



**PLANNING AND REGULATORY SERVICES DEPARTMENT
DEVELOPMENT ENGINEERING DIVISION**

March 6, 2018

MEMO TO: Katherine Faria, Planner II

FROM: Paul Guerreiro, Manager of Development Engineering - Site Plans

COPY TO: Richard Hui, Manager of Transportation

SUBJECT: D02-14029 (Zoning By-Law Amendment) Related File: D06-14096
2295190 ONTARIO INC.
10027 YONGE STREET

The Development Engineering and Transportation Division has reviewed the above noted application.

Transportation and Traffic - Please contact Ahsun Lee, Traffic Engineer at (905) 771-2515 if you have any questions or concerns.

For the aforementioned application, Transportation staff reviewed "Traffic Impact and Parking Study", prepared by LMM Engineering Inc., revised February 16, 2018, draft zoning by-law, and a site plan concept drawing, revision no. 9, dated February 15, 2018. Below outlines key transportation issues based on the review of these submitted documents, followed by detailed comments.

Parking Supply and TDM Plan

- It should be noted that the gross floor area information used in this Traffic Impact and Parking study is different from the site statistics provided on the site plan concept drawing. It appears that the study used Gross Leasable Floor Area to calculate the parking requirements although the applicable parking requirements should be calculated based on the Gross Floor Area (GFA). Proper parking rate variables and corresponding statistics should be used to calculate the proper parking requirements. In comparison to the Site Plan Concept drawing, the parking calculation is missing about 560m² of GFA (3906.86 m² of total GFA versus 3349.87 m² in Table 8-1).
- The Traffic Impact and Parking Study did not indicate the sources for the parking rates used in Table 8-1. Please provide the source.
- As the subject site is within the Downtown Secondary Plan area, reduction to the applicable parking requirement in the current zoning by-law can only be considered in conjunction with an acceptable TDM plan. The Traffic Impact and Parking Study recommends 18 bicycle parking spaces as part of the TDM plan, but the draft zoning by-law indicates 8 bicycle parking spaces. The draft zoning by-law should be revised to reflect the recommendation from the Traffic Impact and Parking Study, which is 18. The zoning by-law should also define the bicycle parking spaces with appropriate dimensions.
- The transportation staff request that the draft zoning by-law be rewritten for the consistency with other by-laws (i.e. spaces / 100 m² of GFA for each use) rather than presented in a table as illustrated in the submitted document. The transportation staff is also in the agreement with sharing the parking requirements between different compatible uses, but the format as shown in the draft zoning by-law is not acceptable.

- Notwithstanding the above, the transportation staff advise that the difference in GFA (about 560m² of GFA) would result in the parking deficiency by 10 spaces or more.

Loading Space Requirement

- No justification has been submitted in support of the proposed changes to the zoning by-law. In absence of reviewing the required loading activities, including type of vehicles, for the proposed development application, transportation staff cannot accept the proposed reduction to the loading requirement. The submission is seeking an approval on the reduction to the loading space size from 12 ft (3.66m) by 30 ft (9.14m) to 3.0m by 9 m. Therefore, transportation staff cannot support the proposed loading reduction in absence of any materials providing justification for such reduction.
- The Traffic Impact and Parking Study states that "the largest size truck that can be accommodated is a light single unit truck" based on the internal circulation analysis. The largest truck allowed on the site, which is a light single unit truck, is about 1 m longer than a typical passenger vehicle. The transportation staff is concerned that the proposed development with the total GFA being about 3,900 m² which includes about 500 m² of restaurant GFA is relying on a loading space and design that can only accommodate a light single unit truck. Therefore, the functionality and accessibility of the loading space as proposed does not appear to be adequate.

Compact Car Parking Spaces

- It should be noted that there is no justification to support the proposed compact car parking spaces. The transportation staff does not support the proposed introduction of compact car parking spaces.

Access Operations and Linked System of Courtyards and Mews

- The Traffic Impact and Parking Study indicates that the proposed Yonge Street access will operate poorly (levels of service at 'E' and 'F' in Table 5-2). The analysis also shows that the southbound vehicular queue on Yonge Street from Major Mackenzie Drive would extend beyond the subject site, which will block the proposed driveway. As such, the proposed full-movement driveway will have operational challenges due to high vehicular traffic volumes and queues on Yonge Street. As envisioned in the Downtown Secondary Plan, the planned linked system of courtyards and mews will address this operational challenge.
- The Downtown Secondary Plan and Downtown Transportation and Parking Study highlight the importance of a linked system of courtyards and mews. Characterized by heritage buildings and Richmond Hill Performing Arts Centre, a strong presence of pedestrian realm is essential which is to be highlighted by the implementation of a linked system of courtyards and mews. Furthermore, consolidation of accesses between developments within the Downtown Secondary Plan Area that would avoid access onto Yonge Street is critical recognizing the operational challenges along Yonge Street. Therefore, this planned linked system of courtyards and mews will allow for viable development activities to occur by addressing challenges with accessibility and connectivity within the Downtown Secondary Plan area while promoting the envisioned public realm. As such, the linked system of courtyards and mews is situated within properties along Yonge Street.
- The Downtown Transportation and Parking Study recommends a parking courtyard with a vehicular driveway aisle, connecting properties to the north and south, and a destination courtyard on the subject site. Reviewing the proposed development application, the transportation staff feels that having mews providing two-way connections for vehicles to/from the north and south and as well as to/from Yonge Street would satisfy the intent of the linked system of courtyards and mews. This will provide alternative vehicular access to other public streets, enhancing accessibility of the subject site. This linked system will alleviate pressure from its proposed Yonge access point which will experience significant vehicular queues and volumes. The design of the linked system on the subject site should have regards for the provisions for pedestrians in order to provide the connectivity. The planned linked system of courtyards and mews can utilize the majority of the driveway aisles and the walkway connections of the

proposed development application; so that there would be minimal impact to the density yields and the parking supply. Once the linked system of courtyards and mews is fully established, the on-site circulation for the subject site would be significantly improved as servicing vehicles can make forward motions using this system to circulate the site instead of making three-point turns.

- Therefore, the proposed future potential pedestrian connection as shown on the site plan conceptual drawing is not adequate and does not meet the intent of the planned linked system of courtyards. The site design as proposed does not appear to provide adequate access, loading and on-site circulation for the proposed development. However, at this point, Transportation staff cannot provide comprehensive comments on this matter as the Traffic Impact and Parking Study require revisions to address the following comments:
 - Section 3.2 Existing Traffic: Please provide traffic data collected on February 8, 2018 and the signal timing plan used for the analysis.
 - Section 4.0 Future Background Condition: The intersection of Yonge Street and Major Mackenzie Drive will be reconfigured to provide an exclusive bus rapid transit way to the south, which is currently under construction. However, the study does not account for this improvement. Please revise the analysis to incorporate the planned infrastructure improvement.
 - Section 5.2 Trip Generation: Please advise which edition of Institute of Transportation Engineers Trip Generation Manual is used to forecast the anticipated trip generation of the proposed development. The forecasted trip generation is under-estimated as (a) retail trip calculation should utilize a fitted curve equation rather than the average rate; and (b) medical office trip calculation should be calculated based on the GFA. Please revise accordingly.
 - Appendix C Internal Trip Capture Estimation Tool: Please provide justifications for the modal split and vehicle occupancy estimates used in the calculation.
 - Synchro Analysis: Several inputs to the Synchro analysis should be reconsidered and revised. As mentioned above, intersection configurations and signal timing plans reflecting the future Yonge Street rapid transit way should be incorporated into the analysis accordingly. Pedestrian volumes should also be forecasted to increase rather than staying the same as existing levels. In addition, the lane widths on Yonge Street and the proposed driveway should be appropriately reflected in the Synchro analysis.

Hydrogeological - Please contact Jeff Walters, Manager of Stormwater Management & Subdivision at (905) 747-6380 if you have any questions or concerns.

We understand that a recent submission indicates that two underground parking levels are now proposed for this site plan application. The latest version of the Hydrogeological Investigation (revised January, 2017) and related dewatering requirements/impact assessment are based on one level of underground parking.

To support the rezoning application, a preliminary Hydrogeological investigation is required of sufficient detail to allow SPL Consultants Limited to state that construction of the proposed building and underground structures are feasible and that impacts from any temporary construction or permanent dewatering systems may be mitigated using conventional methods.

To support the site plan application and detailed design, the current Hydrogeological Investigation will need to be updated to reflect two levels of underground parking based on the current building and underground parking structure design elevations.

Servicing, Grading, Storm Water Management & ESC - Please contact David Moyle, Project Coordinator – Site Plans at (905) 771-5541 if you have any questions or concerns.

It has been noted that the requested engineering documentation to support the Zoning By-Law Amendment application based on the applicants Concept Plan (Exhibit 3)

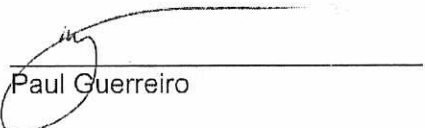
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submitted to the Town February 16th has not be included in the resubmission documentation. Development Engineering cannot provide any comments regarding the feasibility of the proposed development to achieve servicing and grading at this time until the previously requested engineering documentation in support of the Zoning By-Law Amendment has been submitted for review.

These comments have been addressed by:

Name: _____
Contact Number: _____

For


Paul Guerreiro

PG/ph