



OSKAR GROUP

June 27, 2018

Scarborough District
Community Planning
Scarborough Community Council
150 Borough Drive Floor 3
Toronto ON M1P 4N7

via email scc@toronto.ca

Attention: Administrator, Scarborough Community Council

**Re: Zoning By-law Amendment by N Architecture Inc.
City of Toronto File No. 16 212352 ESC 41 CC
3662 Midland Avenue Toronto, Ontario**

We are owners of the lands municipally known as 3660 Midland Avenue, located immediately south of, and adjacent to, the lands subject of the above-noted application.

The applicant proposes to amend the Milliken Employment District's Zoning By-law no. 24982, as amended for the lands at 3662 Midland Avenue to include a vehicle washing establishment and drive-through facility. This application also proposes to bring this site into the City-wide Zoning By-law 569-2013 under the Employment Industrial (E) Zone to permit a drive-through facility and a vehicle washing establishment. The application will facilitate the redevelopment of lands with a vehicle fuel station, a vehicle washing establishment and a building containing a retail store and take-out restaurant with a drive-through facility.

We are not opposed to the proposed development in principle. Our concern arises from the traffic impacts brought by the proposal described above, as well as the Tim Horton's restaurant identified in the Planning Rationale Report.

We engaged JD Northcote Engineering Inc. to peer review the applicant's Traffic Impact Study (TIS) by LMM Engineering Inc. JD Northcote concludes the TIS is based on sound traffic engineering principles but recommends additional analysis or discussion to ensure adequate mitigation measures are implemented to address any operational and/or traffic issues.

The following excerpts from JD Northcote's Peer Review Letter are some of the critical items that require additional analysis or discussion:

2.4 Traffic Generation and Assignment – Proposed Development

- *In our experience a Tim Hortons coffee shop generates notably more trips than the trip generation estimates provided for ITE Use #937. It is recommended that the developer identify the type of coffee shop that is anticipated and revise the TIS generation rates based on proxy counts for a similar use.*

2.5 Capacity Analysis

- *The results of the analysis indicate that the McNicoll Avenue / Midland Avenue intersection is approaching theoretical capacity during the existing (2016) scenario with the eastbound left turn movement outside typical design parameters (LOS F). The results of the analysis also indicate that the McNicoll Avenue / Midland Avenue intersection is over theoretical capacity during the background (2021) and total (2021) scenarios with multiple movements outside typical design parameters (LOS F and V/C ratio >1).*
- *The results of the analysis indicate that the anticipated 95th percentile queues at the McNicoll Avenue / Midland Avenue intersection will extend beyond the existing storage length. A queueing analysis should be completed to assess the impact.*

2.6 Layout

- *Figure 1-2 illustrates a centre median on McNicoll Avenue and Midland Avenue; however, there is currently no median in either location and no discussion is provided in the TIS regarding the feasibility of constructing these medians.*

2.8 Proposed Development Driveway Spacing

- *The proposed development access on Midland Avenue and McNicoll Avenue do not meet the minimum corner clearance requirements outlined in the Transportation Association of Canada Design Guide for Canadian Roads (2017) (TAC Guidelines) – Figure 8.5.2 (Suggested Minimum Corner Clearances to Accesses or Public Lanes at Major Intersection).*
- *The RO driveway on Midland Avenue and the existing adjacent driveway to the south do not meet the minimum driveways spacing requirement identified in the TAC Guidelines (3 metres for commercial land uses).*

We emphasize our concerns are not related to the proposed uses, but rather the operational and traffic safety issues imposed by the development. In addition to the **2.4 Traffic Generation and Assignment – Proposed Development** excerpt, the **Figure 1** photo below was taken of another nearby Tim Horton's drive-through that regularly backs-out onto the road during AM Peak hours:



Figure 1: A Tim Horton's located 1.3 km north of the subject lands at the southwest corner of Steeles Avenue East and Midland Avenue. This photo was taken at 8:30 am on June 27, 2018, when the drive-through line backs-out onto Midland Avenue.

We welcome an opportunity to further discuss the proposal with the proponent on the matters mentioned. We will continue to review the documents provided by the proponent in support of the proposed development and reserve the right to provide additional commentary as our review proceeds. Please email me at salzamora@oskargroup.com or call me directly at ext. 504 should you have any questions.

Sincerely,

Sebastian Alzamora
Project Manager
For and behalf of 1572866 Ontario Inc.

Encl.: 3662Midland Ave – Traffic Impact Study – Peer Review



June 28, 2018

JDE Project 18055

Oskar Group

3660 Midland Avenue, Suite 200
Toronto, ON M1V 0B8

Attn: Sebastian Alzamora

RE: 3662 Midland Avenue – Traffic Impact Study – Peer Review

1. Introduction

Oskar Group has retained **JD Northcote Engineering Inc.** [JD Engineering] to complete a peer review of the Traffic Impact Study (dated February 6, 2018, by LMM Engineering Inc.) [TIS] for the proposed Midland Avenue Gasoline Station at 3662 Midland Avenue, in the City of Toronto [City].

The proposed development includes a gas station with car wash and a convenience store with a food partner which is understood to be a Tim Hortons with a drive-through window. The Tim Hortons is anticipated to have 1,100 sq.ft. of gross floor area and the gas station is anticipated to have 12 vehicle fueling units.

The proposed development will have a right-in-right-out [RIRO] access driveway on McNicoll Avenue, a RIRO access driveway on Midland Avenue and right-out [RO] access driveway on Midland Avenue.

The subject site, which is currently undeveloped, is located at the southwest quadrant of the McNicoll Avenue / Midland Avenue intersection.

While spot-checks on calculations were undertaken to confirm the specified design manuals had been consulted, JD Engineering does not take liability for any omissions / exceptions that the consultant may have made though their assessment. The reviewed study was carried out utilizing a standard traffic impact study methodology, as prescribed in the City of Toronto Guidelines for the Preparation of Transportation Impact Studies (2013) and in comparison with the standards and guidelines employed by various municipalities in Ontario.

Though JD Engineering agrees with the general approach, some critical items in the analysis have been noted below for additional consideration.



JD Engineering
Phone: 705.725.4035
Email: Info@JDEngineering.ca

2. Peer Review Comments

Generally, the information and analysis included in the TIS appears to be based on sound traffic engineering principles.

The TIS included a review of the following intersection:

- McNicoll Avenue / Midland Avenue (signalized);
- McNicoll Avenue / Site Entrance 1 (unsignalized);
- Site Entrance 2 / Midland Avenue (unsignalized); and
- Site Entrance 3 / Midland Avenue (unsignalized).

2.1. Existing Traffic Data

- The traffic counts were completed on a date that would result in the critical scenario for traffic generation; however, the time period selected for the PM peak hour (16:00 to 18:00) may not have captured the actual peak traffic period. The PM peak hour identified in the TIS is from 17:00 to 18:00; consequently, there is no way to confirm that the peak traffic period ends at 18:00. For example, a number of movements have the highest 15 minute traffic volume between 17:45 – 18:00. The same issue occurs during the morning peak, but to a lesser extent.

2.2. Background Traffic Growth Rate

- The TIS notes that existing (2016) traffic volumes were compared to the most recent AM peak hour traffic volumes found on the City's website resulting in a decrease in traffic volumes. This could not be confirmed as the data was not provided in the TIS.

2.3. Traffic Generation and Assignment – Adjacent Development

- There appears to be an error in the presented trip generation values in Table 4-2. The total trips during the PM peak hour do not equal the sum of all adjacent developments.
- The distribution of the traffic from the adjacent developments has not been provided in the TIS; however, the description provided in the TIS represents a reasonable approach. We were unable to calculate or confirm the suitability of trip distribution used, as a result of the error in the traffic volumes in Table 4-2, as noted above.

2.4. Traffic Generation and Assignment – Proposed Development

- Based on our experience with similar studies, the trip generation for a coffee shop with drive thru varies significantly depending on the type of coffee shop. **In our experience a Tim Hortons coffee shop generates notably more trips than the trip generation estimates provided for ITE Land Use #937. It is recommended that the developer identify the type of**

coffee shop that is anticipated and revise the TIS traffic generation rates based on proxy counts for a similar use.

- Separate figures were not provided for the pass-by and primary proposed development traffic assignment; consequently, we were not able to fully review the traffic distribution assumptions.

2.5. Capacity Analysis

- Typical Synchro model parameters appear to have been used in the analysis. Generally, the methodology used in the Synchro model is in accordance with the City of Toronto Synchro guidelines.
- The impact of bus loading in the curb lanes on all intersection approaches was not included in the analysis. It is anticipated that the impact of the bus loading will be relatively minor, but this impact should be reviewed / discussed.
- The results of the analysis indicate that the McNicoll Avenue / Midland Avenue intersection is approaching theoretical capacity during the existing (2016) scenario with the eastbound left turn movement outside typical design parameters (LOS F). The results of the analysis also indicate that the McNicoll Avenue / Midland Avenue intersection is over theoretical capacity during the background (2021) and total (2021) scenarios with multiple movements outside typical design parameters (LOS F and V/C ratio >1). The TIS indicates that aside from adding an eastbound advance left-turn phase, design feasibility would need to be considered for any lane widenings at the intersection. It is noted that intersection operation with signal timing improvements and adding an eastbound advance left-turn phase has not been provided for any of the scenarios. It is also noted that based on a preliminary review of the intersection, an eastbound right turn auxiliary lane may be feasible and could have a notable impact on the operation of the McNicoll Avenue / Midland Avenue intersection.
- The results of the analysis indicate that the anticipated 95th percentile queues at the McNicoll Avenue / Midland Avenue intersection will extend beyond the existing storage length. A queueing analysis should be completed to assess the impact.
- The model results for the site access driveways are operating well within an acceptable range.

2.6. Layout

- The proposed site layout may result in operational issues at the RO driveway, as vehicles in the drive-thru will have no opportunity to pull aside and park within the site, if there are issues with an order.
- Figure 1-2 illustrates a centre median on McNicoll Avenue and Midland Avenue; however, there is currently no median in either location and no discussion is provided in the TIS regarding the feasibility of constructing these medians.
- The extent of the proposed median on Midland Avenue does not adequately restrict eastbound-left turn movements at the RO driveway.

- A vehicle swept path analysis should be provided to demonstrate the impact of a centre median on Midland Avenue for the existing driveway south of the subject site.
- The clear throat distance for Site Entrance 1 (at McNicoll Avenue) should be increased to avoid operational issues between the car wash exit driveway and the vehicles entering the subject site at Site Entrance 1.

2.7. Loading

- A vehicle swept path analysis for the tanker trucks within the site should be completed to ensure adequate clearance is provided.

2.8. Proposed Development Driveway Spacing

- The proposed development accesses on Midland Avenue and McNicoll Avenue do not meet the minimum corner clearance requirements outlined in the Transportation Association of Canada *Design Guide for Canadian Roads (2017)* [TAC Guidelines] – Figure 8.8.2 (Suggested Minimum Corner Clearances to Accesses or Public Lanes at Major Intersections).
- The RO driveway on Midland Avenue and the existing adjacent driveway to the south do not meet the minimum driveways spacing requirement identified in the TAC Guidelines (3 metres for commercial land uses).

3. Peer Review Summary

Generally, the information and analysis included in the TIS appears to be based on sound traffic engineering principles. The items outlined above require additional analysis or discussion to ensure adequate mitigation measures are implemented to address any operational and/or traffic safety issues.

We trust that you find this satisfies your requirements, however if you have any questions or comments, please contact the undersigned.

Yours truly,
JD Northcote Engineering Inc.



John Northcote, P.Eng.
President -