Memorandum



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То

Aquisha Khan, P. Eng., Transportation Engineer Transportation Planning Services **Town of Oakville**

From

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RE: PROPOSED INDUSTRIAL DEVELOPMENT, TRIP GENERATION REVIEW TECHNICAL REWVIEW MEMO, 560 AND 772 WINSTON CHURCHILL BOULEVARD, TOWN OF OAKVILLE

Blackwood Partners Inc. and 772 Winston Churchill GP Inc. are proposing to develop warehouse facilities in the Town of Oakville (the Town) at 560 and 772 Winston Churchill Boulevard, respectively. Henceforth, these sites are referred to as the subject site. The Town previously provided C.F. Crozier & Associates (Crozier) comments on their transportation studies for their site. Crozier has since prepared a Trip Generation Review Memo (the Memo) to address the Town's comments. The purpose of this memorandum is to provide a technical review of the Memo.

Memo Summary

Key aspects of the Memo include:

- An analysis of trip generation rates and parking rates, based on a proxy site located at 8550 Boston Church Road in the Town of Milton. This site is currently a distribution centre for Lowe's.
- A review of the methodology used for trip generation rates and parking rates for an industrial site located at 551 Avonhead Road in the City of Mississauga.
- An analysis of the heavy vehicles expected at the subject site, based on the heavy vehicle volumes observed at 8550 Boston Church Road and 551 Avonhead Road sites.

Detail Comments

Key transportation-related items are as follows:

Site comparison. Table 1 of the Memo demonstrates that the subject site is relatively comparable to the observed 8550 Boston Church Road site. The number of parking

spaces and gross floor area (GFA) are nearly identical for the two sites, with the number of loading spaces being 46 spaces greater for the subject site.

- Adjacent Sites. Prior discussions of the 560 Winston Churchill Boulevard site sought to consider the combined impacts of the 772 Winston Churchill Boulevard site. The Trip Generation Review Memo considers the combined impacts of both 560 and 772 Winston Churchill Boulevard sites.
- Trip Generation. The trip generation rate used for the subject site is based on the Institute of Transportation Engineers (ITE) *Trip Generation Manual, 10th Edition*, land use code (LUC) 150 (Warehousing). The methodology for estimating trip generation rates is similar to the methodology used in 551 Avonhead Road Traffic Impact Study. The ITE trip generation rates are 53% and 47% higher than the proxy site trip generation rates for AM and PM peak hour, respectively. The ITE trip generation rates are found to be conservative when compared to the proxy site.
- Parking. The proxy site located at 8550 Boston Church Road has a similar number of parking spaces as the subject site. It is estimated that there are approximately 733 passenger parking spaces at the proxy site, which is similar to the combined total of 761 for the 560 and 700-750 Winston Churchill Boulevard sites. The total number of parking spaces planned for the subject site is 4% higher than the proxy site having a similar GFA. The planned parking spaces at the subject site were also verified against the industrial site located at 551 Avonhead Road. It was found that the subject site contains five (5) percent fewer parking spaces compared to the industrial site, after normalizing the GFA for both sites. The parking spaces are relatively comparable, but proportionally smaller in terms of number of parking space per m² of GFA.
- Loading Spaces. The 8550 Boston Church Road site has 180 loading bays, which is less than the combined total of 226 for the 560 and 700-750 Winston Churchill Boulevard site. The total number of parking spaces planned for the subject site is 20% higher than the proxy site having a similar GFA. The loading spaces at the subject site are not explicitly compared with the industrial site located at 551 Avonhead Road. The Memo mentions that the loading space provisions at 551 Avonhead Road was not made clear in the Traffic Impact Study.
- Heavy Vehicle Percentage. The Memo assumes 20% of peak hour trips as heavy vehicles for 560 and 772 Winston Churchill Boulevard analyses. The heavy vehicle data for the 8550 Boston Church Road site indicates lower percentages, with the highest being 13%, observed during the AM peak. The heavy vehicle percentage used in the 551 Avonhead Road Traffic Impact Study yields much higher truck volume allocations of 40%, 20%, 50%, and 30% for the weekday AM inbound, weekday AM outbound, weekday PM inbound, weekday PM outbound peak hour conditions, respectively. The 20% assumption of heavy vehicles in both AM and PM peak hours is reasonable, given that the ITE trip generation rates used for the subject site are conservative compared to the proxy site.
- Gross Floor Area. The Gross Floor Area (GFA) for the proxy site is 121,400 m². The combined GFA of the 560 and 772 Winston Churchill Boulevard sites is approximately



119,200 m². The GFA of the proxy site is comparable to the subject site, with the latter being around 2% smaller than the proxy site.

- Data Collection. The Turning Movement Counts (TMCs) were collected for the 8550 Boston Church Road proxy site on 30 May 2023 (Tuesday) and 31 May 2023 (Wednesday) across entire 24-hour time periods. The TMCs collected for the proxy site best practices as data is typically collected between Tuesday and Thursday in the spring and fall periods. The peak hours for the trip generation at the proxy site were observed to be between 5:00-6:00 AM and 4:45-5:45 PM for AM and PM peak hours, respectively. The AM peak of the proxy site occurs outside peak period expected for the adjacent roadways, while the PM peak of the proxy site occurs within the peak period expected for the adjacent roadways. The Memo mentions that an AM peak hour occurring within the expected AM peak hour for the surrounding network was selected for the analysis, thereby making the analysis more robust and comparable. However, the AM peak hour selected for analysis is not explicitly detailed in the Memo.
- Surrounding Land Use. The proxy site at 8550 Boston Church Road (proxy site) is located in an industrial area with no residential houses in the vicinity. The 560 and 772 Winston Churchill Boulevard site is located directly north of an existing residential area. The varying land uses in the two study areas may result in varying travel patterns.
- Site Access. The proxy site has two passenger vehicle accesses located at the south side of the property. There is a separate driveway exclusively for heavy vehicles along the north side of the proxy site. The subject site has one access each for heavy and passenger vehicles for both properties and the two properties are completely separate. The difference in the site access configurations for the proxy and subject site will influence travel behaviour to some extent, but there does not appear to be any significant implications on the study area network for the subject site in this regard.
- Public Transit. The proxy site as well as the subject site are both located close to a major GO Transit stops. The proxy site is located close to the Milton GO Transit stop and the subject site is located near the Clarkson GO Transit stop. Both transit stops have comparable park and ride facilities.

Conclusions

The following conclusions are noted:

- The Memo considers the traffic impacts of both 560 and 772 Winston Churchill Boulevard sites in combination with each other.
- The Memo demonstrates that the subject site and proxy site located at 8550 Boston Church Road are similar to each other, in terms of GFA and parking spaces. The ITE trip generation rates are found to be conservative when compared to the proxy site.
- The parking spaces are found to be similar to the proxy site at 8550 Boston Church Road. However, the subject site contains 5% fewer parking spaces when compared to the industrial site located at 551 Avonhead Road, after normalizing the GFA for both



sites. The parking spaces for the subject site are relatively comparable with both proxy site and the industrial site.

- The planned loading spaces are found to be 20% higher when compared to the proxy site at 8550 Boston Church Road. The loading spaces for the subject site are found to be conservative when compared to the proxy site.
- ► The heavy vehicle percentage of 20% for both AM and PM peak hours are found to be conservative when compared against 8550 Boston Church Road proxy site. However, the industrial site at 551 Avonhead Road estimates a higher heavy vehicle percentage in both AM and PM peak hours. The 20% assumption of heavy vehicles for the subject site is reasonable, given that the ITE trip generation rates used for the subject site are almost double compared to the trip generation rates estimated for the proxy site.
- The Memo provides clear and adequate data collection details, including TMC locations and data collection dates.
- Further details regarding surrounding land use, site access and nearby transit do not indicate any significant issues with the analysis for the subject site.

Recommendations

The Town may consider the following recommendation:

 Confirm the conclusions of the 560 and 772 Winston Churchill Boulevard Trip Generation Review Memo and this Technical Review Memo.

Yours truly,

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