
# Canterbury Road, Canterbury
# Signage Safety Assessment

Prepared for:

TfNSW

24 October 2024

The Transport Planning Partnership

# Canterbury Road, Canterbury
# Signage Safety Assessment

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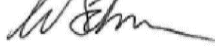
| V03 | 24/10/2024 | James Goodman | James Goodman | Wayne Johnson |  |

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# 1 Introduction

## 1.1 Overview

Transport for NSW is seeking to renew the permit for large format static advertising signs located on both sides of a pedestrian bridge above Canterbury Road, Canterbury. The signs are mounted on a pedestrian bridge above Canterbury Road facing westbound and eastbound traffic travelling on Canterbury Road, and northbound and southbound traffic travelling on Church Street.

The signage was approved on 24 July 2009 by the Department of Planning (DA-68-5-2009), the signage was subsequently installed in December 2009.

The Transport Planning Partnership (TTPP) has been commissioned by Transport for NSW 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 signs and provide recommendations on mitigation measures to alleviate impacts on the surrounding road network, if required. This report sets out the findings of TTPP's signage safety assessment for the static signs above Canterbury Road in Canterbury.

The following items have been considered in this report:

- Potential for the signs 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 signs 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:

- A site inspection of the site from a driving viewpoint along Canterbury Road in both directions and on all approaches to Canterbury Road in close proximity to the signage was undertaken on Monday 12 August 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.
- Plans for the static advertising signs dated 23 October 2024.

# 2 Proposal Description

## 2.1 Location Details

The permit for the existing static advertising signs mounted on both sides of the pedestrian bridge above Canterbury Road are proposed to be renewed. The signage faces westbound and eastbound traffic travelling on Canterbury Road, and northbound and southbound traffic travelling on Church Street.

The signs are located at the intersection of Church Street and Canterbury Rd approximately 5m east of Unwin Street and 5m west of the intersection of Unwin Street and Canterbury Road. Unwin Street and Church Street are 40km/h School Zones between 8am to 9:30am and 2:30pm to 4pm on school days, the posted speed limit of 50km/h applies at all other times. Canterbury Road has a posted speed limit of 60km/h.

An aerial image of the signage location and surrounding area is shown in Figure 2.1.

**Figure 2.1: Signage Location**


*Basemap source: NearMap, aerial imagery dated 22 July 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 for both signs are to remain as per the existing dimensions, with an area of 45.4m$^2$ (22.5m width by 1.8m height) for each sign.

The signage will be used by Transport for NSW to continue promoting its sponsors and third-party advertising. The static signage will contain text and images. The general layout of the proposed static advertising signage is shown by the elevation plans in Figure 2.2 to Figure 2.4. Full scale concept design plans are provided in Appendix A.

**Figure 2.2: Elevation A Plan - Facing Westbound Traffic**

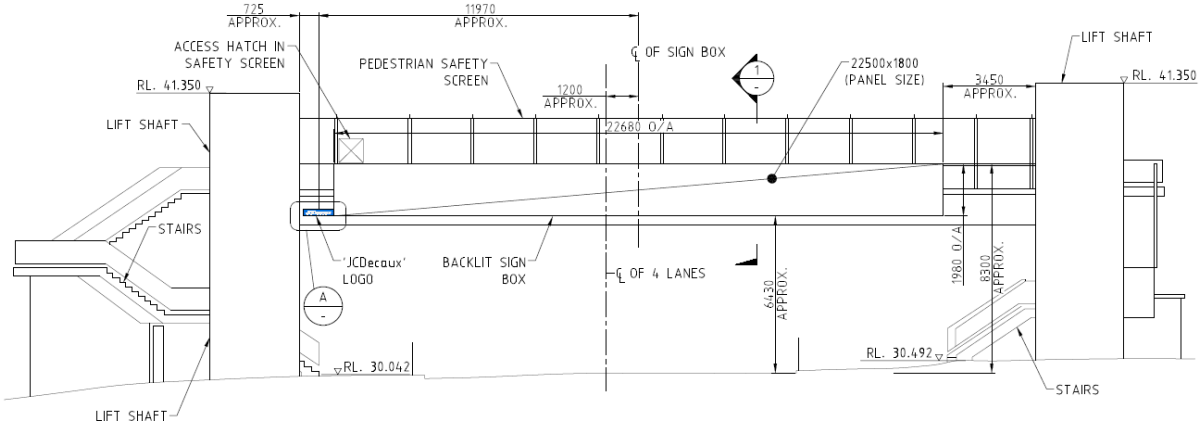



**Figure 2.3: Elevation B Plan - Facing Eastbound Traffic**

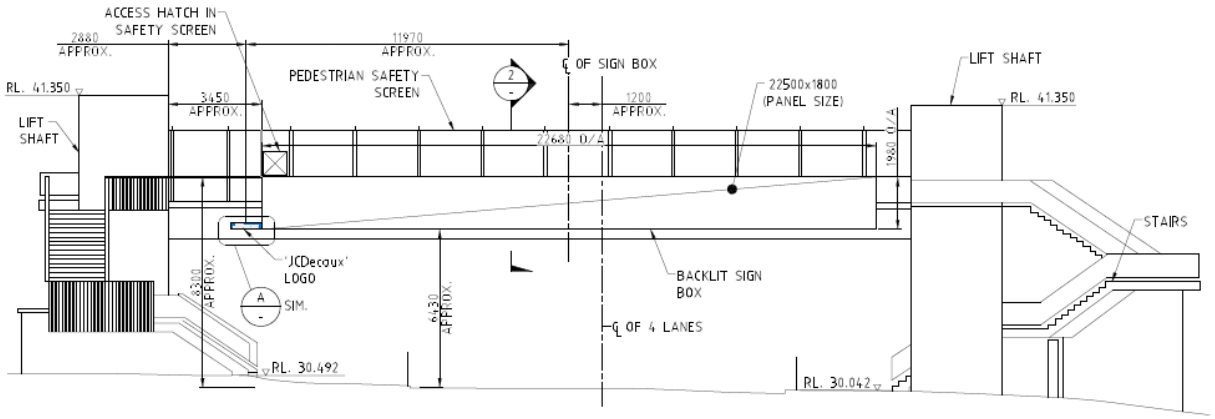
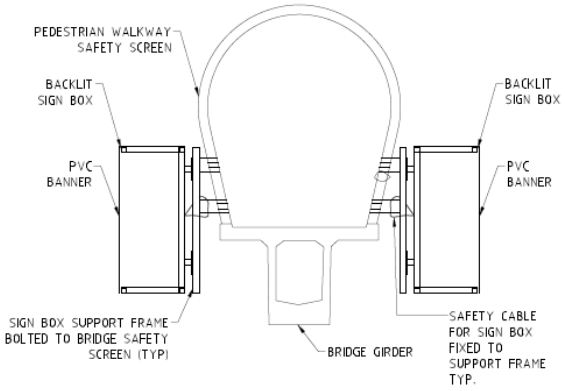


**Figure 2.4: Elevation C Plan - Side View**




## 2.3 Signage Exposure

The existing static advertising sign is visible to motorists travelling westbound and eastbound on Canterbury Road, and to motorists travelling southbound and northbound on Church Street as shown in Figure 2.2.

**Figure 2.5: Canterbury Road and Church Street Approaches to Signage**


*Basemap source: NearMap, aerial imagery dated 22 July 2024*

A site visit was undertaken on Monday 12 August 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.

### 2.3.1 Canterbury Road Eastbound Approach

The lane configuration on the Canterbury Road eastbound carriageway in the vicinity of the existing static advertising sign is shown in Figure 2.2. Travel lanes are numbered 1 to 2 from left to right.

**Figure 2.6: Canterbury Road Eastbound Approach Lane Configuration**


*Source: Photograph taken by TTPP dated 12 August 2024*

- The sign is visible to motorists on Canterbury Road travelling eastbound.
- There is no other large format static or digital advertising signage within 150m of the existing sign location.
- Treating the observed conditions during the site inspection as the typical conditions in the area, the sign is completely visible from both traffic lanes at a distance of 400m from the sign.
- Due to the uphill approach to the sign, cars and trucks in front obscure visibility towards the sign until close proximity of the signage, especially in heavy traffic.
- The distance at which the sign would be legible from both travel lanes is approximately 110m from the sign on approach.
- No significant road safety issues associated with the existing static sign were observed.
- The posted speed limit is 60km/h.
- Pedestrian volumes at the time of the site inspection in vicinity of the sign were low.
- The kerbside lane is a clearway from 6am-7pm on weekdays and from 9am-6pm on the weekend and public holidays.

The likely visible distance and legible distance in each lane on approach to the sign is shown in Figure 2.4 and Figure 2.5.

## Figure 2.7: Canterbury Road Eastbound Approach Sign Exposure – Lane 1


*Source: Photograph taken by TTPP dated 12 August 2024*

## Figure 2.8: Canterbury Road Eastbound Approach Sign Exposure – Lane 2


*Source: Photograph taken by TTPP dated 12 August 2024*

### 2.3.2 Church Street Northbound Approach

There is only one northbound travel lane on the Church Street approach to the sign, with the kerbside lane consisting of unrestricted parking.

- The sign is visible to motorists on Church Street travelling northbound
- There is no other large format static or digital advertising signage within 150m of the existing sign location.
- Treating the observed conditions during the site inspection as the typical conditions in the area, the sign is partially visible from a distance of 280m from the sign.
- Due to the angle of approach to the sign, the extremities of the sign are not visible until a motorist is 60m from the sign
- The distance at which the sign would be legible is approximately 110m from the sign on approach, although the sign would not be completely visible.
- No significant road safety issues associated with the existing static sign were observed.
- The posted speed limit is 50km/h.
- Pedestrian volumes at the time of the site inspection in vicinity of the sign were low.

The likely visible distance and readable distance on approach to the sign is shown in Figure 2.10.

**Figure 2.9: Church Street Northbound Approach Sign Exposure**


*Source: Photograph taken by TTPP dated 12 August 2024*

### 2.3.3 Canterbury Road Westbound Approach

The lane configuration on the Canterbury Road westbound carriageway in the vicinity of the existing sign is shown in Figure 2.7. Travel lanes are numbered 1 to 2 from left to right.

**Figure 2.10: Canterbury Road Westbound Approach Lane Configuration**


*Source: Photograph taken by TTPP dated 12 August 2024*

- The sign is visible to motorists on Canterbury Road travelling westbound.
- There is no other large format static or digital advertising signage within 150m of the existing sign location.
- Treating the observed conditions during the site inspection as the typical conditions in the area, the sign is completely visible from each traffic lane as follows:
  - In Lane 1, 400m from the sign.
  - In Lane 2, 390m from the sign.
- The distance at which the sign would be legible from both travel lanes is approximately 110m from the sign on approach.
- No significant road safety issues associated with the existing static sign were observed.
- The posted speed limit is 60km/h.
- Pedestrian volumes at the time of the site inspection in vicinity of the sign were low.
- The kerbside lane is a clearway from 6am-7pm on weekdays and from 9am-6pm on the weekend and public holidays.

The likely visible distance and legible distance in each lane on approach to the sign is shown in Figure 2.8 and Figure 2.9.

## Figure 2.11: Westbound Approach Sign Exposure – Lane 1


*Source: Photograph taken by TTPP dated 12 August 2024*

## Figure 2.12: Westbound Approach Sign Exposure – Lane 2


*Source: Photograph taken by TTPP dated 12 August 2024*

### 2.3.4 Church Street Southbound Approach

There is only one southbound travel lane on the Church Street approach to the sign, with the kerbside lane having unrestricted parking.

- The sign is visible to motorists on Church Street travelling southbound.
- There is no other large format static or digital advertising signage within 150m of the existing sign location.
- Treating the observed conditions during the site inspection as the typical conditions in the area, the sign is partially visible from a distance of 300m from the sign.
- Due to the angle of approach to the sign, the extremities of the sign are not visible until a motorist is 40m from the sign
- The distance at which the sign would be legible is approximately 110m from the sign on approach, although the sign would not be completely visible.
- No significant road safety issues associated with the existing static sign were observed.
- The posted speed limit is 50km/h with a 40km/h School Zone in effect from 8am to 9:30am and 2:30pm to 4pm on school days.
- There are three raised pedestrian crossings with kerb build outs along Church Street on approach to the sign, lowering the speed of motorists to below the 50km/h speed limit.
- Pedestrian volumes at the time of the site inspection in vicinity of the sign were low.

The likely visible distance and readable distance on approach to the sign is shown in Figure 2.10.

**Figure 2.13: Church Street Southbound Approach Sign Exposure**


*Source: Photograph taken by TTPP dated 12 August 2024*

## 2.4 Crash History

Historic crash data has been obtained from Transport for NSW (TfNSW) and assessed for incidents on Canterbury Road and Church Street within the visible distance of the existing

static advertising signs. Crash history data has been assessed on both approaches to each sign for the most recent five-year period for data collated and published by TfNSW. The period is between 1 January 2019 to 31 December 2023.

### 2.4.1 Westbound Approach

Crash data has been reviewed within the legible and visible distance of the static sign location, which is up to 400m from the sign on Canterbury Road and 300m from the sign on Church Street. Five casualty crashes were reported within the visible distance of the sign, with no crashes within the legible distance. It is noted that beyond the legible distance, the sign is highly unlikely to draw the attention of motorists. There were no crashes reported on Church Street within the visible distance of the sign.

During 2022 (most recent available data), Canterbury Road had an AADT volume of more than 20,000 vehicles in the westbound direction according to TfNSW's Traffic Volume Viewer. Five casualty incidents over a 400m distance and a 5-year period is not considered unusual for an arterial road in this setting given the high volume of traffic and highly urbanised road environment.

A summary of the crashes within the visible and legible distance of the sign is presented in Table 2.1. The crash locations and associated incident descriptions are also shown in Figure 2.11.

**Table 2.1: Crash Type and Severity – Westbound Sign**

| Crash Type (RUM code) | No. of Crashes | Crash Severity (No. of Crashes) | | | | | |
|---|---|---|---|---|---|---|---|
| | | Fatality | Serious Injury | Moderate Injury | Minor Injury | Uncategorised Injury | Non-casualty (tow-away) |
| **Within Visible Distance = 400m** | | | | | | | |
| Pedestrian near side (RUM Code 0) | **1** | 0 | 0 | 1 | 0 | 0 | 0 |
| Pedestrian far side (RUM Code 2) | **1** | 0 | 1 | 0 | 0 | 0 | 0 |
| Cross traffic (RUM Code 10) | **1** | 0 | 0 | 0 | 1 | 0 | 0 |
| Head on (RUM Code 20) | **1** | 0 | 1 | 0 | 0 | 0 | 0 |
| Right through (RUM Code 21) | **1** | 0 | 0 | 0 | 0 | 0 | 1 |
| Rear end (RUM Code 30) | **1** | 0 | 0 | 0 | 0 | 0 | 1 |
| Lane change right (RUM Code 34) | **2** | 0 | 0 | 0 | 1 | 0 | 1 |
| **Total** | **8** | **0** | **2** | **1** | **2** | **0** | **3** |

**Figure 2.14: Westbound Sign Crash Map**


*Basemap source: NearMap aerial imagery dated 22 July 2024.*

## 2.4.2 Eastbound Approach

Crash data has been reviewed within the legible and visible distance of the static sign location, which is up to 400m from the sign on Canterbury Road and 280m from the sign on Church Street. Seven casualty crashes were reported within the visible distance of the sign, with four casualty crashes within the legible distance. It is noted that beyond the legible distance, the sign is highly unlikely to draw the attention of motorists. There were no crashes reported on Church Street within the visible distance of the sign.

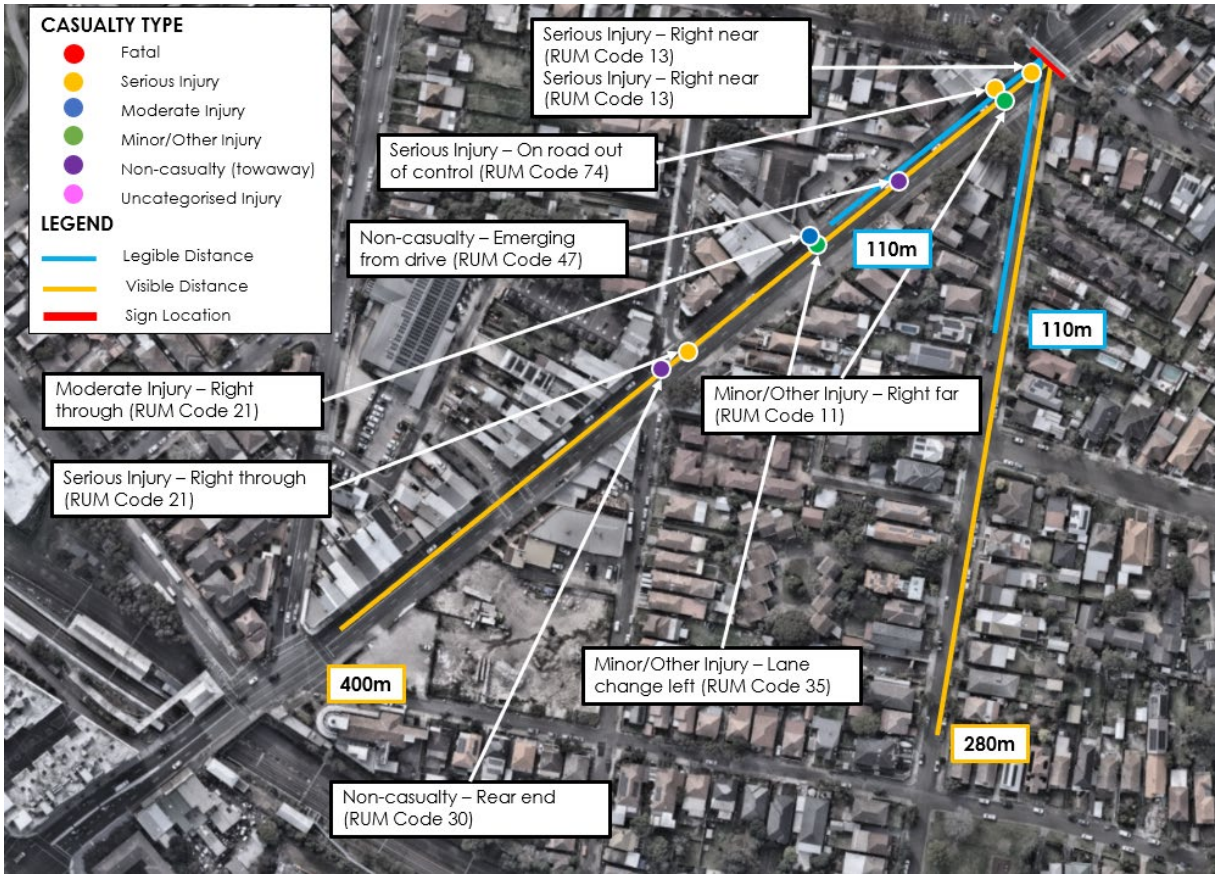
During 2022 (most recent available data), Canterbury Road had an AADT volume of more than 22,000 vehicles in the eastbound direction according to TfNSW's Traffic Volume Viewer. Seven casualty incidents over a 400m distance and a 5-year period is not considered unusual for an arterial road in this setting given the high volume of traffic and highly urbanised road environment.

A summary of the crashes within the visible and legible distance of the sign is presented in Table 2.1. The crash locations and associated incident descriptions are also shown in Figure 2.11.

## Table 2.2: Crash Type and Severity – Eastbound Sign

| Crash Type (RUM code) | No. of Crashes | Crash Severity (No. of Crashes) | | | | | |
|---|---|---|---|---|---|---|---|
| | | Fatality | Serious Injury | Moderate Injury | Minor Injury | Uncategorised Injury | Non-casualty (tow-away) |
| **Within Legible Distance = 110m** | | | | | | | |
| Right far (RUM Code 11) | **1** | 0 | 0 | 0 | 1 | 0 | 0 |
| Right through (RUM Code 21) | **2** | 0 | 1 | 1 | 0 | 0 | 0 |
| On road out of control (RUM Code 74) | **1** | 0 | 1 | 0 | 0 | 0 | 0 |
| Emerging from drive (RUM Code 47) | **1** | 0 | 0 | 0 | 0 | 0 | 1 |
| **Total** | **4** | **0** | **2** | **1** | **1** | **0** | **1** |
| **Within Visible Distance = 400m** | | | | | | | |
| Right far (RUM Code 11) | **1** | 0 | 0 | 0 | 1 | 0 | 0 |
| Right near (RUM Code 13) | **2** | 0 | 2 | 0 | 0 | 0 | 0 |
| Right through (RUM Code 21) | **2** | 0 | 1 | 1 | 0 | 0 | 0 |
| Rear end (RUM Code 30) | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| Lane change left (RUM Code 35) | 1 | 0 | 0 | 0 | 1 | 0 | 0 |
| Emerging from drive (RUM Code 47) | **1** | 0 | 0 | 0 | 0 | 0 | 1 |
| On road out of control (RUM Code 74) | **1** | 0 | 1 | 0 | 0 | 0 | 0 |
| **Total** | **9** | **0** | **4** | **1** | **2** | **0** | **2** |

## Figure 2.15: Eastbound Crash Map




*Basemap source: NearMap aerial imagery dated 22 July 2024.*

# 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 which 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 detailed 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 signage on both sides of the pedestrian bridge above Canterbury Road is unlikely to reduce safety for motorists, pedestrians or cyclists. There will be no changes to the location or size of the existing static advertising signage in the future.

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

## 3.2 Transport Corridor Outdoor Advertising and Signage Guidelines – Digital Signs Criteria (Section 2 of Guidelines)

The Transport Corridor Outdoor Advertising and Signage Guidelines specify criteria which are directly applicable to the assessment of signs mounted on bridges. The criteria have been assessed in Table 3.1.

Some of the criteria are related to signage content and would need to be addressed by the operator.

**Table 3.1: Bridge Signage Criteria (Section 2 of Guidelines)**

| Criteria | | Comments |
|---|---|---|
| A | The architecture of the bridge must not be diminished. | The existing signage is considered to be compatible with the form and scale of the bridge structure. The proposal will not alter the existing signage and will therefore will not detract from the structural qualities of the bridge. |
| B | The advertisement must not extend laterally outside the structural boundaries of the bridge. | The existing signage is located wholly within the structural boundaries of the bridge. |
| C | The advertisement must not extend below the soffit of the superstructure of the bridge to which it is attached, unless the vertical clearance to the base of the advertisement from the roadway is at least 5.8m. | The advertisement does not extend below the soffit of the Canterbury Road bridge. |
| D | On a road or pedestrian bridge, the advertisement must:<br>*i.* not protrude above the top of the structural boundaries of the bridge<br>*ii.* not block significant views for pedestrians or other bridge users (e.g. cyclists)<br>*iii.* not create a tunnel effect, impede passive surveillance, or in any other way reduce safety for drivers, pedestrians or other bridge users. | The positioning of the signage on the Canterbury Road pedestrian bridge:<br>• does not protrude above the top of the existing structural boundaries of the bridge/advertising structure<br>• does not block significant views for pedestrians or other bridge users including cyclists being a railway bridge<br>• does not create a tunnel effect, impede passive surveillance, or in any other way reduce safety for drivers, pedestrians or other bridge users. |
| E | Paragraphs (a) to (d) above do not apply to the continuation of the display of any existing advertising on bridges approved prior to the gazettal of State Environmental Planning Policy No 64 (Advertising and Signage) (Amendment No 2) in 2007 for only one additional period under SEPP 64 Clause 14 if there is no increase in the advertising display area of the signage | N/A |
| F | A DCP to display an advertisement on a bridge must be accompanied by a statement demonstrating how the advertisement will contribute to a public benefit. Section 4 outlines the public benefit test requirements. | This application does not require the preparation of a site-specific DCP. |
| G | Any advertising sign proposed for development on a bridge over a classified road requires that construction drawings be submitted for review and approval by RMS | Construction drawings were prepared and submitted as part of the original application. |

| Criteria | | Comments |
|---|---|---|
| | bridge engineers prior to construction to ensure all road safety requirements are met. | |
| H | Any advertising sign proposed for development on a bridge over a road requires provision of a fall arrest system (sign and sign support structure to bridge) to ensure the sign will not detach in case of impact by an over high vehicle. | A fall arrest system has been implemented as part of the design to ensure the sign will not detach in the event of impact by an over height vehicle. |

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

### 3.3.1 Signage 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 existing signage does not physically obstruct any vehicle, pedestrian and cyclist movements as it is placed on both sides of the pedestrian bridge above Canterbury Road. The signage does not protrude below the underside of the overhead bridge and hence the vertical clearance from the roadway to the bridge is maintained.

The development application plans for the proposed static advertising signage are contained in Appendix A.

***(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 signage is installed on both sides of the pedestrian bridge, which is positioned above the carriageway and outside of the clear zone. Hence, it would 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 signage is not located within the clear zone.

The available vertical clearance between the road surface and the underside of the pedestrian bridge would be maintained.

***(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 signage 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 boards 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 (AS1170.1:2002 and AS1170.2:2021).

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

The signage is positioned on the pedestrian bridge above Canterbury Road completely within the structure of the bridge. Therefore, the signage does not obstruct the drivers' view of the road or pedestrians and cyclists.

***(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 photo-montage should be used to assess this issue.***

The position of the existing static adverting signage would not change. The proposed static advertising signage would remain at the same height as the existing overhead bridge which would not impede a driver's visibility on the alignment of the road. The signage does not indicate misleading information or information contrary to the existing roadway.

***(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 signs are located above the road and well within a driver's peripheral vision whilst travelling eastbound and westbound on Canterbury Road and southbound and northbound on Church Street. Motorists are not required to turn their heads when observing the signage, and all motorists are able to see the road simultaneously when viewing the signage.

The positioning and angle of the signage is not expected to result in 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.***

Canterbury Road

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, the posted speed limit is 60km/h.

For the purpose of this assessment, an operating speed of 60 km/h has been used to calculate the safe stopping sight distance which is the sign posted speed limit on Canterbury Road. Also, it is the speed at which motorists were observed to be driving during the site inspection. The slope of the road on each approach to the sign is negligible, so a grade correction factor is not required.

Table 5.2 of the Austroads Guide to Road Design Part 3 provides the typical road conditions and driver reaction times. A reaction time of 2.0 seconds is used for road conditions in "higher speed urban areas" and with "few intersections". A 1.5 second reaction time is used in alert driving conditions where there is a "High expectancy of stopping due to traffic signals" and "built up areas – high traffic volumes".

TTPP notes that Canterbury Road, Canterbury comprises the following road and geometric elements that pertain to alert driving conditions:

- High expectancy of stopping due to traffic signals

- Built-up area – high traffic volumes
- Built-up area with direct accesses and intersections.

Moreover, Canterbury Road features frequent signalised intersections, which would contribute to drivers having an elevated expectancy of stopping and thereby, a lower reaction time.

Therefore, based on the criteria of Table 5.2 in the Austroads Guide to Road Design Part 3, a reaction time of 1.5 seconds is considered suitable for the safe stopping sight distance assessment. According to the Austroads guide, the minimum safe stopping sight distance for a 60km/h speed zone is 64 m. This is applicable for both approaches on Canterbury Road.

The signage is not located within the safe stopping sight distance of any decision making or conflict point and is therefore compliant with the criteria.

Church Street Northbound Approach

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 the posted speed limit is 50km/h.

For the purpose of this assessment, an operating speed of 50 km/h has been used to calculate the safe stopping sight distance which is the sign posted speed limit on Church Street. Also, it is the speed at which motorists were observed to be driving during the site inspection. The slope of the road on approach to the sign is negligible, so a grade correction factor is not required.

Table 5.2 of the Austroads Guide to Road Design Part 3 provides the typical road conditions and driver reaction times. A reaction time of 2.0 seconds is used for road conditions in "higher speed urban areas" and with "few intersections". A 1.5 second reaction time is used in alert driving conditions in "restricted low speed areas" and "built up areas – high traffic volumes"

TTPP notes that Church Street northbound approach comprises the following road and geometric elements that pertain to alert driving conditions:

- High expectancy of stopping at intersection due to traffic on Canterbury Road
- Tight alignments at the intersection
- Built-up area – high traffic volumes
- Built-up area with direct accesses and intersections
- Restricted low speed urban area.

Therefore, based on the criteria of Table 5.2 in the Austroads Guide to Road Design Part 3, a reaction time of 1.5 seconds is considered suitable for the safe stopping sight distance assessment. Church Road is a lower volume road. According to the Austroads guide, the minimum safe stopping sight distance for a 50km/h speed zone is 42 m.

The signage is not located within the safe stopping sight distance of any decision making or conflict point and is therefore compliant with the criteria as shown in Figure 3.1 below.

**Figure 3.1: Church Street Northbound Approach Stopping Sight Distance**


*Basemap source: Nearmap aerial imagery dated 22 July 2024*

Church Street Southbound Approach

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 40km/h school zone between 8am to 9:30am and 2:30pm to 4pm on school days, however the posted speed limit of 50km/h applies at all other times.

For the purpose of this assessment, an operating speed of 50 km/h has been used to calculate the safe stopping sight distance which is the sign posted speed limit on Church Street. Also, it is the speed at which motorists were observed to be driving during the site inspection. The slope of the road on approach to the sign is negligible, so a grade correction factor is not required.

Table 5.2 of the Austroads Guide to Road Design Part 3 provides the typical road conditions and driver reaction times. A reaction time of 2.0 seconds is used for road conditions in "higher speed urban areas" and with "few intersections". A 1.5 second reaction time is used in alert driving conditions where there is a "restricted low speed areas" and "built up areas – high traffic volumes"

TTPP notes that Church Street southbound approach comprises the following road and geometric elements that pertain to alert driving conditions:

- High expectancy of stopping at intersection due to traffic on Canterbury Road
- Tight alignment at the intersection
- Built-up area
- Built-up area with direct accesses and intersections
- Restricted low speed urban area.

Therefore, based on the criteria of Table 5.2 in the Austroads Guide to Road Design Part 3, a reaction time of 1.5 seconds is considered suitable for the safe stopping sight distance assessment. Church Road is a lower volume road. According to the Austroads guide, the minimum safe stopping sight distance for a 50km/h speed zone is 42 m.

The signage is not located within the safe stopping sight distance of any decision making or conflict point and is therefore compliant with the criteria as shown in Figure 3.2 below.

**Figure 3.2: Church Street Southbound Approach Stopping Site Distance**


*Basemap source: Nearmap aerial imagery dated 22 July 2024*

***iii. So that it is visible from the stem of a T-intersection.***

**Eastbound Sign from Church Street Northbound Approach**

The eastbound sign would be visible to motorists waiting to turn from Church Street northbound approach onto Canterbury Road. The view from Church Street is shown in Figure 3.3. Motorists approaching Canterbury Road from Church Street are required to stop which will give sufficient time to observe the static sign, assess oncoming traffic and select a suitable gap in traffic.

**Figure 3.3: Motorist's View on Church Street Northbound Approach**


*Source: Photograph taken by TTPP dated 12 August 2023.*

The sign is visible from the Minter Street approaches to Canterbury Road and are shown in Figure 3.4 and Figure 3.5. Visibility of the sign from both approaches is limited and at a distance of 200m and 230m from the sign, far beyond the legible distance. Hence, the sign is not expected to impact driver behaviour at either approach.

**Figure 3.4: View from Minter Street (North)**

*Source: Photograph taken by TTPP dated 12 August 2024.*

**Figure 3.5: View from Minter Street (South)**


*Source: Photograph taken by TTPP dated 12 August 2024.*

**Westbound Sign from Church Street Southbound Approach**

The westbound facing sign is located well above a driver's field of view on the Church Street southbound approach to Canterbury Road as shown in Figure 3.6. At this point, the sign would likely be restricted by a vehicle's interior, so the sign is not expected to impact driver behaviour at this approach.

**Figure 3.6: Motorist's View on Church Street Southbound Approach**

*Source: Photograph taken by TTPP dated 12 August 2023.*

The sign would also be partially visible from the Floss Street, Dunkeld Street, and Vincent Street intersections as shown below in Figure 3.7 to Figure 3.9. Visibility of the sign from both approaches is limited and at a distance of 150m, 240m and 250m from the sign respectively, beyond the legible distance. Hence, the sign is not expected to impact driver behaviour at any approach.

**Figure 3.7: Motorist's View on Floss Street Approach**


*Source: Photograph taken by TTPP dated 12 August 2023.*

**Figure 3.8: Motorist's View on Dunkeld Street Approach**


*Source: Photograph taken by TTPP dated 12 August 2023.*

**Figure 3.9: Motorist's View on Vincent Street Approach**


*Source: Photograph taken by TTPP dated 12 August 2023.*

***(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)***

***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 signage is fixed on the pedestrian bridge and is completely within the structure of the bridge, therefore, the signage does not obstruct a motorist's view of any traffic signals, signage, and other traffic hazards when travelling on Canterbury Road in the westbound or eastbound direction and Church Street in the southbound or northbound direction.

#### *3.3.1.4 Sign Spacing*

***(a) Sign spacing should limit drivers view to a single 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 static sign.

### 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.***

The existing static signage is located above the carriageway and is a considerable distance from any traffic signals. Hence, it does not distract motorists nor obstruct or reduce the visibility and effectiveness of any directional signs, traffic signals, traffic control devices, regulatory signs or advisory signs.

The signage does not obscure information about the road alignment.

***(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 advertising. It is noted that the signage would not display colours and shapes which could be mistaken for traffic signals.

Notwithstanding this, it is recommended that the content of the signage 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 the image display must not be less than:***
***i. 10 seconds for areas where the speed limit is below 80km/hr.***
***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.***
***(e) The transition time between messages must be no longer than 0.1 seconds, as in the event of image failure, the default image must be a black screen.***

Although the sign is visible from a school zone, the existing signage is not a digital sign and will remain as static signage in the future and therefore these requirements are not applicable.

*3.3.2.3 Illumination and Reflectance*

***(a) Luminance levels 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 Guidelines details assessment criteria to ensure that illumination and reflectance qualities of the signage 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 signage are static signs and would not contain interactive technology or technology that enables opt-in direction communication with motorists.

# 4 Conclusion

TfNSW is seeking to renew the permit of a large format, double-sided static advertising sign facing eastbound and westbound traffic, located on the footbridge above Canterbury Road, Canterbury.

The proposal has been assessed in accordance with the following statutory requirements and guidelines for advertising signs:

- Transport Corridor Outdoor Advertising and Signage Guidelines
- State Environmental Planning Policy (Industry and Employment) 2021.

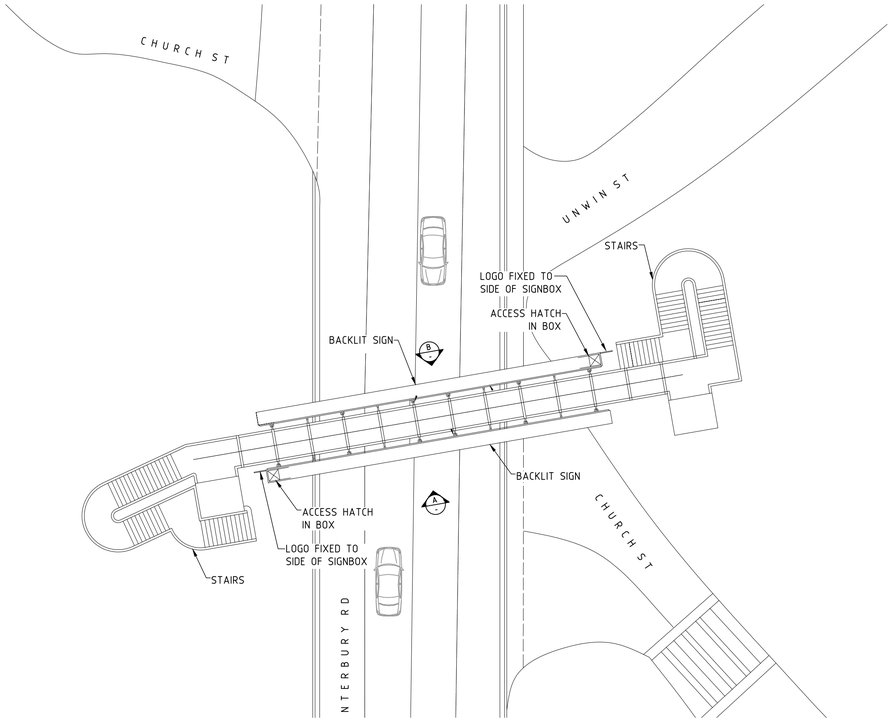
The following findings and conclusions are made from the signage safety assessment:

- In the five-year period between January 2019 and December 2023, there were four casualty incidents on the eastbound approach within the legible distance to the existing static signage, and no casualty incidents on the westbound approach within the legible distance.
- The signage does not obstruct and/or reduce the visibility of any traffic control devices, signage, pedestrians or cyclists.
- The signage does not give incorrect information on the alignment of the road.
- The signage is located above the carriageway, within the driver's vision on both approaches and does not require motorists to turn their head way from the roadway ahead.
- The sign is not located within the safe stopping distance to any key decision points or conflict points.
- The signage does not compromise road safety for road users in the vicinity.

Having consideration for the static signage safety assessment and discussion presented within this report, the analysis demonstrates that the existing static signage on Canterbury Road facing eastbound and westbound traffic would satisfy the traffic safety criteria, requirements and guidelines in the Industry and Employment SEPP and NSW Guidelines.

# Appendix A

## Concept Design Plans


SITE PLAN
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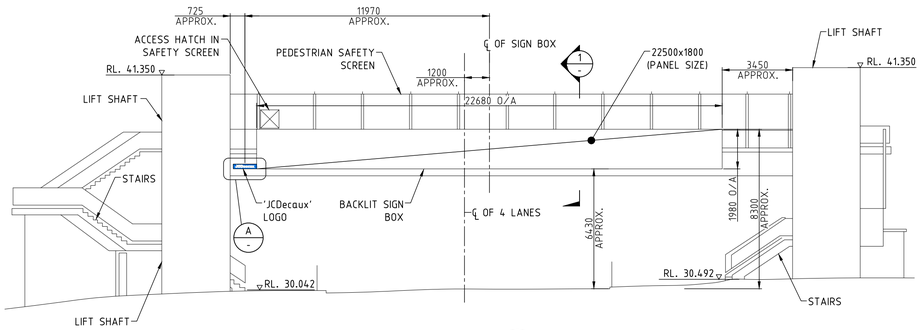
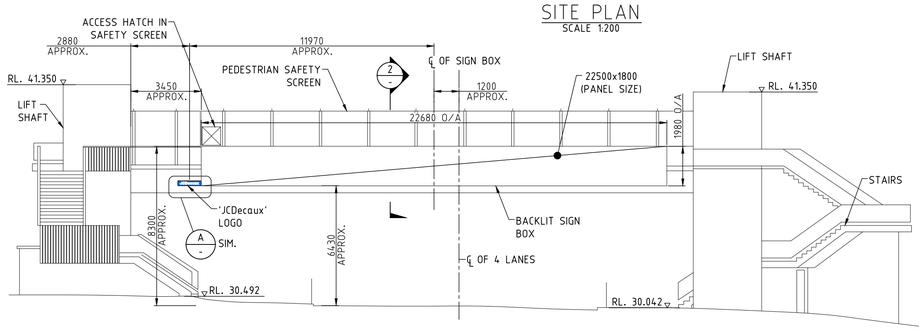
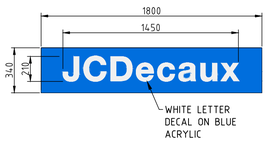


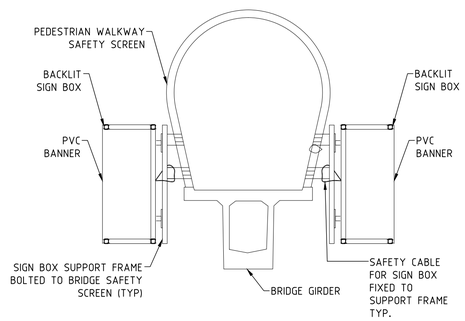

ELEVATION A (OUTBOUND)
SCALE 1:150




ELEVATION B (INBOUND)
SCALE 1:150




DETAIL A
SCALE 1:25




SECTION 1 2 SIM
SCALE 1:50

| ISSUE | DATE | REVISION | PREP | CHECK | AUTH |
|---|---|---|---|---|---|
| 2 | 23/10/24 | ISSUED FOR DA APPROVAL | | | |
| 1 | 23/09/24 | ISSUED FOR DA APPROVAL | | | |

TRANSPORT FOR NEW SOUTH WALES

CANTERBURY RD — CANTERBURY CITY COUNCIL

# ADVERTISING SIGNAGE CANTERBURY RD OVERPASSS CANTERBURY

GENERAL ARRANGEMENT

Dennis Bunt Consulting Engineers Pty Ltd
Transport Roads & Maritime Services NSW GOVERNMENT
27-31 Argyle Street, Parramatta NSW 2150

| PREPARED | CHECKED | REGISTRATION No OF PLANS |
|---|---|---|
| DESIGN JL | | DS2024/001015 |
| DRAWING MT | | RTA BRIDGE NUMBER B10153 |
| APPROVED DESIGN DA RECORDS | | ISSUE STATUS DA APPROVAL |
| DIRECTOR | | SHEET No DA01 ISSUE 2 |

# Appendix B

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

NSW legislation

# State Environmental Planning Policy (Industry and Employment) 2021

Current version for 4 March 2024 to date (accessed 13 September 2024 at 10:28)

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

Dennis Bunt
Consulting Engineers Pty Ltd

ABN 23 039 013 724
Level 2, Building 8
Forest Central Business Park
49 Frenchs Forest Road East
Frenchs Forest NSW 2086

PO Box 652
Forestville, NSW, 2087
PH: (02) 9451 3455
FX: (02) 9451 3466
Email:info@dbce.com.au

Ref: 24137

23rd October 2024

Sammy Hamilton
43A The Corso, Manly
New South Wales 2095

**RE: Canterbury Rd Overpass, Canterbury. NSW**
**DA For Continued Signage Use, Structural Feasibility and Safety Report**

## 1.0 Introduction

This assessment has been conducted by Dennis Bunt Consulting Engineers Pty Ltd (DBCE) at the request of Keylan. No responsibility under the law of contract, tort or otherwise for any loss or damage is accepted.

The purpose of this assessment was to perform a structural and safety review of the existing signs at Canterbury Rd Overpass, Canterbury for the DA approval by TfNSW for Continued Signage use.

The existing signage was inspected on the 12th of September 2024 as part of DBCE's ongoing maintenance inspections for JCDecaux.

The existing signage was documented by DBCE on the 23rd Of September 2024 for TfNSW, drawing number DS2024/001015, DA01(1).

The following documents were used in this assessment.

1. Transport Corridor Outdoor Advertising and Signage Guidelines, NSW Government (November 2017)
2. AS1170.0-2002 Structural design actions Part 0: General principles
3. AS1170.1-2002 Structural design actions Part 1: Permanent, imposed and other actions.
4. AS1170.2-2021 Structural design actions Part 2: Wind actions
5. AS4100-2020 Steel structures.
6. AS5100-2017 Bridge design.

7. AS1657-2018 Fixed platforms, walkways, stairways, and ladders - Design, construction and installation

This report was limited to a visual examination only and no calculations were performed.

## 2.0 Observations/ Discussion

The existing signs are backlit landmark signs. The signs consist of steel boxes that are fixed to each side of a concrete girder footbridge located over Canterbury Rd. There are steel frames bolted to each side of the bridge's steel safety screen. Horizontal rails are fixed to the frames. Z brackets are fixed to the back of the sign boxes and the brackets fit over the rails connecting the boxes to the support frames. Each sign face is 22.5m horizontal x 1.8m vertical. Refer to photo 1 to 5 and 8 to 10.

The sign boxes are located on the outside of the safety screen. Access to each sign box is from a hatch in the side of the safety screen. Refer to photo 4, 5 and 9. There are platforms between the safety screen and the sign boxes to step on when accessing each box. There is a hatch in the top of each sign box and a permanent ladder inside each sign box underneath the hatches.

Each sign box consists of steel structure on all sides of the box except for the front where a PVC banner tensioned with ratchet straps is fixed. There are fluorescent lights fixed to the back of each box to illuminate the advertising signs at night.
When the banners are replaced, it is done from a walkway inside each box without having to stop the traffic below the signs. There is a horizontal cable running the length of each box that workers replacing the banner can fix their harnesses to. Refer to photo 6,7 and 10.

Safety cables to stop the boxes falling onto the road during vehicle impact have been installed. Refer to photo 1 and 2.

## 3.0 Recommendations/ Conclusions

- The sign boxes are in accordance with the relevant Australian standards and Transport Corridor Outdoor Advertising and Signage Guidelines, NSW Government (November 2017)
  DBCE note there are safety cables fixed to the rear of each box and the bridge to prevent the sign boxes falling on traffic should it be impacted by high vehicles in accordance with Section 1.2 e of the guidelines.

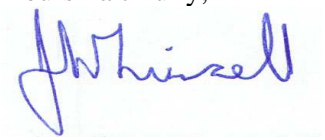
- The steel frames connecting the sign boxes to the bridge and the sign boxes are both galvanised and in good condition.

- The structure and the sign box are rated as category 2 by DBCE. ie Minimal damage, minor localised surface corrosion but serviceable. Re-inspection required approximately 2 years from the time of the last inspection.

- There are presently no structural or safety issues requiring fixing.

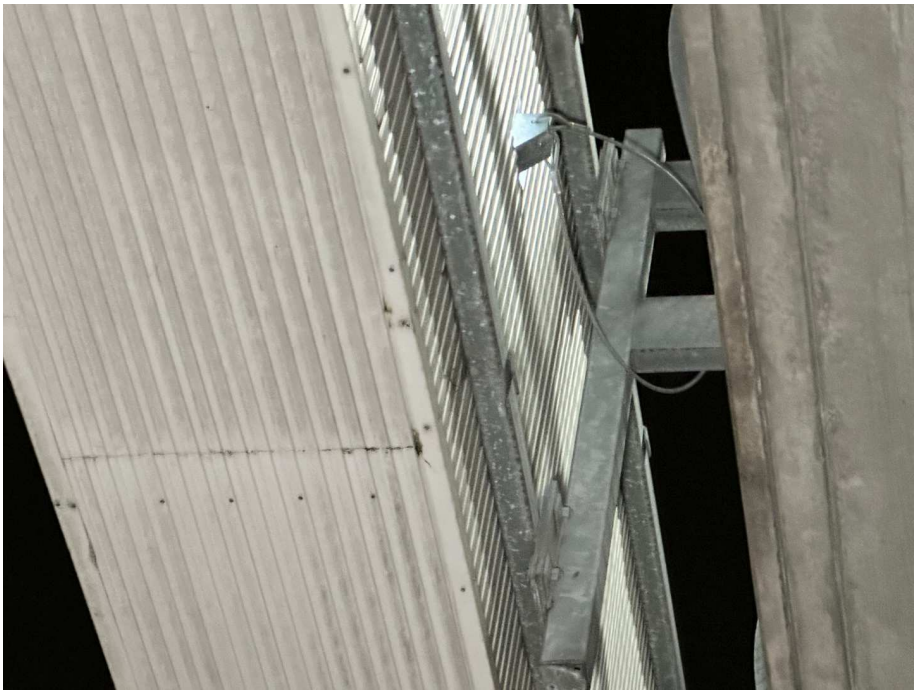
If you have any questions, please do not hesitate to ring the undersigned on 0400 023 714

Yours Faithfully,



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

Photo 1



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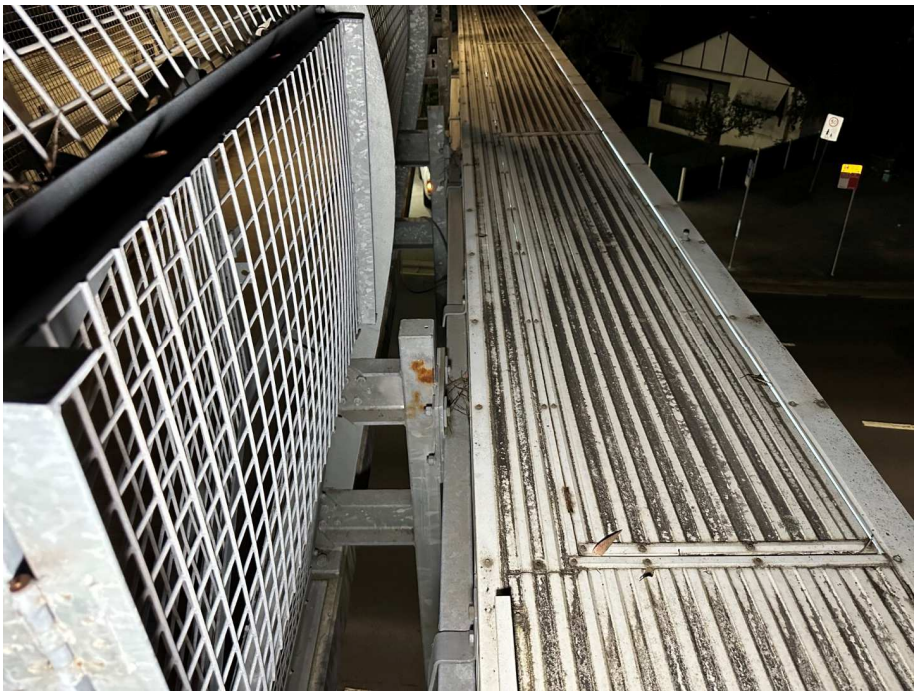

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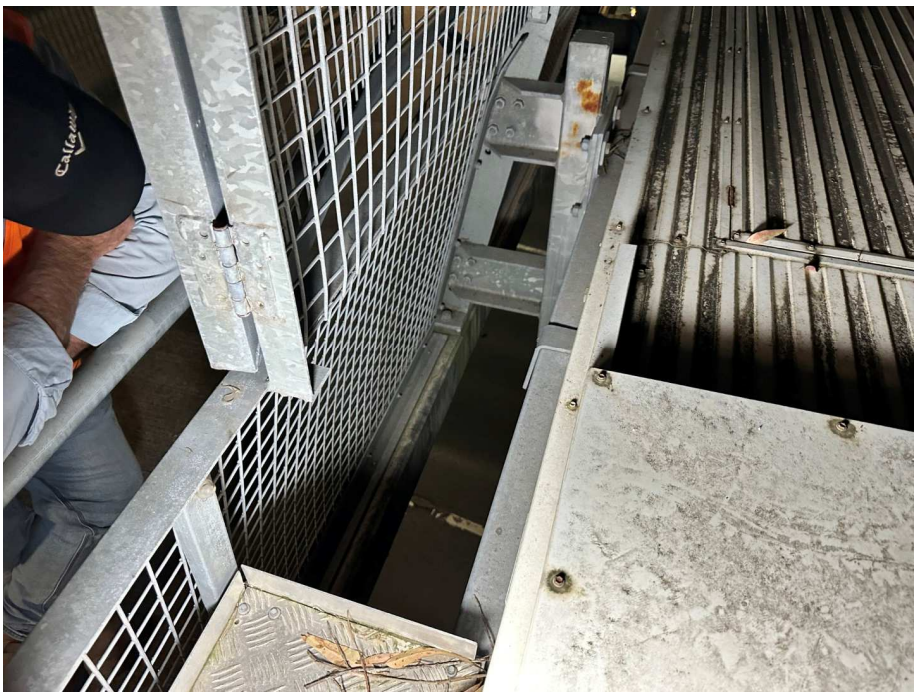

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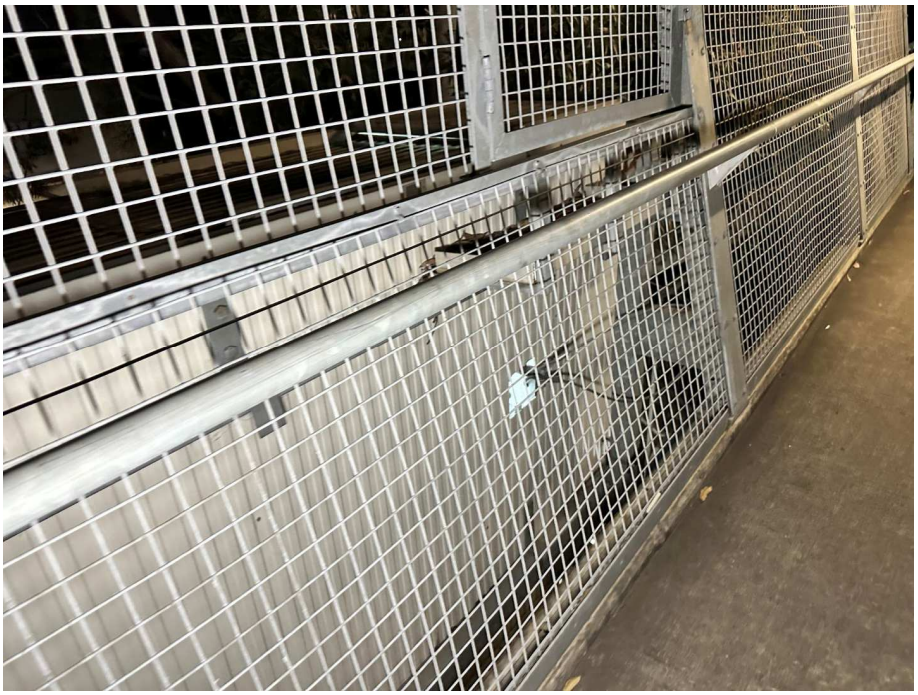

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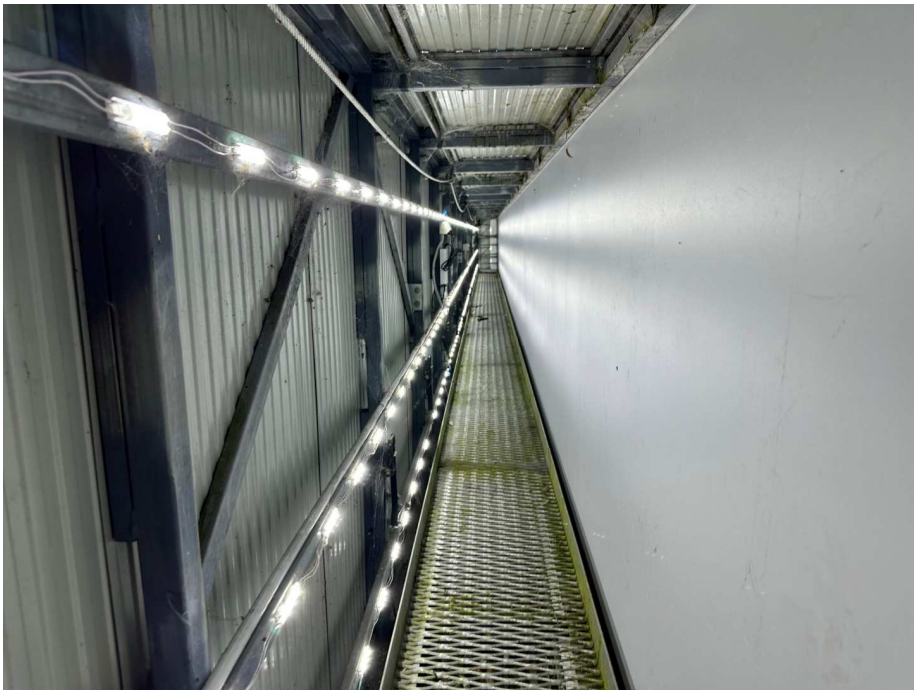

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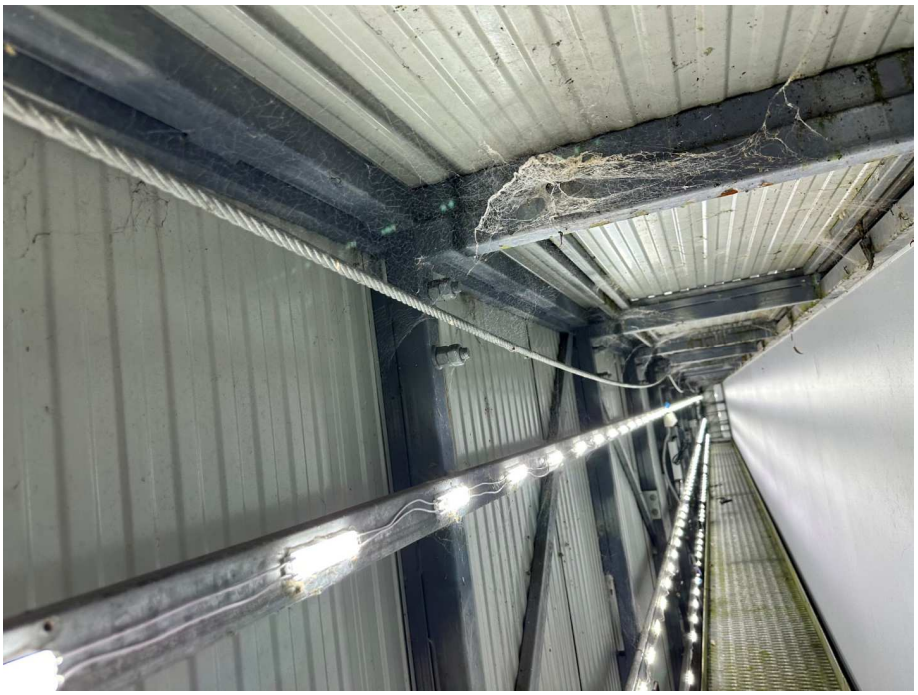
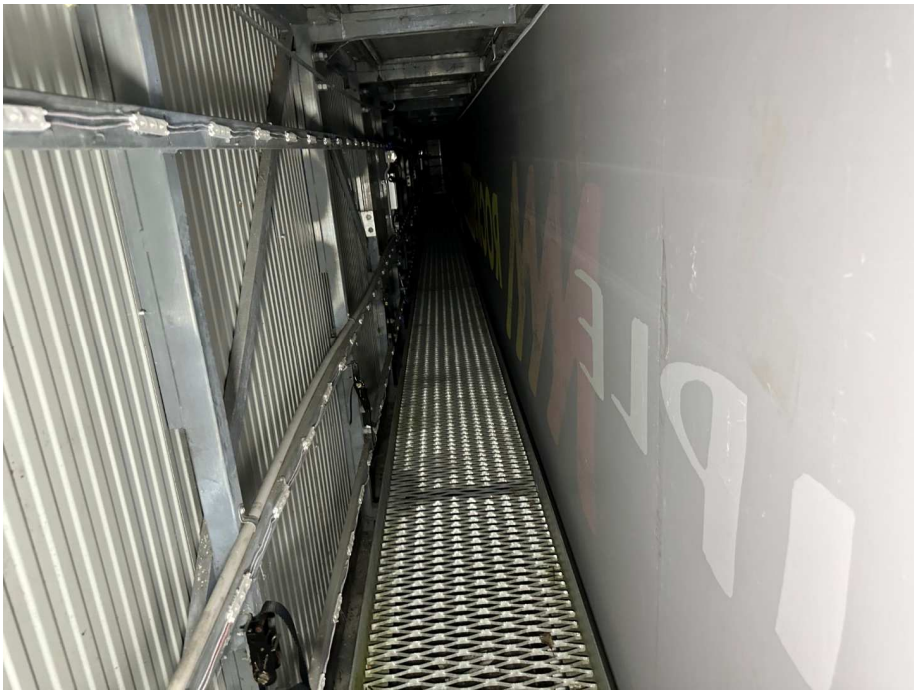


Photo 7

Photo 8

Photo 9



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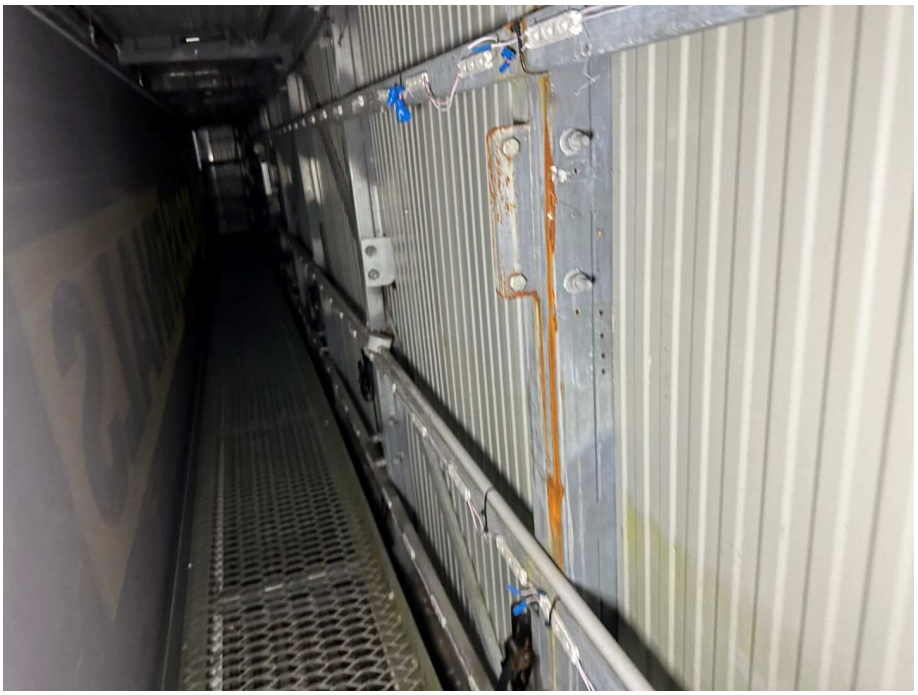

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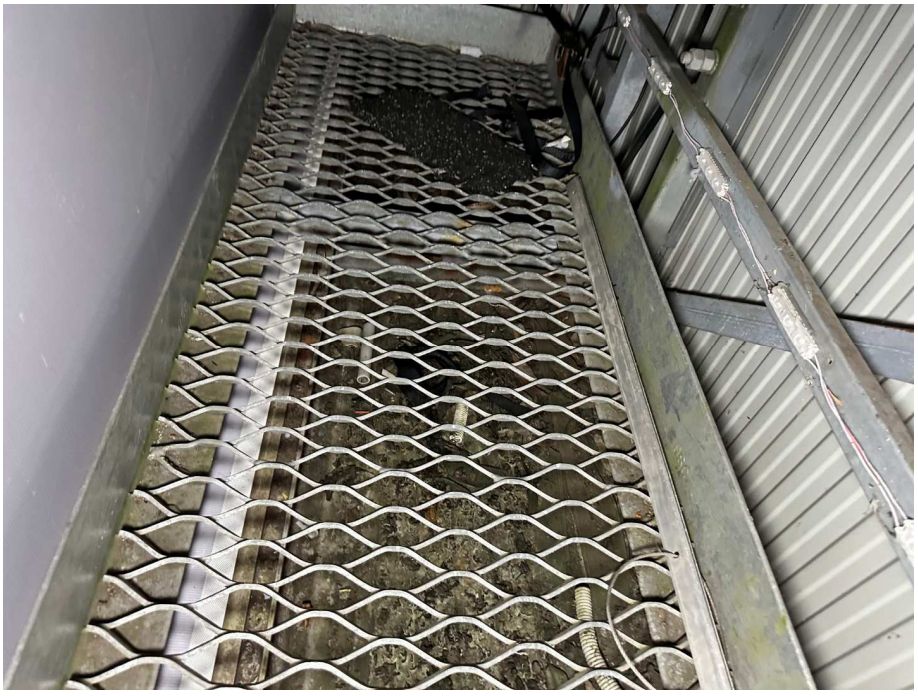

Photo 12

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