

Attachment 1: Description of Sign and Required Variance Conditions

Proposed Sign Description:

One third party electronic ground sign described as follows:

- a) Contains two sign faces in an approximate North Westerly and North Easterly orientation, placed in a "V-shaped" configuration, with an internal angle of no more than 45 degrees.
- b) Each sign face shall comply with the following:
 - I. Have a maximum bisecting line no greater than 3.05 metres;
 - II. Have a maximum centre line of no greater than 6.1 metres;
 - III. Have a maximum sign face area of no greater than 18.61 square metres;
 - IV. May display static, or electronic static copy, but not both.
- c) Having a height not to exceed 12.5 metres.

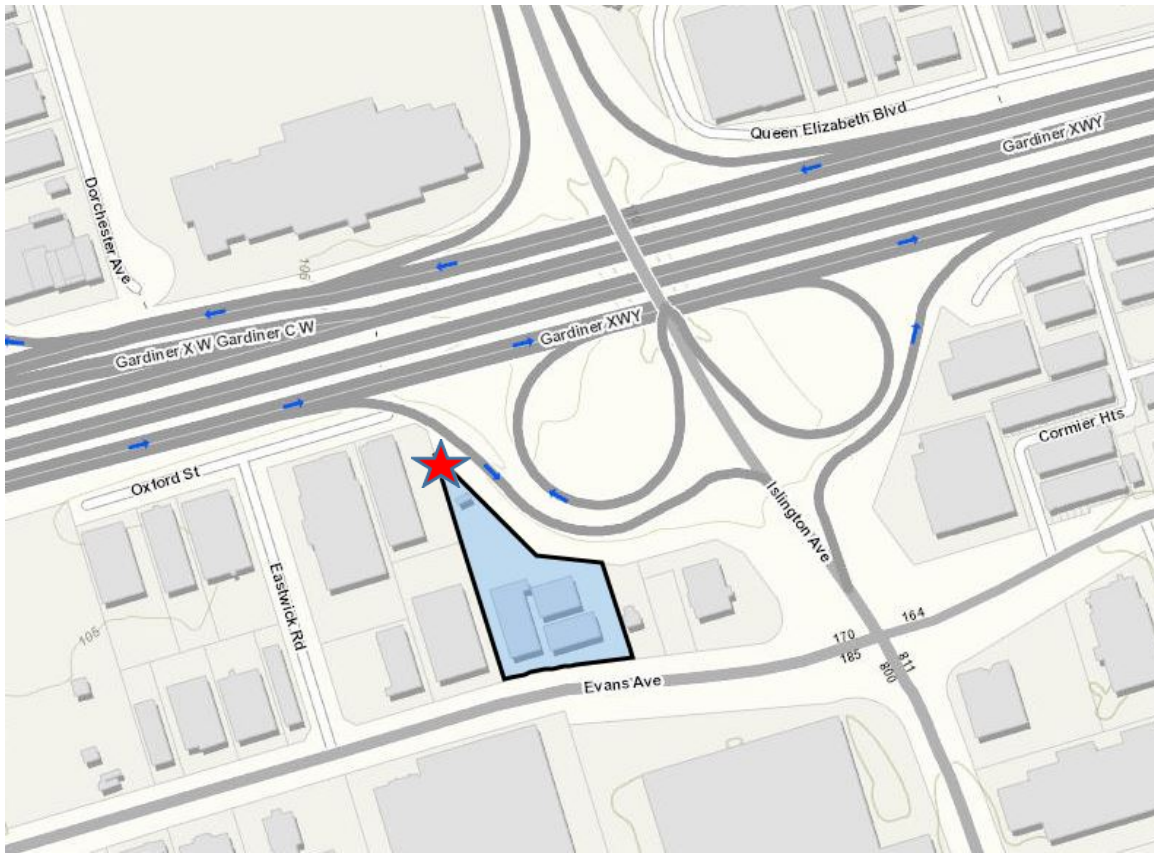
Required Variances:

- 1) **§ 694-24.A(1)**- A third party sign shall not be erected or displayed or caused to be erected or displayed in whole or in part within 400 metres of any limit of the F.G. Gardiner Expressway from Highway 427 to the Humber River, transferred from the Province by Order in Council 534/97 be varied to permit The Proposed Sign to be erected and displayed within 0.3 metres of a portion of F.G. Gardiner Expressway between Highway 427 and the Humber River subject to condition #1 below
- 2) **§ 694-25.C(2)(b)**- An Employment Sign District may contain an electronic ground sign provided the height shall not exceed 10.0 meters be varied for the Proposed Sign to have a maximum height of 12.5 meters subject to condition #1 below.
- 3) **§ 694-25.C(2)(d)**- An Employment Sign District may contain an electronic ground sign provided the sign shall not be erected within any required setback of a building from a street as regulated by the City's applicable Zoning By-Law- be varied to allow the Proposed Sign to be erected within is 0.3 metres of a property line, whereas the required setback of the Proposed Sign shall be a minimum of 7.5 metres subject to condition #1 below.
- 4) **694-25C(2)(k)** – An (E) Employment Sign District may contain a third party electronic ground sign, provided where there are two sign faces, the sign faces shall be back-to-back be varied to allow the Proposed Sign to be erected and displayed with two sign faces in a “v-shaped” configuration subject to condition #1 and condition #2 below.

Conditions:

- 1) Any and all existing third party signs located at the property municipally known as 200 Evans Avenue shall be removed and all associated permits revoked, prior to the erection or display of the Proposed Sign; and,
- 2) The Proposed Sign to have an internal angle of no more than 45 degrees as between the two sign faces.

Attachment 2: Sign District View Mapping of the Premises and Surrounding Area



Attachment 3 – Applicant's Submission Package



July 9th, 2020

City of Toronto Sign Bylaw Unit
100 Queen Street W., Floor 1st East Tower
Toronto, Ontario
M5H 2N2

RE: Application for Variance from the Sign By-law– 200 Evans Avenue, Etobicoke

Attn: Ted Van Vliet, Manager, Sign By-law Unit
Farnaz Bigdeli, Acting Supervisor, Variances & Permits, Sign By-law Unit

Please accept this rationale as part of our application for five variances from the Sign By-law, which are required for Pattison Outdoor Advertising to obtain a Sign Permit for one third party electronic ground sign with two sign faces, directed north-east and north-west (the “Proposed Sign”), to be located near the north frontage of the property municipally known as 200 Evans Avenue (the “Subject Premises”).

Our application is seeking the necessary variances to obtain a permit for the Proposed Sign, which will contain two (2) rectangular-shaped sign faces aligned in a “V-shaped” configuration, each measuring approximately 6.1 metres horizontally by 3.05 metres vertically (or 10’ x 20’). Each of the sign faces will contain electronic static copy, with a height not to exceed 12.5 metres (This is the same height as the existing third party ground sign with mechanical copy).

The five variances required to allow a Sign Permit to be issued for the Proposed Sign are:

- (i) **694-24A(2)**: A third party sign shall not be erected or displayed, or caused to be erected or displayed, in whole or in part, within 400 metres of any limit of the F.G. Gardiner Expressway, from the Humber River to the easterly limit of Dufferin Street – a setback of approximately 2.5 metres is proposed.
- (ii) **694-25C(2)(b)**: An E – Employment Sign District may contain a third party electronic ground sign, provided the height shall not exceed 10.0 square metres – a height of 12.5 metres is proposed;
- (iii) **694-22E**: A third party electronic sign shall not be erected within 150 metres of another lawful third party sign, whether or not erected – whereas the Proposed Sign will be located approximately 1 metre from an existing ground sign at the property, however this sign is owned by Pattison and will be removed as a condition of approval;
- (iv) **694-25C(2)(d)**: An E – Employment Sign District may contain a third party electronic ground sign, provided the sign shall not be erected within any required setback of a building from a street as regulated by the City’s Zoning By-law – In an Employment zone, the required minimum rear yard setback is 7.5 metres; and

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- (v) **694-25C(2)(k)**: An E – Employment Sign District may contain a third party electronic ground sign, provided where there are two sign faces, the sign faces shall be back-to-back – the Proposed Sign has a V-shaped configuration.

Conditions of Approval:

- A. The existing third party ground sign with two sign faces displaying mechanical sign copy shall be removed if the required variances are granted, and any associated sign permits will be revoked prior to the issuance of a sign permit for the Proposed Sign.

Establishing the Nine Criteria Required for Approval

(1) The Proposed Sign will belong to a sign class permitted in the district where the premises is located

The Proposed Sign is a third party electronic ground sign, which advertises, promotes, or directs attention to business, goods, services, matters or activities which are not available at or related to the premises where the sign is located. The Subject Premises is located within an E – Employment Sign District. As third party electronic ground signs are permitted in E Sign Districts, we believe this criteria has been met.

(2) In the case of a third party sign, the Proposed Sign will be of a sign type that is permitted in the sign district, where the premises is located

The Proposed Sign is a third party electronic ground sign, which is a sign type that is permitted in the E Sign District where the Subject Premises is located. Therefore, we believe this criteria has been met.

(3) The Proposed Sign will be compatible with the development of the premises and surrounding area

The subject property is designated as an E Sign District, and is located immediately south of the Gardiner Expressway and adjacent to the Islington Avenue off-ramp. It contains three buildings of one and two storeys in height with employment and storage uses, and associated grade-level parking. Tenants include Rumanek and Co., Chasers Juice and Kingsway Motion Picture Inc.

There is an existing third party ground sign with mechanical copy near the northern frontage of the property, which has been in place since 2009 (See Figure 1 below). This sign would be removed as a condition of approval if the required variances are granted. Third party electronic ground signs are permitted within any E Sign Districts under the Sign By-law, which helps to establish that the Proposed Sign is compatible with the development of the premises and surrounding area.

The condition of approval further establishes that the Proposed Sign is compatible with the premises and surrounding area, as it ensures that only one third party sign will be located at the Subject Premises. It would also allow the compatibility of the Proposed Sign to be re-evaluated in five years when the sign

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permit expires, in the event that future development at the property or in the surrounding area reduces the compatibility of the Proposed Sign with the subject property and/or with the surrounding uses.

Figure 1 – Image of the Existing Sign at the Subject Premises (looking east)



The Gardiner Expressway includes the iconic Gardiner Gateway Special Sign District (GG-SSD), which is located approximately 7.3 kilometres east of the Proposed Sign. This area of the City has been designated within the Sign By-law because the presence of large-format third party signs with electronic static copy is a defining characteristic of the area. Outside of the GG-SSD, the Gardiner Expressway contains many other large-format third party signs with electronic static copy, both to the east and west, which demonstrates that third party signs contribute towards the character of properties which have frontage along the Gardiner Expressway – both within the GG-SSD, and also outside of this special area.

Many large-format third party signs with electronic copy have existed along the Gardiner Expressway for several decades. Granting the required variances with the proposed condition would result in an updated, more modern sign at the subject property, which would contribute towards the development of the premises.

The distance between Highway 427 and Islington Avenue along the Gardiner Expressway is approximately 2.7 kilometres. Within this stretch of the expressway, there are currently 15 third party signs, located on the north and south sides (See Figure 2 below for a snapshot of other signs in the surrounding area). Six of these signs are under 20 square metres, and nine have sign faces of greater than 62 square metres.

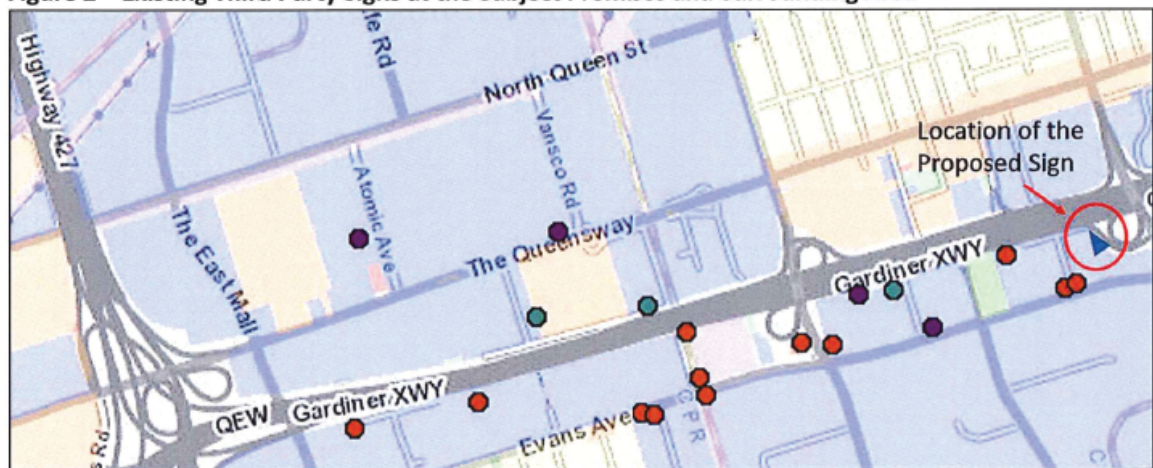
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The Proposed Sign face area of less than 18.6 square metres is at the bottom end of the range in terms of size of the existing signs in this area, and is less than the maximum size for third party electronic ground signs in an E Sign District, which we believe further speaks to its compatibility with the Subject Premises and surrounding area.

Figure 2 – Existing Third Party Signs at the Subject Premises and Surrounding Area



The Subject Premises and surrounding area contain a mix of third party roof and ground signs that use various methods of copy display (static, mechanical and electronic). This demonstrates that different types of third party signs with various methods of copy display form a part of the streetscape along the Gardiner Expressway, and have for many years. For these reasons, we believe that the Proposed Sign is compatible with the development of the premises and surrounding area, and this criteria has been met.

(4) The Proposed Sign will support the Official Plan objectives for the Subject Premises and surrounding area

The Subject Premises is designated as an *Employment Area* in the Official Plan, and there is no *Secondary Plan* that applies to this property. *Employment Areas* are places of business and economic activity, and include a wide array of uses such as manufacturing, warehousing, distribution, research and development facilities, utilities, media facilities, parks, hotels, retail outlets, restaurants and small-scale stores and services that support and serve these businesses and workers.

The Proposed Sign will help to support the Official Plan objectives for a healthy and vibrant *Employment Area* by providing multiple opportunities for local and national businesses to promote themselves and advertise their goods and services, contributing to future economic growth. We note that there are no residential or open space uses at the Subject Premises or in the surrounding area which could be impacted by the Proposed Sign.

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The Official Plan also states that *"diverse employment areas can adapt to changing economic trends and are poised to capture new business opportunities."* In order for *Employment Areas* to adapt and grow, we believe the City should consider the significant benefits of allowing property owners to undertake a process to replace existing third party signs with static or mechanical copy, with electronic signs of similar height and size.

There are provisions in the Sign By-law which allow for existing signs in the GG-SSD to be replaced with newer electronic signs, and the Sign By-law was amended in 2015 to allow third party electronic ground signs in E Sign Districts throughout the City.

Adapting to the changes and improvements in technology that have been achieved within the sign industry since the inception of the Sign By-law in 2009, and considering the needs of local and national business looking to promote their products and services and expand their customer base is in line with the overall objectives laid out in the Official Plan.

We believe the Proposed Sign also supports the Official Plan objectives by contributing to the viability and continuation of the existing uses carried out at the Subject Premises. The introduction of the Proposed Sign as an ancillary use will not compromise or be contrary to the Official Plan objectives for *Employment Areas*.

In addition, the City of Toronto states in their Official Plan that climate change is one of the biggest challenges facing our planet, and has committed to addressing this challenge in order to provide a sustainable future for all Torontonians.

This application supports the Official Plan's goals with respect to climate change by removing an existing ground sign with mechanical copy, which requires considerable maintenance and materials, and will replace it with an electronic ground sign powered by renewable energy via an agreement with Bullfrog Power. The Proposed Sign will use "green" power, and contribute to a healthier environment.

One important benefit to allowing third party signs to display electronic copy, compared to signs which display static or mechanical copy, is that the messages are capable of being changed remotely. This eliminates the need for maintenance crews to access the site, the travel associated with regular changes to the copy, and the printing and disposal of paper / vinyl copy.

Removing the existing sign in order to obtain a permit to build a new third party electronic ground sign significantly reduces our environmental footprint, and helps the Proposed Sign further support the Official Plan objectives. For the reasons outlined above, we believe this criteria has been met.

(5) The Proposed Sign will not adversely affect adjacent premises

The Proposed Sign will display electronic static copy, and will comply with the illumination provisions set out in the Sign By-law. During the day, when ambient light levels are bright, the lighting impacts of electronic copy are minimal. After sunset, the Proposed Sign will comply with the maximum brightness

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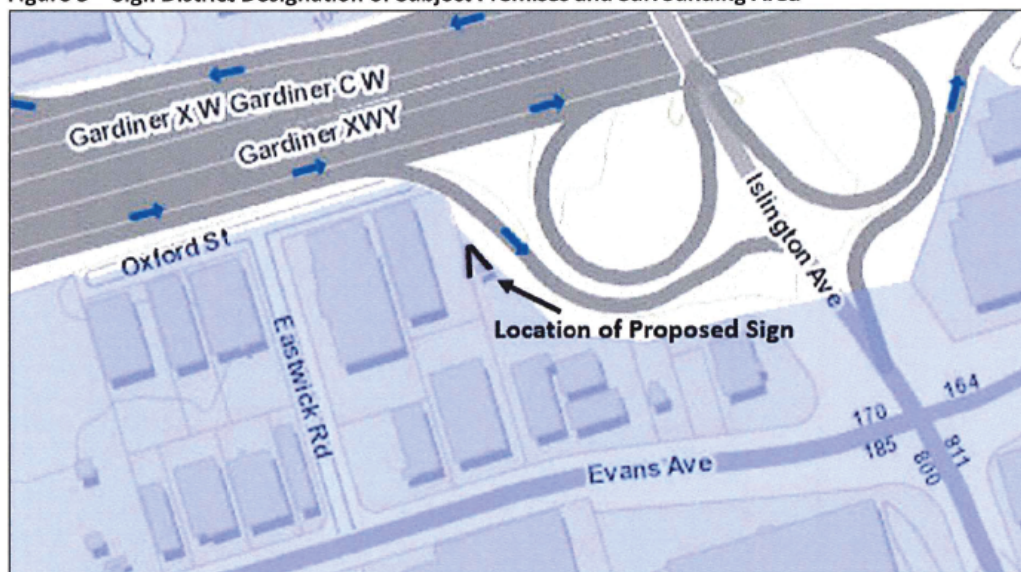
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level of 300 NITS, which has been deemed an acceptable level by the Sign By-law to minimize impacts on adjacent premises.

The Proposed Sign will contain two sign faces directed north-west and north-east towards the Gardiner Expressway, and there are no residential or open space uses in the surrounding area which could be impacted by the Proposed Sign. The Subject Premises is completely surrounded on all sides by other E Sign Districts, as can be seen in Figure 3 below. As E Sign Districts may contain third party electronic ground signs, we cannot foresee any instances where the Proposed Sign would adversely affect any of the adjacent premises.

Figure 3 – Sign District Designation of Subject Premises and Surrounding Area



Granting the variance to configure the sign faces in a V-shaped formation, rather than back-to-back, will ensure that the sign copy is directed towards the intended traffic travelling along the Gardiner Expressway. Because all of the surrounding properties are designated as E Sign Districts, and do not contain any sensitive uses that could be impacted by the Proposed Sign, we believe this criteria has been achieved.

(6) The Proposed Sign will not adversely affect public safety

The Proposed Sign will not be located within a visibility zone, or within the minimum separation distance from signalized intersections. It will be set back more than 180 metres from the decision point on the Gardiner Expressway where drivers would change lanes while exiting at Islington Avenue, and is set back

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nearly 60 metres from the travelled portion of the Gardiner Expressway (See Figure 3 above as a reference).

In relation to traffic travelling along the Gardiner Expressway, the Proposed Sign will be set back approximately 90 metres from the starting point of the off-ramp to Islington Avenue, and will be located well past the exit to Islington Avenue, as can be seen in Figure 4 below.

Figure 4 – Proposed Sign in relation to Islington Ave. off-ramp



As part of the *Electronic and Illuminated Sign Study* conducted by the City of Toronto in 2015, the Transportation Services division completed a review of electronic signs and their impacts on traffic safety, comprised mainly of two elements. The first element was a literature review of studies that had been completed on the topic; the second element was a statistical analysis of locations in Toronto where electronic signs have been installed, in an effort to determine whether there has been an increase in traffic collisions.

Transportation Services conducted a statistical analysis of collisions before and after electronic signs were installed using the methodology outlined in the *American Association of State Highway Traffic Officials Highway Safety Manual*, which included more than six years of data.

A total of 1,727 collisions at 11 separate locations along the **Gardiner Expressway** and Highway 27 were analyzed for this review. The results indicated there was a four per cent decrease in the number of

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collisions after the electronic signs were installed, which is considered to be statistically insignificant. The main conclusion of this study by Transportation Services was they were unable to identify any statistically significant effect on collisions where electronic signs had been installed.

With electronic signs that change from one message to the next, shorter message duration results in drivers being more likely to observe a change in the message being displayed, which can result in a higher likelihood that a driver will glance at it for a longer duration. In order to further reduce the potential for driver distraction, the Proposed Sign will comply with the Sign By-law provisions for a message duration of 10 seconds between changes in copy.

The Proposed Sign will transition between messages instantaneously, and will not include any visual effects between one message and the next, such as flashing, blinking or movement, to further minimize potential driver distraction.

Approvals have recently been granted for several large-format third party electronic ground signs at minimal setbacks from 400-series highways, which have been reviewed and approved by multiple municipalities, including Toronto. With sign faces in excess of 62 square metres located in direct view of, and in close proximity to the travelled portion of these highways, we believe this further demonstrates that the impacts of electronic signs on traffic have been deemed to be negligible.

The Proposed Sign will also be designed, engineered and installed in accordance with Ontario Building Code requirements. As well, all operational requirements for electronic signs as defined in the City's Sign By-law will also be maintained by this proposal. As such, we do not believe that any issues related to public safety are foreseeable, and that this criteria has been met.

(7) The Proposed Sign will not be a sign prohibited by Toronto Municipal Code Chapter 694-15B

The Proposed Sign is not a prohibited sign listed under §694-15B of the Sign By-law, and therefore this criteria has been established.

(8) The Proposed Sign will not alter the character of the premises or surrounding area

The Proposed Sign will not alter the character of the premises or surrounding area, as the Subject Premises is located within an E Sign District, which allows third party electronic ground signs, and has contained a third party ground sign with changeable copy for over 10 years.

Imposing the condition of approval that the existing sign will be removed prior to a permit being issued for the Proposed Sign will ensure that the character of the premises is not altered by adding a second third party ground sign to this property. The number of signs at the premises and along the Gardiner Expressway will remain unchanged if the requested variances are granted and the condition of approval is adopted.

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Third party signs have existed along the entire Gardiner Expressway for several decades. There are currently 41 third party signs along the Gardiner located outside the GG-SSD. The existing concentration of third party signs between Highway 427 and Islington Avenue (15 signs within a 2.7-kilometre section of the expressway, including the existing sign) establishes that third party signs contribute to the character of the area. Removing an old sign with an outdated structure and method of copy display and replacing it with a new, modern sign that is better from both an environmental and visibility standpoint will not alter the character of the premises or surrounding area.

The Subject Premises and surrounding area include a mix of third party roof and ground signs, and these signs display copy using various methods (including static, mechanical and electronic). This shows that third party signs of various types and sizes form a part of the streetscape along the Gardiner Expressway, and have done so for many years. For these reasons, we believe that the Proposed Sign will not alter the character of the premises and surrounding area, and that this criteria has been established.

(9) The Proposed Sign will not be, in the opinion of the decision maker, contrary to the public interest

The Proposed Sign will not be contrary to the public interest, and we believe it will provide significant benefits to the Subject Premises and surrounding area. Despite requiring variances for height and configuration, we believe the attributes of the Proposed Sign are generally in line with what is permitted in an E Sign District, and significantly smaller and closer to grade than other electronic and static third party signs in the surrounding area.

We are requesting a variance approval for a height of 12.5 metres, instead of the 10 metres permitted in an E Sign District, to match the height of the existing sign, and because of the scale of the Proposed Sign in relation to the intended viewers travelling along the Gardiner Expressway, so that the messages can be seen clearly across the expressway (See Figure 5 below for a rendering of the Proposed Sign).

The variances to allow the Proposed Sign to be slightly taller than otherwise permitted in an E Sign District will allow it to more visible from the Gardiner Expressway, which contains 10 lanes of traffic travelling in both directions near the Subject Premises. A height of 10 metres would make it much more difficult to see for the intended traffic travelling along the Gardiner.

Imposing the condition of approval will further help to ensure the Proposed Sign is not contrary to the public interest, because the removal of the existing third party sign from the Subject Premises will ensure there is no increase in sign clutter at the property or in the surrounding area, and allow the new sign to be re-evaluated in five years to ensure it remains compatible with the Subject Premises and the surrounding area should any development occur over this period.

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Figure 5 – Rendering of the Proposed Sign (with the existing sign removed)



In 2014, the Sign By-law Unit was directed by City Council to report back with recommendations on changes to the Gardiner Gateway Special Sign District. Staff recommended changes to allow for upgrading of existing signs to new electronic signs which would have less impact on the sensitive land uses surrounding this area.

Staff concluded:

Currently, signage is an identifying feature of the area, where legally existing third party ground signs containing any electronic static or electronic moving sign copy may be converted or replaced with a sign containing electronic static copy. This authority is intended to allow for the improvement or replacement of existing signs, while also responding to the changing nature of the area, as any sign that takes advantage of the conversion regulations would be subject to the regulations of Chapter 694, including a five-year sign permit and a review of the surrounding land uses.

We believe that granting variances to allow for new third party electronic ground signs at properties where they have been deemed suitable, such as E Sign Districts, which already contain an existing third party sign with an outdated structure and method of copy display, is not contrary to the public interest and in line with these recommendations.

The Proposed Sign will not have any adverse impacts on adjacent properties; is not a prohibited sign type under the Sign By-law; and is of a class and type that is contemplated within an E Sign District. It

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will not alter the character of the Subject Premises or the surrounding area, which has contained large-format third party signs and electronic signs for decades.

Even though the Proposed Sign is slightly taller than what is permitted in an E Sign District, we believe that it is not contrary to the public interest, if the proposed conditions of approval are imposed. The removal of the existing third party ground sign with mechanical copy would help to achieve one of the key objectives of the Sign By-law – minimizing sign clutter in the surrounding area.

Based on the information included with our application, and the condition of approval included, we believe this criteria has been met. Pattison is committed to carrying out the removal of the existing sign at the Subject Premises if the requested variances are approved, prior to the issuance of a Sign Permit for the Proposed Sign.

Thank you for your consideration of our Sign Variance application. If you would like to discuss the proposal further, please do not hesitate to contact me directly.

Sincerely,

A handwritten signature in blue ink, appearing to read "Nicholas Campney", with a long, sweeping flourish extending to the right.

Nicholas Campney
Pattison Outdoor Advertising

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Attachment 4 – Traffic Safety Analysis for Proposed Sign at 200 Evans Avenue



Mr. Nathan Jankowski
Pattison Outdoor Advertising
Manager, Legislation & Permits
njankowski@pattisonoutdoor.com

February 12, 2021

Dear Mr. Jankowski:

RE: Safety Evaluation of an Electronic Advertising Sign at 200 Evans Avenue in Toronto, Ontario

Introduction

An existing static billboard is located at 200 Evans Avenue in Toronto, Ontario. The existing sign has two faces in a v-shaped formation that are facing north-east and north-west towards the Gardiner Expressway. The sign is visible to motorists travelling on the Gardiner Expressway near Islington Avenue. Pattison Outdoor Advertising ('Pattison') is proposing to replace the two faces of the sign with a digital display and maintain its current location, configuration, and dimension (6.10 m wide by 3.05 m high).

True North Safety Group (TNS) was retained to assess the safety impacts of replacing the sign faces with electronic advertising signs on the motorists travelling the Gardiner Expressway near Islington Avenue. The findings of our safety assessment are discussed below.

Visibility of the Sign

Mr. Alexandre Nolet of TNS attended the subject location in Toronto, Ontario on February 11, 2021, to review the physical and operational characteristics of the site as well the visibility of the static billboard.

The electronic advertising sign is primarily visible to eastbound motorists travelling on the Gardiner Expressway. In the westbound direction, limited visibility of the sign is provided due to the significant sign setback (approximately 60 metres south of eastbound lanes of the Gardiner Expressway) and the presence of the Islington Avenue interchange blocking the view of the sign. Given the orientation of the sign, motorists travelling on the on- and off-ramps of the Islington Avenue interchange are not provided with clear and continuous visibility of the sign.

Figures 1 and 2 show the existing view of the sign from the Gardiner Expressway.

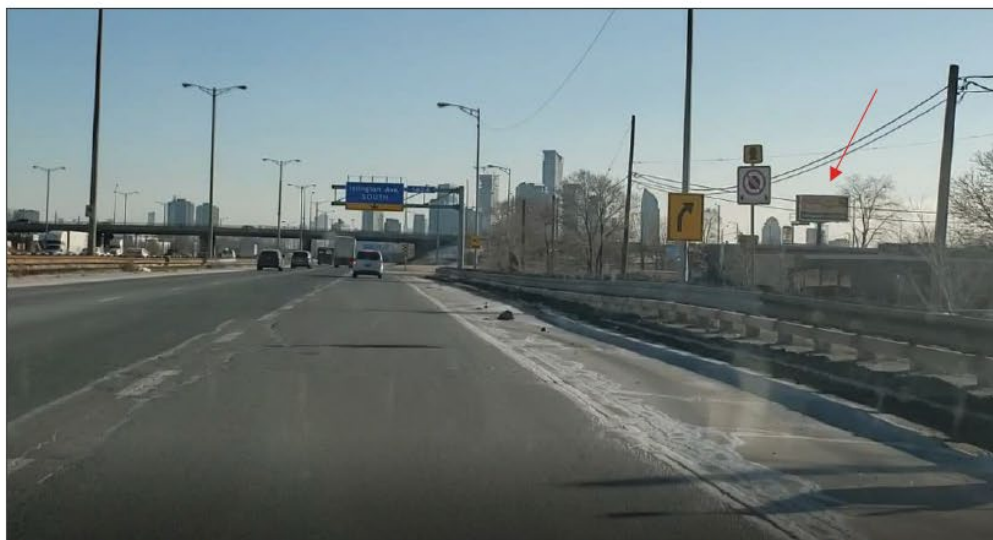


Figure 1: View looking east on Gardiner Expressway from the exit ramp for Islington Avenue.

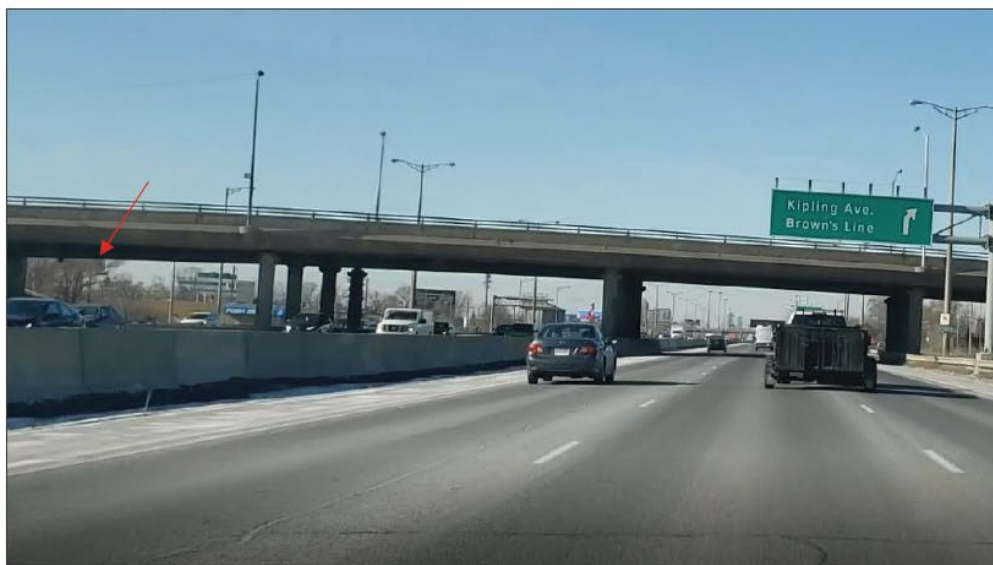


Figure 2: View looking west on Gardiner Expressway from approximately 200 metres east of the sign.

Research Findings

A comprehensive literature review was conducted to identify existing or in-progress research about the safety impacts of electronic advertising signs. Our literature review covered some of the most accredited research and experimental studies and best practices conducted by Austroads¹, NCHRP², Caltrans³, and City of Toronto⁴. The most relevant study to the proposed signage strategy is the 2013 study conducted for the City of Toronto that evaluated the safety impacts of electronic static signs at mid-block locations in Toronto. The study consisted of a before/after analysis, which measured the change in the number of collisions associated with the installation of seven signs along the Gardiner Expressway from East Mall to Park Lawn Road, and three signs along Highway 27 north of Dixon Road. The reviewed signs included electronic signs, or digital signs with an LED display and messages, which can change at regular intervals. The proposed signs at 200 Evans Avenue are similar to those considered as part of this study.

As part of this study, the number of collisions in the period before the installation of the signs was compared to the number of collisions recorded in the period after the installation of the signs. A state-of-the-art statistical method was used to determine if the change in collisions was statistically different. The results of the before/after analysis showed that a 4% decrease in the number of collisions after installing electronic static roadside advertising signs. However, the reduction was not statistically significant, which indicated that there was not enough evidence to suggest that these signs had any impacts on the level of safety of the road segments adjacent to where the signs were located.

Qualitative Assessment

Freeway segments especially near entrance and exit ramps can be challenging for motorists when the length of the acceleration lanes is insufficient and/or if there is a significant speed differential between traffic streams. In the vicinity of the Islington Avenue interchange, there is an entrance followed by an exit ramp creating a speed-change lane of approximately 300 m. However, since the sign becomes visible approximately 115 m before the end of the speed-lane change, most of the motorists changing lanes are not distracted by the sign. Therefore, the sign would have no impact on most of the eastbound lane change maneuvers caused by the successive ramps.

Further, given the limited visibility of the sign from the westbound lane of the Gardiner Expressway and from the interchange ramps, installing a digital sign is not expected to change the safety level on those freeway segments.

¹ Boddington and Rodwell "Impact of roadside advertising on road safety, Austroads Research Report", 2013

² Safety Impacts of the Emerging Digital Display Technology for Outdoor Advertising Signs, NCHRP 20-07, 2009

³ Caltrans Division of Research and Innovation "Effects of Outdoor Advertising Displays on Driver Safety", 2012

⁴ Safety Impacts and Regulations of Electronic Static Roadside Advertising Signs, Technical Memorandum #2C – Before/After Collision Analysis at Signalized Intersection, 2013, City of Toronto

Conclusion

The nature and operation of the proposed sign is not significantly different than others present for several years along the Gardiner Expressway. The proposed sign is expected to have minimal impact on motorists travelling on the Gardiner Expressway. Given the location and orientation of the sign, it would have limited impact on motorists travelling on freeway segments where higher driver's workload is required. Based on our assessment and a review of previous research, the number of collisions on the subject segment of the Gardiner Expressway is not expected to be statistically different after the installation of the proposed electronic advertising sign. Given the minimal expected safety effects of the proposed changes to the existing sign, TNS supports the conversion of the existing sign to the electronic billboard sign.

To monitor any safety effects of the electronic billboard conversion, we recommend a before and after collision analysis to be conducted approximately 2 to 3 years after the conversion date. Should the data be available, comparison sites should be used to isolate the effect of the sign on the level of safety. Given the nature of such assessment, it is preferable for the City to internally conduct the analysis or for an independent consultant to be retained.

We trust the above meets with your expectations. Please do not hesitate to contact us if you have any questions.

Sincerely,

A handwritten signature in blue ink, appearing to read 'AL Nolet', with a stylized flourish at the end.

Alexandre Nolet, M. Eng., RSP₁, P. Eng.