Transgrid

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Mount Piper to Wallerawang Transmission Line Upgrade Project

Submissions Report

December 2025

Document preparation history

Revision	Reviewed By	Date
0	Jenny McKinney Greg Marshall	11.12.25 11.12.25
1	Jenny McKinney Greg Marshall	17.12.25 17.12.25

Executive summary

Project scope

Transgrid is seeking planning approval for the construction and operation of a new 330 kilovolt (kV) transmission line of approximately eight kilometres (km) in length between the Mount Piper and Wallerawang 330 kV substations (referred to as 'the project'). Approximately 5.3 kilometres (km) would involve upgrading transmission structures on a widened, existing easement while about 2.7 km would be new transmission line within a new easement. The project is located in the City of Lithgow Local Government Area in the central west of NSW.

The project would include (refer to Figure 1.1):

- demolition and removal of redundant transmission structures, including two steel lattice towers, a gantry, and wood pole structure from the existing 132 kV transmission line
- construction of double circuit 330 kV steel lattice towers and three 132 kV concrete pole structures to accommodate 5.3 km of 132 kV and 330 kV transmission line on a widened easement
- construction of 2.7 km of new 330 kV transmission line on a new easement
- upgrade of existing tracks as well as creation of new tracks to facilitate efficient construction access
- other ancillary works required to support construction of the project, including establishment of temporary construction compounds and laydown areas.

The project is crucial to reliably transfer power from the Central-West Orana Renewable Energy Zone (CWO REZ) to the Greater Sydney region. The project is identified in the New South Wales (NSW) Transmission Infrastructure Strategy (EnergyCo 2023), as requiring a capacity upgrade and will also support the key objectives of the NSW Electricity Infrastructure Roadmap (DPIE 2020).

Planning approvals process

The project was declared Critical State Significant Infrastructure (CSSI) on 4 July 2024 and is subject to approval by the NSW Minister for Planning and Public Spaces under Part 5, Division 5.2 of the *Environmental Planning and Assessment Act 1979* (NSW) (EP&A Act). The project was determined to be a controlled action on 2 August 2024 under the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act) and also requires approval from the Australian Government Minister for the Environment and Water.

Purpose of this submissions report

An Environmental Impact Statement (EIS) was prepared to support Transgrid's application for approval of the project and was placed on public exhibition between 27 August 2025 and 24 September 2025. This Submissions Report considers the issues raised in submissions received during the public exhibition of the EIS, as well as Transgrid's response to these issues and includes:

- a summary of the consultation activities undertaken during, and post exhibition of the Environmental Impact Statement
- a summary of the proposed amendments to the project and other key actions undertaken since public exhibition of the Environmental Impact Statement
- revised consolidated environmental mitigation and management measures for the project, adjusted in response to the submissions received and the proposed design changes.

Overview of submissions

Submissions from agencies, public authorities, organisations and the community were received by the NSW Department of Planning, Housing and Infrastructure and provided to Transgrid for consideration. The submissions from agencies and public authorities are published on the DPHI major projects portal. A total of 71 submissions were received, comprising:

- nineteen (20) submissions from agencies and public authorities, including one (1) submission from a local council
- forty-two (42) community submissions
- nine (9) organisation submissions.

Of the 51 submissions received from the community and organisations:

- five (5) submissions provided 'support' for the project
- one (1) submission provided 'comment' on the project
- forty-five (45) submissions 'object' to the project.

DPHI – Planning also provided a separate request for additional information and clarification that was not counted as a formal submission.

Summary of issues raised by community and organisations

Key issues raised in community and organisation submissions included:

- justification for selection of the existing transmission line route on undulating land within the Gardens of Stone State Conservation Area as the preferred project route
- issues associated with efficiently constructing, operating and maintaining a transmission line within the Gardens of Stone State Conservation Area
- demonstration of avoidance and minimisation of biodiversity impacts, including vegetation clearing and potential fauna collision risks
- hazard and risks of constructing, operating and maintaining the proposed transmission line, primarily relating to the perceived risk of bushfire ignition and constraints on firefighting operations
- justification of the project, including the strategic need and benefits.

A more detailed breakdown of the issues raised is provided in chapter 2 of this Submissions Report.

Responses to the issues raised within the community and organisation submissions is provided in chapter 4.

Government agencies and public authority submissions and responses are outlined in chapter 5 of this Submissions Report.

Mitigation and management

The EIS identified mitigation measures to address potential impacts from the project and outlined the approach to environmental management. Some mitigation measures presented in the EIS have been revised and new mitigation measures have been added based on the issues raised in submissions and consideration of the proposed project amendments. A consolidated revised list of mitigation measures is provided in Appendix B.

Actions taken since exhibition of the EIS

Since the public exhibition of the EIS, stakeholder and landowner consultation has continued as have field investigations, design development and construction planning. A number of changes have been proposed in response to stakeholder and landowner feedback. A separate Amendment Report (Transgrid, 2025a) has been prepared to describe proposed changes, outline the justification for the changes and provide a full assessment of the potential impacts.

The following technical reports have been updated and are attached to this report:

- Technical Report 2 – Revised Biodiversity Development Assessment Report (Appendix C)
- Technical Report 8 – Revised Traffic and Transport Assessment Report (Appendix D).

Technical Report 2 and 8 have also been updated with the project amendments including minor changes to the Project footprint and revised traffic numbers. This Submissions Report should be read in conjunction with the Amendment Report (Transgrid, 2025a).

Conclusion and next steps

The EIS, this Submissions Report and the Amendment Report (Transgrid, 2025a), including any supplementary technical assessments will be reviewed by DPHI – Planning on behalf of the NSW Minister for Planning and Public Spaces. Once DPHI – Planning has completed their assessment, a draft assessment report will be prepared for the NSW Planning Secretary, which may include recommended conditions of approval.

The final assessment report will then be provided to the NSW Minister for Planning and Public Spaces, who will decide whether or not to approve the amended project. If the amended project is approved, DPHI - Planning's assessment report and any conditions of approval will be provided to the Australian Government Minister for the Environment and Water, who will assess the amended project under the bilateral agreement and decide whether the amended project should be approved. If it is approved, the Minister for the Environment and Water may add any additional conditions.

If the amended project is approved, Transgrid will continue to consult with community members, government agencies and other stakeholders during detailed design and construction of the project to avoid, manage and mitigate the project impacts and realise the benefits as far as possible.

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Glossary

Term	Definition
ACHAR	Aboriginal Cultural Heritage Assessment Report
ACHMP	Aboriginal Cultural Heritage Management Plan
AEMO	Australian Energy Market Operator Public company that manages the National Electricity Market.
AHIMS	Aboriginal Heritage Information Management System
AIP	NSW Aquifer Interference Policy
APZ	Asset Protection Zone
BAM	Biodiversity Assessment Method
BAM-C	Biodiversity Assessment Method Calculator
BC Act	NSW *Biodiversity Conservation Act 2016*
CEMP	Construction Environmental Management Plan
CNMLs	Construction Noise Management Levels
CNVMP	Construction Noise and Vibration Management Plan
Conductor	The material that conducts electricity and in relation to overhead transmission lines is often referred to as 'wires' that are suspended between the structures.
Construction footprint	Direct ground disturbance footprint proposed by construction activities.
CSSI	Critical State Significant Infrastructure
Cth	Commonwealth
CWO REZ	The Central-West Orana Renewable Energy Zone Renewable Energy Zones combine new renewable energy infrastructure, including generators (such as solar and wind farms) with storage (such as batteries and pumped hydro) and high-voltage transmission infrastructure.
Commonwealth DCCEEW	Australian Government Department of Climate Change, Energy, the Environment and Water. The Department administering the EPBC Act.
CPHR	Conservation Programs, Heritage and Regulation Group, a division of NSW DCCEEW.
CVA	Cultural Values Assessment
dB(A)	decibel, A-weighted
DPE	The former NSW Department of Planning and Environment (now known as the Department of Planning, Housing and Infrastructure).
DPHI	NSW Department of Planning, Housing and Infrastructure
DPI	NSW Department of Primary Industries
DPIRD	NSW Department of Primary Industries and Regional Development
Easement	An area surrounding the transmission line which is a 'legal right of way' and allows for the development, ongoing access and maintenance of the transmission line.
EIS	Environmental Impact Statement
Energised	An electricity line that is carrying electricity
EnergyCo	Energy Corporation of NSW
EMFs	Electric and Magnetic Fields
EP&A Act	NSW *Environmental Planning and Assessment Act 1979*

Term	Definition
NSW EPA	NSW Environment Protection Authority
EPBC Act	*Environment Protection and Biodiversity Conservation Act 1999 (Cth)*
ESCP	Erosion and Sediment Control Plan
ICNG	*Interim Construction Noise Guideline*
ISP	Integrated System Plan. The Australian Energy Market Operator's whole-of-system plan for the efficient development of the National Electricity Market power system that achieves power system needs for a planning horizon of at least 20 years for the long-term interests of the consumers of electricity.
km	kilometre
kV	kilovolt, one thousand volts
LCVIA	Landscape Character and Visual Impact Assessment
LEP	Local Environmental Plan
LGA	Local Government Area
m	metre
MNES	Matters of National Environmental Significance
NEM	National Electricity Market The connected electricity transmission grid of Queensland, New South Wales, Australian Capital Territory, Victoria, Tasmania and South Australia.
NPfI	Noise Policy for Industry
NPWS	National Parks and Wildlife Service
NSW	New South Wales
NSW DCCEEW	NSW Department of Climate Change, Energy, the Environment and Water. The Department administers a range of NSW environment legislation including the BC Act and POEO Act.
OOHW	Out of hours work
OSOM	Oversize and/or Overmass Vehicle
Outage	An event where electricity supply is interrupted and electricity is not being supplied along an electrical cable, either scheduled in advance or otherwise.
Outage recall or recall	Where a scheduled outage has commenced, but transmission network capacity requires the transmission line to be re-energised at short notice by Transgrid to meet network demands.
PAD	Potential archaeological deposit
PCT	Plant Community Type
PNTL	Project-specific noise trigger levels
POEO Act	NSW *Protection of the Environment Operations Act 1997*
RAPs	Registered Aboriginal Parties
SCA	State Conservation Area
SEARs	Secretary's environmental assessment requirements
SoHI	Statement of Heritage Impact
SWMP	Soil and Water Management Plan
TfNSW	Transport for NSW
TS	Transmission structure
TTA	Traffic and Transport Assessment
TTMP	Traffic and Transport Management Plan

Term	Definition
the project	Construction and operation of a new 330 kV transmission line between existing substations at Mount Piper and Wallerawang.
the project footprint	Includes the easement and route of the proposed transmission line, transmission structures, a widened easement, substations, potential access tracks to/from the easement, temporary construction compounds, and laydown areas with the easement. Access tracks and construction compound sites are indicative and subject to design changes and further investigation.
the study area	The investigation area for identifying potential direct and indirect impacts of activities as a result of the project. The study area includes the investigation area for potential access tracks, the location of which are yet to be confirmed. The study area will differ across the various environmental matters being investigated.
Transgrid	The manager and operator of the high voltage electricity transmission network in New South Wales and the Australian Capital Territory with connections to Victoria and Queensland. Transgrid manages the network that is the backbone of the National Electricity Market, which enables energy trading between Australia's three largest states along the east coast.
VRZ	Vegetated riparian zone
WNTCAC	Warrabinga Native Title Claimants Aboriginal Corporation

1. Introduction

This chapter provides an overview of the project key features, a summary of consultation conducted during and after EIS exhibition and outlines the purpose and structure of this report.

1.1. Background

The Mount Piper to Wallerawang Transmission Line Upgrade Project (the project) was declared Critical State Significant Infrastructure (CSSI) on 4 July 2024 and is subject to approval by the NSW Minister for Planning and Public Spaces in accordance with the requirements of the NSW *Environmental Planning and Assessment Act 1979* (EP&A Act). The project was determined to be a controlled action on 2 August 2024 under the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act) and also requires approval from the Australian Government Minister for the Environment and Water.

An Environmental Impact Statement (EIS) was prepared to support Transgrid's application for approval of the project in accordance with the requirements of Part 5, Division 5.2 of the EP&A Act. The EIS (SSI-70279722) was placed on public exhibition by the NSW Department of Planning, Housing and Infrastructure (DPHI – Planning) from 27 August 2025 to 24 September 2025.

1.2. Key features of the project

The project would involve the construction and operation of approximately eight kilometres (km) of new 330 kilovolt (kV) transmission line between the Mount Piper and Wallerawang 330 kV substations. Approximately 5.3 km would involve upgrading transmission structures on a widened, existing easement while about 2.7 km would be new construction within a new easement. The project location and regional context is shown in Figure 1.1. The key features of the project include:

- demolition and removal of redundant transmission structures, including two steel lattice towers, a gantry, and wood pole structure from the existing 132 kV transmission line
- construction of double circuit 330 kV steel lattice towers and three 132 kV concrete pole structures to accommodate 5.3 km of 132 kV and 330 kV transmission line on a widened easement
- construction of 2.7 km of new 330 kV transmission line on a new easement
- upgrade of existing tracks as well as creation of new tracks to facilitate efficient construction access
- other ancillary works required to support construction of the project, including establishment of temporary construction compounds and laydown areas.

The project's transmission infrastructure, and construction and operational activities are further described in section 3 of the EIS (Project description). Chapter 2 of the Amendment Report (Transgrid, 2025a) describes the amendments to the project's construction method since the public exhibition of the EIS. These amendments are primarily related to access track requirements and associated drainage, extent of construction compound sites, piling methods and construction traffic volumes.

This Submissions Report should be read in conjunction with the Amendment Report (Transgrid, 2025a).

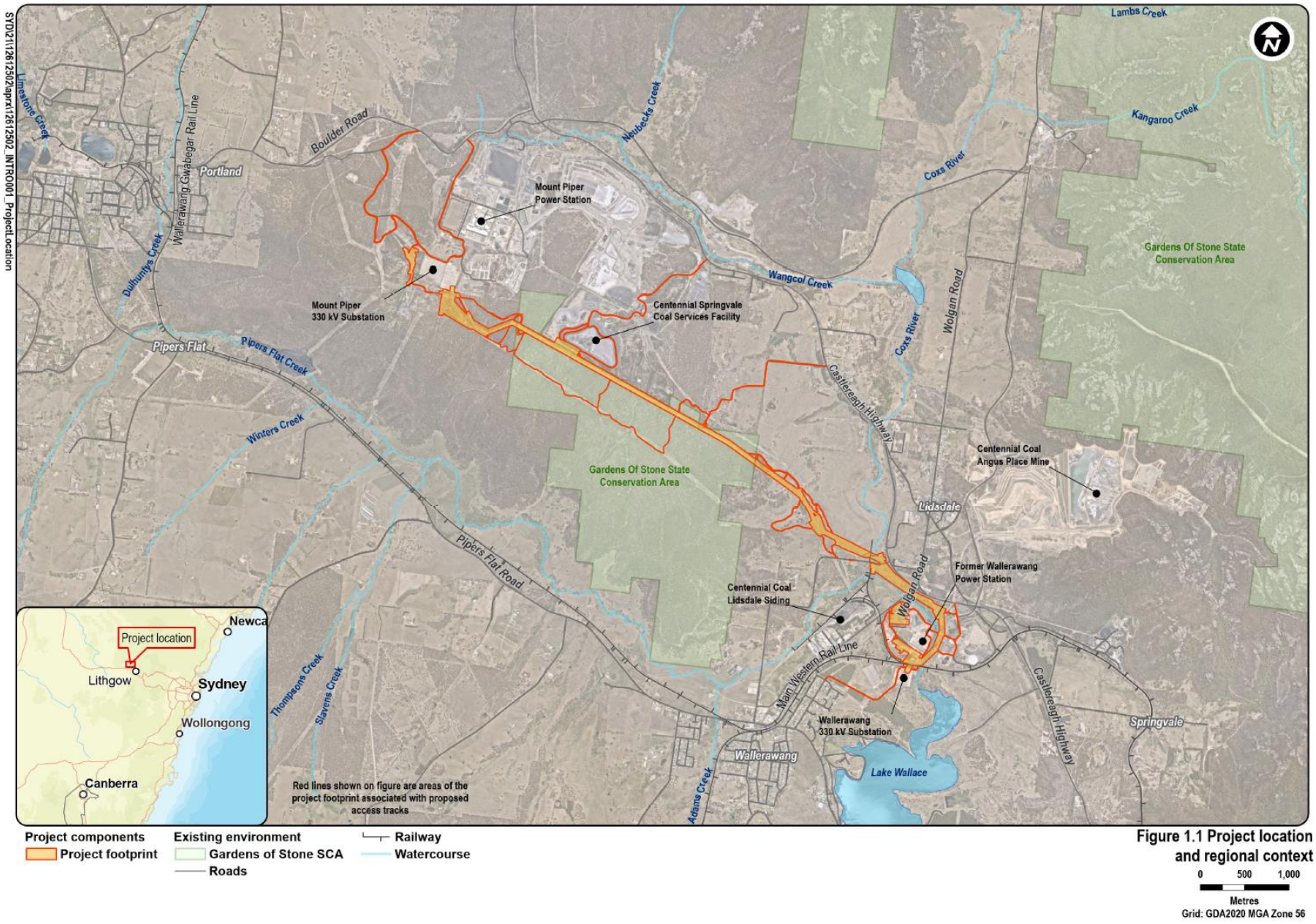

Figure 1.1. Project location and regional context

1.3. Consultation undertaken during public exhibition

1.3.1. Overview of consultation activities

Prior to the EIS public exhibition period commencing, Transgrid provided advance notice and briefings with landowners in July 2025 and August 2025 to inform them of the contents of the EIS.

During the public exhibition period, three dedicated community information sessions were held at local venues, including Portland Library (on 11 September), Wallerawang Library (on 13 September), and the Black & Gold Motel Wallerawang (on 16 September), where in-depth conversations took place with 16 community members. Comprehensive project materials, such as printed information sheets and factsheets, were distributed at these sessions and made available online. In addition, targeted social media campaigns were launched across Transgrid's LinkedIn, Instagram, and Facebook channels, actively engaging residents in the Wallerawang and Lithgow areas and promoting both the EIS public exhibition period and related community benefit initiatives.

Further consultation activities included advertisements in the Lithgow Mercury newspaper, press releases to regional radio and online media, and distributing flyers to 2,753 letterboxes in Portland, Wallerawang, Lidsdale, Blackmans Flat and the surrounding locality. Transgrid also maintained a community inbox and free call 1800 phone number for enquiries.

Regular email updates were provided to subscribed stakeholders, and project webpages provided accessible and updated information, including detailed factsheets supporting the EIS. These coordinated efforts ensured broad awareness of the project and opportunities for community input throughout the public exhibition period.

Electronic copies of the EIS were available on the NSW Major Projects Portal. Hard copies of the EIS were exhibited at the Wallerawang Library.

All EIS consultation activities undertaken are detailed in the Consultation Outcomes for the Preferred Route report (dated March 2024) on the Transgrid website (Transgrid, 2024).

1.3.2. Stakeholder engagement

During the public exhibition period, Transgrid offered all landowners a one-to-one briefing session. One-on-one briefing sessions were held with the following 15 stakeholders:

- Transport for NSW
- NSW National Parks and Wildlife Service (NPWS)
- Heritage NSW
- Commonwealth Department of Climate Change, Energy, Environment, and Water (DCCEEW)
- Conservation Programs, Heritage, and Regulation Group (CPHR)
- State Emergency Services
- Rural Fire Service
- NSW Environment Protection Authority (NSW EPA)
- Paul Toole MP
- Andrew Gee MP
- Bathurst Local Aboriginal Land Council
- Lithgow Environmental Group
- Lidsdale Wallerawang Progress Association

- Wilderness Australia
- Lithgow City Council.

One nearby neighbour contacted Transgrid directly seeking a meeting, which was held on 22 September 2025.

All landowners were formally notified via letter on the first day of the EIS public exhibition informing them of the start of the EIS exhibition period and an invitation to comment. Transgrid received no requests for briefings from landowners.

1.4. Purpose and structure of this report

This Submissions Report has been prepared in accordance with the requirements for SSI projects under Division 5.2 Section 5.17(6) of the EP&A Act and the *State significant infrastructure guidelines – preparing a submissions report* (the SSI guidelines; DPIE March 2024). The report provides Transgrid's responses to feedback received during public during exhibition of the EIS and includes the following:

- **Section 1 Introduction** – a short summary of the project and the consultation that has been carried out to date
- **Section 2 Analysis of Submissions** – analysis of the submissions received, summarising the groups and people who made submissions and categorising the issues raised in submissions
- **Section 3 Actions taken since exhibition** – a summary of actions taken since public exhibition to address the issues raised in submissions, including refining or amending the project, undertaking further engagement with the community and/ or undertaking further assessment of the impacts of the project
- **Section 4 Response to submissions** – organisations and individuals – Transgrid's detailed response to issues raised during EIS exhibition by organisation and individuals
- **Section 5 Response to submissions** – agencies and authorities – Transgrid's detailed response to issues raised during EIS exhibition by Government agencies and authorities
- **Section 6 Conclusion** – an updated justification and evaluation of the project and conclusion
- **Section 7 References** – a list of all documents referred to in the report
- **Appendix A** – a list of all public submissions received and identifies where the issues raised are addressed in this report
- **Appendix B** – a consolidated revised mitigation measures for the project including any amendments made in response to submissions received
- **Appendix C** – the Revised Biodiversity Development Assessment Report (BDAR) which has been amended due to submissions and amendments to the project
- **Appendix D** – the Revised Traffic and Transport Assessment (TTA) Report which has been amended due to submissions and amendments to the project
- **Appendix E** – additional information on the Fish River Water Scheme
- **Appendix F** – additional information with regards to the NSW EPA submission regarding construction noise.

2. Analysis of submissions

This chapter provides an analysis of the submissions received, including a breakdown of the submitter types and number of submissions received and the key issues raised.

2.1. Submissions received

A total of 71 submissions were received during public exhibition of the EIS and includes one duplicate submission. A breakdown of submitter types and number of submissions received is provided in Table 2.1.

Table 2.1. Submitter type and number of submissions

Submitter type	Number of submissions received
Agency and authority submissions*	**20**
Public submissions	**51**
Individuals^	42
Community organisations	9
Total submissions	**71**

* DPHI-Planning's request for information and clarification was provided separately and not counted as a formal submission.
^ The 42 individual submissions, includes one duplicate submission (refer to Appendix A).

Submissions were received from the following agencies and authorities:

- DPHI – Crown Lands
- Civil Aviation Safety Authority
- CPHR
- Heritage NSW
- Transport for NSW
- NSW Rural Fire Service
- Fire and Rescue NSW
- Heritage Council of NSW
- NPWS
- NSW EPA
- Airservices Australia
- NSW Department of Primary Industries and Regional Development (DPIRD) – Agriculture
- NSW DPIRD – Fisheries
- NSW DPIRD – NSW Resources
- WaterNSW
- NSW DCCEEW – Water
- Endeavour Energy
- Lithgow City Council
- Subsidence Advisory
- NSW Health – Nepean Blue Mountains Local Health District.

These submissions are published on the DPHI major projects portal. In addition to these formal submissions, the DPHI – Planning requested further information and clarification on the project.

Responses to these submissions are provided in Chapter 5 of this report. Additional information and clarifications, which respond to DPHI – Planning, are provided in sections 3.2 and 5.20.

Public submissions were received from the following community organisations:

- Save Our Surroundings Swan Hill
- Save Our Surroundings Redbank Plains
- Save Our Surroundings Lancefield
- Save Our Surroundings Hay
- Save Our Surroundings Murrumbidgee
- Save Our Surroundings Riverina
- Rainforest Reserves Australia
- Wellington Valley Wiradjuri Aboriginal Corporation
- Wallerawang Acclimatisation Society Incorporated.

Response to these submissions and the 42 submissions from individuals are provided in chapter 4.

2.2. Analysis of public submissions

Key details of the public submissions received are provided in the following sections.

2.2.1. Support/objection

Of the 51 public submissions received from individuals and community organisations:

- five submissions expressed 'support' for the project
- one submission provided 'comment' on the project
- forty-five submissions 'object' to the project (including the one duplicate submission).

2.2.2. Location of submitters

Of the 51 public submissions received, 38 submissions were from within NSW and 13 submissions were located outside of NSW. Further details of the location of submitters are provided below and shown in Figure 2.1:

- three local submissions (<5 km from the site)
- two regional submissions (< 100 km from the site)
- 46 broader community interest (>100 km from the site) (including the one duplicate submission).

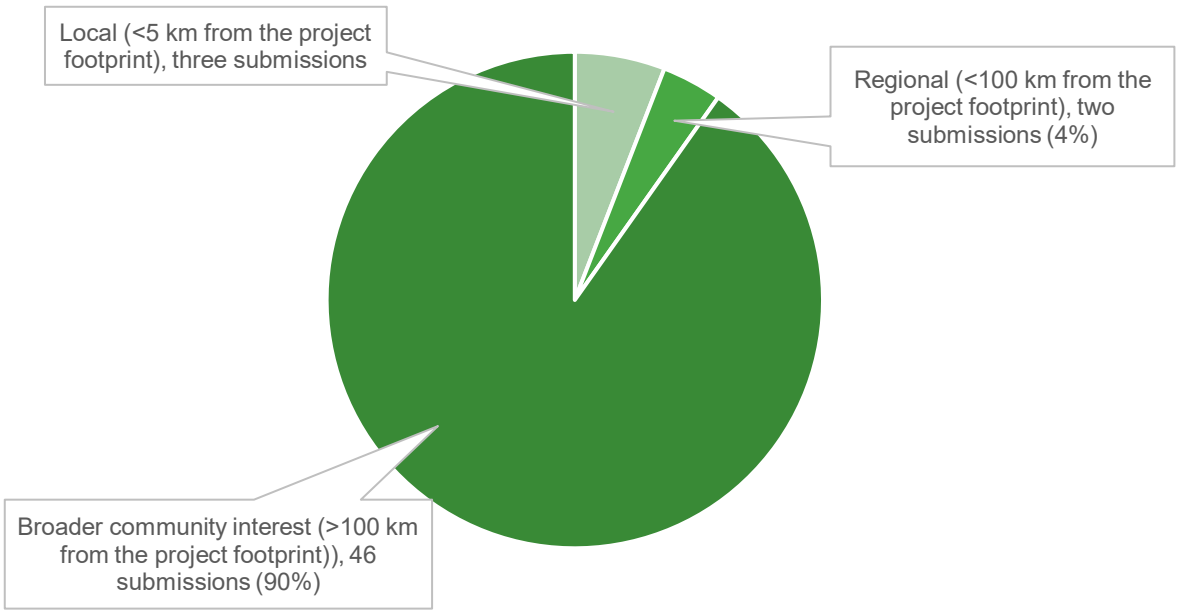

Figure 2.1. Location of submitters

2.2.3. Issue categories

Public submissions were grouped into one of the five categories outlined in the *State significant infrastructure guidelines – preparing a submissions report* (DPHI 2021):

- details of the project, e.g. the physical layout and design, construction and operation activities, construction program and timing, etc.
- procedural matters, e.g. compliance with the Secretary's Environmental Assessment Requirements (SEARs), approval process, statutory requirements, etc.
- the economic, environmental and social impacts of the project, level or quality of engagement, etc.
- justification and evaluation of the project, e.g. consistency with Government plans, policies or guidelines
- issues beyond the scope or not relevant to the project.

Figure 2.2 provides a summary of the number of public submissions received and aligned with each of the above categories.

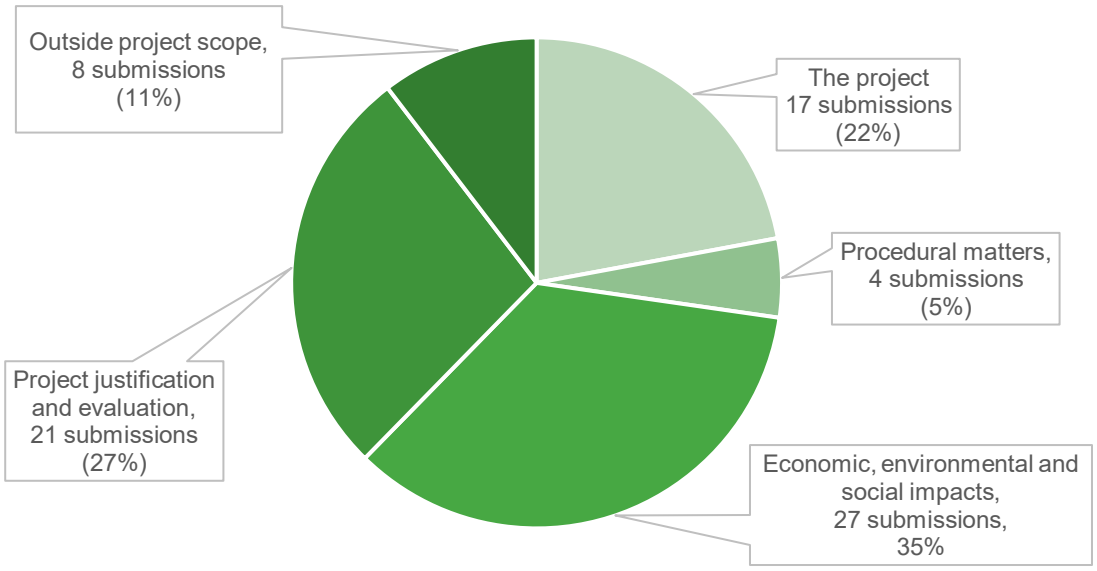

Figure 2.2. Summary of issue categories in public submissions

Each of the above issue categories were further divided into sub-issue categories. The number of submissions aligned with each sub-issue category is provided in Table 2.2. Some submissions raised several issues. Therefore, submissions can be assigned to multiple categories and the total number of the submissions in the table therefore will not equal the total number of public submissions outlined in section 2.1.

Table 2.2. Summary of key issues and sub-issues raised in public submissions

Key issue category	Sub-issue category	Number of times sub-issues raised	Section in the report the issue is located
Project details	Transmission line design	9	4.1.2
	Construction	2	4.1.3
	Mitigation and compensation	11	4.1.5
	Operation and maintenance	3	4.1.4
	Route options	4	4.1.1
Procedural matters	Consultation and community engagement	3	4.2.1
	EIS adequacy and accessibility	1	4.2.2
	Statutory compliance	1	4.2.3
Environmental, economic and social impacts	Biodiversity	29	4.3.1
	Landscape character and visual amenity	4	4.3.2
	Land use and agriculture	3	4.3.3
	Water resources	6	4.3.4
	Hazards and risks	21	4.3.5
	Soils, geology and contamination	8	4.3.6
	Economic impacts	3	4.3.7
	Social impact	9	4.3.8
	Cultural heritage	5	4.3.9

Key issue category	Sub-issue category	Number of times sub-issues raised	Section in the report the issue is located
	Greenhouse gases	1	4.3.10
	Cumulative impacts	7	4.3.11
Justification and evaluation of the project	Ecologically sustainable development (ESD)	2	4.4.3
	Strategic need and context	16	4.4.2
	Project benefits	5	4.4.1
Not relevant to the project/ outside of project scope	-	14	4.5

3. Actions taken since exhibition

This section summarises the key actions including consultation activities that have been undertaken by Transgrid since public exhibition of the EIS.

3.1. Consultation following public exhibition of the EIS

Transgrid has continued to engage with government agencies, councils, landowners, near neighbours, communities and other key stakeholders since public exhibition of the EIS. Engagement activities have focused on providing information, responding to specific issues raised in submissions, and discussing and seeking feedback on the proposed amendments to the project and any new or updated mitigation measures.

Engagement activities have included briefings for all landowners and the following government agencies:

- DPHI – Planning
- Heritage NSW
- Transport for NSW
- NSW Environmental Protection Authority
- CPHR
- Commonwealth DCCEEW
- NPWS
- WaterNSW.

Lithgow City Council was offered a briefing to discuss Council's submission and the proposed amendments. Council requested information to be provided by email.

Further details of how stakeholder engagement has supported the proposed project amendments is provided in the Amendment Report (Transgrid, 2025a). Ongoing communication with directly impacted landowners has also occurred.

3.2. Project amendments

Since the public exhibition of the EIS, changes have been made in response to stakeholder and landowner consultation, and project construction requirements.

An overview of the proposed amendments is provided in Table 3.1. A detailed description and assessment of the proposed amendments is provided in the separate Amendment Report (Transgrid, 2025a) for this project.

Table 3.1. Project amendments

No.	Proposed amendment to the project	Reason for amendments
1	New temporary culvert over unnamed creekline on existing a track near Mount Piper 330 kV substation.	The temporary culvert is required to facilitate heavy vehicle movements safely across this low point in the topography and maintain uninterrupted streamflow (when flowing).
2	Use of additional existing tracks on the Centennial Springvale Coal Services facility and a segment of a new track.	Centennial Coal has requested the use of an additional track to minimise disruption to their operations. During construction, the identification of what tracks will be used would be decided in consultation with Centennial Coal based on their operations at the time. Changes to the access track alignment south of the reject emplacement area is the result of further construction planning and consideration of specific topographical constraints.
3	Upgrade of an additional existing access track west of transmission structure (TS) 14D.	Changes to these access tracks are the result of ongoing construction planning to enable: • further avoidance and minimisation of the risk of impacts on the Springvale Colliery Aboriginal heritage site (AHIMS 45-1-0237) • efficiencies in construction and reduction of impacts by removing the need for a new culvert and a new access point.
4	Changes to TS10D laydown area and brake and winch site.	The exclusion of Lidsdale 2 PAD Extension from the project footprint reflects ongoing construction planning and avoidance of impacts on Aboriginal heritage in accordance with mitigation measure H2 in the EIS (Transgrid, 2025a). The extension of the laydown area would facilitate more efficient construction of TS10D and decrease the duration of construction by several days in this location, thereby reducing potential impacts on sensitive receivers.
5	Adjustment of project footprint near access point 7 on Brays Lane.	The change is required to ensure all required access tracks are included in the project footprint.
6	Additional new access track to TS5C from the east	The additional new access track would avoid the low lying and wet area located between the TS5C and TS6C.
7	Amendment to access track to TS5C from the west	The amended alignment would avoid the low lying and wettest area west of TS5C.
8	Extension of construction compound C2	Construction compound C2 has been expanded to allow for the option of using only construction compound C2 rather than both construction compounds C2 and C3. The shift to a single compound would minimise vehicle movements through existing security gates on the property which was raised as a concern by the landowner.
9	Use of additional existing track to access construction compound C3	This change is the result of outcomes from further landowner consultation and review of construction efficiencies relating to compound use and access.
10	Use of additional existing access track to access TS1C to TS4C	The use of the additional track would address security concerns raised by the landowner and minimise traffic noise at a site office.
11	Changes to construction traffic volumes	Ongoing construction planning have provided a more detailed understanding of vehicle movements required to enable construction. This included total heavy vehicle movements during peak construction and the traffic movements to the construction compound for pre-start meetings, and onwards to work areas across the project footprint.
12	Use of preferred bored piling construction method and exclusion of impact piling	Ongoing geotechnical work and construction planning have progressed and identified that ground conditions do not require impact piling. Bored piling, which has lower noise and vibration impacts is considered suitable for all transmission structure foundation locations.

3.3. Clarifications and corrections to the EIS

Several clarifications and corrections to the EIS have been identified during and following the public exhibition of the EIS. The clarifications and corrections were identified through ongoing development of the design and construction planning, as well as through submissions from government agencies and the community.

3.3.1. Use of Centennial Coal road network for project access

As outlined in section 3.4 of the EIS, access to the central portion of the project footprint via access point 2 would occur through Centennial Coal's Springvale Coal Services Facility. As shown in Figure 3.7a of the EIS, this access would utilise both the existing internal tracks within the property including the Coal Reject Emplacement Area.

Transgrid will continue to work with Centennial Coal to ensure that use of these tracks does not interfere with their site operations. Since the exhibition of the EIS, consultation with Centennial Coal has identified the need for inclusion of additional access tracks, which are outlined in section 3.2 and assessed in detail in the Amendment Report (Transgrid, 2025a).

The tracks used within Centennial Coal's facility may differ from those shown in the Amendment Report (Transgrid, 2025a), as Centennial Coal sometimes adjusts the position of tracks to meet their operational needs. Centennial Coal may also request that Transgrid use alternative existing tracks within their facility to minimise disruption to site operations. Any changes are not expected to alter the environmental impacts identified in the EIS or Amendment Report (Transgrid, 2025a).

3.3.2. Confirmation of access track work

Section 3.4 of the EIS outlined proposed access tracks. These tracks are also shown in Figure 3.7 (a, b and c). The EIS included the following track categories:

- existing tracks, no upgrade required
- existing tracks requiring upgrade and widening
- existing tracks requiring minor upgrades to existing tracks (light vehicle use only)
- new tracks.

Since exhibition of the EIS, it was identified that some existing tracks were incorrectly identified as requiring upgrade and widening. This was mostly related to tracks located on properties owned by EnergyAustralia, Centennial Coal and on the former Wallerawang Power Station site. These tracks have been re-categorised and are shown in Figure 3.1 to Figure 3.4. The re-categorised tracks are also outlined in the Amendment Report (Transgrid, 2025a) and the revised project description (Appendix A of the Amendment Report).

3.3.3. Inconsistencies or editorial errors

Corrections to the EIS have been required due to inconsistencies or editorial errors on project footprint areas and biodiversity assessment information. These are further described in sections 5.3, 5.4 and 5.21.

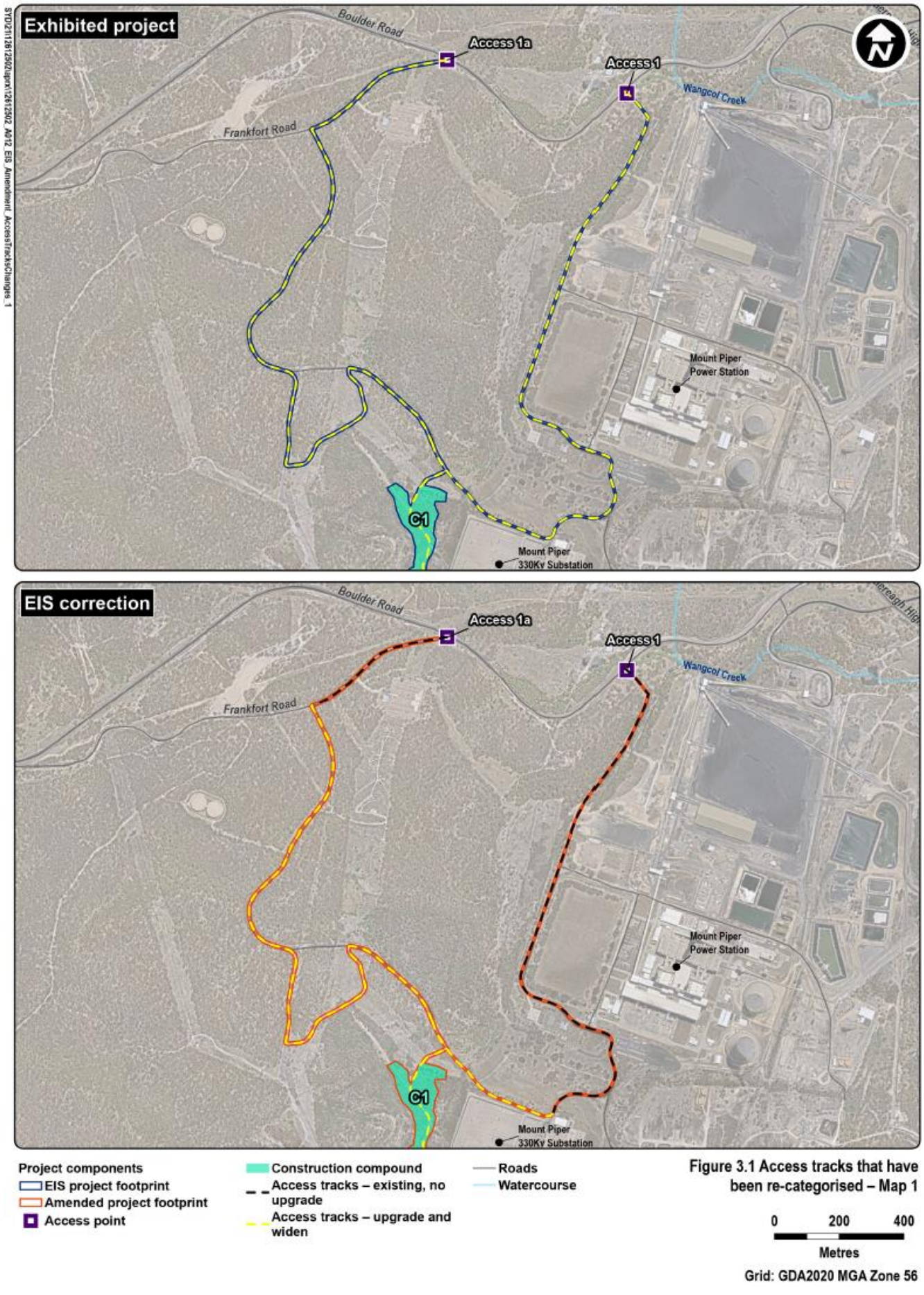

Figure 3.1. Access tracks that have been re-categorised – Map 1

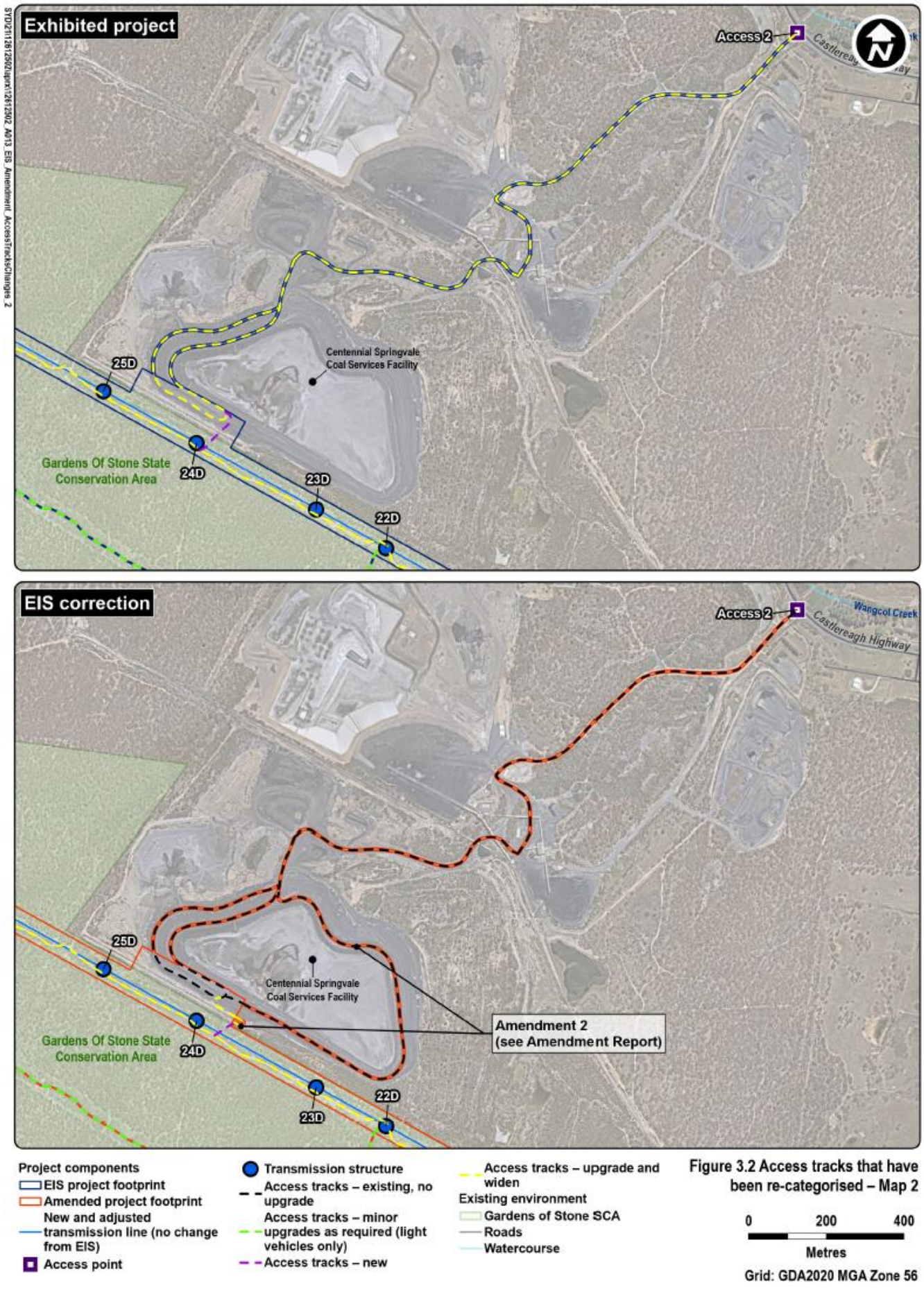

Figure 3.2. Access tracks that have been re-categorised – Map 1

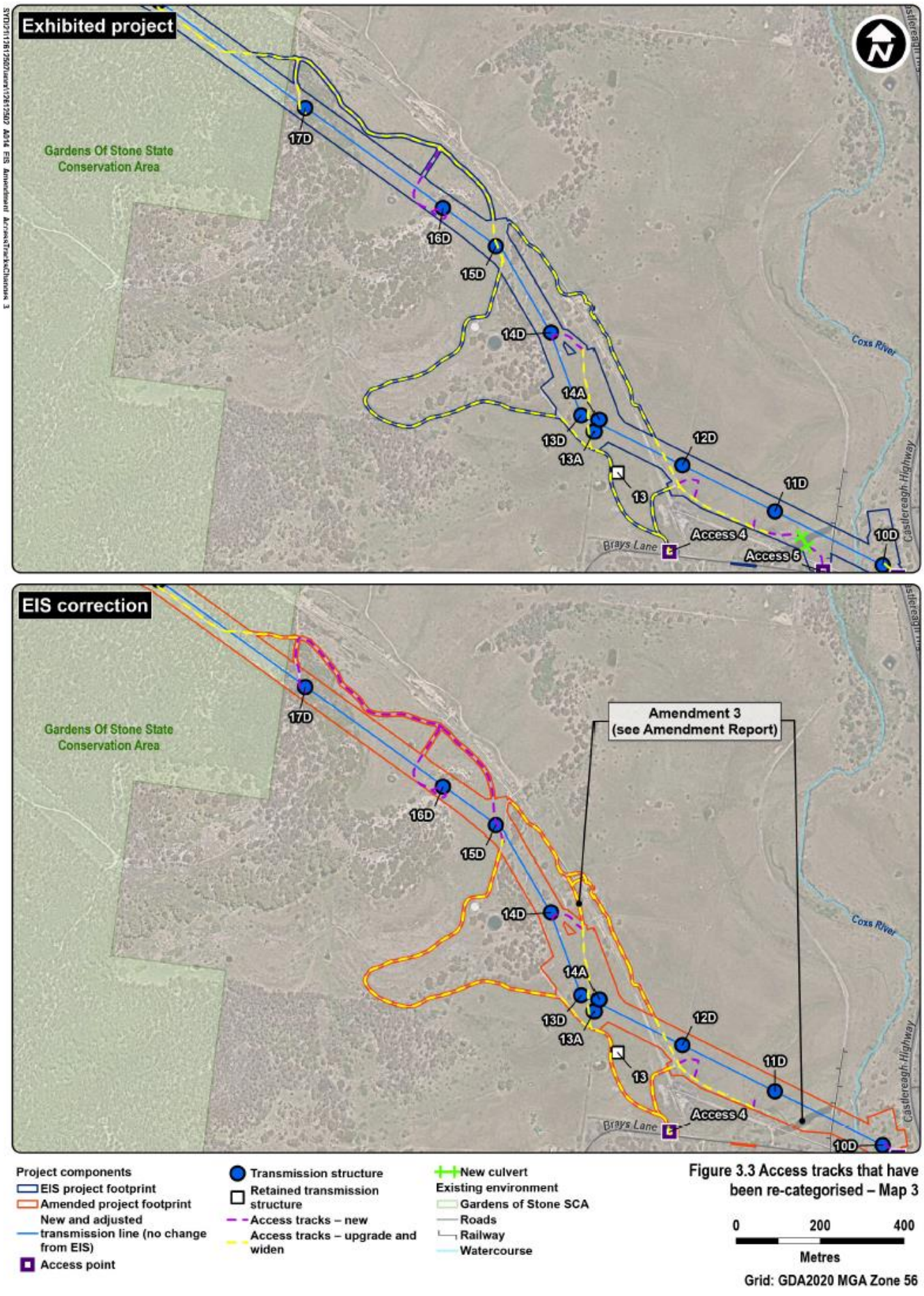

Figure 3.3. Access tracks that have been re-categorised – Map 3

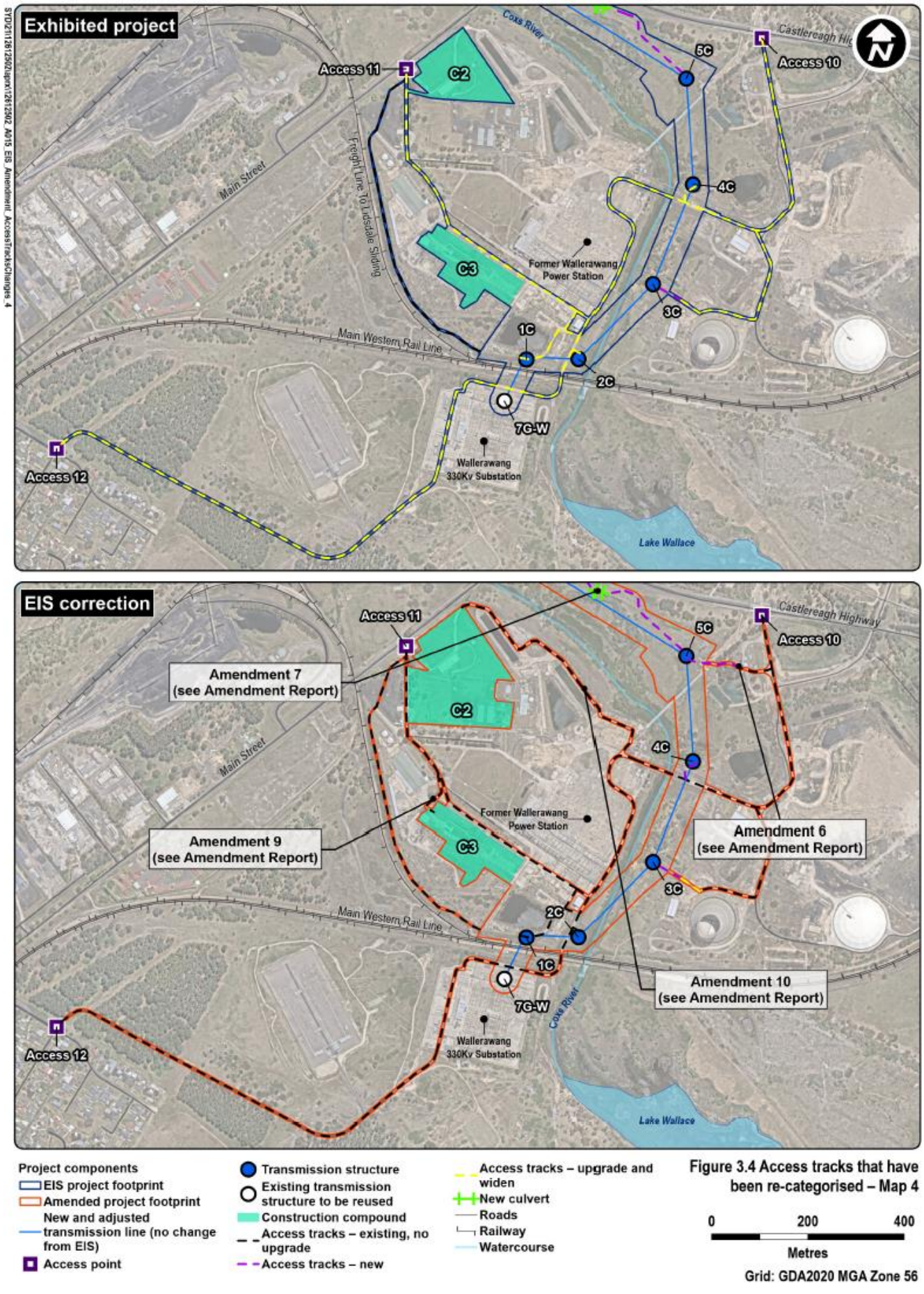

Figure 3.4 Access tracks that have been re-categorised – Map 4

Figure 3.4. Access tracks that have been re-categorised – Map 4

3.4. Additional assessments following public exhibition

Following public exhibition of the EIS, revised environmental assessments have been undertaken for biodiversity impacts, and traffic and transport impacts. These assessments have been revised due to:

- submissions received on the EIS during public exhibition requesting additional/new assessments
- consideration of the potential impacts of the proposed project changes.

A summary of each of the revised assessments is provided in sections 3.4.1 and 3.4.2. The revised assessments are provided in Appendix C and Appendix D.

3.4.1. Revised Biodiversity Development Assessment Report

The BDAR has been revised to include:

- assessment of biodiversity impacts associated with the amended project footprint (amendments summarised in section 3.2)
- responses to requests for clarification from CPHR and DPHI – Planning (section 3.3).

In addition to revision and mapping updates, the following changes have been included in the Revised Biodiversity Development Assessment Report:

- Revised biodiversity assessment area to adopt a 500 m buffer, consistent with the approach for linear developments in section 3.1.2 of the Biodiversity Assessment Method (BAM) and a recalculation of the native vegetation cover percentage in the BDAR and BAM Calculator (BAM-C).
- A review of the candidate species credit species listed in the BAM-C to determine if the vegetation cover class increased and whether any additional threatened species require assessment. It was identified that while there has been an increase in vegetation cover class, it remains within the same vegetation cover class category as previously recorded and therefore there are no changes to species identified in the BAM-C.
- The vegetation mapping for the Biodiversity Development Assessment Report spatial data and BAM-C cases was reviewed, and minor inconsistencies have been corrected.
- Revision and justification of the plot duplication approach to ensure that plots are only duplicated across the same vegetation zone and plant community type (PCT). A review of the duplicated plots in the BAM C has been conducted and the BAM-C and Biodiversity Development Assessment Report updated where necessary.
- Targeted surveys for the Purple Copper Butterfly in all locations containing *Bursaria spinosa* were completed over six days in October 2025. Details of the survey and findings are provided in the revised BDAR.
- The species areas for threatened forest owls have been refined in accordance with recent changes to survey advice.
- Mitigation measures have been revised in relation to threatened birds and the squirrel glider.

A copy of the revised BDAR is provided in Appendix C.

3.4.2. Revised Traffic and Transport Assessment

The Traffic and Transport Assessment presented with the EIS has been revised to respond to submissions received during the public exhibition of the EIS and two amendments to the project, which have implications on traffic and transport. These amendments comprise:

- changes to daily vehicle movements and the distribution of these movements
- removal of access point 5 on Brays Lane.

The revised assessment builds on the initial analysis undertaken for the exhibited project, which included analysis of existing conditions, and identifying the potential impacts on the performance and safety of the road network in the study area.

The revised assessment includes the following key changes to the estimated daily construction movements and distribution:

- The estimated daily construction traffic volumes accessing the project footprint during peak period of construction:
  - 90 light vehicles accessing the project footprint in a day, an increase from 30 light vehicles
  - 10 heavy vehicles accessing the project footprint in a day, a decrease from 20 heavy vehicles.
- The estimated daily construction traffic movements to, from and between portions of the project footprint during peak periods of construction:
  - 350 light vehicle movements per day, an increase from 80 movements
  - 150 heavy vehicles movements per day, an increase from 60 movements.
- The estimated peak hour construction traffic movements to, from and between portions of the project footprint during peak periods of construction:
  - AM peak – all traffic generated would travel to a construction compound off of Main Street before travelling to work sites. It is assumed that some workers would carpool or remain at work areas near the compound. The distribution assessed for the exhibited project assumed all traffic generated to the site would travel directly to work areas. The revised traffic distribution would result in the following AM peak movements:
    - > 160 light vehicle movements, an increase from 30 movements
    - > 15 heavy vehicle movements, a decrease from 20 movements.
  - PM peak – workers would depart the work areas and either travel back home directly or to the construction compound before heading home. The revised traffic distribution would result in the following PM peak movements:
    - > 135 light vehicle movements, an increase from 30 movements
    - > 15 heavy vehicle movements, a decrease from 20 movements.
- A swept turn path analysis of turning movements and SIDRA 10 intersection modelling for intersections where it was identified that a cumulative impact may be expected during the peak construction period. The following intersections were assessed:
  - Boulder Road / Castlereagh Highway
  - Brays Lane / Castlereagh Highway
  - Main Street / Castlereagh Highway.

A copy of the revised Traffic and Transport Assessment is provided in Appendix D.

4. Response to submissions – organisations and individuals

This section provides a summary of the issues raised in submissions received from organisations and individuals within the community and Transgrid's response to these issues. As described in Section 2, the issues raised by the community and organisations were grouped according to the identified key issues and sub–issues. Responses are provided according to these categories. Appendix A lists the public submissions and provides a reference to where the issues raised in each submission are addressed in this section.

4.1. Details of the project

4.1.1. Route options

Submission ID number(s)

SE-94857480, SE-95115230

Summary of issues

Submitters raised concerns that:

- The NSW *Environmental Planning and Assessment Act 1979* (EP&A Act) requires proponents to show consideration of alternatives; however, the proponent has not demonstrated that feasible route adjustments or avoidance measures were properly assessed.
- The project unnecessarily forces infrastructure into steep, remote wilderness areas.

Response

Transgrid, in collaboration with EnergyCo, conducted network studies to define strategic project alternatives and options to augment the existing transmission network. An extensive route options development and assessment process was initiated in 2021, and a preferred route was identified in 2023. Consultation then continued through 2024. This assessment is detailed in the Preferred Route Report available on the project website and is summarised in section 2.4 of the EIS. A total of eleven possible routes were assessed.

A multi-criteria analysis was used to rank the performance of the eleven route options according to the following categories:

- community and stakeholder
- environment and planning approvals
- technical design
- construction and operation
- program and scope
- cost and regulatory
- environment
- property and land use.

Of the eleven possible routes, six options were discontinued following this analysis due to environmental, cost or operational constraints.

The preferred route alignment utilises existing infrastructure easements as far as possible, where existing transmission infrastructure has been successfully operated and maintained for several decades. Use of the existing easement also ensures that the infrastructure is accessible mostly via existing access tracks minimising the need for additional vegetation clearance. Section 23.1.4 of the EIS describes how the preferred route has aimed to avoid and minimise biophysical, social and economic impacts. Following consultation with key stakeholders, section 2.4.2.2 describes how as a result, Option B-4 (the project) was chosen as it had the lowest impact overall as it uses an existing transmission line easement, which would impact the smallest number of landowners and minimise impacts on the environment. This means that the project does not unnecessarily force infrastructure into a steep remote wilderness area because it follows an existing alignment.

The project has been designed to meet the requirements of relevant engineering and design criteria, including requirements for different types of materials, terrain and environments. These engineering standards include the Australian Standards; international standards and technical guides from the American Society of Civil Engineers (ASCE), the Council on Large Electric Systems (CIGRE), and the Institute of Electrical and Electronics Engineers (IEEE); and Transgrid's Transmission Line Design Manual (TLDM). These design standards are applied relative to the features of the project such as its topography, soils, etc.

Submission ID number(s)

Duplicate submissions SE-95114719 and SE-95115225.

Summary of issues

Submitters noted the corridor cuts through remnant bushland, fragmenting habitat for endangered and threatened species.

Response

Throughout the design and construction planning process to date, Transgrid has sought to avoid and minimise potential project impacts, including on native vegetation and its biodiversity values. In summary, this has included:

- An extensive route options development and assessment process, summarised in section 2.4 of the EIS (and in the above response), which considered a total of eleven possible routes. Of the eleven routes, four routes (options A-1, A-2, B-2 and C-2) were not considered further due to unacceptable impacts on native vegetation. The evaluation of the eleven possible routes is summarised in Table 2.1 of the EIS.
- Impacts from the proposed transmission line have been confined, where possible, to an existing transmission line easement that has already been cleared of native vegetation and is subject to ongoing vegetation management. The preferred route option was selected to reduce the need for clearing of additional vegetation and avoid further habitat fragmentation.
- The preferred route was selected to minimise disturbance to the Gardens of Stone State Conservation Area (SCA), as vegetation clearing would occur on only one side of the existing easement. This would be where poorer quality habitat is present due to its position between the existing easement and the Centennial Coal Reject Emplacement Area.
- Brake and winch sites have been located within the existing easement as far as possible.
- Existing access tracks are proposed to be used as far as possible with necessary widening limited to a few select areas only. New access tracks were selected following review of biodiversity constraints assessment which identified high priority vegetation for retention, including avoidance of impacts on Box Gum Woodland.

- Avoiding higher value habitat features and resources including potential impacts on a rock outcrop containing a small overhanging cave which may provide habitat for reptiles and microbats.
- Locating temporary construction compounds within previously cleared and/or primarily poor condition or non-native vegetation.

4.1.2. Transmission line design

Submission ID number(s)

SE-95096713, SE-95096722, SE-95109983, SE-95117718, SE-95120459

Summary of issues

Submitters raised concerns that:

- The project lacks engineering rigour.
- The location of the project on steep terrain will increase exposure of transmission infrastructure to higher winds and lightning and increase risks to public safety in the event of component failure, including tower collapse, conductors sever, insulator drop and increased risk of arcing.
- The steep terrain will exacerbate maintenance hazards and risk of failure.

Response

The project has been developed to meet the requirements of relevant engineering and design criteria, which includes requirements for different types of materials, terrain and environments. Detailed design of the structures and selection of materials would be progressed in consideration of the following Australian Standards (AS) including:

- Overhead Line Design – Detailed Procedures (AS/NZS 7000)
- Insulator and Conductor Fittings for Overhead Power Lines (AS 1154.1)
- Structural Design Actions – Wind actions (AS/NZS 1170.2)
- Structural Design Actions – Earthquake Actions (AS/NZS 1170.4)
- Piling – Design and Installation (AS 2159)
- Guide to Protection of Structural Steel against Atmospheric Corrosion by the use of Protective Coatings (AS 2312)
- Concrete Structures (AS 3600)
- Concrete Utility Service Poles (AS/NZS 4065)
- Steel Structures (AS4100).

International standards, guides and technical brochures from the American Society of Civil Engineers (ASCE), the Council on Large Electric Systems (CIGRE), and the Institute of Electrical and Electronics Engineers (IEEE) would also be applied, as relevant, including:

- Design of Steel Transmission Pole Structures (ASCE 48) (US Standard)
- Design of Lattice Steel Transmission Structures (ASCE 10) (US Standard)
- Overhead Conductor Safe Design Tension with Respect to Aeolian Vibrations (CIGRE TB 273) (Technical Brochure)
- Guide to the Installation of Overhead Transmission Line Conductors (IEEE 524)
- Guide for Transmission Structure Foundation Design and Testing (IEEE 691)
- Guide to the Assembly and Erection of Metal Transmission Structures (IEEE 951)

- Guide to Installation of Foundations for Transmission Line Structures (IEEE 977)
- Guide to the Assembly and Erection of Concrete Pole Structures (IEEE 1025).

The transmission line and its structures are designed with reference to the above standards and Transgrid's TLDM. Transgrid would adopt proven transmission design elements, including the use of durable steel and concrete transmission structures and lightning protection systems. These design standards make the transmission line more resilient to high wind conditions and minimises the risk of component failure under a range of hazardous conditions. The design standards are applied relative to the specific features of the study area (e.g. topography, soils, ground conditions, etc).

The project is largely located within an existing transmission line easement that has been maintained for the current 132 kV transmission line infrastructure (Line 94E), which has been in operation since 1976. The project is not located in areas of terrain greater than 15 degrees and is thus not considered steep. Steep terrain is generally defined as slopes exceeding 18 degrees (AGS 2007).

The project would be safely operated and maintained in accordance with Transgrid's existing safety rules, operation and maintenance procedures. Operation would be continuously monitored, and the system performance managed through Transgrid's Network Operations Centre. Transgrid's protection systems will detect and switch off the power in a very short period of time should a fault occur, to prevent any incidents. Maintenance activities are discussed in detail in section 3.6.1 of the EIS, which outlines the regular and reactive inspections and maintenance activities which would be undertaken.

Submission ID number(s)

SE-95114471, SE-95112460

Summary of issues

Submitters raised concerns that the project, and all related infrastructure (i.e. transmission lines, energy structures) will be unreliable.

Response

A key aim of the project is to strengthen connections between areas of renewable energy generation in the Central West Orana Renewable Energy Zone (CWO REZ) and major electricity demand centres. Augmentation of the existing transmission line infrastructure will achieve this aim by renewing the infrastructure in accordance with current design and maintenance standards, increasing the capacity of the network and improving reliability.

Transgrid's transmission line design standards have been developed in line with industry best practice and are key to delivering transmission line infrastructure that is reliable, cost-effective and capable of meeting network needs both now and over the next 50 years. They are also designed to accommodate future increases in capacity and changes in industry and consumer requirements.

Transgrid will operate the project as it is required to do so in accordance with the NSW *Electricity Supply Act 1995* and regulations. This will be undertaken using mature asset management practices that continuously monitor and manage system performance through Transgrid's Network Operations Centre. These asset management practices help maintain reliable operation and prevent electricity supply loss.

Submission ID number(s)

SE-94319228

Summary of issues

The submitter requested information on how the losses of electrical energy from the transmission lines will be minimised, noting the importance that infrastructure is efficient for conveying electricity and not wasted.

Response

Transgrid is committed to ensuring that all transmission infrastructure operates at maximum efficiency and with minimal electrical energy transmission loss. Transgrid's transmission line design standards, developed in line with industry best practice, specify the use of high-efficiency conductors and optimised voltage levels to reduce resistance and reactive losses. These standards are key to delivering transmission line infrastructure that is reliable, cost-effective and capable of meeting network needs both now and over the next 50 years.

Transgrid continuously monitors and manages system performance through its Network Operations Centre. This includes real-time power flow optimisation to maintain system voltages within optimal limits, thereby minimising energy losses during electricity transmission.

4.1.3. Construction

Submission ID number(s)

SE-95112962

Summary of issues raised

The submitter stated that the project has an unethical procurement and construction processes utilising cheap materials.

Response

If the project is approved, Transgrid will contract suitably qualified, registered and reputable construction contractors to construct the project and meet the relevant engineering and construction standards. The project would source materials from pre-qualified suppliers. Transgrid will ensure that materials meet the contract specifications and the relevant design and manufacturing standards.

Further, Transgrid's Modern Slavery Statement 2023/2024 reported that its direct supply chain, which consists of primarily construction, network equipment, facilities management, advisory and corporate services companies, are mostly based in Australia. Transgrid's contractors are also expected to abide by this statement.

4.1.4. Operation and maintenance

Submission ID number(s)

SE-95120459

Summary of issues raised

A submitter raised concerns about the operation and maintenance mechanisms for the project including:

- the type of controls that will be put into place to ensure zero tolerance for any maintenance defects
- provision of continuous monitoring, immediate de-energising in extreme fire weather days and automatic power shut-off under hazardous conditions, including who is responsible for enforcing automatic shutdown systems.

Response

Transmission lines are designed and constructed based on specific standards and engineering principles to withstand anticipated environmental stresses, including those associated with extreme fire weather (refer response in section 4.1.2 for further details of applicable Australian and International standards).

Transgrid has specific risk management plans related to bushfire risk that are applied throughout operation and maintenance of the project. Transgrid has several controls to maintain the reliable and efficient operation of the project, including regular maintenance inspections and rectification of defects. Section 3.6 of the EIS outlines the operational and maintenance activities that will be undertaken, including regular inspection and maintenance, reactive maintenance, vegetation management and approaches to emergency situations. Maintenance activities (including monitoring of the transmission lines) would identify faults and defects on the transmission line and transmission structures. Maintenance will be undertaken using mature asset management practices that continuously monitor and manage system performance. Transgrid's protection systems will detect faults and switch off the power in a very short period of time should a fault occur, to prevent damage or dangers to the asset and public safety. These asset management practices also help identify areas for maintenance.

Transgrid proactively mitigates risks through structured risk assessment and management processes that identify threats, assess the risks, and implement control measures. Ad-hoc fault and emergency fly-overs of the transmission line would be carried out as required to identify any faults and defects. Regular maintenance of the transmission line would be undertaken and the maintenance schedule would also be available on Transgrid's website. Activities would assess the condition of infrastructure, should an unplanned outage occur such as during a weather event or other failure of infrastructure.

4.1.5. Mitigation and compensation

Submission ID number(s)

SE-94857480

Summary of issues

The submitter stated that the *Protection of the Environment Operations Act 1997* (POEO Act) prohibits the pollution of land and water through sediment runoff and inadequate erosion and sediment control during construction would constitute a breach of the POEO Act.

Response

The POEO Act applies to activities with a risk of polluting air, land or water and therefore applies to the construction, operation and decommissioning phases of the project.

The project mitigation measures (refer to Appendix B) include plans and controls to minimise sediment runoff and pollution of land and water. This includes a Soil and Water Management Plan (SWMP) as outlined in mitigation measure W1. The SWMP will include the preparation of Erosion and Sediment Control Plans (ESCPs) prepared in consultation with a Certified Professional in Erosion and Sediment Control (CPESC) and in accordance with the following publications:

- Managing Urban Stormwater – Soils and Construction, Volume 1 (Landcom, 2004), Volume 2A (DECC, 2008) and Volume 2C (DECC, 2008a)
- Best Practice Erosion and Sediment Control (IECA, 2008)
- Guidelines for controlled activities on waterfront land (DPE, 2022).

The SWMP will include how erosion and sediment controls will be effectively implemented, monitored and maintained.

Submission ID number(s)

SE-95114485, SE-95116750, SE-95120459

Summary of issues

Submitters questioned if the proponent will assume responsibility for any damages resulting from project failure, including providing indemnity to impacted landholders in the event of bushfires, public safety risks introduced by the project, and worst-case transmission infrastructure failures.

Response

Transgrid is subject to requirements of the NSW Electricity Supply Act 1995 and other acts and regulations within the jurisdictions where Transgrid operates. Transgrid designs, constructs, operates and maintains the electricity network using mature asset management practices that ensure the safety of surrounding communities, worker safety, protect property, and prevent loss of electricity supply (including from bushfire).

As a responsible operator, Transgrid proactively mitigates risks through structured risk assessment and management processes and implements control measures that minimise the risks. Operation of the project would be managed through Transgrid's existing Environmental Management System, which is accredited to the international standard ISO 14001 requirements; and the project will be maintained in accordance with Transgrid's design and maintenance standards. This is further described in section 3.6 of the EIS.

Chapter 15 of the EIS provides a summary of the hazards and risk assessment relevant to audible corona noise, aviation, bushfire, electric and magnetic fields (EMFs), radio interference, and telecommunications. Sections 15.4.1.3 and 15.4.2.3 of the EIS provide an assessment of public safety risks during construction and operation. Transgrid will prepare and implement a Bushfire Management Plan (refer mitigation measure HR3), which will form part of the Construction Environmental Management Plan (CEMP). The plan will provide measures to control bushfire risks from construction activities that have potential to cause bushfires. Transgrid's design and operational procedures and existing Environmental Management System will apply to the project during operations and maintenance. The EIS concludes that public safety risks would not increase as a result of the project.

Submission ID number(s)

SE-95096719, and duplicate submissions SE-95114719 and SE-95115225.

Summary of issues

Submitters questioned if the proponent would commit to removing, re-routing or disabling line segments that are causing harm to endangered species or if mortality incidence exceeds agreed thresholds. Submitters stated that the project cuts through remnant bushland, fragmenting habitat for endangered and threatened species.

Response

Transgrid is aware of the presence of endangered species on and near the transmission line easement via on ground verification during biodiversity surveys. Mitigation measures to avoid or minimise impacts to endangered and threatened species are described in EIS Chapter 7, Technical Report 2 – Revised Biodiversity Development Assessment Report (Appendix C) and summarised in Appendix B. These measures will be implemented during construction and operation through Transgrid's environmental

management plans. For example, mitigation measure B01 commits Transgrid to investigate opportunities to avoid and minimise biodiversity impacts during detailed design, to consider retaining vegetation and trees to minimise impacts on threatened species. Additionally, mitigation measures B02 to B07 describe the requirements for a Biodiversity Management Plan, measures to avoid and minimise impacts to threatened flora, threatened fauna habitat and the threatened Large-Eared Pied Bat.

During operation, Transgrid maintains its commitment to protecting threatened and endangered species while operating a transmission network. Transgrid understands that different flora and fauna species can have different interactions with the transmission lines, so Transgrid undertakes routine ecological reviews to determine how operations may affect these interactions. This review guides the operating processes such as vegetation management and fauna protection devices. Transgrid routinely works with landowners, including NPWS, to protect and enhance areas of high environmental sensitivity.

If changes are needed to Transgrid's work practices, these are identified and responded to in a timely manner and in consultation with ecologists and subject matter experts.

Once the project is constructed and in operation, the route cannot be adjusted. All redundant structures will be removed to accommodate the new transmission structures.

Further description of the potential impacts and proposed mitigation relating to:

- habitat fragmentation and connectivity are provided in section 4.3.1.4
- impacts on threatened fauna (birds) from collision risk is provided in section 4.3.1.5.

Submission ID number(s)

SE-92343959, SE-95109960

Summary of issues

Submitters raised concerns that:

- affected landowners will be subject to compulsory acquisition if a negotiated agreement with Transgrid cannot be achieved, and that compulsory acquisition should be the last resort
- use and occupation of land for the project would not be compensated.

Response

Transgrid has been consulting with easement affected landowners since April 2022 and this consultation is ongoing as outlined in section 5.5 of the EIS. Private landowners are compensated for hosting the easement in accordance with the NSW Government's *Land Acquisition (Just Terms Compensation) Act 1991 (Just Terms Act)*. Transgrid endeavours to reach negotiated agreement with affected landowners on mutually acceptable terms, however where agreement is not possible, the compulsory acquisition process may be undertaken in accordance with the NSW *Land Acquisition (Just Terms Compensation) Act 1991*.

Submission ID number(s)

SE-95117713

Summary of issues

The submitter questioned if the proponent will guarantee attainment of mitigation targets, for example no net loss of habitat and fully funded restoration plans. The submitter also queried what would happen if ecological targets failed.

Response

The EIS assessed the potential impacts of the project and identified the management measures to address those impacts, in accordance with the SEARs, the Supplementary SEARs, the requirements of the EP&A Act and EPBC Act and the State significant infrastructure guidelines – preparing an environmental impact statement (DPE, 2022).

The project has sought to avoid potential impacts through careful route selection (section 2.4.2 of the EIS) and commits to investigating further opportunities to avoid and minimise impacts by implementing mitigation measures B01 to B19. Mitigation measure B02 commits Transgrid to develop a Biodiversity Management Plan (BMP) that will include all the management measures described in Appendix B and will be prepared by a qualified ecologist in consultation with NSW DCCEEW. The BMP will ensure the implementation of mitigation measures that will minimise potential impacts resulting from the project's construction. Where relevant, the measures include objectives and outcomes (such as exclusion zones for avoidance of impacts). Environmental targets and performance indicators would be identified as part of the CEMP and various sub-plans for example, the BMP would consider compliance, monitoring inspections and audits which would measure the project's performance. The BMP will form part of the project's CEMP and follows the environmental management approach described in chapter 22 of the EIS for the project during construction, operation and decommissioning.

For residual impacts on threatened species, the project will be offset in accordance with the Biodiversity Offset Scheme (BOS). The biodiversity offset delivery strategy assesses impacts to biodiversity and gains at stewardship sites to a no net loss of standard, calculated using the BAM and in accordance with the *Biodiversity Conservation Act 2016* (NSW) (BC Act) and the *Environment Protection and Biodiversity Conservation Act 1999 (Cth)* (EPBC Act). The biodiversity offset delivery strategy is described in section 9.5 of the Revised BDAR in Appendix C and section 7.5.4.3 of the EIS.

The biodiversity offset package for the project would depend on the selected offset delivery option and some options will require demonstration of like-for-like biodiversity values.

4.2. Procedural matters

4.2.1. Consultation

Submission ID numbers(s)

SE-94857480, SE-95118458

Summary of issue raised

Submitters raised concerns that:

- The EIS provides limited evidence of engagement, including limited notice and failures to respond to community submissions rendering the consultation process procedurally unfair.
- Transgrid's consultation process was not equitable and genuine.
- The project has not responded to feedback received.
- One submitter acknowledged that Transgrid engaged with them regarding loss of habitat within the Gardens of Stone SCA.

Response

Transgrid has undertaken an extensive range of engagement activities with community and organisations since April 2022 to provide information on the project and to gather feedback. Communications have been tailored to the audiences in and around the project footprint, including the wider Lithgow LGA. This engagement has been implemented in accordance with the project's Community and Stakeholder Engagement Plan which was developed in line with the following industry guidance documents:

- Public Participation Spectrum (IAP2 Spectrum; International Association of Public Participation)
- Landholder and Community Better Practice Engagement Guide (Better Practice Guide; The Energy Charter 2021)
- Undertaking Engagement Guidelines for State Significant Projects (Engagement Guidelines; DPE, 2022)
- NSW Transmission Guidelines (DPHI, 2024).

Transgrid appreciates the acknowledgement of the consultation undertaken with the submitter regarding the Gardens of Stone SCA.

A summary of how Transgrid has engaged with stakeholders and the community prior to and during the preparation of the EIS is provided in chapter 5 of the EIS. Table 5.6 of the EIS outlines the issues and themes raised by the community and stakeholders and shows where these issues have been addressed in the EIS.

Section 3 of this report provides an outline of further engagement completed by Transgrid during the EIS exhibition period in August and September 2025. If the project is approved, consultation activities would continue through finalisation of the project design and construction.

4.2.2. EIS adequacy and accessibility

Submission ID numbers(s)

SE-95109469

Summary of issue raised

A submitter stated that the project has no consent and ignores the democratic process.

Response

The EIS has been prepared to seek approval under Part 5, Division 5.2 of the NSW EP&A Act and the EPBC Act. The planning approval process for the project is described in chapter 4 of the EIS. The assessment report will be provided to the NSW Minister for Planning and Public Spaces, who will decide whether or not to approve the amended project. Under the bilateral agreement, the Australian Government Minister would subsequently decide whether the amended project should be approved.

During all stages of the project, Transgrid has undertaken extensive consultation with the community, organisations and government agencies. Chapter 5 of the EIS summarises the engagement undertaken for the project during the EIS and chapter 3 of this report provides an outline of further engagement completed by Transgrid following EIS exhibition. Feedback, queries and concerns have been welcomed throughout the engagement process; all of which have informed the design, impact assessment and the development of appropriate mitigation measures for the project.

4.2.3. Statutory compliance

Submission ID numbers(s)

SE-94857480

Summary of issue raised

A submitter stated that the project is non-compliant with the NSW BC Act and the *Rural Fires Act 1997* as the EIS does not contain a Vegetation Management Plan or a Hazard Reduction Strategy endorsed by the NSW Rural Fire Service.

Response

The EIS has been prepared to address the SEARs, the supplementary SEARs relating to EPBC Act matters and other relevant legislation and guidelines. The EIS has assessed the potential impacts of the project on biodiversity values and bushfire risk and identified the mitigation measures relevant to these matters in accordance with the NSW BC Act and NSW Rural Fires Act 1997, as they apply to the assessment process.

Technical Report 2 – Biodiversity Development Assessment Report satisfies the requirement of Section 7.9 of the BC Act for a State Significant Infrastructure application to be accompanied by a BDAR. Mitigation measures to reduce risks related to biodiversity and vegetation clearing are included in the revised mitigation measures in Appendix B and includes the preparation of a Biodiversity Management Plan (mitigation measure B02).

Consideration of the Rural Fires Act 1997 has been undertaken as part of the bushfire assessment appended to Technical Report 9 – Hazards and Risk Assessment, with the consideration of the Lithgow Bush Fire Risk Management Plan prepared by the Lithgow Bush Fire Management Committee (LBFMC, 2020). Hazard

reduction would be considered as part of the Bushfire Management Plan (mitigation measure HR3) which will be prepared in consultation with NSW Rural Fire Service (RFS) and NPWS.

Management plans and other procedures and strategies for reducing risks and impacts related to bushfire and biodiversity, as well as other matters addressed by the EIS, will be prepared in accordance with the conditions of approval and mitigation measures outlined in the EIS.

4.3. Economic, environmental and social impacts of the project

4.3.1. Biodiversity

4.3.1.1. Vegetation clearance

Submission ID numbers(s)

SE-94684959, SE-94857480, SE-95096719, SE-95108975, SE-95112713

Summary of issue raised

Submitters provided the following comments and concerns relating to vegetation clearing:

- While the project is critical, so is the need to protect and preserve natural areas within the Gardens of Stone SCA.
- Impacts on biodiversity are unnecessary and unacceptable, including the clearing of native vegetation and threatened flora and fauna habitat.
- Clearing of remnant native vegetation is inconsistent with the NSW BC Act which prohibits harm to threatened species and communities without lawful authority.

Response

Avoidance and minimisation of impacts on biodiversity have been key objectives of the project's development and design process to date. Details on how the project has achieved avoidance and minimisation, which is a key requirement of the BC Act, is described in sections 23.1.4 and 7.5.1 and Table 7.20 of the EIS (and also in section 4.1.5 of this report). Where possible, the project footprint has been located within previously cleared and/or primarily poor condition or non-native vegetation, for example for brake and winch sites and construction compounds. Transgrid also worked with NSW NPWS to determine the preferred route through the Gardens of Stone SCA to avoid and minimise unnecessary and unacceptable impacts.

The assessment of biodiversity impacts in the EIS was carried out in accordance with the BC Act and the NSW BAM and completed by accredited assessors. Mitigation measure B01 commits Transgrid to investigate further opportunities to avoid and minimise impacts and this measure has been updated in Appendix B to investigate further opportunities during detailed design.

Table 7.11 of the EIS provides a summary of the residual direct impacts on fauna habitat types which amounts to a total of 55.49 ha. The majority of native vegetation removal is within the existing cleared easement and is in poor/moderate condition with limited canopy. Further amendments of the project footprint, described in section 3.2 and assessed in the project's Amendment Report (Transgrid, 2025a), results in a reduced area of vegetation and habitat removal of 55.08 ha. A detailed outline of the residual direct impacts is provided in Table 8.1 of the Revised Biodiversity Development Assessment Report (Appendix C).

For residual impacts on threatened species, the project will be offset in accordance with the BOS and the EPBC Act. The BOS scheme assesses impacts to biodiversity from development and gains at stewardship sites to a no net loss of standard, which is calculated using the BAM. The biodiversity offset delivery strategy is described in section 7.5.4.3 of the revised BDAR in Appendix C. Further reduction of native vegetation clearing will be considered during detailed design and construction planning via methods such as micro-siting of individual transmission structures, and retaining native vegetation within the easement wherever possible by establishing partial clearance and exclusion areas.

Mitigation measures B03, B04 and B06 commits Transgrid to implement measures that avoid and minimise impacts to vegetation and threatened flora.

The project, including clearing of native vegetation, will not commence until approval is received from the NSW Minister for Planning and Public Spaces and the Australian Government Minister for the Environment and Water and relevant approval conditions are met. The construction and operation of the project will be undertaken in accordance with the approval conditions.

4.3.1.2. Significance of impacts

Submission ID numbers(s)

SE-94857480

Summary of issue raised

A submitter commented that the project has not adequately considered significant impacts on threatened and migratory species.

Response

Technical Report 2 – Biodiversity Development Assessment Report was undertaken by suitably qualified specialists and endorsed by an accredited BAM assessor. The methodology for the impact assessment including consideration of the potential impacts on threatened and migratory species was undertaken in accordance with:

- the NSW BAM and Section 6.15 of the BC Act
- the Commonwealth Significant Impact Guidelines 1.1 – Matters of National Environmental Significance (MNES) in relation to the EPBC Act.

The revised Technical Report 2 – Biodiversity Development Assessment Report (Appendix C) includes changes to the project footprint and a review of these impacts has been undertaken. Any new areas have been assessed in accordance with the NSW BAM method and Significant Impact Guidelines noted above.

Significant Impact Criteria assessments for matters listed under the EPBC Act, were conducted and are provided in Appendix E of the Revised Biodiversity Development Assessment Report (Appendix C). Six migratory species were identified with the potential to occur in the study area (see Table 7.6 of the EIS and sections 5.3.3 and 5.3.4 of the Revised Biodiversity Development Assessment Report), however the number of previously recorded individuals and the limited habitat within the project footprint indicates the site is unlikely to support sufficient individuals or provide sufficient habitat.

Mitigation measures B07 to B10 identify controls to manage and reduce impacts to fauna.

4.3.1.3. Serious and Irreversible Impacts

Submission ID numbers(s)

SE-94857480

Summary of issue raised

A submitter stated that the proposed offset to SAII entities is unlawful and that the EIS does not demonstrate avoidance of serious and irreversible biodiversity impacts.

Response

The assessment of SAII is provided in section 8.6 of Technical Report 2 – Biodiversity Development Assessment Report of the EIS. The assessment includes consideration of one threatened species, the Large-eared Pied Bat, which is listed as an SAII entity under one of four principles in Section 6.7 of the BC Act. The BDAR assesses the potential direct impacts on foraging, roosting, maternity and breeding habitat as well as indirect impacts for this species and concludes that the project is not expected to result in impacts that would be serious or irreversible. No further SAII entities are potentially impacted by the proposal.

Avoidance and minimisation measures for biodiversity impacts are provided in section 7.5.1 and Table 7.20 of the EIS (see also response in section 4.1.5 of this report). Mitigation measure B07 aims to manage and control impacts on potential habitats for threatened fauna. For the Large-eared Pied Bat, the project footprint avoids direct impacts on potential roosting or maternity habitat for the species such as karst, caves, cliffs, crevices, and other formations that may comprise roosting or maternity habitat for the species. Mitigation measure B07 commits Transgrid to minimising indirect impacts on potential habitat for the Large-eared Pied Bat by adopting a 10-metre exclusion zone and undertaking regular inspections of the habitat. The residual direct and indirect impacts on the Large-eared Pied Bat would be offset by retiring 1,828 and 6 species credits, respectively. The species credits are outlined in Table 9.2 and Table 9.15 in the Revised Biodiversity Development Assessment Report (Appendix C) in accordance with the requirements of the BC Act and the BOS.

4.3.1.4. Connectivity

Submission ID numbers(s)

SE-94857480, and duplicate submissions SE-95114719 and SE-95115225.

Summary of issue raised

Submitters have raised concerns relating to connectivity and fragmentation of vegetation and habitats, that:

- The project contravenes State Environmental Planning Policy (Biodiversity and Conservation) 2021, which mandates the maintenance of ecological connectivity.
- The EIS has not assessed corridor disruption.
- The project would fragment habitat for endangered and threatened species and create barriers.

Response

State Environmental Planning Policy (Biodiversity and Conservation) 2021 only applies to project assessed in accordance with Part 4 of the EP&A Act and therefore does not apply to the project, however the project would be consistent with the SEPP's objectives for ecological values such as maintenance of connectivity and other aspects.

Assessment of habitat connectivity has been undertaken for threatened fauna species in section 7.4.1.3 of the EIS and sections 3.2.1, 6.2, 6.3 and 8.5, Table 8.12 and Appendix E of the Technical Report 2 – Biodiversity Development Assessment Report. The project will widen the existing gap between intact vegetation, exacerbating impacts created by the existing 132 kV transmission line (TL94E). Where new sections of easement are required, the land is predominantly cleared and used for agriculture and has limited existing habitat value. Minor impacts on connectivity would result from easement widening. Where possible, trees with a mature height that do not encroach on the vegetation clearance requirement will be retained and the ground and shrub layers will be allowed to regrow post-construction, except on tracks and in the immediate vicinity of transmission structures. This is further described in section 3.6.2 of the EIS. The assessment concluded that such impacts would not be sufficient to completely interrupt any ecological process such as migration or pollination. The connectivity assessment for the Squirrel Glider found that key links would be retained.

A Connectivity Strategy will be developed, as part of the Biodiversity Management Plan (refer to mitigation measure B14) which will include measures to provide equal or improved connectivity to the existing easement.

4.3.1.5. Impacts to birds

Submission ID numbers(s)

SE-94857480, SE-95096713, SE-95096719, SE-95114477, and duplicate submissions SE-95114719 and SE-95115225.

Summary of issue raised

Submitters stated concerns for the potential for bird strike, injury and mortality impacts of the project, identifying the following:

- The EIS does not adequately assess bird strike mortality and potential impacts against the EPBC Act significant impact criteria for threatened and endangered bird species.
- A peer review of bird collision risk modelling should be undertaken.
- Flight path intersection risk studies should be undertaken.
- Transmission structures will intersect and sever flight corridors resulting in injury and mortality of birds.
- The EIS does not present mitigation for avian strike.
- Up-to-date biodiversity species surveys should be provided.
- There should be a commitment to annual independent monitoring, setting of mortality thresholds and removal or realignment of the transmission line if deaths exceed safe levels.

Response

Avian strike assessment and mitigation

Assessment of the potential for bird strike injury or mortality resulting from the project is provided in section 8.5 of Technical Report 2 - Biodiversity Development Assessment Report and summarised in the EIS section 7.4.1.4. The assessment was undertaken in accordance with the BAM by a BAM-accredited assessor and has considered the likelihood of strikes, their nature, extent and duration and the consequence of transmission line collision impacts.

The EIS and the BDAR have addressed EPBC Act requirements, in particular the requirements of the Significant Impact Guidelines 1.1 (Commonwealth of Australia, 2013) and the NSW bilateral assessment

requirements outlined in the project's supplementary SEARs. Appendix E of the BDAR includes significant impact assessments for species where a significant impact is likely to occur, including those listed under the BC Act and the EPBC Act. The EPBC listed birds assessed in Appendix E include Gang-gang Cockatoo, Brown Treecreeper, Regent Honeyeater, Glossy-black Cockatoo and Superb Parrot.

The assessment indicated that the overall risk of collision was considered minor (refer to Table 8.12 of the BDAR) with species at the highest risk of strike being those that are likely to fly at a similar height to the transmission lines, and which are not familiar with the local habitat. Importantly, transmission line strike is an existing impact in the study area with several other 132 kV and 330 kV transmission lines already present and constructed at similar heights to those proposed by the project.

Threatened forest owls and forest birds are unlikely to experience a significant risk of transmission line strike as the species present within the local area are acclimatised to the structures present. Threatened raptors and some microbat species are at a higher risk due to flight patterns and foraging in large ranges. The project would result in a minor, but tangible increase in transmission line strike for these species. Collision risk for raptors such as the Wedge-tailed Eagles in Tasmania was strongly associated with the proportion of open habitat, forest edges, and freshwater sources in the area surrounding power lines (Pay et al 2025). Within the project footprint, the Coxs River represents an area of open habitat and a freshwater source, near to the Gardens of Stone SCA, similar to landscape features identified by Pay et al (2025). The collision risk is expected to be similar for raptors, including the White-bellied Sea-eagle, recorded within the project footprint.

During operation, Transgrid will undertake regular inspections of the easement and any observations of bird injury or mortality recorded and managed in accordance with Transgrid's Environmental Management System. Additionally, mitigation measure B15 (refer Appendix B) which aims to minimise potential impacts of transmission line collision, entanglement or electrocution by birds or microbats has been amended to specifically refer to adoption of fauna deterrent devices in habitat most likely to be used by these species.

Based on the overall collision risk being assessed as minor, the need for bird collision modelling, a peer review process, annual independent monitoring, setting of mortality thresholds or removal or relocating of the transmission line is not considered necessary.

Chapter 7 of the EIS summarises the avoidance measures and mitigation measures to minimise the collision risk for threatened fauna including birds and bats, including mitigation measure B15 which outlines the use of fauna deterrent devices. Transgrid will undertake regular maintenance inspections of the easement. Observations of injury or mortality to threatened fauna will be recorded and managed in accordance with Transgrid's externally accredited Environmental Management System.

Biodiversity surveys

Surveys for relevant biodiversity species were undertaken in accordance with the BAM between August 2023 and January 2025 and are described in section 7.2.4 of the EIS. The Technical Report 2 – Biodiversity Development Assessment Report described the results of these surveys. Further discussion relating to bird strike risks is provided in section 8.5 of the revised BDAR.

4.3.1.6. Edge effects and weeds

Submission ID numbers(s)

SE-95117713, SE-95118470, SE-95118711, and duplicate submissions SE-95114719 and SE-95115225.

Summary of issue raised

Submitters raised concerns that the project will introduce weeds, increase human access, noise and result in edge effects and effects on flora and fauna. One submitter also raised concerns of increased predation within the project footprint. One submitter questioned if the proponent could publish a before and after habitat loss quantification (including indirect edge effects) and commit to offset programs only if scientifically verified.

Response

Section 7.4.1.2 of the EIS and section 8.2 of Technical Report 2 – Biodiversity Development Assessment Report describes the potential indirect impacts that would arise from the construction and operation of the project. As mentioned in the summary of residual impacts in Table 8.5 of Technical Report 2 – Biodiversity Development Assessment Report, edge effects can include increased noise and light or erosion and sedimentation or predation at the interface of intact vegetation and cleared areas.

Given the location of the project along an existing transmission line easement, much of the vegetation is already subject to edge effects. The widening of the easement on one side will move the edge, extending edge effects to areas previously not affected.

Across the project footprint, there are moderate numbers of priority weeds and high threat exotics. The project has the potential to result in spread and introduction of new weed species into native vegetation where they are not yet established or where they occur at low densities. The CEMP will include measures to prevent access to native vegetation outside the project footprint and minimise the risk of transmitting weed propagules. Mitigation measure B13 provides measures to avoid and minimise the spread of weeds across the project footprint. Further details on mitigating residual biodiversity impacts, including indirect impacts from edge effects and weeds, are detailed in section 8.8 of the revised Biodiversity Development Assessment Report (Appendix C). Revised mitigation measures for the project are provided in Appendix B.

Any residual indirect impacts from the spread of weeds, pests and pathogens and increased predation have also been included in the project's biodiversity offset liability. The proposed approach to biodiversity offsets is outlined in section 9.5.2 of Technical Report 2 – Biodiversity Development Assessment Report. All biodiversity credits would be secured in accordance with the BC Act and Regulation, and bilateral agreement as outlined in section 9.5.1 of Technical Report 2 – Biodiversity Development Assessment Report.

Establishing biodiversity stewardship agreements on identified properties would require scientific investigations to demonstrate like-for-like offsets, particularly for significant impacts on MNES, and be subject to review and approval. Verification, monitoring and reporting for the performance of offsets would be outlined in the Biodiversity Offset Strategy, as required by the BC Act and Regulation.

Before and after habitat loss quantification, documenting the extent of vegetation removal and compliance against conditions of approval, would be published as part of any independent audit of the project. Such an audit would be carried out in accordance with NSW Independent Audit Post Approval Requirements (2020). Should conditions of approval require the proponent to undertake Independent Audit Reports, these are typically made publicly available within 60 days of submission to the DPHI Planning Secretary.

4.3.2. Landscape character and visual amenity

4.3.2.1. Visual impact

Submission ID numbers(s)

SE-94857480, SE-95120457

Summary of issue raised

Submitters raised the following concerns about the visual impacts of the project:

- The proponent should provide visual simulations (day/night) to justify the visual impacts claimed.
- The EIS should provide viewshed analysis and landscape-sensitive alternatives for the project.
- The proposed new access tracks and the project itself will scar the landscape, ridgelines, and vistas.

Response

An assessment of landscape character and visual amenity impacts are detailed in Technical Report 7 – Landscape Character and Visual Impact Assessment (LCVIA). Although the *Transmission Guideline Technical Supplement for Landscape Character and Visual Impact Assessment (the Supplement) Version 1.1* (DPHI, 2025) does not apply to the project as it is an augmentation of an existing transmission corridor, the LCVIA considered its broad objectives. Methodologies adopted from the Supplement include conducting both a landscape character assessment and a visual impact assessment.

The process of creating panorama and photomontages is detailed in Appendix D of the EIS and outlined in section 3.10 of Technical Report 7 – Landscape Character and Visual Impact Assessment. The resulting photomontages are shown in Appendix A of Technical Report 7 – Landscape Character and Visual Impact Assessment. Panoramic photomontages were developed from specific viewpoints to represent visual simulations of the proposed infrastructure in the context of the existing terrain, vegetation and buildings.

The topography of the study area features a relatively short ridgeline oriented in a north-west to south-east direction associated with the top of Mount Piper that falls sharply away to the south and west towards Pipers Flat Creek and Lake Wallace. The analysis showed that the project is more visible to residents in the eastern end of Lidsdale due to the elevation and open views, while it is less visible to areas south of the project such as Pipers Flat Road. As described in section 4.2.1 of Technical Report 7 – Landscape Character and Visual Impact Assessment, a review of scenic and significant vistas was undertaken as part of the desktop assessment and during field work. The review concluded that there are no scenic views or significant vistas occurring within the study area that would be impacted by the project.

Section 3.4 of the EIS indicates that the project would primarily utilise existing access tracks, although to facilitate efficient construction access, they would need to be widened between 6-10 m in places to account for local topography. Additionally, some new access tracks would also be constructed. Access tracks would be surfaced with gravel to resemble typical farm access tracks. Tracks not required for future maintenance activities would be rehabilitated, subject to agreement with landowners. Mitigation measure LV2 commits Transgrid to minimise the removal of existing vegetation and minimise any landform changes to reduce the overall landscape character and visual impacts from temporary and permanent access tracks.

The transmission infrastructure will not be fitted with permanent lighting, therefore visual simulations for nighttime periods were not prepared.

A discussion of alternative options and designs is provided in section 4.1.1. This included a multi-criteria analysis which included environment and community categories, to rank the performance of the eleven route options.

4.3.3. Land use and agriculture

Submission ID numbers(s)

SE-92343959, SE-95118470, SE-95119208

Summary of issue raised

Submitters raised concerns that the project would result in agricultural impacts, such as the loss of productive and valuable agricultural lands.

Response

The impact on agricultural land use is described in section 13.4.3.3 of the EIS and Technical Report 4 – Land Use and Agriculture Assessment. The project would result in an additional 24.2 ha of agricultural land being required for the transmission line easement. While there would be an exclusion zone extending 20 m from the base of each transmission structure, agricultural and grazing activities would still be permitted within the easement. Areas impacted during construction would be restored to their previous condition or as agreed with the landowner, to facilitate ongoing use of the land for agricultural purposes. Property management plans (mitigation measure LU1) and pre-condition assessments (mitigation measure LU2) will be developed in consultation with impacted landowners, to manage this process. Therefore, impacts on agricultural land use are expected to be negligible.

The upgraded transmission line would be operated in accordance with Transgrid's existing operational and maintenance procedures and updated property agreements. Property agreements will include access restrictions to ensure that agricultural properties are not impacted by biosecurity risks. This will be outlined in property management plans (mitigation measure LU1).

4.3.4. Water resources

4.3.4.1. Water quality

Submission ID numbers(s)

SE-95096713, SE-95097707, SE-95117713

Summary of issue raised

Submitters indicated that construction of the transmission lines and access tracks will increase soil erosion and sedimentation, loosen soils and destabilise watercourses, affecting water quality and environmental receptors. One submitter requested information on what monitoring is proposed to ensure water impacts do not occur and if Transgrid would provide a guarantee to not harm downstream water systems.

Response

Chapter 14 of the EIS and Technical Report 1 – Water Impact Assessment includes the assessment of potential surface water quality impacts resulting from construction activities. The location of all transmission line structures, construction benches and temporary construction compounds was reviewed against the riparian zone buffers outlined in the Guidelines for riparian corridors on waterfront land (DPE, 2022a) (see Table 5.1 of Technical Report 1 – Water Impact Assessment). The riparian zones are measured from the

bank of watercourses and therefore provide an indication of watercourses that may potentially affected from construction activities. Section 14.4 of the EIS outlines specific impacts associated with works in riparian buffer zones including waterway crossings. For most transmission structures and construction benches, activities would be located outside of the riparian zone buffer areas. Where riparian areas are likely to be affected by construction, they would be stabilised and revegetated following construction.

Section 14.5 of the EIS outlines the mitigation measures and controls to protect surface water quality and surface water resources from environmental harm. The principal mechanism for management of potential water quality impacts during construction would be via a Soil and Water Management Plan (SWMP) and mitigation measure W1 outlines Transgrid's commitment to prepare and implement a SWMP, which would be part of the project's CEMP. The SWMP will include:

- Implementation of staged, location-specific ESCPs erosion and sediment control measures which would manage the impacts associated with sediment laden runoff.
- An Erosion Sediment Control Plan prepared in accordance with Landcom (2004) *Managing Urban Stormwater – Soils and Construction, Volume 1*.
- Specific requirements related to the monitoring and evaluation of erosion and sediment controls. This includes hold points for installation, and regular inspection regimes for inspection and auditing.
- Progressive planning through the project phases to ensure that controls are suitable to the work activities.

Mitigation measure W1 has been revised to include the changes above. With the implementation of measures W1 to W5, construction of the project is expected to have a neutral effect on water quality (section 14.4.1.7 of the EIS).

During operation phase, Transgrid's regular maintenance checks identify and correct any potential incident, in accordance with Transgrid's Environmental Management System (EMS) and other asset operational procedures.

Submission ID number(s)

SE-94857480

Summary of issues

The submitter requested comprehensive hydrological modelling for extreme rainfall or stormwater flows which is required under both the Water Management Act and the Environment Planning and Assessment Act.

Response

The EIS and the Technical Report 1 – Water Impact Assessment for the project was prepared to address the SEARs. The SEARs did not request hydrology modelling for the project.

The assessment methodology was tailored to the nature of the project and the study area which includes existing transmission structures and other infrastructure. Transmission structures would be installed close to existing structures along the Coxs River. Additionally, structure foundations which are predominantly below ground level would only result in minor, localised alterations to surface water flow. For these reasons, a qualitative hydrological assessment approach was considered adequate for the purposes of the impact assessment and to meet the requirements of the SEARs.

The detailed design of the project is undertaking hydrology and flooding assessments in the study area. The assessment models the 1 in 100 AEP event to determine the spatial extent of flooding, inundation depths and flow velocities. Preliminary results show flooding levels from Coxs River and Pipers Flat Creek of depths exceeding 1 m at transmission structures 2C, 3C to 9D and 11D. Transmission structures 1C, 5C and 12D may experience flooding depths less than 1 m. Transgrid will consult with DPHI – Planning on the final outcomes of the assessment.

Mitigation measures W2 to W4 address the potential impacts associated with flooding and commit Transgrid to ensuring that proposed transmission structures within flood liable areas are designed and constructed to withstand a 1 in 100 AEP event. Mitigation measure W2 includes preparation of Flood Risk Management Plan (FRMP) as part of the project's Emergency Management Plan. The FRMP would include a trigger action response plan to outline how and when actions will be undertaken in areas of the project footprint at risk of flooding.

4.3.5. Hazards and risks

4.3.5.1. Bushfire

Submission ID numbers(s)

SE-94319228

Summary of issue raised

The submitter requests the consideration of installing underground water storages along the transmission line route in case of bushfire.

Response

Assessment of the potential risk of bushfires both during the construction and operational phases of the project was considered in sections 15.4.1 and 15.4.2 of the EIS respectively and Appendix C of Technical Report 9 – Hazards and Risk Assessment. The assessment concluded that with the implementation of the proposed mitigation measures, the risk of bushfire ignition during construction and operation was very low and low respectively.

The location and quantity of water supply and storages for firefighting would be considered during the preparation of the Bushfire Management Plan (mitigation measure HR3) in consultation with RFS and NPWS. As a result of this feedback, the mitigation measure has been amended to include reference to providing details of the location and quantity of water supply sources and storages for firefighting purposes to ensure adequate and accessible water for firefighting.

Underground water storages along the transmission line for firefighting purposes would not be practicable and would result in additional impacts to property, biodiversity and soils.

Submission ID numbers(s)

SE-95096719, SE-95096722, SE-95114485, SE-95115230, SE-95116750, SE-95120457, SE-95120459

Summary of issue raised

Submitters raised the following concerns and requests related to bushfire risk:

- The bushfire risk to human safety, flora and fauna is too high.
- The EIS understates the danger to public safety and the environment associated with bushfire ignition and propagation.
- Fire risk will be increased by construction in bushland.
- The potential for the transmission line to initiate or worsen a bushfire is unacceptable.
- Details of the transmission line design, worst case modelling and fire-spread models should be released.
- Electrical faults resulting in bushfire are more likely due to the steep terrain.
- Steep terrain would disadvantage ground fire crews.
- Request to provide evidence of effective fire suppression in steep terrain.

Response

Assessment of the potential risk of bushfires both during the construction and operational phases of the project was assessed in sections 15.4.1 and 15.4.2 of the EIS respectively and Appendix C of Technical Report 9 – Hazards and Risk Assessment. The assessment concluded that with the implementation of the proposed mitigation measures HR1 to HR5, the risk of bushfire during construction and operation was very low and low respectively.

The assessment was undertaken in accordance with the SEARs relevant to bushfire risks and the Planning for Bush Fire Protection (RFS, 2019). Engagement with stakeholders, including RFS, Airservices Australia, NSW NPWS and landowners was also undertaken during this assessment. Bushfire modelling and fire-spread models were not requested by these stakeholders so were not included in the assessment. Likewise, these models were not required by the SEARs.

The bushfire scenarios that may affect the project or be caused by the project impacting the community and biodiversity were assessed. Terrain and vegetation type were considered, including the following aspects:

- The project footprint is classified as bushfire prone land and has a Fire Danger Index of 80 as part of the Central Ranges fire weather district.
- Vegetation Category 1 (the highest bushfire risk) occurs in the northern extent of the project footprint and Vegetation Category 2 occurs in the southern extent of the project footprint.
- There are large parcels of forest and woodland areas on either side of the existing easement. Some of these areas have substantial surface and near-surface fuels present.
- Within the existing easement, there are some areas where significant weed encroachment (e.g. blackberry) occurs elevating fuel loads.
- Potential bushfire ignition sources currently exist due to the rail lines and sidings, the surrounding road network, industrial operations and general farm operations.
- Fire behaviour through the project footprint would be most affected by the topography of the landscape and fuel moisture content in the gully areas.

The project footprint includes moderate slopes less than 15 degrees with existing access tracks present throughout the area. The project footprint is not characterised as steep terrain, defined as slopes exceeding 18 degrees. No previous fires have been recorded within the project area despite the multiple potential sources being present, including transmission and distribution lines.

Additional access tracks and upgrade of existing tracks would be required for the project. This would improve access to the easement and providing the opportunity for Category 1 firefighting response vehicles to traverse parts of the easement. These proposed upgrades are expected to reduce the risk to personnel and contractors working within the easement, and also to response personnel in the event of an emergency during both construction and operation. It is noted also that firefighting activities can be undertaken from either the ground or in the air.

Transgrid takes the risk of bushfires very seriously, and the safety of workers, landowners and communities is Transgrid's first priority. Transgrid uses best practice asset management and network safety management systems to reduce bushfire risk and potential impacts on local communities and the surrounding environment. Transgrid is subject to the requirements of the NSW Electricity Supply Act 1995 and other acts and regulations which requires network operators to reduce bushfire risk by appropriate means, including removing or trimming vegetation on private land and some public lands. Transgrid designs, constructs, operates and maintains the electricity network to ensure the safety of surrounding communities, worker safety, protect property, and prevent loss of electricity supply (including from bushfire). As a responsible network operator, Transgrid proactively mitigates risks through structured risk assessment and management processes that identify threats, assess the risks, and implement control measures that minimise the risks to as low as reasonably practicable.

The detailed design of the project will be undertaken will be in accordance with Transgrid's Transmission Line Design Manual – Major New Build Rev 2.0 and other standards that are detailed in section 4.1.2 of this report. These standards would be implemented specific to conditions present in the study area.

During operation, transmission lines are considered to have a low vulnerability to bushfire impact due to their robust, non-combustible and highly reliable design. Well established and proven transmission design elements and maintenance procedures would mitigate the potential risks of bushfire, both to the transmission lines and from the operation and maintenance of the transmission lines.

Given the existing transmission lines in the area, and the recommended mitigation measures and controls to be implemented as part of the design, construction and operation of the project, the assessment concluded that the project would not increase the bushfire risk profile of the area.

Submission ID numbers(s)

SE-95096713, SE-95096719, SE-95096722, SE-95114485, SE-95115230, SE-95116750, SE-95117718, SE-95120459

Summary of issue raised

Submitters raised concerns that the project and its safety zones around transmission lines will constrain aerial firefighting reducing its effectiveness.

Response

Assessment of the potential impacts on aviation safety both during the construction and operational phases of the project were considered in sections 15.4.1 and 15.4.2 of the EIS respectively and Appendix D of Technical Report 9 – Hazards and Risk Assessment. The assessment included consultation with Airservices Australia, Department of Defence, landowners and aerial application operations, NSW NPWS, NSW Ambulance, NSW Police Air Wing and NSW RFS.

The proposed transmission structures would have an indicative height similar to existing structures, ranging between approximately 14 m to 60 m. The height of these structures would not affect flight operations or create an adverse impact upon aerial firefighting operations.

4.3.6. Soils, geology and contamination

Submission ID numbers(s)

SE-94857480, SE-95096719

Summary of issue raised

Submitters raised the following issues:

- The project has not considered the contamination footprint of the Mount Piper power station or the presence of unstable legacy ash dams and waste storage facilities within proximity to the project. Tower collapse or conductor drop could ignite toxic soils or mobilise ash dam sediments. A failure mode analysis has not been conducted which contravenes the requirements of the Contaminated Land Management Act.
- A detailed geotechnical risk assessment is not provided and contravenes relevant sections of the NSW EP&A Act.
- The project area is characterised by steep and unstable terrain, which will intensify the risk of slope failure and soil erosion.
- Access tracks will cause landslip risk and destabilise the soils in the area due to heavy machinery, earthworks and blasting on slopes.

Response

The EIS and Technical Report 11 – Contamination Assessment was prepared to address the SEARs, the requirements of the EP&A Act, and with reference to relevant guidelines of the NSW *Contaminated Land Management Act 1997* (CLM Act). Failure mode analysis is not a requirement of the CLM Act or the project SEARs. The contamination assessment included a preliminary site investigation conducted in accordance with industry guidelines and is summarised in chapter 16 of the EIS.

The contamination assessment identified existing areas of environmental concern (AEC) which included Mount Piper Power Station and associated infrastructure (AEC 01), a number of ash repositories (AEC 09 and AEC 12) and other areas associated with historic industrial usage. While there are a number of AECs located within or close to the project footprint (refer EIS Figure 16.3), the assessment concluded that it is unlikely that significant or widespread contamination is present. The EIS identified that the risks of these existing contaminants being exacerbated by construction activities is generally considered low due to the small scale of earthworks and shallow depth of excavation.

Identified contamination risks will be managed by implementing a SWMP (mitigation measure SC1) which will include measures to:

- manage disturbance to AECs identified as having a potentially complete source-pathway-receptor linkage
- undertake soil testing of excavated soils in accordance with NSW EPA's waste classification guidelines and NEPM (2013), to identify opportunities for onsite reuse or offsite disposal (e.g. contaminated material) at licenced facility

- if present, ensure contaminated groundwater is not released to the surrounding environment and is disposed of at a licenced facility.

Unexpected contamination would be managed in accordance with an Unexpected Contaminant Finds Protocol (mitigation measure SC6) during construction.

The project footprint includes moderate slopes less than 15 degrees with existing access tracks present throughout the area. The project footprint is not characterised as steep terrain, defined as slopes exceeding 18 degrees (AGS 2007).

The investigation of geotechnical conditions within the project footprint is ongoing as part of the detailed design and construction planning. Section 16 of the EIS summarises the outcomes of an assessment of subsidence risk and potential collapse of underground mine workings in and around TS22D to TS25D. Evidence of existing landslip or slope failure within the project footprint and immediate surrounds, including easements for transmission lines 94E and 70/71, was not reported or observed during investigations for the project (SMEC 2024).

Transgrid will consider the results of all project-related information, including geotechnical studies, during detailed design and construction planning to mitigate potential geotechnical risks and impacts. This includes risks associated with development of new access tracks. Earthwork slopes and batters will be designed specific to the identified soil types and characteristics and with reference to industry standards and good engineering practice. This will include drainage work (as required) to manage potential risks associated with erosion and potential landslips. Section 3.4 of the EIS provides further detail on the location of the tracks requiring widening and where new tracks would be constructed. Blasting is not required for the project.

Ongoing maintenance and inspection of transmission structures and the easement will be undertaken during the operational phase to identify any issues that require rectification or management. Inspections and routine maintenance will be undertaken in accordance with Transgrid's EMS and other asset operational procedures.

4.3.7. Economic impacts

Submission ID numbers(s)

SE-95108975, SE-95109960, SE-95109983, SE-95111212

Summary of issue raised

Submitters raised concerns the project would not provide any local, State or national economic benefits or reduce power prices.

Response

The key objective of the project is to support the NSW Government's delivery of the CWO REZ and the State's energy policies and strategies. The project is essential to NSW for economic, social, and environmental reasons. It will increase the network's capacity to transfer additional power from the CWO REZ to major electricity demand centres. Additionally, it will facilitate the delivery of at least 4.5 gigawatts of renewable energy to consumers, aiding NSW and Australia in reaching net zero emissions by 2050. The project is also expected to enhance affordability of electricity for consumers by increasing supply and driving down electricity prices in the medium to long term.

As outlined in section 17 and section 23.5 of the EIS, the project is expected to provide the following key economic and social benefits:

- increase in economic activity and benefits to the local Lithgow LGA economy and the broader economy of NSW
- increase in opportunities for local procurement and spend in local businesses
- provide employment of a peak of 150 construction workers, with an average workforce of about 60 depending on the stage of construction
- result in predicted $9.6 million in direct and indirect output from the project.

4.3.8. Social impact

Submission ID number(s)

SE-93049209

Summary of issues raised

The submitter requested safe and continuous access to the Coxs River for angling and fish stocking activities, during and after construction.

Response

The project footprint crosses over with a small number of sections of the Coxs River, including a section of Brays Lane and Main Street (refer to Figure 3.1 of the EIS). Review of the DPIRD Fish Stocking Map accessed 21 October 2025, identifies two locations next to Brays Lane and Main Street where access to the Coxs River has been provided for previous fish stocking of Rainbow Trout and Brown Trout respectively. These locations occur within the project footprint. Fish stocking at these two locations was last undertaken in the period 2021/22.

Transgrid understands that angling and fish stocking activities occur on public lands near Brays Lane and Main Street. Transgrid's primary concern is about maintaining adequate levels of safety and efficiency for the construction works, including for the workforce and members of the public.

The ability to access Coxs River at Brays Lane and Main Street will only be affected only when construction activities have the potential to impact users. At these times, we may require the areas to be excluded from public use. Access will be maintained at all other times. Note that Transgrid cannot allow the use of private lands for access to Coxs River.

Should members of the public require information about access to the Coxs River from public lands they can contact the Community Engagement line. Transgrid is open to consultation with the NSW Department of Primary Industries (DPI) – Fisheries about providing access to Coxs River (at Brays Lane and Main Street) during construction, should it be required. Transgrid's primary concern is about maintaining adequate levels of safety and efficiency for the construction works, including for the construction workforce and NSW DPI – Fisheries' contractors. To the extent this is achievable and subject to adherence to any necessary requirements from other parties, there is no in principle objection to what is proposed.

Submission ID numbers(s)

SE-94319228

Summary of issue raised

The submitter would like to see a greater effort to utilise the region's labour and materials. While the region is small, the project can assist growing available skills.

Response

Transgrid, and its nominated construction contractor, are committed to providing opportunities for encouraging the use of local employment for the construction of the project. The project is expected to require a peak workforce of about 150 workers, with an average workforce of about 60 workers, depending on the stage of construction. It is expected that the majority of project employees will be sourced outside of the Lithgow LGA due to the relatively small available workforce and speciality skills shortage within the LGA.

Options for prioritising the employment of local workers for the construction phase will be investigated as detailed in mitigation measure S4, which will include consideration of requirements for:

- recruitment, skills and training measures, including identification of skills and qualifications required, and training targets
- how the contractor will work with regional stakeholders to upskill local residents, including Indigenous and culturally diverse communities.

Mitigation measure S5 outlines Transgrid's commitment to develop and implement a Local Industry Participation Plan and an Aboriginal Participation Plan to ensure opportunities for local, regional and Indigenous businesses to participate in the project's supply chain. Implementation of the plans will include:

- a process for local businesses to source information about supply opportunities for the project
- host business information evenings
- maintain a local supply chain register
- step appropriate targets for local and Indigenous business procurement.

Submission ID numbers(s)

SE-92280716, SE-92343959, SE-95109469, SE-95113960, SE-95115207

Summary of issue raised

Submitters raised concerns that the project:

- would result in unacceptable impacts to our communities, including rural community character and cohesion
- is being undertaken without adequate transparency
- has no social licence from the community or landowners.

Response

Technical Report 13 – Social Impact Assessment was prepared by a team of suitably qualified specialists to address the SEARs and was undertaken in accordance with the Social Impact Assessment Guideline (DPIE 2023). The social impact assessment considered a range of potential impacts to the way of life, community values, health and wellbeing, cohesion, community infrastructure, accessibility via road networks to community infrastructure and recreational areas, culture, amenity of surroundings, livelihoods, decision-making systems. Community wellbeing and cohesion were considered as part of community impacts.

The social impacts of the project are presented in chapter 18 of the EIS (refer to Table 18.6 and Table 18.7). With the adoption of mitigation measures S1 to S6, the residual social impacts would mostly be low impact, except for temporary accommodation and potential noise impacts during construction which would result in medium negative impacts. Social impacts associated with rural community character and social cohesion were both assessed to be low.

Transgrid has undertaken an extensive community engagement program to ensure transparency in accordance with the project's Community and Stakeholder Engagement Plan developed with guidance from recognised Australian and international documents. Engagement and consultation for the project have been undertaken to address the SEARs and the Undertaking Engagement Guidelines for State Significant Projects (DPE, 2022) to:

- provide clear and concise information about the project and its impacts
- implement activities that encourage and facilitate participation
- report back on what was heard, what has or hasn't changed, and why.

Tables 5.6 and 5.7 in chapter 5 of the EIS present the key topics raised during consultation with the community and stakeholders respectively, including landowners and where this topic has been addressed in the EIS. A summary of all consultation conducted during the route options assessment phase and EIS is presented in section 5 of the EIS and subsequently, in section 3.1 of this report.

During the project planning (pre-EIS) phase, Transgrid implemented a social licence initiative via the Community Partnerships Program which supported delivery of community-led wellbeing, environmental, sustainability and education services in Lithgow. This program included three rounds of funding with each grant recipient being awarded approximately $5,000.

Following approval of the project, community and stakeholder consultation, including landowners will be ongoing in accordance with the project Community and Stakeholder Engagement Plan. Further stages of the Community Partnerships Program will also be undertaken. In addition, eligible landowners will receive payments as prescribed by the Strategic Benefit Payments Scheme (SBP Scheme) (NSW Government, 2022).

4.3.8.1. Tourism impacts

Submission ID numbers(s)

SE-92280716, SE-94857480

Summary of issue raised

Submitters raised concerns that tourism will be affected by the project due to impacts on natural landscapes and heritage assets.

Response

The project study area is characterised by an industrial and rural landscape. It includes energy generators such as the Mount Piper Power Station, Wallerawang Power Station and several collieries currently or previously operating in the area. In addition, the area includes current and historic industrial facilities, and extensive energy and transmission line infrastructure.

The landscape character and visual impact assessment (refer Technical Report 7 – Landscape Character and Visual Impact Assessment and Chapter 10 of the EIS) categorises the scenic quality of the local environment as low to very low, and the visual sensitivity as moderate to low. The heritage sites located within study area, and the views to and from the heritage items, are not anticipated to be impacted by the project (refer to Technical Report 6 – Historic Heritage Assessment and Statement of Heritage Impact Report and Chapter 12 of the EIS).

The social impact assessment (refer Technical Report 13 – Social Impact Assessment and chapter 18 of the EIS), found that tourism is not a significant industry within the study area. This is because of the existing low scenic quality of the landscape and also the limited use of the SCA for recreation/tourism activities. Usage of the SCA by the public for tourism or recreation in the vicinity of the project footprint is considered to be low due to the presence of the existing infrastructure easements, the distance to the project footprint from public roads, and lack of designated recreational areas and formal bushwalking tracks. The Gardens of Stone SCA Masterplan (NSW NPWS 2025) also does not identify any current or future visitor infrastructure in the portion of the SCA within the project footprint. Although tourism is limited within the study area and project footprint, the broader local government area is recognised as an important tourism destination. The Lithgow City Council is preparing to transition its local economy from its historical reliance on coal mining and coal-fired power generation to facilitate growth in the renewable energy, manufacturing, and tourism sectors. This is further described in the response below.

Submission ID numbers(s)

SE-94857480

Summary of issues raised

The submitter identified that large scale transmission infrastructure is not compatible with the NSW Tourism Strategy 2030.

Response

A review has shown that Destination NSW has developed the Visitor Economy Strategy 2030 and no reference can be found to a document 'NSW Tourism Strategy 2030' identified by the submitter. The NSW Government's Visitor Economy Strategy 2030 – A Roadmap for Growing the NSW Visitor Economy (Destination NSW) provides a roadmap to support all industries involved in the visitor economy to recover from the impact of drought, bushfires and COVID-19 and to grow in the future. The strategy is underpinned by five strategic pillars:

- Road to recovery – a comprehensive program of marketing and industry development.
- Build the brand – new brands will be developed for Sydney and NSW to provide a strong foundation for differentiation, consumer messaging, local pride and competitiveness.
- Showcase our strengths – focus on existing strengths and develop new opportunities to ensure place making, destination marketing, events and visitor experiences drive visitation.
- Invest in world-class events – accelerated investment in signature sporting, cultural events and business events.
- Facilitate growth – investing in infrastructure, job creation, industry resilience and sustainability, future planning, and better ways to do business will ensure continued growth and future prosperity of the NSW visitor economy.

The Social Impact Assessment (Technical Report 13 of the EIS) did not identify tourism as a significant industry in the study area due to the existing industrial landscape and generally low scenic quality. However, the assessment identified that the Lithgow local government area is recognised as an important tourism destination and is preparing to transition its economy from its historical reliance on coal mining and coal-fired power generation to grow the renewable energy, manufacturing, and tourism sectors.

Transgrid is working with the chosen construction contractor to co-design the scope of workforce and workforce development, local industry participation, Aboriginal participation and community investment and benefits to prepare the local workforce for opportunities in these emerging and diversified sectors. Mitigation measure E1, detailed in section 17.5 of the EIS, outlines Transgrid's commitment to develop and implement the Local Industry Participation Plan and an Aboriginal Participation Plan.

4.3.8.2. Compensation

Submission ID numbers(s)

SE-94857480

Summary of issue raised

The submitter raised concerns that:

- The project will create inequities between host landholders and non-host landholders where host landholders receive compensation.
- The proponent has not demonstrated compliance with Government policy or fair treatment of non-host landholders.

Response

Section 2.4 of the EIS details the alternative route options that were considered for the project and describes the evaluation process, which aimed to avoid private property. Ultimately, the preferred route affects only one private landowner.

Due to the critical function of supplying electricity across NSW, Transgrid must acquire an interest over the land that will host the transmission infrastructure. Transgrid will negotiate an appropriate form of agreement, usually an easement or a lease, with the affected landowner and proceed to secure construction access. Where agreement cannot be reached with landowner (and where legally permissible), compulsory acquisition can be used to secure the required property interest with compensation payable in accordance with the *Land Acquisition (Just Terms Compensation) Act 1991*. The Act does not provide for compensation to adjacent landowner, on the basis that no property interest is being acquired.

Transgrid has engaged with landowners who are not easement affected and are outside of the project footprint who might experience impacts as a result of the project's construction. Engagement activities have focused on providing information, responding to specific issues, and discussing and seeking feedback on the project, including the potential impacts and any new or updated mitigation measures. Engagement for the project is outlined in section 1.3 and 3.1, and chapter 5 of the EIS. Transgrid will continue to engage throughout the project with directly impacted and neighbouring landowners, through councils and community groups, and more broadly with the community.

The project is eligible for the Strategic Benefits Payments Scheme. Landowners who are eligible for the Strategic Benefits Payments Scheme will be paid the Strategic Benefits Payments post-energisation in accordance with the guidelines. Payments under the Strategic Benefits Payments Scheme are in addition to payments to landowners for transmission easements on their land. Non-host landowners located adjacent or near to the project may experience other social and economic benefits of the project, including business, employment and training opportunities (mitigation measure S5), opportunity for community grants through established Transgrid programs and plans. Transgrid will continue to promote opportunities for community benefits for local and regional stakeholders, including landowners, as described in mitigation measure S6.

4.3.8.3. Property value

Submission ID number(s)

SE-94857480

Summary of issues

A submitter identified that the project did not consider the devaluation of agricultural and residential properties which may result from the project as required by the EP&A Act.

Response

The land use and agricultural assessment summarised in chapter 13 of the EIS concluded that operation of the project is not expected to result in impacts on agricultural productivity within the transmission line easement. Areas impacted during construction would be restored to previous condition to minimise the risk of impacts to the use of the land for agricultural purposes. The project is not expected to result in long-term degradation of soils that reduce the capacity of the soils for any existing agricultural operations.

As mentioned in section 3.3 of the EIS, any permanent or temporary acquisitions of easements (direct impacts) would be carried out by agreement with landowners where possible and, as a last resort, by compulsory acquisition in accordance with the requirements of the *Land Acquisition (Just Terms Compensation) Act 1991*. Eligible private landowners will also receive payments under the Strategic Benefits Payments Scheme in addition to compensation, as outlined in the *Land Acquisition (Just Terms Compensation) Act 1991*.

Throughout the development of the project, Transgrid has encouraged landowners of easement affected properties to engage the services of independent professional advisors including legal and property valuation advisers who are best placed to assess the compensation with regard to the relevant matters outlined in the *Land Acquisition (Just Terms Compensation) Act 1991*, and any other matters that are relevant to the specific property holding. This affords the landowner of the affected property the opportunity to obtain an independent opinion as to the value of compensation attributable to the easement being acquired. Currently, there is no existing legislative mechanism within the NSW Government outlining compensation measures for non-easement affected landowners that may experience devaluation of their agricultural or residential property as a result of transmission infrastructure projects.

4.3.9. Cultural heritage

4.3.9.1. Consultation

Submission ID number(s)

SE-94857480, SE-95120457

Summary of issues

Submitters raised the following concerns on the consultation approach with Traditional Custodians:

- The project fails to demonstrate lawful consultation with Traditional Custodians, including the Wiradjuri people.
- The EIS provides evidence of limited or selective engagement with a failure to incorporate Wiradjuri voices into project decision-making.
- The proponent has not engaged with Traditional Custodians to consider potential damage from the project.

Response

As outlined in section 11.2.3 of the EIS and Technical Report 5 – Aboriginal Cultural Heritage Assessment Report (ACHAR), Transgrid has been consulting with local Indigenous knowledge holders and the Local Aboriginal Land Council since 2022.

Consultation undertaken as part of the Aboriginal Cultural Heritage Assessment Report (Technical Report 5) was in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (ACHCRs; DECCW 2010) as required by the SEARs. Section 3.2 of Technical Report 5 outlined the process to identify and consult with Indigenous knowledge holders. In accordance with the ACHCRs, engagement for the ACHAR was undertaken in four stages as follows:

- Stage 1: identify Registered Aboriginal Parties (RAPs) and other stakeholders
- Stage 2: project information and the assessment methodology sent to all RAPs
- Stage 3: RAPs provided 28 days to provide feedback on the assessment methodology and field survey was undertaken with the assistance RAP representatives
- Stage 4: draft ACHAR distributed to all RAPs for feedback.

Fifteen RAPs were identified for the project, with the details of these RAPs outlined in Technical Report 5 – Aboriginal Cultural Heritage Assessment Report. All RAPs were consulted in Stages 2, 3 and 4. A detailed consultation log with all Indigenous stakeholders is documented in Appendix 1 of Technical Report 5 – Aboriginal Cultural Heritage Assessment Report. Further discussion of some further consultation with stakeholders is outlined in the responses in section 5.4.

The individuals or groups who responded as RAPs included multiple individual Wiradjuri stakeholders and the following Wiradjuri stakeholder groups:

- Bathurst Local Aboriginal Land Council
- Warrabinga Native Title Claimants Aboriginal Corporation (WNTCAC)
- Mingaan Wiradjuri Aboriginal Corporation (Mingaan).

A significance assessment was undertaken for all Aboriginal heritage sites identified within the project footprint with reference to the Burra Charter. The criteria used to assess the significance of the Aboriginal heritage sites within the project footprint is detailed in section 11.2.4 of the EIS. Where sites with significant cultural, scientific, aesthetic or historic value cannot be avoided, appropriate mitigation was identified in consultation with the RAPs.

An Aboriginal Cultural Heritage Management Plan (ACHMP) will be prepared before construction commences, to minimise and manage impacts on Aboriginal heritage sites. This will be prepared in consultation with the RAPs and DPHI – Planning, with input from Heritage NSW. This requirement is detailed as mitigation measure H1 (see Appendix B).

4.3.9.2. Adequacy of Aboriginal Cultural Heritage Assessment Report

Submission ID number(s)

SE-94857480

Summary of issues

A submitter stated that the EIS does not provide a complete Aboriginal Cultural Heritage Assessment Report nor does it demonstrate that a permit under section 90 has been sought.

Response

As outlined in section 2.2 of Technical Report 5 – Aboriginal Cultural Heritage Assessment Report, the Aboriginal cultural heritage assessment was prepared in accordance with Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW (OEH 2011) as required by the SEARs. Archaeological assessment undertaken as part of the ACHAR followed the Code of Practice for the Investigation of Aboriginal Objects in New South Wales (DECCW 2010).

Section 5.23(1)(d) of the *Environmental Planning and Assessment Act 1979,* provides that certain approvals under other legislation are not required for approved SSI, including an Aboriginal heritage impact permit under section 90 of the *National Parks and Wildlife Act 1974*. However, as noted above, impacts on Aboriginal cultural heritage have been considered and assessed in detail.

4.3.9.3. Cultural values

Submission ID number(s)

SE-94857480

Summary of issues

A submitter stated that the EIS fails to assess intangible and landscape-scale cultural values which breaches EP&A obligations and recognition of cultural heritage values as a Matter of National Environmental Significance under the EPBC Act.

Response

A cultural values assessment (CVA) was undertaken by Transgrid as part of the project as described in section 11.2.2 of EIS. The results of the CVA are outlined in section 11.3.2.4 of the EIS and section 9.2.1 of Technical Report 5 – Aboriginal Cultural Heritage Assessment Report.

The CVA identified one intangible and landscape scale item of cultural value, the Coxs River (Duiwan), due to its importance as a traditional meeting place for trade, social interaction, and cultural practice.

As outlined in section 11.4.3 of the EIS, the cultural value of the Coxs River (Duiwan) was acknowledged by participants, but that they did not express any concerns about the project's impact on the river or its surroundings.

While a referral under the EPBC Act was submitted for the project (EPBC 2024/09855), the controlling provisions specified for the action did not include impacts on cultural heritage matters as a potentially significant impact. The Aboriginal Cultural Heritage Assessment Report concluded that significant impacts on identified Aboriginal heritage items were unlikely.

4.3.10. Greenhouse gases

Submission ID number(s)

SE-94319228

Summary of issues

A submitter questioned what efforts will be implemented to ensure that construction materials used for the project are environmentally sound and contribute to reducing greenhouse gas emissions, while also inquiring about innovative technologies or practices to be used.

Response

A greenhouse gas assessment was conducted and is detailed in chapter 19 of the EIS, along with mitigation measures AQ4 to AQ6, to reduce greenhouse gas emissions.

In alignment with Transgrid's Science Based Targets Initiative (SBTi), and in accordance with mitigation measure AQ4, the project will incorporate efficient construction methods, reuse of materials where possible, and use local suppliers to reduce transport emissions.

Mitigation measure AQ5 includes consideration of technologies that would reduce energy or fuel use during construction. These include battery-powered lighting and solar panels for site power and use of biofuels in machinery, where feasible.

4.3.11. Cumulative impacts

Submission ID numbers(s)

SE-92280716, SE-94857480

Summary of issue raised

The submitters noted that planning and delivery of many generation projects in Renewable Energy Zones and the required interconnecting transmission projects across NSW are collectively required to successfully deliver both the NSW Electricity Infrastructure Roadmap and the Integrated System Plan (ISP). Concerns were raised that the planning process for this type and scale of infrastructure is not protecting NSW agriculture, rural communities and the future of rural and regional NSW and Australia. The concerns included:

- Presenting each REZ project in isolation does not consider the cumulative environmental impacts of the REZ and undermines the objectives and purpose of the EP&A Act.
- The EIS does not adequately consider the cumulative impacts.

- The scope and scale of each REZ and the ISP is not being assessed as a whole and fails to address the cumulative impacts transparently.

Response

The Cumulative Impact Assessment Guidelines for State Significant Projects (DPIE, 2022) have been prepared to assist proponents in meeting the cumulative impact assessment requirements of the EP&A Act. As outlined in section 21.2 of the EIS, the assessment undertaken had reference to the procedures outlined in this document when identifying relevant future projects for cumulative impact assessment.

Future developments within 20 km of the project study area were identified as potentially relevant for the cumulative impact assessment as documented in Table 21.3 of the EIS. The cumulative impact assessment considered issue-specific cumulative impacts from the identified projects and based on the outcomes, also considered combined cumulative impacts within the Lithgow LGA as a whole. The outcomes of the issue-specific and combined cumulative impact assessments are documented in section 21.3 of the EIS which draws on issues identified with a number of the EIS specialist studies.

Assessment of the cumulative impacts of the Central-West Orana Renewable Energy Zone (CWO REZ), which is more than 80 km from the northern end of the study area is provided in section 20 of the CWO REZ Transmission Project EIS (SSI-48323210).

Submission ID numbers(s)

SE-94857480

Summary of issue raised

The submitter noted the Lithgow–Wallerawang corridor contains coal mining legacies and existing transmission easements and that the EIS does not adequately consider the cumulative impacts in accordance with the EPBC Act.

Response

The EIS has been prepared in accordance with the SEARs, including the supplementary SEARs with regards to EPBC Act MNES This includes consideration of project impacts on threatened species and communities (sections 18 and 18A of the EPBC Act) in the manner specified in Schedule 1 of the bilateral agreement between the Australian Government and the State of NSW. For all other matters, including cumulative impacts, the assessment was conducted in accordance with relevant NSW procedures and guidelines which are accredited under the bilateral agreement for State significant projects.

The EIS considered issue-specific and combined cumulative impacts arising from identified future and potential developments in accordance with the Cumulative Impact Assessment Guidelines for State Significant Projects (DPIE, 2022).

In all assessments undertaken in the EIS, baseline environmental conditions have been identified and appropriately evaluated to identify the potential impacts of the project. This includes existing land uses, such as transmission easements and coal mining legacies.

Submission ID numbers(s)

SE-94857480

Summary of issues raised

One submitter raised concerns that the EIS did not provide cumulative visual simulations for the project.

Response

A Landscape Character and Visual Impact Assessment (LCVIA) was prepared to address the SEARs and assess the impacts of the project and identify the required mitigation measures (refer Technical Report 7). Engagement with DPHI – Planning, Lithgow City Council and affected residents was also undertaken during preparation of the assessment to confirm the scope and methodology.

The visual impact assessment involved a viewshed analysis which identified a total of approximately 278 public and private receiver locations within the study area as having potential views of the project (see section 6.1 of Technical Report 7 – Landscape Character and Visual Impact Assessment). Panoramic photomontages were developed from specific viewpoints (see EIS Figures 10.3 and 10.4) to represent visual simulations of the project infrastructure in the context of the existing terrain, vegetation and buildings. The photomontages show the project infrastructure together with other existing infrastructure.

The assessment of cumulative visual impacts of the project with other proposed developments was undertaken in accordance with the *Cumulative Impact Assessment Guidelines for State Significant Projects* (DPIE, 2022). This assessment identified two projects having the potential for cumulative visual impacts for the sensitive receiver at viewpoint 06 (233 Brays Lane). Only one of these projects, the Great Western Battery Energy Storage System (BESS) had sufficient publicly available assessment information to enable cumulative visual assessment to be undertaken. This information indicated the Great Western BESS project on its own would have a moderate-low visual impact at this receiver. In combination with the project, the assessment identified a moderate visual impact from viewpoint 06 looking north.

The ability for individual proponents to undertake cumulative visual photomontages and to achieve an accurate visual model is considerably hindered by the lack of publicly available data of the other proponent's development.

Submission ID numbers(s)

SE-95117713

Summary of issues raised

One submitter raised concerns that the project would cause a compounding impact on current infrastructure pressures on the region.

Response

An assessment of the potential impacts associated with the project in terms of land use, social infrastructure and cumulative impacts were addressed in chapters 13, 18 and 21 respectively.

The land use assessment included a conflict risk assessment which considered the existing infrastructure and other land uses in the region and provided a cumulative impact assessment of the project combined with these other land uses. It was concluded the project is not expected to contribute to any large-scale land use change in the surrounding area. The project would support other land use changes already underway such as BESS projects which support the transition to renewable energy.

A social impact assessment was undertaken and included an assessment of impacts on social infrastructure, including strain on services such as emergency and health services. The assessment identified that the potential impacts would be of short-term, during the construction phase, and would have low residual impacts once mitigated. A workforce management plan (mitigation measure S3) would be prepared and implemented for the project. The plan would include an accommodation strategy, with consideration to cumulative accommodation impacts and identifying the health and well-being services needed for the temporary construction workforce to minimise impacts on services already under pressure in the region.

4.4. Justification and evaluation of the project

4.4.1. Project benefits

Submission ID numbers(s)

SE-93457216, SE-94470463, SE-93962457, SE-95118470, SE-95118711, SE-95121474

Summary of issues raised

Three submitters expressed support for the project, noting its importance in supporting community needs and enabling the transition to renewable energy.

A submitter stated that the project will facilitate the uptake of renewable energy from the CWO REZ. Other submitters raised concerns that:

- The project will only benefit investors and not provide broad public benefits.
- The project impacts will be greater than the benefits.

Response

The support for the project is noted.

Section 23.1 of the EIS outlines the project justification. The key objective of the project is to support the NSW Government's delivery of the CWO REZ and the State's energy policies and strategies, including Australia's greenhouse gas emission targets. The project is considered essential to NSW for economic, social and environmental reasons as it would:

- strengthen connections between areas of renewable energy generation in the CWO REZ and major electricity demand centres
- support the delivery of at least 4.5 GW of renewable energy generation from the CWO REZ to customers
- assist NSW (and Australia) to meet its target of net zero emissions by 2050
- contribute to the substantial economic and social benefits for NSW that will be delivered by the NSW Government's Electricity Infrastructure Roadmap.

The project would increase the capacity between the Mount Piper and Wallerawang 330 kV substations to enable increased output from the CWO REZ to reach customers in the Greater Sydney region.

Chapter 17 and chapter 18 of the EIS outline the economic and social impact assessments of the project. These assessments detail potential positive impacts of the project and the groups that may be benefited, including:

- opportunity for local procurement and labour-hire businesses, as well as increased spend at retail and hospitality venues – potential for high positive impact

- employment opportunities throughout Lithgow and NSW, opportunities to develop new skills, and earn salaries above the regional median – potential for medium positive impact.

The project would contribute $9.6 million to economic activity in regional NSW, generating specific benefits for the Lithgow LGA. The project is essential for Lithgow as part of the Lithgow Emerging Economy Project (LEEP) for their renewable energy transition. The renewable energy sector is identified as a priority in the LEEP Transition Plan and this project would support the transition by providing the critical and essential infrastructure. The project would provide increased economic activity and regional job opportunities to the Lithgow LGA.

The project has been developed following a robust and iterative process that has involved substantial options analysis, design, environmental assessment, and stakeholder engagement. Where feasible and reasonable, the project has aimed to avoid and minimise biophysical, social and economic impacts. At this stage of assessment, a conservative worst-case assessment has been carried out, which indicates that no unacceptable impacts are anticipated.

Any residual environmental impacts from construction and operation of the project would be managed with proven mitigation and management measures to reduce the likelihood, magnitude and consequences of these impacts. This would be confirmed through monitoring and auditing requirements. The design and construction methodology for the project would be refined with the objective of further avoiding and minimising potential impacts on the local and regional environment, and the local community with ongoing input from stakeholders and communities being considered.

Overall, the project is a critical component in delivering long-term benefits to the National Electricity Market (NEM) and supporting its transition to a greater mix of low-emission renewable energy sources. This project would enhance the affordability of electricity for consumers by increasing supply and driving down electricity prices. On balance, it is considered that the strategic need and benefits of the project outweigh the mitigated project impacts and, therefore, the project is justified and would be in the public interest as concluded in chapter 6 of this report.

4.4.2. Strategic need and context

Submission ID numbers(s)

SE-92280716, SE-92343959, SE-94857480, SE-95109469, SE-95109983, SE-95111212, SE-95109983, SE-95112707, SE-95112962, SE-95114461, SE-95115207, SE-95118465, SE-95118470, SE-95119208, SE-95119215, SE-95119222, SE-95121460

Summary of issues raised

Submitters raised concerns that:

- The project has no justification and is unnecessary.
- The project would reduce energy independence and hand control of Australia's electricity grid to foreign supply chains.
- The need for the project is unclear.
- The project does not fulfill a recognised need and will not provide cheap and reliable power, or energy security.
- The project is located in the wrong area.
- The project will affect grid reliability, resulting in grid failure.
- The project will have no accountability or oversight.

Response

As mentioned in section 1.4 of the EIS, the project will be wholly owned and operated by Transgrid. Transgrid is the operator and manager of the main high voltage transmission network in NSW and the Australian Capital Territory.

Section 2.1 and 2.2 of the EIS summarises the need for the project and outlines its consistency with multiple State and local policies and plans. The project is needed to strengthen the connection between the CWO REZ and major electricity demand centres, thus providing greater access to affordable and reliable electricity from the CWO REZ to consumers and supporting the Australian Government's net-zero emission targets. The project is integral in providing energy security for the consumer by augmenting critical transmission infrastructure between the CWO REZ, a zone of renewable energy generation, to energy consumers.

A brief summary of the key documents that underline the need and justification for the project includes:

- The NSW Electricity Strategy (2019) outlines a plan for a reliable, affordable and sustainable electricity system for NSW and identifies the need to connect new generation projects to the existing transmission network to meet NSW's future energy needs.
- The CWO REZ project is a committed project presented in the Australian Energy Market Operator's (AEMO) 2024 ISP.
- The NSW Electricity Infrastructure Road Map (2020) details the plan to transition from fossil fuel generation to renewable energy generation. The transition must be accompanied by increased transmission capacity to bring the new and clean sources of power from the REZs to demand centres.
- The NSW Network Infrastructure Strategy (2023) places the network arrangement project in the 'deliver now' category to meet network capacity for the CWO REZs.
- The Net Zero Plan Stage 1: 2020-2030 explains that delivery of the REZs will involve expanding transmission infrastructure into regions to open new parts of the grid for renewable energy projects.

Transgrid undertook an extensive route options development and assessment process to select the preferred route for the project. This process was also informed by stakeholder and community input. A multi criteria analysis was undertaken in which multiple environmental, social and technical factors were considered. A summary of the route option selection process is described in section 2.4 of the EIS.

The preferred route for the transmission line utilises an existing transmission easement for most of its length and is located where existing access tracks and access points can be used to access the project footprint. This minimises the extent of project impacts, e.g. to biodiversity, land use, property and the community generally to achieve the project objectives.

If the project is approved, it will be implemented in accordance with the EIS, including the proposed mitigation measures and the Conditions of Approval from the NSW Minister for Planning and Public Spaces and the Australian Government Minister for the Environment and Water. Monitoring, reporting and independent audits of the project will be undertaken by Transgrid in accordance with the approval conditions.

4.4.3. Ecologically sustainable development

Submission ID numbers(s)

SE-94857480, SE-95108975

Summary of issues raised

A submitter mentioned that the project has not applied the precautionary principle and that the proponent failed to demonstrate avoidance or minimisation of environmental harm. Another submitter contended that the project would not contribute to intergenerational equity.

Response

The project's response to the principles of ESD are outlined in section 23.3 of the EIS, including the precautionary principle and the principle of intergenerational equity.

Precautionary principle

To support the EIS, technical reports have been carried out by industry specialists using accepted scientific methods and were informed by stakeholder and community consultation. A conservative approach was taken in regard to construction and operational impacts and the modelling used (where relevant). This included assessing worst-case scenarios and a project footprint subject to refinement (reduction) during detailed design. Mitigation measures have been proposed to avoid and minimise impacts to the community and the environment.

Overall, the EIS has identified the relevant parameters of the project and has assessed the impacts of those parameters. Within the parameters, there are some uncertainties. Uncertainties with regard to potential biophysical, social and economic impacts have been largely minimised through the design process, assessment approach, extensive field investigations, experience and expertise gained from similar scale projects constructed in similar environments.

Conservative, worst case and precautionary approaches have been adopted to address uncertainties, thus enabling potential impacts of the project to be fully assessed as part of this EIS. For example, in relation to contaminated land and water, where information is not available, a precautionary approach has been adopted and requires mitigation measures SC1 and W5 for potential contaminated soil and groundwater should it be present and encountered during construction. This approach was taken to manage potential contamination risks and protect worker safety.

Technical Report 2 – Biodiversity Development Assessment Report provided in Appendix C of this report, discusses the limitations associated with survey results and where precautionary conclusions were made. This included habitat being assumed as potential breeding habitat such as for the Large Eared Pied Bat, when surveys were unable to be completed at the appropriate time of year to detect breeding.

Avoidance and minimisation

Section 23.1.4 of the EIS provides a detailed outline of the approaches taken to avoid, minimise and mitigate potential impacts of the project (also section 4.1.5 of this report). This has occurred through a comprehensive options and route selection process. Strategic alternatives and network studies have guided the identification of route options, considering technical, environmental, social, and financial factors, with ongoing stakeholder and community consultation to refine the preferred alignment. The preferred alignment was chosen to best

meet project objectives while reducing environmental impacts and accommodating landowner preferences, including specific engagement with Centennial Coal and NPWS to address local constraints.

Specific measures to avoid and minimise potential impacts of the preferred alignment include locating most infrastructure outside sensitive riparian vegetation zones, with targeted mitigation such as a Soil and Water Management Plan where encroachment is unavoidable. Biodiversity impacts have been reduced by minimising intrusion into the Gardens of Stone SCA and using existing cleared easements where possible, with further mitigation based on construction methods. Land use impacts were limited by largely avoiding private land, resulting in only one affected private landowner, and balancing impacts between sensitive areas and operational facilities via stakeholder consultation. For Aboriginal heritage, sites are to be protected or avoided using specialised construction methods, with salvage and protection of artefacts where avoidance is not feasible. Ongoing avoidance and minimisation of potential impacts to Aboriginal heritage and biodiversity has occurred through project footprint amendments, as described in the Amendment Report (Transgrid, 2025a).

Unavoidable impacts will be managed and mitigated as far as possible in accordance with the mitigation measures proposed and the conditions of approval.

Intergenerational equity

As described in section 23.3.2 of the EIS, the project has a design life of 50 years, aligning with the needs of both current and future generations. The project would contribute to increasing the resilience and capacity of the electricity network, providing access to renewable energy generators in the CWO REZ, increasing local economic activity, and providing employment opportunities. Overall, the project supports the NSW Government's energy policies and Australia's net-zero emission targets. These policies and targets, as well as the project's contribution to support these, have been developed to address the effects of climate change now and for future generations.

4.5. Not relevant to the project/ outside of project scope

Submission ID numbers(s)

SE-92280716, SE-92343959, SE-94857480, SE-95113207, SE-95113215, SE-95114467, SE-95119231, SE-95121466

Summary of issues raised

Submitters raised the following issues:

- issues related to the planning approval process and community inputs to the establishment of REZs as part of the energy transition, its effect on NSW agriculture, communities and future generations
- the transition to renewable energy requires unprecedented development across NSW to meet targets and the ISP requirements
- taxation matters relating to the Strategic Benefit Payment Scheme and the duration of the scheme payments
- the Government's commitment to Net Zero and its effect on Australian industries
- the price of energy and its affordability
- policy matters regarding the ISP and its reliance on renewables
- objected to the project without providing any reasoning

- issues related to decommissioning bonds and breach of section 4.17 of the NSW EP&A Act
- no electrical safety management plan that complies with AS2067:2016 is presented in the EIS.

Response

These issues are beyond the scope of this project and relate to matters governed by other NSW Government agencies, such as the Energy Corporation of NSW (EnergyCo) for the establishment of the REZs and the Strategic Benefit Payments Scheme Guidelines, DPHI – Planning for approvals related to other REZ projects and the cumulative impacts and the Australian Energy Regulator relating to electricity affordability for customers.

Section 2.2.1 of the EIS describes how the project is consistent with the objectives of AEMO's 2024 ISP and Australia's Long-term Emissions Reduction Plan 2021. Whilst Transgrid supports the implementation of these plans, the Net Zero Plan and the 2024 ISP are developed by the Australian Government DCCEEW and AEMO respectively. By not proceeding with renewable energy development and transmission infrastructure, parts of AEMO's committed, anticipated and actionable projects in the 2024 ISP would not be achieved.

Section 4.17 of the EP&A Act does not apply to this project as the project is assessed under Part 5, Division 5.2 as State Significant Infrastructure, rather than requiring development consent under Part 4. Nevertheless, Transgrid's externally-accredited Environmental Management System and Quality Management System covers both maintenance and end-of-life requirements for infrastructure assets. The project includes ongoing maintenance activities in the operation phase to protect and extend the asset's service life, removal of redundant assets when it becomes unnecessary for the network, recycling of these assets wherever possible, and the restoration of affected land. Appendix B of the EIS identifies the statutory requirements relevant to the project and where they are addressed in the EIS.

With reference to AS2067:2016, this standard is the primary design standard that Transgrid adopts for the design of substations. No substations are included in the scope of this project, as described in chapter 3 of the EIS.

5. Response to submissions – agencies and public authorities

This section provides responses to the issues raised in submissions provided by authorities, including local council, utility providers, and NSW government agencies. Where required to in responses to submissions, revisions have been made to the mitigation measures for the project in Appendix B (new measures in red, amended text or deleted measures as strikethrough).

5.1. Department of Planning, Housing and Infrastructure – Crown Lands

The DPHI – Crown Lands noted that Crown roads or waterways are included within the project footprint. The relevant considerations for using and accessing Crown Land are listed in Table 5.1.

Table 5.1. Summary of Crown Lands comment and Transgrid responses

Crown Lands comment	Response
Any use or occupation of the Crown land during the assessment phase will require consultation with Crown Lands to obtain the necessary authority under the *Crown Land Management Act 2016* and/or the *Roads Act 1993*.	Noted. There is no planned use or occupation of Crown Land during the assessment phase prior to project approval.
Crown Lands notes that there are several Crown roads within the project area. These roads may provide legal access to the development but may not provide practical access.	Noted. Transgrid has assessed access required to facilitate construction and operation of the project, including those that may include Crown roads to ensure they are suitable for the intended purpose. Access required for the project is described in the EIS (refer section 3.5.7).
If the project necessitates the acquisition of Crown land/roads, this must be undertaken in accordance with the *Land Acquisition (Just Terms Compensation) Act 1991*.	Transgrid has identified all Crown land parcels (roads and waterway) directly or indirectly affected by the project as shown in Figure 13.5 and described in Table 13.7 of the EIS. Transgrid accepts the DPHI-Crown Lands preference that easement interests are acquired in accordance with the provisions of the *Land Acquisition (Just Terms Compensation) Act 1991*, to ensure any potential interest holders are provided the opportunity to submit a claim. However, due to the potential for extended timeframes required for this process, Transgrid is proposing to utilise its powers under section 45 of the *Electricity Supply Act 1995* to facilitate access for construction. Prior to construction, easement interests will be acquired for those Crown lands where an easement is required.
Authority to use, traverse, access, or construct infrastructure on Crown land and roads is required under the *Crown Land Management Act 2016* and/or the *Roads Act 1993*. It is recommended that the proponent contact Crown Lands as early as possible to discuss and initiate the necessary processes to authorise the use of and/or access to Crown land and roads.	Transgrid will consult with DPHI – Crown Lands to discuss the requirements for access and/or access use of Crown lands, in line with mitigation measure LU5. As outlined in the above response, Transgrid is proposing to utilise its powers under section 45 of the *Electricity Supply Act 1995* to facilitate access for construction. Where an easement is required on Crown land, easement interests would be acquired in consultation with DPHI - Crown Lands.

Crown Lands comment	Response
If infrastructure is to be built on Crown land or roads, consent from the Minister for Water, Property and Housing (via Crown Lands) will be required. Constructed roads may also need to be transferred to Council.	Transgrid notes the need to obtain approval from the Minister for Water, Property and Housing (via Crown Lands) for infrastructure built on Crown lands. Mitigation measure LU5 has been updated to include consideration of any consent required for the project. Transgrid will consult with DPHI - Crown Lands regarding construction access and stringing works across Crown roads (see response above with regards to planned approach to construction access) in line with mitigation measure LU5. Transgrid has not identified any circumstance where application to close a Crown road or to transfer a Crown road to a local council is necessary. Should this change in the future, Transgrid acknowledges this requirement.

5.2. Civil Aviation Safety Authority

The Civil Aviation Safety Authority (CASA) agreed that obstacle lighting and marking is not required for the transmission towers and noted that the provision of marker balls/aerial warning markers on the transmission lines is yet to be quantified/designed/finalised.

The comments from CASA are noted. The need for marker balls/aerial warning markers on the transmission lines would be confirmed during detailed design and in consultation with CASA, as required.

5.3. NSW Department of Climate Change, Energy, the Environment and Water – Conservation Programs, Heritage and Regulation Group

The CPHR has requested some minor changes to Technical Report 2 – Biodiversity Development Assessment Report to confirm that it is compliant with the BAM. The CPHR requirements are addressed in Table 5.2. Additional guidance provided in the CPHR submission on specific biodiversity matters is addressed in the Revised Biodiversity development Assessment Report (GHD 2025) in Appendix C.

Table 5.2. Summary of CPHR comments and Transgrid responses

CPHR comment	Response
1.1 Revise the assessment area for the project in accordance with the requirements of section 3.1.2 of the BAM and recalculate the native vegetation cover percentage in the BDAR and BAM-C.	The assessment area shown on Figure 3.1 of the Biodiversity Development Assessment Report included a more conservative 1,500 m buffer than the 500 m buffer required in section 3.1.2 of the BAM and was used as there were large compound areas at each end of the project footprint. The buffer has been updated to be consistent with section 3.1.2 of the BAM using a 500 m buffer. Amendments to Figure 3.1 and section 3.1 of the Biodiversity Development Assessment Report have been made to reflect the revised assessment area. A Revised Biodiversity Development Assessment Report is located in Appendix C.

CPHR comment	Response
1.2 Review the candidate species credit species list in the BAM-C if the vegetation cover class increases and determine whether any additional threatened species require assessment.	The vegetation cover class has increased from 51 per cent to 57 per cent (refer to section 3.3 of the Revised Biodiversity Development Assessment Report in Appendix C). While there is an increase in vegetation cover, the vegetation cover class remains unchanged from that assessed in the Biodiversity Development Assessment Report (e.g. within the 30 to 70 per cent category), which was exhibited with the EIS. With no change in the vegetation cover class, there are no changes to the species list in the BAM-C, therefore no additional threatened species require assessment. In addition, no new species were brought in when re-opening the BAM-C case due to updates by NSW DCCEEW that may have occurred following submission of the Biodiversity Development Assessment Report.
2.1 Provide all VI plot data, in both raw capture (scanned paper sheets) and spreadsheet format to CPHR, which includes every plot informing the BDAR and BAM-C.	This data was provided as part of the package provided in the lodgement via Biodiversity Offset Assessment Management System (BOAMs). Since EIS exhibition, it was however confirmed that the data file may have been corrupted and unable to be opened by CPHR. Data has been resubmitted to BOAMs with the lodgement of the Revised Biodiversity Development Assessment Report.
2.2 Review the vegetation mapping for the BDAR, spatial data and BAM-C cases and ensure the information is consistent. Where required, revise the credit obligation for the project in the BAM-C and BDAR.	A review of plot data and mapping was undertaken against field data sheets to identify inconsistencies. Updates to the BAM-C and BDAR were completed to ensure consistency where errors were identified. The Revised Biodiversity Development Assessment Report rectifies the inconsistencies and is located in Appendix C.
3.1 Undertake an audit of duplicated plots in the BAM-C and ensure that the floristic data entered is consistent across original and duplicated plots. **3.2** Revise the plot duplication approach to ensure that plots are only duplicated across the same vegetation zone and PCT. **3.3** Provide justification for plot duplication in the revised BDAR.	A review of the plot information was undertaken. The following provides an overview of the outcomes of this review. Plot BH13B is not a duplicate of plot BH13, with the 'B' in the plot name used because plot numbers were accidentally repeated during the field surveys. To maintain the remaining survey plot numbers, the duplicate use of BH13 was given a differentiator of 'B'. Two separate plots were sampled at different locations. Each plot contributes to the VI calculations and description of the vegetation zone and has been entered in the BAM-C accordingly. Plot JR4B is a duplicate of plot JR3 used for preliminary credit calculations and was included in the Biodiversity Development Assessment Report and BAM-C calculations in error. Plot JR4B has been omitted from the updated BAM-C and the Biodiversity Development Assessment Report updated accordingly (see Appendix C). Plot JR7B is a duplicate of plot JR7, included in vegetation zone 15_3385_non-native with other plots (BH15 and BH16) to meet the BAM requirement for four VI plots for the 30.25 ha area of vegetation zone 15. This approach is adopted to estimate VI for non-native vegetation and to estimate species credit calculations for *Eucalyptus aggregata* and *E. cannonni,* which occur in vegetation zone 15.

CPHR comment	Response
	Since the total area of non-native vegetation (30.25 ha) is substantially infrastructure or bare ground, three VI plots are considered sufficient to sample the area that is vegetated with potential to support threatened species habitat. As a result, JR7B has been retained in BAM-C calculations rather than sampling a new plot, and the Biodiversity Development Assessment Report has been updated (see Appendix C) to clarify this example of applying the assessor's professional judgement accordingly.
4.1 Conduct targeted surveys for the Purple Copper Butterfly in all areas containing *Bursaria spinosa*. Alternatively, assume presence or obtain an expert report, in accordance with section 5.2 of the BAM.	Additional surveys were undertaken between the 14 and 16 October 2025 and included targeted surveys for the Purple Copper Butterfly. These surveys targeted all previously identified areas known to include *Bursaria spinosa*. Surveys of a nearby reference population was also undertaken. Details of the surveys undertaken and the results of the survey are outlined in section 5.2.1 of the Revised Biodiversity Development Assessment Report located in Appendix C. Potential habitat in the project footprint is fragmented and generally occurs on less preferred facing aspects. No species polygons are required as no Purple Copper Butterflies were recorded in the project footprint.
5.1 Refine the species polygons for threatened forest owls in accordance with recent changes to survey advice in the TBDC.	The species polygons for the Barking Owl and Powerful Owl have been restricted to 800 m of individuals recorded during surveys. The updated species polygons are shown in Figures 5.11 (Barking Owl) and 5.12 (Powerful Owl) in the Revised Biodiversity Development Assessment Report located in Appendix C.
6.1 Include explicit commitments to mitigation measures for threatened birds and the squirrel glider in the revised BDAR.	Mitigation measures have been updated to include specific commitments for threatened birds and the Squirrel Glider. These are summarised below and outlined in Appendix B and the Revised Biodiversity Development Assessment Report (see Appendix C): • Mitigation measure B14 has been updated to outline Transgrid's commitment to develop and implement a connectivity strategy with a focus on arboreal fauna species including the Squirrel Glider. • Mitigation measure B15 has been updated to provide specific reference to where fauna deterrent devices would be installed to manage collision impacts on threatened bird and bats.

5.4. Heritage NSW

Heritage NSW reviewed the EIS and the Aboriginal Cultural Heritage Assessment Report for the project and requested additional information as summarised in Table 5.3.

Table 5.3. Summary of Heritage NSW comments and Transgrid responses

Heritage NSW comment	Response
The consultation documentation provided with the EIS should include evidence of consultation relating to the following matters: a. Stage 1 consultation mailout to statutory agencies, and any agency responses. b. Evidence that all Aboriginal people identified in statutory agency responses were contacted and invited to register for consultation. c. Evidence that the assessment methodology and test excavation methodology were provided to Mingaan Aboriginal Corporation and Koori Digs. Heritage NSW does note that a late registration was accepted from Mingaan Aboriginal Corporation. d. Evidence that the draft ACHAR was provided to Koori Digs. This may include documentation such as copies of dated email records with relevant email addresses shown.	An updated package of consultation documentation has been provided directly to Heritage NSW as part of the lodgement of this Submissions Report, as the consultation documentation is of a sensitive nature. The updated package includes the following evidence of consultation: • All Stage 1 consultation materials including with statutory agencies and any agency responses. • Evidence that all Aboriginal people identified during agency consultation were contacted and invited to register as part of Stage 1 consultation. • Evidence that all groups where provided the assessment and test excavation methodology as part of a combined Stage 2 and 3 consultation process (see below regards issue of the methodology document to Mingaan Aboriginal Corporation and Koori Digs). • Evidence that all groups were provided the draft ACHAR as part of Stage 4 consultation (see below for details around the draft Aboriginal Cultural Heritage Assessment Report submission to Koori Digs). It was identified since the exhibition of the EIS and review of Heritage NSW comment's that Koori Dig's (a RAP) was not issued the Stage 2 and 3 methodologies or the draft ACHAR in error. Since exhibition, these methodologies and the draft ACHAR have been issued to Koori Digs. No response has been received to date with regards to the issue of these documents. As outlined in section 3.2.1 of Technical Report 5 – Aboriginal Cultural Heritage Assessment Report, as Mingaan Aboriginal Corporation was a late registration after the completion of the first survey effort, they did not review the Stage2/3 assessment methodology during the RAP review period. Mingaan Aboriginal Corporation were provided the test excavation methodology on 23 August 2024 for the 28-day review period and participated in the text excavations. They were then provided with the draft ACHAR which included the Stage 1 Assessment Methodology.
Please update the mapping provided in Figure 6-2 of the ACHAR to provide greater context to the track logs by reducing the mapping scale.	Mapping provided in Figure 6-2 of the Technical Report 5 – Aboriginal Cultural Heritage Assessment Report has been updated reducing scale to improve readability of the pedestrian coverage of the field survey. The updated figures are shown in Figure 5.1 to Figure 5.3 below.
Please clarify the number of test units excavated as a part of the excavation program. Section 7.4 states that 18 test units were excavated, but Figure 7-3 and Table 7-3 indicate that 17 test units were excavated.	A review has confirmed that 17 test units were excavated. Mention of 18 test units in section 7.4 is a typographic error.

Heritage NSW comment	Response
Table 7-3 states that all test units were excavated in 5 cm spits, please confirm whether this is the case or update the table to reflect how the methodology was implemented.	The initial test unit was dug in 5 cm spits to determine whether archaeological stratigraphy was present, as per requirement 7 of the Code of Practice. Once it was determined that stratigraphic deposits were not present, test units were excavated in 10 cm spits. For analysis purposes, the assemblage was described in 10 cm spit intervals for all test units.
Section 7.4 states that the 18 test units totalled 9m^2, however it is noted that 18 test units measuring 50 cm by 50 cm would total an excavated area of 4.5m^2. Please provide commentary on this, and how this calculation affects the discussion of artefact density in section 7.5.1 and the assessment of significance for the site in section 8.2.	The 17 excavated test units (refer to response above) equate to an area of 4.25 m^2, a smaller area than the 9 m^2 originally proposed for the excavation. The density of artefacts at Transect 3 TU 4, 236 artefacts across the remaining section of the site, remains categorised as low (20 artefacts per m^2, n=80). The updated artefact densities have not resulted in an update to the statement of significance in relation to site 45-1-0237. The higher artefact density of Transect 3 TU 4 does not change the interpretation of the location as a single knapping event with no evidence of multiple phases of occupation.
Noting that one knapped glass artefact was identified during test excavations, please provide additional discussion of the historic values of the site, including potential connections with historically recorded Aboriginal occupation at Pipers Flat and the nearby recorded potential burial ground referenced in section 5.1 of the ACHAR.	The identification of a single glass artefact likely dates the upper sections of the deposit at 45-1-0237 to the post-contact period, although the influence of bioturbation or isolated stock disturbance in the top 20 to 30 cm cannot be entirely discounted. RAPs present during the test excavation and aware of the Aboriginal post-contact period settlement at Pipers Flat, did not provide commentary on the relationship between the glass artefact and the known settlement. Although the location of the settlement itself is not recorded, it is likely that the location is 3.5 km west of site 45-1-0237. It is unclear what the identification of a glass artefact in the deposit at site 45-1-0237 can reveal regarding the potential burial ground at Lidsdale (approximately 250 m north). It is plausible that the riparian corridor of Pipers Flat Creek and the Coxs River was a transit route between the potential burial ground and occupation sites at Pipers Flat. However, the level landform adjacent to the former channel of the Coxs River at site 45-1-0237 site may have been a desirable pre- and post-contact occupation location in its own right. The evidence of knapping with post-contact material at the site indicates that the historical theme of the continuation and adaptation of Aboriginal cultural practices in the modern period is associated with the site. No specific information regarding the significance of this theme has been received from the RAPs and it is noted that the condition of the site makes it difficult for the layperson to appreciate the historic values associated with the location.
Please provide further detail on the works required within the boundary of Lidsdale 2 Potential archaeological deposits (PAD) Extension/ Aboriginal Heritage Information Management System (AHIMS) 45-1-2994 for use as a brake and winch site.	Since the exhibition of the EIS, the brake and winch site in the vicinity of Lidsdale 2 PAD Extension/ AHIMS 45-1-2994 site has been relocated. As discussed in section 3.2 and the Amendment Report (Transgrid, 2025a), the project footprint has now been modified to exclude Lidsdale 2 PAD Extension/ AHIMS 45-1-2994 and avoids potential impacts. Mitigation measure H2 has been revised (see Appendix B) to reflect that impacts on this item are no longer anticipated.

Heritage NSW comment	Response
Detailed mitigation measures which will be implemented to ensure the following would be required within the Aboriginal Cultural Heritage Management Plan: a. impacts to WPS-PAD 2 by vegetation clearance activities are avoided. b. impacts to Springvale Colliery/ AHIMS 45-1-0237 will be avoided during construction, use, and maintenance of the proposed access track at this location. c. impacts to Lidsdale 2 PAD Extension/ AHIMS 45-1-2994 will be avoided by use of this location as a brake and winch site.	The ACHMP (as required by mitigation measure H1) commits Transgrid to provide detailed measures to ensure that: a. impacts to WPS-PAD 2 by vegetation clearance activities are avoided b. impacts to Springvale Colliery/ AHIMS 45-1-0237 will be avoided during construction. It is noted that potential impacts on Springvale Colliery/ AHIMS 45-1-0237 outlined in Technical Report 5 – Aboriginal Cultural Heritage Assessment Report, are to be avoided with the removal of the proposed access track through this site (refer to section 3.2 for details of this amendment and the project's Amendment Report (Transgrid, 2025a). A portion of this PAD area has been removed from the project footprint with the remaining portions located within the proposed easement of the transmission line. Impacts on Lidsdale 2 PAD Extension/ AHIMS 45-1-2994 will be avoided and are no longer considered. The area of this site has been removed from the project footprint (refer to section 3.2 for details of this amendment).
Consideration of additional test excavation surrounding Transect 3, Test Unit 4 of Springvale Colliery/ AHIMS 45-1-0237 to inform the detailed design, with the intent of siting the proposed access road in this area to avoid areas of highest artefact density.	As explained in section 3.2, the proposed access track from access point 5 is no longer needed, so there will be no impacts on Springvale Colliery/ AHIMS 45-1-0237. Due to the removal of this track from the project footprint, the need for additional test excavation is not required.
A requirement for the AHIMS site card for Springvale Colliery/ AHIMS 45-1-0237 to be updated to include detail of the works carried out within the boundaries of the site, and the mitigation measures implemented to avoid impacts to the site.	The AHIMS site card for site 45-1-0237 has been updated to include the test excavation carried out at the site. Following the completion of construction work, the site card will be updated with its current condition, where required. Impacts on Springvale Colliery/ AHIMS 45-1-0237 will be avoided as the proposed access track from access point 5 is no longer needed (refer to section 3.2).

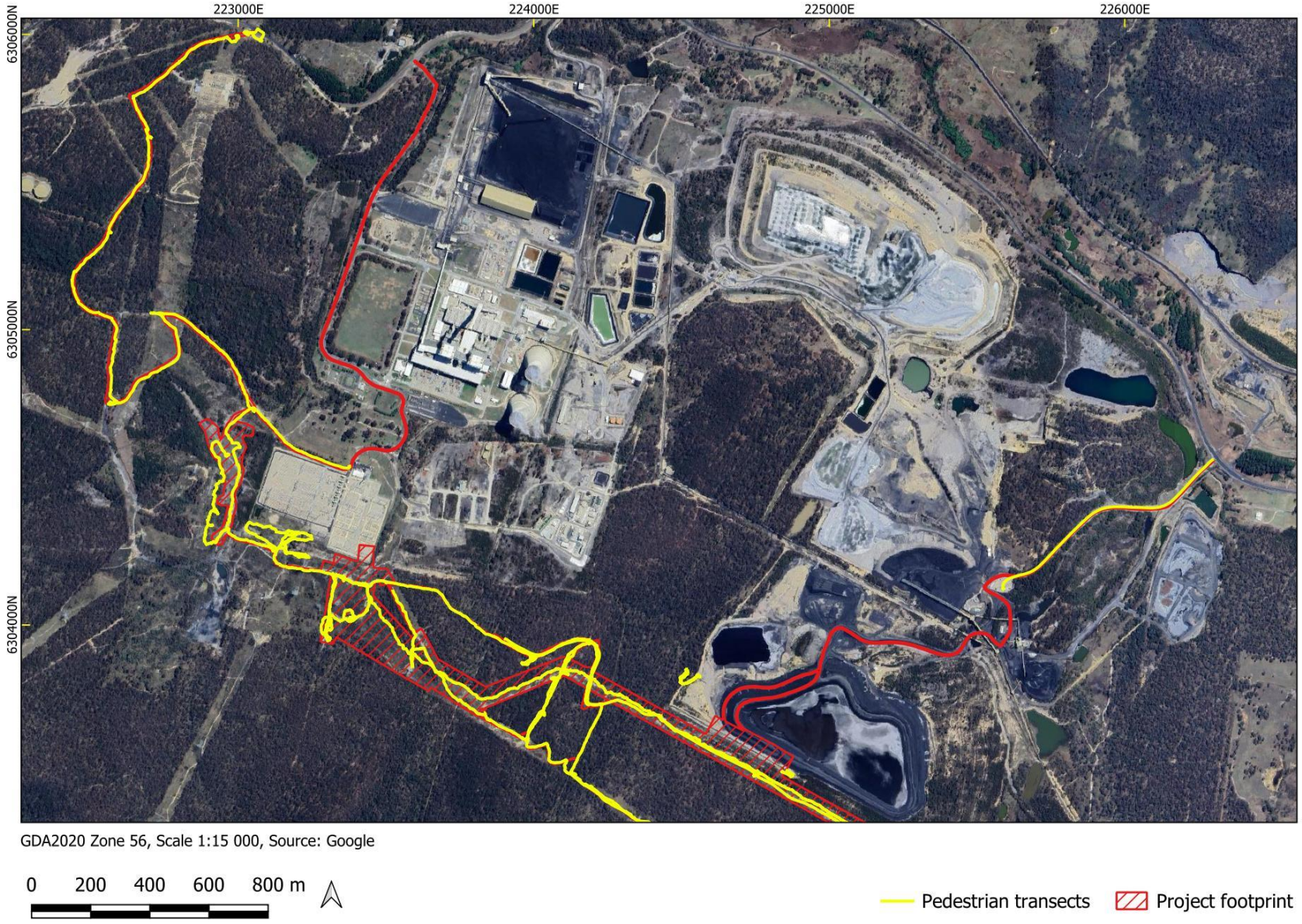

Figure 5.1. Revised Figure 6-2 from ACHAR for pedestrian coverage – Map 1

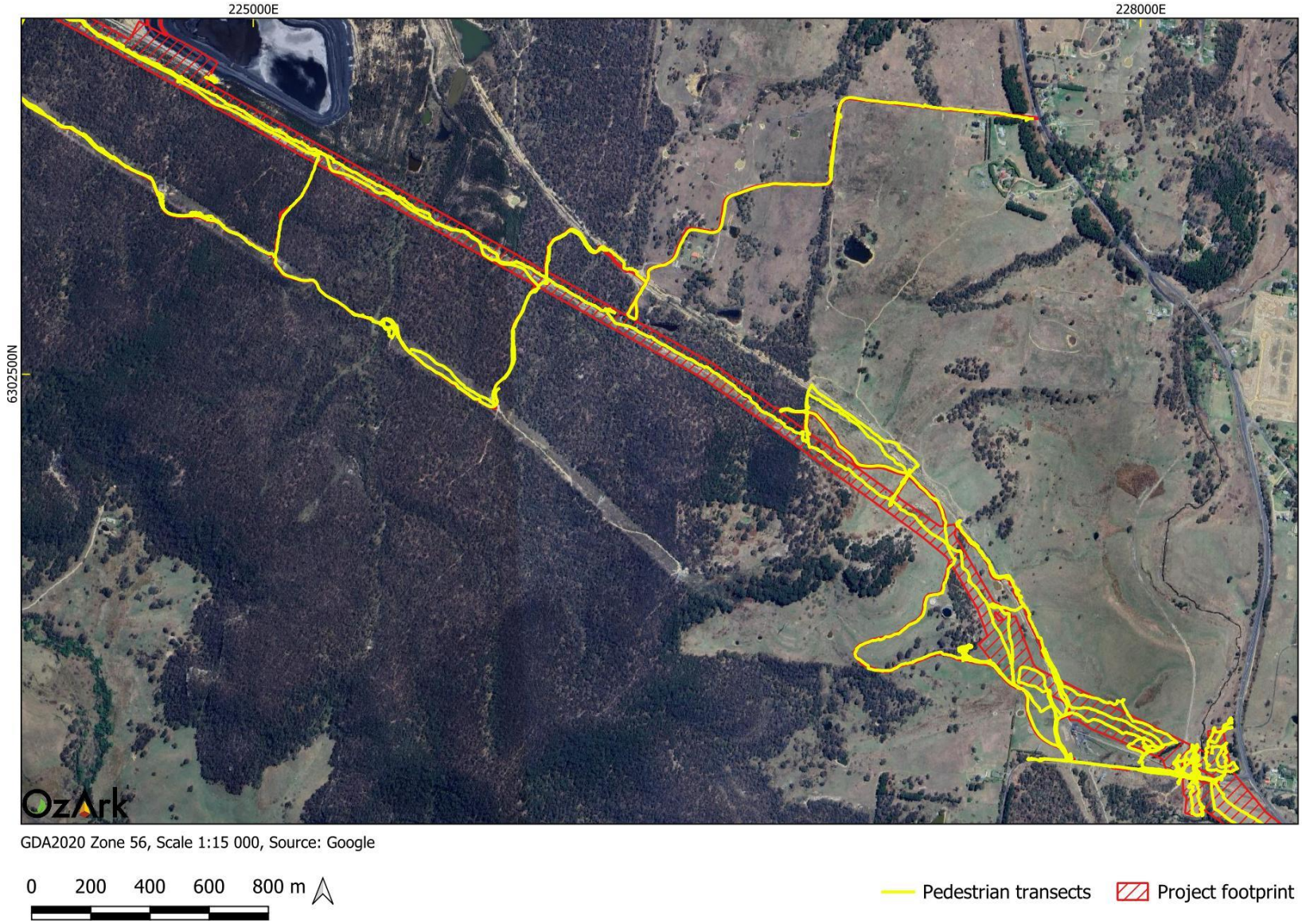

Figure 5.2. Revised Figure 6-2 from ACHAR for pedestrian coverage – Map 2

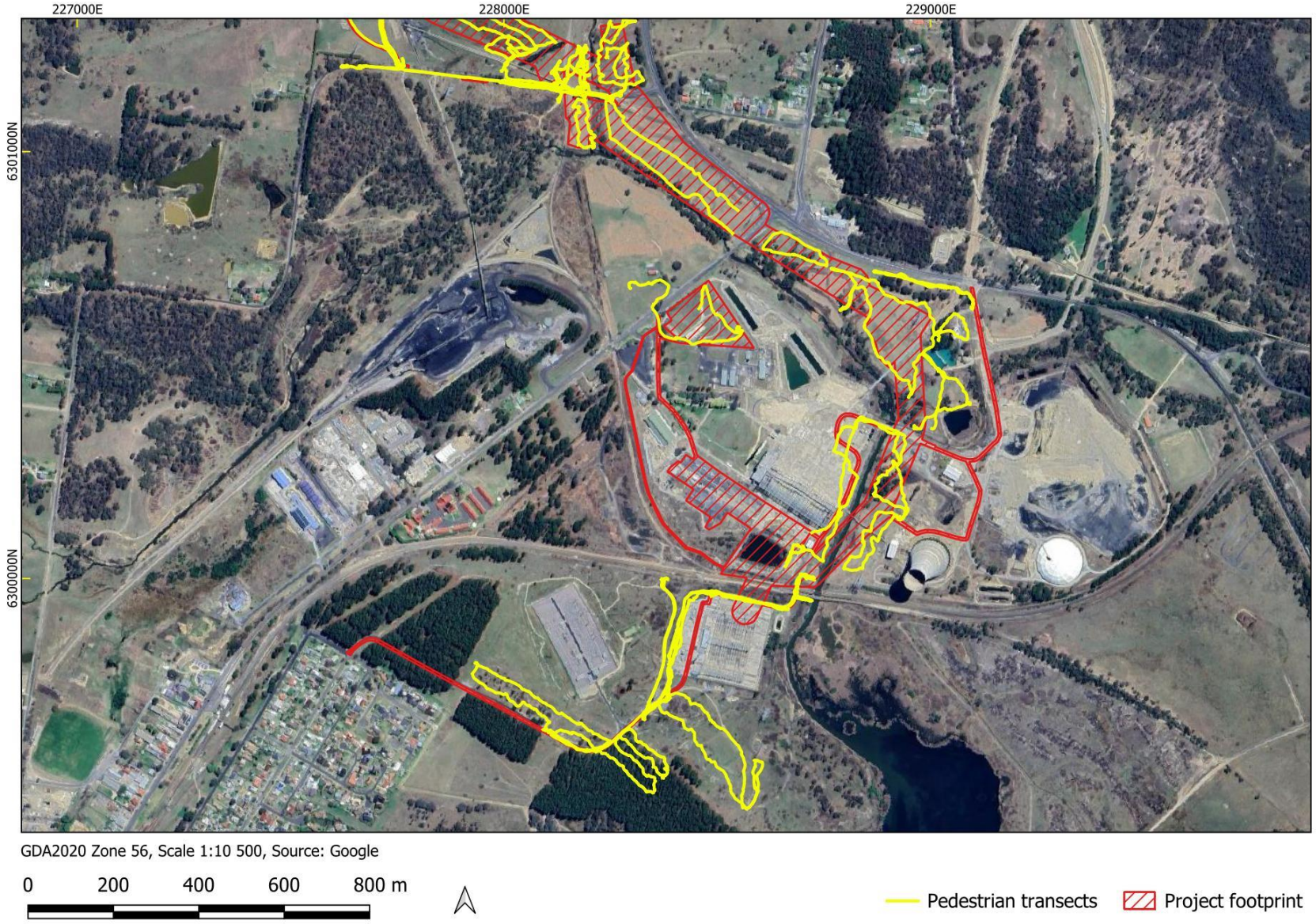

Figure 5.3. Revised Figure 6-2 from ACHAR for pedestrian coverage – Map 3

5.5. Transport for NSW

Transport for NSW (TfNSW) requested the TTA be updated to include the additional information summarised in Table 5.4. Following TfNSW's submission:

- Additional consultation was held with TfNSW on 15 October 2025 and an approach to address key items was agreed.
- The project's proposed construction traffic volumes have been revised, as outlined in section 3.2.

The responses outlined respond to the issues raised by TfNSW and reflect the outcomes of additional assessment conducted. A revised Technical Report 8 – Traffic and Transport Assessment is provided in Appendix D.

Table 5.4. TfNSW comments and Transgrid responses

TfNSW comment	Response
Traffic assessment	
The intersection of Barton Avenue / Great Western Highway has not been assessed for traffic impacts. The revised TTA is to a include a SIDRA assessment of this intersection to understand if traffic mitigation measures are required.	Following additional consultation with TfNSW held on 15 October and 21 November 2025, it was agreed that a SIDRA assessment for the intersection of Barton Avenue/ Great Western Highway was not required because of the very low proposed construction traffic volumes (less than one heavy vehicle and less than two light vehicles in the peak hour). These volumes of construction traffic would not change the current operation of the intersection.
All cumulative traffic volumes of projects approved or at the EIS stage (or otherwise agreed with TfNSW) have not been included within the turn warrant assessments for the access track and intersections with the state road network, for background traffic volumes of the through and turning traffic movements. Accordingly, the turn warrants and SIDRA analysis for all intersections and access tracks identified in the TTA with a connection to the state road network must be revised to include the cumulative traffic volumes. If the timeframes of projects identified in section 6 of the TTA do not coincide with the Mount Piper to Wallerawang Transmission, this should be included in the revised TIA. This can be included as a timeline assessment to confirm that there will not be a cumulative impact for each intersection with the state road network.	A cumulative impact assessment has been undertaken of projects approved or at the EIS stage and is recorded in Section 21 of the EIS (Section 6 of Technical Report 8 – Traffic and Transport Assessment). The assessment of the cumulative impacts of the project utilised publicly available information at the time of exhibition, noting only a few projects had sufficient traffic data in the exhibited EISs. This detail together with an assessment of the project construction timeline is outlined in section 6 and Table 6.1 of Technical Report 8 – Traffic and Transport Assessment. Where it was identified that other projects would use the same access points/intersections as the project and there would be an overlap of construction timelines, the expected cumulative traffic volumes were added to the warrants assessment and mid-block capacity assessment undertaken for the project traffic (Section 4.2 of Technical Report 8 – Traffic and Transport Assessment). The revised Traffic and Transport Assessment (Appendix D) has been updated to include SIDRA intersection modelling for three key intersections where a cumulative impact could be expected. These intersections are at: • Boulder Road / Castlereagh Highway with potential cumulative impact from the Mount Piper Battery Energy Storage System (BESS) project • Brays Lane / Castlereagh Highway with potential cumulative impact from the Great Western BESS project • Main Street / Castlereagh Highway with potential cumulative impact from the Great Western BESS project.

TfNSW comment	Response
	All three intersections were found to maintain a good level of service (Level of Service 'A') for the modelled year 2028, with traffic increases being minor and queue lengths being able to fit within existing turning lanes, so traffic flow through the intersections along Castlereagh Highway will not be affected. The turn warrants assessment and mid-block assessments have been reviewed and updated based on revised traffic movements in the revised Traffic and Transport Assessment (Appendix D), where relevant. The outcomes of these assessments remained the same even with revised traffic movements. All locations are expected to operate well within capacity in 2028 during peak construction periods and the (Brays Lane/ Castlereagh highway) intersection remains close to the requirement of an auxiliary left turn lane. The recommended mitigation measures for this intersection to reduce the number of trips, such as further carpooling, remain relevant. Mitigation measures are in section 7 of the revised Traffic and Transport Assessment (Appendix D).
The turning volumes in the AM/PM peak hour for each intersection, as provided in Figures 3.9, 3.10 and 3.11, do not align with the turn warrants assessment graph provided in the tables provided in Section 4.2.1.2 of the TTA for each intersection and access track with direct connection to the state road network. Review the turn warrant assessments in relation to this point and revise to align with the correct turning volumes and distribution assumptions.	Turning movement volumes outlined in Figures 3.9 to 3.11, show existing volumes from the traffic surveys only. Volumes outlined in the tables in section 4.2.1.2 include traffic volumes generated by the project and forecast 2028 traffic volumes (background traffic growth + existing traffic). The revised Traffic and Transport Assessment (Appendix D) has assessed the proposed changes to construction traffic volumes and distribution from construction compound C2 or C3 with a focus on turning volumes in the AM and PM peak periods. Sections 4.15, 4.16 and 4.17 describe the revised turning movements and assumptions made on distribution during AM and PM periods. As described in the response above, no changes to the turn warrants assessment or mid-block assessment outcomes have occurred as a result of the proposed changes. The mid-block assessments and turn warrants assessments are provided in sections 4.2.1.1 and 4.2.1.2, respectively.
A clear comparison between traffic volumes as impacted by the project and background traffic (inclusive of cumulative impacts and growth rates) is to be presented in diagrams depicting volumes for each intersection, similar to Figures 3.9, 3.10 and 3.11 in the TTA. To differentiate between the existing background and the turning volumes from the project traffic volumes associated with this project, construction traffic volumes, and allow for ease of comparison.	Figures providing traffic volumes for the base case, the project and cumulative volumes from other projects (including growth rates) are provided in Appendix C of the revised Traffic and Transport Assessment (Appendix D).
SIDRA analysis is required to be included within a revised TTA, based on the revised traffic data and inclusion of cumulative traffic volumes from other projects that will be present in the background and turning volume for each intersection and state road connection. • Boulder Road / Castlereagh Highway • Karawatha Drive / Castlereagh Highway • Brays Lane / Castlereagh Highway • Main Street / Castlereagh Highway • Barton Avenue / Great Western Highway. SIDRA analysis is to assess light vehicle, and heavy vehicle impacts at peak hour, and include the distribution and directional splits for the project traffic. SIDRA files are to be provided as part of the revised TTA package.	SIDRA analysis has been undertaken consistent with the approach agreed with TfNSW (refer to above responses).

TfNSW comment	Response
The project peak construction peak timeframe in terms of months or years is to be identified within the revised TTA.	The project's peak construction traffic is expected to occur in 2027 when foundation work for transmission structures will commence. The project workforce and traffic volumes would increase to its peak associated with this activity and remain at this level until construction is complete. This is outlined in section 4.1.6 of the revised Traffic and transport Assessment (Appendix D).
The project peak construction peak hours are to be identified within the revised TTA.	The revised Traffic and Transport Assessment (Appendix D) describes peak traffic volumes and their distribution in the AM and PM periods in sections 4.16 and 4.17. From traffic surveys, the peak periods for the road network were determined to be: • AM peak of 6am to 7am. • PM peak of 3.30pm to 4.30pm. For the purposes of undertaking a worse case traffic impact assessment, SIDRA modelling has assumed the project's peak construction traffic occurs within the road network's AM and PM peak periods. It is likely that the project's AM traffic peak between 6.30am to 8am would coincide with the network's AM peak of 6 am to 7am. The project's PM construction traffic peak would also coincide with the network's PM peak of 3.30pm to 4.30pm, as construction workers would be expected to depart work areas between 3:00 pm and 5:00 pm.
Raw data from the traffic surveys conducted are to be provided within the revised TTA.	Raw traffic count data is presented in Appendix D of the revised Traffic and Transport Assessment (Appendix D of this Submissions Report).
SIDRA files are to be provided as part of the revised TTA package as separate files.	Noted. Files for SIDRA modelling representing the cumulative impact assessment will be provided to TfNSW.
Swept turn paths	
Swept turn path analysis is to be conducted and included within the revised TIA for the largest vehicle to use each intersection on the State road network, demonstrating that the intersections can accommodate the heavy vehicles turning. a. Concurrently in all turn directions, and b. that the heavy vehicle swept turn path will not encroach upon medians, islands and other lanes. One pinch point known from nearby projects is the Boulder Road / Castlereagh Highway intersection, which has previously been shown to accommodate a maximum vehicle length of 19 m. The applicant is to conduct its own swept turn path analysis of all intersections.	Swept turn path analysis for heavy vehicles using intersections on the state road network are provided in section 4.8 and Appendix A of the revised Traffic and Transport Assessment (Appendix D). The analysis identified that the turning path for a maximum-sized typical delivery vehicle (19 m articulated vehicle) can be accommodated on the existing State road network, with sufficient clearance for passing vehicles.

TfNSW comment	Response
Rail impacts	
TfNSW and UGL Regional Linx have identified the following comments regarding heavy vehicle and oversize overmass (OSOM) vehicle routes, as well as potential impacts on the rail network.	
a. It is noted that site access routes are expected to originate primarily from Sydney and Newcastle, with some transport from Orange or Bathurst as required. However, the EIS and TTA do not include a detailed map of the proposed Heavy Vehicle and OSOM routes to access the site. Additionally, the documents do not provide any information on suggested routes that may cross Country Regional Network (CRN) railway infrastructure, such as level crossings, overbridges, or under bridges.	Details of routes for heavy vehicles and OSOM vehicle movements are provided in section 4.1.4 of the Technical Report 8 – Traffic and Transport Assessment. The expected routes for the project, including OSOM movements, are: • to/from Sydney: along the Castlereagh Highway (B55) and Great Western Highway (A32) • to/from Newcastle: along the Castlereagh Highway (B55), Golden Highway (B84) and New England Highway (A16) • to Orange/Bathurst: along the Great Western Highway (A32) and Mitchell Highway (A32) (for Orange only). Figures from the National Heavy Vehicle Regulator indicating these routes are approved for heavy vehicles are provided in Figures 4.3 and 4.4 of the revised Traffic and Transport Assessment (Appendix D). It is not expected that OSOM routes would interact with the Country Rail Network, whether originating from Sydney/Newcastle or Orange/Bathurst.
b. Details of the proposed access route from the port/origin to the site is to be included within the revised TIA, clearly identifying any CRN infrastructure along the route. If any CRN infrastructure is impacted, the amended documents must be referred to TfNSW and UGL Regional Linx (UGLRL) for review and approval. Furthermore, the applicant must comply with the transport management and safety requirements of both UGLRL and TfNSW for any matters involving the CRN corridors.	As above, figures indicating the OSOM routes from these two locations to the site are provided in Figures 4.3 and 4.4 of the revised Traffic and Transport Assessment (Appendix D). It is not expected that OSOM routes would interact with the Country Rail Network, whether originating from Sydney/Newcastle or Orange/Bathurst.
c. UGL Regional Linx has issued its Approval In Principle (AIP) letter, dated 17 July 2025, to the applicant. The applicant must comply with the requirements stated in the AIP.	This requirement is noted.
Minor matters that need to be resolved prior to determination	
a. The design vehicle for the heavy vehicle to be used for the project is to be clarified within the revised TTA for each access point and intersection.	Section 4.8 and Table 4.14 of the revised Traffic and Transport Assessment (Appendix D) outline the vehicle types adopted for the swept turn path analysis.
b. Dimensions of the OSOM vehicles to be used are to be provided within the revised TTA, to confirm that the project's OSOM vehicles do not fall within the high-risk OSOM category.	Table 4.14 of the revised Traffic and Transport Assessment (Appendix D) outlines the dimensions of the OSOM vehicle based on information available at the time of the assessment. The revised Traffic and Transport Assessment confirms that the OSOM vehicles do not fall within the high-risk OSOM category.

TfNSW comment	Response
c. Clarify the distance to the travel lanes and road reserve of the transmission line work occurring adjacent to the state road network. TfNSW requires that the transmission line not be constructed within the road reserve. On this point, commitments will be necessary to manage the traffic impacts on the state road network from both an operational and safety perspective during the construction phase, following consent, as part of the Traffic Management Plan.	Transmission structures, construction benches, laydown areas or brake and winch sites will not be located within the travel lanes or the road reserve of the state road network. Construction would be undertaken within the existing and widened easement for the project as shown in the EIS and amended in the Amendment Report (Transgrid, 2025a). The stringing of overhead conductors across the road corridor will be required for the local roads (Brays Lane and Main Street). Stringing of conductors over the Castlereagh Highway (State road) is not proposed. The EIS and Technical Report 8 – Traffic and Transport Assessment include mitigation measure T1 that commits Transgrid to develop a Traffic and Transport Management Plan to minimise impacts on traffic and road network performance, and to obtain necessary permits including road occupancy licences for any short term and temporary local road closures.
d. The TIA identifies that the Brays Lane/Castlereagh Highway and Main Street/Castlereagh Highway will be required to be diverted during stringing activities. Diversions and detours for stringing activities across the state road network are unlikely to be supported by TfNSW. Alternatives to diversions and detours are to be identified as part of the revised TTA.	Stringing activities are not proposed over the state road network. Diversion of traffic on the state road network is not proposed. Stringing activities will be required over local roads, Brays Lane and Main Street only. During stringing, there will be a need to stop traffic for short periods, this can range from 20-30 minutes. Stringing over Brays Lane would be located about 60 m from the Castlereagh Highway. Stringing over Main Street would be located about 50 m from the Castlereagh Highway. Traffic on these local roads may require diversions for safety reasons and to avoid traffic impacts on the State road network.
e. AS1742.2 states that the proposed sign (W2-9(R)) is not used where intersection directional signs are in place. As there is a directional sign near the existing advisory sign, the existing sign (W13(R)) is the appropriate sign, and W2-9(R) is not required.	This requirement is noted.
f. The revised TTA is to confirm whether heavy vehicles will or will not be using the Barton Road / Great Western Highway intersection and the types and lengths of the heavy vehicles that will use this intersection.	The project proposes to use the Barton Avenue / Great Western Highway intersection where access to the Wallerawang 330 kV substation is not possible for vehicles unable to meet the height and width restrictions in place the heritage listed rail bridge. Vehicle movements using this intersection are expected to be very low with works requiring access south of the Main Western Rail Line limited to stringing activities only. Less than one heavy vehicle and two light vehicles would be required to access to utilise this intersection during the peak hour. Heavy vehicles which would be required to use this intersection would include the following: • 19 metre articulated vehicle • 28 metre oversize overmass vehicle required for the delivery of oversized equipment. Table 4.14 of the revised Traffic and Transport Assessment (Appendix D) outlines the dimensions of heavy vehicles to be used by the project.

5.6. NSW Rural Fire Service

The NSW Rural Fire Service (RFS) verified the assessment undertaken in the Bushfire Risk Assessment provided in Appendix C of Technical Report 9 – Hazards and Risk Assessment and summarised in section 15.4.1.3 in the EIS to demonstrate compliance of the proposed works with the aim and objectives of Planning for Bush Fire Protection (PBP) 2019.

The proposed development is supported by the RFS to progress to the next stage, subject to compliance with the recommendations listed under section 6 of the Bushfire Risk Assessment. These recommendations have been adopted as part of mitigation measures HR3 and HR4.

Additional comments received from RFS and responses are provided in Table 5.5, relating to the Bushfire Risk Assessment.

Table 5.5. Summary of RFS comments and Transgrid responses

RFS comment	Response
Asset protection zones (APZs) compliant with bush fire attack level (BAL 29) and BAL 40 are recommended around the construction compounds, where in some instances the APZ is identified to be less than 10 m placing the areas within potential flame contact. As such, the APZs around the structures and associated buildings/infrastructure must not be less than 10 m in accordance with section 8.3.5 of PBP 2019.	Table 5.1 of Appendix C (Bushfire Risk Assessment), in Technical Report 9 – Hazards and Risk Assessment of the EIS identifies the proposed APZ requirements to achieve BAL-29 and BAL-40 relevant to the proposed construction compounds. The APZ requirements differ between each facing aspect of the compound, the vegetation type and the slope class for each aspect. Where compounds would not be used for the storage of combustible materials and do not contain site offices, a reduced APZ resulting in an exposure of 40 kW/m2 (BAL-40) can be provided to avoid flame contact to stored materials and therefore lower the risk of fire spread. Therefore, if construction compound C3 meets these requirements by the construction contractor, an APZ of less than 10 m would achieve a BAL-40. Construction compound 2 would accommodate the main site offices, therefore it would be required to comply with the BAL-29 APZ requirement ranging between 10 and 11 m. Construction compound 1 is surrounded by a vegetation class requiring an APZ between 15 m (for BAL-40) or 20 m (for BAL-29). As detailed in section 5.1.2 of the Bushfire Risk Assessment, implementation of these APZs would be confirmed as part of the development of the Bushfire Management Plan (mitigation measure HR3) and would include a commitment to consult with surrounding landowners to reach agreement on the use of adjacent land for the purposes of the APZ during construction. The final location of construction compounds to be used and APZs to be implemented would be documented in the Bushfire Management Plan, developed in consultation with NSW Rural Fire Service and NSW NPWS. The requirement for a minimum 10 m APZ is noted.

RFS comment	Response
The effective slopes beneath the hazard to the north, east and northeast of the construction compound C1 is assessed in 0-5° D/S as compared to upslope assessed in the bush fire report. The APZs must be revised to reflect these downslopes.	As indicated above, the APZs provided in Table 5.1 of the Bushfire Risk Assessment, are based upon design information that was current at the time of the EIS exhibition. The APZs including any specific requirements will be finalised as part of the Bushfire Management Plan (mitigation measure HR3) process pending approval of the project. Once the final sizes and locations of construction compounds are confirmed, hazard vegetation and associated slopes will be confirmed.
The APZ must be managed to the standards of Inner Protection Area outlined in Appendix 4 of PBP 2019.	Section 5.1.2 of the Bushfire Risk Assessment outlines Transgrid's commitment to comply with APZ requirements for the inner protection area specifications, as detailed in Appendix 4 of PBP 2019.
A Bush Fire Emergency Management and Operations Plan must be prepared for the proposed development including the requirements outlined in 8.3.5 of PBP 2019.	Mitigation measure HR4 outlines Transgrid's commitment to develop an Emergency Management Plan. Mitigation measure HR4 has been amended to include reference to the requirements outlined in section 8.3.5 of PBP 2019.
Essential equipment should be designed and housed in such a way as to minimise the impact of bush fires on the capabilities of the infrastructure during bush fire emergencies. It should also be designed and maintained so that it will not serve as a bush fire risk to surrounding bush.	Section 5.2.1 of the Bushfire Risk Assessment specifies the project will be designed and constructed to Transgrid's Transmission Line Design Standard which complies with *Australian Standard AS/NZS 7000:2016 Overhead Line Design* and is consistent with obligations under the Electricity Supply Act and Regulation, which includes designing and operating a safe network and preventing network assets from igniting bushfires. This section also provides detail on enhancement of the resilience of the existing 132 kV transmission line through the replacement of wooden poles to taller steel or concrete structures. Additionally, this transmission line would be positioned in a 60 m easement which is greater than the 45 m required for a 132 kV transmission line, further minimising risk.
Access tracks within the facility must comply with property access requirements of Table 5.b of PBP 2019 such that firefighting vehicles can access the site and exit the facility safely providing a safe operational environment for emergency service personnel during firefighting and emergency management.	Section 4.2.3.2 Bushfire Risk Assessment outlines that the proposed upgrade and new access tracks across the transmission easement would provide the opportunity for Category 1 bushfire response vehicles to traverse parts of the easement. Procedures and evacuation routes would be defined prior to construction within an Emergency Management plan (HR4). These will comply with the requirements specified in Table 5.b of PBP. Section 5.2.2 of the Bushfire Risk Assessment describes that Transgrid's Maintenance Plan – Easements and Access Tracks (Transgrid, 2018) requires consideration of third-party use, including use as fire trails. Mitigation measure HR4 outlines the commitment to address the standards detailed in Appendix A of NSW Fire Trail Standards (NSW RFS, 2023).

5.7. Fire and Rescue NSW

Fire and Rescue NSW provided no comments or recommendations for consideration, nor any requirements beyond those specified by applicable legislation.

The response from Fire and Rescue NSW is noted.

5.8. Heritage Council of NSW

The Heritage Council of NSW reviewed the EIS and Technical Report 6 – Statement of Heritage Impact for the project and requested additional information as summarised in Table 5.6.

Table 5.6. Summary of Heritage Council of NSW comments and Transgrid responses

Heritage Council of NSW comment	Response
Please provide additional information on the following matters to clarify the potential impacts of the proposed works in relation to the Wallerawang Rail Bridges over Coxs River (SHR no. 01064): • Table 4-1 of the SoHI states that the nearest proposed works to the SHR item is the construction of a transmission structure 36m to its north, however Table 6.5 of Technical Report 10 – Noise and Vibration Impact Assessment indicates that works are anticipated to include vibratory rolling, excavation and piling between 0m and 6m from the item.	The identified inconsistency in distance from the works at transmission structures near the Wallerawang Rail Bridges over Coxs River (SHR no. 01064) results from differences in the assessment methodology. For Technical Report 10 – Noise and Vibration Impact Assessment, the measurement uses the closest point of the work area to the structure location, whereas the measurement in the Statement of Heritage Impact applies the centre point of the proposed transmission structure. The proposed centre point of the transmission structure based on the current design is confirmed to be about 32 m from the heritage listed bridge. It is noted that some of the proposed piling activities would be positioned slightly closer than the 32 m outlined above. Since exhibition of the EIS, the use of impact piling for constructing foundations of transmission structures, including those in proximity to the Wallerawang Rail Bridges over Coxs River (SHR no. 01064), is no longer proposed as outlined in section 3.2. Piling activities would be undertaken using a bored piling method, which minimises vibration impacts. Further discussion of the changes to the vibration impacts on the heritage listed bridge is included in section 5.2.3 of the Amendment Report (Transgrid, 2025a).
• The SoHI states that the access route which runs under the bridges will be limited to light vehicle usage and does not reference any proposed upgrades to this access route, however Figure E.2c of the EIS indicates that this track will be upgraded and widened.	Further review of the proposed access tracks, including those near the Wallerawang Rail Bridges over Coxs River (SHR No. 01064), has determined that the access track passing under the rail bridge no longer requires upgrade work. As a result, the vibration impacts previously identified Technical Report 6 – Historic Heritage Assessment and Statement of Heritage Impact Report and Technical Report 10 – Noise and Vibration Impact Assessment associated with the use of vibratory rollers near or under the heritage structure, are no longer anticipated. During construction, the track will be maintained in a similar condition as its existing condition.
Noting that the recommendations of the Noise and Vibration Impact Assessment may result in the requirement for additional actions such as monitoring of the Wallerawang Rail Bridges over Coxs River (SHR no. 01064), the Historic Heritage Management Plan (HHMP) should include a requirement that methodologies for these works are completed in consultation with a suitably qualified heritage specialist to avoid impacts to the SHR item.	The HHMP to be developed for the project (mitigation measure HH1) has been updated to include consideration of alternative construction methods to avoid impacts to the Wallerawang Rail Bridges over Coxs River (SHR no. 01064) and consideration of vibration monitoring, in consultation with a suitably qualified heritage specialist. NV6 has been revised (see Appendix B) to include consultation with a suitably qualified heritage specialist when investigating alternative construction methods to minimise vibration impacts on any heritage structures.

5.9. NSW National Parks and Wildlife Service

Feedback from the NSW NPWS is summarised in Table 5.7.

Table 5.7. Summary of NSW NPWS comments and Transgrid responses

NSW NPWS comment	Response
1. Disturbance of Purple Copper Butterfly habitat to be avoided as much as possible, both during the line's construction and operation.	The project has sought to minimise the impact on potential Purple Copper Butterfly habitat as much as possible. Five areas in the study area were identified as potentially suitable habitat for the species. The location and description of the habitat is provided in Table 5.8 and Figure 5.6 of the revised BDAR (Appendix C). Further surveys undertaken since the exhibition of the EIS and BDAR confirmed the absence of the Purple Copper Butterfly within habitat located in the project footprint. These surveys included the survey of a nearby reference population (at which the species was recorded) and then survey of the potential habitat located within the project footprint. Three patches of potential habitat are small, shaded and isolated from each other. One larger patch (of which the majority of the patch is not within the project footprint) is not located on an aspect preferred by the species. A second larger patch is located along the edge of an access road that is not being widened and will not be directly impacted. Given the limited suitable habitat and lack of evidence of the Purple Copper Butterfly in the project footprint during suitable survey conditions no species polygons are required. Prior to carrying out operation phase activities, an environmental assessment will be prepared that considers up-to-date NSW BioNet data. Transgrid has established procedures for working in areas with Purple Copper Butterfly presence or potential. These requirements are adopted as a new mitigation measure B20. Further details of the surveys undertaken and the results of the surveys are detailed in the revised BDAR located in Appendix C.
2. Conditions of consent to identify that works within the park are subject to NSW NPWS authorisation.	Noted. Transgrid will comply with any conditions of approval under the EP&A Act and the EPBC Act, which may include the need for NSW NPWS authorisation for any works within the Gardens of Stone SCA.
3. A formal creek crossing to be constructed as part of the trail upgrades over the third-order stream between towers 21D and 22D.	A formal creek crossing will be designed and installed at this location in the form of a bed rock crossing. This type of crossing would ensure that other informal crossing locations in the vicinity of the proposed track allow natural regeneration on removal. The design of the crossing would be undertaken to ensure the: • carrying capacity of the crossing allows for all construction and operational vehicles, including fire fighting vehicles • final levels align with surrounding landforms • stream flows are directed through the existing downstream concrete culvert's inlet • materials, including rock sizing, are designed to withstand flood events • disturbance of the area is minimised.

NSW NPWS comment	Response
	Construction would be undertaken in line with the Department of Land & Water Conservation guideline "Guidelines for the Planning, Construction and Maintenance of Trails" and in accordance with the Blue Book Volume 2C - Erosion and Sediment Control on Unsealed Roads (NSW Govt, Office of Environment and Heritage, 2012) and applicable sections of Managing Urban Stormwater: Soils and Construction Volume 1 (Landcom 2004). A rock-lined bed-level crossing is proposed which has the following benefits: • results in less impacts to install due to the smaller footprint particularly considering presence of an existing track and crossing point • minimises impacts on flows • minimises impacts on fauna movement along the creek • allows unimpeded transport of debris during storm events compared to pipeline crossings. The final design will be developed at a date closer to construction, so that up-to-date site conditions are considered.
4. The CEMP to be developed in consultation with NSW NPWS.	Transgrid acknowledges the importance of working with NSW NPWS for works located in the Gardens of Stone SCA. Transgrid will consult with NSW NPWS during the preparation of the CEMP. Details of the processes for this consultation will be discussed in ongoing stakeholder consultation meetings frequently held with NSW NPWS.
5. At completion of construction works, the access trail network to be consistent with the Gardens of Stone SCA Vehicle Access Strategy (NPWS-DCCEEW 2024).	Transgrid notes that the project footprint contains NSW NPWS management tracks that do not facilitate public access. Access tracks to be retained following construction would be left in a suitable condition, maintained to meet the NSW Rural Fire Service Standards for Fire Trails, and will ensure that public access remains restricted through on-site security measures such as locked gates. The access tracks will remain as 'NPWS Management Trails', identified as having no public vehicle access on Figure 1 of the Gardens of Stone SCA Vehicle Access Strategy (NPWS-DCCEEW 2024). The strategy requires the management tracks to be maintained by NSW NPWS in accordance with relevant road standards.
6. NSW NPWS to be consulted in development of the Biodiversity Offset Strategy.	NSW NPWS is a key stakeholder of the project. Two meetings have been held with NSW NPWS to date to discuss the Biodiversity Offset Strategy and specifically how the impacts to the Gardens of the Stone SCA would be offset. Transgrid will continue to consult with NPWS with regards to the proposed offsets where Transgrid is to manage the process of discharging the offset liability. Where offsets are to be managed through a Strategic Offset Delivery Agreement (SODA), the process of discharging the offset liability would not be managed by Transgrid. In the case of a SODA, consultation on offsets with NSW NPWS may not be possible.

5.10. NSW Environment Protection Authority

Feedback from the NSW Environment Protection Authority (NSW EPA) is summarised in Table 5.8.

Table 5.8. Summary of NSW EPA comments and Transgrid responses

NSW EPA comment	Response
Matters to be addressed prior to determination	
Environment Protection License The NSW EPA indicated that the project does not appear to require an environment protection licence under the POEO Act. However, the project is being undertaken by an authorised electricity network provider as described in Section 6(2)(c1) of the POEO Act and therefore the NSW EPA is the appropriate regulatory authority for the project. The NSW EPA also indicated that that as part of the development of detailed design and construction details, the need for an Environmental Protection Licence (EPL) under the POEO Act may be identified, particularly for Helicopter-related activities, Crushing, grinding or separating, Electricity Generation (back-up diesel generators) or Sewage treatment. The NSW EPA states that the proponent is responsible for determining whether any activities trigger the requirement for an EPL and applying for the appropriate licence. The NSW EPA recommends that the CEMP includes provisions for continuous review of relevant details to ensure an EPL is obtained prior to works exceeding any of the thresholds in Schedule 1 of the POEO Act at any of the construction sites.	A review of Schedule 1 of the Protection of the POEO Act (chapter 4 of the EIS) indicates that an environment protection licence is not required for the project, based on the activities described in Chapter 3 of the EIS. The proposed activities do not trigger the thresholds in Schedule 1 for construction or operational phases: • Helicopter-related activities – the project does not propose the landing, taking-off or parking of helicopters with more than 30 flight movements per week within the easement. • Crushing, grinding or separating – the project does not propose to process more than 150 tonnes of materials per day or 30,000 tonnes of materials per year (including sand, gravel or rock) for crushing, grinding or separating. • Electricity generation – the project compound sites will be connected to mains power. The project does not propose to generate power of more than 30 megawatts of electrical power for more than 200 hours per year, other than emergency stand-by plant such as diesel generators, if they are required. • Sewage treatment – no treatment of sewage is proposed by the project. Wastewater and sewage from the construction workforce would be collected on site and disposed via a licenced contractor to an approved licenced facility. The project will comply with all statutory requirements, including the requirement for an EPL, if required. Mitigation measure AQ1 requires a routine review of project activities against Schedule 1 of the POEO Act to ensure an EPL is obtained before project activities exceed relevant thresholds, as required.
Construction Noise The Noise Impact Assessment (NIA) proposes construction works outside the standard construction hours, which includes works from 6pm to 7pm on weekdays, 7am to 8am and 1pm to 6pm on Saturdays, and 7am to 6pm on Sundays. Exceedances of construction noise management levels (NMLs) of up to 34 dB occurring outside standard construction hours have been predicted. Section 3.3 of the NIA outlines justification for works occurring outside standard hours, noting that these works would be scheduled to occur away from the Lidsdale and Wallerawang townships and to avoid evening and night periods where possible. The NSW EPA notes that measures to mitigate and manage these impacts outlined in section 7 of the NIA do not provide specificity regarding when or where they will be implemented, how works will be scheduled, or how effectively they will reduce impacts. As such, they provide limited certainty that construction noise impacts will be managed effectively.	Section 3.1.2 of Technical Report 10 – Noise impact Assessment and section 3.5.2 of the EIS outlines the proposed project construction hours would be from 7am to 6pm Monday to Sunday and use of the construction compounds from 6 pm to 7 pm Monday to Friday. Further project development and construction planning has confirmed bored piling as the preferred piling method to be used. Impact piling will no longer be used and was assessed as the worst-case noise impact scenario. Additionally, the noise level reduction when typical mitigation measures are adopted have also been assessed. The additional assessment is provided in Appendix F. The detailed construction schedule is based on a typical 20:8 work roster (typically 20 work days and 8 non-work days), inclusive of every second Sunday being a non-work day. During a 3-month period, construction at TS5C to TS13D near Lidsdale will take place on five out of 13 Sundays, meaning only about 38% of Sundays would be work days. Seven representative sensitive receivers in

NSW EPA comment	Response
The NSW EPA requests the proponent to provide quantitative specificity regarding how the proposed measures will shift the timing of impacts away from sensitive periods, and/or reduce magnitude or duration of impacts.	this area were analysed, with these receivers potentially being the most effected. The analysis shows the following worst-case potential noise level impacts using bored piling for structure footing construction (scenario 6B): • exceedances of the Construction Noise Management Level (CNML) greater than 20 dBA of up to six days on weekdays at the receiver RES0862 • exceedances of the CNML greater than 25 dBA of up to four days on OOHW Period 1 Day at the receiver RES0862 on Saturdays • exceedances of the CNML greater than 25 dBA of up to two days on OOHW Period 1 Day at the receiver RES0862 on Sundays. Further analysis was undertaken to identify the potential reductions in noise level exceedances of the CNML when implementing typical mitigation options. Appendix F provides the results and a detailed breakdown of the effectiveness of noise mitigation options for all construction scenarios during OOHW Period 1 (Saturday and Sunday) and OOHW Period 1 Evening/ Period 2 Night. Adopting mitigation option/s that reduce noise levels by 5 dBA generally results in a greater than 50 per cent reduction of the number of sensitive receivers experiencing noise level exceedances above the CNML. As an example, the number of sensitive receivers predicted to have highly intrusive noise levels (that is, noise level greater than 25 above the CNML) was predicted to be: • with 0 dB or no mitigation (as assessed in the EIS): 7 receivers • with 5 dB mitigation: 2 receivers • with 10 dBA mitigation: 0 receivers.
Operational Noise The NIA has identified exceedances of the Noise Policy for Industry (NPfI) nighttime criteria from corona noise during light rain by up to 9 dB, representing a 3 dB increase when compared against noise from the existing transmission lines. section 7 of the NIA states that monitoring will be undertaken at receivers predicted to experience exceedances of operational noise criteria, with mitigation considered in consultation with affected landowners where verified. However, detail has not been provided on the extent of mitigation that will be considered for affected receivers. The NSW EPA requests the proponent clarify how and what mitigation will be considered and applied to impacted receivers based on the extent of the predicted impacts.	As outlined in section 6.4.2 of the EIS, modelling undertaken suggests that 14 receivers may already be subject to noise levels up to 6 dB above the evening/night project -specific noise trigger levels (PNTLs) during light rain as a result of existing transmission lines. It is noted that Transgrid has not received any complaints from nearby receivers with regards to corona noise in the area with modelled exceedances. Modelling undertaken identified 23 receivers with exceedances of up to 9 dB of the PNTLs which is an increase of about 3 dB considering existing exceedances. Of the 23 receivers, nine are predicted to be newly affected by corona noise exceedances. The assessment described in the EIS is conservative due to the following factors: • Modelling includes consideration of worst-case conditions (temperature and load) which are unlikely to also coincide with periods of light rain and fog. • Modelling results are predicted at the façade of the receiver and therefore the internal noise level would be much less. A standard window will generally provide a 10 dB reduction when partially open and a 20 dB reduction when closed (refer section 8.2.2.4 of the EIS).

NSW EPA comment	Response
	• Investigations undertaken by Transgrid (Transgrid, 2025b) have identified that based on field measurements with other existing 330 kV transmission lines, modelled corona noise levels are considered to be an overestimate compared to modelling for 500 kV transmission lines where testing results generally better align with the modelled results. Mitigation measure NV10 outlines the process for the investigation and mitigation of corona noise at nearby sensitive receivers. The process includes verification within six months following commencement of operation or where a landowner requests such monitoring within two years of after the project's commencement of operation. Where monitoring confirms corona discharge above the criteria, consultation with affected landowners would be undertaken to confirm the reasonable and feasible at receiver mitigation measures to be implemented. Typical mitigation that is known to be effective in reducing noise levels at residences includes: • architectural treatments on exposed facades such as window and door treatments, upgrading seals, glazing and solid core doors • mechanical treatments such ventilation systems or installation of air-conditioners. The method of mitigation required would be discussed with the landowners and the type of mitigation to be implemented would require consideration of the following: • level of impacts to be mitigated • suitability of the existing structure to include potential treatment options • effectiveness of methods to reduce levels to a suitable level.
Matters to be addressed with conditions	
Ground water and surface water management The NSW EPA recommended conditions include: • preparation of a SWMP, which includes sediment control plans which are prepared in accordance with WaterNSW Current Recommended Practices (CRPs) *Managing Urban Stormwater: Soils and construction (Volume 1) (Landcom, 2004) and Volume 2c (DECC, 2008)* to manage construction phase risks associated with water quality and groundwater.	Noted. Mitigation measure W1 commits to the preparation and implementation of a SWMP that will be prepared in accordance with the: • Managing Urban Stormwater – Soils and Construction, Volume 1 (Landcom, 2004), Volume 2A (DECC, 2008) and Volume 2C (DECC, 2008a) • Best Practice Erosion and Sediment Control (IECA, 2008) • Guidelines for controlled activities on waterfront land (DPE 2022). No further changes are considered necessary in relation to this advice.

NSW EPA comment	Response
Develop a trigger action response plan for the construction phase of the project to address groundwater inflows. The trigger response plan should include proposed actions in response to higher levels of groundwater inflow then predicted and how any ground water will be managed.	Noted. Mitigation measure W5 commits to the preparation and implementation of a groundwater dewatering procedure that includes the requirements of this proposed condition and included in the CEMP. As part of this procedure, mitigation measures W5 outlines that a groundwater trigger action response plan will be developed and implemented in the event that groundwater inflows are greater than expected. This plan would outline the proposed actions if greater than expected groundwater inflows occur as well as outline how the water would be managed. No further changes are considered necessary in relation to this advice.
Sediment/Erosion The NSW EPA recommended condition include: • The implementation of all feasible and reasonable erosion and sediment controls as may be necessary throughout any construction works and activities to minimise the migration of sediment. The Proponent should ensure erosion and sediment controls are designed (where required), constructed, operated and maintained consistent with the principle and practices of industry best practice, including but not limited to the document *Managing Urban Stormwater: Soils and Construction (Volume 1) (Landon 2004).*	Noted. As outlined above, mitigation measure W1 commits to the preparation and implementation of a SWMP in accordance with a number of relevant publications including *Managing Urban Stormwater – Soils and Construction, Volume 1 (Landcom, 2004), Volume 2A (DECC, 2008) and Volume 2C (DECC, 2008a)*. No further changes are considered necessary in relation to this advice.
Contaminated Land The NSW EPA recommended conditions include: CEMP • A CEMP must be developed to outline the management measures required to prevent mobilisation of airborne asbestos fibres during the works. • The CEMP must be prepared, or reviewed and approved, by consultants certified under either the Environment Institute of Australia and New Zealand's Certified Environmental Practitioner (Site Contamination) scheme (CEnvP(SC)) or the Soil Science Australia Certified Professional Soil Scientist Contaminated Site Assessment and Management (CPSS CSAM) schemes. • The Applicant must develop a site-specific CEMP for contamination at the site. The CEMP must: - Consider all known contamination present in soils at the site and consider the potential for groundwater to also be contaminated. - Outline clear measures to mitigate impacts to human health and the environment from the contamination, and identify the parties responsible for implementing these measures - Include information on what actions must be undertaken if unexpected contamination is found as part of the development works; and - Be prepared, or reviewed and approved, by consultants certified under either the Environment Institute of Australia and New Zealand's Certified Environmental Practitioner (Site Contamination) scheme (CEnvP(SC)) or the Soil Science Australia Certified Professional Soil Scientist Contaminated Site Assessment and Management (CPSS CSAM) scheme.	A CEMP will be prepared and will include a SWMP (mitigation measure W1) which will include all the soil and water construction mitigation measures outlined in Appendix B, including measures to manage impacts to soil and contamination as outlined in mitigation measures SC1-SC7. Mitigation measure SC1 requires the disturbance of any Areas of Concern (AECs) identified as having potentially complete source-pathway-receptor linkages to be managed in accordance with the SWMP required by mitigation measure W1. The SWMP would include the following with regards to contaminated material: • procedures for dewatering, specifying capture, storage, and testing requirements • measures to minimise exposure and migration of potentially contaminated soil, including handling and storage procedures • relevant HSE requirements, including staff inductions and PPE to minimise the risk of dermal contact and inhalation • requirements for soil testing of excavated soils in accordance with NSW EPA's waste classification guidelines and NEPM (2013), to identify opportunities for onsite reuse or offsite disposal (e.g. contaminated material) at licenced facility. • contaminated groundwater will not be released to the surrounding environment and will be disposed of at a licenced facility. With regards to human health and environmental risks, the SWMP will include an adaptive management approach to reduce human health and environmental risk as required by mitigation measure SC3. This approach will respond to the soil contamination results or any additional information with regards to existing contamination which

NSW EPA comment	Response
	becomes available, with further assessment and additional management measures to be confirmed based any new information. A project-specific Asbestos Management Plan will be prepared by the construction contractor. Mitigation measure SC3 has been updated to include this requirement. Unexpected contamination would be managed in accordance with an Unexpected Contaminants Finds Protocol which is required as part of the SWMP in accordance with mitigation measure SC6. Mitigation measure SC1 has been updated to include the requirement for elements of the SWMP related to contamination to be prepared, or reviewed and approval by consultants certified under either the Environment Institute of Australia and New Zealand's Certified Environmental Practitioner (Site Contamination) scheme (CEnvP(SC)) or the Soil Science Australia Certified Professional Soil Scientist Contaminated Site Assessment and Management (CPSS CSAM) schemes (see Appendix B).
Unexpected Finds Protocol • An Unexpected Finds Protocol must be developed for the site to outline procedures to follow if unexpected contamination is found during works at the site. The Unexpected Finds Protocol must be written by, or reviewed and approved by, a consultant certified by either of the following schemes: - Environment Institute of Australia and New Zealand – Certified Environmental Practitioner (Site Contamination) (CEnvP (SC)); or - Soil Science Australia – Certified Professional Soil Scientist Contaminated Site Assessment and Management (CPSS CSAM).	As noted above, mitigation measure SC6 requires an Unexpected Contaminants Finds Protocol which will be developed and included within the SWMP as part of the CEMP. Mitigation measure SC6 has been revised (see Appendix B) to include the requirement for this protocol to be reviewed by a consultant certified by one of the identified schemes.
Waste The project has the potential to generate large quantities of waste. Construction and decommissioning of the project may exceed the capacity of local waste management facilities. It is recommended that the applicant prepare and implement a waste management strategy in consultation with the relevant local Councils to show waste will be directed to facilities that can lawfully accept it, including: • The capability of the waste management facilities of the relevant Local Government Area to accept the volumes of waste predicted to be deposited and any associated approvals required to create and/or expand waste storage or disposal facilities. • Any infrastructure that may be required at any waste facilities that are proposed to be created and/or expanded to receive additional volumes of waste from the project.	Mitigation measure WM1 proposes the development of a Waste Management Plan to manage waste and resource use, including its disposal. The Waste Management Plan will be developed in accordance with the NSW EPA's Waste Classification Guidelines, Resource Recovery Orders and other statutory requirements and will include the requirement to identify disposal and recycling locations for those waste types that cannot be reused. The requirement to identify disposal locations has been added to mitigation measure WM1 (see Appendix B). Systems will also be developed to sort, track and record the actual types and quantities of all waste generated, including those required to be disposed offsite as required by mitigation measure WM1. At the time of consultation in April 2025, Lithgow City Council confirmed that Council's solid waste facility at Lithgow did not presently have capacity constraints or issues, and that any waste groundwater could be disposed of at Lithgow Councils sewage treatment plant. Council did note that items such as concrete slurry would need to be disposed of at other licenced facilities, noting no Council facilities are able to accept concrete slurry waste. Ongoing consultation with Lithgow City Council will be undertaken, consistent with mitigation measure WM1

NSW EPA comment	Response
	and the projects Community and Stakeholder Engagement Plan (mitigation measure S1) to confirm acceptability of project waste types and volumes. Co-ordination and engagement with other proponents of relevant future projects will also occur during detailed design and prior to construction (mitigation measure C1). Joint opportunities or constraints that may arise will be identified and appropriate mitigation strategies developed to manage cumulative waste types and volumes.
Springvale Coal Services (also known as Western Coal Services)	
The NSW EPA is currently working with Centennial to address several significant historical and current surface and groundwater water management matters across the Western Coal Services (WCS) premises, particularly a diversion of clean water draining from the upper Huon Gully towards the WCS premises in an area where the transmission line is proposed to be constructed. Therefore, the NSW EPA seeks to ensure that the proponent is acutely aware of all potential risks to the environment while undertaking construction works within the upper catchment of WCS and within the Wangcol Creek and Upper Coxs River Catchment.	Transgrid acknowledges that the NSW EPA is working with Centennial Coal regarding watercourse management within the upper Huon Gully. Clean water flows from the Huon Gully are proposed to be directed onsite to WCS's Huon Clean Water Pond (JB&A 2022). The project's interaction with Huon Gully is minor, and occurs at the top of the catchment, within an area where existing conductors span overhead and the proposed project would similarly do the same between TS25D and TS26D. Potential impacts to Huon Gully are limited to potential erosion and sedimentation from the upgrade and widening of existing access tracks within the easement and conductor stringing/removal activities, and potential groundwater interception and dewatering when constructing footings for TS25D and TS26D. Other risks include vegetation management and potential pollution (hazardous substances) from accidental spills and leaks. A SWMP will be prepared as required by mitigation measure W1, that addresses the project's interaction with surface water, groundwater and watercourses. A groundwater dewatering procedure will be included as part of the SWMP (mitigation measure W5), which will define measures for the appropriate management of extracted groundwater. A Biodiversity Management Plan will also be prepared as required by mitigation measure B01 to address the impacts from clearing of vegetation. These plans will include an assessment of potential risks and appropriate management measures.

5.11. Airservices Australia

Airservices Australia provided no comments on the project but noted that an Aviation Impact Assessment may be required. If so, it was recommended that an aviation consultant is engaged to prepare and submit an application to Airservices Australia.

Transgrid prepared an Aviation Impact Assessment for the project, which was included as Appendix D to Technical Report 9 – Hazards and Risk Assessment as part of the EIS. Consultation was undertaken with Airservices Australia prior to exhibition and a draft Aviation Impact Assessment report provided for review at that time. A response from Airservices Australia was received on 6 May 2025 which indicated that the project would not impact Airservices' operations or facilities at Bathurst aerodrome, Lithgow Medical helicopter landing site, or any air routes.

5.12. NSW Department of Primary Industries and Regional Development – Agriculture

The NSW Department of Primary Industries and Regional Development (DPIRD) – Agriculture noted that the EIS includes mitigation measures regarding land use conflict potential and agricultural biosecurity at the pre-construction, construction and operational stages via a Biosecurity Risk Management Plan.

Transgrid notes the feedback from DPIRD-Agriculture including the adequacy of measures proposed regarding land use conflict and biosecurity risk included in the EIS.

5.13. NSW Department of Primary Industries and Regional Development – Fisheries

Summary of submission

The NSW DPIRD – Fisheries recommended adoption of the *Policy and Guidelines for Fish Habitat Conservation and Management* (Update 2013) for the design and construction of watercourse crossings and use of riparian buffer zones. DPIRD-Fisheries also supports maintaining adequate riparian buffer zones adjacent to the Coxs River where possible.

Response

Assessment of potential biodiversity impacts, including for aquatic ecology and impacts on riparian areas, was conducted as part of the EIS and is documented in Technical Report 2 – Biodiversity Development Assessment Report, Technical Report 3 – Aquatic Ecology and Technical Report 1 – Water Impact Assessment.

The presence of watercourses and the need to minimise potential impacts on riparian areas were considered during project design and construction methodology development. While some disturbance within riparian areas is unavoidable, works will be undertaken in accordance with the *Guidelines for riparian corridors on waterfront land*, maintaining adequate buffer zones to protect water quality and habitat values.

Table 5.1 of Technical Report 1 – Water Impact Assessment provides a preliminary screening assessment of the project elements against the watercourses within the project area. The table indicates three transmission structures would be permanently located within the vegetated riparian zone (VRZ) of the Coxs River and its tributaries. The table indicates that three transmission structures will be permanently located within the vegetated riparian zone (VRZ) of the Coxs River and its tributaries. These areas are already disturbed, with limited existing riparian vegetation dominated by pasture and grass. Accordingly, no significant impacts to riparian zones are anticipated. Construction activities will also occur within VRZs at several additional locations where existing infrastructure limits available workspace.

Mitigation measures outlined in the EIS (B01, B03, B04, B11 and B16) commits Transgrid to implement avoidance, minimisation and rehabilitation measures for riparian areas, including demarcation of exclusion zones, restoration of disturbed areas, and consultation with DPIRD – Fisheries and Water NSW on riparian restoration. Mitigation measure B04 has been amended to reference the *Policy and Guidelines for Fish Habitat Conservation and Management (Update 2013)* and clarify requirements for delineating and protecting riparian exclusion zones.

5.14. NSW Department of Primary Industries and Regional Development – NSW Resources

Summary of submission

NSW Resources recommends consultation with Enhance Place Pty Limited regarding the overlap with Mining Lease 1637 and that the outcomes of consultation undertaken with all identified title holders is detailed in the Submissions Report. NSW Resources advises the Proponent to actively monitor the MinView map viewer at https://minview.geoscience.nsw.gov.au for mining title changes that may interact with this project.

Response

Transgrid understands that Enhance Place Pty Limited is an entity of EnergyAustralia, an easement affected landowner for the project. The affected area is a former railway line protected by a mining lease (Mining Lease 1637). The disused railway line is on land owned by Ivanhoe Coal which is an entity of Centennial Coal. The indicative area of land affected by the project and the relevant land/ title holders are provided in Figure 3.4a-3.4d in the EIS showing the disused railway line occurring on properties DP1137972/ Lot 101 and DP252472/ Lot 9. Transgrid and EnergyAustralia have had extensive consultation regarding EnergyAustralia's interface with the project, including the rail crossing. The project will not impede on the rights that Enhance Place Pty Ltd hold in their mining lease.

Transgrid have an option agreement with Ivanhoe Coal regarding the access to and use of their land which includes the need to comply with the terms of their mining lease and will continue to consult with Ivanhoe Coal throughout the duration of the project in accordance with the Community and Stakeholder Engagement Plan (section 5.6 of the EIS).

Transgrid will also monitor the MinView map viewer for mining title changes that may occur but also anticipate that any changes would also be notified to Transgrid via other existing channels, e.g. lease agreements, consultation with directly affected landowners, etc.

5.15. WaterNSW

WaterNSW has reviewed the EIS and comments are addressed in Table 5.9.

Table 5.9. Summary of WaterNSW comments and Transgrid responses

WaterNSW comment	Response
WaterNSW considers that the project poses substantial risks to the Fish River Water Supply Scheme during construction and the following must be considered further and mitigated against: • loading over the pipelines (access tracks and construction compounds) • damage from vibration and ground movement • electrification of the metal pipeline • restrictions to WaterNSW access and egress.	Further assessment of construction activities in proximity to the Fish River Water Supply Scheme pipeline is provided in Appendix E. The pipeline is buried and is made of metal. Loading over the pipeline would occur from various activities. A key risk is loading as a result of a 100-tonne drill rig traversing access tracks that occur over the pipeline, vibration impacts from pipeline, loading and operation of vehicles, bored piling and earthworks. In some places, the depth of cover to the pipeline is known to be shallow where the pipeline crosses proposed access tracks (Access Point 4 off Brays Lane) and at construction compound C1. To address the potential impacts and risks from potential loading over the underground pipeline, new and revised mitigation measures are proposed (mitigation measures T1, NV6, LU2 and LU7).

WaterNSW comment	Response
	The pipeline occurs outside the 30-metre earthing exclusion zone which deems the risk of electrification as negligible. No mitigation measures are required for this risk. Construction activities have the potential to restrict access, egress, and emergency and/or regular maintenance access to the pipeline. Transgrid commits to retain unrestricted access to all of Water NSW assets for emergency maintenance purposes.
The proponent is to include a mitigation measure to minimise vibration emitted from pre-construction minor works, road upgrades, construction, upgrading or decommissioning of the development in the locations closest to the Fish River pipeline.	Mitigation measure LU7 has been revised to specifically include the Fish River Water Supply Scheme pipeline in minimising impacts to utilities. This requires Transgrid to commit to confirming the location of the pipeline, determining the requirements for access, diversion, protection and/ or support to the WaterNSW. Other mitigation measures, such as NV6, relates to buried infrastructure and commits Transgrid to consult with the asset owner to minimise potential vibration impacts. NV6 also includes requirements for vibration monitoring, and pre- and post-construction condition surveys of vibration sensitive receivers that occur within the recommended safe working distances. Operation and decommissioning of the development will occur in accordance with Transgrid's accredited Environmental, Health & Safety and Quality Management Systems. Any non-routine works, including decommissioning, will trigger an environmental assessment which will include stakeholder engagement with WaterNSW should any major works have the potential to impact the pipeline.
To protect the environment and critical infrastructure, the proponent should commit to and include the following general safeguards: (a) Consult with the applicable public authority or service provider where works are undertaken on or in the vicinity of infrastructure or utilities.	Mitigation measure LU7 requires the confirmation the location of utilities and any impacts in consultation and agreement with service providers. The mitigation measure LU7 has been revised to include consultation with asset owners when confirming utility locations and any related impacts. Mitigation measure NV6 also requires consultation with asset owners in relation to vibration impacts on assets.
(b) Repair, or pay the full costs associated with repairing, any public infrastructure that is damaged by the development.	Mitigation measure LU2 commits to the pre-condition surveys of assets, infrastructure and the general condition of land prior to construction to inform the requirements for rectification or rehabilitation. Mitigation measure T3 also outlines the requirement for road dilapidation surveys and the process for rectifying any public road damage caused by the project.
(c) Minimise erosion and control sediment generation. (d) Ensure all land disturbances have appropriate drainage and erosion and sediment controls designed, installed and maintained in accordance with *Best Practice Erosion and Sediment Control* (IECA, 2008), *Managing Urban Stormwater – Soils and Construction Volume 1* (Landcom, 2004), *Managing Urban Stormwater – Soils and Construction Volume 2A Installation of Services* (DECC, 2008) and *Managing Urban Stormwater – Soils and Construction Volume 2C Unsealed Roads* (DECC, 2008), or their latest versions.	Mitigation measure W1 commits to the preparation and implementation of a SWMP as part of the CEMP and is detailed below in this table. The SWMP will describe how mitigation measures W2-W5 will be implemented to ensure erosion and sedimentation impacts are managed.

WaterNSW comment	Response
(e) Within the project footprint, a pre-condition assessment of assets, infrastructure and the general condition of the land at risk of impact during construction within the project footprint must be completed prior to works commencing and on completion of works to inform the requirements for rectification or rehabilitation.	Mitigation measure LU2 commits to pre-condition surveys of assets, infrastructure and the general condition of land during and after construction. Mitigation measure T3 also outlines the requirement for road dilapidation surveys and the process for rectifying any damage caused to public roads by the project.
To protect the Fish River Water Supply Scheme, the proponent should commit to and include the following specific safeguards: a) The Proponent must not impact the WaterNSW Fish River Water Supply Scheme. b) Through ongoing consultation and prior to construction commencing, the proponent must confirm with WaterNSW any specific asset protection requirements for use of access tracks, laydowns or construction compounds in the vicinity of the Fish River Scheme. Details of any specific requirements must be included in the Traffic and Transport Management Plan. c) The Proponent must ensure unobstructed access to all components of the Scheme is maintained for WaterNSW during both the construction and operation. d) The Proponent must ensure that the project works are designed, constructed and operated in such a way that does not impact the environment or restrict WaterNSW from operating and maintaining the water supply scheme (including access to inspection points and scour valves). WaterNSW requests direct consultation regarding construction of the project to ensure our assets are adequately considered and protected. e) Prior to construction commencing, the proponent must enter into an agreement with WaterNSW for access and use of WaterNSW Lot 1 Deposited Plan 567915. f) Unless otherwise agreed with Water NSW, the project must not trigger the maximum allowable limits set within the German Standard DIN 4150 – Part 3 - Structural Vibration Part 3: Effects of vibration in structures, when measured at the Fish River Water Supply Pipeline or another agreed location.	Revised mitigation measures will commit to protecting the Fish River Supply Scheme and are included in Appendix B. As a summary, potential impacts to the WaterNSW Fish River Water Supply Scheme will be reduced through: • management measures implemented as part of the Traffic and Transport Management Plan (mitigation measure T1), Soil and Water Management Plan (mitigation measures W1), Emergency Management Plan (mitigation measures LU7), and Noise and Vibration Management Plan (mitigation measure NV1) • locating the pipeline prior to works commencing through Before-You-Dig Australia, potholing or verification of depths (mitigation measure LU7) • ensuring all site plans include the location of the buried pipeline (mitigation measure LU7) • Pre-and post- construction condition assessments on the asset condition (mitigation measures NV6 and LU2) • assessing the need for protection, such as traffic management, construction equipment selection, construction bench siting and the placement of additional cover, plating or bog mats (mitigation measures NV6 and LU7) • reducing traffic speeds to reduce dynamic loading and vibration impacts and establishing designated crossing points for access tracks (mitigation measure T1) • undertaking monitoring and remedial actions, where relevant (mitigation measures LU2) • reporting incidents to WaterNSW (mitigation measure LU7).
Prior to the commencement of construction activities, the following should be prepared/updated in consultation with WaterNSW: • a SWMP for the construction and operational phases of the development. The plan shall: - have consideration for vegetation clearing, susceptibility to erosion for the works proposed, and include location and details of existing erosion issues and mitigation measures across the project area - provide specific details for the construction/upgrade of the proposed waterway crossings to reduce erosion and sediment risks and subsequent water quality impacts to include a groundwater dewatering management plan where proposed excavation works are anticipated to intercept groundwater including testing of intercepted groundwater to inform discharge requirements and suitable management, i.e. reuse or disposal options for potential contamination	Mitigation measures W1 and W2 respectively commit to the preparation of the following plans prior to construction: • a SWMP (including ESCPs) • Emergency Management Plan related to flood risk. The SWMP would be prepared in accordance with the principles and requirements outlined in: • Managing Urban Stormwater – Soils and Construction, Volume 1 (Landcom, 2004), Volume 2A (DECC, 2008) and Volume 2C (DECC, 2008a) • Best Practice Erosion and Sediment Control (IECA, 2008) • Guidelines for controlled activities on waterfront land (DPE 2022). Mitigation measure W5 requires the preparation and implementation of a groundwater dewatering procedure, which includes development of a groundwater trigger action response plan for events where groundwater inflows are greater than expected.

WaterNSW comment	Response
- include a groundwater Trigger Action Response Plan that will be implemented in the event that groundwater inflows are greater than expected - an Emergency Management Plan including Flood Risk Management Plan highlighting potential impact on water quality during an emergency/ flooding and when relevant authorities shall be notified during a water quality incident, and	
• management and maintenance of stormwater management measures as part of an Operational Environmental Management Plan.	Transgrid's existing operating management and maintenance practices would be applied to any new infrastructure proposed to maintain stormwater assets and watercourse crossings. No changes to mitigation measures W1 and W2 are therefore proposed.

5.16. NSW Department of Climate Change, Energy, the Environment and Water – Water

Feedback from the DCCEEW Water is summarised in Table 5.10.

Table 5.10. Summary of DCCEEW-Water comments and Transgrid responses

DCCEEW Water comment	Response
DCCEEW requests the proponent to review the licensing requirements for the proposed water take (dewatering of stored water) from a first order watercourse to enable construction of a crossing between towers 10D and 11D. If the stored water is only used on the landholding, the applicability of the Maximum Harvestable Rights Dam Capacity (MHRDC) should be considered. Where a license is required for the water take, the proponent will need to demonstrate the ability to obtain sufficient entitlement in the water source by identifying willing sellers or available entitlement to purchase.	Following the exhibition of the EIS, several amendments are proposed to the project as described in section 3.2. One of these amendments includes removing the access track and culvert crossing over the unnamed first order tributary (oxbow) of Coxs River. Dewatering of the proposed waterbody is no longer proposed and a WAL is therefore not required. As described in section 14.4.4.1 of the EIS, the likely water take for the project is expected to be less than 3ML per water year.
DCCEEW requests the proponent to ensure a water access license (WAL) is obtained to account for the maximum predicted water take for construction and operation activities, unless an exemption applies under the Water Management (General) Regulation 2025.	Sections 5.5.1 and 5.5.2 of Technical Report 1 – Water Impact Assessment address the potential interception of groundwater during construction and operation of the project. Groundwater interaction is expected to be minimal, limited to possible extraction during footing construction. Transgrid will assess likely volumes during detailed design and obtain a WAL if required, as described in mitigation measure W5 (refer to Appendix B). Groundwater conditions and expected extraction volumes may vary over the duration of construction. The construction contractor's dewatering procedure will include monitoring of the cumulative amount of water extracted and contain a Trigger Action Response Plan that identifies when a WAL may be needed, and the process that will be followed. In accordance with Clause 19, Schedule 4 of the Water Management (General) Regulation 2025, an exemption from the requirement to obtain a WAL may be available if water take is less than or equal to 3 ML per water year and other criteria are met.

DCCEEW Water comment	Response
	Dewatering and construction activities are unlikely to exceed this threshold (refer Appendix A of Technical Report 1 – Water Impact Assessment). Furthermore, project amendments have removed the need to dewater the unnamed first order tributary (oxbow) of Coxs River (refer section 3.2 and the Amendment Report (Transgrid, 2025a). Water extraction of this water body is not proposed. As such, a WAL is not expected to be required.
DCCEEW requests the proponent to ensure works on waterfront land are in accordance with the Guidelines for Controlled Activities on Waterfront Land (DCCEEW 2025).	Mitigation measure W1 includes the development of a SWMP which would be prepared in accordance with the Guidelines for Controlled Activities on Waterfront Land.

5.17. Endeavour Energy

Endeavour Energy provided feedback regarding the location of their low voltage assets within and adjacent to the project footprint, along with various documents which prescribe standard requirements for activities or encroachments near to their assets. Preliminary information on the location of Endeavour Energy assets was provided in section 3.5.3.2 and shown on Figure 3.6c and 3.6d of the EIS.

As part of consultation conducted during the EIS, Transgrid provided a preliminary design for the proposed crossing of Endeavour Energy's 66kV overhead transmission line Feeder 85Y. The two crossing locations are in Wallerawang between TS10D and TS9D and between TS7C and TS6C (refer Figure 3.6).

Advice received from Endeavour Energy's mains design branch indicated that the design is compliant with Endeavour Energy's standards and notes that outages of Endeavour Energy's Feeder 85Y will be required, as necessary.

As outlined in section 3.5.3.2 of the EIS, the methodology for completing crossings of all utilities, including Endeavour Energy, would be agreed in consultation with the asset owner in line with mitigation measure LU3. Engagement during construction would continue as guided by Transgrid's Community and Stakeholder Engagement Plan.

5.18. Lithgow City Council

Feedback from the Lithgow City Council in the form of proposed conditions of consent are summarised in Table 5.11, noting that DPHI – Planning will determine the conditions of approval for the project.

Table 5.11. Lithgow City Council comments and Transgrid responses

Lithgow City Council comment	Response
The development is proposed to be located in proximity to significant world, state and local heritage items. Council requests that conditions of consent include management and monitoring strategies to ensure the protection of heritage items throughout the construction stage.	Details of the heritage items located within an adjacent to the project footprint are detailed in section 3.3 of Technical Report 6 – Historic Heritage Assessment and Statement of Heritage Impact Report and the impacts on these items are outlined in section 4. There are no Commonwealth or National heritage listed places within the project footprint. The Greater Blue Mountains World Heritage Area is located approximately 10 km to the north east of the project footprint. Construction and operational activities of the project, as described in Chapter 3 of the EIS, will not impact on the world heritage area. While impacts on historic heritage items are considered inconsequential, a Historic Heritage Management Plan (mitigation measure HH1) will be prepared in consultation with Council, DPHI – Planning and Heritage NSW and would include the following: • An unanticipated finds protocol and heritage induction/toolbox requirements. • The location and curtilage extents of Wallerawang Rail Bridges, St. John the Evangelist Church and the Old Wallerawang School House on mapping. This includes details of the exclusion zone over a portion of the Old Wallerawang School House (LEP #I113) curtilage to the south-west of the project footprint. • Requirements for inductions and toolbox talks to include a summary of the significance of heritage items, legislative responsibilities and appropriate mitigation measures. Implementation of mitigation measure NV6 will also ensure the vibration impacts to any nearby heritage items (in particular the Wallerawang Rail Bridges) are minimised, including pre-construction surveys of heritage items, adjustment of construction methods and vibration monitoring.
During construction works all measures are taken to eliminate/suppress any dust nuisance emanating from the project area, such as onsite sprinkler and/or water truck being available at all times and trucks to be covered with a tarp or other material that would prevent dust emissions when leaving the vicinity.	Mitigation measure AQ1 proposes the preparation of a dust control protocol which will include confirmation of dust suppression measures to be used (such as water sprays, water extension agents, soil stabilising polymers or other media) and to provide an adequate water supply on site. AQ1 also specifies that loads of spoil, earthwork materials, waste and other loose materials will be covered when leaving the site to prevent the escape of materials during transport.
If closure of any Council public road is required for vehicle transportation or access, the applicant must lodge an Application for Temporary Road/Footpath Closing Permit with Council.	Mitigation measure T1 proposes the development of a Traffic and Transport Management Plan (TTMP) prepared in consultation with relevant stakeholders (including Lithgow City Council). The TTMP will include identification of the need for road occupancy licenses and road/footpath closures (partial/full) and associated permits from relevant road owners (including Lithgow City Council).

Lithgow City Council comment	Response
Brays Lane contains two bridges. If it is intended to use these bridges as the primary heavy vehicle access for the development, it is recommended that a qualified structural engineer certifies the safety of the bridges prior to use given that prefabricated elements to be delivered to the site include 180-tonne transformers and 60-tonne control rooms.	The project does not involve the delivery of any transformer or control rooms. As a result of ground conditions within the project footprint, a 100-tonne drill rig will be required. At this stage of construction planning, the transport route for the drill rig would use Brays Lane for the transmission structure sites located north of Brays Lane. Using Brays Lane for access will require vehicles to cross at bridge crossings with Coxs River and the Centennial Coal conveyor. The construction contractor will engage a suitably qualified structural engineer to assess the suitability of the bridges once heavy equipment loads are determined for the selected equipment. Where restrictions are identified, use of alternate routes would be to the north via Access Points 1, 1a and 2 to access the project footprint (refer to Figure 3.7 in the EIS). A new mitigation measure T5, has been developed to include structural integrity assessments of existing bridges on Bray's Lane by a suitably qualified structural engineer. The measure also outlines the process for identifying alternative routes where restrictions are put in place.
Traffic control will also be required for oversized vehicles on Brays Lane (approximate 5m – 6m in width).	This comment is noted. The movement of over size and over mass (OSOM) vehicles/ equipment to and from the project site will be conducted in accordance with all relevant legislation, licenses and permits acquired from the relevant road authorities. Any traffic control needed will be included in the Traffic and Transport Management Plan (TTMP) as required by mitigation measure T1.
The existing pavement of Brays Lane and Karawatha Drive is not designed for heavy vehicle use. If this pavement is damaged by vehicle usage during construction of the development, the developer will be required to promptly report such damage to Council and make good such damage at its cost.	Mitigation measure T3 requires road dilapidation surveys of Brays Lane and Karawatha Drive and condition monitoring to be carried out during construction and rectification during and/or following construction to the satisfaction of the road owner.
Construction noise should comply with the 'Noise Control Guidelines for Construction Noise Standards'. Hours of operation should be limited to 7am and 6pm Monday to Friday and 8am and 1pm Saturdays. No heavy machinery work or usage should be permitted on Sundays or Public Holidays.	The assessment presented in Technical Report 10 – Noise and Vibration Impact Assessment was prepared to meet the requirements of the project SEARs and was undertaken in accordance with the Interim Construction Noise Guideline (ICNG) (DECC, 2009). Section 2.2 of the ICNG notes that in some cases, construction work would need to occur outside the standard construction hours and the project's justification for work outside standard hours is detailed in sections 3.5.2 and 8.2.2.4 of the EIS and outlined below. Transgrid is proposing project construction hours which includes the ICNG standard construction hours and additional working hours on weekdays and weekends. In addition to the ICNG standard construction hours, the proposed working hours include: • Weekdays – 6pm to 7pm • Saturday – 7am to 8am and 1pm to 6pm • Sunday and public holidays – 7am to 6pm. For the periods 6pm to 7pm weekdays, the works would only comprise activities within the construction compounds, mainly workers returning at the end of the day. Mitigation measures such as parking vehicles away from the nearest sensitive receivers and switching vehicles off when not in use will be included in the projects Construction Noise and Vibration Management Plan.

Lithgow City Council comment	Response
	Between 7am to 8am on Saturdays and Sundays, only works which do not exceed the Construction Noise Management Levels are proposed. This acknowledges the increased sensitivity to noise impacts during these periods while still allowing some construction to occur. The justification for proposing working hours additional to the ICNG standard construction hours is the need to: • undertake works near live transmission lines and within specified network outage windows to maintain worker safety and avoid network security and reliability issues • improve the overall efficiency of the works, considering the need to schedule and undertake works on and near live transmission lines only when allowed by the network operator and within strict time periods. Mitigation measure NV1 commits to the implementation of a Construction Vibration Noise Management Plan (CVNMP) as part of the projects CEMP. The CVNMP will include measures such as an updated noise and vibration assessment to confirm sensitive receivers and identify appropriate noise management measures included in mitigation measure NV2. Where the predicted or measured noise level is greater than the construction noise management levels, Transgrid would apply all feasible and reasonable work practices to meet the noise affected level and inform all potentially impacted residents of the nature of works to be carried out, the expected noise levels and duration as well as contact details for the site manager. The Construction Noise and Vibration Strategy (CNVS) (Transport for NSW (2019a)) outlines standard mitigation measures (source mitigation and path mitigation measures) which would apply to the project where reasonable and feasible. Residual noise impacts would be managed in accordance with the CNVS where additional mitigation measures would apply once all reasonable and feasible mitigation measures have been implemented. Project specific management and mitigation measures (refer to Appendix B) would also be reviewed and refined during the design development process. To assist with managing construction noise impacts outside of the ICNG standard working hours, these activities would be managed by mitigation measures NV1, NV2, NV3 and NV5 and require: • consideration of the hierarchy of time periods for works outside the ICNG recommended standard hours and a strong justification for work outside of these hours • extensive community consultation including with affected landowners • development of an out of hours work (OOHW) protocol to be included in the Construction Noise and Vibration Management Plan • development of site or activity specific Construction Noise and Vibration Impact Statements (CNVIS) in accordance with the CNVS. Further information on construction noise mitigation measures and their expected effectiveness is provided in the response to NSW EPA (see section 5.10 and Appendix F).

Lithgow City Council comment	Response
Council has adopted a section 7.12 development contributions plan. The Plan requires payment of 1% of the estimated development cost, for development valued at over $200,000. The developer is required to pay to Council appropriate development contributions, in line with Council's section 7.12 development contributions plan or the Department's relevant policy, whichever prevails.	As the project is seeking CSSI approval, no contributions are payable to Council in line with the section 7.12 development contributions plan.

5.19. Subsidence Advisory

Summary of submission

Subsidence Advisory commented that the project site is not within a declared mine subsidence district.

Subsidence Advisory also noted that the Mine Subsidence Assessment by SMEC indicates that additional investigations are recommended in the area of known underground mining in order to accurately quantify the subsidence risk to proposed transmission infrastructure.

Subsidence Advisory also recommends that this additional geotechnical investigation and reporting be completed and incorporated into the design of transmission structures.

Where works are proposed in a current mining lease area, the lease holder should be consulted in relation to the potential impact of future mining. Future mining impacts may need to be considered as part of the design of transmission structures.

Response

The feedback from Subsidence Advisory is noted.

Section 4.1.5 of Technical Report 9 – Hazards and Risk Assessment refers to the geotechnical investigation report undertaken by SMEC (2024) and indicates that during construction the project would include piling activities that may reach a maximum depth of up to 18 m below ground level. Proposed works in the vicinity of TS23D to TS25D are underlain by historical mine workings and have the potential to encounter the workings. The transmission structure 22D is outside of the zone of influence of underground workings but is located next to ormer open cut working of the Lamberts Gully colliery and is about 20 m from the mining highwall (SMEC, 2024). However, the risk of encountering the workings and risk of subsidence is considered to be very low (SMEC, 2024). The risk of subsidence impacts to the proposed TS22D, TS24D and TS25D located next to former open cut working of the Lamberts Gully colliery is considered negligible (SMEC, 2024). Transmission structure 23D is located about 5 m from limits of former open cut working. There is a low risk that this structure is partially founded on deep fill associated with backfill from the former open cut workings (SMEC, 2024).

Despite the risk of subsidence being considered very low, Transgrid has undertaken further geotechnical investigations (Douglas Partners, 2025). The results of the additional geotechnical studies are being incorporated into the design of structure footings and foundations, transmission tower types and construction methodology to address identified voids.

During the operational phase, ongoing maintenance and inspection will also be undertaken to confirm the presence of any mine subsidence within the vicinity of the affected transmission structures.

Transgrid will also maintain contact with lease holders in relation to the potential for future mining impact in accordance with the Community and Stakeholder Engagement Plan (refer section 5.6.2 of the EIS). Additional information regarding consultation with mining lease holders is provided in section 5.14 in response to DPIRD – NSW Resources.

5.20. NSW Health – Nepean Blue Mountains Local Health District

Submission

Nepean Blue Mountains Local Health District (NBMLHD) have provided feedback for the project. NBMLHD agrees with the recommended mitigation measures to reduce construction noise and vibration as presented in Technical Report 10 – Noise and Vibration Impact Assessment. NBMLHD also agrees with the recommended mitigation measures to reduce contamination risks.

NBMLHD recommends the following assessments to be undertaken to further minimise the impacts of the project:

- A detailed site investigation to determine land contamination risk and if a remediation action plan is required prior to construction. It is noted in the technical report that there is potential for land contamination of the site due to the varying land uses within the site. NBMLHD also noted that there are six sites within the project footprint or in close proximity to the footprint that are listed as contaminated sites notified to the NSW EPA.
- An air quality assessment to be included as part of the Planning Proposal to determine the potential effects of air quality on existing and future community. NBMHLD noted that the scoping report did not address human health impacts from air pollution due to construction works and traffic generation.

Response

Technical Report 11 – Contamination Assessment included a preliminary site investigation (PSI) conducted in accordance with industry guidelines and is summarised in Chapter 16 of the EIS. A detailed site investigation (DSI) is undertaken when outcomes of a PSI indicate that there is likelihood of contamination at a subject site. The PSI adopted a precautionary approach based on desktop and publicly available information. A DSI is not currently proposed for the project as effective mitigation measures, detailed in Appendix B, are provided to manage potential contamination risks prior to and during construction.

Section 16.3.6.1 and Table 16.2 of the EIS summarises the six contaminated sites notified to the NSW EPA. Four of these sites occurring within or directly adjacent the project footprint has been assessed by NSW EPA as not requiring regulation under the Contamination Land Management Act. The other contaminated sites are between 229 m to 546 m from the project footprint and would have a low risk of impact to the project due to their separation distance.

An air quality impact assessment has been undertaken and is detailed in Chapter 19 of the EIS and to address the updated SEARs dated 22 May 2025. Potential air quality impacts of the project, including dust generation and gaseous emissions, are detailed in section 19.4 of the EIS. Mitigation measures to address these impacts are detailed in Appendix B.

5.21. NSW Department of Planning, Housing and Infrastructure – Planning

DPHI – Planning division sought additional information and clarifications about the project as outlined in Table 5.12. These have been addressed in this document and the Amendment Report (Transgrid, 2025a), as referenced below.

Table 5.12. DPHI – Planning request for information and clarifications

Request for information or clarification	Response / where addressed
Water	
Consider available modelling data to characterise the existing flooding conditions.	As outlined in section 14.3.4 of the EIS, a review of existing flood information was undertaken to determine the existing flooding conditions. The Lithgow City Council LEP flood prone land mapping indicates the project footprint is located outside of the Council's flood planning area. No publicly available regional flood studies are available. Literature searches for flood studies undertaken for nearby projects, such as the Wallerawang BESS (HARC 2022), do not contain published information covering the project footprint. As limited information was available to characterise existing flooding conditions, the EIS relied on historical streamflow data from the nearest WaterNSW Coxs River flow gauge. The detailed design of the project is undertaking hydrology and flooding assessments in the study area. The assessment will model the 1% AEP scenario to determine the spatial extent of flooding, inundation depths and flow velocities. Preliminary results show flooding levels from Coxs River and Pipers Flat Creek of depths exceeding 1 m at transmission structures 2C, 3C to 9D and 11D. Transmission structures 1C, 5C and 12D may experience flooding depths less than 1 m). The flooding depths are consistent with the assessment provided in section 14.3.4 of the EIS. Transgrid will consult with DPHI – Planning on the final outcomes of the assessment.
Detail the potential impact of flooding on the construction of the project and management approaches.	The assessment in section 14.3.4 of the EIS and section 4.4 in Technical Report 1 – Water Impact Assessment outlines that recorded flood levels for the Coxs River are generally within the confines of the bank at the nearest WaterNSW flow gauge. This suggests that there is limited lateral connectivity to the floodplain, given the high channel capacity. In the event of flooding, inundation of the floodplain is anticipated to be limited to locations where channel constraints or changes in channel geometry reduce channel capacity, resulting in overbank flows. Inundation depths on the Coxs River floodplain could be in the order of 1 to 2 m during rare events (e.g. the 1 in 100 AEP event) but would be highly varied and subject to location. As described above, the preliminary results of hydrological flood modelling are consistent with the findings of the EIS and the Water Impact Assessment. Section 14.4.1.4 of the EIS outlines the potential impact of flooding on the project. The majority of the footprint is unlikely to be affected by flooding due to elevated topography. The potential for flooding impacts would be confined to low lying areas within the Coxs River. This may include construction areas, laydown areas and access tracks where stream flows overtop the banks of the Coxs River within the project footprint. Refer to the above response that outlines the preliminary flooding depths around transmission structure locations near Coxs River and Pipers Flat Creek. To reduce the potential impacts of flooding on the project, the layout of construction areas would be prepared with consideration of existing overland flow paths, avoiding known flood liable land and minimising the duration of works required in flood liable areas, where possible.

Request for information or clarification	Response / where addressed
	As outlined in mitigation measure W2, to manage potential flooding impacts, a Flood Risk Management Plan (FRMP) would be developed as part of the Emergency Management Plan. The FRMP would include a trigger action response plan to outline how and when actions will be undertaken in areas of the project footprint at risk of flooding. Mitigation measure W2 also commits Transgrid to include measures in the FRMP to minimise the risk of flood-related impacts, such as: • induction of workers and visitors onto the Plan • workers will not commence or continue in construction areas that are at risk of flooding • people, machinery and materials will be removed from construction areas prior to any flood event that is predicted to impact the construction area.
Assess the impact of construction benches/construction compounds within the vegetation riparian zones (VRZs) on surface water (noting that it appears only transmission structures within vegetation riparian zones have been assessed).	Sections 14.4.1.2 and 14.4.1.3 of the EIS includes an assessment of the proposed transmission structures and construction benches within riparian zones and the potential impact on hydrology and stream flow. No construction compounds occur within riparian zones, however, construction benches at TS2C to TS10D are within riparian zones. Section 14.4.1.3 concludes that no direct impacts from construction benches would occur to the hydrological regime as temporary clean water diversions would return overland flows to the same catchment, downstream of the construction bench/ compound area. Another potential impact of construction benches includes accidental spills that may occur on surface water. The management of this risk is dealt in section 15.4.2.3 of the EIS and through mitigation measure SC5. Sections 14.4.1.2 and 14.4.1.5 of the EIS indicate the potential impacts on water quality from earthworks and soil disturbance associated with establishing construction benches. Potential impacts would include erosion and sedimentation of nearby waterways, particularly following rainfall events. The potential impacts would be managed through standard erosion and sediment control measures in accordance with Managing Urban Stormwater: Soil and Construction (Landcom, 2004) and with consideration to Controlled activities - Guidelines for instream works on waterfront land (DPE 2022c). Measures would be implemented through a SWMP as part of mitigation measure W1 and include staged location -specific ESCPs such that impacts on surface water quality from potential erosion and sediment would be minor.
Detail the impacts of groundwater interception during the excavation of footing foundations for TS10D, TS9D, TS8C, TS7C, TS6C, TS5C, TS4C, TS3C, TS2C, and TS1C and how these impacts would be managed/mitigated.	Impacts of groundwater interception during the excavation of footing foundations for TS10D, TS9D, TS8C, TS7C, TS6C, TS5C, TS4C, TS3C, TS2C, and TS1C were assessed in section 5.5.1 of Technical Report 1 – Water Impact Assessment and section 14.4.1.6 of the EIS. The potential rate of groundwater inflow into excavations has been conservatively estimated (refer Appendix A of Technical Report 1) to be approximately less than five cubic metres per day for each transmission structure. The actual quantity of groundwater inflow will depend on the construction methods used and the duration of construction works. The potential impacts of groundwater interception during construction of the project were assessed against the Level 1 Minimal Impact Considerations of the NSW Aquifer Interference Policy (NSW AIP) in section 5.5.1 of Technical Report 1 – Water Impact Assessment. The construction of the project is not predicted to result in changes in groundwater levels at surrounding bores, groundwater dependent ecosystems or culturally significant sites, or changes in groundwater quality. Therefore, construction of the project is within the Level 1 Minimal Impact Considerations in the NSW AIP. A groundwater dewatering procedure will be prepared and implemented as part of the SWMP as required by mitigation measure W5 (see Appendix B). The procedure will define measures for the appropriate management of extracted groundwater, including: • reviewing groundwater volumes, such as inflows and extraction • identifying licencing requirements

Request for information or clarification	Response / where addressed
	• water quality testing of intercepted groundwater to inform treatment (if required), disposal and/or discharge requirements • a groundwater trigger action response plan that will be implemented in the event that groundwater inflows are greater than expected.
Biodiversity	
Address inconsistencies in information presented in the BDAR and main body of the EIS. The BDAR and EIS present different areas of impact for threatened fauna habitat, and different species credit requirements.	The information presented in Technical Report 2 – Biodiversity Development Assessment Report was correct with inconsistencies identified in the EIS being editorial errors. These inconsistencies include: • Table 7.2 in the EIS – the area of zone 12 Western Blue Mountains Scribbly Gum Forest was 1.65 ha, when it should be 1.64 ha per the BDAR; area of zone 13 in the EIS was 1.36 ha but should be 1.35 ha. • Table 7.23 Impacts that require an offset – species credits in the EIS have different values for loss of habitat/individuals and the number of species credits required for the Gang-gang cockatoo, Large-eared Pied Bat, Barking Owl, and Powerful Owl. A revised Biodiversity Development Assessment Report (see Appendix C) has been updated to address the amendments proposed to the project footprint and the agency submission from CPHR received on the EIS, which includes updated areas of impact for threatened fauna habitat and species credit requirements.
Noise and vibration	
Provide specific mitigation measures that demonstrate commitments to minimise impacts associated with construction noise, particularly for those receivers that are highly noise affected.	Specific mitigation measures have been discussed in the response to the NSW Environment Protection Authority submission located in section 5.10 and Appendix F. Appendix B of this Amendment Report (Transgrid, 2025a) provides the revised mitigation measures for noise and vibration.
Highlight the OOHW periods to reflect typical evening and nighttime noise periods (i.e. evening works being 6pm to 10pm and nighttime works occurring between 10pm and 7am). Confirm when and where nighttime period works will be undertaken and provide mitigation measures for sleep disturbance where required.	As outlined in section 3.5.2 of the EIS, the project would generally be undertaken during the proposed project working hours (see Figure 3.8 in the EIS). These working hours only include a one-hour period defined as the OOHW Period 2 Night, with this being between 7am and 8am on a Sunday morning. Works during this period would be low impact noise activities where the CNMLs for this period would not be exceeded. The project may require works occurring during the OOHW Period 2 Night. While not currently planned, works may occur during this period if an outage is recalled due to network constraints elsewhere on the transmission network. This is further outlined in the response to the NSW Environment Protection Authority's submission in section 5.10. Impacts during the OOHW Period 2 Night period would affect receivers located near active construction if an outage is recalled. The location of affected receivers includes Duncan Street and Wolgan Road, Lidsdale; Karawatha Drive, Wallerawang, and Brays Lane, Wallerawang. These locations are shown in Figure 8.6 of the EIS. Mitigation measure NV5 requires the preparation of a project-specific OOHW protocol which would include the process for considering, approving and managing any OOHW. The protocol will include consideration of mitigation measures NV2 (source controls) and NV3 (administrative controls), such as noise screens, offset distances and planning noise-intensive work to less sensitive construction hours. An example of noise mitigation controls that would be implemented by the construction contractor and their effectiveness in reducing construction noise levels is provided in Appendix F. Additional mitigation measures, outlined in section 8.5.2.1 of the EIS, would be implemented for any sleep disturbance impacts. Additional mitigation measures include notifications, verification monitoring, phone calls to receivers, respite offers, duration respite, specific notifications and alternative accommodation. These additional mitigation measures may be amended following consultation with affected receivers, and this will be captured within

<table>
<tr><th>Request for information or clarification</th><th>Response / where addressed</th></tr>
<tr><td></td><td>the construction noise and vibration Management Plan (see Table 8.17 and table 8.18 of the EIS).</td></tr>
<tr><td>Present the total number of residential sensitive receivers (total of both noise catchments) impacted by 'highly intrusive noise' and those that are 'highly noise affected' for each of the nine construction activity scenarios.</td><td>The below table outlines the total number of residential sensitive receivers that are assessed to be highly noise affected and subject to highly intrusive noise for each of the construction scenarios. These are presented in Tables 8.10, 8.11 and 8.12 in the EIS.
The below table includes a breakdown of the receivers subject to highly intrusive noise during both the day and evening/nighttime periods.
<table>
<tr><th>Scenario</th><th>Highly noise affected</th><th>Highly intrusive noise – day</th><th>Highly intrusive noise – night and evening</th></tr>
<tr><td>Site establishment works (CS01)</td><td>0</td><td>3</td><td>n/a</td></tr>
<tr><td>Construction compounds (CS02)</td><td>0</td><td>0</td><td>0</td></tr>
<tr><td>Access track upgrades (CS03)</td><td>5</td><td>17</td><td>n/a</td></tr>
<tr><td>Vegetation clearing (CS04)</td><td>5</td><td>21</td><td>n/a</td></tr>
<tr><td>Earthworks & civil works (CS05)</td><td>0</td><td>8</td><td>n/a</td></tr>
<tr><td>Structure footing construction (bored piling) (CS06b)*</td><td>0</td><td>7</td><td>n/a</td></tr>
<tr><td>Structure assembly and erection (CS07)</td><td>0</td><td>2</td><td>7</td></tr>
<tr><td>Stringing transmission line (CS08)</td><td>0</td><td>4</td><td>11</td></tr>
<tr><td>Demobilisation/ rehabilitation (CS09)</td><td>1</td><td>14</td><td>n/a</td></tr>
</table>
Notes: * Construction scenario CS06 (structure footing construction – impact piling) – impact piling no longer required and not considered further. Discussed further in section 5.10 and the project's Amendment Report (Transgrid, 2025a).
n/a – these scenarios will not be undertaken during the nighttime period (OOHW Period 2 Night)</td></tr>
<tr><td>Outline the maximum consecutive period (number of nights) of nighttime noise /sleep disturbance at the affected sensitive residential receivers.</td><td>Works during the OOHW Period 2 Night (excluding the proposed low impact works between 7am and 8am Sunday) are not planned as part of the project. However, works during OOHW Period 2 Night may occur if a planned outage is recalled by the network operator. Transgrid is unable to predict whether and when a recall might occur and these recalls may happen at short notice. When an outage recall occurs, the construction work currently in progress must be completed within a designated timeframe to restore power to the transmission line. This timeframe is confirmed at the time of the recall. Where night works are necessary due to a recall, Transgrid will contact affected receivers as soon as possible to provide mitigations previously described.
Outage recall periods are not expected to exceed 72 hours. Therefore, predicted exceedances of evening and nighttime construction noise management levels during an outage recall would be typically limited to three consecutive nights, depending on the timing specified by the network operator.</td></tr>
</table>

Request for information or clarification	Response / where addressed
	During the 20-month construction period, an individual receiver may be affected by more than one outage recall, although these occurrences are expected to be infrequent. Due to the scheduling of planned outages across the construction program, there will be intervals of respite between outage recalls. Potential noise impacts during OOHW Period 2 Night would depend on the work location along the easement and proximity to sensitive receivers. Where worst case impacts are predicted to be the greatest, i.e. in the vicinity of Duncan Street, Lidsdale, preliminary construction programming has identified that works are likely to occur outside the peak demand periods of summer and winter. This means that the risk of a recall is lower and therefore, the likelihood of works being required during an outage recall at night are lower. As noted above, outage recalls cannot be reliably predicted, however overall, they are expected to occur infrequently, if at all.
Exceedances of corona noise levels are identified at nine additional receivers compared to the existing situation. Provide anticipated noise levels at RES0863 (noting that the remaining eight receivers can be identified on the noise contour map in Figure 6.11).	Figure 6.11 from the EIS has been updated to include labelling of RES0863. This is presented as Figure 5.4 in this Submissions Report and shows the anticipated noise levels at receiver RES0863 as well as all other receivers.
Outline the change, if any, in corona noise levels at the residential sensitive receivers already experiencing corona noise.	The change in corona noise levels is described in section 8.4.2 of the EIS. The modelling suggests that of the 14 sensitive receivers that could already be experiencing potential exceedances of the assessment criterion for light rain conditions, nine receivers could be subject to an increase in corona noise of around 3 dBA as a result of the project.
Visual	
Provide specific mitigation measures that provide clear commitments to minimise visual impacts on sensitive receivers and minimise/manage impacts of night lighting.	Night lighting will only be required during the construction phase of the project. No permanent night lighting is proposed for the operation of the project. To manage the impacts of lighting on nearby sensitive receivers, mitigation measure LV4 has been updated to provide the key principles to be considered in the design and operation of outdoor lighting during construction. The following mitigation measures proposed in the EIS would assist in minimising the visual impacts on sensitive receivers: • mitigation measure LV1 – minimising the removal of trees and vegetation • mitigation measure LV2 – minimising the removal of trees for access track construction • mitigation measure LV3 – investigating planting of screening vegetation to mitigate impacts on viewpoint 06 in consultation with the affected landowners • mitigation measure B01 – retaining vegetation and trees, where possible • mitigation measure B06 – establishing tree protection zones and no-go zones in accordance with the requirements of Australian Standard 4970-2009 for the Protection of Trees on Development Sites • mitigation measure B11 – rehabilitation of cleared vegetated areas. To minimise night lighting impacts, measures such as consideration of light spill when setting out work areas, choosing of appropriate lighting types, and turning lights off when not in use would be implemented.
Confirm that VP01 is easement affected and include details of proposed landowner compensation.	VP01 is confirmed as easement affected with a property agreement in place between the landowner and Transgrid. Any details regarding compensation are confidential between the two parties.

Request for information or clarification	Response / where addressed
Confirm the conclusion of 'low' visual impact to VP04 is representative of **all** 72 residences considered.	Yes, the low visual impact rating for VP04 represents all residences in this area. The viewpoint assessed was from one of the closest houses to the transmission line (about 675 m away) and therefore aims to represent the 'worst case' scenario. All residences have low scenic quality contributing to the rating of 'low'.
Land Use and Agriculture	
Include Land and Soil Capability mitigation measures within the mitigation measures table.	Three additional mitigation measures (LU8, LU9, and LU10) have been included in Appendix B to capture the measures discussed in section 6.1.3 of Technical Report 4 – Land Use and Agriculture Assessment.
Detail the impact on the identified Crown waterway.	Impacts on the Crown waterway located within the project footprint are detailed in section 13.3.6 of the EIS. The section of the mapped Crown waterway within the project footprint is a former alignment of the Coxs River with no current physical watercourse present. The area mapped as the Crown waterway is currently grassland. It is located in the existing easement and is currently subject to Transgrid's operational and maintenance activities such as vegetation maintenance. During construction, some clearance of the grassland would occur for a new access track and new watercourse crossing over an ephemeral drainage line that drains to Coxs River. No construction benches are located or overlap with the Crown waterway. The position of the new access track and new watercourse crossing have been adjusted, as described in section 2.2 of the Amendment Report (Transgrid, 2025a). These items are located north of the Crown waterway and therefore would not result in any impacts. The impact on the Crown waterway from the operation of the project would not differ to the current Transgrid activities for maintaining the operational easement. Refer to section 3.6 of the EIS for further details.
Detail the outcomes of consultation with Warrabinga-Wiradjuri Native Title Claimants regarding the active Native Title Claim.	As outlined in section 13.4.2.5 of the EIS, Transgrid undertook consultation with the Warrabinga-Wiradjuri Native Title Claimants in accordance with Section 24KA of the *Native Title Act 1993*. This consultation was undertaken in July 2024 with a response received in August 2024. This response sought clarifications with regards to the following items: • confirmation that development consent is required for the project • extent of major work planned. Transgrid provided responses to these queries in August 2024. No further queries were received from the native title claimants. The consultation, consistent with Section 24KA of the Native Title Act, is therefore considered complete. Transgrid has considered the requirements of the Act and has met its requirements. Should the claim be determined in the future, Transgrid may need to re-engage with the claimants.
Transgrid to provide map(s) showing the Fish River Water Supply Scheme Infrastructure and any other WaterNSW infrastructure within or adjacent the project footprint.	Figure 3.6 in the EIS and information provided in Appendix E shows the WaterNSW Fish River Water Supply Scheme pipeline in the vicinity of the project footprint. There is also a reservoir and its associated infrastructure south of TS15D, however, this will not be affected by works. Detailed figures showing the WaterNSW Fish River Water Supply Scheme pipeline is provided in Appendix E .
Contamination	
Ensure *all* mitigation measures for management of Contaminated Lands are included in the mitigation measures table.	Mitigation measures SC1 to SC7 listed in Table 16.4 of the EIS capture all the key risks to contaminated lands and the management approaches described in sections 16.4.1 and 16.4.2 of the EIS. All of these mitigation measures are also included in Appendix B of this Submissions Report.

Request for information or clarification	Response / where addressed
Traffic	
Clarify the maximum peak hour vehicle movements for the project footprint vs the peak hour vehicle movements per access point.	As outlined in section 3.2, since exhibition of the EIS a review of construction vehicle movements has been undertaken resulting in changes. The revised traffic movements and traffic distribution are outlined in the revised Traffic and Transport Assessment (refer to Appendix D) and the Amendment Report (Transgrid, 2025a).
Telecommunications	
Provide information on the types of rectification measures that would be implemented if radio interference effects are reported during project operations.	Where radio interference is reported within 12 months of operation, the following rectification measures would be considered and discussed with the relevant landowners, including farmers and neighbouring mining operations: • signal boosting equipment • antenna upgrades. Mitigation measure HR1 has been updated (see Appendix B) to include the option of antenna upgrades as a potential rectification measure.
Provide modelled results of Scenario 3 identified in the telecommunications assessment methodology (which is not included in Table 4-3 of Technical Report 9 – Hazards and Risk Assessment).	The results from Scenario 3 were not used since the cumulative impact of radio noise at the line crossing does not provide distinct results from the parallel section. Scenario 4 results were used as a conservative approach in assessing the extent of potential radio frequency interference at TS14A to TS13D crossover, in which both circuits are modelled at the minimum conductor-to-ground distances.
Other items	
Confirm the operational project footprint in hectares to address inconsistencies (EIS refers to 86.5 ha, 86.6 ha and 86.9 ha).	The area of the project footprint as shown in the EIS is 86.5 hectares. The mention of 86.9 hectares and 86.6 hectares were made in error and a result of rounding of values, respectively. The operational footprint, which includes the easement area and access track area (where the access track is not in the easement) is about 54.8 hectares, with about 33.1 hectares of this area already positioned within an existing Transgrid easement as mentioned in section 13.4.1 of the EIS. Since the exhibition of the EIS, the project footprint has been revised to include project amendments, as outlined in section 3.2 and assessed in detail in the Amendment Report (Transgrid, 2025a) and the revised BDAR. The revised project footprint is 90.41 hectares.

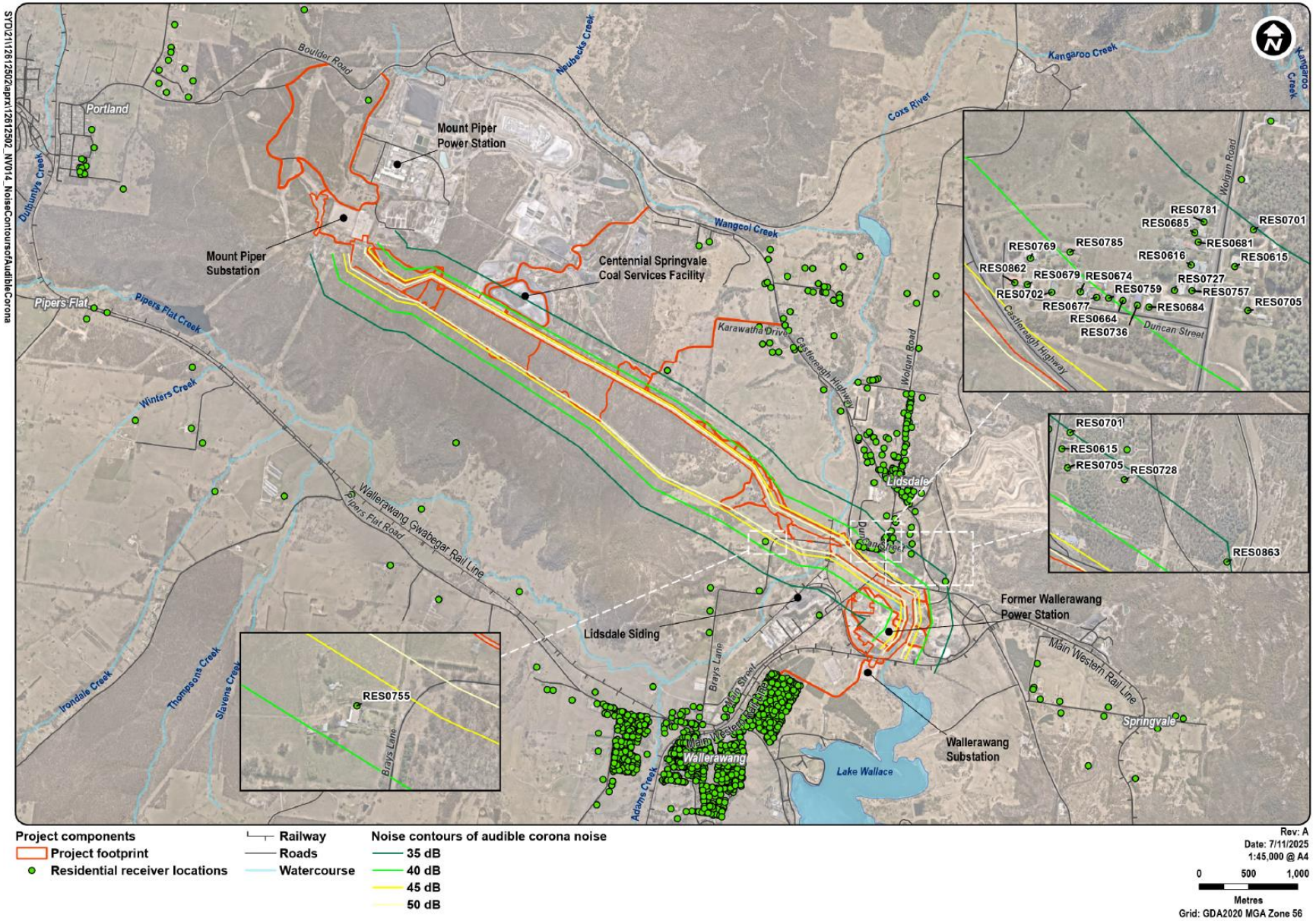

Figure 5.4. Updated Figure 6.11 from EIS – Noise contours of audible corona noise in L50 conditions

6. Conclusion

This section provides a synthesis of the findings of the Submissions Report and an updated justification and evaluation of the project.

The EIS was placed on public exhibition to provide the community, organisations and public authorities with an opportunity to respond to the project. A total of 70 submissions, including from Government agencies, community organisations and individuals were received and have been responded to in this report. As a result of this feedback, some changes have been made to the recommended mitigation measures and the revised measures are included in Appendix B.

A number of changes to the project have been made in response to stakeholder and landowner consultation, ongoing field investigations and design development as well as further construction planning activities with the contractor. These are assessed in a separate Amendment Report (Transgrid, 2025a) and will result in reduced environmental impacts. Updated assessments for biodiversity and traffic are included in Appendix C and Appendix D of this report respectively.

With consideration of the submissions and project amendments, the justification for the project remains unchanged from the EIS. The project is essential to NSW for economic, social, and environmental reasons and will help deliver long-term benefits to the National Electricity Market and support the transition to a greater mix of low-emission, renewable energy sources. It is crucial to reliably transfer power from the CWO REZ to the Greater Sydney region. The project is underpinned by a number of NSW Government energy policies and strategies and will assist in delivery of Australia's greenhouse gas emission targets.

The project would have the following key benefits:

- The project would facilitate greater access to reliable and affordable electricity for the people of NSW by providing additional capacity from renewable sources in the CWO REZ to key demand centres.
- The project would enable more renewable energy generation to enter the market, supporting Australia's emissions reduction targets.
- The project would create a peak workforce of about 150 workers, with an average workforce of about 60 workers depending on the stage of construction.
- The project would contribute $9.6 million to economic activity in regional NSW, generating specific benefits for the Lithgow LGA.

The project has been developed following a robust and iterative process that has involved substantial options analysis, design, environmental assessment, and stakeholder engagement. Where feasible and reasonable, the project has aimed to avoid and minimise biophysical, social and economic impacts. On balance, it is considered that the strategic need and benefits of the project outweigh the mitigated project impacts and, therefore, the project is justified and would be in the public interest.

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Appendix A Submissions register

DPHI ID	Type	Name	Section of this report where issues addressed
SE-95121460	Community organisation	Save Our Surroundings Swan Hill	Section 4.4.2
SE-95119222	Community organisation	Save Our Surroundings Redbank Plains	Section 4.4.2
SE-95119208	Community organisation	Save Our Surroundings Lancefield	Sections 4.3.3, 4.4.2
SE-95112713	Community organisation	Save Our Surroundings Hay	Section 4.3.1.1
SE-95111212	Community organisation	Save Our Surroundings Murrumbidgee	Sections 4.3.7, 4.4.2
SE-95108975	Community organisation	Save Our Surroundings Riverina	Sections 4.3.1.1, 4.3.7, 4.4.3
SE-94857480	Community organisation	Rainforest Reserves Australia	Sections 4.1.1, 4.1.5, 4.1.2, 4.2.1, 4.2.3, 4.3.1.1, 4.3.1.2, 4.3.1.3, 4.3.1.4, 4.3.1.5, 4.3.2.1, 4.3.4.1, 4.3.6, 4.3.8.1, 4.3.8.2, 4.3.8.3, 4.3.9.1, 4.3.9.2, 4.3.9.3, 4.3.11, 4.4.2, 4.4.3 and 4.5
SE-93962457	Community organisation	Wellington Valley Wiradjuri Aboriginal Corporation	Section 4.4.1
SE-92280716	Individual	Sally Edwards	Sections 4.3.8, 4.3.8.1, 4.3.11, 4.4.2 and 4.5
SE-92343959	Individual	Emma Bowman	Sections 4.1.5, 4.3.3, 4.3.8, 4.4.2 and 4.5
SE-93049209	Individual	Ray Tang	Section 4.1.3
SE-93457216	Individual	Craig Hargrave	Section 4.4.1
SE-94319228	Individual	Withheld	Sections 4.1.2, 4.3.5.1, 4.3.8 and 4.3.10
SE-94470463	Individual	Thomas Ebersoll	Section 4.4.1
SE-94684959	Individual	Chris Jonkers	Section 4.3.1.1
SE-95096713	Individual	Withheld	Sections 4.1.2, 4.3.1.5, 4.3.4.1 and 4.3.5.1
SE-95096719	Individual	Withheld	Sections 4.1.5, 4.3.1.1, 4.3.1.5, 4.3.5.1 and 4.3.6
SE-95096722	Individual	Withheld	Sections 4.1.2 and 4.3.5.1
SE-95097707	Individual	Withheld	Section 4.3.4.1
SE-95109469	Individual	Withheld	Sections 4.2.2, 4.3.8 and 4.4.2
SE-95109960	Individual	Withheld	Section 4.3.7
SE-95109983	Individual	Withheld	Sections 4.1.2, 4.3.7 and 4.4.2
SE-95109983	Individual	Withheld	Section 4.4.2
SE-95112460	Individual	Withheld	Section 4.1.2
SE-95112707	Individual	Withheld	Section 4.4.2
SE-95112962	Individual	Withheld	Sections 4.1.3 and 4.4.2
SE-95113207	Individual	Withheld	Section 4.5
SE-95113215	Individual	Withheld	Section 4.5
SE-95113960	Individual	Withheld	Section 4.3.8

DPHI ID	Type	Name	Section of this report where issues addressed
SE-95114461	Individual	Withheld	Section 4.4.2
SE-95114467	Individual	Withheld	Section 4.5
SE-95114471	Individual	Withheld	Section 4.1.2
SE-95114477	Individual	Withheld	Sections 4.1.2 and 4.3.1.5
SE-95114485	Individual	Withheld	Sections 4.1.5 and 4.3.5.1
SE-95114719*	Individual	Withheld	Sections 4.1.1, 4.1.5, 4.3.1.4, 4.3.1.5 and 4.3.1.6
SE-95115207	Individual	Withheld	Sections 4.3.8 and 4.4.2
SE-95115225*	Individual	Withheld	Sections 4.1.1, 4.1.5, 4.3.1.4, 4.3.1.5 and 4.3.1.6
SE-95115230	Individual	Withheld	Sections 4.1.1 and 4.3.5.1
SE-95116750	Individual	Withheld	Sections 4.1.5 and 4.3.5.1
SE-95117713	Individual	Withheld	Sections 4.1.5, 4.3.1.6, 4.3.4.1 and 4.3.11
SE-95117718	Individual	Withheld	Sections 4.1.2 and 4.3.5.1
SE-95118458	Individual	Withheld	Section 4.2.1
SE-95118465	Individual	Withheld	Section 4.4.2
SE-95118470	Individual	Withheld	Sections 4.3.1.6, 4.3.3, 4.4.1 and 4.4.2
SE-95118711	Individual	Withheld	Section 4.3.1.6
SE-95119215	Individual	Withheld	Section 4.4.2
SE-95119231	Individual	Withheld	Section 4.5
SE-95120457	Individual	Withheld	Sections 4.3.2.1, 4.3.5.1 and 4.3.9.1
SE-95120459	Individual	Withheld	Sections 4.1.1, 4.1.2, 4.1.4, 4.1.5 and 4.3.5.1
SE-95121466	Individual	Withheld	Section 4.4.2
SE-95121474	Individual	Withheld	Section 4.4.1

*Duplicate submission from the same individual.

Appendix B Revised mitigation measures

ID	Impact	Environmental measures	Timing
Biodiversity			
B01	Avoid and minimise impacts	Opportunities to avoid and minimise impacts on biodiversity will be investigated during detailed design with consideration to retaining vegetation and trees, where possible, to improve connectivity values and/or minimise impacts on threatened species and their habitats, such as threatened Eucalypts ~~Eucalyptus species~~ and hollow bearing trees.	Detailed design – ~~pre-Approval~~
B02	General biodiversity impacts	A Biodiversity Management Plan (BMP) will be prepared by a qualified ecologist in consultation with NSW DCCEEW. The BMP will: • include biodiversity values on the site, measures for indirect, prescribed and uncertain impacts, processes and procedures, and responsibilities to minimise the potential for biodiversity impacts during construction • outline induction requirements prior to starting work on site, which will inform the workforce on the biodiversity values of the site, protection measures to be implemented to protect native biota and penalties for breaches • be based on SMART principals (Specific, Measurable, Achievable, Realistic, Timebound) • include a plan for implementing, evaluating and reporting on the effectiveness of all mitigation measures outlined in the BDAR • include an adaptative management approach based on performance triggers for remedial action • include a monitoring and/or auditing process to conform that clearing during construction remains within the predicted clearing of native vegetation and threatened species identified in the BDAR • include a map with co-ordinates showing areas to be cleared and areas to be protected, including exclusion zones and protected habitat features in the vicinity of work areas.	Pre-construction and construction
B03	Removal of vegetation and habitat resources	Prior to the commencement of any work in or adjoining areas of native vegetation, a survey will be carried out to identify threatened plants and threatened species habitat within and adjacent to the subject land that are to be avoided or impacts to be minimised. The survey will focus on identifying occurrences of *Eucalyptus cannonii* and *Eucalyptus aggregata* as well as hollow bearing trees directly adjacent to the works area. The BMP will include a Vegetation Clearing Procedure, which will require the limit of clearing and construction boundary to be surveyed and clearly demarcated using high visibility tape. All vegetation outside the boundary will be clearly sign posted and marked on plans as an exclusion zone. Signage will be maintained for the duration of the construction period. Clearing of native shrub and ground layer vegetation ~~groundcover~~ will be minimised as far as possible.	Pre-construction and construction

ID	Impact	Environmental measures	Timing
B04	Impacts on riparian vegetation	The BMP will identify opportunities to minimise impacts on shrub or ground stratum vegetation within riparian zones when reviewing final construction methods and staging. Riparian vegetation clearing methods will retain root balls and trunk bases in situ and undertaken in a manner that minimises ground disturbance. Riparian buffers will be clearly marked onsite in accordance with recommended VRZs from the *Guidelines for riparian corridors on waterfront land* (DPE 2022) and the *Policy and Guidelines for Fish Habitat Conservation and Management* (Update 2013). Riparian areas within the project footprint and not within construction work zones will be delineated and managed as exclusion zones wherever possible in accordance with mitigation measure B03.	Pre-construction and construction
B05	Unexpected direct impacts to threatened flora and fauna	An Unexpected Species Finds Protocol will be prepared to detail measures to be undertaken if threatened flora and fauna not previously recorded on site are detected during clearing or construction activities.	Construction
B06	Impacts on threatened flora	A pre-clearing survey will confirm all Black Gum and Capertee Stringybark trees that will be removed. Visual markings will be employed prior to any clearing to identify Black Gum and Capertee Stringybark trees that will be removed and retained. Tree protection measures are to be installed and maintained and may include establishment of no-go zones and other practicable measures from AS 4970-2009 – *Protection of Trees in Development Sites* throughout construction. Any additional removal of native vegetation, including threatened Eucalypts, above the number of individuals identified in the project's BDAR will be avoided wherever possible. In the instance, where additional impact on trees or vegetation cannot be avoided, this will require survey to determine the number of trees, realign tree protection areas and demarcation, and identify the additional credits to be purchased and retired. The BMP will consider measures to work with local Landcare for seed collection from Black Gum and Capertee Stringybark trees to be grown for local restoration projects.	Construction

ID	Impact	Environmental measures	Timing
B07	Impacts on threatened fauna – SAII entity	Piling for structure foundations within 80 m of the rock outcrop will be conducted outside the breeding period for the Large-Eared Pied Bat (November to January), wherever possible, within the required work program. Biodiversity exclusion zones including a minimum 10 m buffer around the rock outcrop will be established. The boundary this ~~of the exclusion zone~~ is to be delineated using a method that does not restrict access for microbats to potential habitat. Pre-clearing targeted surveys by a qualified ecologist will be conducted of the rocky outcrop to confirm the presence/ absence of active roosts prior to construction. Weekly inspections of potential breeding habitat within the rocky outcrop will be conducted by an Environment Officer during construction where this includes the breeding period (November-January). Re-routing of light vehicles will be undertaken to avoid the adjacent access track during the breeding season, if any microbats are recorded in pre-clearance or weekly inspections. Alternative lower impact piling methods and foundation designs will be considered during detailed design, subject to geotechnical constraints. This will consider the use of smaller drill rigs and methods of piling with lower noise and vibration impact.	Construction
~~B07~~ B08	Fauna management	A Fauna Handling and Rescue Procedure for the management of fauna and habitats will be included in the BMP. These will include: • a procedure for the felling of hollow-bearing trees to prevent or minimise mortality of fauna, and the salvage of hollows and logs where practicable • supervision of hollow-bearing tree removal and salvage by a qualified ecologist • management of any trenches or drill sites to prevent fauna from becoming trapped or injured.	Construction
~~B08~~ B09	Pre-clearing surveys	Pre-clearing surveys will be undertaken prior to construction by a suitably qualified ecologist. The surveys and inspections, and any subsequent relocation of species, will be undertaken in accordance with the BMP. Specific surveys include: • surveys for roosting microbats or occupied nests for any man-made structures to be removed • searches for nests in vegetation to be removed • identification of fauna refuge sites potentially requiring fauna management during removal, including woody debris as well as human made material such as metal sheets.	Construction

ID	Impact	Environmental measures	Timing
~~B09~~ B10	Post-clearing report	A post-clearing report will be prepared documenting all animals that are handled or managed within the site during vegetation clearing. Data to be recorded includes: • date and time of the fauna interaction or sighting and details of the observer • species (if known) or a photograph • number of individuals recorded • adult/juvenile • condition of the animal (living/dead/injured/sick) • management action undertaken (e.g. captured, handled, taken to vet) • results of any management actions (e.g. released, placed in a nest box, euthanised, placed with carer). The post-clearing report is also to include and maintain an inventory of hollows and fallen timber that have been salvaged and relocated.	Construction
~~B10~~ B11	Fauna habitat strategy	The BMP will include a Nest Box Strategy for tree hollows impacted during the clearing of vegetation, developed in consultation with NPWS. The strategy would include (at a minimum): • reuse of hollows, where appropriate • identification of target species that best benefit from installation of nest boxes • identification of alternative methods of replacing or creating hollows, cavity sizes • the number required when assessed against retained hollows • monitoring • the use of nest boxes as an immediate measure (i.e. for rescue and relocation of fauna during clearing).	Pre-construction
~~B11~~ B12	Rehabilitation of vegetation subject to temporary disturbance	A Rehabilitation Management Plan (RMP) will be prepared to guide rehabilitation planning, implementation, monitoring and maintenance of the following disturbed areas within the construction footprint: • construction compounds and laydown areas • brake and winch areas • areas of the easement where vegetation is allowed to regrow.	Construction
~~B12~~ B13	Pathogen spread and establishment	All machinery entering the site will be appropriately washed down to be vegetation-and-soil free prior to work on site, to prevent the potential spread of disease in accordance with the Protocols to protect priority biodiversity areas in NSW (DPIE 2020d). Protocols to prevent introduction or spread of chytrid fungus will be included in the BMP and implemented following the Hygiene guidelines for wildlife (DPIE 2020d).	Construction Operation

ID	Impact	Environmental measures	Timing
~~B13~~ B14	Spread of weeds	Declared priority weeds will be managed according to requirements of the NSW Biosecurity Act 2015. Soil material and stripped groundcover vegetation with the potential to contain priority weeds will not be removed from the project footprint. Soil disturbance would be avoided as much as possible to minimise the potential for spreading weeds. Declared priority weeds will be managed according to requirements of the Biosecurity Act 2015. The BMP will include a Biosecurity Management Plan to outline measures for managing declared priority weeds during construction. Weed control strategy during the operational stage of the project will be guided by existing Transgrid operational weed management procedures. During maintenance activities, general biosecurity duty obligations will be implemented as per existing Transgrid procedures. Biosecurity risks within the works footprint, such as weeds, will also be assessed and control measures implemented, as required, to manage existing or emerging issues.	Construction Operation
~~B14~~ B15	Habitat connectivity	A Habitat Connectivity Strategy will be prepared for all affected threatened fauna species with a focus on threatened species including Squirrel Glider and other arboreal species that rely predominately on mature trees and canopy to move through the landscape. The strategy will: • identify measures to provide equal or improved connectivity than is provided by the current maintained easement • include designated exclusion areas and tree retention as well as partial clearance areas as a first priority ~~before other measures~~, including opportunities ~~for revegetating~~ to retain vegetation associated with creek lines ~~with vegetation of an appropriate height~~ within the Gardens of Stone SCA and/or considering the feasibility of installing crossing structures. This would include: - Modelling of existing and post construction glider crossing opportunities. - Assessment of fauna species recorded or considered likely to occur and review of suitable crossing structures and their effectiveness for these particular species. - Assessment of projected line clearance requirements and opportunities to install connectivity structures below the transmission line focussing on riparian areas where topography allows greater clearance. The Connectivity Strategy will be implemented together with Vegetation Clearance Requirements for the maintenance and operation of the transmission line.	Detailed design Construction Operation
~~B15~~ B16	Injury or mortality from transmission line collision, entanglement, or electrocution	Use of fauna deterrent devices~~, most likely~~ consisting of the flapper variety, will be used ~~considered~~ within areas of open habitat along the Coxs River, to minimise impacts on the threatened bird ~~fauna~~ and bat species, such as raptors which includes the White-bellied Sea Eagle. ~~If required,~~ The positioning and the deterrent model will be developed as part of the habitat connectivity strategy ~~and in consultation with the design team~~.	Detailed design
~~B16~~ B17	Removal of riparian vegetation around Coxs River	Following construction, consider initiatives to improve riparian zones for aquatic biota, such as revegetation, in consultation with DPIRD-Fisheries and WaterNSW (for flooding perspective) and other relevant stakeholders. Where feasible and reasonable initiatives exist, they are to be implemented during post-construction site restoration.	Post construction

ID	Impact	Environmental measures	Timing
~~B17~~ B18	Instream works in minimal key fish habitat of watercourses ~~unnamed tributaries of Wangcol Creek~~	Construction activities occurring in or adjacent to watercourses providing key fish habitat, including Class 1 (major) 'Coxs River' to Class 3 (minimal) fish habitat 'Unnamed tributaries of Wangcol Creek (a) and (c)', are to minimise any additional restriction to fish passage from current conditions and be undertaken in accordance with: • the Policy and guidelines for fish habitat conservation and management (DPI 2013) • the Controlled activities – Guidelines for watercourse crossings on waterfront land (DPE 2022b).	Construction
~~B18~~ B19	Spread of invasive fish species	Any invasive fish will not be discharged to a natural watercourse as required under the Fisheries Management Act 1994 and Biosecurity Act 2015.	Construction
~~B19~~ B20	Surface water dewatering at culvert crossings	Consult with DPIRD on the management of aquatic biota for any proposed dewatering of the Coxs River oxbow for construction of the culvert crossing, and any proposed discharge of surface water to/ from waterways.	Construction
~~B20~~ B21	Threatened fauna species – Purple Copper Butterfly	Prior to the operational phase, an environmental assessment will be prepared that considers up-to-date records of the NSW BioNet data for the Purple Copper Butterfly. Transgrid will implement its established procedures for working in areas with Purple Copper Butterfly presence or potential.	Operation
Noise and vibration			
NV1	Construction noise and vibration management	A Construction Noise and Vibration Management Plan (CNVMP) will be developed in consultation with NSW EPA and implemented as part of the CEMP. The CNVMP will generally follow the approach outlined in the ICNG and include: • identification of sensitive receivers, including sensitive threatened fauna and their nearby habitats in consultation with a qualified ecologist, and heritage structures (ie Wallerawang Rail Bridges over Coxs River (SHR #01064), the St John the Evangelist Church (SHR #01702, LEP#I112), ~~and~~ Braemai (LEP #I193)) and underground utilities including the Fish River Water Supply Scheme • an updated construction noise and vibration assessment based on final construction staging, compound locations and details, selected equipment types and proposed OOHW periods • all potentially high noise and vibration generating activities associated with the construction of the project • standard and additional mitigation measures to manage identified impacts as required in accordance with the ~~CNVG~~ *Construction Noise and Vibration Guideline (Roads)*, including safe working distances when working near heritage structures to avoid vibration damage and measures to protect underground utilities including the Fish River Water Supply Scheme • a monitoring program to assess performance against relevant noise and vibration criteria • arrangements for consultation with affected neighbours and sensitive receivers where exceedances are predicted of NMLs, including notification and complaint handling procedures • details of the process and actions to be taken in the event of non-compliance with noise and vibration criteria.	Prior to construction

ID	Impact	Environmental measures	Timing
NV2	Construction noise (source controls)	As part of development of the detailed design and construction methodology, all reasonable and feasible mitigation measures will be considered, confirmed and implemented, in line with the ~~Interim Construction Noise Guideline~~ ICNG (DECC, 2009), to minimise construction noise impacts and to avoid exceedances of the applicable noise management levels at adjacent sensitive receivers, where practicable. Measures that may achieve this outcome may include, but not limited to the following: • Portable temporary noise screens will be erected adjacent to stationary or long term static noise sources, or noise generating items, where reasonable and feasible. • Spotters, "smart" reversing alarms, or broadband reversing alarms will be used in place of traditional tonal beeper reversing alarms, particularly on equipment where reversing alarms are frequently in use such as rollers, loaders or compactors. • Noise source controls, such as the use of residential class mufflers, will be used reduce noise from all plant including cranes, excavators and trucks. • The offset distance between noisy plant items and sensitive receivers will be maximised, where reasonable and feasible. • Machinery will be operated in a manner which reduces maximum noise level events such as shaking excavator buckets, dropping materials into trucks from a, height or steel on steel contact. • Construction plant and equipment will be turned off when not in use.	Detailed design and construction
NV3	Construction noise (administrative controls)	Opportunities to reduce exceedances of the applicable construction noise management levels through the implementation of administrative controls will be examined, confirmed and implemented where reasonable and feasible in line with the ~~Interim Construction Noise Guideline~~ ICNG (DECC, 2009). Controls to be considered will include, but not limited to the following: • Environmental awareness training and inductions for site personnel will include noise mitigation techniques/measures to be implemented when on site and accessing the site. • Plant and equipment will be selected based on noise emission levels. This will include the consideration of alternative piling and stringing methods, such as the use of bored piling methods and drones for stringing. • Noise-intensive works will be limited to less sensitive construction hours (i.e. Away from early morning and late afternoon periods) as far as practicable, when working in the vicinity of sensitive receivers. • Plant and equipment will be well maintained to ensure that excessive noise is not generated. • Noise level predictions for works undertaken outside standard working hours will be confirmed and verified in accordance with the ICNG (DECC, 2009) by the construction contractors. This will consider implementation of additional construction noise mitigation measures.	Detailed design and construction

ID	Impact	Environmental measures	Timing
NV4	Construction compounds	Where reasonable and feasible, measures will be taken to minimise noise emissions from construction compounds using the following principles: • The layout of the construction compounds C2 and C3 will be planned so that the primary noise sources are at a maximum distance from residences, with solid structures (sheds, containers, etc.) placed between residences and noise sources (and as close to the noise sources as is practical). • Enclosures will be used to shield fixed noise sources such as pumps, compressors, fans, screens (where practicable). • Site topography will be considered when situating plant to block line of sight where possible.	Construction
NV5	Construction noise – OOHW period	A project-specific OOHW protocol will be developed to define the process for considering, approving and managing OOHW. The protocol will include provisions to: • confirm and verify proposed noise level impacts for specific work activities proposed outside standard construction hours, including the potential for sleep disturbance impacts • confirm and verify the potentially affected sensitive receivers and the standard and additional mitigation measures that will be applied to such receivers • additional mitigation measures will be applied to affected sensitive receivers impacted by sleep disturbance for more than two consecutive nights • notify and engage with potentially noise affected receivers about upcoming work outside standard construction hours and address any associated complaints • identify appropriate respite for noise affected receivers (where required) • proactively communicate and engage with affected receivers.	Detailed design Construction
NV6	Construction vibration	Where vibration intensive activities are planned within vibration minimum working distances (including for sensitive or heritage structures and buried infrastructure), reasonable and feasible mitigation measures will be implemented. These measures will include, and not be limited to: • pre- and post-construction condition surveys of vibration sensitive receivers within the recommended safe working distances prior to construction works • alternative construction methods and equipment with lower source vibration levels will be investigated and implemented, where feasible, this will include consultation with a suitably qualified heritage specialist for any potential vibration impacts on heritage structures • schedule the use of vibration-sensitive equipment during the least sensitive times of the day • sequence operations to avoid or minimise concurrent vibration intensive activities • vibration monitoring will be carried out at the start of work to determine actual vibration levels at the receiver • work will cease if the monitoring indicates vibration levels are likely to, or do, exceed the relevant criteria • where potential vibration impacts relate to buried infrastructure, measures to protect the buried infrastructure will be developed in consultation will be undertaken with asset owners. These measures may include traffic management, construction equipment selection, construction bench siting and the placement of additional cover, plating or bog mats.	Construction

ID	Impact	Environmental measures	Timing
		Where vibration intensive activities are proposed in the vicinity of historical mine workings (including but not limited to transmission tower locations 23D to 25D), geotechnical investigations and consultation with mine operators will be undertaken to consider the potential impacts associated with ground vibration generated by equipment during the project's construction.	
NV7	Construction traffic noise	Management of construction traffic noise on local roads will be included in the CNVMP. The CNVMP will consider the following controls: • scheduling and routing of construction traffic to minimise impacts using the following principles: - more even distribution of traffic movements across the various access roads during the daytime period to reduce the peak 1-hr period traffic noise levels - scheduling of movements at less-sensitive times for impacted receivers • implementing temporary construction traffic speed limits on access roads in the vicinity of potentially impacted noise sensitive receivers.	Construction
NV8	Cumulative construction noise	Where cumulative construction noise impacts are likely at sensitive receivers, coordination with other proponents will occur to minimise the cumulative construction noise impacts. This should involve: • scheduling of noise or vibration-generating construction activities to minimise the duration or level of impact • combined approach to mitigation where considered reasonable and feasible such as a temporary noise barrier that may provide mitigation for more than one project • consideration of cumulative noise levels in compliance monitoring • community consultation, notification and complaints handling are to include consideration of cumulative impacts.	Construction
NV9	Aerial noise - drone use	Management measures will be implemented to minimise drone noise at sensitive receivers where practicable and appropriate. Measures will include (but are not limited to) consultation with nearby sensitive receivers on upcoming work involving drones including scheduled dates, locations, indicative hours and a description of the proposed works.	Construction Operation

ID	Impact	Environmental measures	Timing
NV10	Corona noise	For each residence where potential operational noise levels from the project are predicted to exceed the noise criteria, verification monitoring is required to confirm actual operational noise levels. Monitoring will be carried out: • within six months of the project's commencement of operation • to respond to a request of the landowner within two (2) years after the project's commencement of operation. The noise monitoring will occur during weather/atmospheric conditions conducive to generating the corona effect. For residences where the monitoring identifies corona discharge levels above 35 dB(A) LAeq,15min at the most affected point of the residence, consultation will be undertaken with the landowner of the affected residence to identify reasonable and practicable measures. Measures may include at property treatment to upgrade aspects of the dwellings including the façade or ventilation systems. Once measures have been agreed with the landowner, these will be implemented within 12 months.	Prior to operation
NV11	Corona noise – cumulative impact	Consultation and co-ordination with nearby proponents, including proponents of the Great Western BESS, to minimise cumulative at-property impacts from audible corona noise.	Prior to operation
Traffic and transport			
T1	Traffic management and road network performance	A Traffic and Transport Management Plan (TTMP) will be developed and implemented as part of the CEMP, in consultation with relevant stakeholders. The plan will detail processes and responsibilities to minimise traffic disruptions and delays, to identify and to respond to changes to road access. The TTMP will include: • Consultation and approval of road designs from Lithgow City Council for any proposed minor road work, such as a passing bay on the shoulder of Brays Lane. The need for a passing bay will be determined in consultation with relevant road authorities. • Maps of designated and approved heavy vehicle routes for heavy vehicles and oversize and overmass movements. • Traffic and transport permitting requirements, including oversize and overmass movements permits and road occupancy licences. • Planning for heavy vehicle routes to access point 12 via Heel Street, as well as the alternate heavy vehicle route for access points 4 and 5, which are to be confirmed through consultation with Lithgow City Council. • Transmission line stringing across the Main Western Rail Line to be undertaken within scheduled rail shutdown period (i.e. planned rail maintenance) or as agreed with the appropriate rail authority. • Road closures (partial or full) will be planned during the road network off-peak periods, where possible. • A drivers' code of conduct for heavy vehicle safety. • Requirements for drivers operating heavy vehicles on public roads. • Measures to ensure the efficient delivery of equipment and construction materials.	Pre-construction Construction

ID	Impact	Environmental measures	Timing
		• Traffic control measures at construction access points and intersections, including: - left-in/ left-out turn movements at the Karawatha Drive/Castlereagh Highway intersection, including details of required signage for this arrangement to construction vehicles only - signage to prohibit the use of the unsealed track located south of the Karawatha Drive/Castlereagh Highway intersection - internal site traffic management to ensure only one 19 metre articulated vehicle arrives and departs at any one time on Karawatha Drive - traffic control at the Frankfort Road/Boulder Road intersection, including the requirements for obtaining a road occupancy licence - traffic management at Brays Lane and Main Street during stringing works, including the requirements for obtaining a road occupancy licence. • Measures to reduce construction traffic movements at Brays Lane/Castlereagh Highway. This will include reducing trips taken by personnel and contractors, such as carpooling and shuttle bus services. • Measures to monitor construction traffic movements occurring to and from the project footprint and between work areas, including the consideration of: - Recording of vehicle entry and exit movements to ensure they are within the project's worst case peak traffic generation estimates - Undertaking visual traffic inspection during peak hours to identify any unacceptable queuing. • Measures for the protection of underground and above ground services and utilities, which may include speed restrictions to reduce dynamic loading and vibration and establishing designated crossing points for access tracks. • Consultation with other relevant project proponents to consider cumulative traffic impacts and identify the need for project-specific mitigation measures. • Visual monitoring of the road shoulder condition will be undertaken at the intersection of Karawatha Drive / Castlereagh Highway intersection during the construction period to ensure surface degradation does not occur, should vehicles inadvertently track off the sealed carriageway.	
T2	Potential access impacts	Where temporary disruption to access cannot be avoided, consultation will be undertaken with the owners, occupants and managers of affected properties and road infrastructure to confirm their access requirements and determine any alternative arrangements required.	Construction
T3	Impacts on local roads	Road dilapidation surveys will be undertaken of Brays Lane and Karawatha Drive, prior to and following the completion of construction, and provided to the relevant road authority. Condition monitoring will be carried out during construction. Rectification measures will be implemented to the satisfaction of the road owner, during and/or following completion of construction, to address any damage caused by the project.	Pre- and Post-Construction Construction

ID	Impact	Environmental measures	Timing
T4	Intersection sight distance	Confirmation of safe sight distances for all proposed access points' will be undertaken when preparing the TTMP in consultation with the relevant road authority. Mitigation measures to meet safe sight distances at proposed access points and intersections will be adopted for: • intersection of Boulder Road/Frankfort Road requiring traffic control • intersection of Boulder Road/Mount Piper Power Station access road requiring vegetation trimming • intersection of Castlereagh Highway/Karawatha Drive requiring Left-in/Left-out access arrangement. All mitigation measures will be developed in consultation with the relevant road authority. Ongoing consultation with Transport for NSW will occur for improving the existing road sign on the southern approach to the Boulder Road / Castlereagh Highway intersection.	Detailed Design Pre-construction
T5	Brays Lane bridge crossings	Prior to using Brays Lane by proposed heavy vehicles and OSOM equipment, a suitably qualified structural engineer will assess the structural integrity of two bridge culvert crossings. Where structural load restrictions are identified, alternative routes for heavy vehicles and equipment, including the use of Access Points 1, 1a or 2, will be identified and discussed with the relevant road authority.	Pre-construction
Landscape character and visual amenity			
LV1	Impacts on LCZ1	The removal of existing trees and vegetation will be minimised in the detailed design and construction as much as practicable to retain as much natural bushland character as possible. Trees with high associated conservation value will be identified to be retained and protected where practicable.	Detailed design
LV2	Impacts of access track construction on landscape character and visual amenity	Temporary and permanent access tracks will be designed to minimise the removal of existing vegetation and minimise any landform changes to reduce the overall landscape character and visual impacts.	Detailed design
LV3	Visual impacts on sensitive visual receivers	Opportunities to plant screening vegetation to minimise impacts on VP06 will be investigated in consultation with affected landowners.	Detailed design

ID	Impact	Environmental measures	Timing
LV4	Lighting impacts on sensitive receivers	Lighting during construction of the project will be designed and operated in accordance with guidelines in AS 4282 2019 *Control of the obtrusive effects of outdoor lighting*. ~~Directional lighting will be used to minimise the effects of light spill outside the easement as far as possible.~~ Principles to be considered as part of the design and operation of light would include: • lighting is only used when areas are in use and are switched off when not required • lighting is to be positioned close to the ground and/or angled downwards • lighting intensity is to be as low as possible to suit the task being undertaken and consistent with any safety requirements • ensure lights are not directed at reflective surfaces and that the amount of reflective surfaces is minimised with use of non-reflected dark coloured surfaces, where possible • use of light shield fittings to direct light to areas required and to minimise light spill • lighting should be directed away from sensitive receivers, where possible.	Detailed design Construction
Aboriginal heritage			
H1	General	An Aboriginal Cultural Heritage Management Plan (ACHMP) will be prepared in consultation with the RAPs and DPHI - Planning, with input from Heritage NSW. The ACHMP will include: • an Unexpected Heritage Finds Protocol for any new discovery of Aboriginal artefacts as per the detailed methodology described in the ACHAR • an unanticipated skeletal find protocol as described in detail in the ACHAR • a process for engaging with RAPs prior to and during construction of the project • salvage methodology • heritage induction procedures • provisions for the long-term management of the Aboriginal objects that are salvaged.	Pre-construction Construction
H2	Impact avoidance	Impacts on Aboriginal heritage sites will be avoided for Springvale Colliery (45-1-0237), WPS-IF1 (45-1-2800), and WPS PAD 2 ~~and Lidsdale 2 PAD Extension (AHIMS No. Pending)~~ by implementing: • a no-go zone for 45-1-2800 • adopting construction and maintenance work methods that avoid ground disturbance. These methods will be monitored during operation and maintained as necessary. All Aboriginal heritage sites within the project footprint and PAD sites that extend outside the project footprint will be clearly marked on construction plans, and mapped and recorded in Transgrid's GIS system to avoid impacts.	Pre-construction Construction Operation
H3	Surface salvage	Sites 45-1-0215 and 45-1-2967 will be salvaged through the recording and collection of the surface artefacts, prior to construction in accordance with the salvage methodology described in the ACHAR.	Pre-construction

ID	Impact	Environmental measures	Timing
Historic heritage			
HH1	General	A Historic Heritage Management Plan (HHMP) will be prepared in consultation with Council, the DPHI – Planning and Heritage NSW, as required. The HHMP will include: • An unanticipated finds protocol and heritage induction/toolbox requirements. • The location and curtilage extents of Wallerawang Rail Bridges, St. John the Evangelist Church and the Old Wallerawang School House on mapping. This includes details of the exclusion zone over a portion of the Old Wallerawang School House (LEP #I113) curtilage to the south-west of the project footprint. • Consideration of alternative construction methods to avoid impacts to the Wallerawang Rail Bridges over Coxs River (SHR no. 01064) and the requirement for vibration monitoring in consultation with a suitably qualified heritage specialist. • Requirements for inductions and toolbox talks to include a summary of the significance of heritage items, legislative responsibilities and appropriate mitigation measures.	Pre-construction
HH2	Wallerawang Rail Bridges over Coxs River	Use of the existing access road within the heritage curtilage for Wallerawang rail bridges over Coxs River (SHR #01064) will be limited to light vehicles to avoid impact on the bridge heritage fabric or values of the bridges. Signage will be erected and maintained during construction advising of the height limitations. No upgrades to this track are to occur within the curtilage area of the item.	Construction
Land use and agriculture			
LU1	Property impacts	Property Management Plans (PMPs) or other agreements will be prepared in consultation with impacted landowners, including DPHI-Crown Lands and WaterNSW. The plans or agreements will define the works required during construction, properties affected by easement acquisition and properties requiring adjustments as a result of the project. Works will include, but not be limited to, adjustments to property access, internal roads and fences (if required). The PMPs or agreement may include: • measures to reduce property impacts, including impacts on agricultural operations • specific requirements to ensure that disruption to operations, including the movement of livestock as agreed with landowners • required adjustments to and/or replacement of affected structures • biosecurity and rehabilitation measures to be implemented as outlined in the BMP.	Pre-construction Construction Operation
LU2	Property, asset and infrastructure impacts	Pre-condition assessments of assets, infrastructure and the general condition of the land, asset or infrastructure at risk of impact during construction within the project footprint will be completed. ~~to inform the~~ requirements for rectification or rehabilitation will be agreed or determined with the asset owner or landowner. ~~This will be carried out in consultation with the asset owner or landowner.~~	Pre-construction Construction
LU3	Impacts on Centennial Coal Springvale operations	Confirmation of requirements for use of internal roads within Centennial Coal's Springvale site will be sought through ongoing consultation prior to and during construction ~~commencing~~. Details of any specific requirements would be included in the Traffic and Transport Management Plan.	Pre-construction Construction

ID	Impact	Environmental measures	Timing
LU4	Impacts on ~~access within~~ the SCA	Access for NPWS personnel will be maintained, where required, and will be determined in consultation with NPWS. Details of any specific requirements would be included in the TTMP.	Construction Operation
LU5	Impacts on Crown land	Temporary and permanent impacts and use of Crown land will be undertaken in accordance with any licences and consents required to be obtained in accordance with the Crown Land Management Act 2016 and in consultation with DPHI - Crown Lands.	Pre-construction
LU6	Impact on land subject to Native Title claim	Transgrid will continue to consult with the Warrabinga-Wiradjuri Native Title Claimants about potential impacts to the claim area to assist Transgrid in understanding and appropriately managing potential land use issues that may arise.	Pre-construction Construction
LU7	Impacts on utilities	The location of all utilities and services, and requirements for access to, diversion, protection and/or support of utilities will be confirmed prior to construction and included on all site plans, including WaterNSW Fish River Water Supply Scheme pipeline. This will include (as required) undertaking utilities investigations, including intrusive investigations, and consultation and agreement with asset owners and service providers. In the event that service interruptions are required, notice will be given by the relevant asset owner. The Emergency Management Plan will include communication and reporting of incidents on utilities to the relevant asset owner.	Pre-construction Construction
LU8	Land degradation	Vegetation clearance is to be minimised to prevent further degradation of land. Vegetation clearing methods will be determined based on vegetation.	Pre-construction Construction
LU9	Land rehabilitation	Woody material from vegetation clearing that is weed free will be considered for beneficial reuse as part of rehabilitation works.	Construction
LU10	Land rehabilitation	Topsoil would be scraped off, stockpiled separately for possible reuse in resurfacing and rehabilitation at end of the construction work.	Construction
Water resources			
W1	Water quality	A Soil and Water Management Plan (SWMP) will be prepared and implemented as part of the CEMP. The SWMP will include: • an outline of relevant legislation, policies and guidelines relevant to the handling and storage of hazardous materials • ESCPs prepared in consultation with a CPESC, or Registered Soil Practitioner (RSP_ESC), or similarly qualified professional • detail on processes such as regular inspection, monitoring, auditing and maintenance of erosion and sediment controls, roles and responsibilities and measures to manage potential soil and water quality impacts during construction • hold points for installation of erosion and sediment controls • measures to minimise the potential for chemical spills, including storage in bunded areas • outline of the frequency and type of water quality monitoring, if required, in relation to sensitive environments and high risk landforms.	Pre-construction Construction

ID	Impact	Environmental measures	Timing
		The SWMP and ESCP will be prepared in accordance with the principles and requirements, in the following publications: • Managing Urban Stormwater – Soils and Construction, Volume 1 (Landcom, 2004), Volume 2A (DECC, 2008) and Volume 2C (DECC, 2008a) • Best Practice Erosion and Sediment Control (IECA, 2008) • Guidelines for controlled activities on waterfront land (DPE 2022).	
W2	Flooding	An Emergency Management Plan will include a Flood Risk Management Plan (FRMP), which will be prepared in consultation with the SES. The FRMP will include a Trigger Action Response Plan to detail how and when actions will be taken. The plan will also outline the following: • workers and visitors will be inducted onto the Plan • works will not commence or continue in construction areas that are at risk of flooding • people, machinery and materials will be removed from construction areas prior to any flood event that is predicted to impact the construction area. The construction program will schedule and carry out works in flood-risk areas in periods of dry, stable weather as far as practicable. To further manage risk, resources will be made available to reduce the duration of works within flood-risk areas.	Pre-construction Construction
W3	Flooding	Structures within flood liable areas will be designed and constructed to withstand a 1 in 100 AEP event.	Design
W4	Flooding	No maintenance activities will be undertaken where flood risk exists. Rainfall and catchment conditions will be monitored during maintenance activities to ensure safety of people and environment. As soon as it is safe and practicable after flood events, structures will be checked for damage. Remediation work will be undertaken if required.	Operation
W5	Groundwater impacts and dewatering	A groundwater dewatering procedure will be prepared and implemented as part of the SWMP. The procedure will define measures for the appropriate management of extracted groundwater, including: • reviewing groundwater volumes, such as inflows and extraction • identifying licencing requirements • water quality testing of intercepted groundwater to inform treatment (if required), disposal and/or discharge requirements • a groundwater trigger action response plan that will be implemented in the event that groundwater inflows are greater than expected.	Pre-construction
W6	Waterfront land	Detailed design and construction for works on waterfront land be in accordance with the Guidelines for Controlled Activities on Waterfront Land (DCCEEW 2025).	Pre-construction Construction

ID	Impact	Environmental measures	Timing
Hazards and risks			
HR1	AM and VHF band telecommunication interference from high voltage transmission lines	If adverse radio interference effects are reported within 12 months of operation, practical rectification measures (including signal boosting equipment and antenna upgrades) will be considered. This will be carried out in consultation with the relevant landowners.	Operations
HR2	EMFs exposure	Design of the transmission line will be in accordance with the ICNIRP guidelines and Transgrid's Transmission Line Design Manual – Major New Build Rev 2.0. This will include phasing of the conductors to minimise the level of EMFs generated.	Detailed design
HR3	Bushfire Management Plan	A Bushfire Management Plan will be prepared in accordance with Planning for Bush Fire Protection (PBP; RFS 2019) in consultation with the RFS and NPWS and implemented as part of the Emergency Management Plan. It will include the following: • asset protection zones (APZs) for construction compounds following consultation with relevant landowners in relation to APZ locations and management • APZs to be managed to the standards of Inner Protection Area outlined in Appendix 4 of PBP • avoidance of local concentration of bushfire fuels from vegetation removal • maintenance of infrastructure and equipment so as to reduce bushfire risk • safe work systems for workforce and firefighter safety from bushfire impacts, including bushfire hazard identification, hazard reduction and controls including the siting of flammable materials • safe work procedures for activities that have potential for fire ignition, including hot works and flammable material storage • induction and training of personnel, including risks and management measures associated with construction equipment and activities • firefighting equipment to be provided on site • details of site access and internal road plans based on construction staging • details of the location and quantity of water supplies and storages ~~provision of adequate water supply~~ for fire fighting purposes.	Pre-construction Construction
HR4	Emergency access during bushfire	The Emergency Management Plan to be developed for the project will include bushfire emergency management and an evacuation plan consistent with the Guide to Developing a Bush Fire Emergency Management and Evacuation Plan (RFS 2014) and section 8.3.5 of Planning for Bushfire Protection (RFS 2019). The Emergency Management Plan will address the requirements for evacuation routes and access as outlined in NSW Fire Trail Standards (RFS, 2023).	Pre-construction Construction ~~Operation~~
HR5	Disruption of aerial application operations	If local aerial operators identify the need for a risk assessment, the standards outlined in the AS 3891.2:2018 *Air navigation – Cables and their supporting structures* – Marking and safety requirements Part 2: Low level aviation operations will be followed.	Detailed design

ID	Impact	Environmental measures	Timing
Soils, geology and contamination			
SC1	Soil and groundwater contamination	Disturbance to AECs identified as having a potentially complete source-pathway-receptor linkage in the Contamination Assessment, will be managed in accordance with a SWMP that will include: • procedures for dewatering, specifying capture, storage, and testing requirements • measures to minimise exposure and migration of potentially contaminated soil in excavated spoil, including handling and storage procedures • relevant HSE requirements, including staff inductions and PPE to minimise the risk of dermal contact and inhalation • requirements for soil testing of excavated soils in accordance with EPA's waste classification guidelines and NEPM (2013), to identify opportunities for onsite reuse or offsite disposal (e.g. contaminated material) at licenced facility • contaminated groundwater will not be released to the surrounding environment and will be disposed of at a licenced facility. Elements of the SWMP relating to contamination will be prepared, or reviewed and approved by a suitably certified consultant. In AECs with potentially complete source-pathway-receptor linkages, ground disturbance will be minimised to the extent practicable and construction staged with progressive rehabilitation to minimise the amount of disturbed land at any one time.	Detailed design Construction Operation
SC2	Soil contamination – compound sites	At the construction compound sites, the avoidance and minimisation of ground disturbance will consider the importation and placement of engineering fill, Excavated Natural Materials (ENM) or Virgin Excavated Natural Materials (VENM) as a construction base to avoid disturbance of potentially contaminated soils in these areas. If excavation and earthworks is required, the contamination status of the surface soils will be assessed and management, if necessary, will be undertaken in accordance with procedures detailed in the CEMP.	Construction
SC3	Soil and groundwater contamination	The CEMP will include an adaptive management approach to reduce human health risk and environment risk. The approach will respond to soil contamination test results and if additional contamination-related information becomes available, for example contamination reports relating to AEC 10, which may inform the need for further assessment and additional management measures in accordance with: • the Assessment of Site Contamination (NEPC 2013) • the Waste Classification Guidelines (NSW EPA 2014). An Asbestos Management Plan will be prepared to outline management measures to prevent the mobilisation of airborne asbestos fibres.	Construction

ID	Impact	Environmental measures	Timing
		Any remediation of the construction work area as a result of accidental spills or encountering contaminated materials, will be undertaken based on a site specific Remedial Action Plan (RAP). The RAP will define remedial goals and objectives, performance criteria for remedial effort and remediation methodology. A validation report will be prepared after remedial effort and be in accordance with the NSW EPA Guidelines for Consultants Reporting on Contaminated Land (NSW EPA, 2020b).	
SC4	Hazardous materials audit	Prior to the demolition of any structure and/or building, including transmission structures, a hazardous materials audit would be undertaken in accordance with Australian Standard AS 2601-2001: *The demolition of structures*, if information on materials is not already available.	Detailed design Construction
SC5	Storage and handling of hazardous substances	Chemicals, fuels, oils or other hazardous substances will be stored, handled and used in accordance with relevant legislation, Australian Standards and other applicable guidelines, including Transgrid procedures. A spill response procedure will be developed and implemented as part of the SWMP. Spill kits will contain materials suitable for the work being undertaken. Portable spill kits will be easily accessible and available to onsite construction, maintenance personnel and contractors when accessing transmission lines. All onsite construction and operational maintenance personnel will be inducted in spill response procedures.	Pre-construction Construction Operation
SC6	Unexpected contamination	The discovery of any unexpected contamination during construction will be managed in accordance with an Unexpected Contaminants Finds Protocol which will be prepared as part of the SWMP prior to construction. This protocol will be prepared by, or reviewed and approved by a suitably certified consultant.	Construction
SC7	Acid sulfate soils	Prior to ground disturbance in areas of potential acid sulfate soil or rock occurrence, testing will be carried out to determine the presence of actual and/or potential acid sulfate soils or rocks. If acid sulfate soils or rocks are encountered, they will be managed in accordance with the Acid Sulfate Soil Manual (ASSMAC, 1998) and Transgrid's Health, Safety and Environment Guideline.	Construction
Economic – Benefit enhancement measures, as no mitigation measures are required			
E1	Labour demand and employment	An Aboriginal Participation Plan and an Australian Industry Participation Plan will be prepared and implemented for the project in line with First Nations Guidelines (such as the Australian Government Indigenous Procurement Policy (IPP)) and the Renewables Energy Sector Board Plan (Office of Energy and Climate Change, 2022). The key objective of the Plans will be to ensure full, fair and reasonable opportunities for local, regional and Indigenous businesses to participate in the project's supply chain. The Plans will: • identify and provide initiatives to maximize opportunities for local businesses to supply goods and services • identify how local participation will be promoted • identify and describe opportunities for stakeholder collaboration and partnerships with Council, the local chamber of commerce and Local Aboriginal Land Councils	Detailed design Pre-construction Construction

ID	Impact	Environmental measures	Timing
		• identify initiatives for industry workforces to transition between industry sectors • consider potential cumulative economic effects in consultation with industry and other nearby project proponents.	
Social			
S1	Social impacts, communication, engagement and monitoring	An overarching CSEP will be developed to guide delivery of engagement throughout all phases of the project, to ensure that: • accurate and accessible information about the project is provided • feedback from the community is encouraged • opportunities for input are provided • community members and stakeholders with the potential to be affected by construction activities are notified in a timely manner about the timing of activities and potential for impacts • enquiries and complaints are managed, and a timely response is provided for concerns raised. The aims and outcomes of the CSEP will be reviewed and monitored to ensure effectiveness and that the plan adapts to any specific and changing circumstances. Communications and engagement activities will include approaches and protocols to: • communicate with potentially affected residents, other community members, businesses and other key stakeholders to provide information about the project, and the likely nature, extent and duration of changes during construction • share information about the project with other regional stakeholders to assist with managing cumulative impacts on local and regional communities.	Pre-construction Construction Operation
S2	Social impacts, communication and engagement and monitoring	An enquiries and complaints management system will be developed in accordance with Transgrid's Complaints Management Policy, and outlined in the CSEP, and implemented during all phases of the project. The complaints management systems will be maintained throughout the construction period and for a minimum of 12-months after construction finishes.	Pre-construction Construction Operation
S3	Workforce management, accommodation, and housing impacts	A Workforce Management Plan will be developed in consultation with Lithgow Council and service providers, including local and regional health and emergency services providers to manage the potential impacts of the non-resident construction workforce. The Plan will: • include an accommodation strategy with measures to reduce negative impacts of the project workforce, identification of preferred workforce accommodation options and a review accommodation supply and availability • include strategies to promote wellbeing of the workforce • outline a code of conduct for workers, policies relating to antisocial behaviour • identify health and wellbeing service needs of the temporary construction workforce, including medical, allied health and wellbeing services • outline information to the workforce on community services, recreation facilities, events, tourism activities and how to access health services	Pre-construction Construction

ID	Impact	Environmental measures	Timing
		• consider the cumulative accommodation impacts associated with other major projects in the area • include a program to monitor and review the effectiveness of the Plan.	
S4	Local employment and training opportunities	Options for prioritising the employment of local workers for the construction phase will be investigated. This will include consideration of requirements for: • recruitment, skills and training measures, including identification of skills and qualifications required, and training targets • how the contractor will work with regional stakeholders to upskill local residents, including Indigenous and culturally diverse communities.	Pre-construction Construction
S5	Local employment and training opportunities	A Local Industry Participation Plan and an Aboriginal Participation Plan have been developed and will be implemented to ensure opportunities for local, regional and Indigenous businesses to participate in the project's supply chain. Implementation of the plans will include: • a process for local businesses to source information about supply opportunities for the project • host business information evenings • maintain a local supply chain register • step appropriate targets for local and Indigenous business procurement.	Pre-construction Construction
S6	Community benefits - local and regional stakeholders	Transgrid will continue to promote and engage with the community, interest groups and Lithgow City Council during all stages of the project to identify methods and opportunities to maximise community benefits and enhancements to leave a lasting legacy in the area.	Pre-construction Construction Operation
Air quality			
AQ1	Dust generation	A construction dust control protocol will be prepared and implemented as part of the CEMP and SWMP that details management measures, a method for recording dust complaints, and monitoring the effectiveness of controls. The construction dust control protocol will include: • locate dust generating activities away from sensitive receptors • dust suppression measures such as water sprays, water extension agents, soil stabilising polymers or other media on: - on unpaved work areas and tracks subject to traffic or wind - on spoil and aggregate stockpiles - during loading and unloading of dust generating materials • provide adequate water supply on site for dust suppression • wind monitoring and forecasting using Bureau of Meteorology AWS forecasts, to identify conditions where winds are over 10 m/s and the additional controls required to reduce dust if observed to be leaving the site boundary • implement measures to minimise the tracking of dust generating material onto paved roads	Pre-construction Construction

ID	Impact	Environmental measures	Timing
		• minimising the extent of ground disturbance at any one time as far as practicable, such as planning and scheduling vegetation clearing and grubbing activities to minimise areas of open and exposed soil • disturbed land will be stabilised as soon as practicable after completion of construction works and will also include: - construction benches, where not in riparian zones, to be left in a stable, weed free condition - brake and winch sites to be restored to previous condition - access tracks not required for operation to be returned to previous condition unless otherwise agreed with the relevant landowner - disturbed areas in riparian zones to be rehabilitated to ensure bank stability and minimise ecological impacts in accordance with a Rehabilitation Management Plan. • stockpile management to minimising the amount of material stockpiled, protecting stockpiles from wind erosion, and positioning stockpiles as far as practicable from nearby receptors • covering of transport loads of spoil, earthwork materials, waste and other loose materials when leaving the site to prevent escape of materials during transport. • The CEMP will also include a routine review of project activities against schedule 1 of the POEO Act to ensure an EPL is obtained before project activities exceed thresholds.	
AQ2	Amenity impacts	Visual monitoring will be undertaken. Where visible dust or wind-blown rubbish is observed leaving the site boundary towards sensitive receptors with the potential to result in amenity impacts, the dust generating construction activity will be modified or stopped until the hazard is reduced to an acceptable level, where practicable and appropriate, to minimise amenity impacts.	Construction
AQ3	Exhaust emissions	Plant, vehicles and equipment will be maintained in good condition in accordance with manufacturer's specifications. Plant, vehicles and equipment will be turned off when not in use.	Construction
AQ4	Greenhouse gas emissions	Approaches to reduce GHG emissions in line with Transgrid's Science Based Targets initiative (SBTi) GHG emission reduction targets during construction will be implemented such as: • employing efficient construction methods and reuse of materials, where possible • using local suppliers as much as possible to reduce transport emissions • using high efficiency diesel, where possible • avoiding and minimising vegetation clearance as much as possible.	Construction
AQ5	Greenhouse gas emissions	Measures to minimise/substitute fuel consumption during construction include: • using fuel efficient equipment rated for high fuel efficiency • equipment and site vehicles onsite will be regularly serviced, and energy efficient vehicles or equipment will be selected where available • optimise equipment use. Equipment and site vehicles must be switched off when not in constant use and not left idling and scheduling works to minimise machine operation • use of renewable energy such as battery power lighting and solar panels for site power and use of biofuels where possible.	Construction

ID	Impact	Environmental measures	Timing
AQ6	Greenhouse gas emissions	Measures to minimise earthworks and re-use considerations include: • spoil from drilling will be re-used as backfill if uncontaminated • excavated material from foundations will be re-used for landscape fill • planning and management of drill spoil including stockpile segregation for re-use or disposal • use of excavated material for access track formation.	Pre-construction Construction
Waste			
WM1	Construction waste	A Waste Management Plan (WMP) will be prepared and implemented. The WMP will outline processes, responsibilities, and measures to manage waste and resource use: • in line with circular economy principles and the waste hierarchy contained in the Waste Avoidance and Resource Recovery Act 2001 • in compliance with the EPA's Waste Classification Guidelines, Resource Recovery Orders and other statutory requirements • in consultation with Lithgow City Council and waste receivers to confirm receipt of project waste types and volumes, and to consider cumulative impacts from multiple construction projects proposing to utilise Council's waste facilities • include identification of disposal location based on the types and quantities of waste generated • include systems to sort, track and record the actual types and quantities of waste generated including contaminated waste, a stockpile register, waste re-used, recycled and transported for offsite disposal • include portable amenity facilities to store wastewater from construction compounds and disposal to licenced facilities by a licensed contractor • include record keeping for all offsite waste disposal (where required) and for the importation of materials, such as engineering fill and ENM or VENM • include measures for separating waste based on classification of management options, such as colour coded bins • include routine inspection and visual monitoring of waste management activities, such as ensuring waste receptacles are covered and wind-blown rubbish is collected and disposed of appropriately.	Pre-construction Construction
Cumulative impacts			
C1	Cumulative impacts	Coordination and engagement with proponents and/or construction contractors of relevant future projects will occur during detailed design and prior to construction to confirm timing of construction. Coordination and engagement will include: • providing regular construction program updates • identifying potential conflict and constraints points with other relevant future projects, e.g. proximity of work sites, or shared construction access routes and traffic management requirements, accommodation requirements • developing mitigation strategies in order to manage conflicts and constraints that may arise.	Detailed design Construction

Appendix C Revised Biodiversity Development Assessment Report

Appendix D Revised Traffic and Transport Assessment Report

Appendix E Fish River Water Supply Scheme working paper

Appendix F EPA response – detailed construction noise response