

June 23, 2023

City of Mississauga Planning and Building Department Development and Design Division 300 City Centre Drive Mississauga, ON L5 3C1

Re: Urban Design Impact Study - SGNBLD 23-6953 - Sign Variance 1061 Winston Churchill Blvd.

Dear Sir:

The following submission is our Design Impact Assessment Study as it relates to our sign variance submission for the property known as 1061 Winston Churchill Blvd..

The variance being requested are to permit one single-sided electronic billboard sign with a static electronic changing copy face and the sign will be installed on the east side of Winston Churchill Blvd. facing northbound traffic.

Physically, the property is located between Royal Windsor Drive to the south and Sheridan Garden Dr/Bromgrove Rd. to the north, on lands owned by Metrolinx.

Winston Churchill Blvd.. is a Peel Region road and we have obtained approval from the region to install the sign. Email confirmation has been uploaded to the City of Mississauga website.

The property is zoned Railway Right of Way. The property frontage along Winston Churchill Blvd. is 28.19m with a depth of 25.01m t the location where the sign will be installed. There is an existing billboard sign on the property which will be removed. Directly to the north of the Metrolinx lands approximately 68m from the proposed sign location is OS-Open Space and beyond that at +/-263m is the start of residential. The sign will not face these lands. To the immediate south the lands are zoned E2 Employment. To the west on the opposite side of Winston Churchill Blvd. is the Town of Oakville. The image below shows the property location and properties within 500 m of the proposed sign.



The following assessment of our application will be completed in conjunction with the document titled "Guidelines for the Review of Sign Variance Applications for Billboard Signs with Electronic Changing Copy". Our analysis will be compared to the "Guideline" excerpt:

"The purpose of this document is to establish a set of criteria by which sign variance applications for billboard signs with electronic changing copy will be evaluated. Municipalities generally establish controls to mitigate the impacts of electronic billboard signs on traffic safety, sensitive land uses and on the visual image of the communities in which they are located."

The guidelines contained in that document and their criteria will be applied in this review and submission for our request to install billboard featuring electronic changing copy. The single face of the board will be oriented towards west bound traffic on Derry Road East.

3.1 Waiver

A waiver releasing the City and Road Authority from liability and committing to indemnifying the City and Road Authority against any claim, action or process for damage and/or injury as a result of the installation or existing of the billboard sign has been submitted to the city.

3.2 Location

Billboard signs with electronic changing copy shall only be considered wherever billboard signs are permitted in accordance with Sign by-Law 54-02 (see Table 4, page 19) and in the following areas of the City:

- Public Squares in the Downtown Core
- Public Squares within the Cooksville 4 Corners
- Public Squares within Major Nodes
- Specific areas of the City, deemed by the City to be locations in which electronic billboard signs are seen
 as key elements that contribute to the character and vibrancy of the area.

The property at 1016 Winston Churchill Blvd. is ideally located for this type of sign.

The property and proposed sign location is approximately 200 north of Royal Windsor Drive with the singlesided sign facing northbound traffic along Winston Churchill Blvd. which at this point is two lanes in either direction. The intersection at Royal Windsor Dr. and Winston Churchill is signalized with no driver decision points impacting the proposed sign. The area is zoned Employment to the south with residential to the north with no visibility to the sign. There are no other sensitive uses which could be impacted by the proposed sign.

3.3 Urban Design Impact Assessment

Each sign variance application package for a billboard sign with electronic changing copy shall include an urban design impact assessment of the proposed sign on the views, visual quality and character of the existing and planned surrounding context (see Appendix C for Terms of Reference).

A contextual plan/site plan is attached to this submission as per the criteria contained in Appendix C of the Guidelines.

3.4 Sign By-law 54-02

As per Table 4 and Sec. 20 of the Sign By-law 54-02 the proposed billboard featuring electronic changing copy will abide by all the criteria as set out on Page 20 of the Sign By-law 54-02.

3.5 Separation Distances, Heights, Setbacks, Maximum Sign Area

Billboard signs with electronic changing copy shall be positioned relative to one another such that not more than one electronic billboard display shall be visible to an approaching driver at the same time. Except for 2(a) and 2(b), the provisions of the Sign By-law 54-02 Sec. 20 shall also apply to billboard signs with electronic changing copy. No part of a billboard sign with electronic changing copy shall:

- Exceed 7.62 m in height (240-07)
- Be located closer than 7.5 m to the street line (240-07)
- Be multi-faced
- The maximum sign area of a billboard shall be 20 m2 per sign face (240-07)

The proposed sign will not exceed 7.62 m in height.

The proposed sign will be set back not less than 7.5 m from the property line

The proposed sign will have a sign face area per face of 29.49 square metres which is 9.49 sq m over the maximum allowable. This is due to the design of the sign and the panels to be used for display.

Notwithstanding the provisions of Sign By-law 54-02, Section 20, 2(a) and 2(b), no part of a billboard sign with electronic changing copy shall be:

- Located closer than 250 m from another billboard on the same side of the street but this does not apply
 to billboard signs on opposite sides of grade separated by railway crossings.
- Located closer than 250 m measured in a straight line from a residential Zone.

There are no existing billboard signs within 250m of the proposed billboard location. The existing billboard sign will be removed.

3.6 Location of billboard signs with electronic changing copy, relative to traffic control devices and important driver decision points

Where the posted speed limit on a road is less than 80 km/hr, a billboard sign with electronic changing copy shall not be erected within 120 m of a major traffic sign or driver decision point.

The proposed billboard sign will be located approximately 200.0 m north of the controlled intersection at Royal Windsor Dr.. The sign will face south and have visibility to northbound traffic. The traffic lights are well outside the minimum 120m. This separation satisfies the Sign by-laws for setback for a static image billboard.



Driver decision points include intersections, on ramps, interchanges, merge areas, right/left turn lanes and close to traffic signals, toll plaza, pedestrian crossings, rail crossings, work zones, where the cognitive demands on drivers are greatest.

There are no other important driver decision points for northbound traffic which could be impacted by the proposed billboard sign.

3.7 Minimum Message Display Duration

Generally, bright lights and visual changes, both of which are associated with electronic billboards, can draw the eye to a stimulus that is brighter than its surroundings. Bright lights and visual change can also draw the eye to a stimulus that exhibits movement or apparent movement. In addition, the Zeigarnik Effect (the increased memory recall of an incomplete task/message) suggests that drivers will focus longer on a display in which the message changes, in an effort to complete the viewing experience. Ideally, the dwell time for an individual message should be set so that drivers will see no more than one complete message, thus reducing any possible distracting effects of trying to complete the viewing experience.

The minimum dwell time of the proposed billboard with electronic changing copy shall be 10 seconds.

3.8 Transition between successive displays

The transition time between successive displays on a billboard sign with electronic changing copy shall appear seamless and imperceptible to approaching drivers.

- The maximum interval between successive displays on a billboard sign with electronic changing copy shall be 0.1 seconds.
- There shall be no visual effects or animation of any kind, including but not limited to, fading, dissolving, blinking or the illusion of such effects, during the message transition or interval between successive displays.

The proposed billboard will only display static images which will change on 10 second intervals. There will be no visual effects or animation of any kind as described above. The maximum transition interval between successive displays on the proposed sign will adhere to 0.1 seconds.

3.9 Message Sequencing

When a single message or advertisement is divided into segments and presented over two or more successive display phases on a single electronic billboard or across two or more billboards, it is described as Message Sequencing. The objective of this type of advertising is to capture and hold the viewers' attention throughout the time or distance required to complete the message.

The proposed billboard with electronic changing copy will not use message sequencing or text scrolling of any kind, over successive display phases on a single billboard or across multiple billboards.

3.10 Amount of information displayed

It takes approximately one second for a road user to read one word. The number of words displayed on a billboard sign with electronic changing copy shall not be greater than the number of seconds required for



the duration of the message display. The height of each character on the message display shall be sufficient to ensure that the message is clearly legible over the entire viewing distance.

The proposed billboard will adhere to the maximums above.

Interactive billboard messages that permit, support or encourage interactive communication with drivers in real time shall not be permitted. These include billboard signs with electronic changing copy that respond to text messages, phone calls or emails from passing drivers or that request immediate response by text, phone, email, etc. The proposed billboard will only display static images which meet the criteria above and will include no interactive communication whatsoever.

3.11 Sign Animation

Animation refers to any motion in the advertisement, including video, special effects within a single frame and transition, movement and rotation between successive frames.

There shall be no animation, flashing movement or appearance of movement on a billboard with electronic changing copy, except where the billboard sign with electronic changing copy is not visible from any vehicular roadway.

The proposed electronic changing copy billboard will provide only static images and those images will change in 10 second intervals. In addition, there will be no video, or animation or flashing as well as those criteria mentioned above and to as "Transition between successive displays".

3.12 Sign Brightness and Luminance

Brightness is the perceived intensity of a source of light. It is the appearance of light to the viewer. Luminance is the amount of light leaving a surface in a particular direction or the amount of light that is deflected off a surface. Sign brightness is a function of sign luminance, the background against which the sign is viewed, the driver's age, level of adaptation to the eyes, and atmospheric conditions, such as fog.

Brightness can be measured as luminance, in candelas per square m (cd/m2) or illuminance in foot candles (fc). Luminance is the amount of light that is emitted from a surface, while illumination is the amount of light falling upon a surface. The human eye is drawn to the brightest objects in a field of view and this is generally referred to as the "moth effect". A brightly illuminated electronic billboard sign could draw a driver's attention away from the road, other vehicles and traffic devices. This is of particular concern at nighttime, dusk or dawn and during periods of inclement weather. The maximum luminance level for a billboard sign with electronic changing copy shall be:

- 5000cd/m2 from sunrise to sunset (One nit = One Candela per m2 [cd/m2])
- 300cd/m2 from sunset to sunrise (One nit = One candela per m2 [cd/m2])
- The maximum illumination level for a billboard sign with electronic changing copy shall be 0.3 lux above ambient light levels (One lux = 0.093 foot-candles [fc])
- All billboard signs with electronic changing copy shall be equipped with ambient light sensors and automatic dimmers that control the light output relative to ambient conditions
- Electronic billboard signs shall be illuminated between the hours of 5:00 am and 12 midnight only each day.



To measure illumination, the International Sign Association (2011) has provided the following equation to determine the distance away from the billboard sign at which the measurement shall be taken:

Measurement distance = Square Root of (Sign Area [m2] x 100)

The proposed billboard will adhere to the proposed criteria of 5,000 nits during the day and powering down to 300 nits during the night. This is typical for many other municipalities in Ontario. Preferred illumination of the boards is continuous with no shut-down time.

Conclusion

It is important to remember that these are guidelines only and are not contained in any municipal law. The intent is to allow for applications of this type to be reviewed on a case by case basis by staff and decided through Council.

As stated in the introduction, the property location and proposed billboard with electronic changing copy are ideally suited to this particular location. From every perspective, this is an extremely safe location. The sign meets all of the criteria identified in the by-law.

We respectfully request your support for this applications.

Yours sincerely,

C. Pales

Gilda Collins

Senior Project Manager - Special Projects

Permit World Consulting Services Inc. 57 William St. West | Waterloo, ON | N2L 1J6 519-585-1201 x 102 | gcollins@permitworld.ca www.permitworld.ca



APPENDIX C

TERMS OF REFERENCE FOR URBAN DESIGN IMPACT ASSESSMENT OF BILLBOARD SIGNS WITH ELECTRONIC CHANGING COPOY

Purpose

This urban design impact assessment is to evaluate the visual impact of a billboard sign with electronic changing copy proposed for 1061 Winston Churchill Blvd. The assessment will consider the character of the context where proposed as well as an assessment of the impact on the use of the spaces from where it will be visible and on the physical elements which make up those spaces, including landscaping, trees, streetscape elements, sidewalks, parks and other open spaces and any other amenities and will address the compatibility of the context where it is to be located.

2. Required Information

- 2.1 A context site plan is attached indicating the 250 m radius centred on the proposed billboard location.
- 2.2 The context plan shows all existing and approved developments, sensitive land uses including, but not limited to, existing parkland along with street names and road, and traffic lights. The context plan shows that there are no sensitive uses within 250m of the proposed sign. There are no public art installations or ground signs. There are no Heritage or Cultural Heritage Resources nearby which would be impacted by the proposed billboard sign.
- 2.3 3D image of the proposed billboard sign with electronic changing copy is included.
- 2.4 The immediate neighbourhood to the south and east with any potential visibility to the sign extending for a minimum of 250 m is industrial generally zoned E2 and E3. There are no residential properties within 500m of the subject property which would have any visibility to the sign. The property is located approximately 200m from Royal Windsor Dr. which is a signalized intersection. The property itself is situated on the east side of Winston Churchill Blvd. bounded by Bromsgrove Rd. to the north and Royal Windsor Dr. to the south, both of which are signalized intersections.

The height of the proposed billboard will be 7.5 m which is also in keeping with the approximate height of all the surrounding industrial buildings. It will not alter the building skyline in the surrounding area.

The proposed location is unique in that it is ideally situated for this type of billboard sign given the border with the Town of Oakville to the west, Lakeshore Rd. E. further to the south and the QEW to the north.

The proposed single-sided billboard sign is designed to enhance the viewing for northbound vehicular traffic on Winston Churchill Blvd., generally travelling to the QEW. There is no intent to capture southbound attention. The billboard itself will be approximately 400m to the closest signalized intersection for northbound traffic at Bromsgrove Road.

The proposed new billboard sign with electronic changing copy along a developed section of Winston Churchill Blvd. will be an attractive, well placed enhancement to this stretch of the road and will serve local business, the municipality and the community effectively for many years to come. There will be no impact on the immediate neighbourhood and we believe that the use of the sign will meet all the perceived intents of the Guidelines. We respectfully request support for this Urban Design Impact Assessment.





