

ADVERTISING SIGNAGE STRUCTURE

Cowpasture Road, Bossley Park – Inbound & Outbound

Structural Condition Report

21 AUGUST 2023



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OOH! MEDIA ADVERTISING SIGNAGE STRUCTURE

Cowpasture Road, Bossley Park – Inbound & Outbound - Structural Condition Report

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REVISIONS

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1 INTRODUCTION

1.1 General

Arcadis Australia Pacific Pty Ltd (Arcadis) was engaged by oOh! Media to conduct a structural condition report on the advertising signage structure attached to the roof of the pedestrian bridge over Cowpasture Road, Bossley Park.



Figure 1 Locality Plan

1.2 Site Visit

Chris Slater of Arcadis visited the site on Thursday 17th August 2023. The purpose of this visit was to undertake a detailed inspection of the advertising signage structure from all accessible areas. The inspection was achieved using a safety harness and working at height precautions in accordance with Work Health and Safety Regulations 2017.

The weather at the time of the inspection was fine and sunny.

During this visit, information and photographs were recorded regarding the condition of the fixing components, framing members, protective surfacing, and other relevant material with respect to the performance of the signage structure. All caption comments are indicative, with the true condition record being the photographic record.

2 DESCRIPTION

The signage structure is commonly referred to as a double sided front lit 'Supersite', having a nominal display size of 12.660m long x 3.350m high.

The signage structure comprises a galvanised steel framed box structure with circular hollow section (CHS) legs. The legs penetrate the pedestrian bridge roof and are fully welded to the top of the main frames of the superstructure.



Photo 1 – Signage structure legs welded to bridge superstructure (circled).

The galvanised steel framed box structure is equipped with an upper and lower catwalk, providing the signage installers access to the top and bottom of the respective sign faces.

Both catwalks exceed minimum width requirements and are equipped with compliant handrails and kick rails (where required). A permanent fixed ladder located at each end of the catwalk, provides access between the gantry levels. The ends of the upper catwalk are only fitted with safety chains, which does not necessarily provide adequate fall protection.

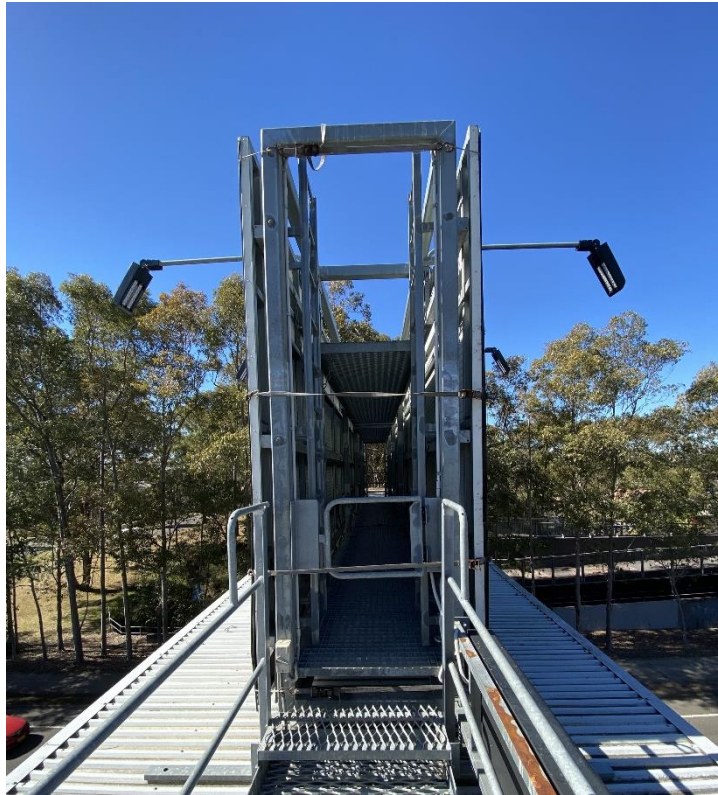


Photo 2 – General end view of signage structure

Three horizontal rails (75 x 75 SHS) are connected to the front face of the signage box structure via bolted through bolts. These rails support the respective sign faces, which comprise steel framed sheet metal (Colorbond) segments, commonly referred to as `signage pans`.

The `signage pans` are separate entities, nominally 1200mm wide for the full height of the advertising sign, providing a flat backing for the vinyl advertising skin to be attached. These elements are fixed to the horizontal rails via angle brackets, and `Tek` screws.

The signage structure is also equipped with four overhead cantilever floodlights that illuminate the front of the advertising sign.

Access to the signage structure is gained via a padlocked access hatch in the roof of the pedestrian bridge. This access hatch permits entry to a galvanised steel-framed landing equipped with handrailing. An eyebolt has been fitted adjacent to the access hatch, providing a strong point for attaching a harness lanyard for ingress and egress purposes.



Photo 3 – Secured access hatch in roof of pedestrian bridge.



Photo 4 – Lanyard attachment eyebolt (circled)

During the inspection no other obvious defects that might warrant further investigation were noticed. However, that does not preclude the possibility that other less obvious defects may exist and were concealed.

For the intent of this report Arcadis has assumed that the existing signage structure has been designed in accordance with relevant Australian codes/standards and is structurally adequate for its purpose.

Advertising Signage Structure



Photo 5 – General view of advertising signage structure.

3 STRUCTURAL CONDITION & OBSERVATIONS

Generally, the signage structure is in a satisfactory condition (refer photos 6 to 9).



Photo 6 – General view of landing area



Photo 7 – General view of lower catwalk



Photo 8 – General view of upper catwalk



Photo 9 – Typical horizontal rail connection

Advertising Signage Structure

However, there are some issues that need to be addressed.

The issues observed were:

- Minor surface corrosion to logo box support framing (both sides).

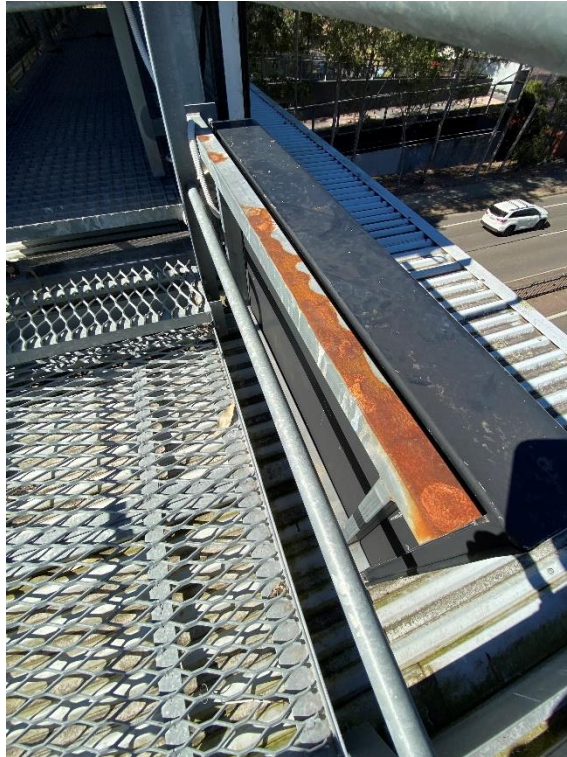


Photo 10 – Minor surface logo box support framing (west).

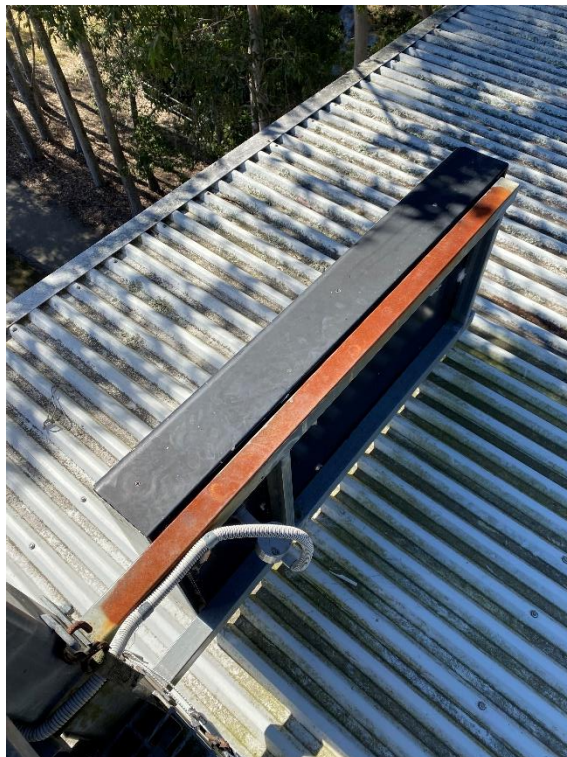


Photo 11 – Minor surface logo box support framing (east).

- Minor surface corrosion to vertical ladder support framing.



Photo 12 – Minor surface corrosion to vertical ladder support framing.

- Corroding nut to vertical ladder support framing.

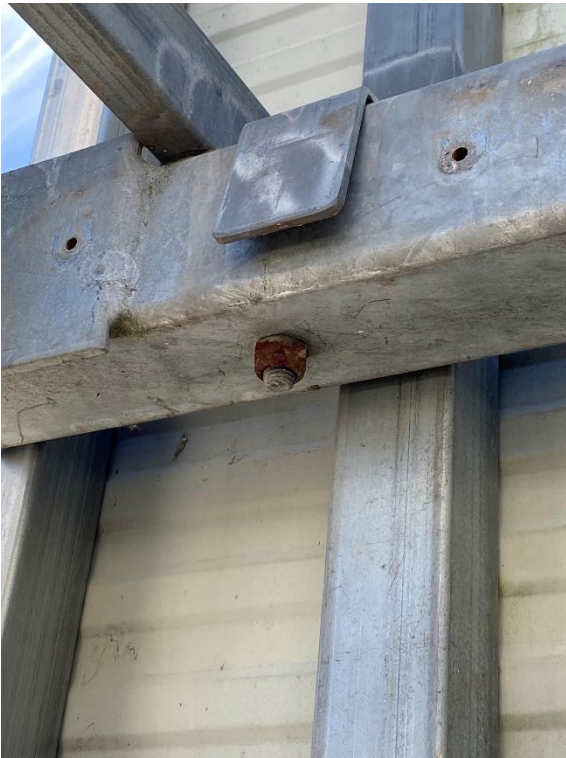


Photo 13 – Corroding nut to vertical ladder support framing.

Advertising Signage Structure

- Deteriorating hatch strut.



Photo 14 – Deteriorating hatch strut.

- Trip hazards to top catwalk.



Photo 15 – Trip hazards to top catwalk (circled).

4 RECOMMENDATIONS

We would recommend that the surface corrosion be wire brush cleaned and treated with a proprietary cold galvanising paint at the next scheduled maintenance programme, to avoid further corrosion developing and potentially more costly remediation. This may involve the complete replacement of nuts and bolts.

The deteriorating hatch struts be replaced.

Elimination of the trip hazards would necessitate total redesign and fabrication of the signage structure – a significantly costly exercise. In lieu of replacing the structure, measures such as ‘tiger tape’ on the trip hazard and warning signs should be instated.

Arcadis would recommend that the signage structure be re-inspected every three (3) years from the date of this report.

