KEYLAN
43A The Corso
Manly NSW 2095

Statement of Environmental Effects

Digital Advertising Signage
Beecroft Road, Epping

Prepared for JCDecaux on behalf of Sydney Trains
Submitted to the Department of Planning, Industry and Environment

July 2022

KEYLAN
43A The Corso
Manly NSW 2095

This report has been prepared by:

Nic Najar B Prop (DIV)
Planner
E: nic@keylan.com.au

Padraig Scollard BA MRUP
Principal Planner
E: padraig@keylan.com.au

This report has been reviewed by:

Michael Woodland BTP MPIA
Director
E: michael@keylan.com.au

Cover image: the site (Source: JCDecaux)

Revision	Prepared by	Reviewed by	Date	Revision Type
1	NN/PS	MW	06/07/2022	Draft
2	NN/PS	MW	08/07/2022	Final

Table of Contents

Figures

Tables

Appendices

Project Summary

Project Element	Summary of the project
Proposed Signage	• new monopole sign in portrait format on the north elevation of the Epping Road overpass
Advertising Display Area	• dimensions: 4.708m x 3.172m • advertising area: 14.93m^2
Visual Screen Size	• dimensions: 4.61m x 3.07m • Area: 14.15m^2
Site Description	• Lot 10 DP 1189759
Visual Impacts	• a detailed Visual Impact Assessment (VIA) has been undertaken by Keylan Consulting (Appendix 7) • the proposal does not result in visual clutter as the proposed digital advertising signs are consistent with the urbanised character of the area • the assessment concludes that the eastern façade of the lower-level apartments at 12-40 Langston Place Epping is the greatest impacted residential receiver however it can coexist with the sign in the urbanised environment • other surrounding residential receivers in the R2 zone will have low visual impacts • residential receivers east and west in future R4 developments and the Epping town centre will have low visual impacts
Heritage Impacts	• the Site is located near to two local heritage items. An assessment of heritage impacts is at Section 4.4.2 and 5.3 of this SEE • the visual impact on the local conservation area and landscape item is minimal as there is sufficient distance between the Site and item • the railway corridor provides for sufficient screening which ensures there isn't a direct sight line to the Site • impacts on the local items of heritage are negligible given the location and orientation of the sign

Lighting Impacts	• a Lighting Impact Assessment (LIA) has been undertaken by Electrolight (Appendix 4)
	• the LIA confirms the proposal:
	  ○ complies with the relevant illumination criteria under the Signage Guidelines and AS 4282-2019
	  ○ will not result in unacceptable glare
	  ○ will not unreasonably impact on the visual amenity of nearby residences of accommodation

Road Safety Impacts	• the SSA has determined the proposed sign will not compromise safety for road users in the vicinity
	• the following findings and conclusions are made from the signage safety assessment:
	  ○ the proposed sign on the northern elevation side of Beecroft Road bridge would face the Epping Road east approach
	  ○ two crashes have occurred within the visible distance of the proposed digital sign in the most recent five years

Project Element	Summary of the project
	○ the proposed digital sign would not be located within the safe stopping sight distance to the traffic signals, crossings, or warning signage ○ the proposed sign would not obstruct/reduce visibility of any traffic control devices, signage, pedestrians, or cyclists ○ the proposed signage would not give incorrect information on the road alignment ○ given that the proposed sign is located within close proximity to traffic signals, it is recommended to increase the minimum dwell time from 10 seconds to 15 seconds
Public Benefit	• the proposal incorporates appropriate public benefit mechanisms as required by the Industry and Employment SEPP and the Transport Corridor Outdoor Advertising and Signage Guidelines • public benefit is addressed at Section 5.6 of this SEE
Hours of Operation	• 24 hours 7 days a week
Cost of Works	• $454,300 inclusive of GST

Table 1: Project Summary

1 Introduction

This Statement of Environmental Effects (SEE) has been prepared by *Keylan Consulting Pty Ltd* (Keylan) for JCDecaux on behalf of *Sydney Trains* (the Applicant) to accompany a Development Application (DA) for an advertising signage at Beecroft Road, Epping within the Parramatta Local Government Area.

As Sydney Trains is the Applicant, the Minister for Planning and Public Spaces (the Minister) is the consent authority for the application, as prescribed under clause 3.10(c) *State Environmental Planning Policy (Industry and Employment) 2021*. Accordingly, this SEE has been prepared and is submitted to the Department of Planning and Environment (DPE) pursuant to the provisions of Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

As the Applicant is a public authority, the subject application is a Crown Development Application pursuant to Part 4 Division 4.6 of the EP&A Act.

This SEE also includes a detailed assessment of the operation of the proposed digital advertising signage against the requirements outlined in the *Transport Corridor Outdoor Advertising and Signage Guidelines, Assessing Development Applications under SEPP 64* (DP&E, 2017) (Signage Guidelines).

The proposed development comprises:

- the erection of a 14.93m^2 one sided monopole digital advertising sign
- the display of illuminated advertisements
- a maximum luminance of 350 cd/m^2 during the night time period
- a minimum dwell time of 15 seconds

The application seeks consent to operate the sign for a period of 15 years. The estimated cost of works is $ $454,300 inclusive of GST

This SEE should be read in conjunction with the following supporting documents:

Supporting documentation	Appendices
Industry and Employment SEPP & Transport Corridor Advertising and Signage Guidelines Assessment	Appendix 1
Architectural Plans	Appendix 2
Signage Safety Assessment	Appendix 3
Lighting Impact Assessment	Appendix 4
Public Benefit Statement	Appendix 5
Visual Impact Assessment	Appendix 6
Site Survey	Appendix 7

Table 2: List of Appendices

1.1 Pre-Lodgement Meeting

On 24 May 2022 a DA pre-lodgement meeting was convened with DPE to discuss key issues associated with the development application.

The meeting provided an opportunity for JCDecaux to introduce the Sites and the proposal and to facilitate discussion on key issues that are considered as part of this DA. The application has been prepared in accordance with the advice given at the pre-lodgement meeting with DPE.

Key issues discussed include:

- Road Safety – recommend discussions with Transport for NSW (TfNSW) prior to lodging any applications
- Amenity – proposal should provide mitigation measures to avoid residential impacts where proposals are in close proximity to such uses, including reducing LUX levels and curfews
- Conversions – where signs are being upgraded from static to digital, opportunities to reduce the proposed size of the asset and display area should be investigated. Seek to improve design and visual impact
- Visual Impact – avoid blocking other signs, such as businesses identification signs. Proposals should provide evidence of reducing clutter and visual impact should be assessed carefully
- Heritage/National Parks – respect architecture of bridge and sensitive areas such as natural settings (e.g. National Parks)
- Public Benefit – show how proposal is specifically providing public benefit under the Industry and Employment SEPP, including consultation with the relevant Council

This application has been prepared with consideration of the issues raised by DPE during the pre-lodgement meeting. These issues are addressed at Section 5.

Transport for NSW

A meeting was convened with TfNSW to discuss traffic and road safety issues associated with the development application. During this meeting no significant issues were raised with the proposal from a traffic safety perspective. Road safety is addressed at Section 5.1.

2 The Site and locality

2.1 Site Description

The Site is located at a busy intersection. The surrounding locality is categorised by predominately commercial land uses surrounded by high rise residential with low density residential approximately 80 metres (m) towards the south.

Private open space and bowling greens are located at Forest Grove Epping 190m southeast. The Site is not visible from these locations. The immediate locality involves other signs associated with transport, businesses identification and digital advertisements uses on the footpaths, airbridges and buildings. The locality allows for sufficient pedestrian access through walkways.

The Site fronts Beecroft Road, which is a classified road traveling in an eastbound direction onto Epping Road. The Site is located between both roads and sits on top of a transport corridor.

The Site in context to the surrounding area is shown in Figure 1. The Site as viewed from Beecroft is shown in Figure 2. There are no existing advertising signs on the overpass.

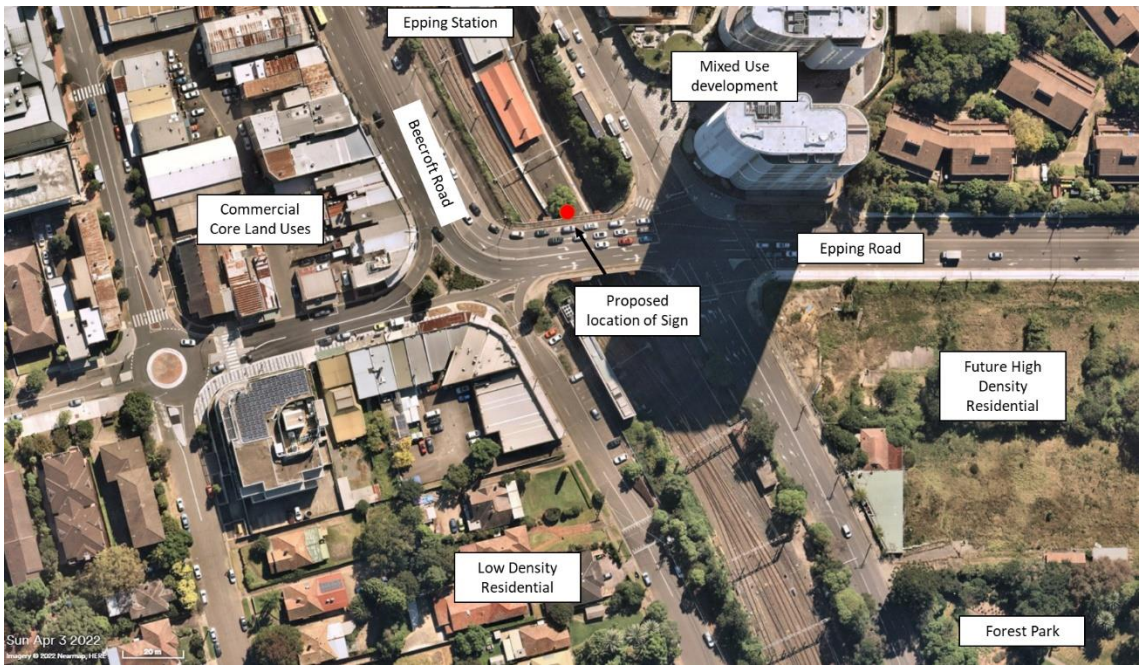

Figure 1: Site context (Base Source: Six Maps)


Figure 2: Existing view from Beecroft Road East bound (Source: Keylan)

2.2 Existing Road Environment

Beecroft Road is an established road corridor comprising of a dual carriageway with two traffic lanes in two directions, traveling west (Beecroft Road) to east (Epping Road). Eastbound vehicles experience a sightly uphill gradient on approach to the Beecroft Road from Epping Road.

Traffic traveling from Epping Road enters a 4-way intersection with traffic flowing from Langston Place, Blaxland Road, Beecroft Road & Epping Road. The road environment flows at a speed limit of 60km/h in all directions. A reduced speed limit turning onto Beecroft Road overpass from Blaxland Road of 25 km/h is applicable.

There are pedestrian footpaths throughout the road locality which connect from Epping Road to Beecroft Road to the wider Epping Town Centre. The road environment does not incorporate cycling lanes. Footpaths can accommodate cycling. Parking is located along High Street.

The nearest intersection is Epping Road Langston Road, Blaxland Road and Beecroft Road located approximately 20 m east of the Site.

2.3 Surrounding Locality

The advertising sign will be located within an established Sydney Trains corridor and visible from Beecroft Road and Epping Road which is an established TfNSW Road Corridor. Local streets are at Bridge Street, High Street and Langston Road. The development surrounding the Site includes:

- highrise residential located on Langston Road and Bridge Street approx. 50 m to 60 m from the Site
- commercial core type land uses scattered throughout the road network. These uses are located on High Street, Beecroft Road, Langston Road and Bridge Street
- low density residential is located on High Street, from 80 m to 150 m away
- private open space and bowling greens is located at Blaxland Road and Forest Grove Epping. The Site is not visible from this location
- the Epping Town Centre located east of the sign. The Epping Town Centre is not yet developed and remains low density in scale however is subject to further densification

Photos of the Site and surrounding locality are provided in Figure 3 to Figure 7.

Figure 3: View from High Street looking northeast (Source: Keylan)

Figure 4: View looking east from corner of Bridge Street and Beecroft Road (Source: Keylan)

Figure 5 View looking north from Epping Road overpass (Source: Keylan)

Figure 6: View looking north-west from Epping Road and Blaxland Road (Source: Keylan)

Figure 7: View looking west from Langston Place and Epping Road (Source: Keylan)

3 The Proposal

A new digital sign is proposed to be installed on the north side of the Beecroft Road overpass, located west of the intersection of Epping Road, Beecroft Road, Blaxland Road, and Langston Place in Epping.

The proposed digital sign will be installed on a column fixed on Platform 1-2 of Epping Railway Station with the digital display erected 3.39 m above the road on Beecroft Road Bridge. The digital sign will be positioned facing motorists on the Beecroft Road east approach.

The development is summarised in Table 3 below.

Development Aspect	Description
Development summary	• Installation of a new digital advertising of a monopole sign
Signage location	• Sign is proposed on the north side of the overpass (visible to east bound traffic traveling on Epping Road
Advertising display area	• 14.93 m^2 (4.708 m x 3.172 m) • Dimensions: 4.708 m x 3.172 m • Advertising Area: 14.93 m^2
Visual screen size	• Dimensions: 4.608m x 3.072 m • Area: 14.15 m^2
Road clearance from ground level to the sign	• 3.39 m above the road surface **Note:** the sign does not cantilever over the road and will therefore not result in any road clearance issues
Dwell time	• 15 seconds
Signage exposure	• Visibility and readability is from a distance of 150 m
Illumination	• The digital signage is illuminated using LEDs installed within the front face
Consent time period	• 15 years
Existing signage	• No existing signage

Table 3: Development summary

The proposed signage will also be available for display of emergency messaging by Sydney Trains and other NSW Government agencies such as NSW Police, NSW Health and Transport for NSW.

Architectural drawings for the sign are shown in Figure 8 and Figure 9 and provided within the Architectural package at Appendix 2.

Indicative image of the sign, as viewed from Beecroft Road, is provided at Figure 10 and Figure 11.

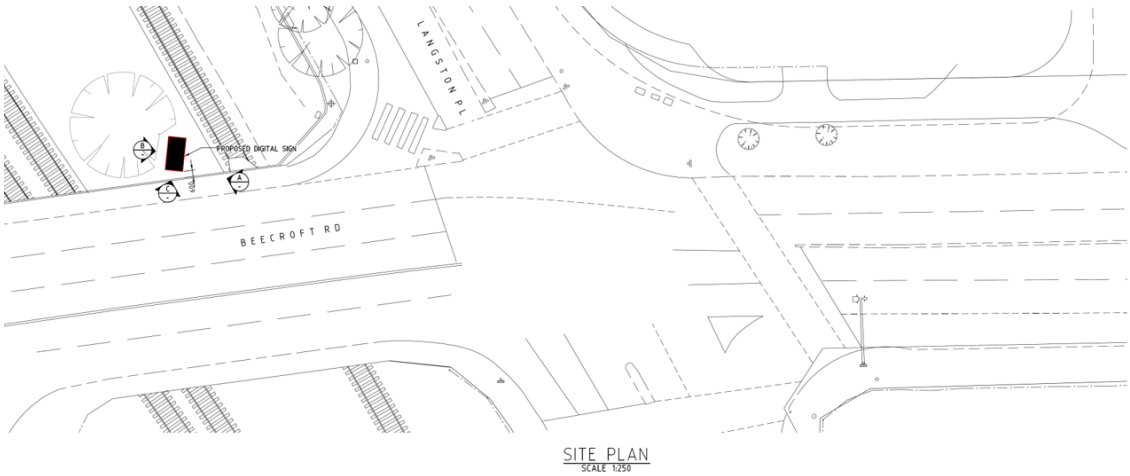

Figure 8: Digital signage plan (Source: Denis Blunt Consulting Engineers)

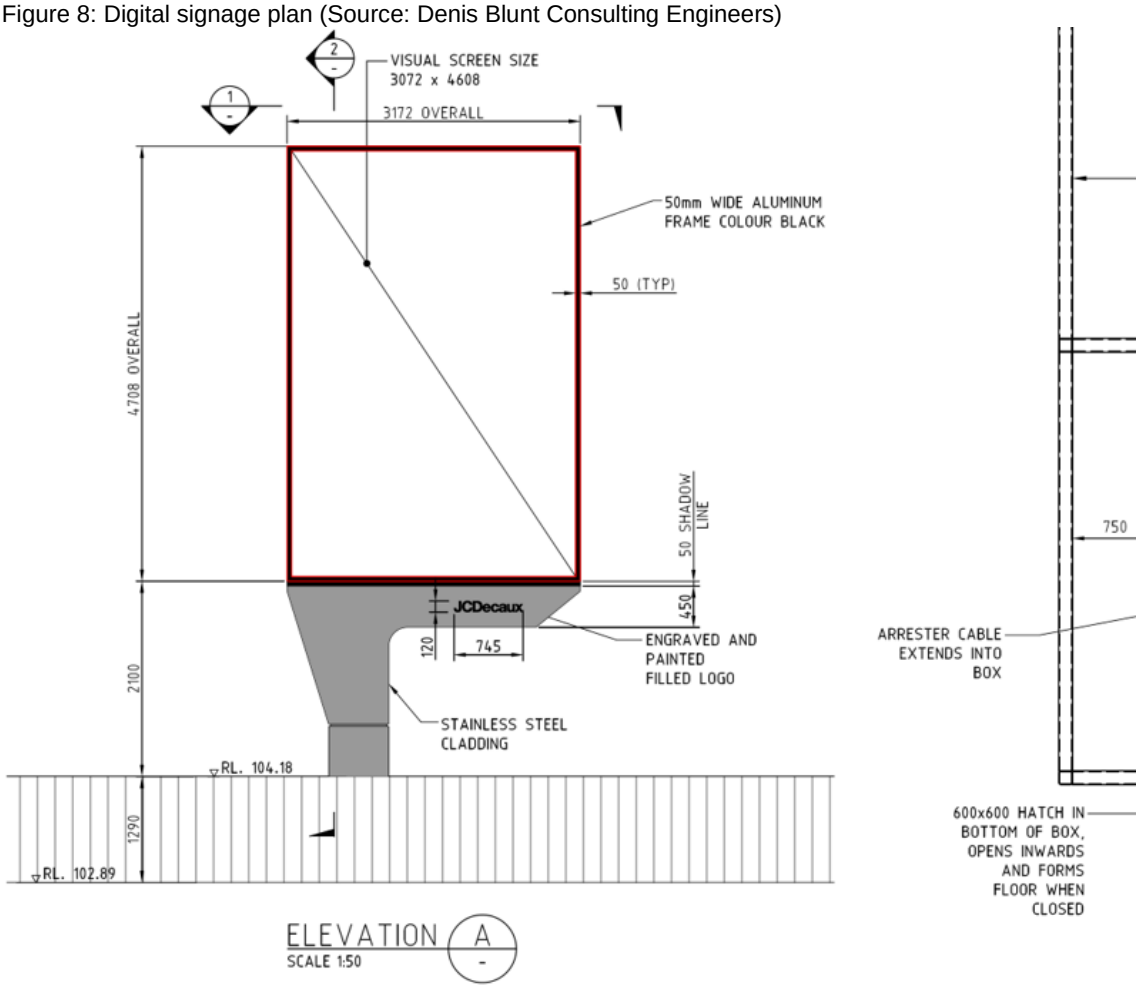

Figure 9: North elevation of proposed sign (Source: Denis Blunt Consulting Engineers)

Figure 10: Photomontage of proposed sign (Source: JC Decaux)


Figure 11: Photomontage of proposed sign (Source: JC Decaux)

3.1 Digital LED Technology for Outdoor Advertising

Outdoor advertising requires changeable signs or images. Traditional outdoor advertising billboards require manual change of materials (paint, paper and vinyl) either pasted onto billboards or tensioned across support frames. The introduction of digital technology has enabled new methods to change signage without regular manual change to the advertising signage.

A LED or digital screen will present a very high quality image by adopting a pixel pitch of 10 mm in accordance with industry standards. A digital screen is comprised of a cluster of red, green, blue and amber diodes driven together to form a full colour pixel usually square in shape. These pixels are spaced evenly apart and are measured from centre to centre for absolute pixel resolution.

The proposed digital advertising sign will only display static content. The LED display will not scroll, flash or feature motion pictures or emit intermittent light. The advertising signage includes an operation management system to ensure that only static images are displayed.

3.2 Digital LED Screen Operation and Management

JCDecaux will operate the content management system for the advertising signage. This management system ensures that unapproved content is not downloaded either by mistake or without appropriate authorisation.

A webcam will monitor operation of the sign 24 hours a day. A motion threat response is built into the display, which will make the screen incapable of displaying movement or live video feed. In the event that unapproved content is displayed the signage will, by default, revert to a black screen format immediately.

The LED screen will display content in feed cycles that are sequentially rotated on a loop cycle. Static digital advertisements will appear on the screen for a 10 second dwell time before changing to a new static digital image. There will be a 0.1 second transition time between images, which appears instantaneous.

The proposed dwell time is consistent with the global and national operation of LED screens, variable messaging and scrolling technology as demonstrated below:

- the dwell time for electronic signage in the United States is typically 8 seconds
- scrolling technology is typically 7 to 8 seconds
- NSW TfNSW variable messaging signage works on a 3 second transition time for both information and emergency displays
- the 10 second dwell time specified for this 60km/hr speed zone is consistent with the Signage Guidelines
- it is recommended by the signage safety assessment to increase the dwell time to 15 seconds for the digital sign given that it is near traffic signals

JCDecaux will implement content controls for the proposed signage, including:

- no tobacco products
- no overtly religious advertising
- no advertising that contains overt and sexually graphic images
- no pornography and illegal drugs

Further, all advertising copy material will comply with the following:

- Australian Advertising Industry Code of Conduct
- The Outdoor Media Association (OMA) Code of Conduct

Sign Access and Maintenance

The proposal involves the installation of a new signage on railway corridor. Access to the sign location is via a gate off the Epping Train Station Platform. The sign will be accessible from the Epping Train Station Platform for maintenance.

JCDecaux will be responsible for maintenance of the signage structures. Maintenance will generally be undertaken by employees of JCDecaux during the night to protect the surrounding road and pedestrian environment.

Hours of Operation

The proposed signage is for 24-hour operation.

4 Statutory Planning Framework

4.1 Environmental Planning and Assessment Act 1979

As the Applicant is a public authority, the subject application is a Crown Development Application pursuant to Part 4 Division 4.6 of the Environmental Planning and Assessment Act 1979 (EP&A Act).

Under section 4.44 of the EP&A, integrated development provisions under Division 4.8 of the EP&A Act do not apply to Crown Development Applications (other than development that requires a heritage approval).

The proposal is consistent with the objects of the EP&A Act as it is considered to promote the orderly and economic use and development of land without resulting in an adverse impact on the environment. Detailed assessment against the objects of the EP&A act is provided below.

Objective	Comment
(a) To promote the social and economic welfare of the community and a better environment by the proper management, development and conservation of the State's natural and other resources,	The development promotes the social and economic welfare of the community by generating revenue to improve and maintain the Sydney Trains network and provide messages to the community during key periods on behalf of the NSW Government.
(b) to facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment,	This SEE provides information on the relevant economic, environmental and social impacts of the proposed development to enable the consent authority to undertake a thorough environmental assessment and assist in its decision-making on the application.
(c) to promote the orderly and economic use and development of land,	The development promotes the orderly and economic use of the land by providing a new digital advertising sign within an established transport corridor that will provide public benefits including the generation of revenue to contribute to improving and maintaining the Sydney Trains network
(d) to promote the delivery and maintenance of affordable housing,	Affordable housing does not form part of this application.
(e) to protect the environment, including the conservation of threatened and other species of native animals and plants, ecological communities and their habitats,	The development will not impact on any threatened species or other species of native animals and plants, ecological communities and their habitats
(f) to promote the sustainable management of built and cultural heritage (including Aboriginal cultural heritage),	There are no significant historical or Aboriginal, cultural heritage features at the site that will be impacted by the development.
(g) to promote good design and amenity of the built environment,	The development will be located within an established transport corridor. The design of the sign is considered to promote good

Objective	Comment
	design and will not have an adverse impact on the amenity of the surrounding location.
(h) to promote the proper construction and maintenance of buildings, including the protection of the health and safety of their occupants,	The development will be constructed and maintained in accordance with any conditions of approval issued by the consent authority and the relevant requirements that relate to health and safety, construction and maintenance.
(i) to promote the sharing of the responsibility for environmental planning and assessment between the different levels of government in the State,	This SEE is submitted to DPIE to enable an environmental assessment of the application. It is expected that the SEE will be referred by DPIE to other State agencies and Council for further assessment and comment.
(j) to provide increased opportunity for community participation in environmental planning and assessment.	As part of DPIE's assessment of the application, the SEE will be made publicly available and the community, Council and State agencies will be invited to provide comment via a submission on the proposal. Any submissions received will be addressed as part of a Response to Submissions Report.

Table 4: Assessment against Objectives of the EP&A Act

This section of the report provides the planning assessment against the key statutory environmental planning instruments and Development Control Plans relevant to the development. The following detailed assessment of the proposal is provided and which is based on the heads of consideration contained in section 4.15 of the EP&A Act.

Relevant Provision	Comment
(a) the provisions of:	
(i) any environmental planning instrument, and	The relevant environmental planning instruments are addressed at Section 4.
(ii) any proposed instrument that is or has been the subject of public consultation under this Act and that has been notified to the consent authority (unless the Secretary has notified the consent authority that the making of the proposed instrument has been deferred indefinitely or has not been approved), and	The relevant proposed environmental planning instruments are addressed at Section 4
(iii) any development control plan, and	The Hornsby Development Control Plan 2013 is addressed at Section 4.5.
(iiia) any planning agreement that has been entered into under section 7.4, or any draft planning agreement that a developer has offered to enter into under section 7.4, and	No planning agreement or draft planning agreement has been entered into as part of this application.

Relevant Provision	Comment
(iv) the regulations (to the extent that they prescribe matters for the purposes of this paragraph),	The application is consistent with the relevant matters of the EP&A Regulations.
(v) (Repealed)	N/A
(b) the likely impacts of that development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality,	The impacts of the proposal are addressed in Section 5.
(c) the suitability of the site for the development,	Site suitability is addressed at Section 5.5.
(d) any submissions made in accordance with this Act or the regulations,	Any submissions made on this subject development application will be duly considered and addressed by Keylan.
(e) the public interest.	Public interest is addressed at Section 5.6.

Table 5: Section 4.15(1) assessment

4.2 Roads Act 1993

The proposal is located above a public road and therefore requires approval under section 138 of the *Roads Act 1993 (*Roads Act):

> *138 Works and structures*
> *A person must not:*
> *(a) erect a structure or carry out a work in, on or over a public road, or*
> *(b) dig up or disturb the surface of a public road, or*
> *(c) remove or interfere with a structure, work or tree on a public road, or*
> *(d) pump water into a public road from any land adjoining the road, or*
> *(e) connect a road (whether public or private) to a classified road, otherwise than with the consent of the appropriate roads authority.*

The application will be referred to Transport for NSW in accordance with *Section 138 of the Roads Act*. However, pursuant to the provisions of section 4.44, Division 4.8 of the EP&A Act, the subject application is not integrated development as it is made by or on behalf of the Crown.

4.3 State Environmental Planning Policies

The proposal has been designed with regard to the objectives and standards of the relevant planning instruments and policies that apply to the site. Under the provisions of the EP&A Act, the key applicable state environmental planning policies are:

- *State Environmental Planning Policy (Industry and Employment) 2021*
- *State Environmental Planning Policy (Transport and Infrastructure) 2021*

The application of the above plans and policies is discussed in detail in the following sections of this SEE.

4.3.1 State Environmental Planning Policy (Industry and Employment) 2021

State Environmental Planning Policy (Industry and Employment) 2021 (Industry and Employment SEPP) aims to ensure that advertising and signage is well located, compatible with the desired amenity of an area and of high quality. The Industry and Employment SEPP applies to all signage, advertisements that advertise or promote any goods, services or events and any structure that is used for the display of signage.

Regardless of permissibility under the *Hornsby Local Environmental Plan 2013*, the proposed sign is permissible with consent under clause 3.14(a) of the Industry and Employment SEPP as it is on behalf of Sydney Trains and is within a railway corridor. Further, under clause 3.10(c) of the Industry and Employment SEPP, the Minister is the consent authority for the application as it is for an advertisement displayed on behalf of Sydney Trains in a rail corridor.

A comprehensive assessment against the provisions of the *Industry and Employment SEPP* that apply to the development is provided at Appendix 1.

Schedule 5 Assessment

Clause 3.6 of the *Industry and Employment SEPP* requires the consent authority to assess the proposal against the criteria within Schedule 5 prior to granting consent to carrying out of any development on that land. An assessment of these matters is provided in Table 6 below:

Schedule 5	Comment	Compliance
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?	• the scale and visual compatibly of the sign is consistent with the surrounding road and locality • the sign is directly adjacent of the Epping Town Centre pursuant to section 4.1.5 of the Parramatta DCP 2011 and section 4.6 of the Hornsby DCP 2013 • the future character of the locality will be categorised by an urbanised city centre within a transport corridor	Yes

Schedule 5	Comment	Compliance
	• the proposed signage is compatible with the centre as its height and scale generally consistent with the surrounding environment	
Is the proposal consistent with a particular theme for outdoor advertising in the area or locality?	• the immediate locality involves other signs associated with transport, digital advertising signage on an air bridge and business identification signage on the footpaths and buildings • the proposal is consistent with the signage theme within the locality	Yes
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?	• the proposal does not unreasonably impact the amenity of the area • the proposed sign is near the Epping/Eastwood Conservation Area • the view lines to the sign from this area is not direct. The proposal is not expected to detract from the amenity or visual quality of the heritage conservation area • the sign is near to public open space and bowling greens on Blaxland Road and Forest Park Road • Forest Park is a local heritage item under the HLEP 2013. The distance and vegetation between Forest Park and the Site provides appropriate separation which minimises impacts on the landscape item and reduces visual impacts from the public open space	Yes
3. Views and vistas		
Does the proposal obscure or compromise important views?	• the sign is proposed on a railway corridor at Beecroft Road, it will not obscure or compromise important views	Yes
Does the proposal dominate the skyline and reduce the quality of vistas?	• the sign's height is consistent with the surrounding road environment • the sign is proposed within an established road corridor and attached to an existing overpass • the proposed sign will not dominate the skyline or reduce the quality of vistas	Yes

Schedule 5	Comment	Compliance
Does the proposal respect the viewing rights of other advertisers?	• the sign does not unreasonably impact viewing rights of other signs	Yes
4. Streetscape, Setting or Landscape		
Is the scale, proportion and form of the proposal appropriate for the streetscape, setting or landscape?	• the proposal is appropriate for its setting, as it is located within a road and railway corridor	Yes
Does the proposal contribute to the visual interest of the streetscape, setting or landscape?	• the proposal provides for a structure that is nestled into the streetscape setting providing compatibility	Yes
Does the proposal reduce clutter by rationalising and simplifying existing advertising?	• there is no existing signage at the Site	Yes
Does the proposal screen unsightliness?	• the proposal will partially screen the existing safety barriers that are located along the overpass	Yes
Does the proposal protrude above buildings, structures or tree canopies in the area or locality?	• the sign is generally consistent with the height of the surrounding structures • the signs height is consistent with the tree on High Street	Yes
Does the proposal require ongoing vegetation management?	• no vegetation management is required as the sign is sufficiently elevated and setback from the canopy tree located on the Epping Station platform	Yes
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?	• the proposal is compatible with the scale, proportion of the existing overpass and the transport corridor characteristics of the Site that are described within Section 2 of this SEE	Yes
Does the proposal respect important features of the site or building, or both?	• the proposal is attached to an existing overpass • there are no known important features at the Site that will be impacted by the proposed sign	Yes
Does the proposal show innovation and imagination in its relationship to the site or building, or both?	• the proposal will lead to the installation of a digital advertising sign that will provide an innovative design which is compatible with the surrounding buildings and road environment	Yes
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?	• JCDecaux will operate the content management system for the advertising signage	Yes

Schedule 5	Comment	Compliance
	• this management system ensures that unapproved content is not downloaded either by mistake or without appropriate authorisation • a compliant operator logo will be located at the bottom of the screen	
7. Illumination		
Would illumination result in unacceptable glare?	• a Lighting Impact Assessment (LIA) prepared by Electrolight is included at Appendix 4 • the LIA confirms that the proposed digital signage would not result in unacceptable glare or have any detrimental impacts to safety • additionally, the sign complies with all relevant criteria for luminance of digital advertisements	Yes
Would illumination affect safety for pedestrians, vehicles or aircraft?	• the LIA confirms that the sign will not affect the safety for pedestrians, vehicles or aircraft (Appendix 4)	Yes
Would illumination detract from the amenity of any residence or other form of accommodation?	• the LIA confirms that the illumination of the sign will not impact on the amenity of nearby residences or any other form of accommodation when operated at the recommended levels (Appendix 4)	Yes
Can the intensity of the illumination be adjusted, if necessary?	• the brightness of the LEDs will be controlled to provide upper and lower thresholds as required as well as automatically via a local light sensor to adjust to ambient lighting conditions	Yes
Is the illumination subject to a curfew?	• the proposal is consistent with the applicable 'post curfew' illuminance limits established under AS 4282-2019	Yes
8. Safety		
Would the proposal reduce the safety for any public road?	• the proposal would not reduce the safety for any public road. The Signage Safety Assessment (SSA) submitted as part of the application (refer Appendix 3) confirms there is a low risk the proposed sign will distract drivers and that drivers would not need to turn away from their direct line-of-sight to view the full extent of the sign • the SSA confirms that the proposed sign will not distract	Yes

Schedule 5	Comment	Compliance
	drivers from any directional signs, traffic signals, prescribed traffic control devices, regulatory signs or advisory signs • the proposal is not expected to reduce the safety of the Beecroft Road overpass • road safety is discussed in further detail at Section 5.1	
Would the proposal reduce the safety for pedestrians or bicyclists?	• the SSA prepared by TTPP confirms the proposal will not reduce the safety of any public road or reduce the safety of pedestrians or bicyclists	Yes
Would the proposal reduce the safety for pedestrians, particularly children, by obscuring sightlines from public areas?	• the location of the sign on the overpass will not obscure sightlines from any public areas	Yes

Table 6: Schedule 5, Industry and Employment SEPP Consideration

4.3.2 Transport Corridor Advertising and Signage Guidelines 2017

The *Transport Corridor Outdoor Advertising and Signage Guidelines* (Signage Guidelines) sets out a best practice approach for the planning and design of outdoor advertisements in transport corridors in NSW.

The Signage Guidelines have been established to compliment the provisions of Industry and Employment SEPP under the EP&A Act. The DA for any advertising sign that is in, or adjacent to, a transport corridor to demonstrate how the proposal addresses the Signage Guidelines. An assessment against the criteria within Signage Guidelines is provided at Appendix 1 and Section 5.

The assessment provided at Appendix 1 demonstrates the proposal is consistent with:

- the Land Use Compatibility Criteria for Transport Corridor Advertising
- the Digital Sign Criteria
- the Freestanding Signage Criteria
- Road Safety (refer Section 5.1)
- Luminance Levels for Digital Advertisements (refer Section 5.2)
- the Public Benefit Test (refer Section 5.6)

4.3.3 State Environmental Planning Policy (Transport and Infrastructure) 2021

State Environmental Planning Policy (Transport and Infrastructure) 2021 (Transport and Infrastructure SEPP) identifies the environmental assessment category into which different types of infrastructure and services development fall. In addition, the Transport and Infrastructure SEPP identifies those matters that are to be considered in the assessment of development that is adjacent to particular types of infrastructure, including development in and adjacent to road corridors.

Subdivision 2 (2.118) of the Transport and Infrastructure SEPP requires the consent authority to be satisfied that any new development with a frontage to a classified road would not compromise the operation and function of the road. The proposal comprises development with frontage to classified roads of Beecroft and Epping Road.

A Signage Safety Assessment (SSA) has been prepared as part of the application and is included at Appendix 3. The SSA considers the ongoing operation and function of Beecroft Road and Epping Road in context to the development and concludes that the surrounding road environment presents a low-risk environment for the proposed digital advertising sign. road safety is further discussed at Section 5.1.

4.4 Hornsby Local Environmental Plan 2013

The *Hornsby Local Environmental Plan 2013* (HLEP 2013) is the applicable EPI, however the Site is located within the Parramatta LGA following Council amalgamations.

4.4.1 Zoning

The overpass at Beecroft Road is located on land zoned SP2 Infrastructure – Railway Corridor under the HLEP 2013 Signage is prohibited in the SP2 zone under the HLEP 2013. The Site is located on land within the Parramatta LGA, however, shares a zone boundary with the Hornsby Shire LEP. This is demonstrated in Figure 12 and Figure 13.

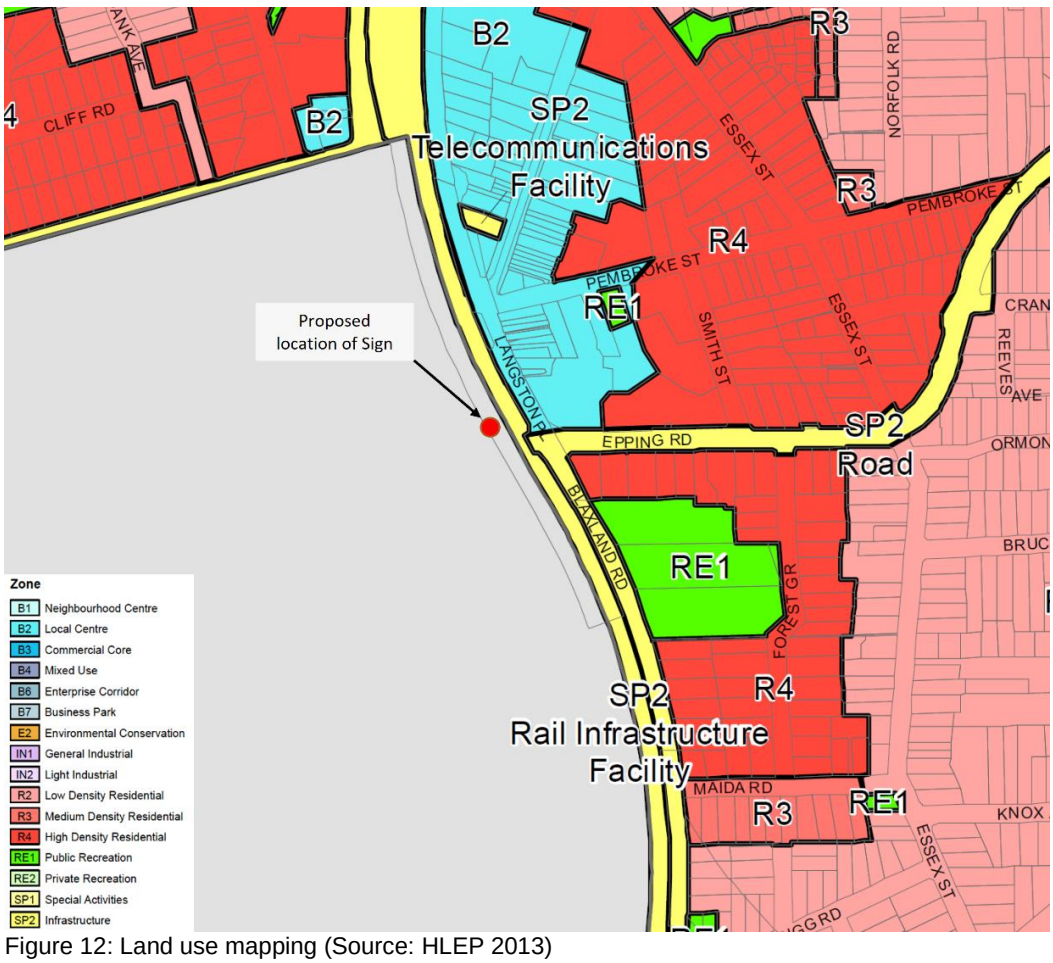

Figure 12: Land use mapping (Source: HLEP 2013)

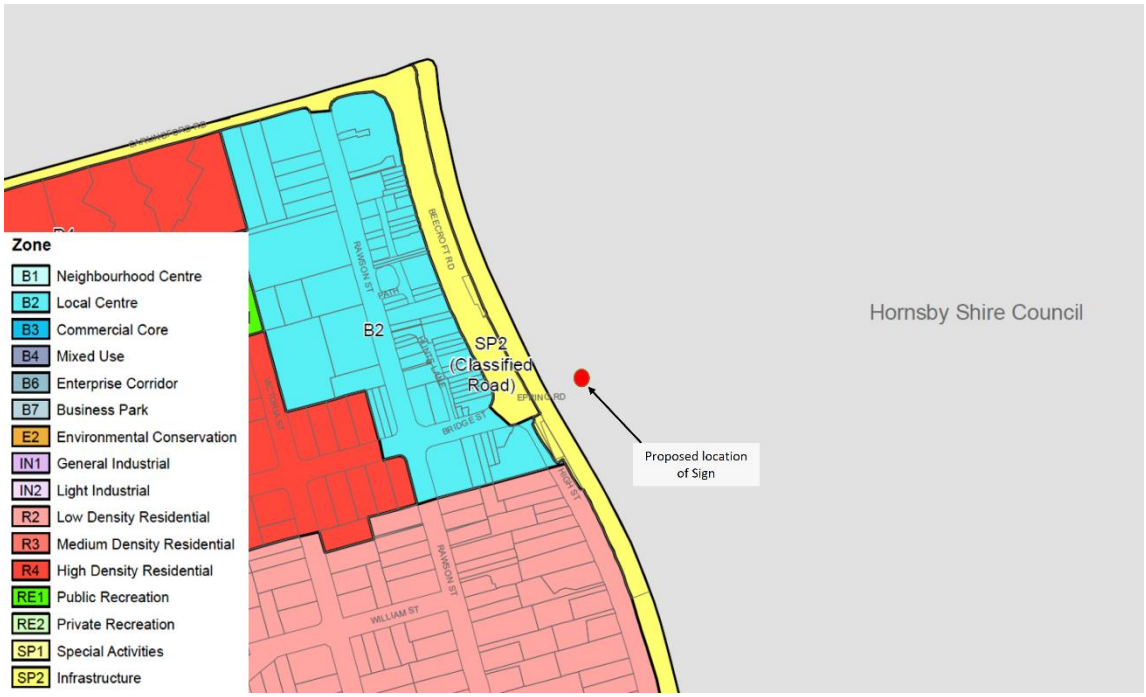

Figure 13: Land use mapping (Source: PLEP 2011)

Notwithstanding, clause 3.14 of the *Industry and Employment SEPP* overrides the provisions of any other environmental planning instrument including the provisions under the HLEP 2013. Consequently, under clause 3.14(1)(a) of the SEPP, the display of an advertisement by or on behalf of Sydney Trains on a railway corridor is permissible with development consent.

4.4.2 Heritage

The Site is not a heritage item or within a conservation area. The Site is identified to be near to two heritage items. 1 item under the *Parramatta Local Environmental Plan (2011)* and 1 item under the Hornsby Local Environmental plan (HLEP 2013). These items being:

- Epping/Eastwood Conservation Area (Significance: Local) (PLEP 2011)
- Forest Park Significance: Local (HLEP 2013)

The proposed works will have an acceptable impact on the heritage significance of the surrounding neighbouring items for the following reasons:

- there will be no impact on the fabric of the item as the site lies well outside the curtilage of the surrounding items and conservation area
- the proposed signage will be sufficiently separated from the items and conservation area so that it is not viewed from the public domain as part of this area
- the proposed signage will not block significant view corridors towards surrounding items and conservation areas as it is located well outside these view corridors
- the proposed signage will be consistent with the setting of the items and conservation area, as a busy commercial and transport corridor

- overall the proposed works will have no impact on the ability of the public to understand and appreciate the historic and aesthetic significance of the items or conservation area

The proposal satisfies the objectives of clause 5.10 of the HLEP 2013 and PLEP 2011 as it has minimal adverse impacts on the heritage significance of the surrounding heritage items, including the associated fabric, settings and views. Heritage is further discussed in Section 5.3.

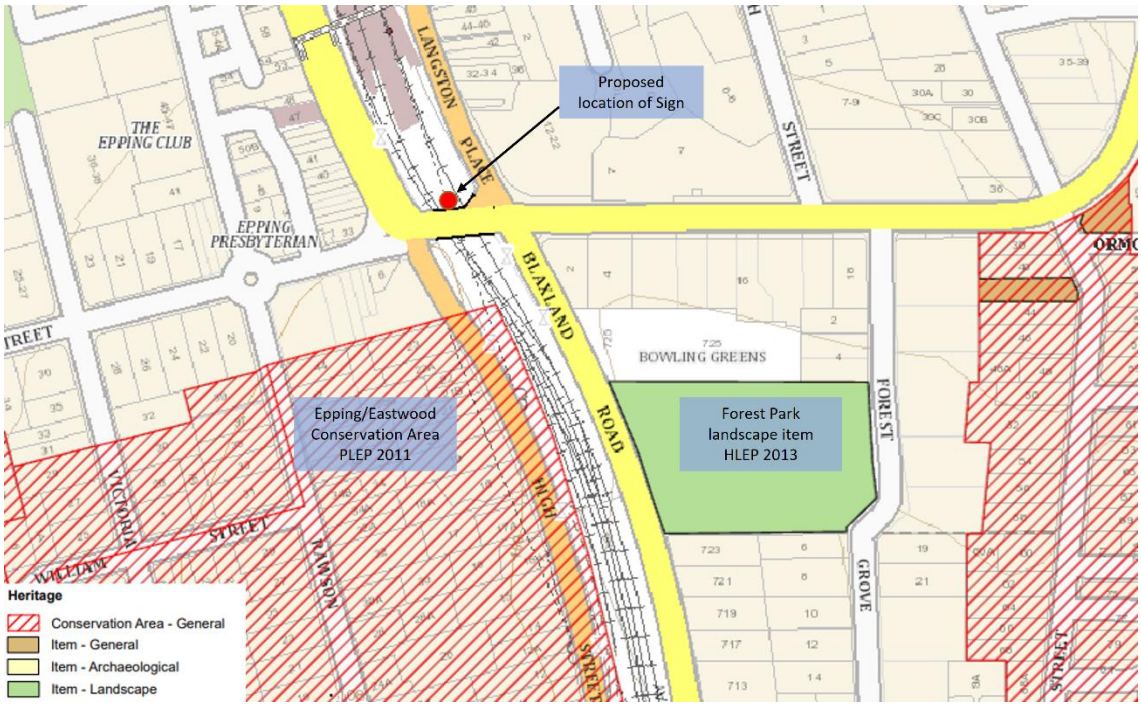

Figure 14: Heritage map (Source: E-Planning Portal)

4.5 Hornsby Development Control Plan 2013

The proposal is generally in compliance with the aims, objectives and key provisions of the DCP. In areas of non-compliance the proposal has been well justified as detailed in this SEE.

A detailed assessment of the proposal against the relevant provisions of the DCP is provided in the table below:

Provision	Comment	Complies
1C.2.11 Signage		
Signs should be designed and located to: • relate to the use of the premises, • be consistent with best practice guidelines, • be integrated with the architecture of the supporting building, not obscure significant architectural features and maintain the dominance of the architecture, • be limited in number to avoid cluttering, distraction and unnecessary repetition, • not cover mechanical ventilation inlets or outlets, • not comprise a roof sign, • not compromise road or pedestrian safety, • be a minimum of 2.6 metres above any footpath • where the sign is not flush with the wall, and • be at least 600mm from a kerb or roadway edge where the sign is over a public road.	• the signage relates to the railway corridor and is on behalf of Sydney Trains • the signage is consistent with the Signage Guidelines and the Industry and Employment SEPP • a detailed assessment against Schedule 5 of the Industry and Employment SEPP is provided at Appendix 1 • the SSA at Appendix 3 confirms the sign will have an acceptable impact on road safety • the sign is located 3.39 m above the footpath, consistent with the control • Appendix 2 and Figure 8 show that the sign is located 600mm from the roadway edge	Yes
b. In addition to the above, illumination of signage should: • be integrated with the design of the sign, • not cause light spillage into nearby residential properties, • not use complex displays, moving signs, flashing lights or the like that hold driver's attention beyond 'glance appreciation', and	• the proposal will be for fixed digital images that to ensure advertisements cannot distract drivers • a SSA and LIA is provided with the application • these documents confirm that the proposal has an acceptable impact on road safety and illumination	Yes

Provision	Comment	Complies
• be fitted with an automatic timing device, controlling the illumination hours		
c. In residential zones, signage should not be illuminated.	• the sign is located a transport corridor • an LIA is provided at Appendix 4 confirming the illumination levels are consistent with the relevant guidelines	Yes
d. All commercial advertising should comply with SEPP No.64-Advertising and Signage.	• the proposal is located on a transport corridor and has been assessed against the provisions of the Industry and Employment SEPP	Yes

Table 7: Hornsby Shire DCP Assessment

5 Environmental Planning Assessment

5.1 Road safety

A Signage Safety Assessment (SSA) has been prepared by The *Transport Planning Partnership* (TTPP) (Appendix 3). The SSA considers the signage exposure and road accident history and has been prepared having considered the requirements for road safety set out in the Signage Guidelines.

5.1.1 Road environment

The existing road environment along Beecroft Road and Epping Road in proximity to the Epping Road overpass is summarised in Table 8.

Existing Feature	Description
Road classification	• Beecroft Road and Epping Road is a classified State road (Road 139).
Speed limit	• on approach to the overpass the posted speed limit is 60 km/h, decreasing to 25km/h traversing the overpass
Nearby intersections and traffic control devices	• no intersections, crossing, merge points or critical traffic control devices are located within the Stopping Sight Distance (SSD) of the sign
Road configuration and geometry	• dual carriageway is located on the overpass
Crash data	• there was a total of five incidents recorded during this period • two crashes were recorded on Epping Road east approach within the visible distance on approach towards the sign • these were rear-end collisions which resulted in a moderate injury and vehicle being towed-away
Pedestrian and cyclist infrastructure	• pedestrian footpaths are along the overpass • the sign is elevated approximately 3.39m above the footpath, clear of any pedestrian or cyclist infrastructure
Parking	• no parking is permitted across the overpass • parking is permitted on High Street, and further down Langston Road and Blaxland Road
Stopping sight distance (SSD)	• a 60 km/h speed has been adopted by the SSA based on the signposted speed limit on Beecroft Road and Epping Road • the minimum SSD for a 60km/h speed limit is 64m based on the Austroads guidelines • the sign is not proposed within the SSD of any intersections or traffic control devices (discussed further at Section 5.1.4).

Table 8: Existing road environment (Source: TTPP)

5.1.2 Signage exposure

The SSA estimates that the proposed digital sign would be visible to traffic Epping Road from 150 m on the east approach as shown in Figure 15. The SSA identifies the sign exposure from the east approach, outlining the sign will be visible from 3 lanes (Figure 16). The key findings are summarised below:

- The digital sign would be visible to motorists on Epping Road travelling in the westbound direction.
- Treating the observed conditions during the site inspections as typical conditions in the area, the digital sign would likely be visible in travel lanes as follows:
  - in Lane 1 (left-turn lane to Blaxland Road), 150 m from the sign on approach
  - in Lane 2 (through lane), 150 m from the sign on approach
  - in Lane 3 (through lane), 150 m from the sign on approach

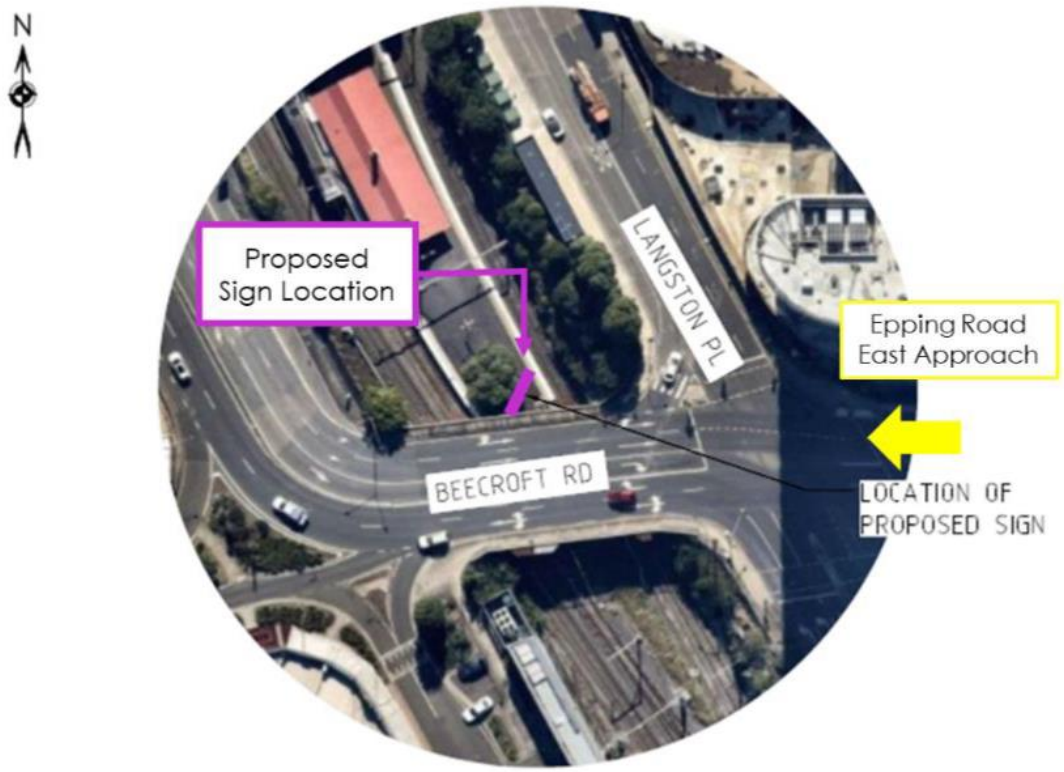

Figure 15: Signage exposure distance (Source: TTPP)

Figure 16: Indicative view from approximately 150 m – east approach (Source: TTPP)

5.1.3 Road accident history

Historic crash data has been obtained from Transport for NSW (TfNSW) and assessed for incidents along Epping Road within the visible distance of the proposed sign and the intersection of Epping Road, Beecroft Road, Blaxland Road, and Langston Place. Based on site observations, the proposed digital sign would be visible from up to 150 m away.

Crash history data has been assessed on Epping Road east approach towards the proposed digital sign for the most recent five-year period for data collated and published by TfNSW. This period is between 1 January 2016 and 31 December 2020.

There was a total of five incidents recorded during this period. Two crashes were recorded on Epping Road east approach within the visible distance on approach towards the sign. These were rear-end collisions which resulted in a moderate injury and vehicle being towed-away.

At the intersection, there were three crashes recorded where the vehicles involved were turning onto Beecroft Road. Two of these incidents involved a vehicle travelling straight on Blaxland Road south approach and a vehicle turning right from Langston Place north approach (towards Beecroft Road). In June 2018, the intersection was upgraded which included the removal of the right-turn movement from Langston Place north approach to Beecroft Road west approach. Hence, such crashes would not occur in the future.

The last incident was a rear-end collision on Blaxland Road south approach while a vehicle was waiting in the left-turn lane (Lane 1). The proposed digital sign would not be visible to motorists in Lane 1 on Blaxland Road as visibility would be obstructed by fencing located along the railway corridor boundary. The proposed digital sign would not exacerbate the likelihood of crashes in such location.

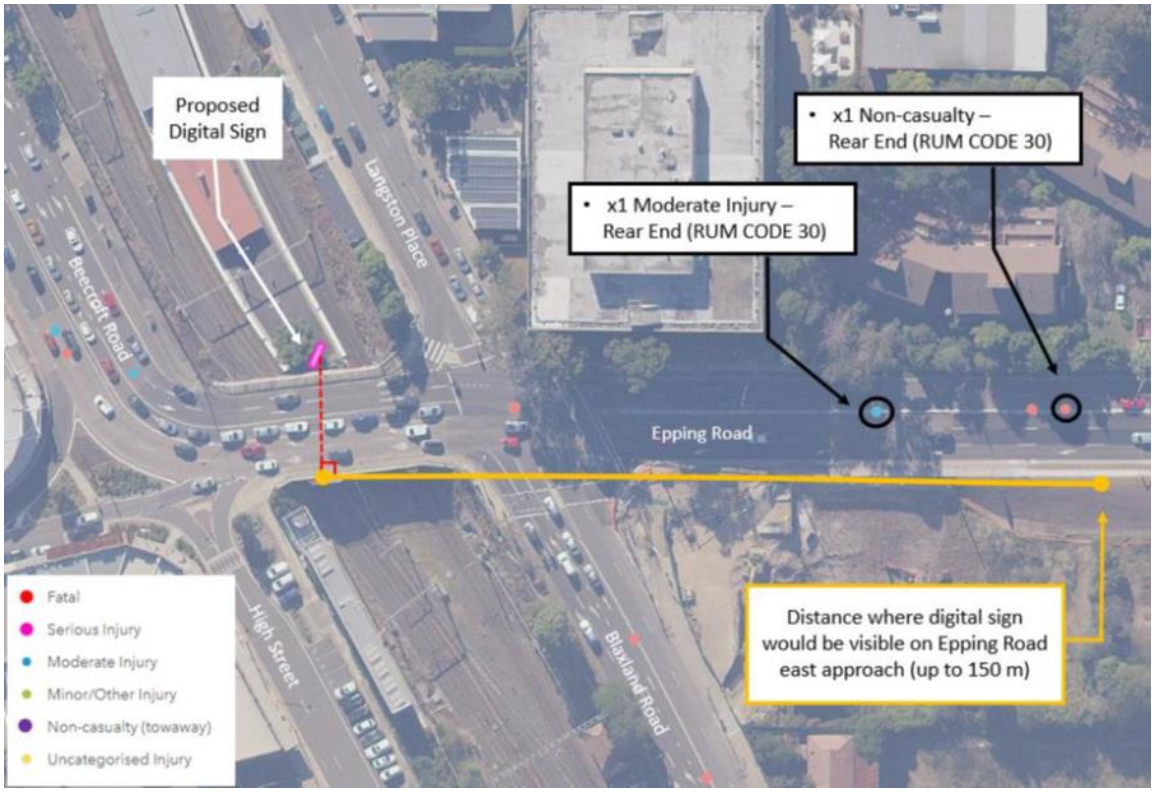

Figure 17: Historical crash data in proximity to the site (Source: TTPP)

5.1.4 Stopping sight distance

A 60 km/h speed has been adopted by the SSA based on the signposted speed limit on Beecroft Road and Epping Road as well as the speed limit which motorists were observed to be driving during the site inspection. The minimum SSD for a 60km/h speed limit is 64 m based on the Austroads guidelines.

The proposed digital sign would be located beyond the stop line at the Epping Road east approach. Therefore, the digital sign would not be located within the SSD of the stop line at the Epping Road, Beecroft Road, Blaxland Road and Langston Place intersection as shown in Figure 18.

Figure 18: Minimum Safe Stopping Sight Distance (Source: TTPP)

5.1.5 Road safety criteria – Signage Guidelines

The SSA includes an assessment of the proposal against the criteria for road safety set out under Section 3 of the Signage Guidelines.

Responses provided in the SSA in respect to the sign location criteria (Section 3.2) and the sign design and operation criteria (Section 3.3) of the Signage Guidelines is outlined in Table 9 and Table 10.

Sign Location Criteria	Response provided by TTPP	Compliance
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*	*The proposed digital sign would be installed on a column (a monopole-like structure) where the base of the column is fixed on Platform 1-2 of Epping railway station and the digital display would be erected 3.39 m above the road surface level on Beecroft Road bridge.* *The edge of the proposed sign would be offset 0.6 m from the edge of the pedestrian footpath on the bridge, and 2.6 m from the edge of the carriageway on Beecroft Road. Hence, the sign would not protrude over the pedestrian footpath and carriageway. The sign would not physically obstruct any vehicle, pedestrian, and cyclist movements.*	✓

Sign Location Criteria	Response provided by TTPP	Compliance
corridor so it could be hit by trucks or wide vehicles?	*The concept design for the proposed sign and its positioning on the north side of Beecroft Road are provided 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 supplements) or behind an RMS approved crash barrier.*	*The Austroads Guide to Road Design Part 6 states that a clear zone is the area adjacent to the traffic lane that should be kept free from features that would be potentially hazardous to errant vehicles.* *The Guide also acknowledges that it may not be possible to physically provide clear zone at every location particularly in well-established urban environments. The proposed digital sign is located within an urban area where there is kerb and guttering which would redirect an errant vehicle. Furthermore, it is a low-speed environment with an advisory speed limit of 25 km/h on approach to this location. Based on the above, the proposed digital sign is considered to be in an acceptable location.*	✓
c. *Where a sign is proposed within the clear zone but behind an existing RMS-approved crash barrier, all its structures up to 5.8m in height (relative to the road level) are to comply with any applicable lateral clearances specified by Austroads Guide to Road Design (and RMS supplements) with respect to dynamic deflection and working width.*	*As discussed above, the digital sign is located within a well-established urban area where a clear zone has not been provided. Notwithstanding, the proposed digital sign is located within an urban area where there is kerb and guttering which would redirect an errant vehicle. Furthermore, it is a low-speed environment with an advisory speed limit of 25 km/h on approach to this location.* *The sign screen display would be laterally offset 2.6 m from the edge*	✓

Sign Location Criteria	Response provided by TTPP	Compliance
	of the carriageway and 3.39 m above the road surface level on Beecroft Road.	
d. *All signs that are permitted to hang over roads or footpaths should meet wind loading requirements as specified in AS 1170.1 and AS1170.2. All vertical clearances as specified above are regarded as being the height of the sign when under maximum vertical deflection.*	*The proposed digital sign would not hang over the road or footpath on Beecroft Road. As part of the detailed design phase, the digital sign would be designed in accordance with Australian Standards AS1170.1 and AS1170.2 to meet the requirements for wind loading, whilst having consideration for height of the sign boards when under maximum vertical deflection.*	✓
Additional road clearance criteria for digital signs		
Digital signs greater or equal to 20sqm must ensure the following clearances: a. *2.5m from lowest point of the sign above the road surface if located outside the clear zone*	*These requirements are noted.* *It is noted that the sign is less than 20 square metres.*	✓
b. *5.5m from lowest point of the sign above the road surface if located within the clear zone or the deflection zone of a safety barrier, if installed.*		✓
Line of sight		
a. *An advertisement must not obstruct the driver's view of the road, particularly of other vehicles, bicycle riders or pedestrians at crossings.*	*The proposed digital sign would be positioned on the north side of the Beecroft Road bridge and would not extend over the carriageway and adjacent footpath.*	✓
b. *An advertisement must not obstruct a pedestrian or cyclist's view of the road.*	*The proposed digital sign would not obstruct pedestrian or cyclist's view of the surrounding road network.*	✓
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 sign would be located beside the carriageway and elevated above the level of vehicles on the carriageway. There would be clear definition between the proposed digital sign and the surrounding road network which would not provide misleading information on the roadway alignment.*	✓
d. *The advertisement should not distract a driver's attention away from the road environment for an*	*The proposed digital sign would be located within the motorists' peripheral view when travelling on*	✓

Sign Location Criteria	Response provided by TTPP	Compliance
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 reflections 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 headlight 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.*	*Epping Road/ Beecroft Road westbound (for which the sign is intended).* *Motorists would not be required to turn their heads when observing the sign and would be able to view the road and sign simultaneously.* *The sign would be angled away from the Blaxland Road south approach, and therefore, the sign display would not be visible to motorists on this approach. Furthermore, visibility of the sign structure would be obscured by fencing located along the railway corridor boundary.* *The positioning and angle of the sign would not be expected to result in headlight reflection or glare for vehicles on approach to the sign.*	
Proximity to decision making points and conflict points		
a. The sign should not be located: *i. less than the safe sight distance from an intersection, merge point, 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 referenced in the Austroads Guide to Road Design, Part 3, sight distance refers to the distance required to enable a driver to react and stop before reaching a hazard. This distance is dependent on the operating (85th percentile) speed of the road, road gradient and other road characteristics.* *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 signposted speed limit on Epping Road and Beecroft Road. Also, it is the speed which motorists were observed to be driving during the site inspection. According to the Austroads guide, the minimum safe*	✓

Sign Location Criteria	Response provided by TTPP	Compliance
	stopping sight distance for a 60km/h speed zone is 64 m. *The proposed digital sign would be located beyond the stop line at the Epping Road east approach. Therefore, the digital sign would not be located within the SSD of the stop line at the Epping Road – Beecroft Road – Blaxland Road – Langston Place 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 6-9m) 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 proposed digital sign would be positioned beyond the traffic signals at the Epping Road east approach. As such, the proposed digital sign would not obstruct the motorist's view of traffic signal lanterns at any time.*	✓
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 is an existing digital sign located on the pedestrian overpass above Beecroft Road. However, the existing digital billboard sign would be spaced 180 m away from the proposed digital sign. Due to the alignment of Beecroft Road, motorists would not be able to view the proposed digital sign and existing digital sign at the same time.*	✓

Table 9: Sign location criteria – Section 3.2 of the Signage Guidelines (Source: TTPP)

Sign Design and Operation Criteria	Response provided by TTPP	Compliance
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.	*Regulatory and warning signage are currently present at the Beecroft Road – Epping Road – Blaxland Road – Langston Place intersection facing Epping Road east approach.The proposed digital sign is located on the far side of the road carriageway and thus would not obstruct or reduce the visibility of the regulatory, advisory and warning signs.*	✓

Sign Design and Operation Criteria	Response provided by TTPP	Compliance
b. *The advertisement must not interfere with stopping sight distance for the road's design speed or the effectiveness of a prescribed 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 are not yet known since the project is still within the concept design stage. However, the sign content would not display colours and shapes which could be mistaken for a traffic signal or traffic signs. It is recommended that the content of the proposed sign be reviewed against Table 5 of the Guidelines to avoid any content that may be construed as imitating a traffic control device.*	✓
Additional criteria for digital signs and moving signs		
a. *The image must not be capable of being mistaken:* *i. for a rail or traffic sign or signal because it has, e.g. 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* *ii. as text providing driving instructions to drivers.*	*This criterion relates to signage content and should be considered once the signs are in operation. The criterion could be included in the Consent Conditions.*	✓
b. *The amount of text and information supplied on a sign should be kept to a minimum (e.g. no more than a driver can read at a short glance).*	*This criterion relates to signage content and should be considered once the sign is in operation. The criterion could be included in the Consent Conditions.*	✓
Dwell time and transition time – criteria for digital signs		
a. *Each advertisement must be displayed in a completely static manner, without any motion, for the approved dwell time as per criterion (b) below.*	*Based on the NSW Guidelines, the minimum dwell time for content displayed on the digital sign would be 10 seconds. Notwithstanding this, increasing the minimum dwell time could be considered a measure to mitigate any preserved safety risk of the proposed sign located in the vicinity of traffic signals.* *Thus, it is suggested that the dwell time is increased to a minimum of*	✓
b. *Dwell times for image display must not be less than:* *i. 10 seconds for areas where the speed limit is below 80km/h.*		✓

Sign Design and Operation Criteria	Response provided by TTPP	Compliance
ii. 25 seconds for areas where the speed limit is 80km/h and over	*15 seconds for the sign. The basis for this recommendation is the Land and Environment Court Case, Outdoor Systems Pty Ltd v Georges River Council and Roads and Maritime Services [2017] NSWLEC 1505. In this case, a digital sign was proposed to be installed at the intersection of the Princes Highway and Rocky Point Road in Kogarah. The applicant proposed to modify the dwell time of the digital signage to 15 seconds (from 24 hours, as previously approved by RMS as the minimum dwell time). The LEC deemed the reduced dwell time to 15 seconds appropriate on the basis that the crash history at the proposed signage location did not suggest that it was a "crash hotspot". This decision was driven by expert evidence provided by registered psychologist and RMS accredited Level 3 Road Safety Auditor, Carolyn Samsa, who spent five years working in the NSW Centre for Road Safety at the RTA and nine years in the industry advising associations representing outdoor advertising.* *The LEC decision was further supported by the fact that during a 3-month period where the digital signage operated with a 10 second dwell time, there were no crashes reported in the vicinity of the sign. Furthermore, it was acknowledged in the court case that there were other digital billboards that were previously approved and operational at signalised intersections within the Sydney basin with dwell times of approximately 10 seconds and yet there were no reported incidents of drivers being distracted by these signs as far as Samsa had been aware.* *On this basis, a dwell time of 15 seconds, a five second increase on the minimum 10 seconds dwell*	

Sign Design and Operation Criteria	Response provided by TTPP	Compliance
	time prescribed by the Guidelines, is deemed to be an appropriate measure for consideration.	
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.	*The proposed digital sign is not visible from any school zones*	✓
d. Digital signs must not contain animated or video/movie style advertising or messages including live television, satellite, Internet or similar broadcasts.	*The digital sign is proposed to contain text and images, which would be in a static manner without any motion for this dwell time. The transition between content would be almost instantaneous.*	✓
e. The transition time between messages must be no longer than 0.1 seconds, and in the event of image failure, the default image must be a black screen.	*The sign would have an almost instantaneous transition no longer than 0.1 seconds.*	✓

Table 10: Sign design and operation criteria – Section 3.3 of the Signage Guidelines (Source: TTPP)

5.1.6 Road safety summary

Road safety impacts have been comprehensively assessed as part of the application in accordance with the requirements of *Industry and Employment SEPP* and the road safety criteria set out in the Signage Guidelines.

The SSA has determined the proposed sign will not compromise safety for road users in the vicinity. The following findings and conclusions are made from the signage safety assessment:

- the proposed sign on the north side of Beecroft Road bridge would face the Epping Road east approach
- two crashes have occurred within the visible distance of the proposed digital sign in the most recent five years
- the proposed digital sign would not be located within the safe stopping sight distance to the traffic signals, crossings, or warning signage
- the proposed sign would not obstruct/reduce visibility of any traffic control devices, signage, pedestrians, or cyclists
- the proposed signage would not give incorrect information on the road alignment
- given that the proposed sign is located within close proximity to traffic signals, it is recommended to increase the minimum dwell time from 10 seconds to 15 seconds

Having consideration for the SSA and discussions presented within this report, the analysis suggests that the installation of one digital sign on the north side of Beecroft Road would be acceptable.

5.2 Illumination

The proposed sign will be illuminated using LEDs installed within the front face on a 24 hour, 7 days per week basis. The brightness of the LEDs shall be controlled to provide upper and lower thresholds (as required) and will include a light sensor to automatically adjust the brightness of the display area to adjust to ambient lighting conditions.

A Lighting Impact Assessment (LIA) has been prepared by Electrolight (Appendix 4). The LIA has assessed the proposal against the illumination criteria under:

- Industry and Employment SEPP
- Signage Guidelines
- AS 4282-2019 Control of the Obtrusive Effects of Outdoor Lighting

5.2.1 Illumination criteria – Signage Guidelines

Section 3.3.3 of the Signage Guidelines sets out the illumination criteria for digital signs. The LIA has categorised the site as being within Zone 4 of the Signage Guidelines, which is described as areas with generally low levels of off-street ambient lighting (e.g. most rural areas or areas that have residential properties nearby).

The luminance levels for digital advertisements that are within a Zone 4 environment, as outlined in the Signage Guidelines, are shown in Table 11.

Lighting Condition	Max Permissible Luminance for Zone 4 (cd/sqm)	Complies
Full sun on face of signage	No limit	✓
Daytime luminance	6000	✓
Morning and evening twilight and inclement weather	700	✓
Night time	350	✓

Table 11: Luminance levels for digital advertisements criteria – SEPP 64 Guidelines

The LIA confirms that the sign, once illuminated to the maximum luminance, will be visually consistent with the existing ambient lighting and is therefore suitable for the local area. It is noted that the maximum luminance limit during the night time period will not exceed the recommended maximum permissible luminance level set out in the Signage Guidelines of 350 cd/sqm for Zone 4.

5.2.2 AS 4282-2019 Control of the Obtrusive Effects of Outdoor Lighting

The Control of the Obtrusive Effects of Outdoor Lighting (AS 4282-2019) sets out limits for different obtrusive factors associated with the night time operation of outdoor lighting systems. The LIA has undertaken an assessment of the sign during the 'post-curfew' period (11 pm to 6 am), which is considered the most obtrusive night time period and generally when residents are trying to sleep.

The LIA has categorised the nearest residential properties as all being within Environmental Zone A4 of AS 4282-2019, which is described as having high district brightness (e.g. town and city centres, commercial areas, and residential areas abutting commercial areas). Lighting impacts on the four nearest residential buildings with potential views to the sign are assessed. The location of the nearest buildings is shown in Figure 19.

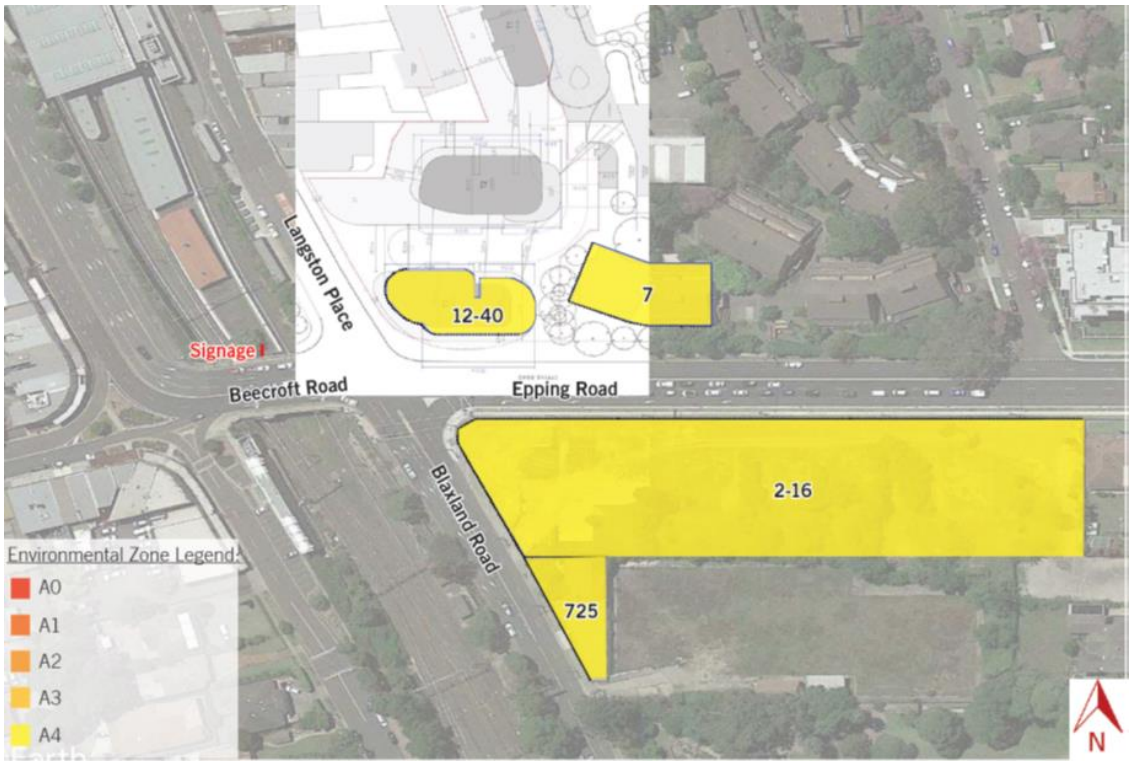

Figure 19: Location of assessed residential properties (Source: Electrolight)

The maximum lighting limits for Environmental Zone A4 during the pre-curfew and post-curfew periods, as set out in AS 4282-2019, is shown in Table 12. Table 13 shows the nearest receivers and the LIA's assessment of the sign on these receivers.

Environmental Zone	Maximum vertical illuminance (lux)		Complies
	Pre-curfew	Post-curfew	
A4	25	5	✓

Table 12: Maximum lighting limit (post-curfew)

Address	Zone
12-40 Langston Place	A4
725 Blaxland Road	A4
2-16 Epping Road	A4
7 Epping Road	A4

Table 13: Table of residential receivers (Source: Electrolight)

The LIA modelled the light spill from the proposed sign based on the proposed maximum night time illumination level of 350 cd/sqm. It is noted that some of the residential properties are shielded by mature vegetation which will obstruct any spill light from the signs.

Notwithstanding, the model results presented in the LIA are provided on the assumption that there was no vegetation present at the site, in accordance with AS 4282-2019.

The modelling finds the nearest potentially affected residential properties a unit at 12-40 Langston Place is the maximum affected dwelling is of 2.2 Lux during the post-curfew which is below the maximum vertical illumination level of 5 lux.

Consequently, the sign demonstrates an acceptable level of compliance with the maximum night time illumination criteria specified under AS 4282-2019.

5.2.3 Illumination summary

The LIA recommends the Applicant ensure that the average luminance difference between successive images do not exceed 30 per cent to ensure compliance with AS 4282-2019 and for the dwell time to not exceed 10 seconds or greater. The LIA also recommends baffles or any other upward light mitigation technology to ensure compliance with AS4282. The Applicant has committed to these recommendations.

In summary, the LIA determines that the sign:

- the proposed digital signage has been found to comply with all relevant requirements of AS 4282-2019 Control of the Obtrusive Effects of Outdoor Lighting
- the proposed digital signage should not result in unacceptable glare nor should it adversely impact the safety of pedestrians, residents or vehicular traffic
- the signage should not cause any reduction in visual amenity to nearby residences or accommodation

5.3 Heritage

The Site is near a local heritage item and conservation area listed under Schedule 5 of the PLEP 2011 and HLEP 2013 (Figure 20). These are:

- Epping/Eastwood Conservation Area, local (PLEP 2011)
- Forest Park. Local landscape item number 359 (HLEP 2013)

The Forest Park is located approximately 190 m southeast of the Site. The Epping/Eastwood Conservation Area is located approximately 60 to 100 m south of the Site.

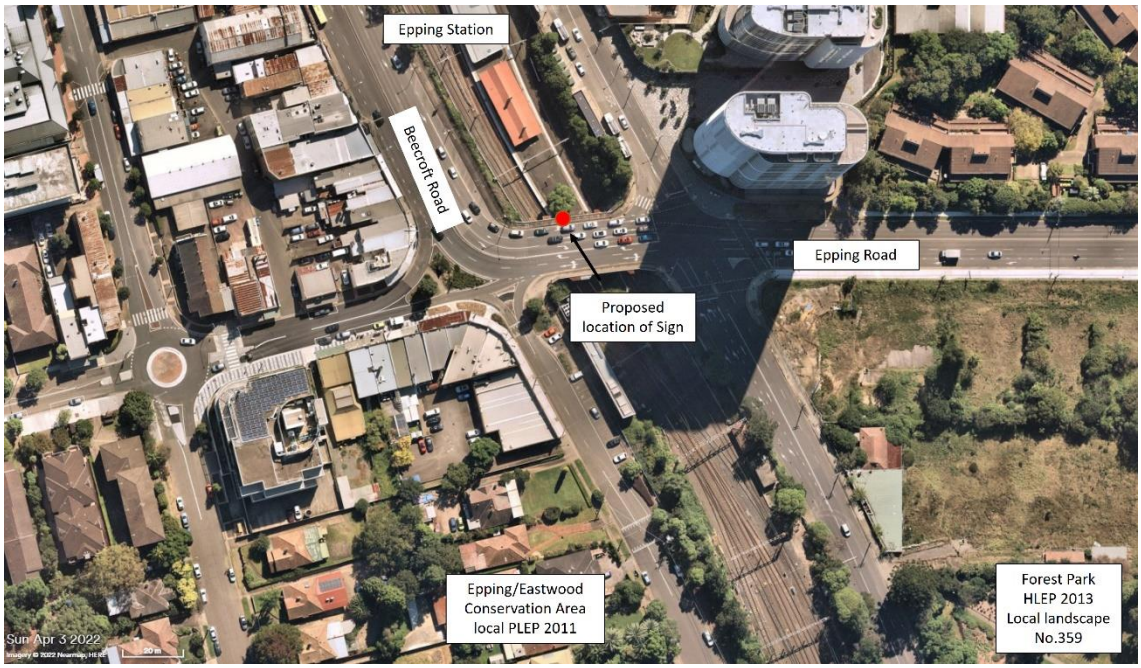

Figure 20: Heritage locality map (Base Source: Six Maps)

The visibility of the sign to the heritage landscape item and conservation area is restricted primarily due to the aspect and direction of the sign from these locations. View lines are not direct to the sign as these items are located southeast and south west of the sign. The sign will have negligible impact on these items as the distance separating these elements and visual barriers located along each corridor provides for appropriate relief.

The illuminance of the proposed sign will be calibrated to the levels recommended in the LIA, which is an acceptable level that does not introduce any lighting impacts upon the heritage item.

The proposal is not expected to have any additional adverse impact on the heritage significance, associated fabric, settings or views of the surrounding heritage items. Specifically, the proposal will not impact the role of the heritage items in maintaining historic aesthetically built environments and heritage landscape.

5.4 Visual Impacts

A detailed Visual Impact Assessment (VIA) prepared by Keylan is included at Appendix 6. The VIA assesses the impact of the proposed installation and operation of a new freestanding digital advertising sign on the north aspect of the Beecroft Road and Epping Road overpass, located in Epping.

The VIA considers 5 viewpoints from a variety of locations including surrounding residential receivers, mixed use locations and public open space. The viewpoints are identified in Figure 21. The assessment of viewpoints concludes that visual impacts from most locations within the immediate vicinity were minimal due to:

- the sign does not result in visual clutter given there is no signage on the overpass and it is sufficiently separated from existing signage
- the signs' location within the transport corridor is appropriate and has low impact on the residences located immediately east, southeast and south-west
- the visual impact of the sign on pedestrians is low given the locality is a highly urbanised precinct that supports commercial spaces, entertaining businesses and is transitioning into a more intensive urbanised precinct
- the sign is located within a future town centre that is going through a densification process and is appropriately located
- the proposal will not unreasonably impact streetscape characteristics or detract from the road environment

Overall, the VIA concludes the proposal will result in an acceptable visual impact on the surrounding locality.

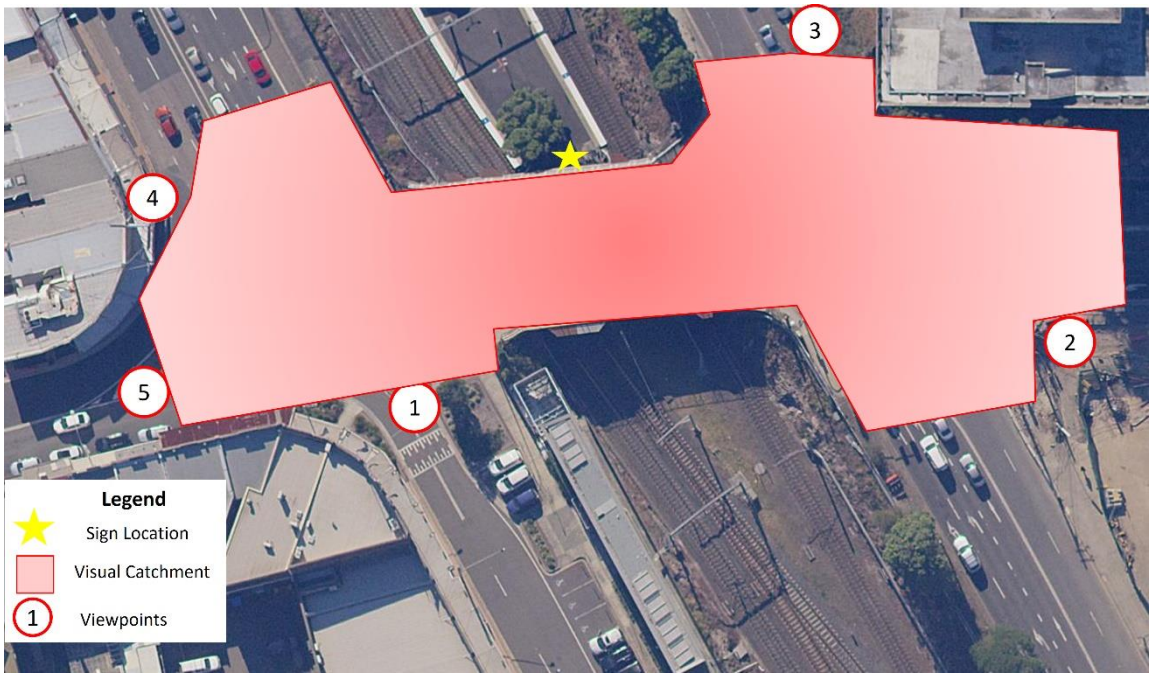

Figure 21: Locality Map of surrounding visual receivers (Base Source: Six Maps)

Visual impact summary

This SEE has considered the visual impacts of the proposal and in summary, the proposal is assessed as having a minor and acceptable visual impact on the surrounding area, on the basis that:

- the proposal does not result in any visual clutter as the sign will be a standalone sign on the Beecroft Road and Epping Road overpass
- the proposal has low visual impacts on the nearest residential development and item of heritage
- the presence of mature trees and vegetation along the road corridor will restrict views of the sign from surrounding land uses
- the proposal is integrated within the visual envelope of the bridge and will not extend outside of the structural boundaries of the Beecroft Road and Epping Road overpass and will therefore not obstruct a view line or any significant views
- the installed digital advertising sign will enhance the visual interest of the Beecroft Road and Epping Road overpass through the presentation of high resolution static digital advertisements
- the proposal is considered appropriate for its setting, as it is located within an established major road corridor
- surrounding residential receivers south will have negligible impacts
- residential receivers east and west in future R4 developments and the Epping town centre will have negligible to moderate to visual impacts

5.5 Site suitability

The Site is a suitable location for the provision of digital advertising signage on the basis that:

- the proposal is compatible with the existing and desired future character of the area, noting that the advertising sign is proposed on a rail corridor
- there will be no impact on any significant European or Aboriginal cultural heritage items or heritage conservation zones
- there will be minimal visual impacts on sensitive land uses at Forest lodge Park or the surrounding heritage conservation area
- detailed investigations of the road network have determined that the development will not impact on the continued and safe operation of Beecroft and Epping Road in its function as a classified road
- the illumination of the sign will not result in unacceptable glare or adversely lead to an unacceptable impact on the visual amenity of surrounding residences or heritage items
- the development fully complies with the relevant statutory and policy provisions that govern outdoor advertising signage and LED technology in NSW

Further to the above, the Site is an effective location for outdoor advertising that will generate revenue to the benefit of the local community. The public benefits of the proposal are discussed in further detail at Section 5.6.

5.6 Public benefit

In accordance with the Signage Guidelines, an application for digital advertising that is proposed by Sydney Trains is to demonstrate how the local community will benefit from the proposal, such as railway station upgrades, rail crossings or amenity improvements along rail corridors including landscaping, litter removal or vandalism and graffiti management.

A Public Benefit Statement prepared by Sydney Trains is included as part of the application (Appendix 5). The statement confirms that part of the revenue generated by the proposed advertising signage will help fund essential Sydney Trains services to the benefit of the local community, including:

- benefit to the community including emergency messaging and announcements
- revenues to be directed by Sydney Trains into rail services and infrastructure projects
- emergency messaging and public service announcements (including alerts by NSW Government, Emergency Services and Police)
- community event announcements, including Sydney Trains, NSW Trains and TfNSW promotion and events (5 min per hour dedicated to Sydney Trains)

The proposed new digital advertising signage will be capable of providing public benefit through availability to be used for an emergency or community message (e.g. display of information relating to major disruption to the operation of the surrounding road network which is likely to cause delays to traffic or emergency information). The emergency messaging system may in the future be available to Sydney Trains and other NSW Government agencies such as NSW Police, NSW Health and Transport for NSW.

Accordingly, the application addresses the public benefit test outlined in the Signage Guidelines through the provision of funding toward improvements to the Sydney Trains network and direct messaging to the community.

6 Conclusion

This SEE supports a DA for the installation of a new digital advertising sign on the northern elevation of Beecroft Road an Epping Road overpass in Epping

The sign is proposed to comprise an advertising display area of approximately 14.93 m^2. The sign will be visible to motorists travelling on the east approach from Epping Road.

Following a detailed consideration of the proposal in its legislative and physical context, this SEE determines that the proposal:

- meets the objectives of the *Industry and Employment SEPP* as it is compatible with the amenity and visual character of the surrounding area
- demonstrates compliance with the assessment criteria set in Schedule 5 of the *Industry and Employment SEPP*
- demonstrates compliance with the criteria set out in the Signage Guidelines in regard to land use compatibility, digital signage, road safety and illumination requirements and the public benefit test
- will not impact on any items of European or Aboriginal heritage
- will be of high-quality design and finish and will provide visual interest for motorists using Beecroft Road and Epping Road
- will be in the public interest as the revenue that is generated by the advertising signage will be used by Sydney Trains to improve the network through projects such as railway station upgrades, rail crossings or amenity improvements along rail corridors including landscaping, litter removal or vandalism and graffiti management

In consideration of the above, it is considered that the digital advertising sign will not have an adverse impact on the environment or on the safety of road users and therefore warrants approval.

Appendix 1

Industry and Employment SEPP & Transport Corridor Advertising and Signage Guidelines Assessment

Appendix 2

Architectural Drawings

Appendix 3

Signage Safety Assessment

Appendix 4

Lighting Impact Assessment

Appendix 5

Public Benefit Statement

Appendix 6

Visual Impact Assessment

Appendix 7

Site Survey