

# M7 Motorway, Prestons Static Advertising Signage Safety Assessment

Prepared for:

**JCDecaux** 

17 July 2024

The Transport Planning Partnership



# M7 Motorway, Prestons Static Advertising Signage Safety Assessment

Client: JCDecaux

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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 the M7 Motorway in Prestons facing northbound traffic.

The sign was approved on 1 December 2008 by the Department of Planning (DA-65-7-2008). The sign was subsequently installed in 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 the M7 Motorway in Prestons.

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 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 the M7 Motorway was carried out on Thursday, 2 November 2023.
- 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.
- Design plans for the static advertising sign dated 16 July 2024.



# 2 Proposal Description

#### 2.1 Location Details

The permit for the existing static advertising sign located on the east side of the M7 Motorway in Prestons facing northbound traffic is to be renewed. The existing static advertising sign is erected on a monopole and is visible to drivers travelling northbound along the M7 Motorway. The proposed static advertising sign is to remain the same size and at the same location.

The sign is located within a variable speed zone with a default limit of 100 km/h. In the vicinity of the proposed sign, the M7 Motorway has two travel lanes in the northbound direction. The nearest entry ramp to the M7 Motorway in the northbound direction is approximately 600m to the south, which is the entrance to the M7 Motorway from the M5 Motorway. The nearest exit ramp north of the sign in the northbound direction is approximately 300m away.

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

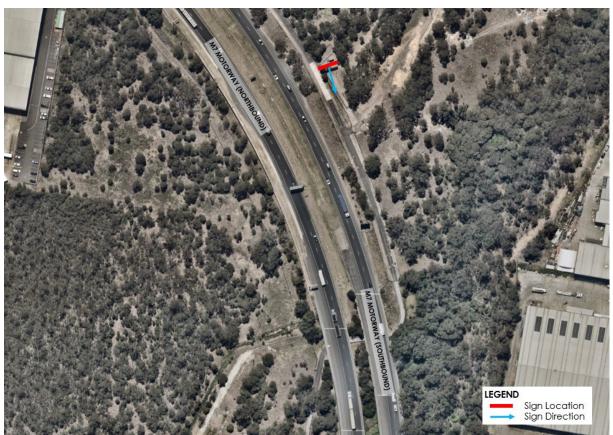


Figure 2.1: Sign Location

Basemap Source: Nearmap, aerial imagery dated 24 October 2023



#### 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 42.41 m<sup>2</sup> (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 the M7 Motorway, as shown in Figure 2.2.



Figure 2.2: M7 Motorway Northbound Approach

Basemap Source: Nearmap, aerial imagery dated 24 October 2023



A site visit was undertaken on Thursday 2 November 2023 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 M7 Motorway northbound carriageway in the vicinity of the existing static advertising sign is shown in Figure 2.3.



Figure 2.3: M7 Motorway Northbound Approach Lane Configuration

Source: Photograph taken by TTPP dated 2 November 2023

- The sign is visible to motorists on the M7 Motorway 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 visible from each traffic lane as follows:
  - In Lane 1 (through lane), 380m from the sign.
  - In Lane 2 (through lane), 400m from the sign.
- The distance at which the sign is <u>readable</u> from both travel lanes is approximately 110m from the sign on approach.
- From a distance of 220m to 350m from the sign, the view from Lane 2 towards the sign is partially to fully obscured by vegetation.
- No significant road safety issues associated with the existing static advertising sign were observed.
- There is an existing static advertising sign at this location, and therefore, the readable distance is based on the text font and sizing display of the current static advertising sign.



The likely visible and readable distances on the M7 Motorway northbound approach are shown in Figure 2.4 and Figure 2.5.

Figure 2.4: Northbound Approach Sign Exposure – Lane 1



Source: Photograph taken by TTPP dated 2 November 2023



Figure 2.5: Northbound Approach Sign Exposure – Lane 2



Source: Photograph taken by TTPP dated 2 November 2023

## 2.4 M7-M12 Integration Project

To support future development growth in Western Sydney, and to provide a boost to the road network in Western Sydney, the NSW Government has commissioned the M7-M12 Integration project, which includes three major elements:

 M7-M12 Interchange: a connection between the new toll-free M12 Motorway and the existing Westlink M7 Motorway.



- Elizabeth Drive Connection: a new connection between the M12 Motorway and Elizabeth Drive, and the realignment of Wallgrove and Cecil Roads at Cecil Hills.
- Westlink M7 Widening: a new lane in each direction within the existing median of the M7 between the M5 and Richmond Road, excluding at the Westlink M7/M4 Motorway (Light Horse) Interchange.

Of these elements, the only change to the road environment within vicinity of the sign will be the widening of the M7 Motorway which began construction in October 2023. The location of the sign has been overlayed on the road alignment and detail plan in Figure 2.6. Detailed road upgrade plans have been provided in Appendix B.

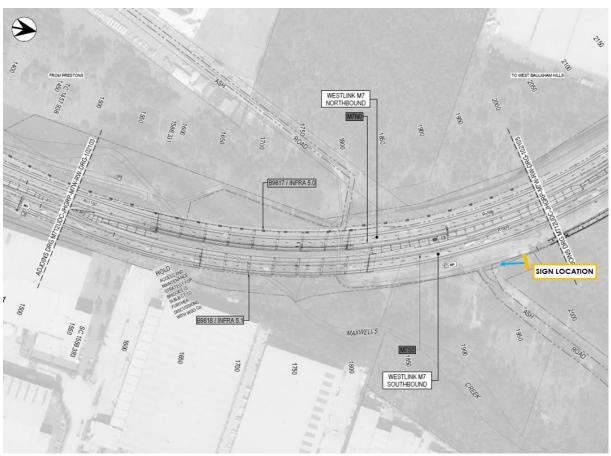


Figure 2.6: Sign Location – M7 Upgrade

Based on the plans, it is not known how much vegetation will be removed from the median if any, though this likely will only increase the visible distance towards the sign. However, as discussed, the sign is likely only to be recognised at a distance of 110m which will remain consistent with the existing environment and therefore there is not expected to be any significant change to driver behaviour or the road environment. Due to the alignment of the road, the additional lane within the existing median will have a very similar readable distance and visible distance to Lane 1 and Lane 2.



The road widening project does not introduce any decision making or conflict points in vicinity to the sign and the changes are largely limited to an additional lane and the minor rearrangement of signs and other road infrastructure.

The existing Variable Message Sign (VMS) will be shifted slightly west to be clear of the additional lane. As discussed in Section 3.3.2.1 the VMS does not have a backdrop issue with the sign, and this will continue to be the case in the new location.

It is proposed to adjust some sign locations as shown in the plans in Appendix B, however the signs are not expected to move more than a few metres. Their effectiveness is not expected to be impacted by the sign due to its location on the far side of the road.

#### 2.5 Crash History

Historic crash data has been obtained from Transport for NSW (TfNSW) and assessed for incidents on the M7 Motorway within the viewable 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 July 2018 to 30 June 2023.

It is noted that crash data prior to 2008 could not be provided by TfNSW. Given the sign was installed around 2009/2010, no reasonable sample size prior to the installation of the sign could be undertaken. On this basis, crash history data from the most recent five-year period has been used for the purpose of this assessment.

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 lane change left (RUM CODE 35) that resulted in a moderate injury.

Crashes within the **visible** distance, in addition to the readable distance, have also been assessed. From 400 m away from the sign, there have been three crashes due to lane change left type incidents which resulted in a moderate injury, and a serious injury.

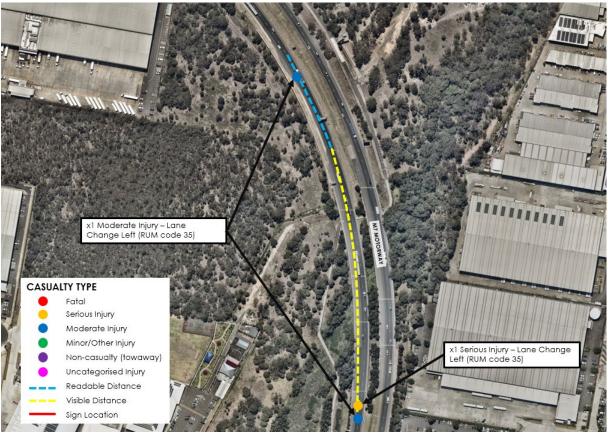
A summary of the crashes in the vicinity of the sign is presented in Table 2.1, while the crash location and incident description are illustrated in Figure 2.7.



Table 2.1: Crash Type and Severity

	Crash Type	Crash Severity (No. of Crashes)				
Location		Fatality	Serious Injury	Moderate Injury	Minor Injury	Non- casualty (tow-away)
Within the <b>visible</b> distance of the existing static sign on the M7 Motorway (up to 400 m away from the sign)	Lane Change Left (RUM CODE 35)		1	2		
Total		Nil.	1	2	Nil.	Nil.
Within the <b>readable</b> distance of static sign on the M4 Motorway (up to 110 m away from the sign)	Lane Change Left (RUM CODE 35)			1		
Total		Nil.	Nil.	1	Nil.	Nil.

Figure 2.7: Crash Locations in Recent 5-Year Period



Basemap Source: Nearmap, aerial imagery dated 24 October 2023

Based on the above, the existing static advertising sign has not materially impacted road safety considering the low volume of incidents from the recorded crash data. 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 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 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 C. 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 alongside the M7 Motorway 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 from both travel lanes, as shown in Figure 2.4 and Figure 2.5.
В	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.
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 shoul 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 placed on the eastern side of the M7 Motorway.



The sign does not protrude laterally into the transport corridor, and therefore, would not be hit by trucks or wide vehicles. The outermost edge of the sign will be approximately 23m from the edge of the carriageway.

(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 sign is placed on the east side of the M7 Motorway which is outside the carriageway and clear zone. Hence, it does not require an RMS-approved crash barrier.

(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 sign in not located within the clear zone.

(d) All signs that are permitted to hang over roads or footpaths should meet wind loading requirements as specified in A\$1170.1 and A\$1170.2. 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 D 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 the M7 Motorway as it is placed above the shared path.

(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 and Figure 2.5.

- (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 the M7 Motorway). However, with a curved road alignment on approach, the sign is located in the drivers' line of sight for those travelling in the northbound direction. Hence, 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 variable speed limit with a default speed limit of 100km/h.

For the purpose of this assessment, an operating speed of 100km/h has been used to calculate the safe stopping sight distance which is the default speed limit of the M7 Motorway on approach to the sign. Also, it is 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 a 100km/h speed zone is 207m.

On the northbound approach, the sign is not located within the safe stopping distance of a decision-making conflict point. The nearest diverge point is approximately 550m north of the sign which is well beyond the safe stopping distance of the sign.

The sign is not located within the safe stopping distance of pedestrian and cyclist crossing facilities.

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:
  - (i) Of a road hazard,
  - (ii) To an intersection,
  - (iii) To a prescribed traffic control device (such as traffic signals, stop or give way signs or warning signs)
  - (iv) 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 the M7 Motorway. The sign does not obstruct a motorist's view of any traffic signals, signage, and other traffic hazards when travelling on the M7 Motorway in the northbound direction.

There is no road hazard, intersection or emergency vehicle access point near the sign.

#### 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.

There is a variable message screen (VMS) and traffic advisory signage "Keep Left Unless Overtaking" as shown in Figure 3.1 which is located approximately 70-80m prior to the static advertising sign.

However, these signs were already in place before the existing static advertising sign was approved and installed as shown in Figure 3.2. There is no backdrop issue for the VMS against the existing static sign.

Notwithstanding this, as mentioned in Section 2.4, there were only a total of three crashes within the visible distance of the sign (i.e. up to 400m from the sign) in the last five years. Only one of these incidents was within the readable distance of the sign, therefore there is no indication of any pattern or evidence of safety issues post installation of the existing static advertising sign in the last five years.

TIME TO EXIT MOTORIARY 12 MIN MOTORIARY 27 MIN WILESS OVERTAKING OVERTAKING

Figure 3.1: VMS and Traffic Advisory Signs – Existing Conditions

Source: Google Street View dated May 2023



Figure 3.2: M7 Motorway Pre-installation of Static Advertising Sign



Source: Google Street View dated January 2010

- (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 advertisement/s 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 in the future.

#### 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 the M7 Motorway in Prestons.

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:

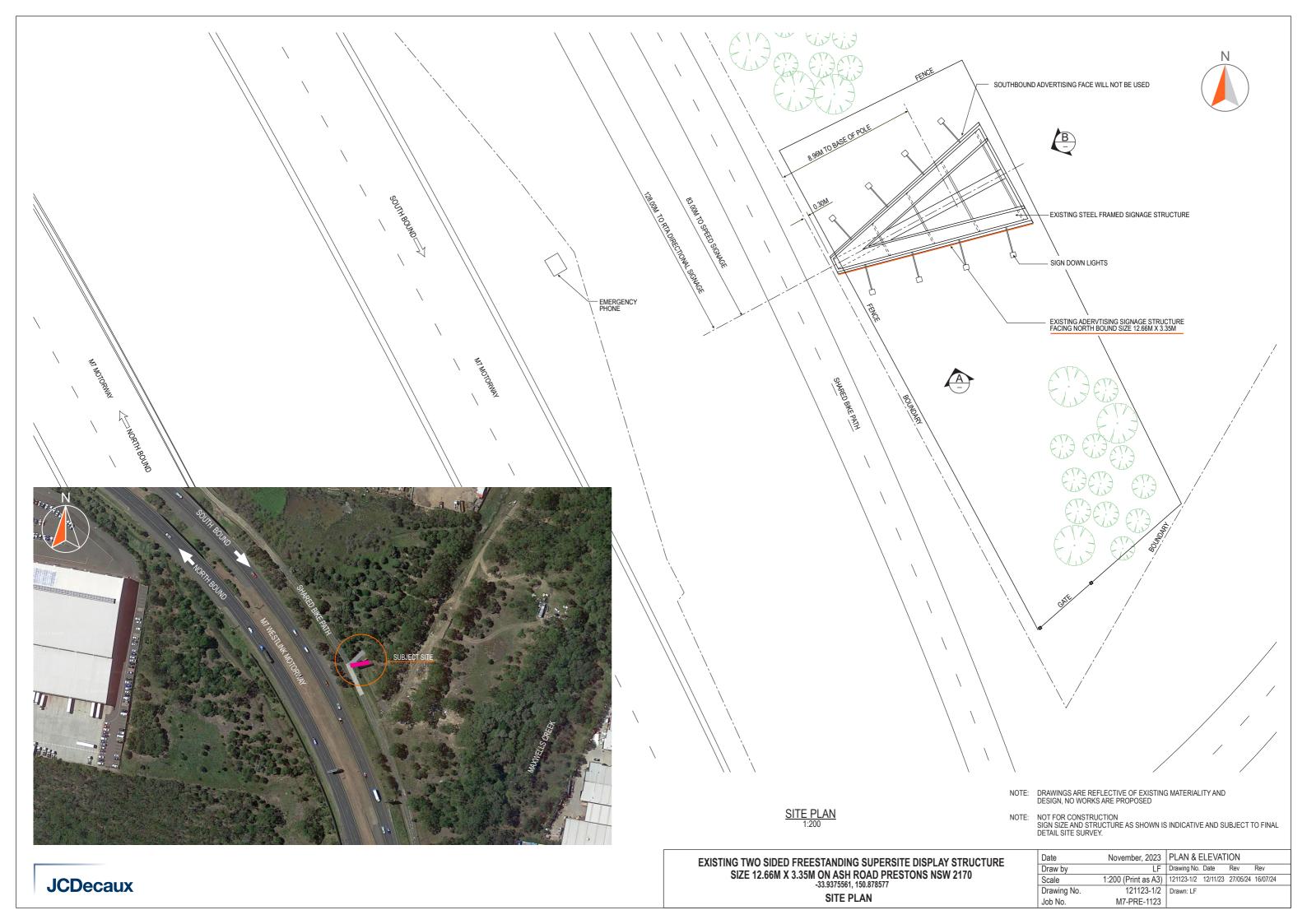
- There have been three crashes recorded on approach to the existing sign location within the visible distance of the sign (i.e. 400m away from the sign) for the most recent five years (for which TfNSW has aggregated data). Only one incident was recorded within the readable distance of the sign location (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 not located within the safe stopping distance to any key decision points or conflict points.
- The sign does not compromise safety for road users in the vicinity.

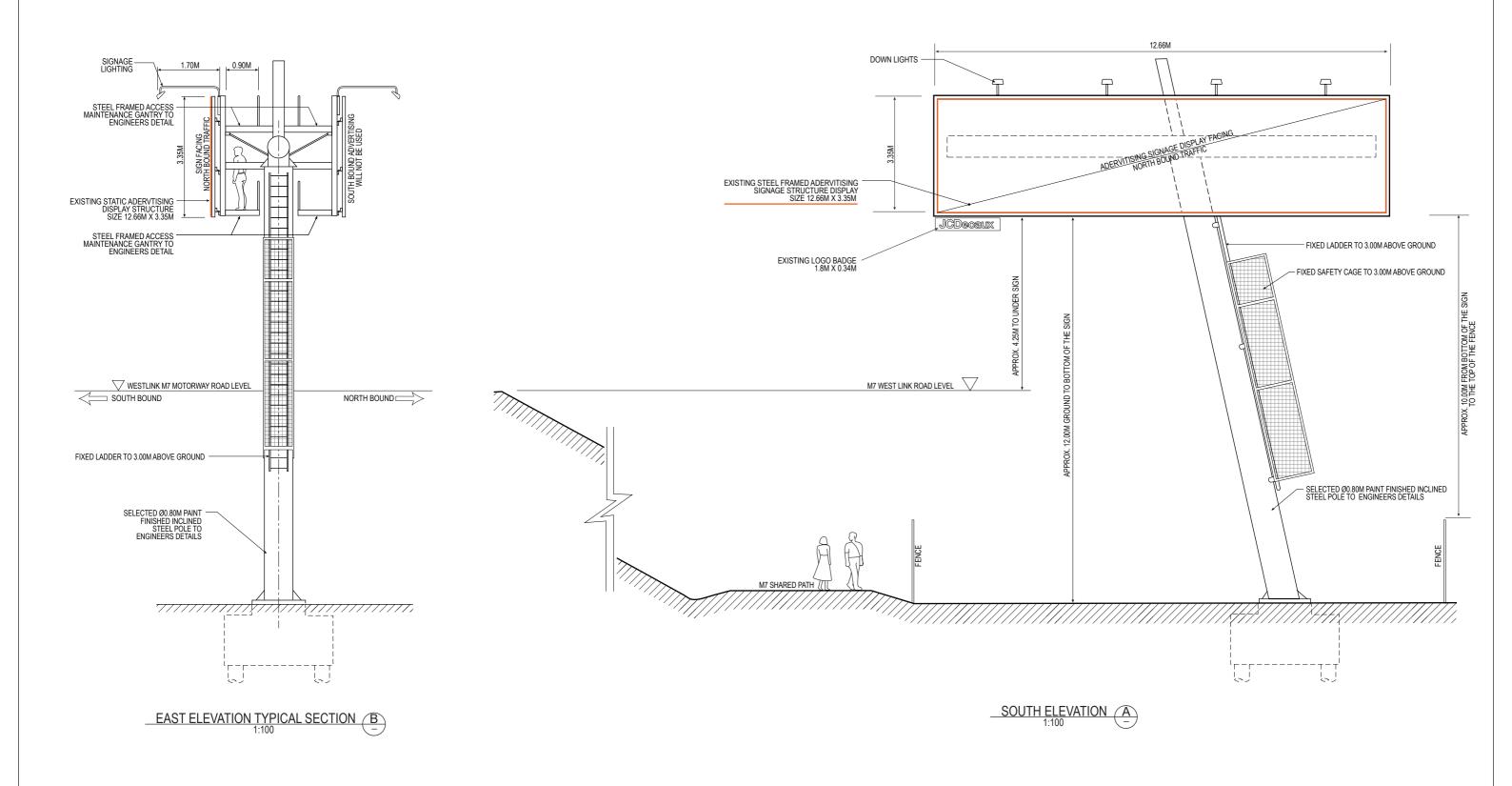
Having consideration for the signage safety assessment and discussions presented within this report, the analysis shows that the existing static advertising sign, and therefore the proposed static advertising sign, on the eastern side of the M7 Motorway facing northbound traffic is acceptable from a road safety perspective.



# Appendix A

Concept Design Plans





NOTE: DRAWINGS ARE REFLECTIVE OF EXISTING MATERIALITY AND DESIGN, NO WORKS ARE PROPOSED

NOTE: SIGN SIZE AND STRUCTURE AS SHOWN IS INDICATIVE AND SUBJECT TO FINAL DETAIL SITE SURVEY.

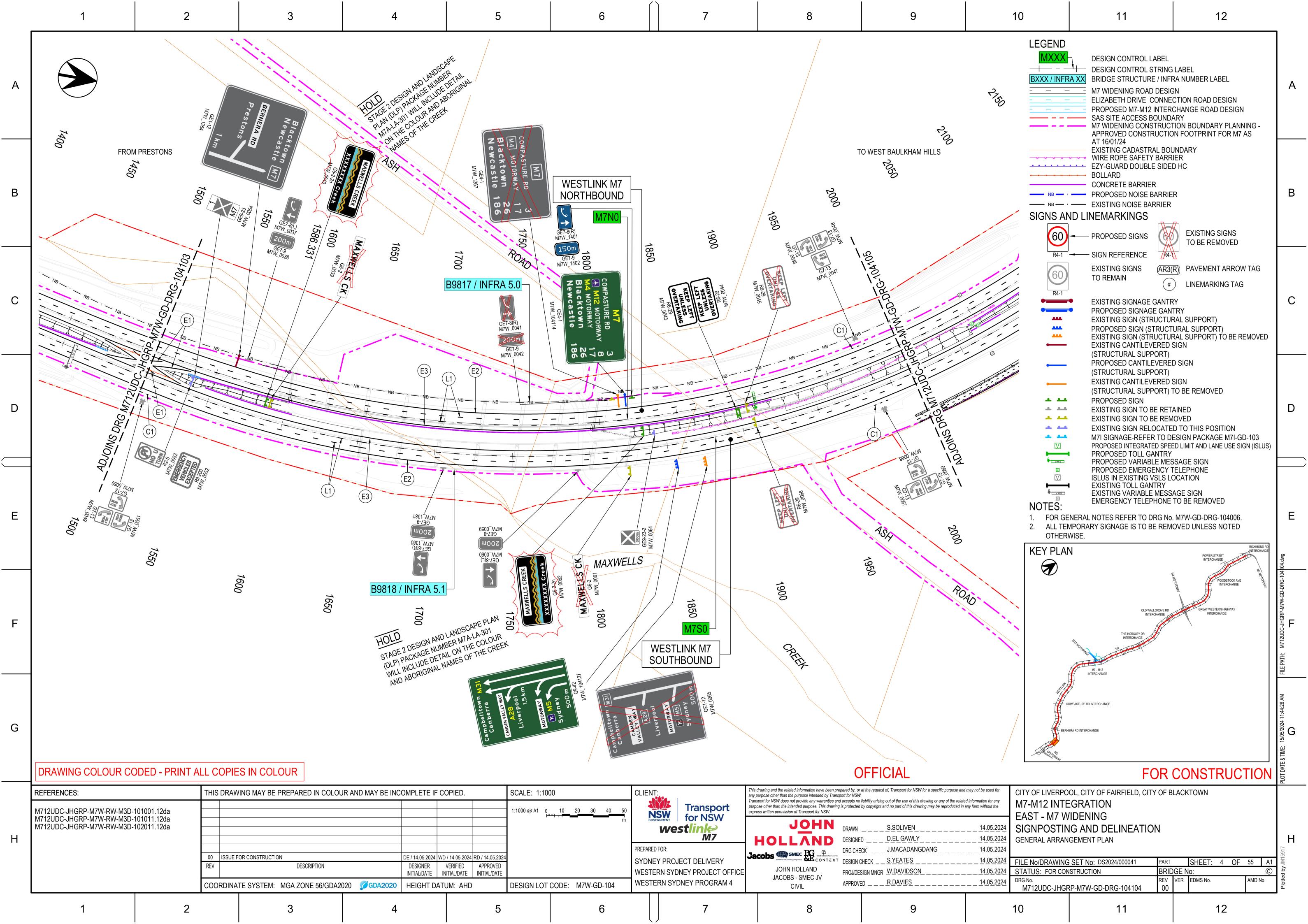
EXISTING TWO SIDED FREESTANDING SUPERSITE DISPLAY STRUCTURE SIZE 12.66M X 3.35M ON ASH ROAD PRESTONS NSW 2170
-33.9375561, 150.878577
ELEVATIONS

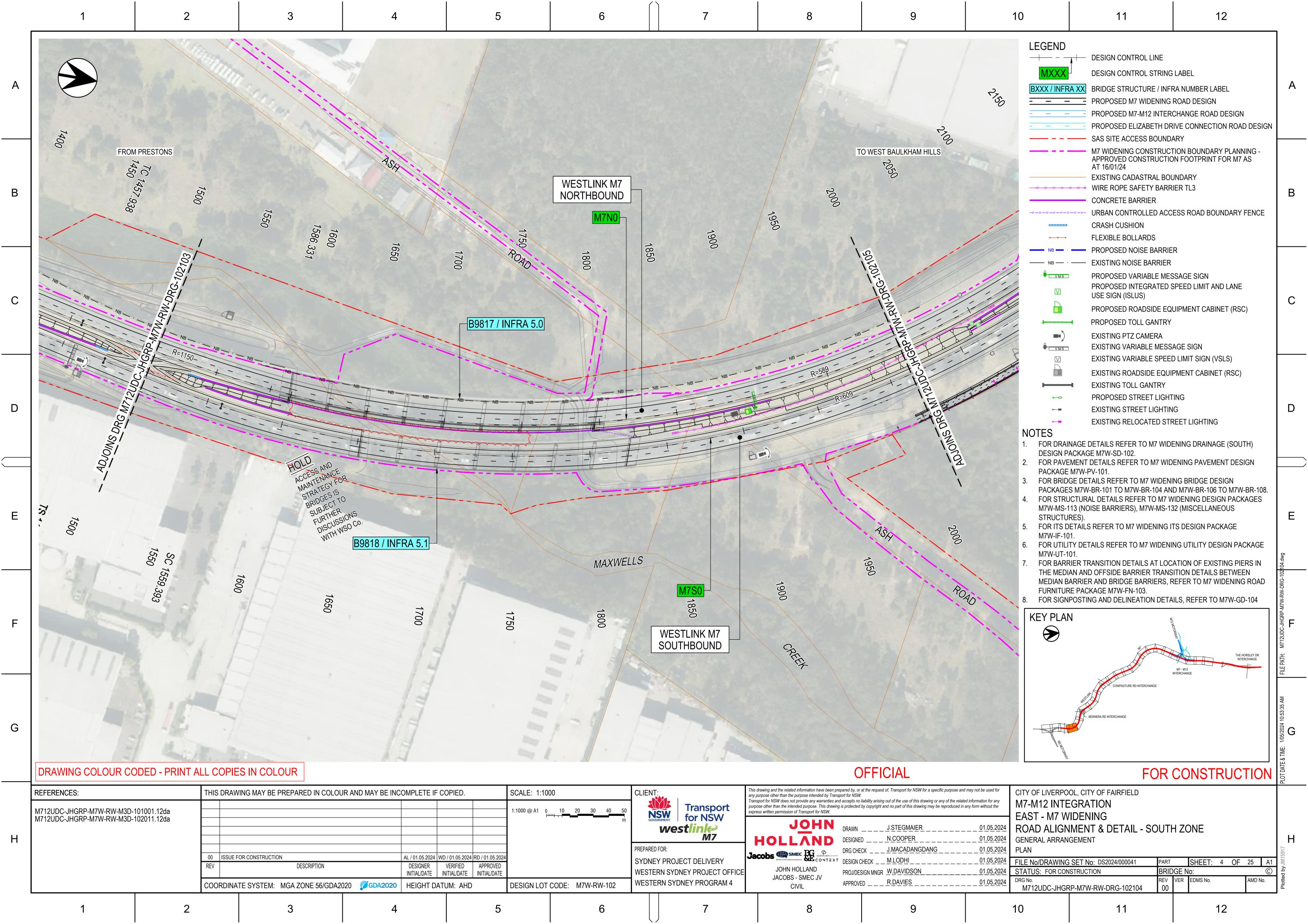
_			
	Date	November, 2023	PLAN & ELEVATION
	Draw by	LF	Drawing No. Date Rev Rev
	Scale	1:100 (Print as A3)	121123-2/2 12/11/23 27/05/24 16/07/24
	Drawing No.	121123-2/2	Drawn: LF
	Job No.	M7-PRE-1123	



# Appendix B

M7 Road Upgrade Plans







# Appendix C

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 D

Assessment Against Current Structural Codes



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Ref: 22233 22nd May 2024

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

# RE: Existing Supersite Signage M7 Westlink, Prestons NSW 2170 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 M7 Westlink, Prestons, NSW, which was designed in 2008, 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 M7 Westlink, Prestons, NSW which was designed in 2008 :

- 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,

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