Centenary Drive, Homebush West
Static Advertising Signage Safety Assessment

Prepared for:

JCDecaux

3 June 2024

The Transport Planning Partnership

Centenary Drive, Homebush West

Static Advertising Signage Safety Assessment

Client: JCDecaux

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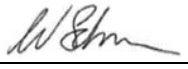
V04	03/06/2024	James Goodman	Wayne Johnson	Wayne Johnson	

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1 Introduction

1.1 Overview

JCDecaux is seeking to renew the permit for an existing large format static advertising sign located on the east side of Centenary Drive in Homebush West facing northbound traffic. The sign was installed in late 2010.

The Transport Planning Partnership (TTPP) has been commissioned by JCDecaux to undertake a signage safety assessment. This assessment has been carried out in accordance with Department of Planning's Transport Corridor Outdoor Advertising and Signage guidelines, November 2017 (Guidelines) and Chapter 3 of State Environmental Planning Policy (Industry and Employment) 2021 (Industry and Employment SEPP).

The Guidelines outline best practice for the planning and design of outdoor advertisements in transport corridors. The Industry and Employment SEPP sets out rules regarding outdoor advertising signage for permissible locations and exempt developments.

1.2 Purpose of this Report

The aim of this assessment is to determine the suitability of renewing the permit for the existing static advertising sign and provide recommendations on mitigation measures to alleviate impacts on the surrounding road network. This report sets out the findings of TTPP's signage safety assessment for the proposed static advertising sign on the east side of Centenary Drive in Homebush West facing northbound traffic.

The following items have been considered in this report:

- Potential for the sign to obstruct or distract a driver's view of the road, traffic control devices, and merge/diverge points at entry and exit ramps.
- Distance from upstream or downstream decision points such as merge and diverge points.
- Potential for the sign to distract at a critical time or for an extended period of time.
- Location relative to the carriageway and its potential to be a physical obstruction for vehicles or other road users.
- Location in relation to other signage.

1.3 References

In preparing this report, reference has been made to the following:

- An inspection of the sign location from a driving viewpoint along Centenary Drive was carried out on 14 March 2024.
- Austroads Guide to Road Design Part 3, Geometric Design, 2016.
- Austroads Guide to Road Design Part 4A, Unsignalised and Signalised Intersections, 2017.
- Transport Corridor Outdoor Advertising and Signage Guidelines, November 2017 by Department of Planning and Environment.
- State Environment Planning Policy (Industry and Employment) 2021.
- Construction plans for the static advertising sign dated 13 July 2010.

2 Proposal Description

2.1 Location Details

The permit for the existing static advertising sign located on the east side of Centenary Drive in Homebush West is to be renewed. The existing static advertising sign is erected on a monopole and is visible to drivers travelling northbound along Centenary Drive. The proposed static advertising sign is to remain the same size and at the same location.

The sign is located in a zone with a posted speed limit of 80 km/h. In the vicinity of the proposed sign, Centenary Drive has three travel lanes in the northbound direction and one exit lane turning onto the M4 Motorway. The nearest entry ramp to Centenary Drive in the northbound direction is approximately 200m to the south, which is the entrance from Marlborough Road.

An aerial image of the sign location and surrounding environs are shown in Figure 2.1.

Figure 2.1: Sign Location

Basemap Source: Nearmap, aerial imagery dated 25 February 2024.

2.2 Description of Signage

As per the Industry and Employment SEPP, the advertising display area is defined as follows:

> *"advertising display area means, subject to subsection (2), the area of an advertisement or advertising structure used for signage, and includes any borders of, or surrounds to, the advertisement or advertising structure, but does not include safety devices, platforms or lighting devices associated with advertisements or advertising structures"*

On the above basis, the advertising display area is to remain as per the existing dimensions, with an area of 42.41m^2 (12.66m width by 3.35m height).

The sign will be used by JCDecaux to continue promoting its sponsors and third-party advertising. The proposed static advertising sign will contain text and images. The development application plans for the proposed static advertising sign are contained in Appendix A.

2.3 Signage Exposure

The existing static advertising sign is visible to motorists travelling northbound on Centenary Drive, as shown in Figure 2.2.

Figure 2.2: Centenary Drive Northbound Approach

Basemap Source: Nearmap, aerial imagery dated 25 February 2024.

A site visit was undertaken on 14 March 2024 to inspect driver sight distances to the existing static advertising sign and observe any potential crash hazards that could be caused by the sign. A description of the site investigation findings is provided herein.

The lane configuration on the Centenary Drive northbound carriageway in the vicinity of the existing static advertising sign is shown in Figure 2.3.

Figure 2.3: Centenary Drive Northbound Approach Lane Configuration

Source: Photograph taken by TTPP dated 14 March 2024.

- The sign is visible to motorists on Centenary Drive travelling northbound.
- There is no other static or digital advertising signage within 150m of the existing sign location.
- Treating the observed conditions during the site inspection as typical conditions in the area, the sign is partially visible from each traffic lane as follows:
  - In Lane 1 (through lane), 550m from the sign.
  - In Lane 2 (through lane), 480m from the sign.
  - In Lane 3 (through lane), 370m from the sign.
- The sign is fully visible from each traffic lane as follows:
  - In the on-ramp from Marlborough Road, 280m from the sign.
  - In Lane 1, 280m from the sign.
  - In Lane 2, 210m from the sign.
  - In Lane 3, 180m from the sign.
- Between the partially visible and fully visible distances, the view from each lane towards the sign is obscured by vegetation.
- The distance at which the sign is readable from all travel lanes is approximately 110m from the sign on approach.
- No significant road safety issues associated with the existing static advertising sign were observed.

- There is an existing static sign at this location, and therefore the readable distance is based on the text font and sizing display of the current static advertising sign.
- There is no pedestrian footpaths along Centenary Drive.

The likely visible and readable distances on the Centenary Drive northbound approach are shown in Figure 2.4 to Figure 2.7.

Figure 2.4: Northbound Approach Sign Exposure – On-ramp

Source: Photograph taken by TTPP dated 14 March 2024.

Figure 2.5: Northbound Approach Sign Exposure - Lane 1

Source: Photographs taken by TTPP dated 14 March 2024.

Figure 2.6: Northbound Approach Sign Exposure - Lane 2

Source: Photographs taken by TTPP dated 14 March 2024.

Figure 2.7: Northbound Approach Sign Exposure - Lane 3

Source: Photographs taken by TTPP dated 14 March 2024.

2.4 Crash History

Historic crash data has been obtained from Transport for NSW (TfNSW) and assessed for incidents on Centenary Drive within the readable and visible distance of the existing static advertising sign. Crash history data has been assessed on the northbound approach to the sign for the most recent five-year period for data collated and published by TfNSW. The period is between 1 January 2019 and 31 December 2023.

Crash data has been reviewed within the **readable** distance of the sign location which is up to approximately 110m away on the northbound approach, as observed on-site. One crash

was recorded in the northbound direction; namely, a rear end collision (RUM Code 30) that resulted in a non-casualty.

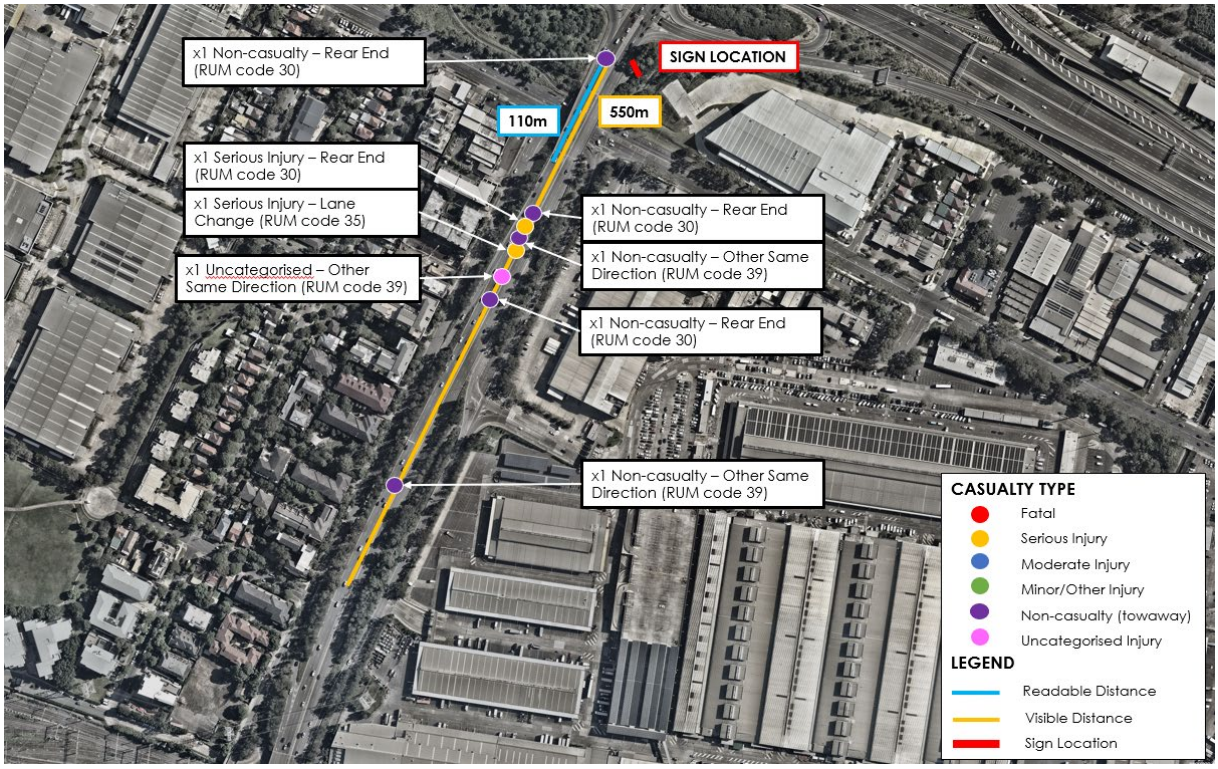
Crashes within the **visible** distance, in addition to the readable distance, have also been assessed. From 550m away from the sign, there have been three crashes that were categorised as other - same direction, four rear end collisions and one lane change collision. These incidents resulted in two serious injuries, one uncategorised injury and five non-casualties.

A summary of the crashes in the vicinity of the sign is presented in Table 2.1, while the crash locations and incident descriptions are illustrated in Figure 2.8.

Table 2.1: Crash Type and Severity

Crash Type	No. of Crashes	Crash Severity (No. of Crashes)					
		Fatality	Serious Injury	Moderate Injury	Minor Injury	Non-casualty (tow-away)	Uncategorised
	Within **readable** distance = 110m						
Rear End (RUM code 30)	1	0	0	0	0	1	0
Total	**1**	**0**	**0**	**0**	**0**	**1**	**0**
	Within **visible** distance = 550m						
Rear End (RUM code 30)	4	0	1	0	0	3	0
Lane Change (RUM code 35)	1	0	1	0	0	0	0
Other Same Direction (RUM code 39)	3	0	0	0	0	2	1
Total	**8**	**0**	**2**	**0**	**0**	**5**	**1**

Figure 2.8: Crash Locations in Recent 5-Year Period



Basemap Source: Nearmap, aerial imagery dated 25 February 2024.

Centenary Drive had an Annual Average Daily Traffic Volume of over 41,000 vehicles in the northbound direction in 2022 according to data provided by TfNSW's Traffic Volume Viewer. The crash history is not considered abnormal given that the location under review is more than half a kilometre long and is a busy urban arterial road.

Moreover, all but one of the incidents occurred at a distance of 150m or greater from the sign from which the sign would not be legible and is highly unlikely to be observed.

Based on the above, the existing static advertising sign has not significantly impacted road safety considering the low volume of incidents within the readable distance. Therefore, the crash data does not indicate that the existing static advertising sign has had a negative impact on road safety.

3 Statutory Requirements

This section of the report assesses the compliance of the sign with the safety assessment criteria established in the NSW Guidelines and State Environmental Planning Policy (Industry and Employment) 2021. It requires analysis as to whether the proposal would reduce the safety of:

- Any public roads,
- Pedestrians and cyclists,
- Pedestrians by obscuring sight lines from public areas.

The existing design will remain consistent in the future and has been assessed against the relevant statutory requirements and guidelines. In order to assess any road facing sign against the key safety assessment criteria, a series of criteria are set out in Section 3.2 *Advertisements and Road Safety* of the NSW Guidelines.

3.1 Industry and Employment SEPP Schedule 5

Clauses 1 to 7 of the Industry and Employment SEPP – Schedule 5 refer to aspects that are unrelated to road safety, as outlined in Appendix B. However, Clause 8 is related to road safety, and thus, is covered under this signage safety assessment as follows:

a) Would the proposal reduce the safety for any public road?
b) Would the proposal reduce the safety for the pedestrians or bicyclists?
c) Would the proposal reduce the safety for pedestrians, particularly children, by obscuring sightlines from public areas?

Provision of the existing static advertising sign mounted on a monopole beside Centenary Drive was not observed to reduce safety for motorists, pedestrians or cyclists. There will be no changes to the location or size of the existing static advertising sign in the future.

Assessment of the existing sign in accordance with the Department of Planning's Transport Corridor Outdoor Advertising and Signage Guidelines has been undertaken in the following sections.

3.2 Transport Corridor Outdoor Advertising and Signage Guidelines – Freestanding Advertisements Criteria (Section 2 of Guidelines)

Table 3.1: Freestanding Advertisements Criteria (Section 2 of Guidelines)

Criteria		Comments
A	The advertising structure must not protrude above the dominant skyline, including any buildings, infrastructure or tree canopies, when viewed from ground level within a visual catchment of 1km. Note: This impact should be measured from the vehicle approach location and any other critical viewpoints.	The advertising structure does not protrude above the tree canopies on approach as shown in Figure 2.4 to Figure 2.7.
B	For a freestanding advertisement greater than 45sqm that requires consent from local council, a DCP must be in force that has been prepared on the basis of an advertising design analysis for the relevant area or precinct.	The sign is less than 45sqm.
C	Where the sign is in a transport corridor a landscape management plan may be required as part of the DA approval for a freestanding advertisement. This may include requirements to provide appropriate vegetation behind and adjacent to the advertising structure to minimise unintended visual impacts. Landscaping should include trees, shrubs and ground covers to provide adequate screening, softening, colour, soil stabilisation and weed reduction.	The DA for this sign has been previously approved and the sign has been operational since 2010. It is envisioned that a landscape management plan is not necessary for permit renewal purposes.

3.3 Transport Corridor Outdoor Advertising and Signage Guidelines (Section 3 of Guidelines)

3.3.1 Sign Location Criteria

3.3.1.1 Road Clearance

(a) The advertisement must not create a physical obstruction or hazard. For example:

- ***i. Does the sign obstruct the movement of pedestrians or bicycle riders? (e.g. telephone kiosks and other street furniture along roads and footpath areas).***
- ***ii. Does the sign protrude below a bridge or other structure so it could be hit by trucks or other tall vehicles? Will the clearance between the road surface and the bottom of the sign meet appropriate road standards for that particular road?***
- ***iii. Does the sign protrude laterally into the transport corridor so it could be hit by trucks or wide vehicles?***

The sign does not physically obstruct any vehicle, pedestrian and cyclist movements as it is offset from the eastern side of Centenary Drive. There is no pedestrian footpath on either side of Centenary Drive.

The sign is located 4.9m above the roadway and does not protrude laterally into the transport corridor, and therefore, would not be hit by trucks or wide vehicles.

(b) Where the sign supports are not frangible (breakable), the sign must be placed outside the clear zone in an acceptable location in accordance with Austroads Guide to Road Design (and RMS supplement) or behind an RMS-approved crash barrier.

The base of the existing sign is located approximately 9m behind an RMS approved crash barrier and is therefore considered to be in an acceptable location.

(c) Where a sign is proposed within the clear zone but behind an existing RMS-approved crash barrier, all its structures up to 5.8m in height (relative to the road level) are to comply with any applicable lateral clearances specified by Austroads Guide to Road Design (and RMS supplements) with respect to dynamic deflection and working width.

The lateral clearance with respect to dynamic deflection and working width for the existing static sign was previously approved by TfNSW.

(d) All signs that are permitted to hang over roads or footpaths should meet wind loading requirements as specified in AS1170.1 and AS1170.2. All vertical clearances as specified above are regarded as being the height of the sign when under maximum vertical deflection.

The existing static advertising sign has been approved and designed in accordance with Australian Standards AS1170.1 and AS1170.2 to meet the requirements for wind loading, whilst having consideration for the height of the sign board when under maximum vertical deflection. An assessment of the existing sign against the current codes is included in Appendix C which demonstrates the signage structure is in accordance with current codes.

3.3.1.2 Line of Sight

(a) An advertisement must not obstruct the drivers view of the road particularly of other vehicles, bicycle riders or pedestrians at crossings.

The sign is significantly offset from the carriageway and does not obstruct the drivers' view of the road or pedestrians and cyclists.

(b) An advertisement must not obstruct a pedestrian or cyclist's view of the road.

The sign does not obstruct pedestrian and cyclist's view of Centenary Drive as it is offset from the roadway against vegetation. Also, there are no pedestrian footpaths along Centenary Drive in the vicinity of the sign, so pedestrians are not expected to travel through this area.

(c) The advertisement should not be located in a position that has the potential to give incorrect information on the alignment of the road. In this context, the location and arrangement of signs' structures should not give visual clues to the driver suggesting that

the road alignment is different to the actual alignment. An accurate photomontage should be used to assess this issue.

The sign is offset from the carriageway in a manner that does not have the potential to give incorrect information about the road alignment. This is supported by Figure 2.4 to Figure 2.7.

(d) The advertisement should not distract a driver's attention away from the road environment for an extended length of time. For example:

- ***(i) The sign should not be located in such a way that the driver's head is required to turn away from the road and the components of the traffic stream in order to view its display and/or message. All drivers should still be able to see the road when viewing the sign, as well as the main components of the traffic stream in peripheral view.***
- ***(ii) The sign should be oriented in a manner that does not create headlight reflection in the driver's line of sight. As a guideline, angling a sign five degrees away from right angles to the driver's line of sight can minimise headline reflections. On a curved road alignment, this should be checked for the distance measured back from the sign that a car would travel in 2.5 seconds at the design speed.***

The sign is positioned within a driver's line of sight. For drivers travelling in the northbound direction, the sign will be located on the other side of the carriageway (east side of Centenary Drive). However, the road is straight on approach such that the sign is within the driver's peripheral view for those travelling in the northbound direction. Drivers are not required to turn their head to view the sign.

The height and distance of the sign away from the carriageway is unlikely to cause headlight reflection or glare.

3.3.1.3 Proximity to Decision Making Points and Conflict Points

(a) A sign should not be located:

- ***(i) Less than the safe sight distance from an intersection, merge points, exit ramp, traffic control signal or sharp curves.***
- ***(ii) Less than the safe stopping sight distance from a marked foot crossing, pedestrian crossing, pedestrian refuge, cycle crossing, cycleway facility or hazard within the road environment.***
- ***(iii) So that it is visible from the stem of a T-intersection.***

As per Austroads Guide to Road Design part 4A, the minimum safe stopping distance (SSD) is based on the travel speed and gradient of the road. At this location, there is a posted speed limit of 80km/h.

For the purpose of this assessment, an operating speed of 80km/h has been used to calculate the safe stopping sight distance. It is also the speed at which motorists were observed to be driving during the site inspection. According to the Austroads guide, the minimum safe stopping sight distance for an 80km/h speed zone is 103m.

The existing sign is located 50m from the stop line of the signalised intersection with the M4 Motorway. Therefore, the sign would be located within the stopping sight distance of the intersection. However, the sign was originally approved under the same conditions and the crash history in Section 2.4 does not indicate that the existing static advertising sign has had a negative impact on road safety with only one crash within the readable distance.

Further to this, the traffic signals are visible from 360m on approach, as shown in Figure 3.1. At this point, the proposed static sign will also be visible at 310m on approach, but not readable until 110m on approach. In this regard, motorists would have sufficient reaction and braking time to stop safely on approach to the signalised intersection of Centenary Drive and the M4 Motorway.

Figure 3.1: Traffic Signals Visible Distance

Source: Photographs taken by TTPP dated 14 March 2024.

Notwithstanding the above, there are several examples of digital and static sign boards located within the minimum safe stopping distance of signalised intersections. These examples are herein provided below.

A digital sign is located on the north side of a pedestrian bridge above King Georges Road in Beverley Hills, as shown in Figure 3.2. The digital sign is located 55m north of the King Georges Road and Shorter Avenue signalised intersection. Given that King Georges Road has a speed limit of 60k m/h, the minimum SSD is 64 m as per the Austroads Guide Part 3. The Traffic Control Signal plan for the intersection indicates that there is a downhill slope of 6.1% on the approach to the digital sign (i.e. King Georges Road north approach). Applying a grade correction of an additional 8m to the SSD on King Georges Road north approach is 72 m. As such, the digital sign is located within the minimum SSD as shown in Figure 3.3.

Figure 3.2: Existing Digital Sign on King George Road, Beverley Hills

Source: Google Streetview, imagery dated October 2020

Figure 3.3: Safe Stopping Sight Distance on King Georges Road

Map Source: Nearmap, aerial image dated 21 December 2021

Similarly, a digital sign has recently been installed on the south side of the pedestrian footbridge across Pacific Highway in Gordon. The digital sign is located approximately 40m south of the Pacific Highway and Dumaresq Street signalised intersection as shown in Figure 3.4. Pacific Highway has a posted speed limit of 60km/h, and therefore, the minimum stopping sight distance to the traffic signals on Pacific Highway south approach is 64m. Hence, the digital sign is located within the minimum stopping sight distance as shown in Figure 3.4.

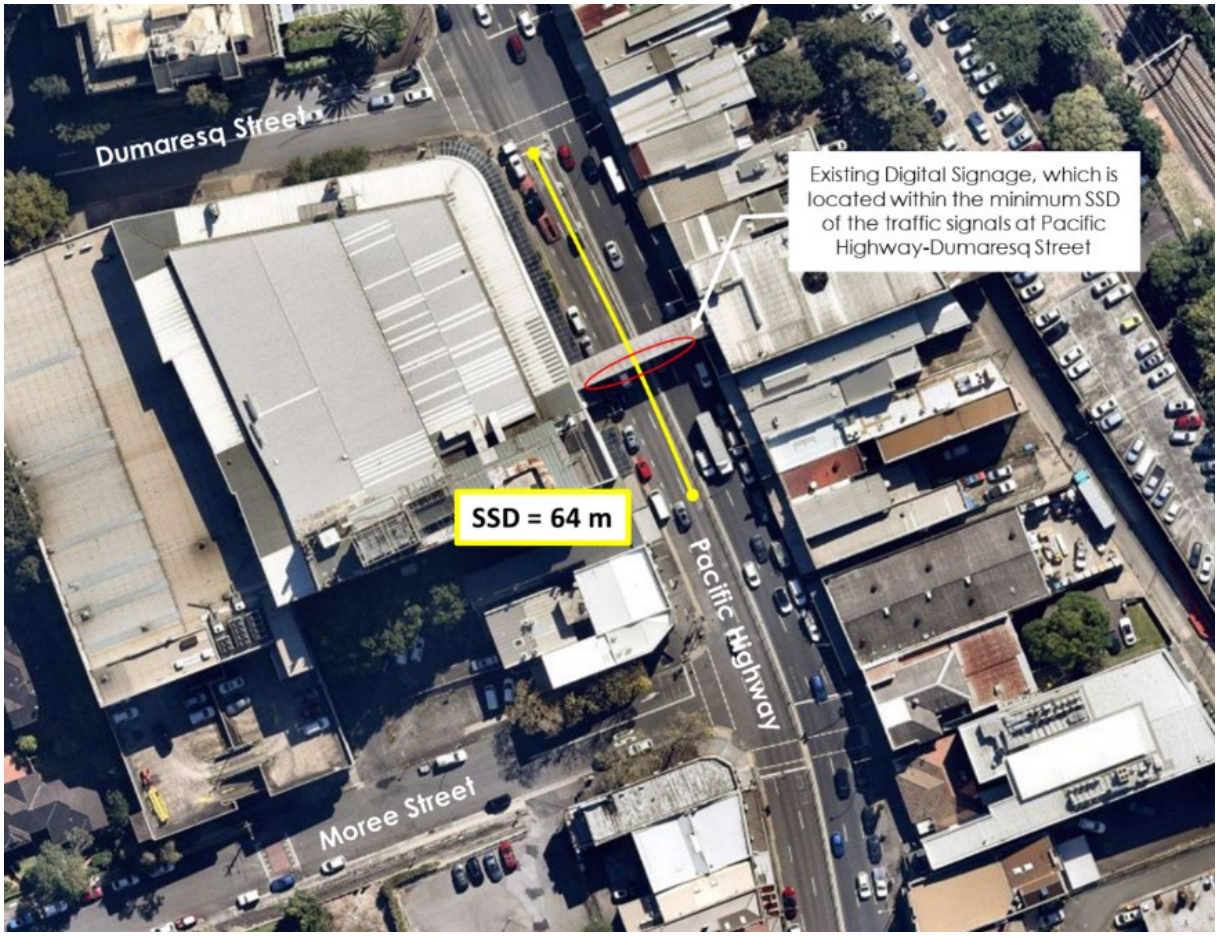
For the digital sign in Gordon, there was a Land and Environment Court proceeding (Captive Vision Pty Ltd v Ku-ring-gai Council (No 3) [2019] NSWLEC 1472) on 19-20 September 2019. An extract from the court transcripts where TfNSW's expert witness, Ms Samsa, was in support of the proposed digital sign is provided below:

- *EXPERT WITNESS SAMSA: Well it was more that there is – when I analysed the crash data, on both approaches there were obviously crashes for both approaches, but on the southbound approach there were more crashes in the approach to the pedestrian bridge than beyond it, whereas the opposite is for the northbound approach. So there's not a lot of crashes towards it, but after you pass the pedestrian bridge there's been crashes, a larger portion of crashes beyond it. So to me that suggests that there's something about that, that northern section around Dumaresq Street and beyond that is causing drivers issues, and I can't qualify what that is. It could be a number of factors, but to me that was just a bit of a, a point to go well I wonder what's happening here that's making it difficult for drivers to negotiate that particular section of road in particular that would be causing those crashes?*
- *SENIOR COMMISIONER: Do I understand your evidence is that you support the north or you don't?*
- *EXPERT WITNESS SAMSA: I would support the north approach.*
- *SENIOR COMMISSIONER: Irrespective of that conundrum about not understanding the after the sign area, is that right?*
- *EXPERT WITNESS SAMSA: I think, I think there's less of a chance for drivers to be distracted or to be thinking of a sign beyond once they've passed it.*
- *SENIOR COMMISSIONER: Okay, thank you.*
- *ASTILL: Just to clarify, you said north approach, you mean northbound commissioner?*
- *SENIOR COMMISSIONER: Yes, northbound.*

Figure 3.4: Existing Digital Sign on Pacific Highway, Gordon

Source: Photograph taken by TTPP on 24/05/2021

Figure 3.5: Safe Stopping Sight Distance on Pacific Highway



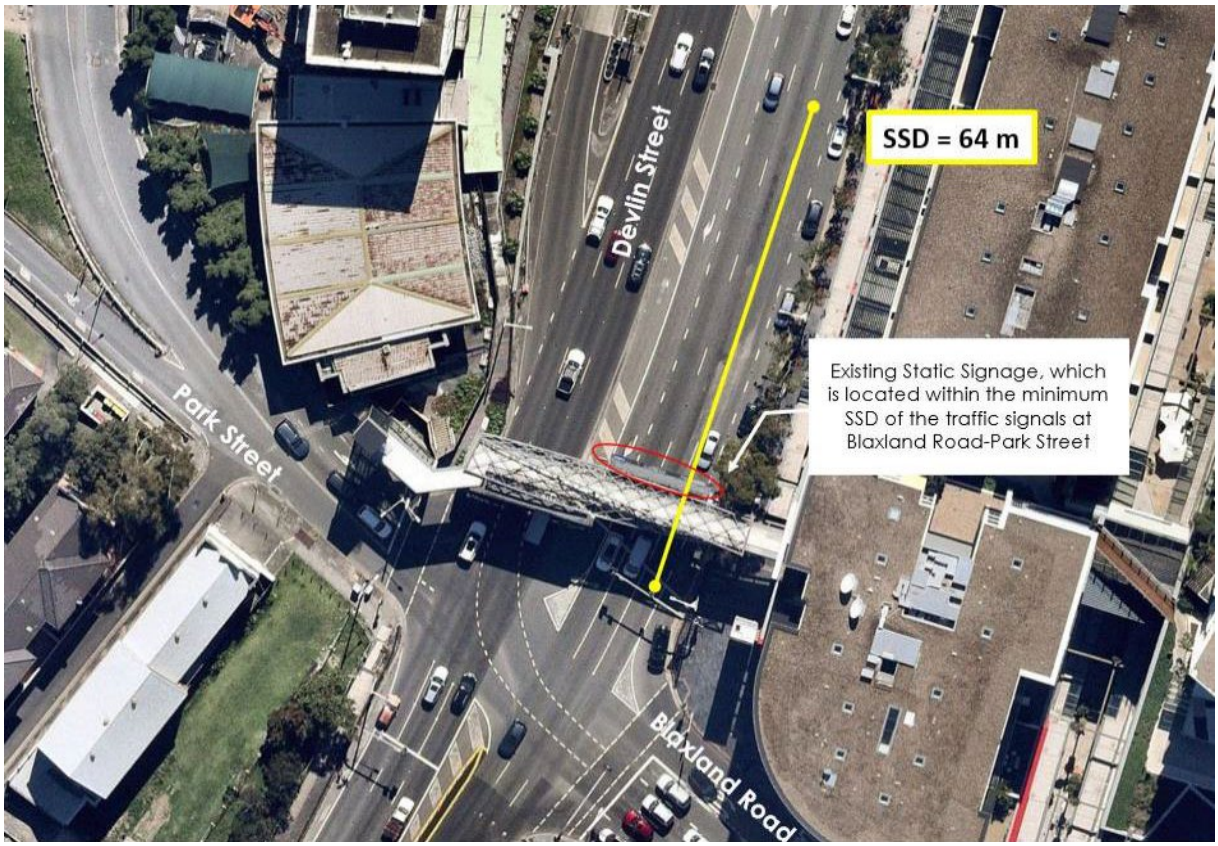
Map Source: Nearmap, aerial image dated 21 December 2021

Another example is an existing static sign located on the pedestrian bridge above Devlin Street in Ryde. The existing sign is located 14m north of the stop line at the Devlin Street, Parkes Street and Blaxland Road signalised intersection as shown in Figure 3.6. In the vicinity of the sign, Devlin Street is posted as 60km/h giving a minimum SSD of 64m. As such, the sign is located within the maximum SSD to the traffic signals as shown in Figure 3.7.

Figure 3.6: Existing Sign on Devlin Street, Ryde

Source: Google Streetview, imagery dated November 2020

Figure 3.7: Safe Stopping Sight Distance on Devlin Street



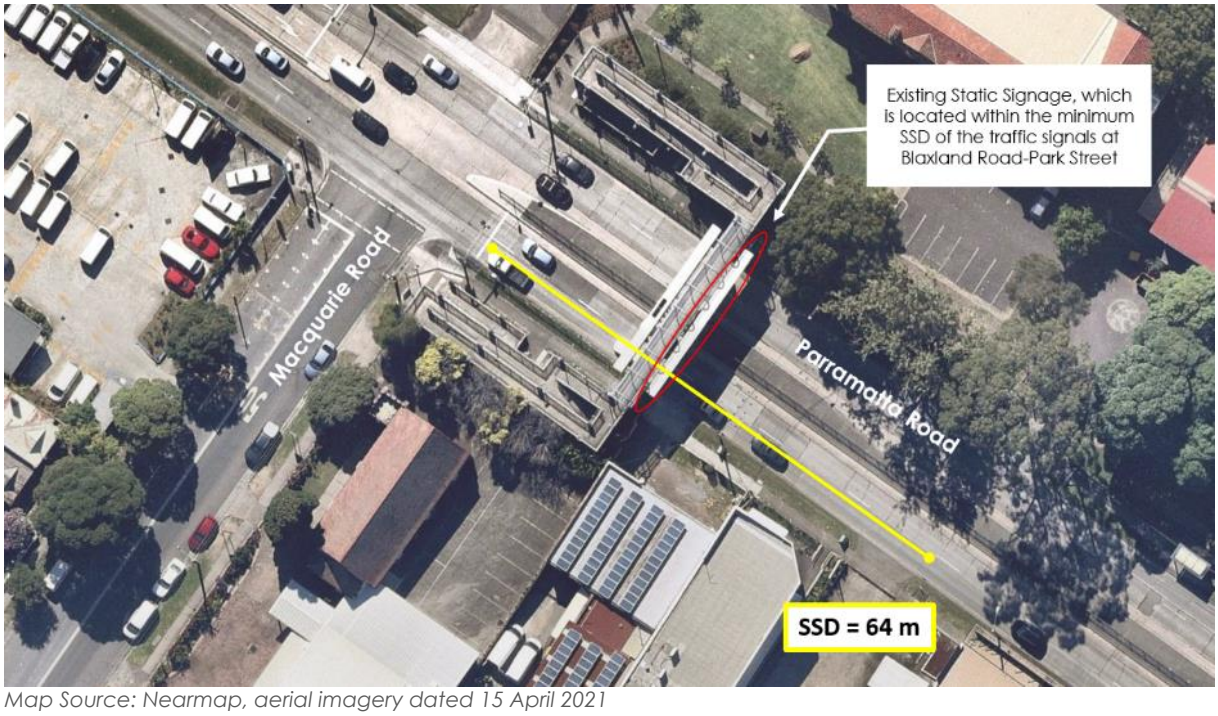
Map Source: Nearmap, aerial image dated 10 April 2021

A fourth example is the static billboard fixed to the side of the overhead pedestrian bridge on Parramatta Road in Auburn. On the east approach to the Parramatta Road and Macquarie Road signalised intersection, there is a sign board located within 25m of the traffic signals. The driving view on approach to the traffic signals and signage is shown in Figure 3.8. The posted speed limit on Parramatta Road is 60km/h which gives a minimum SSD of 64m. Thus, the existing billboard is located less than the minimum SSD to the traffic signals.

Figure 3.8: Existing Sign on Parramatta Road, Auburn

Source: Google Streetview, imagery dated October 2020

Figure 3.9: Safe Stopping Sight Distance on Parramatta Road



Map Source: Nearmap, aerial imagery dated 15 April 2021

Another example is the approved digital sign fixed above 343-345 Parramatta Road, Leichhardt facing westbound traffic on Parramatta Road. The existing static sign was approved in 1996 and has recently been approved for conversion to a digital sign. The sign is located 25m from the traffic signals. The driving view on approach to the traffic signals and signage is shown in Figure 3.10. The posted speed limit on Parramatta Road is 60km/h which gives a minimum SSD of 64m. Thus, the existing billboard is located less than the minimum SSD to the traffic signals as shown in Figure 3.11.

Figure 3.10: Existing Sign on Parramatta Road, Leichhardt

Source: Google Streetview, imagery dated February 2023

Figure 3.11: Safe Stopping Sight Distance on Parramatta Road

Map Source: Nearmap, aerial imagery dated 20 June 2023

Based on the above, there are several instances where there are existing digital and static signage located less than the minimum safe stopping sight distance to traffic signals. Technically speaking, the above examples are also non-compliant with the Transport Corridor Outdoor Guidelines.

However, like the existing static sign on Centenary Drive, these signs do not and would not be expected to cause an unsafe level of distraction for motorists on approach to the respective traffic signals.

The sign is not visible from the stem of a T-intersection.

(b) The placement of a sign should not distract a driver at a critical time. In particular, signs should not obstruct a driver's view:

- **a. Of a road hazard,**
- **b. To an intersection,**
- **c. To a prescribed traffic control device (such as traffic signals, stop or give way signs or warning signs)**
- **d. To an emergency vehicle access point or Type 2 driveways (wider than 6-9 metres) or higher.**

A "critical time" is understood to refer to a point in time when a driver's decision is required implying that a road safety implication could occur if a driver was distracted at this time.

The existing static advertising sign is fixed on the east side of Centenary Drive. The sign does not obstruct a motorist's view of any traffic signals, signage, and other traffic hazards when travelling on Centenary Drive in the northbound direction.

3.3.1.4 Sign Spacing

(a) Sign spacing should limit drivers view to a single sign at any given time with a distance of no less than 150m between signs in any one corridor. Exemptions for low speed, high pedestrian zones or CBD zones will be assessed by RMS as part of their concurrence role.

There are no other large format static or digital signs within 150 m of the proposed static advertising sign facing traffic in the northbound direction.

3.3.2 Sign Design and Operation Criteria

3.3.2.1 Advertising Signage and Traffic Control Devices

(a) The advertisement must not distract a driver from, obstruct or reduce the visibility and effectiveness of directional signs, traffic signals, prescribed traffic control devices, regulatory signs or advisory signs or obscure information about the road alignment.

A Variable Message Sign (VMS) is located approximately 400m prior to the existing static advertising sign as shown in Figure 3.12. There is also a traffic advisory signage located 160m prior to the existing static sign as shown in Figure 3.13. However, both of these signs are located on the opposite side of the carriageway to the proposed static sign, so there is no backdrop issue for either sign.

Figure 3.12: Variable Message Screen – Existing Conditions

Source: Photograph taken by TTPP dated 14 March 2024.

Figure 3.13: Advisory Signs - Existing Conditions

Source: Photograph taken by TTPP dated 14 March 2024.

(b) The advertisement must not interfere with stopping sight distance for the road's design speed or the effectiveness of a traffic control device. For example:

- ***(i) Could the advertisement be construed as giving instructions to traffic such as 'Stop', 'Halt' or 'Give Way'?***
- ***(ii) Does the advertisement imitate a prescribed traffic control device?***
- ***(iii) If the sign is in the vicinity of traffic lights, does the advertisement use red, amber or green circles, octagons, crosses or triangles or shapes or patterns that may result in the advertisement being mistaken for a traffic signal?***

Details of the advertisements would remain consistent with the existing static advertising sign. It is noted that the sign would not display colours and shapes which could be mistaken for traffic signals.

Notwithstanding this, it is recommended that the content of the sign be reviewed against Table 5 of the Guidelines to avoid any content that may be construed as imitating a traffic control device.

3.3.2.2 Dwell Time and Transition Time

(a) Each advertisement must be displayed in a completely static manner, without any motion, for the approved dwell time as per criterion (b) below

(b) Dwell times for image display must not be less than:

- ***(i) 10 seconds for areas where the speed limit is below 80km/h***
- ***(ii) 25 seconds for areas where the speed limit is 80km/h and over.***

(c) Any digital sign that is within 250 metres of a classified road and is visible from a school zone must be switched to a fixed display during school zone hours.

(d) Digital signs must not contain animated or video/movie style advertising or messages of image failure, the default image must be a black screen.

The existing sign is not a digital advertising sign and will remain a static advertising sign.

3.3.2.3 Illumination and Reflectance

(a) Luminance levels must comply with the requirements in Table 6 in Transport Corridor Outdoor Advertising and Signage Guidelines
(b) The image displayed on the sign must not otherwise unreasonably dazzle or distract drivers without limitation to their colouring or contain flickering or flashing content.

Section 3.3.3 of the Guideline details assessment criteria to ensure that illumination and reflectance qualities of the sign do not cause a road safety hazard. It is understood that these criteria would be addressed in a separate specialist report prepared by a qualified consultant.

3.3.2.4 Interaction and Sequencing

(a) The advertisement must not incorporate technology which interacts with in-vehicle electronic devices or mobile devices. This includes interactive technology or technology that enables opt-in direction communication with road users.
(b) Message sequencing designed to make a driver anticipated the next message is prohibited across images presented on a single sign and across a series of signs.

The proposed sign is a static advertising sign and would not contain interactive technology or technology that enables opt-in direction communication with motorists.

4 Conclusion

JCDecaux is seeking to renew the permit of a large format static advertising sign facing northbound traffic on the east side of Centenary Drive in Homebush West.

The proposal has been assessed against the statutory requirements for static advertising signage outlined in the following documents:

- Section 3, Advertisements and Road Safety of the NSW Guidelines
- State Environmental Planning Policy (Industry and Employment) 2021.

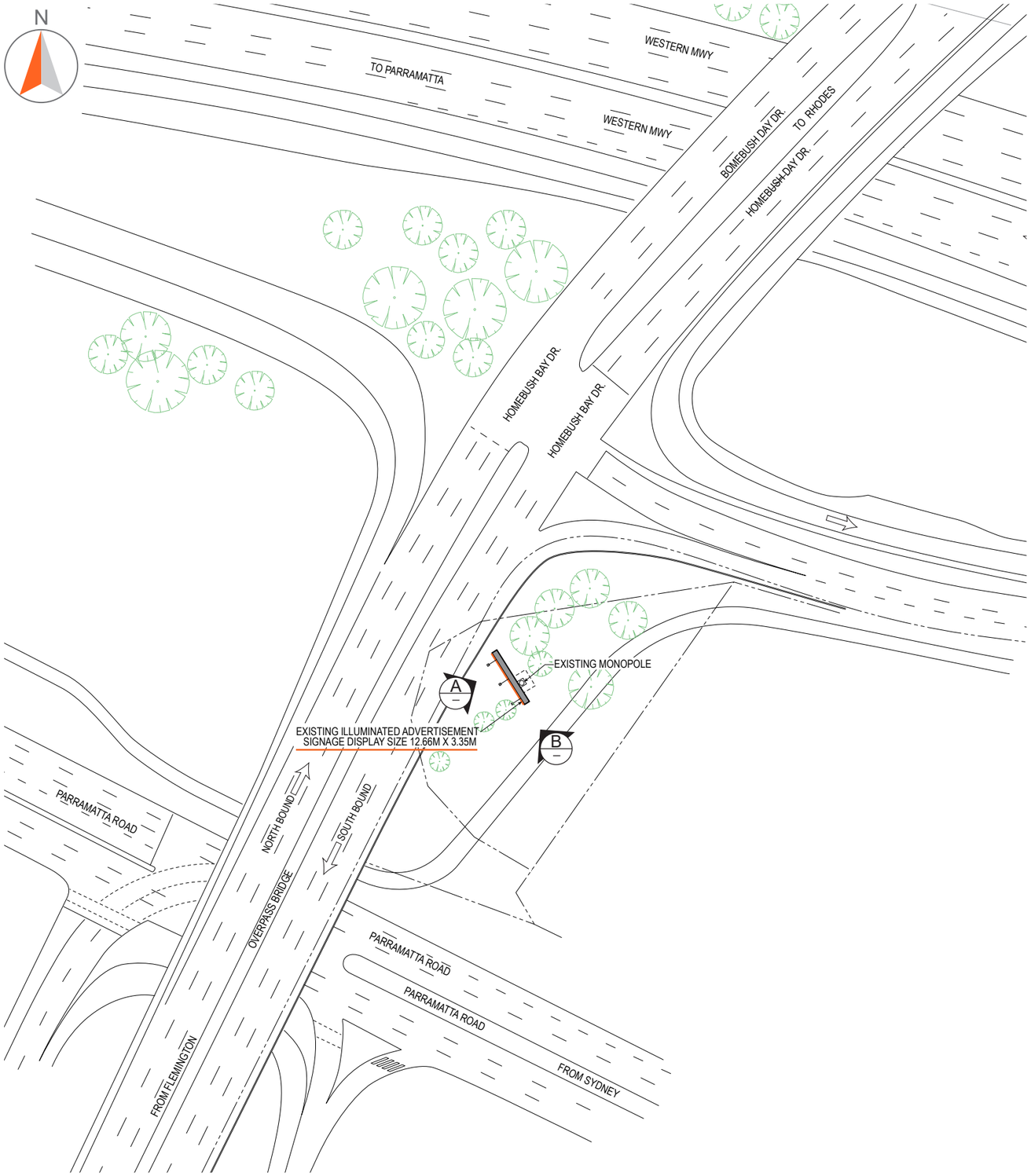
The following findings and conclusions are made from the signage safety assessment:

- There have been eight crashes recorded on approach to the existing sign location within the visible distance of the sign (i.e. 550m away from the sign) for the most recent five years (for which TfNSW has aggregated data). Only one incident was recorded within the readable distance of the sign location (i.e. 110m away from the sign).
- The sign does not obstruct and/or reduce visibility of any traffic control devices, signage, pedestrians or cyclists.
- The sign does not give incorrect information on the alignment of the road.
- The sign is located within the driver's peripheral vision and does not require motorists to turn their head away from the roadway ahead.
- The sign is located within the safe stopping distance to an intersection with the M4 Motorway. However, minimum visible distance of the sign from the intersection is greater than the safe stopping distance.
- The sign does not compromise safety for road users in the vicinity.

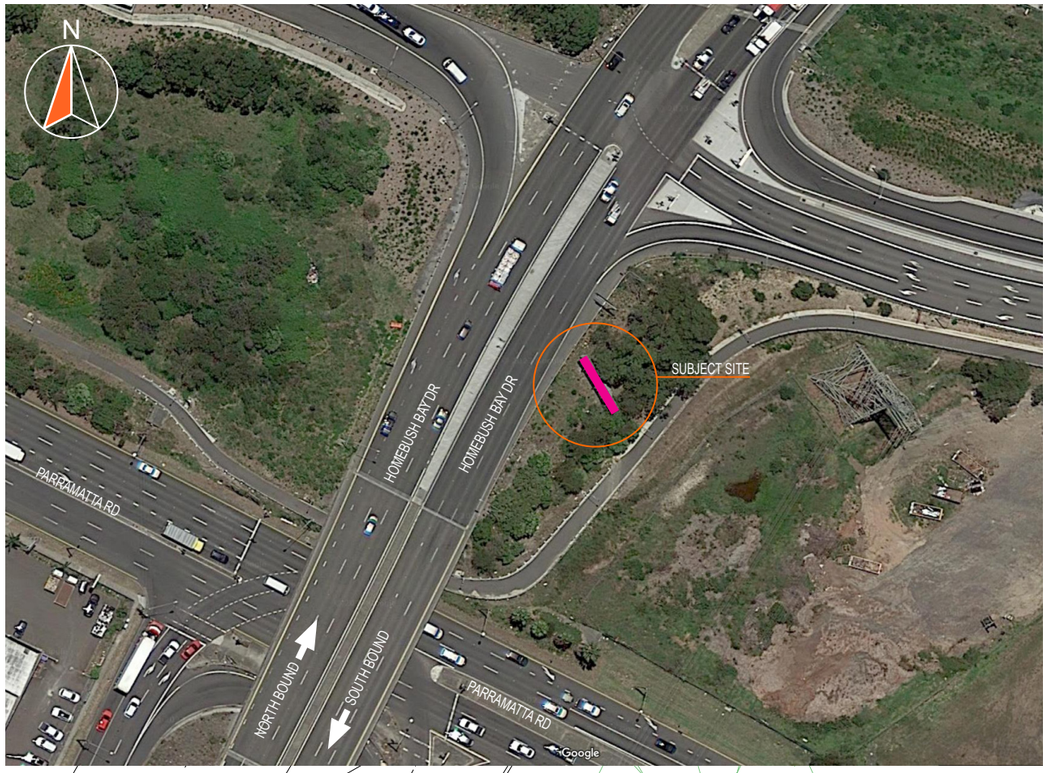
Having consideration for the signage safety assessment and discussions presented within this report, the analysis shows that the existing static advertising sign, and therefore the proposed static advertising sign, on the eastern side of Centenary Drive facing northbound traffic is acceptable from a road safety perspective.

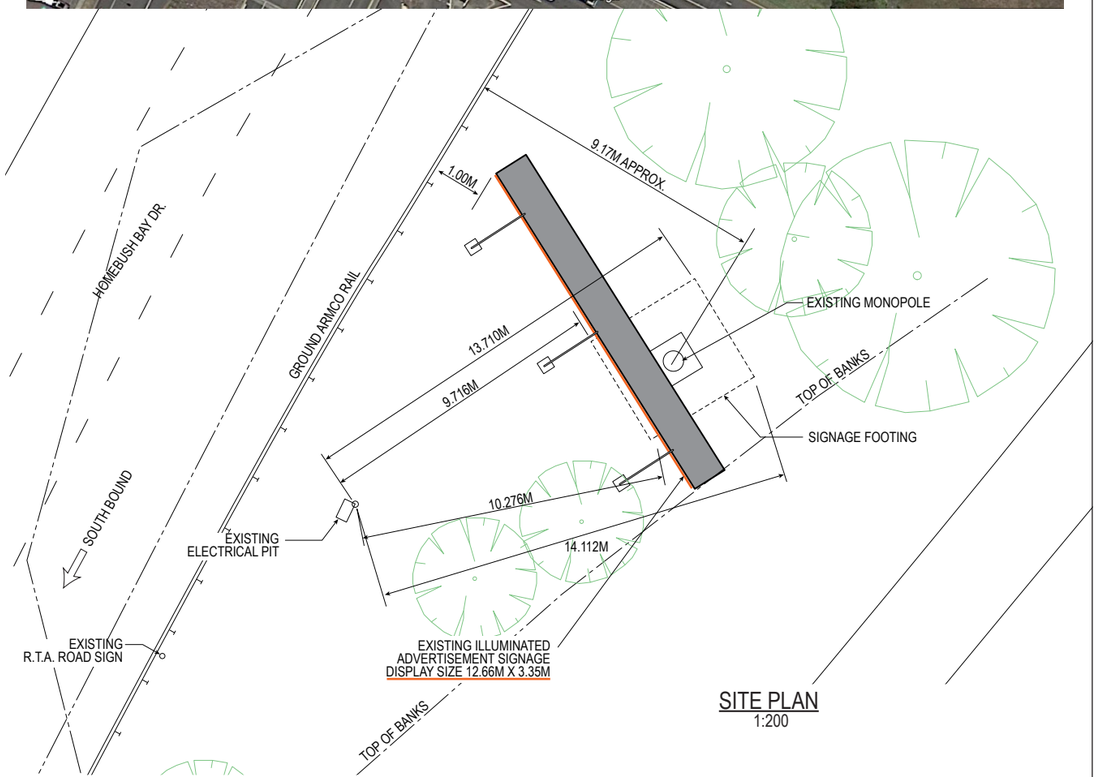
Appendix A

Concept Design Plans



SITE PLAN
1:1000





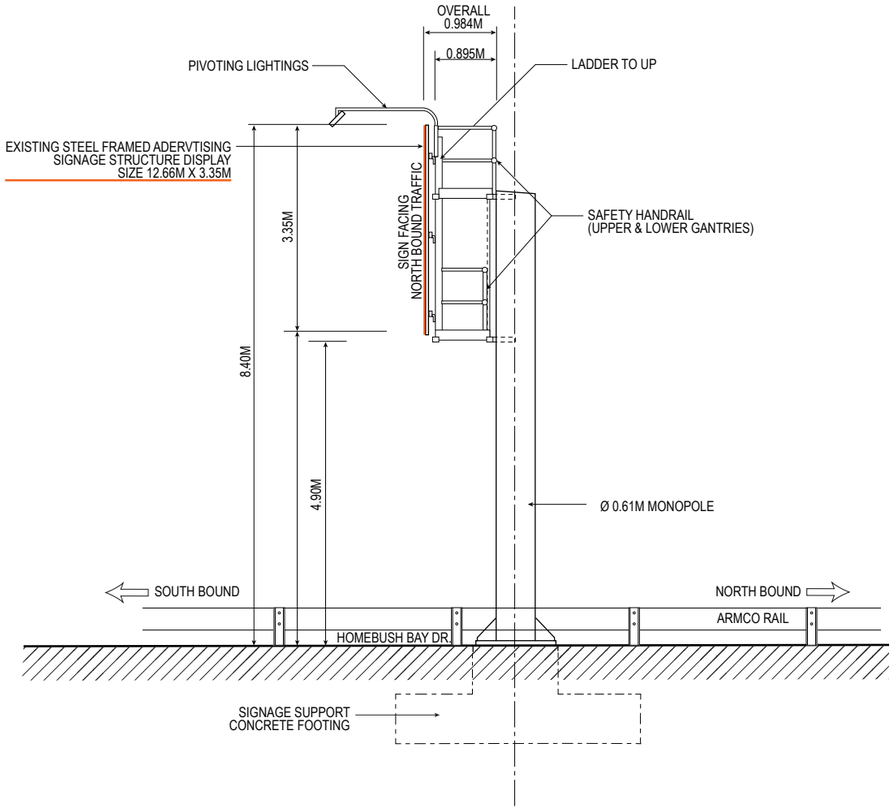
SITE PLAN
1:200

NOTE: NOT FOR CONSTRUCTION
SIGN SIZE AND STRUCTURE AS SHOWN IS INDICATIVE AND SUBJECT TO FINAL DETAIL SITE SURVEY.

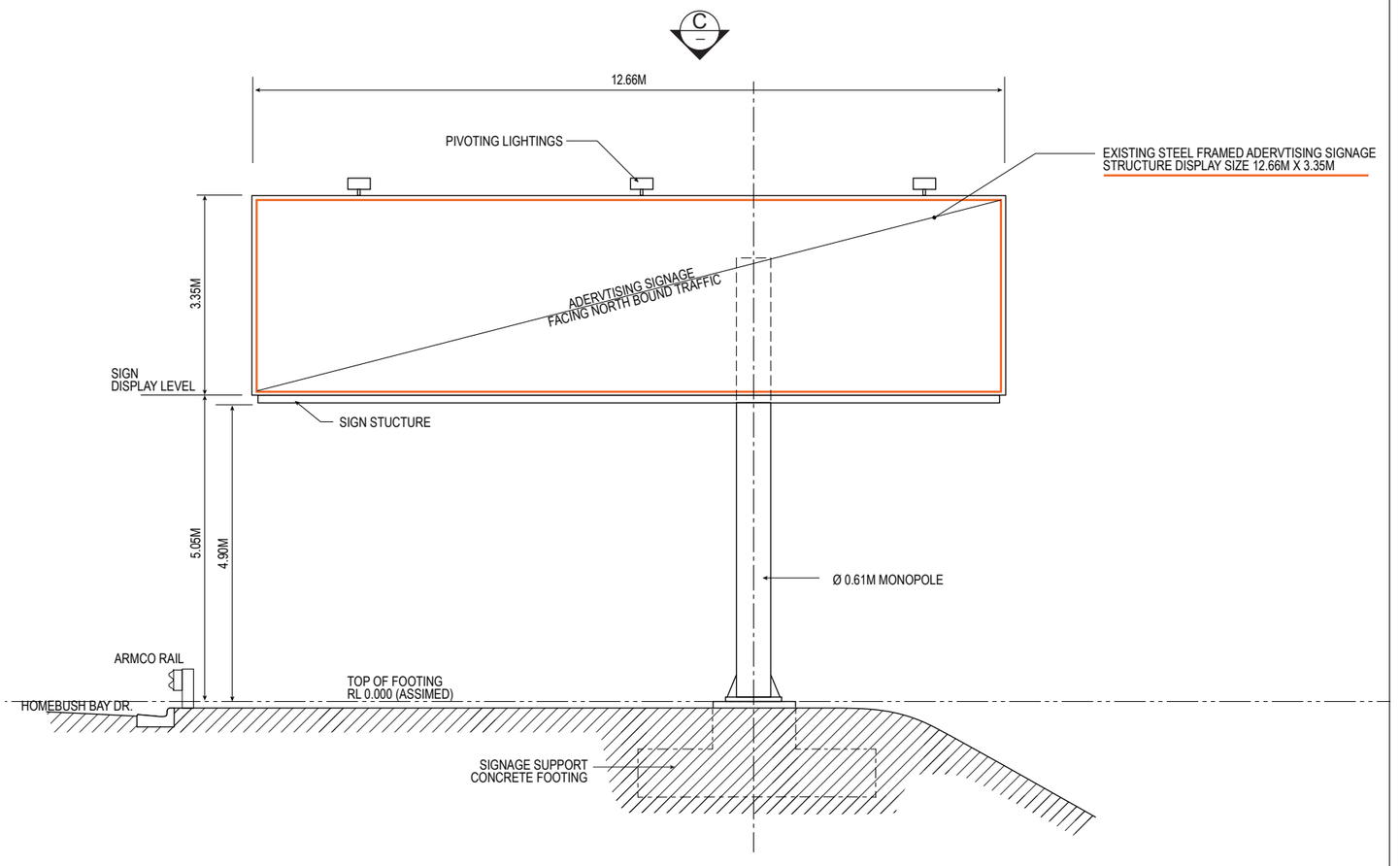
JCDecaux

EXISTING SINGLE SIDED ILLUMINATED ADVERTISEMENT SIGNAGE DISPLAY STRUCTURE SIZE 12.66M X 3.35M AT HOMEBUSH BAY DR HOMEBUSH NSW 2140
-33.857956, 151.06994
SITE PLAN

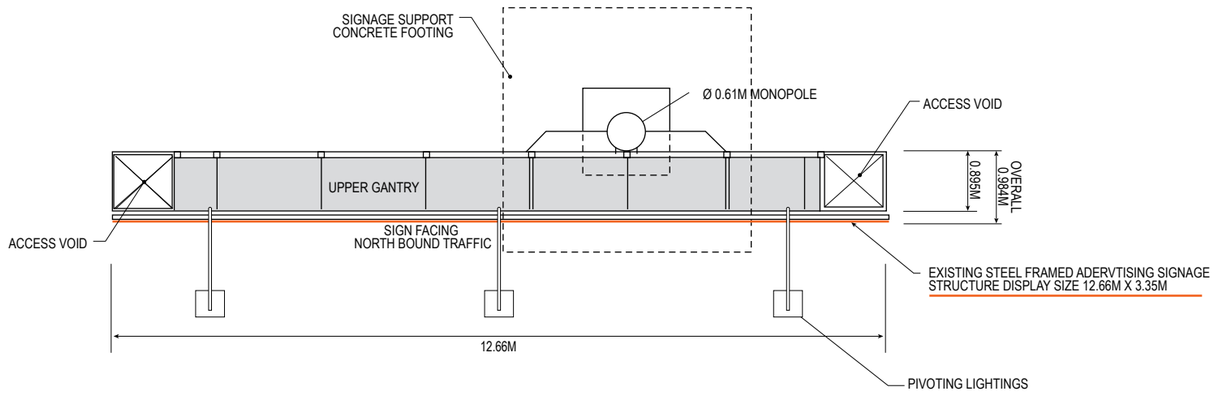
Date	November, 2023	PLAN & ELEVATION	
Draw by	LF	Drawing No. Date	Rev Rev
Scale	1:1000 (Print as A3)	131123-1/2 13/11/23	
Drawing No.	131123-1/2	Drawn: LF	
Job No.	HOM-FLE-1123		



SOUTH EAST ELEVATION (B)
1:100



SOUTH WEST ELEVATION (A)
1:100



TOP VIEW (C)
1:100

NOTE: NOT FOR CONSTRUCTION
SIGN SIZE AND STRUCTURE AS SHOWN IS INDICATIVE AND SUBJECT TO FINAL DETAIL SITE SURVEY.

JCDecaux

EXISTING SINGLE SIDED ILLUMINATED ADVERTISEMENT SIGNAGE DISPLAY STRUCTURE SIZE 12.66M X 3.35M AT HOMEBUSH BAY DR HOMEBUSH NSW 2140
-33.857956, 151.06994
ELEVATIONS

Date	November, 2023	PLAN & ELEVATION	
Draw by	LF	Drawing No. Date	Rev Rev
Scale	1:100 (Print as A3)	131123-2/2 13/11/23	
Drawing No.	131123-2/2	Drawn: LF	
Job No.	HOM-FLE-1123		

Appendix B

State Environmental Planning Policy (Industry and Employment) – Schedule 5

State Environmental Planning Policy (Industry and Employment) 2021

Current version for 16 December 2022 to date (accessed 4 July 2023 at 10:29)

Schedule 5

Schedule 5 Assessment criteria

sections 3.6, 3.11 and 3.15

1 Character of the area

- Is the proposal compatible with the existing or desired future character of the area or locality in which it is proposed to be located?
- Is the proposal consistent with a particular theme for outdoor advertising in the area or locality?

2 Special areas

- Does the proposal detract from the amenity or visual quality of any environmentally sensitive areas, heritage areas, natural or other conservation areas, open space areas, waterways, rural landscapes or residential areas?

3 Views and vistas

- Does the proposal obscure or compromise important views?
- Does the proposal dominate the skyline and reduce the quality of vistas?
- Does the proposal respect the viewing rights of other advertisers?

4 Streetscape, setting or landscape

- Is the scale, proportion and form of the proposal appropriate for the streetscape, setting or landscape?
- Does the proposal contribute to the visual interest of the streetscape, setting or landscape?
- Does the proposal reduce clutter by rationalising and simplifying existing advertising?
- Does the proposal screen unsightliness?
- Does the proposal protrude above buildings, structures or tree canopies in the area or locality?
- Does the proposal require ongoing vegetation management?

5 Site and building

- Is the proposal compatible with the scale, proportion and other characteristics of the site or building, or both, on which the proposed signage is to be located?
- Does the proposal respect important features of the site or building, or both?

- Does the proposal show innovation and imagination in its relationship to the site or building, or both?

6 Associated devices and logos with advertisements and advertising structures

- Have any safety devices, platforms, lighting devices or logos been designed as an integral part of the signage or structure on which it is to be displayed?

7 Illumination

- Would illumination result in unacceptable glare?
- Would illumination affect safety for pedestrians, vehicles or aircraft?
- Would illumination detract from the amenity of any residence or other form of accommodation?
- Can the intensity of the illumination be adjusted, if necessary?
- Is the illumination subject to a curfew?

8 Safety

- Would the proposal reduce the safety for any public road?
- Would the proposal reduce the safety for pedestrians or bicyclists?
- Would the proposal reduce the safety for pedestrians, particularly children, by obscuring sightlines from public areas?

Appendix C

Assessment Against Current Structural Codes

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PH: (02) 9451 3455
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Ref: 22233

12th April 2024

Jocelyn Moorfoot
JCDecaux Australia & New Zealand
83 Main St, Kangaroo Point QLD 4169

RE: Existing Supersite Signage Homebush Bay Dr, Homebush, NSW, 2140
Comparison Of Design Codes With Current Codes.

1.0 Introduction

This assessment has been conducted by Dennis Bunt Consulting Engineers Pty Ltd (DBCE) at the request of JCDecaux. .

The purpose of this assessment was to review the design codes for the supersite signage at Homebush Bay Dr, Homebush, which was designed in 2010, with today's current codes.

The two structural codes used for the design of the signage structure were the Steel Structures code AS4100:1998 and Structural Design Actions Part 2: Wind Actions AS1170.2 2002. The current codes are Steel Structures code AS4100 2020 and Structural Design Actions Part 2: Wind Actions AS1170.2 2021.

Reference is also made to the following documents:

- Industry Insights Steel Australia Spring 2000 pgs 16 and 17
- Wind Loading – History of Changes Aspec Engineering Pty Ltd, Brisbane, Australia
- Key-Changes-to-AS-NZS-1170.2-2021 by Chris Hackney. (Chris is a committee member of AS1170.2)

2.0 Discussion

AS4100 Steel structures code.

Referring to the document "Industry Insights Steel Australia Spring 2020 pg 16 and 17"

1. The primary reason for revising AS 4100:1998 was to reference AS/NZS 5131 Structural steelwork – Fabrication and erection.
2. There were changes to the definition and description of Definition and description of 'architecturally exposed structural steel' (AESS)
3. The new code addressed the likelihood of lamellar tearing in particular welded connections.

Item 1 refers to the recent development of a fabrication and erection code (AS5131) for structural steel. It brings Australia into line with other developed countries. It does not affect the structural design and hence the member, plate, and bolts sizes but the quality control of the fabrication process.
Item 2 refers to architectural items ie not structural.
Item 3 refers to lamellar tearing. This is applicable to welding relatively thick plates together and is not relevant to the signage structure which consists of SHS members and SHS members welded to plates.

Structural Design Actions Part 2: Wind Actions AS1170.2

Referring to the document Wind Loading – History of Changes Aspec Engineering Pty Ltd, Brisbane, Australia

> The table near the base of the document shows that the calculation for the wind load on a structure for the 2002 code was the same as for the 2011 code. It was done for a particular region and design factors but as a comparison tool it shows both codes producing the same wind load.

Referring to the additional document "Key-Changes-to-AS-NZS-1170.2-2021"

> The document compares the 2021 wind code to the previous 2011 code and illustrates no changes relevant to the signage structure.

I have reviewed the relevant sections of the 2002 code and the 2021 code :

> Section 2: Calculation Of Wind Actions
> Section 3: Regional Wind speeds
> Section 4: Site Exposure Multipliers
> Appendix D: Free Standing Walls, Hoardings and canopies

for calculating wind on the signage structure and the equations and factors are the same.

3.0 Summary/Conclusion

For the supersite signage at Homebush Bay Dr, Homebush which was designed in 2010 :

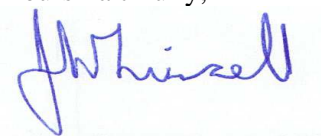
1. The changes to AS1170.2 between 2002 and 2021 do not affect the determination of the wind load calculation on the signage structure.

2. The changes to AS4100 between 1998 and 2020 do not affect the structural sizing of the members or the connections design.

3. Structurally the signage structure is in accordance with current codes and the structural sections of the NCC.

If you have any questions, please do not hesitate to ring the undersigned on 0400 023 714.

Yours Faithfully,



John Linsell BE(Hons), MIEAust, CPEng, NER(Struct)
for Dennis Bunt Consulting Engineers Pty Ltd

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