



Transport Access Program

Turella Station Upgrade

Determination Report



Artist's impression of the proposed Turella Station Upgrade, subject to detailed design

December 2021

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Glossary and abbreviations

Term	Meaning
BC Act	<i>Biodiversity Conservation Act 2016 (NSW)</i>
CCTV	Closed circuit television
CEMP	Construction Environmental Management Plan
CLP	Community Liaison Plan
Construction Contractor	The Construction Contractor for the Proposed Activity would be appointed by TfNSW to undertake the detailed design and construction of the Proposed Activity.
CPTED	Crime Prevention Through Environmental Design
DDA	<i>Disability Discrimination Act 1992 (Cwlth)</i>
Detailed design	Detailed design broadly refers to the process that the Construction Contractor undertakes (should the Proposed Activity proceed) to refine the concept design to a design suitable for construction (subject to TfNSW acceptance).
Determination Report	This document – a report prepared by TfNSW to assess and address certain matters to allow for a determination of the Proposed Activity under, and in accordance with Division 5.1 of the EP&A Act.
DSAPT	<i>Disability Standards for Accessible Public Transport (2002)</i>
EIS	Environmental Impact Statement
EP&A Act	<i>Environmental Planning and Assessment Act 1979 (NSW)</i>
EP&A Regulation	<i>Environmental Planning and Assessment Regulation 2000 (NSW)</i>
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999 (Cwlth)</i>
Infrastructure SEPP	<i>State Environmental Planning Policy (Infrastructure) 2007 (NSW)</i>
ISC	Infrastructure Sustainability Council
LED	Light emitting diode
LEP	Local Environmental Plan
LGA	Local Government Area
MP	Member of Parliament
NES	Matters of 'National Environmental Significance' under the EPBC Act
NSW	New South Wales
Proponent	A person or body proposing to carry out an activity under Division 5.1 of the EP&A Act – in this instance, TfNSW.
Proposed Activity	The construction and operation of the Doonside Station upgrade
REF	Review of Environmental Factors
SPI	Station passenger information (system)
TAHE	Transport Asset Holding Entity of New South Wales
TGSI	Tactile ground surface indicator
TfNSW	Transport for NSW (the Proponent)

Executive summary

Overview of Proposed Activity

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. The program aims to provide:

- stations that are accessible to people with disabilities, mobility issues and parents/carers with prams and customers with luggage
- modern buildings and facilities that meet the needs of a growing population
- modern interchanges that support an integrated network and allow seamless transfers for all customers
- safety improvements including extra lighting, lift alarm, fences and security measures at stations.

Turrella Station has been identified for an accessibility upgrade as it does not currently meet key requirements of the *Disability Standards for Accessible Public Transport* (DSAPT) or the Commonwealth *Disability Discrimination Act 1992* (DDA). The proposed upgrade work would aim to provide:

- a new lift providing access from the Reede Street overbridge to the station platforms
- a new station entrance from the Reede Street overbridge. The new station entrance would include:
 - demolition of the existing station access stairs and the section of the eastern platform canopy
 - construction of a new station entrance landing area
 - construction of new stairs between the proposed landing and the station platforms
- internal modifications to the existing station building including:
 - provision of a new unisex ambulant toilet in the location of the existing female toilets
 - provision of a new unisex family accessible toilet in the location of the existing male toilets
- modifications to kerb and line markings to accommodate the expansion of the kiss and ride bay along Turrella Street
- upgrades along the footpath located on the northern side of Turrella Street to provide an accessible and safe path of travel to the new station entrance including installation of traffic barriers
- localised platform regrading and the installation of new tactiles along the platforms
- provision of three new bike hoops accommodating up to six bicycles located on Henderson Street
- ancillary work including improvements to station lighting and closed circuit television (CCTV) to improve safety and security, electrical upgrades for the new infrastructure (new padmount substation located on Henderson Street), landscaping and adjustments to wayfinding signage.

TfNSW, as the Proponent for the Proposed Activity, has undertaken a Review of Environmental Factors (REF) that details the scope of work and environmental impacts associated with the Proposed Activity. The REF was prepared by Umwelt Australia Pty Ltd on behalf of TfNSW in accordance with the requirements of the *Environmental Planning and Assessment Act 1979* (EP&A Act) and clause 228 of the *Environmental Planning and Assessment Regulation 2000* (EP&A Regulation).

No modifications have been made to the Proposed Activity since the REF was prepared, however modifications may be considered during the detailed design phase. Should design modifications be required as a result of the detailed design process, these modifications would be assessed to determine consistency with the Proposed Activity (as approved), including significance of impact on the environment. Additional mitigation measures and/or consultation would be undertaken where necessary.

Purpose of this report

The purpose of this Determination Report is for TfNSW, as the Proponent of the Turrella Station Upgrade, to comply with its obligations under Division 5.1 of the EP&A Act and determine whether or not to proceed with the carrying out of the Proposed Activity. TfNSW must make a determination in accordance with the provisions of Division 5.1 of the EP&A Act.

This report also presents a summary of the submissions provided during the public display of the REF, and TfNSW's response to the issues and comments raised in these submissions.

Conclusion

Based on the assessments in the REF, consideration of the submissions received, it is recommended that the Proposed Activity be approved, subject to the mitigation measures included in the REF and the proposed Conditions of Approval (refer Appendix B). TfNSW will continue to liaise with the community and other stakeholders as the Proposed Activity progresses through detailed design and into the construction phase.

1. Introduction

1.1. Background

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. The program aims to provide:

- stations that are accessible to people with disabilities, are less mobile and parents/carers with prams and customers with luggage
- modern buildings and facilities that meet the needs of a growing population
- modern interchanges that support an integrated network and allow seamless transfers for all customers
- safety improvements including extra lighting, lift alarm, fences and security measures at stations.

Turrella Station has been identified for an accessibility upgrade as it 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 station entrances and stairs to the platform do not facilitate access for people with reduced mobility, parents/carers with prams or customers with luggage. There are no accessible parking spaces, no lift facilities and inadequate Tactile Ground Surface Indicators (TGSIs) to stairs, platforms and interchange facilities.

TfNSW is the Proponent for the Turrella Station (referred to as the 'Proposed Activity' for the purposes of this document). Also refer to Section 1.4 for a description of the Proposed Activity.

1.2. Review of Environmental Factors

A Review of Environmental Factors (REF) has been prepared by Umwelt Australia Pty Ltd on behalf of TfNSW in accordance with Sections 5.5 and 5.7 of the *Environmental Planning and Assessment 1979* (EP&A Act), and clause 228 of the *Environmental Planning and Assessment Regulation 2000* (EP&A Regulation), to ensure that TfNSW takes into account to the fullest extent possible, all matters affecting or likely to affect the environment as a result of the Proposed Activity. The REF is included in Appendix A.

The Turrella Station REF was placed on public display from 5 November 2021 to 19 November 2021, with 24 submissions received. Issues raised in these submissions are addressed in Section 2.3 of this report.

1.3. Determination Report

Prior to proceeding with the Proposed Activity, the Secretary for TfNSW must make a determination in accordance with Division 5.1 of the EP&A Act (refer Figure 1).

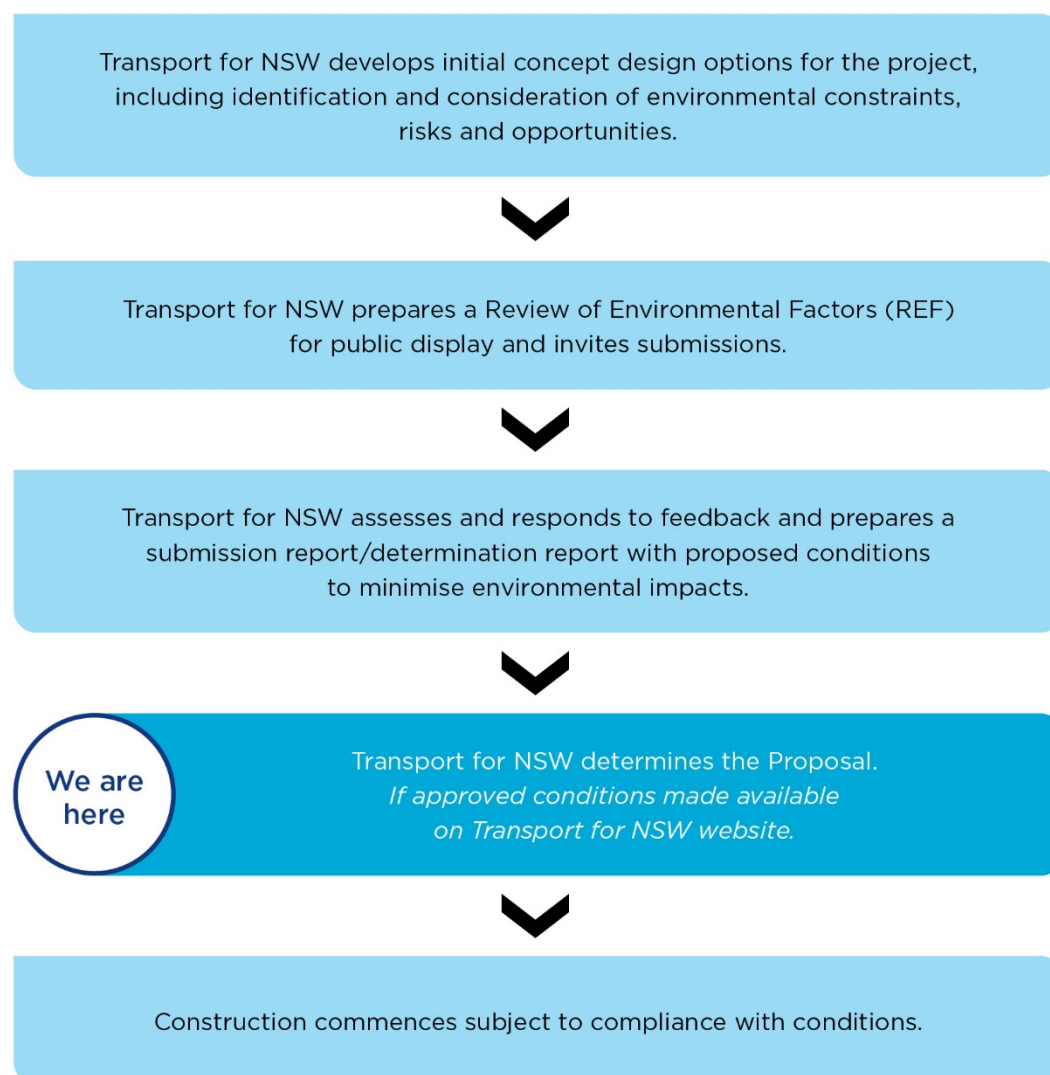


Figure 1 Planning approval process

The purpose of this Determination Report is to address the following to allow for a determination of the Proposed Activity:

- present a summary of the submissions received during the public display of the REF and TfNSW's response to the issues and comments raised in these submissions
- assess the environmental impacts with respect to the Proposed Activity, which are detailed in the environmental impact assessment (and any proposed modifications, as detailed and assessed in this Determination Report)
- identify mitigation measures to minimise potential environmental impacts
- determine whether potential environmental impacts are likely to be significant
- address whether the provisions of the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) apply to the Proposed Activity.

This report has been prepared having regard to, among other things, the objectives of TfNSW under the *Transport Administration Act 1988*:

2A Objects of Act

...

- a) *to provide an efficient and accountable framework for the governance of the delivery of transport services*
- b) *to promote the integration of the transport system*
- c) *to enable effective planning and delivery of transport infrastructure and services*
- d) *to facilitate the mobilisation and prioritisation of key resources across the transport sector*
- e) *to co-ordinate the activities of those engaged in the delivery of transport services*
- f) *to maintain independent regulatory arrangements for securing the safety of transport services.*

1.4. Description of the Proposed Activity in the REF

The Proposed Activity is in the suburb of Turrella NSW, in the Bayside Local Government Area (LGA), approximately 10 kilometres southwest of Sydney's Central Business District. Turrella Station is serviced by the T8 Airport and South Line and bounded by Hannam and Turrella Street to the south, Reede Street to the east and Henderson Street to the north.

Works would be carried out within the rail corridor, which is land owned by Transport Asset Holding Entity of New South Wales (TAHE) and managed by Sydney Trains and would also be undertaken on land owned by Bayside Council along Turrella Street and Reede Street.

The overall need for the Proposed Activity is to provide an accessible station and an improved customer experience at Turrella Station. The Proposed activity does this through the provision of a lift, increased weather protection, toilet facility upgrades and improved integration with the surrounding precinct.

A detailed description of the Proposed Activity is provided in Chapter 3 of the Turrella Station Upgrade REF, and would provide:

- a new lift providing access from the Reede Street overbridge to all station platforms
- a new accessible station entrance from the Reede Street overbridge. The new station entrance would include:
 - demolition of the existing station access stairs and the section of the eastern platform canopy
 - construction of a new station entrance landing area
 - construction of new stairs with a new extended canopy between the proposed landing and the station platforms
- internal modifications to the existing station building including:
 - provision of a new unisex ambulant toilet in the location of the existing female toilets
 - provision of a new unisex family accessible toilet in the location of the existing male toilets
- modifications to kerb and line markings to accommodate the expansion of the kiss and ride bay along Turrella Street

- upgrades along the footpath located on the northern side of Turrella Street to provide an accessible and safe path of travel to the new station entrance including installation of safety barriers and handrails on Turrella and Reede streets
- Relocating the pedestrian crossing on Turrella Street to improve access to the bus stop
- provision of three new bike hoops accommodating up to six bicycles located on Henderson Street
- Partial removal of the concrete traffic median on Reede Street to improve the turning circle for motorists
- localised platform regrading and the installation of new tactiles along the platforms
- ancillary work including improvements to station lighting and CCTV to improve safety and security, electrical upgrades for the new infrastructure (new padmount substation located on Henderson Street), landscaping and adjustments to wayfinding signage.

A schematic outlining the key features of the Proposed Activity is provided in Figure 2. The need for, and benefits of the Proposed Activity are outlined in Chapter 2 of the REF. Construction is expected to commence in 2022 and take around 18 months to complete.

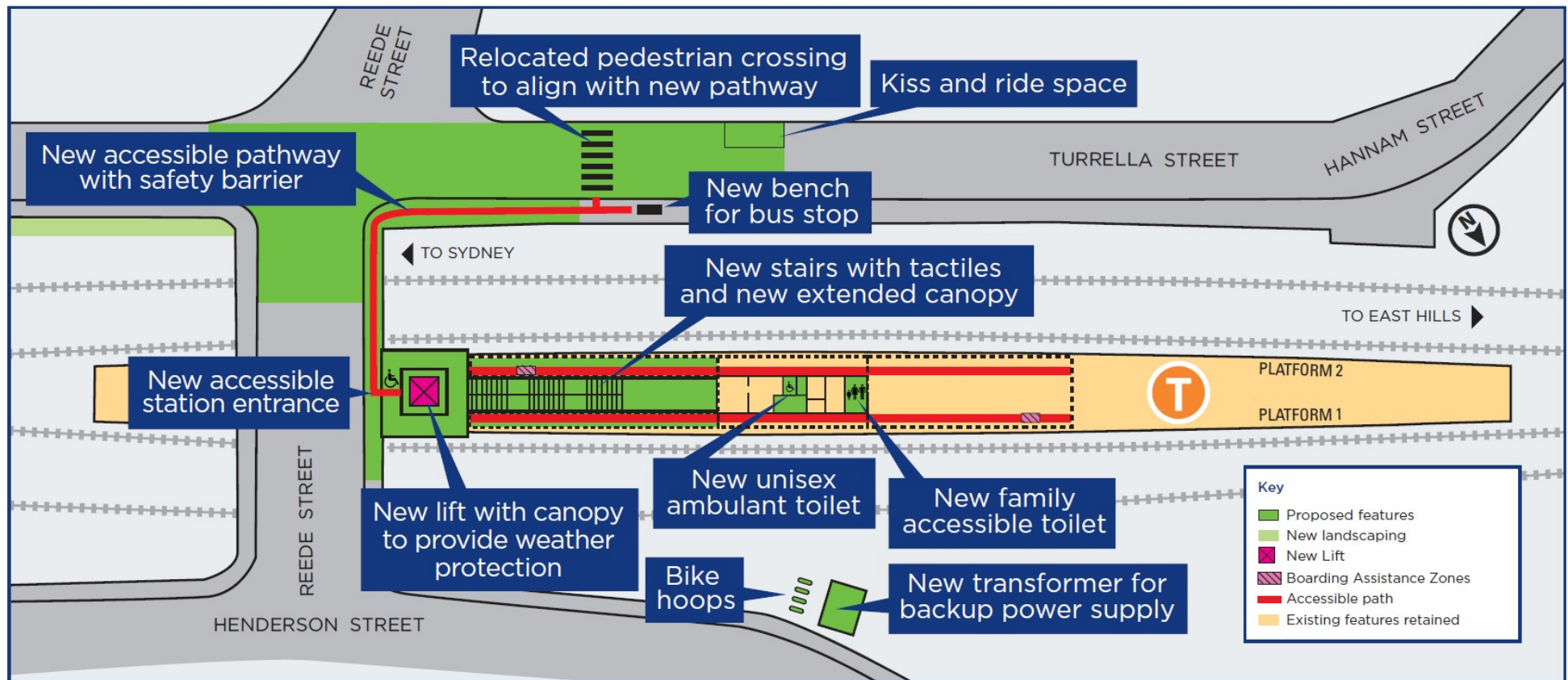


Figure 2 Key features of the Proposed Activity (indicative only, subject to detailed design)

2. Consultation and assessment of submissions

2.1. REF public display

The Turrella Station Upgrade REF was placed on public display from 5 November 2021 to 19 November 2021 on the TfNSW [corporate website](#) with details of how to make a submission, a submission form, telephone number and project email address.

Community consultation activities undertaken for the public display included:

- distribution of around 800 TfNSW flyers to residences in Turrella inviting submissions from the community to 'have your say' on the Turrella Station upgrade from 5 November to 19 November 2021.
- installation of TfNSW project signage inviting the community to 'have your say' on the Turrella Station upgrade with details of the public display and how to make a submission at key locations around Turrella Station, on Reede St, Henderson Street and Turrella Street
- geotargeted social media campaign with a reach over 12,000 customers in Turrella, Arncliffe, Bardwell Park, Bardwell Valley and Earlwood with more than 600 customers clicking to view the REF display, according to Google analytics.
- distribution of the REF display and Have your say information to peak disability groups through TfNSW's Accessible Transport Advisory Committee
- a briefing to Bayside Council officers
- a letter outlining the scope of the Proposed Activity, information on where to view the REF and specialist studies on the TfNSW website, along with details on how to make a submission was sent to Bayside Council as per the consultation requirements under clause 13, and 15, of the *State Environmental Planning Policy (Infrastructure) 2007* (Infrastructure SEPP)
- a letter outlining the scope of the Proposed Activity, information on where to view the REF and specialist studies on the TfNSW website, along with details on how to make a submission was sent to the NSW State Emergency Service as per the consultation requirements under clause 15AA of the Infrastructure SEPP.

2.2. REF submissions

A total of 24 submissions were received via letter, email, telephone and online submissions including the posted comments on the project website. Community submissions are addressed in Table 1, while submissions received from Bayside Council and the NSW State Emergency Service (SES) are addressed in Table 2.

Submissions included feedback on a range of issues in relation to the Proposed Activity. The key issues raised in submissions were:

- General support for the Proposed Activity
- Turrella Station being upgraded prior to Bardwell Park and Tempe Stations
- Flooding risk of the station
- Commuter car parking around Turrella Station
- The installation of safety barriers on the western side of Reede Street

2.3. Consideration and response to submissions

Community submissions

A summary of all issues raised in community submissions and TfNSW's responses to those issues is provided in Table 1.

Table 1 Response to community submissions received

No.	Submission No.	Issue/s raised	TfNSW response
1	General		
1.1	TUR004, TUR006, TUR008, TUR009, TUR010, TUR011, TUR012, TUR013, TUR015, TUR016, TUR021	Expressed support for the Proposed Activity.	Noted.
1.2	TUR014, TUR018, TUR020	Concerns raised about why Turrella is being upgraded before Bardwell Park and Tempe Station.	<p>Turrella Station is currently not compliant with the requirements of the <i>Disability Discrimination Act 1992</i> (DDA) and the <i>Disability Standards for Accessible Public Transport 2002</i> (DSAPT). The existing platforms are only accessible via stairs thus it does not provide suitable access for people with disabilities, mobility limitations and parents with prams.</p> <p>The Transport Access Program assessment process uses evidence-based criteria across all stations, including current and future patronage, customer demographics, proximity to important services such as hospitals or schools, and accessibility to nearby interchanges to determine what stations require immediate attention.</p> <p>The projects under the third tranche of the Transport Access Program, known as 'TAP 3', can be found on the Transport for NSW website (https://www.transport.nsw.gov.au/projects/current-projects/tap-3).</p> <p>While Tempe and Bardwell Park Station are not currently scheduled for an accessibility upgrade, the NSW Government is committed to providing accessible, modern and integrated infrastructure across the NSW transport network.</p> <p>Tempe and Bardwell Park station will continue to be considered as a future project as part of the Transport Access Program.</p>
2	Scope of Works		
2.2	TUR005	Requested additional indicator boards to be installed on the platform.	<p>The overall objective of the Proposed Activity is to improve accessibility at and around Turrella Station and comply with DDA and DSAPT requirements.</p> <p>The existing island platform currently has two Station Passenger Information (SPI) systems. Those SPI systems are located in key views when entering the platforms from the stairs and the new lift. As such, additional SPI systems are not proposed as part of the Proposal.</p>

No.	Submission No.	Issue/s raised	TfNSW response
2.3	TUR017	Requested clarification about the timing of the Proposal.	<p>Construction of the Proposal is expected to commence in early 2022 and take approximately 18 months to complete.</p> <p>Construction timing would be managed by the Construction Contractor once appointed.</p> <p>Regular community updates would be provided prior to and during construction. Updates would also be provided on the TfNSW website.</p>
3 Traffic, transport and access			
3.1	TUR001	Requested additional details about the location of the temporary stairs during construction.	<p>During construction, temporary access stairs would be provided from the Reede Street overbridge to the eastern side of the platform so that access to the station is maintained throughout construction.</p> <p>Temporary traffic control measures would be in place to facilitate the crossing of Turrella Street and Reede Street. Temporary traffic control measures would be carried out in consultation with Bayside Council.</p> <p>The construction methodology, including temporary access arrangements will be further developed during the detailed design of the Proposal by the Construction Contractor in consultation with TfNSW.</p>
3.2	TUR002, TUR021	Concern about the lack of commuter parking available at Turrella Station.	<p>Additional commuter car parking is not proposed as part of the Proposed Activity, which is for accessibility upgrades at Turrella Station.</p> <p>Commuter parking requirements are assessed by TfNSW on a network wide basis considering existing and future demand, proximity to other car parking spaces and the feasibility of providing parking.</p> <p>This feedback would be passed onto the relevant department within TfNSW for consideration in future planning.</p>
3.3.	TUR003	Requested that the footpath on the Reede Street bridge be widened and the median be removed. Request for the footpath to the nearby park to be widened.	<p>The overall objective of the Proposed Activity is to improve accessibility at and around Turrella Station and comply with DDA and DSAPT requirements.</p> <p>As part of that, the Proposed Activity involves the upgrade of existing pathways along Turrella Street and Reede Street to provide improved access between the station and interchange facilities. In addition to the upgrade of existing pathways, safety barriers and fencing would be installed along Reede Street to improve the safety of pedestrians accessing and leaving the station.</p> <p>The central median along Reede Street would be partially removed as part of the Proposed Activity to improve safety for vehicles and pedestrians. The median acts as a traffic barrier for vehicles travelling along Reede Street and has been designed to prevent vehicle collisions and navigate heavy vehicle traffic.</p>

No.	Submission No.	Issue/s raised	TfNSW response
3.4	TUR004	Concerned that the traffic barriers on the corner of Turrella Street and Reede Street would restrict access and increase walking distance for users from Loftus Street.	<p>The introduction of the concrete safety barrier and steel fencing along the corner of Turrella Street and Reede Street and along the western footpath of Reede Street has been proposed to provide improved safety for pedestrians.</p> <p>Customers from Loftus Street could use either the pedestrian crossing on Turrella Street or alternatively cross further up Reede Street.</p>
3.5	TUR022	Suggested the provision of stairs toward the eastern end of the station or a pedestrian crossing on Reede Street bridge.	<p>The design options for the Proposed Activity were assessed in a multi-criteria analysis that included consideration of factors such as design, heritage, customer experience, constructability, program, cost and lifecycle to select a preferred option. Following stakeholder consultation and an assessment of the advantages and disadvantages for each of the options identified, it was determined that the Proposed Activity and design assessed in the REF, which retains the existing entrance locations, was deemed the most feasible.</p> <p>Provision of stairs from the Reede Street bridge toward the eastern end of the station would not be compliant with DDA and DSAPT requirements. To be compliant, the stairs would extend past the City end of the platform.</p> <p>The current proposal aims to improve safety along an established pedestrian path, with existing pedestrian facilities, on Reede Street and Turrella Street. There are a number of criteria on which the warrants for the provision of pedestrian facilities are established. These include consideration of conditions for both vehicular and pedestrian traffic. A new pedestrian crossing on Reede Street Bridge does not meet the required warrants and is unlikely to improve pedestrian safety.</p>
4	Landscape and visual amenity		
4.1	TUR015	Suggested additional planting adjacent to the 'new bench' at the existing bus stop.	<p>The overall objective of the Proposed Activity is to improve accessibility at and around Turrella Station and comply with DDA and DSAPT requirements.</p> <p>Landscape treatments such as additional plants would be considered during the detailed design phase of the Proposed Activity as part of the preparation of the Urban Design and Landscaping Plan (UDLP) required by CoA 36.</p>

No.	Submission No.	Issue/s raised	TfNSW response
5	Hydrology and water quality		
5.1	TUR019	Question about whether the new lift's electronics would be susceptible to flooding.	<p>The current design has considered the potential impacts of flooding on the operation of the Proposed Activity. A review of the <i>Bardwell Creek 2D Flood Study Review</i> (Bayside Council 2019) within the REF indicates that peak flood depths would not adversely impact Turrella Station up to a probable maximum flood (PMF) event, where floodwaters are modelled to reach <2 metres.</p> <p>Existing stormwater assets would be assessed for capacity as part of detailed design to review and mitigate any flooding risk.</p>

Other stakeholder submissions

Table 2 Response to other stakeholder submissions received

Issue no.	Stakeholder	Issue/s raised	TfNSW response
1	Support for Proposal		
1.1	Bayside Council	Council confirms that it supports the final design plans for the upgrade of Turrella Station and will continue to work with TfNSW to progress and finalise this Station upgrade project.	Noted.
2	Hydrology and water quality		
2.1	SES	Suggest site design and stormwater management be incorporated to minimise any flood risk to the community.	<p>The current design has considered the potential impacts of flooding on the operation of the Proposed Activity. A review of the <i>Bardwell Creek 2D Flood Study Review</i> (Bayside Council 2019) within the REF indicates that peak flood depths would not adversely impact Turrella Station up to a probable maximum flood (PMF) event, where floodwaters are modelled to reach <2 metres.</p> <p>Existing stormwater assets would be assessed for capacity as part of detailed design to review and mitigate any flooding risk.</p>

Issue no.	Stakeholder	Issue/s raised	TfNSW response
2.2	SES	Recommendation to ensure that people using the station are aware of the flood risk and that an appropriate business emergency plan be developed to assist in preparedness, response and recovery from flooding.	<p>The <i>Bardwell Creek 2D Flood Study Review</i> (Bayside Council 2019) indicates that the railway structures would remain above the water surface profile during the 100-year ARI flood event.</p> <p>The design has considered the potential impacts of flooding on the operation of the Proposed Activity. Further investigations would be undertaken during the detailed design stage to ensure potential risks to operational activities and equipment are addressed.</p> <p>Sydney Trains are responsible for operating Turrella Station, including the lift and new works after completion. The station has a current Station Incident Management Plan (SIMP) which includes emergency evacuation procedures.</p> <p>Following completion of the Proposed Activity, TfNSW would hand over the asset to Sydney Trains who would then make any necessary amendments to the Turrella Station SIMP to reflect any alterations to operational requirements resulting from the use of the proposed station infrastructure.</p>
3 Traffic and Congestion			
3.1	SES	Request notification to be provided where there are likely to be significant delays in the operation of the roads affected by the upgrades.	Emergency access would be maintained throughout construction. If the construction phase of the upgrade causes disruption to the operation of the road, the SES would be notified.

2.4. Future consultation

Should TfNSW proceed with the Proposed Activity, consultation activities would continue, including consultation with Sydney Trains, Bayside Council, utility authorities and other relevant stakeholders) regarding design development. In addition, TfNSW would notify residents, businesses and community members in the lead up to and during construction. The consultation activities would help to ensure that:

- local council and other stakeholders have an opportunity to provide feedback on the detailed design
- the community and stakeholders are notified in advance of any upcoming work, including changes to pedestrian or traffic access arrangements and out of hours construction activities
- accurate and accessible information is made available
- a timely response is given to issues and concerns raised by the community
- feedback from the community is encouraged.

The [TfNSW email address](mailto:projects@transport.nsw.gov.au)¹ and TfNSW Infoline (1800 684 490) would continue to be available during the construction phase. Targeted consultation methods, such as use of letters, notifications, signage and verbal communications, would continue to occur. The TfNSW project website² would also include updates on the progress of construction.

¹ projects@transport.nsw.gov.au

² <https://www.transport.nsw.gov.au/projects/current-projects/turrella-station-upgrade>

3. Consideration of the environmental impacts

3.1. NSW Environmental Planning and Assessment Act 1979

The REF addresses the requirements of Section 5.5 of the EP&A Act. In considering the Proposed Activity, all matters affecting or likely to affect the environment are addressed in the REF and the Determination Report and associated documentation.

In accordance with the checklist of matters pursuant to clause 228(3) of the EP&A Regulation, an assessment is provided in Chapter 6 and Appendix B of the REF.

In respect of the Proposed Activity an assessment has been carried out regarding potential impacts on critical habitat, threatened species, populations or ecological communities or their habitats, under Section 5.7 of the EP&A Act.

The likely significance of the environmental impacts of the Proposed Activity has been assessed in accordance with the then NSW Department of Planning's 1995 best practice guideline [*Is an EIS Required?*](#)³ It is concluded that the Proposed Activity is not likely to significantly affect the environment (including critical habitat) or threatened species, populations of ecological communities, or their habitats. Accordingly, an environmental impact statement under Division 5.2 of the EP&A Act is not required.

3.2. NSW Heritage Act 1977

The Proposed Activity would be undertaken within the curtilage of the Turrella Railway Station Group heritage item, which is listed on the TAHE Section 170 Heritage and Conservation Register.

The potential heritage impacts of the Proposed Activity have been assessed in Section 6.5 of the REF and Statement of Heritage Impact (Umwelt, 2021). The Proposed Activity includes the demolition of a significant original element, being the removal of the stairs to the station platform and the demolition of the original fitout in the male toilet. Therefore, Heritage NSW would be notified of the proposed works to Turrella Railway Station Group.

3.3. Commonwealth Environment Protection and Biodiversity Conservation Act 1999

As part of the consideration of the Proposed Activity, all matters of national environmental significance (NES) and any impacts on Commonwealth land for the purposes of the EPBC Act have been assessed. In relation to NES matters, this evaluation has been undertaken in accordance with Commonwealth Administrative Guidelines on determining whether an action has, will have, or is likely to have a significant impact. A summary of the evaluation is provided in Chapter 6 and Appendix A of the REF.

It is considered that the Proposed Activity described in the REF is not likely to have a significant impact on any Commonwealth land and is not likely to have a significant impact on any matters of NES.

³ Refer to the National Library of Australia's 'Trove' website
<http://trove.nla.gov.au/work/7003034?selectedversion=NBD11474648>

4. Conditions of Approval

If approved, the Proposed Activity would proceed subject to the Conditions of Approval included at Appendix B.

5. Conclusion

Having regard to the assessment in the REF, consideration of the submissions received, it can be concluded that the Proposed Activity is not likely to significantly affect the environment (including critical habitat) or threatened species, populations of ecological communities, or their habitats. Consequently, an environmental impact statement (EIS) is not required to be prepared under Division 5.2 of the EP&A Act.

It is also considered that the Proposed Activity does not trigger any approvals under Part 3 of the EPBC Act.

The environmental impact assessment (REF and Determination Report) is recommended to be approved subject to the proposed mitigation and environmental management measures included in the Conditions of Approval (refer to Appendix B).

Determination

Turrella Station Upgrade

APPROVAL

I, Justin Perrott, as delegate of the Secretary, Transport for NSW:

1. Have examined and considered the Proposed Activity in the *Turrella Station Upgrade Review of Environmental Factors* (November 2021) and the *Turrella Station Upgrade Determination Report* (December 2021) in accordance with Section 5.5 of the NSW *Environmental Planning and Assessment Act 1979*.
2. Determine on behalf of Transport for NSW (the Proponent) that the Proposed Activity may be carried out in accordance with the Conditions of Approval in this Determination Report (December 2021), consistent with the Proposed Activity described in the *Turrella Station Upgrade Review of Environmental Factors* (December 2021).



Justin Perrott
Director Environment and Sustainability
Safety, Environment and Regulation Division
Transport for NSW

Date: 21/12/2021

References

Bayside Council, 2019, *Bardwell Creek 2D Flood Study Review*

Umwelt, 2021, Statement of Heritage Impact – Turrella Station, Sydney

TfNSW, 2021, *Turrella Station Upgrade – Review of Environmental Factors*

Appendix A Review of Environmental Factors

Please refer to the TfNSW website to access the [Turrella Station Upgrade REF](#)
(Desksite #ref –6635595):

Appendix B Conditions of Approval

CONDITIONS OF APPROVAL

Turrella Station Upgrade

Note: these Conditions of Approval must be read in conjunction with the final mitigation measures in the Turrella Station Upgrade Review of Environmental Factors.

Schedule of acronyms and definitions used:

Acronym	Definition
AFC	Approved For Construction
CECR	Construction Environmental Compliance Report
CEMP	Construction Environmental Management Plan
dBA	Decibels (A-weighted scale)
DES	Director Environment and Sustainability (Rail Development and Delivery) (or nominated delegate)
ECM	Environmental Controls Map
EIA	Environmental Impact Assessment
EPA	NSW Environment Protection Authority
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EPL	Environment Protection Licence issued by the Environmental Protection Authority under the <i>Protection of the Environment Operations Act 1997</i> .
EMR	Environmental Management Representative
EMS	Environmental Management System
HIS	Heritage Interpretation Strategy
ISC	Infrastructure Sustainability Council
ISO	International Standards Organisation
OEH	Former NSW Office of Environment and Heritage
ONVMP	Operational Noise and Vibration Management Plan
OOHWP	Out of Hours Work Protocol
PECM	Pre-Construction Environmental Compliance Matrix
POCR	Pre-Operational Compliance Report
RBL	Rating Background Level
REF	Review of Environmental Factors
SMP	Sustainability Management Plan
TfNSW	Transport for NSW
TMP	Traffic Management Plan
UDLP	Urban Design and Landscaping Plan

Term	Definition
Construction	Includes all work in respect of the Project, other than survey, acquisitions, fencing, investigative drilling or excavation, building/road dilapidation surveys, or other activities determined by the TfNSW Director Environment and Sustainability (Rail Development & Delivery) (DES) to have minimal environmental impact such as minor access roads, minor adjustments to services/utilities, establishing temporary construction compounds (in accordance with this approval), or minor clearing (except where threatened species, populations or ecological communities would be affected, unless otherwise agreed by the DES).
Contamination	The presence in, on or under land of a substance at a concentration above the concentration at which the substance is normally present in, on or under (respectively) land in the same locality, being a presence that presents a risk of harm to human health or any other aspect of the environment.
Designated Works	Includes tunnelling, blasting, piling, excavation or bulk fill or any vibratory impact work including jack hammering and compaction, for Construction.
Emergency Work	Includes work to avoid loss of life, damage to external property, utilities and infrastructure, prevent immediate harm to the environment, contamination of land or damage to a heritage (Aboriginal or non-Aboriginal) item.
Environmental Impact Assessment (EIA)	The documents listed in Condition 1 of this approval.
Environmental Management Representative (EMR)	An independent environmental representative appointed to the Project or a delegate nominated by Transport for NSW.
Feasible	A work practice or abatement measure is feasible if it is capable of being put into practice or of being engineered and is practical to build given project constraints such as safety and maintenance requirements.
Noise Sensitive Receiver	In addition to residential dwellings, noise sensitive receivers include, but are not limited to, hotels, entertainment venues, pre-schools and day care facilities, educational institutions (e.g. schools, TAFE colleges), health care facilities (e.g. nursing homes, hospitals), recording studios, places of worship/religious facilities (e.g. churches), and other noise sensitive receivers identified in the Environmental Impact Assessment.
Project	The construction and operation of the Turrella Station Upgrade as described in the Environmental Impact Assessment.
Proponent	A person or body proposing to carry out an activity under Division 5.1 of the EP&A Act – in the case of the Project, Transport for NSW.
Reasonable	Selecting reasonable measures from those that are feasible involves making a judgment to determine whether the overall benefits outweigh the overall adverse social, economic and environmental effects, including the cost of the measure.

CoA	Condition
	General
1.	<p>Terms of Approval</p> <p>The Project shall be carried out generally in accordance with the environmental impact assessment (EIA) for this Project, which comprises the following documents:</p> <ul style="list-style-type: none"> a) <i>Turrella Station Upgrade – Review of Environmental Factors</i> (Umwelt, November 2021) b) <i>Turrella Station Upgrade – Determination Report</i> (Umwelt, December 2021). <p>In the event of an inconsistency between these conditions and the EIA, these conditions will prevail to the extent of the inconsistency.</p>
2.	<p>Project Modifications</p> <p>Any modification to the Project as approved in the EIA would be subject to further assessment. This assessment would need to demonstrate that any environmental impacts resulting from the modifications have been minimised. The assessment shall be subject to approval under delegated authority by TfNSW, and any additional requirements from the assessment of the Project modification must be complied with.</p>
3.	<p>Statutory Requirements</p> <p>These conditions do not remove any obligation to obtain all other licences, permits, approvals and land owner consents from all relevant authorities and land owners as required under any other legislation for the Project. The terms and conditions of such licences, permits, approvals and permissions must be complied with at all times.</p>
4.	<p>Construction Environmental Compliance Report</p> <p>A Construction Environmental Compliance Report (CECR) for the Project shall be prepared which addresses the following matters:</p> <ul style="list-style-type: none"> a) compliance with the Construction Environmental Management Plan (CEMP) and these conditions b) compliance with any approvals or licences issued by relevant authorities for the construction of the Project c) implementation and effectiveness of environmental controls (the assessment of effectiveness should be based on a comparison of actual impacts against performance criteria identified in the CEMP) d) environmental monitoring results, presented as a results summary and analysis e) details of the percentage of waste diverted from landfill and the percentage of spoil beneficially reused f) number and details of any complaints, including summary of main areas of complaint, actions taken, responses given and intended strategies to reduce recurring complaints (subject to privacy protection) g) details of any review and amendments to the CEMP resulting from construction during the reporting period h) any other matter as requested by the DES. <p>The CECR shall:</p> <ul style="list-style-type: none"> (i) be submitted to the EMR for review. The EMR is to be given a minimum period of seven days to review and provide any comments to TfNSW in relation to the CECR (ii) be submitted to the DES for approval upon completion of the EMR review period. <p>The first CECR shall report on the first six months of construction and be submitted within six weeks of expiry of that period (or at any other time interval agreed to by the DES). CECRs shall be submitted no later than six months after the date of submission of the preceding CECR (or at other such periods as requested by the DES) for the duration of construction.</p> <p>The final CECR shall detail compliance with all Conditions of Approval, licences and permits required to be obtained under any other legislation for the Project</p>

CoA Condition

5. Graffiti and Advertising

Hoardings, site sheds, fencing, acoustic walls around the perimeter of the site, and any structures built as part of the Project shall be maintained free of graffiti and advertising not authorised by TfNSW during the construction period. Graffiti and unauthorised advertising shall be removed or covered within the following timeframes:

- a) offensive graffiti will be removed or concealed within 24 hours
- b) highly visible (yet inoffensive) graffiti will be removed or concealed within a week
- c) graffiti that is neither offensive or highly visible will be removed or concealed within a month
- d) any unauthorised advertising material will be removed or concealed within 24 hours

Communications

6. Community Liaison Plan

A Community Liaison Plan (CLP) shall be prepared and implemented to engage with government agencies, relevant councils, landowners, community members and other relevant stakeholders (such as utility and service providers, bus companies, Taxi Council and businesses). The CLP shall comply with the obligations of these conditions and should include, but not necessarily be limited to:

- a) a comprehensive, project-specific analysis of issues and proposed strategies to manage issues through the duration of the Project
- b) details of the communication tools (traditional and digital) and activities that will be used to inform and engage the community and stakeholders
- c) a program for the implementation of community liaison activities relating to key construction tasks with strategies for minimising impacts and informing the community
- d) policies and procedures for handling community complaints and enquiries, including the Contractor's nominated 24 hour contact for management of complaints and enquiries
- e) analysis of other major projects/influences in the area with the potential to result in cumulative impacts to the community and strategies for managing these.

The CLP shall be prepared to the satisfaction of the Director Place, Inner West (or nominated delegate) prior to the commencement of construction and implemented, reviewed and revised as appropriate during the construction of the Project.

7. Community Notification and Liaison

The local community shall be advised of any activities related to the Project with the potential to impact upon them.

Prior to any site activities commencing and throughout the Project duration, the community is to be notified of works to be undertaken, the estimated hours of construction and details of how further information can be obtained (i.e. contact telephone number/email, website, newsletters etc.) including the 24 hour construction response line number.

Construction-specific impacts including information on traffic changes, access changes, detours, services disruptions, public transport changes, high noise generating work activities and work required outside the nominated working hours shall be advised to the local community at least seven days prior to such works being undertaken or other period as agreed to by the Director Place, Inner West or as required by the Environment Protection Authority (EPA) (where an Environment Protection Licence (EPL) is in effect).

8. Website

Project information shall be made available to members of the public, either on dedicated pages on the TfNSW/Project website or details provided as to where hard copies of this information may be accessed. Project information to be provided includes:

- a) a copy of the documents referred to under Condition 1 of this approval
- b) a list of environmental management reports that are publicly available
- c) 24 hour contact telephone number for information and complaints.

All documents uploaded to the website must be compliant with the *Web Content Accessibility Guidelines Version 2.0*.

CoA Condition

9. Complaints Management

A 24 hour construction response line number shall be established and maintained for the duration of construction.

Details of all complaints received during construction are to be recorded on a complaints register. A verbal response to phone enquiries on what action is proposed to be undertaken is to be provided to the complainant within two hours during all times construction is being undertaken and within 24 hours during non-construction times (unless the complainant agrees otherwise). A verbal response to written complaints (email/letter) should be provided within 48 hours of receipt of the communication. A detailed written response is to be provided to the complainant within seven calendar days for verbal and/or written complaints.

Information on all complaints received during the previous 24 hours shall be forwarded to the Environmental Management Representative (EMR) each working day.

Environmental Management

10. Construction Environmental Management Plan

A Construction Environmental Management Plan (CEMP) shall be prepared prior to the commencement of construction which addresses the following matters, as a minimum:

- a) traffic and pedestrian management (in consultation with the relevant roads authority)
- b) noise and vibration management
- c) water and soil management
- d) air quality management (including dust suppression)
- e) Aboriginal and non-Aboriginal heritage management
- f) biodiversity management
- g) storage and use of hazardous materials
- h) contaminated land management (including acid sulphate soils)
- i) weed management
- j) waste management
- k) bushfire risk
- l) environmental incident reporting and management procedures
- m) non-compliance and corrective/preventative action procedures
- n) details of approvals, licences and permits required to be obtained under any other legislation for the Project.

The CEMP shall:

- i. comply with the Conditions of Approval, conditions of any licences, permits or other approvals issued by government authorities for the Project, all relevant legislation and regulations, and accepted best practice management
- ii. comply with the relevant requirements of *Environmental Management Plan Guideline – Guideline for Infrastructure Projects* (NSW Department of Planning Industry and Environment, 2020)
- iii. include a pre-construction environmental compliance matrix for the Project (or such stages of the Project as agreed to by the EMR) that details compliance with all relevant conditions and mitigation measures
- iv. include an Environmental Policy.

In preparing the CEMP the following shall be undertaken:

1. consultation with government agencies and relevant service/utility providers (as required)
2. a copy of the CEMP submitted to the EMR for review
3. a copy of the CEMP submitted to the DES for approval upon completion of the EMR review period
4. review and update the CEMP at regular intervals, and in response to any actions identified as part of the EMR's audit of the document

CoA Condition

5. ensure updates to the CEMP are made within seven days of the completion of the review or receipt of actions identified by any EMR audit of the document, and be submitted to the EMR for approval.

The CEMP must be approved by the DES prior to the commencement of construction work associated with the Project.

11. Environment Personnel

Suitably qualified and experienced environmental management personnel shall be available and be responsible for implementing the environmental objectives for the Project, including undertaking regular site inspections, preparation of environmental documentation and ensuring the Project meets the requirements of the Environmental Management System (EMS).

Details of the environmental personnel, including relevant experience, defined responsibilities and resource allocation throughout the project (including time to be spent on-site/off-site) are to be submitted for the approval of the DES, at least 21 days prior to commencement of construction of the Project (or such time as otherwise agreed by the DES).

Any adjustments to environmental resource allocations (on-site or off-site) are to be approved by the DES.

12. Environmental Management Representative

Prior to the commencement of construction, the DES shall appoint an EMR for the duration of the construction period for the Project.

The EMR shall provide advice to the DES in relation to the environmental compliance and performance of the Project. The EMR shall have responsibility for:

- a) considering and advising TfNSW on matters specified in these conditions and compliance with such
- b) reviewing and where required by the DES, providing advice on the Project's induction and training program for all persons involved in the construction activities and monitoring implementation
- c) periodically auditing the Project's environmental activities to evaluate the implementation, effectiveness and level of compliance of on-site construction activities with authority approvals and licences, the CEMP and associated plans and procedures, including carrying out site inspections weekly, or as required by the DES
- d) reporting weekly to TfNSW, or as required by the DES
- e) issuing a recommendation for work to stop immediately, if in the view of the EMR circumstances so require. The stop work recommendation may be limited to specific activities if the EMR can easily identify those activities
- f) requiring reasonable steps to be taken to avoid or minimise unintended or adverse environmental impacts
- g) reviewing corrective and preventative actions to ensure the implementation of recommendations made from the audits and site inspections
- h) providing reports to TfNSW on matters relevant to the carrying out of the EMR role as necessary
- i) where required by the DES, providing advice on the content and implementation of the CEMP and Environmental Controls Map (ECM) in accordance with the conditions
- j) reviewing and approving updates to the CEMP.

The EMR shall be available during construction activities to inspect the site(s) and be present on-site as required.

13. Environmental Controls Map

An Environmental Controls Map (ECM) shall be prepared and implemented in accordance with TfNSW's *Guide to Environmental Controls Map* (SD-015) prior to the commencement of construction for implementation for the duration of construction. The ECM is to be endorsed by the EMR and may be prepared in stages, as set out in the CEMP.

CoA Condition

A copy of the ECM shall be submitted to the EMR for review and endorsement. The EMR is to be given a minimum period of seven days to review and endorse the ECM. Following receipt of the EMR's endorsement, the ECM shall be submitted to the DES for approval, at least 14 days prior to commencement of construction (or such time as is otherwise agreed by the DES).

The ECM shall be prepared as a map – suitably enlarged (e.g. A3 size or larger) for mounting on the wall of a site office and included in site inductions, supported by relevant written information.

Updates to the ECM shall be made within seven days of the completion of the review or receipt of actions identified by any EMR audit of the document and submitted to the EMR for approval.

Hours of Work

14. Standard Construction Hours

Construction activities shall be restricted to the hours of 7:00 am to 6:00 pm (Monday to Friday); 8:00 am to 1:00 pm (Saturday) and at no time on Sundays and public holidays except for the following works which are permitted outside these standard hours:

- a) any works which do not cause noise emissions to be more than 5dBA higher than the rating background level (RBL) at any nearby residential property and/or other noise sensitive receivers
- b) out of hours work identified and assessed in the EIA or the approved Out of Hours Work Protocol (OOHWP)
- c) the delivery of plant, equipment and materials which is required outside these hours as requested by police or other authorities for safety reasons and with suitable notification to the community as agreed by the DES
- d) Emergency Work to avoid the loss of lives, property and/or to prevent environmental harm
- e) any works authorised under the Environmental Planning and Assessment (COVID-19 Development – Infrastructure Construction Work Days No. 2) Order 2020 (whilst the Order is in effect)
- f) any other work as agreed by the DES and considered essential to the Project, or as approved by EPA (where an EPL is in effect).

15. High Noise Generating Activities

Rock breaking or hammering, jack hammering, pile driving, vibratory rolling, cutting of pavement, concrete or steel and any other activities which result in impulsive or tonal noise generation shall not be undertaken for more than three hours, without a minimum one hour respite period unless otherwise agreed to by the DES, or as approved by EPA (where relevant to the issuing of an EPL).

Noise and Vibration

16. Construction Noise and Vibration

Construction noise and vibration mitigation measures shall be implemented through the CEMP, in accordance with TfNSW's *Construction Noise and Vibration Strategy* (ST-157) and the EPA's *Interim Construction Noise Guideline* (Department of Environment and Climate Change, 2009). The mitigation measures shall include, but not limited to:

- a) details of construction activities and an indicative schedule for construction works
- b) identification of construction activities that have the potential to generate noise and/or vibration impacts on surrounding land uses, particularly sensitive noise receivers
- c) detail what reasonable and feasible actions and measures shall be implemented to minimise noise impacts (including those identified in the EIA)
- d) procedures for notifying sensitive receivers of construction activities that are likely to affect their noise and vibration amenity, as well as procedures for dealing with and responding to noise and vibration complaints
- e) an Out of Hours Work Protocol (OOHWP) for the assessment, management and approval of works outside the standard construction hours identified in Condition 12 of this approval, including a risk assessment process which deems the out of hours activities to be of low, medium or high environmental risk, is to be developed. All out of hours works are subject to approval by the EMR and/or DES or as approved by EPA (where relevant to the issuing of an EPL). The OOHWP should be consistent with the TfNSW *Construction Noise and Vibration Strategy* (ST-157)

CoA Condition

- f) a description of how the effectiveness of actions and measures shall be monitored during the proposed works, identification of the frequency of monitoring, the locations at which monitoring shall take place, recording and reporting of monitoring results and if any exceedance is detected, the manner in which any non-compliance shall be rectified.

17. Vibration Criteria

Vibration (other than from blasting) resulting from construction and received at any structure outside of the Project shall be limited to:

- a) for structural damage vibration –British Standard BS 7385-2:1993 *Evaluation and measurement for vibration in buildings Part 2* and German Standard DIN 4150:Part 3 – 1999: *Structural Vibration in Buildings: Effects on Structures*
- b) for human exposure to vibration – the acceptable vibration values set out in the *Environmental Noise Management Assessing Vibration: A Technical Guideline* (Department of Environment and Conservation, 2006) which includes British Standard BS 6472-2:1992 *Guide to Evaluation of Human Exposure to Vibration in Buildings (1 Hz to 80 Hz)*.

These limits apply unless otherwise approved by the DES through the CEMP.

18. Non-Tonal Reversing Beepers

Non-tonal reversing beepers (or an equivalent mechanism) shall be fitted and used on all construction vehicles and mobile plant regularly used on-site (i.e. greater than one day) and for any out of hours work.

19. Piling

Wherever practical, piling activities shall be completed using non-percussive piles. If percussive piles are proposed to be used, approval of the DES shall be obtained prior to commencement of piling activities.

Contamination and Hazardous Materials

20. Unidentified Contamination (Other Than Asbestos)

If previously unidentified contamination (excluding asbestos) is discovered during construction, work in the affected area must cease immediately, and an investigation must be undertaken and report prepared to determine the nature, extent and degree of any contamination. The level of reporting must be appropriate for the identified contamination in accordance with relevant EPA guidelines, including the *Guidelines for Consultants Reporting on Contaminated Sites* (Office of Environment and Heritage, 2011).

A copy of any contamination report shall be submitted to the EMR for review. The EMR is to be given a minimum period of seven days to review.

A revised copy of the report shall be submitted to the DES for consideration upon completion of the EMR review period. The DES shall determine whether consultation with the relevant council and/or EPA is required prior to continuation of construction works within the affected area.

Note: *In circumstances where both previously unidentified asbestos contamination and other contamination are discovered within a common area, nothing in these conditions shall prevent the preparation of a single investigation report to satisfy the requirements of both Condition 17 and Condition 18.*

21. Asbestos Management

If previously unidentified asbestos contamination is discovered during construction, work in the affected area must cease immediately, and an investigation must be undertaken and a report prepared to determine the nature, extent and degree of the asbestos contamination. The level of reporting must be appropriate for the identified contamination in accordance with relevant EPA, Safe Work Australia and SafeWork NSW guidelines and include the proposed methodology for the remediation of the asbestos contamination. Remediation activities must not take place until receipt of the investigation report.

Works may only recommence upon receipt of a validation report from a suitably qualified contamination specialist that the remediation activities have been undertaken in accordance with the investigation report and remediation methodology.

Note: *In circumstances where both previously unidentified asbestos contamination and other contamination are discovered within a common area, nothing in these conditions shall prevent the preparation of a single investigation report to satisfy the requirements of both Condition 20 and Condition 21.*

CoA Condition

22. Storage and Use of Hazardous Materials

Construction hazard and risk issues associated with the use and storage of hazardous materials shall be addressed through risk management measures, which shall be developed prior to construction as part of the overall CEMP, in accordance with relevant EPA guidelines, TfNSW's *Chemical Storage and Spill Response Guidelines* (SD-066) and Australian and ISO standards. These measures shall include:

- a) the storage of hazardous materials, and refuelling/maintenance of construction plant and equipment are to be undertaken in clearly marked designated areas designed to contain spills and leaks
- b) spill kits, appropriate for the type and volume of hazardous materials stored or in use, to be readily available and accessible to construction workers. Kits are to be kept at hazardous materials storage locations, in site compounds and on specific construction vehicles. Where a spill to a watercourse is identified as a risk, spill kits are to be kept in close proximity to potential discharge points in support of preventative controls
- c) all hazardous materials spills and leaks to be reported to site managers and actions to be immediately taken to remedy spills and leaks
- d) training in the use of spill kits to be given to all personnel involved in the storage, distribution or use of hazardous materials.

Erosion and Sediment Control

23. Erosion and Sediment Control

Soil and water management measures shall be prepared, implemented and maintained as part of the CEMP for the mitigation of water quality impacts during construction of the Project. The management measures shall be prepared in accordance with *Managing Urban Stormwater: Soils and Construction Volume 1 4th Edition* (Landcom, 2004).

Flora and Fauna

24. Separate approval, in accordance with TfNSW's *Removal or Trimming of Vegetation Application* (FT-078), is required for the trimming, cutting, pruning or removal of trees or vegetation. The trimming, cutting, pruning or removal of trees or vegetation shall be undertaken in accordance with the conditions of that approval.

Heritage Management

25. Aboriginal and Non-Aboriginal Heritage

If previously unidentified Aboriginal or non-Aboriginal heritage/archaeological items are uncovered during construction works, the procedures contained in the TfNSW *Unexpected Heritage Finds Guideline* (SD-115) shall be followed and all works in the vicinity of the find shall cease. The EMR shall be immediately notified to co-ordinate a response, which may include seeking appropriate advice from a suitably qualified and experienced Heritage Advisor (in consultation with Heritage NSW, and the Department of Planning, Industry and Environment, as applicable). Works in the vicinity of the find shall not re-commence until clearance has been received from TfNSW and/or the Heritage Advisor.

26. Protection of heritage items listed on the RailCorp Section 170 Conservation Register

Design and construction of the Project within the curtilage of the Section 170 listed Turrella Railway Station Group must be undertaken in accordance with the recommendations made in the Statement of Heritage Impact (Umwelt, 2021).

27. Section 170A notification

In accordance with Section 170a of the Heritage Act, Sydney Trains should provide notification of the work to Heritage Division 14 days prior to the commencement of the work

CoA Condition

28. Heritage Architect

The suitably qualified and experienced Heritage Architect who is independent of the design and construction team's personnel shall be engaged to the satisfaction of the DES. The Heritage Architect shall provide ongoing heritage, design and conservation advice throughout detailed design and any subsequent relevant design modifications to ensure that the final design adheres to the recommendations of the heritage assessments provided in the EIA.

The Heritage Architect involvement and reporting shall include, but not be limited to:

- Attendance at design meetings and/or heritage meetings to provide iterative heritage advice to actively inform design development
- Targeted historical research to inform the iterative advice as required (to be documented as part of the below summary)
- Summary of the iterative heritage advice provided which should capture (as a minimum):
 - the optioneering process undertaken as part of the design development, including heritage pros & cons
 - discussion on why particular heritage sensitive solutions might be discounted
 - discussion of the relevant detailed design stage
 - recommendations for next steps to further mitigate heritage impacts

A progress draft of the above is to be provided at each detailed design stage. A final copy of the summary report is to be provided to TfNSW no later than 1 week after final submission. The summary report is to also include:

confirmation of the extent of involvement of the Heritage Architect in the detailed design process at the completion of Approved for Construction (AFC) design stage

- b) identification and assessment of any changes to, and/or additional to the scope of work from those identified in the EIA which would affect heritage significance
- c) a description of the impacts, and recommended mitigation measures relating to any new or amended scope of work identified in (b) above including the requirement for additional heritage approvals for consultation
- d) confirmation that the detailed design is compliant with the requirements of the EIA.

29. Heritage Interpretation Plan

If required by the recommendations of the SoHI (Umwelt, 2021) heritage interpretation shall be planned and integrated into the detailed design of the Project. The heritage interpretation planning shall be prepared by the Heritage Advisor (and sub-consultants as required i.e. graphics) with reference to *Sydney Trains Heritage Interpretation Guidelines*. The heritage interpretation planning shall be captured in a Heritage Interpretation Plan (HIP) that is to be issued as a progress report at each stage of detailed design.

The HIP is to be submitted to the DES for approval at least 14 days prior to the commencement of construction of the Project (or such time as is otherwise agreed by the DES).

30. Photographic Archival Recording

Archival recording of Turrella Railway Station Group shall be undertaken in accordance with the Heritage NSW guidelines prior to works commencing. The archival recording shall incorporate the general context and views of the station, the existing stepway and station building. The archival recording shall be reviewed and endorsed by the EMR prior to submission to Heritage NSW or other government body.

Electronic copies of the archival recording are to be provided to the TfNSW Heritage Team for future reference.

31. Protection of built heritage

Significant elements of the station group are to be adequately protected during the works. This could include physical barriers, exclusion zones or other methods as appropriate to ensure accidental damage does not occur during the works

CoA	Condition
	Lighting
32.	<p data-bbox="296 297 512 331">Lighting Scheme</p> <p data-bbox="296 338 1455 461">A lighting scheme for the construction and operation of the Project is to be developed by a suitably qualified lighting designer and prepared in accordance with <i>AS 1158 Lighting for Roads and Public Spaces</i> and <i>AS 4282 Control of the Obtrusive Effects of Outdoor Lighting</i>. The lighting scheme shall address the following as relevant:</p> <ul data-bbox="296 468 1455 831" style="list-style-type: none"> a) consideration of lighting demands of different areas b) strategic placement of lighting fixtures to maximise ground coverage c) use of LED lighting d) minimising light spill by directing lighting into the station e) control systems for lighting that dim or switch-off lights settings according to the amount of daylight the zone is receiving f) motion sensors to control low traffic areas g) allowing the lighting system to use low light or switch off light settings while meeting relevant lighting Standards requirements, and h) ensuring security and warning lighting is not directed at neighbouring properties.
	Property
33.	<p data-bbox="296 891 651 925">Property Condition Surveys</p> <p data-bbox="296 931 1455 1021">Subject to landowner agreement, property condition surveys shall be completed prior to piling, excavation or bulk fill or any vibratory impact works including jack hammering and compaction (Designated Works) in the vicinity of the following buildings/structures:</p> <ul data-bbox="296 1028 1455 1162" style="list-style-type: none"> a) all buildings/structures/roads within a plan distance of 50 metres from the edge of the Designated Works b) all heritage listed buildings and other sensitive structures within 100 metres from the edge of the Designated Works. <p data-bbox="296 1169 1455 1292">Property condition surveys need not be undertaken if a risk assessment indicates that selected buildings/structures/roads identified in (a) and (b) will not be affected as determined by a qualified geotechnical and construction engineering expert with appropriate registration on the National Professional Engineers Register prior to commencement of Designated Works.</p> <p data-bbox="296 1299 1455 1388">Selected potentially sensitive buildings and/or structures shall first be surveyed prior to the commencement of the Designated Works and again immediately upon completion of the Designated Works.</p> <p data-bbox="296 1395 1455 1485">All owners of assets to be surveyed, as defined above, are to be advised (at least 14 days prior to the first survey) of the scope and methodology of the survey, and the process for making a claim regarding property damage.</p> <p data-bbox="296 1491 1455 1559">A copy of the survey(s) shall be given to each affected owner. A register of all properties surveyed shall be maintained.</p> <p data-bbox="296 1565 1455 1659">Any damage to buildings, structures, lawns, trees, sheds, gardens, etc. as a result of construction activity direct and indirect (i.e. including vibration and groundwater changes) shall be rectified at no cost to the owner(s).</p>
	Sustainability
34.	<p data-bbox="296 1720 568 1753">Sustainability Officer</p> <p data-bbox="296 1760 1455 1850">A suitably qualified and experienced Sustainability Officer shall be appointed who is responsible for implementing the sustainability objectives for the Project, in line with the Project's overarching Sustainability Strategic Management Plan.</p> <p data-bbox="296 1856 1455 1951">Details of the Sustainability Officer including defined responsibilities, duration and resource allocation throughout the appointment are to be submitted to the satisfaction of the Director Sustainability prior to the preparation of the Sustainability Management Plan.</p>

CoA Condition

35. Sustainability Management Plan

A Sustainability Management Plan (SMP) which details the approach to managing sustainability requirements and opportunities during design and construction shall be prepared. The SMP shall include the following as a minimum:

- a) inclusion of a completed Infrastructure Sustainability Council (ISC) scorecard demonstrating credits targeted to meet an Infrastructure Sustainability Rating (v1.2) target of an 'Excellent' rating for the 'Design' and 'As-Built' phases of the Project.
- b) a statement outlining the Construction Contactor's own corporate sustainability policies, obligations, goals, targets and commitments
- c) a description of the processes and methodologies for encouraging and identifying innovative sustainability outcomes on the Project, and the areas targeted for innovative sustainable solutions to be explored and/or implemented on the Project
- d) the approach to the identification of opportunities to reduce carbon emissions, energy use and embodied lifecycle impacts of the Project. This should include a summary of initiatives proposed for implementation to meet energy and carbon management objectives and targets
- e) the approach to sustainable procurement including how procurement processes have taken in to account the principles of *ISO 20400: 2017 – Sustainable Procurement* in the selection of all materials, products and services
- f) a description of the processes, standards and procedures for undertaking climate change risk assessments and strategies for mitigation of risks associated with climate change and extreme weather events.

A copy of the SMP shall be submitted to the Director Sustainability at least 30 days prior to the commencement of construction, for approval (or such time as is otherwise agreed by the Director Sustainability).

36. Infrastructure Sustainability Council (ISC) Ratings

The Project shall be registered with the Infrastructure Sustainability Council (ISC), and shall aim to achieve a minimum 'Infrastructure Sustainability Rating Tool' (v1.2) 'Excellent' rating with an overall score of 65 or for the 'Design', and 'As-Built' phases of the Project.

Traffic, Transport and Access

37. Traffic Management Plan

A construction Traffic Management Plan (TMP) shall be prepared as part of the CEMP which addresses, as a minimum, the following matters:

- a) ensuring adequate road signage at construction work sites to inform motorists and pedestrians of the work site ahead to ensure that the risk of road accidents and disruption to surrounding land uses is minimised
- b) maximising safety and accessibility for pedestrians and cyclists
- c) ensuring adequate sight lines to allow for safe entry and exit from the site
- d) ensuring access to railway stations, businesses, entertainment premises and residential properties (unless affected property owners have been consulted and appropriate alternative arrangements made)
- e) managing impacts and changes to on and off street parking and requirements for any temporary replacement provision
- f) parking locations for construction workers away from stations and busy residential areas and details of how this will be monitored for compliance
- g) routes to be used by heavy construction-related vehicles to minimise impacts on sensitive land uses and businesses
- h) details for rail replacement bus stops if required, including appropriate signage to direct customers, in consultation with the relevant bus operator. Particular provisions should also be considered for the accessibility impaired
- i) measures to manage traffic flows around the area affected by the Project, including as required regulatory and direction signposting, line marking and variable message signs and all other traffic control devices necessary for the implementation of the TMP.

CoA Condition

Consultation with the relevant roads authority must be undertaken during the preparation of the TMP, as required. The performance of all Project traffic arrangements must be monitored during construction.

38. Road Condition Reports

Prior to construction commencement, road condition surveys and reports on the condition of roads and footpaths to be affected by construction shall be prepared. Any damage resulting from the construction of the Project, aside from that resulting from normal wear and tear, shall be repaired at the Proponent's expense.

39. Road Safety Audit

A Road Safety Audit shall be undertaken as part of the detailed design process and on completion of construction. The Road Safety Audit shall include but not be limited to detailed assessment of sight distances for vehicles travelling along the Reede Street bridge and mitigation measures proposed.

The Road Safety Audit is to be submitted to and accepted by TfNSW. The findings of the Road Safety Audit shall be provided to Bayside Council for information.

Urban Design and Landscaping

40. Urban Design and Landscaping Plan

An Urban Design and Landscaping Plan (UDLP) for the Project shall be prepared and submitted to TfNSW for endorsement by the Precincts and Urban Design Team. The UDLP is to address the fundamental design principles as outlined in *'Around the Tracks' – urban design for heavy and light rail* (TfNSW, Interim 2016). At a minimum, the UDLP shall:

- a) demonstrate a robust understanding of the Project site through a comprehensive site analysis to inform the design direction, demonstrate connectivity with street networks, transport modes, active transport options, and pedestrian distances
- b) identify opportunities and challenges
- c) establish site-specific principles to guide and test design options
- d) demonstrate how the preferred design option responds to the design principles established in *Around the Tracks*, including consideration of Crime Prevention through Environmental Design Principles.

The UDLP is to include the Public Domain Plan for the chosen option and shall provide analysis of the:

- (i) landscape design approach including design of pedestrian and bicycle pathways, street furniture, interchange facilities, new planting and opportunities for public art
- (ii) materials schedule including materials and finishes for proposed built works, colour schemes, paving and lighting types for public domain, fencing and landscaping
- (iii) an Artist's Impression or Photomontage to communicate the proposed changes to the precinct.

The following design guidelines are available to assist and inform the UDLP for the Project:

- *TAP Urban Design Plan Guidelines* (TfNSW, Draft 2018)
- *Commuter Car Parks Urban Design Guidelines* (TfNSW, Interim 2017)
- *Managing Heritage Issues in Rail Projects Guidelines* (TfNSW, Interim 2016)
- *Creativity Guidelines for Transport Systems* (TfNSW, Interim 2016)
- *Water Sensitive Urban Design Guideline SD-106* (TfNSW, 2017).

The UDLP shall be:

1. prepared in consultation with councils and relevant stakeholders
2. prepared by a registered architect and/or landscape architect
3. prepared to inform/support the concept design and submitted to TfNSW for review at this design milestone
4. finalised and submitted to TfNSW at the completion of design documentation.

41. Worksite compounds and laydown areas shall be screened with shade cloth (or similar material, where necessary) to minimise visual impacts from key viewing locations.

CoA	Condition
	Site Specific Conditions
42.	The contractor in collaboration with the Heritage Architect/Consultant must prepare and submit an illustrated services plan to detail all services routes in order to demonstrate compliance with the Heritage Technical Note: Installation of New Electrical and Data Services at Heritage Sites (2017). The illustrated services plan should include, but not be limited to; high voltage (HV), low voltage, communications, PA and CCTV. The illustrated services plan must be submitted and approved by the TfNSW Heritage Specialist prior to the commencement of permanent works.
43.	Prior to use of the area located north-east off Henderson Street for laydown, the vegetation surrounding the site shall be inspected by a suitably qualified ecologist to rule out the occurrence of any threatened species or ecological communities. All protection measures recommended by the ecologist shall be implemented prior to occupation of the site.