mentioned constraints along Cyclone Taylor Boulevard during special events at the Scotiabank Place, the existing queue that extends from the Huntmar/Cyclone Taylor intersection back to the Palladium/Highway 417 interchange is projected to be significantly longer, requiring significantly more time to clear. This is considered extremely problematic for any driveway connections to the Campeau Drive Extension, Palladium Drive and Huntmar Drive.

While there will be up to four site driveways connecting the Tanger site to the adjacent arterial road network, the driveway connection to the Campeau Drive Extension will be the major primary access and will likely be the first one to be constructed. For this driveway connection, two inbound lanes and two outbound lanes are proposed, with a throat length of approximately 45 m to 50 m.

This driveway connection to the Campeau Drive Extension will not only accommodate the greatest amount of site-generated traffic, it will also connect to the planned dedicated bicycle facilities and sidewalks on the Campeau Drive Extension. Therefore, this will be a very important site access point for pedestrians and cyclists originating/destined to the Tanger site from other adjacent development lands to the north and east of the site.

RECOMMENDATIONS

Based on the foregoing, it is our opinion that a signalized intersection is a more appropriate configuration for the primary vehicle/pedestrian/cyclist access to the Tanger site for the following reasons:

- Traffic signals have the ability to provide breaks in congested traffic streams with a red signal phase and the fact that it is illegal to impede traffic by entering an intersection on a green phase if unable clear the intersection. This is critical for Tanger, as providing a break in the congested traffic stream during an event at the Scotiabank Place will enable Tanger patrons to safely enter/exit the site;
- Traffic signals have the ability to provide safe protected crossings for pedestrians/cyclists, whereas pedestrians/cyclists have to rely on yield control at a roundabout. Given the projected high volume travelling through the subject driveway connection, combined with the traffic flow problems related to Scotiabank Place events, a traditional traffic signal at this location will better accommodate pedestrian and cyclists entering/exiting the Tanger; and
- The Tanger development, being a specialty retail land use, will attract patrons from around the region. As such, many patrons will not be familiar with a single or a two-lane roundabout operation. The combination of non-local patrons, high daily traffic volumes, excessive queues related to Scotiabank Place events, and

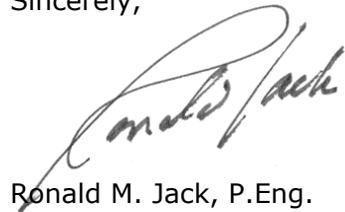
pedestrian/bicycle traffic could pose significant safety problems at the site's primary driveway with a roundabout configuration;

Based on the foregoing operational concerns, being the primary site connection to a major regional retail facility and because neither Tanger nor the City have experience with a two-lane roundabout burdened with congested special event traffic, Tanger has no interest in constructing or experimenting with a roundabout at this location. In order to maintain an environment safer for pedestrians/cyclists and a more intuitive/stress free access to/from the proposed site for vehicles, Tanger wishes to control their site driveway connection to the Campeau Drive Extension by traditional traffic signal control.

In summary, a four-legged signalized intersection is recommended for the primary Tanger site driveway connection to the proposed Campeau Drive extension. For the adjacent Campeau/Huntmar and Campeau/Palladium intersections, if the City wishes to control these two locations by a two-lane roundabout configuration, and their analysis supports efficient operation under all circumstances, we are advised that both Taggart and Tanger do not object to providing the required right-of-way.

Please call if you have any questions of the foregoing.

Sincerely,



Ronald M. Jack, P.Eng.
Vice President Transportation
Manager Ottawa Operations

Attachment

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