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14th October 2022

Ref: 21275

Brett Hutton JCDecaux Unit 2-3, 182-190 Euston Rd, Alexandria NSW 2015

<u>RE: Princes Hwy, Bombo, NSW, Inbound and Outbound</u> Super 8 Signage, Structural Feasibility Statement

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

The proposed sign is documented in the DA drawings by DBCE 21275 / DA01(A) and DA02(C).

A survey of the site was commissioned by JCDecaux.

The signage will consist of two super 8 LED screens with the visual screen dimensions of each screen being 7936mm horizontally x 2048mm vertically. The top of the LED screens will be located approximately 7.5m above the ground. The two screens will be located on either side of a steel box that will sit on a steel column. The inside of the box will be able to be accessed from a hatch in the underside of the box to enable maintenance of the LED screens from behind.

Site Description

The site is located between a Princes Hwy concrete crash barrier to the west and Sydney Trains track to the east.

The ground is relatively flat and covered with grass. There are no trees at the location of the proposed sign. The distance between the crash barrier and the track is approximately 18m and the sign is to be located centrally between the crash barrier and the track.

Structural Description

Steel frame

The structure will consist of a rectangular steel box which will act as a 3D welded steel frame. There will be a walkway in the bottom of the box. Two super 8 LED screens will be clamped to the box, one on each face.

The soffit of the box will be bolted to the top of a steel column, 610mm in diameter and the bottom of the column bolted to a concrete footing.

The LED screens will be assembled in the contractor's factory and clamped to the welded box so they can be transported to site as one unit.

The column will be transported separately.

The weight of the structure including the digital screens and the cladding is approximately 7tonnes. The weight of the support structure is approximately 1 tonne.

The sign is to be designed for a wind load for region A, terrain category 2.5 and a 50 year design life in accordance with AS1170.2.

Footing

As the ground was relatively flat and there was sufficient space between the roads crash barrier and the Sydney Trains track a pad footing approximately 4m square and 1.5m deep would be the preferred option.

Recommendations

Based on the survey and our preliminary design we see no reason why the cantilevered signage cannot be installed.

A geotechnical report is commissioned to provide information on the soil and its profile.

A services search is undertaken in the area of the footing.

If you have any questions, please do not hesitate to ring the undersigned on 9451 7757

Yours Faithfully,

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