Memorandum

28 August 2018

To	Transport for NSW		
Copy to			
From	Kirsten Crosby	Tel	9239 7225
Subject	Ecology assessment: Hazelbrook	Job no.	21275031009

1 Background

1.1 Proposal overview

The NSW Government is committed to facilitating and encouraging the use of public transport, such as trains, by upgrading stations to make them more accessible, and improving interchanges around stations with other modes of transport such as bicycles, buses and cars.

The Transport Access Program is a NSW Government initiative to provide a better experience for public transport customers by delivering accessible, modern, secure and integrated transport infrastructure where it is needed most.

Hazelbrook Station does not currently meet key requirements of the *Disability Standards for Accessible Public Transport* (DSAPT) or the Commonwealth *Disability Discrimination Act 1992* (DDA).

The non-compliant access points and stairs to the Hazelbrook Station concourse and platforms do not facilitate access for people with reduced mobility, parents/carers with prams or customers with luggage. There are no lift facilities and inadequate amenities and tactile surfacing to stairs, platforms and interchange facilities.

The Proposal would involve upgrade works to Hazelbrook Station, the commuter carpark and surrounding footpaths. The station is located 93 kilometres west of the Sydney Central Business District (CBD) in the suburb of Hazelbrook and is serviced by the Blue Mountains line. Platform one provides train services east towards the CBD and platform two provides train services west towards Katoomba, Mount Victoria and Lithgow. The Proposal is located within the Blue Mountains local government area between Railway Parade and the Great Western Highway, Hazelbrook.

The key features of the Proposal are summarised as follows:

- installation of a new lift, awnings and a new lift landing from the existing footbridge to the platform
- modification to the existing levels within the commuter car park, Railway Parade pedestrian crossing (including new road humps) and footbridge to provide a DDA compliant path from the car park to the proposed new lift

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- regrade existing platform surfaces to provide a DDA compliant path between new lift, station building, toilets and the boarding zone on the platform
- upgrade of two DDA compliant parking spaces within the existing commuter car park
- relocation of existing bike storage within the existing commuter car park
- new canopies around the lift and over the new family accessible toilet (FAT)
- installation of new corridor fencing
- removal of some plants and gardens within and surrounding the station to allow for works
- modification of existing station building layout to allow for new amenities and station services equipment room (SSER)
- ancillary works including adjustments to lighting and additional opal card readers, new anti-throw screens, handrails, electrical upgrades, minor drainage works, landscaping, improvements to station communications systems including closed circuit TV (CCTV) cameras, hearing loops, wayfinding signage, emergency help points and installation of tactile ground surface indicators (TGSIs)
- a new padmount and upgrade of low voltage system to account for new lift.

Subject to planning approval, construction is expected to commence in early 2019 and take around 18 months to complete.

1.2 Purpose of this report

An ecological assessment has been prepared to consider aspects of the following NSW and Commonwealth environmental planning legislation with respect to the Proposal:

- NSW *Biodiversity Conservation Act 2016* (BC Act)
- Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

The primary objectives of the ecological assessment are to:

- identify potential ecological constraints and opportunities, including the presence or likely presence of species, populations and ecological communities and their habitats listed under the BC Act and EPBC Act
- identify the potential impacts of the proposed works on listed species, populations and ecological communities and their habitats
- identify opportunities to avoid or minimise impacts on any areas of high ecological constraint through design revision or construction techniques
- assess the likely significance of impacts on listed biota and identify if further assessment or approvals under the BC Act or EPBC Act are required
- advise on management measures to avoid or minimise impacts on planted trees proximate to works areas.

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2 Desktop review

A desktop review of existing information was undertaken prior to the site inspection to identify biodiversity values that may be of relevance to the proposal. This included the following:

- review of aerial photography and site plans to allow preliminary identification of the existing environment and areas to be affected by the proposed works
- review of regional vegetation mapping, the NSW Bionet Wildlife Atlas and the EPBC Act Protected Matters Search Tool for records of any threatened species, populations or ecological communities, or migratory species in the locality that may have potential to be affected by the proposed works.

3 Site inspection

A site inspection was conducted by a GHD ecologist on 7 August 2018. A walked traverse of the extent of the Proposal site was undertaken. The site inspection included surveys within the study area to identify the following:

- vegetation types and condition, and to confirm conservation significance with reference to threatened ecological communities listed under the BC and EPBC Acts
- suitable habitat for threatened flora or suitable habitat and specific resources (e.g. tree-hollows) for threatened fauna species
- identification of planted trees and the potential for impacts on structural root zones (for specimens > three metres in height).

4 Existing environment

No native vegetation is present within the Proposal site at Hazelbrook Station. The following vegetation occurs at the site and may be impacted by the Proposal:

- mown exotic grass within the rail corridor at the proposed substation location
- a planter box containing low shrubs and groundcover on the pedestrian overpass
- a planter box containing planted *Camellia* species and groundcover on the station platform
- low cover of exotic ferns and grasses on the cutting adjacent to the station
- planted Crepe Myrtle (*Lagerstroemia sp.*) and a large Deodar Cedar (*Cedrus deodara*) located in the grounds of the Selwood House Veterinary Hospital along the fenceline adjoining the car park
- a small planted Crepe Myrtle near the entrance to the commuter car park.

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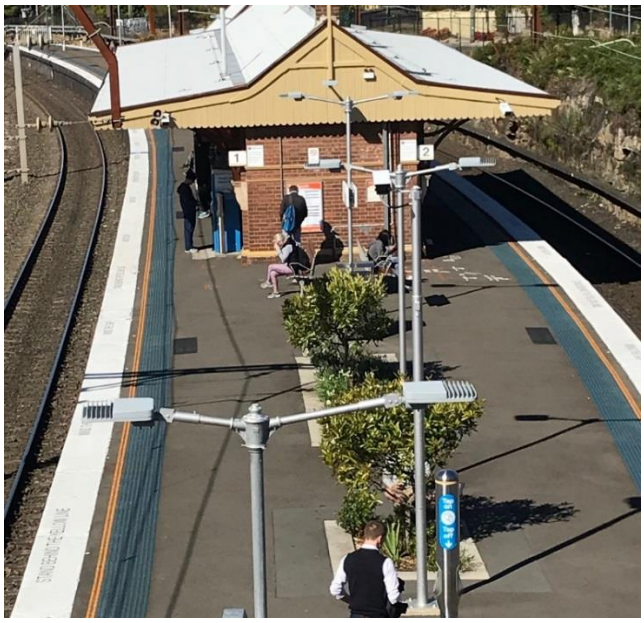

Plate 1 Planter box containing planted *Camellia* species and groundcover on the station platform

Plate 2 Planter box on the pedestrian overpass

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Plate 3 Ferns and cuttings on the cutting adjacent to the station

Plate 4 Deodar Cedar located in the grounds of the Selwood House Veterinary Hospital

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Plate 5 Planted Crepe Myrtle near the entrance to the commuter car park

The highly modified urban environment within the Proposal site at Hazelbrook Station does not contain habitat for threatened flora or fauna species.

The small, isolated patches of planted trees and shrubs in planter boxes are likely to provide very limited shelter and foraging habitat for more mobile fauna, such as common bird species typical of urban parks and gardens, including the Noisy Miner (*Manorina melanocephala*). There were no obvious nests in the canopy of trees and shrubs observed during the site inspection or tree hollows that could provide potential nest sites for hollow-dependent species, including birds or possums.

There is a lack of understorey and groundcover vegetation and so very limited habitat for ground–dwelling fauna, although small common garden skinks (*Lampropholis* spp.) may occur in the mulched groundcover and also present within vegetation associated with cuttings adjacent to the station. The vegetation to be removed would not be important for the persistence of any local populations of common fauna species.

Planted trees in landscaped areas (including the large Deodar Cedar in the grounds of the Selwood House Veterinary Hospital) do not provide suitable or important habitat for the threatened fauna that have been previously recorded in the locality. The large Deodar Cedar may provide nesting habitat for a range of common bird species, but would be unsuitable for threatened fauna. Records of threatened fauna from the wider locality are associated with more extensive areas of intact native vegetation associated with regional reserves and riparian corridors. Planted trees and planter boxes are shown in Figure 1.

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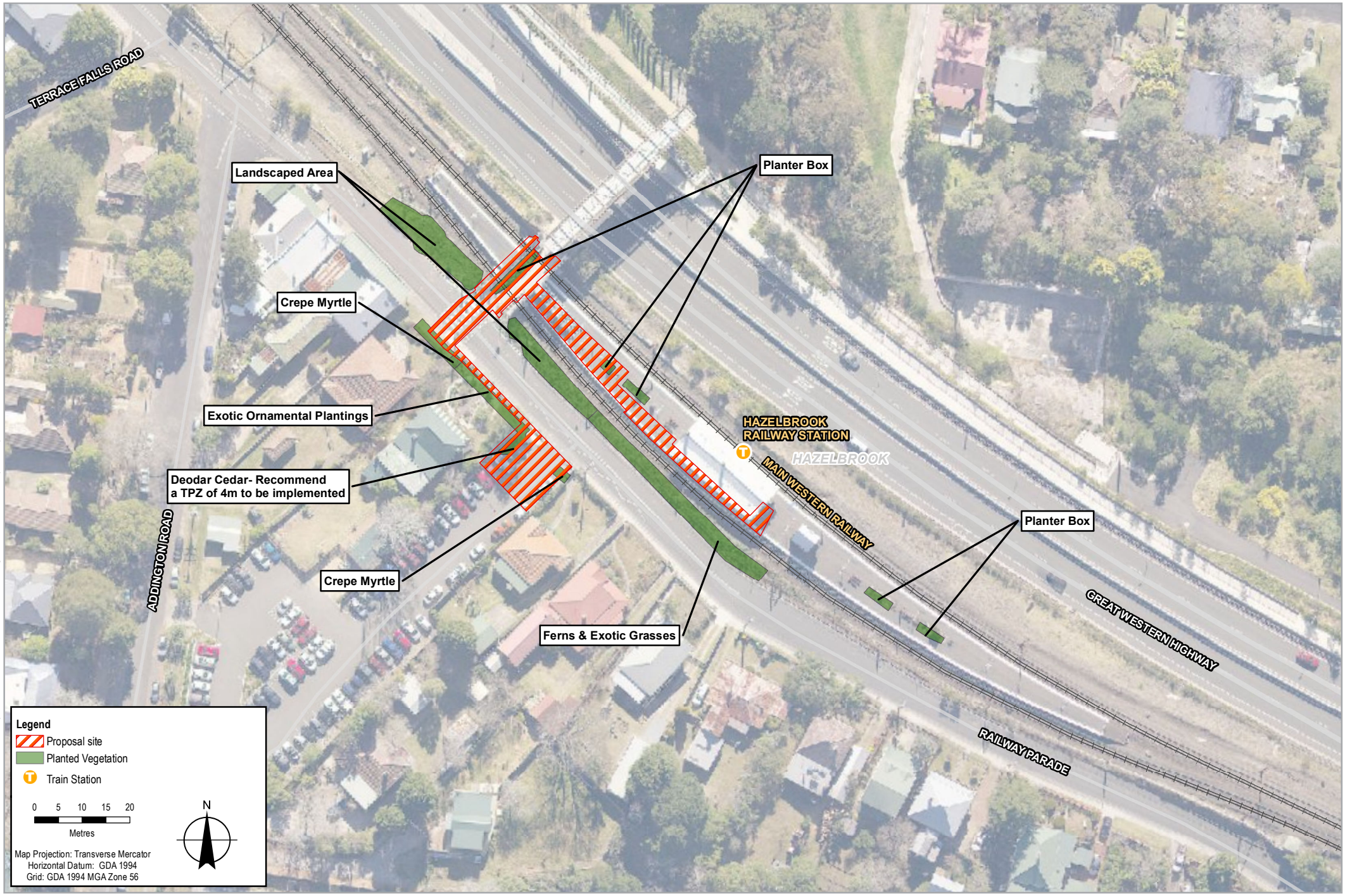

Figure 1: Planted vegetation at Hazelbrook Station

5 Potential impacts

The Proposal is almost entirely located within areas that already contain infrastructure such as sections of footpath and within the existing station area. There will be no disturbance of any complete, continuous patches of native vegetation.

The Proposal would result in the removal of some planted exotic species in planter boxes and low fern cover on the cutting adjacent to the station for the upgrade of facilities at the station (refer Figure 1).

A large Deodar Cedar would be retained within the proposal site, however it may be subject to impacts resulting from potential surface levelling works in the carpark and the construction of a retaining wall near the fence line with the adjoining veterinary hospital within the Tree Protection Zone (and structural root zone) of this tree. Specific tree protection measures are recommended for implementation by an arborist during and potentially following the car park upgrade works to minimise the potential for adverse impacts on this tree (see Section 6).

It is possible that removal of a smaller area of vegetation would be required than indicated on Figure 1 on the southern side of the station, dependent on final design and access requirements for machinery. For the purpose of this report, the largest potential impact area has been assessed.

The proposed works will not remove or modify any stands of intact native vegetation or important habitat for common native fauna that may occur at the site on occasion. The small patches of planted trees do not comprise suitable habitat for threatened flora or fauna species and no threatened fauna species would be reliant on these areas for their survival in the locality. Consequently, the proposed works would not have a significant impact on any threatened biota listed under the BC Act or the EPBC Act.

6 Mitigation

Protection of an optimal proportion of the Tree Protection Zone (TPZ) of the Deodar Cedar tree located within the veterinary hospital along the fence line adjoining the car park should be an aim during excavation and levelling activities within the car park. An arborist should be available to assess impacts to the tree during the works by determining the proportion of TPZ loss, supervising and undertaking any root pruning and canopy trimming requirements and to carry out or recommend remedial actions and monitoring, as required.

7 Conclusion

The Proposal is located within a highly modified urban landscape. There will be no disturbance of any complete, continuous patches of native vegetation or habitat for threatened biota adjacent to or within the Proposal site.

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Based on these findings, the proposed works would not have a significant impact on any threatened biota (or associated habitat) listed under the BC Act and therefore would not trigger the requirement for a Species Impact Statement or assessment using the Biodiversity Assessment Methodology (BAM) under the provisions of the Act. Similarly, the proposed works would not have a significant impact on any listed biota under the EPBC Act and consequently a referral to the Australian Government Minister for the Environment is not required.

While the large Deodar Cedar would not be removed, mitigation measures are proposed to minimise impacts on this tree located in private property adjoining the car park.

Regards,

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