



KINGSWOOD BATTERY ENERGY STORAGE SYSTEM

Amendment Report 2

October 2025

SSD-63207219

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Acronyms and Abbreviations

Acronym	Definition
AHIMS	Aboriginal Heritage Information Management System
Arcadis	Arcadis Australia Pacific Pty Limited
BC Act	<i>Biodiversity Conservation Act 2016</i>
B&C SEPP	<i>State Environmental Planning Policy (Biodiversity and Conservation) 2021</i>
BESS	Battery Energy Storage System
CIV	Capital Investment Value
CLM Act	<i>Contaminated Land Management Act 1997</i>
DPHI	Department of Planning, Housing and Infrastructure
DPIE	Department of Planning, Industry and Environment
EIS	Environmental Impact Statement
Electricity Infrastructure Roadmap	<i>NSW Electricity Infrastructure Roadmap</i>
Electricity Strategy, the	<i>NSW Government's Electricity Strategy</i>
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EP&A Regulations	<i>Environmental Planning and Assessment Regulations 2021</i>
EPBC Act	<i>Environmental Protection and Biodiversity Conservation Act 1999</i>
FTE	Full-time equivalent
ha	Hectare
HV	High voltage
HVAC	Heating, ventilation and air conditioning
Iberdrola	Iberdrola Australia Development Pty Ltd
LV	Low voltage
MW	Megawatt
MWh	Megawatt-hour
NEM	National Energy Market
NSW	New South Wales
O&M	Operations and maintenance
OSOM	Oversize overmass
PCS	Power conversion system
Planning Systems SEPP	<i>State Environmental Planning Policy (Planning Systems) 2021</i>
Proponent, the	Iberdrola Australia Development Pty Ltd
RF Act	<i>Rural Fires Act 1997</i>
R&H SEPP	<i>State Environmental Planning Policy (Resilience and Hazards) 2021</i>

Acronym	Definition
SEARs	Secretary's Environmental Assessment Requirements
T&I SEPP	<i>State Environmental Planning Policy (Transport and Infrastructure) 2021</i>
Transmission Infrastructure Strategy, the	<i>NSW Transmission Infrastructure Strategy</i>
TfNSW	Transport for NSW
2024 ISP	<i>2024 Integrated System Plan for the National Electricity Market</i>

1 Introduction

Iberdrola Australia Development Pty Ltd (Iberdrola) (the Proponent) is seeking development consent for the construction, operation and maintenance of a large-scale Battery Energy Storage System (BESS) at 744 Burgmanns Lane, Kingswood, New South Wales (NSW) 2340 (Lot 43 DP1064582) (the Project Site). The BESS would have a capacity of up to 270 Megawatts (MW) and provide up to 1,080 Megawatt-hours (MWh) of battery storage capacity (the Project).

The Environmental Impact Statement (EIS) submitted to the Department of Planning, Housing and Infrastructure (DPHI) on 27 June 2024 (SSD-63207219) is currently being assessed, as amended on 15 April 2025.

The first Amendment Report (Amendment Report 1) (April 2025) was prepared to address the following amendments to the Project as described in the EIS (June 2024):

- Amendments to the high voltage transmission connection:
 - Solution 1 – Existing above and/or below ground high voltage transmission line
 - Solution 2 – Underground cable northern bay alignment
 - Solution 3 – Direct connection to overhead transmission line within the Project Site
- Amendments to the Project Development Envelope (now Project Site) and Development Footprint
- Amendments to the operational noise criteria

Figure 1-1 provides an overview of the Project as assessed in Amendment Report 1 (April 2025).

This Amendment Report (Amendment Report 2) includes an update to the Project Site and Development Footprint compared to that shown in Amendment Report 1 (refer to Figure 1-1 and Figure 1-3). The proposed update to the Project Site would provide flexibility during design development. Updates to the Development Footprint would facilitate connection of the BESS to the Tamworth substation and allow for the use of the existing Tamworth substation access road.

This Amendment Report also details:

- Revisions made to the oversize overmass (OSOM) route proposed in the Traffic Impact Assessment (TIA) (Update) (September 2025)
- Proposed road upgrades associated with the OSOM route and vehicle movements proposed in the TIA (Update) (September 2025)
- An additional access point into the Project Site and Development Footprint via the existing Tamworth substation access road off Burgmanns Lane. The additional access would be used both during construction and operation and maintenance work. Heavy vehicles using the additional access would do so via Goonoo Goonoo Road/New England Highway, Whitehouse Lane, Ascot-Calala Road and Burgmanns Lane. Light vehicles using the additional access would do so via the heavy vehicle route or via Goonoo Goonoo Road/New England Highway and Burgmanns Lane
- Revised daily peak heavy vehicle movements from 60 (60 in and 60 out) to 80 (80 in and 80 out).

The following outlines the approval history for the Project:

- 5 October 2023 – Submission of Scoping Report to DPHI
- 30 October 2023 – DPHI issued Secretary's Environmental Assessment Requirements (SEARs)
- 27 June 2024 – EIS submitted to DPHI
- 19 July 2024 - 15 August 2024 – EIS placed on public exhibition
- 15 April 2025 – Submissions Report and Amendment Report 1 submitted to DPHI.

This Amendment Report has been prepared in accordance with the Department's *State significant development guidelines – preparing and amendment report* (DPIE, 2022).

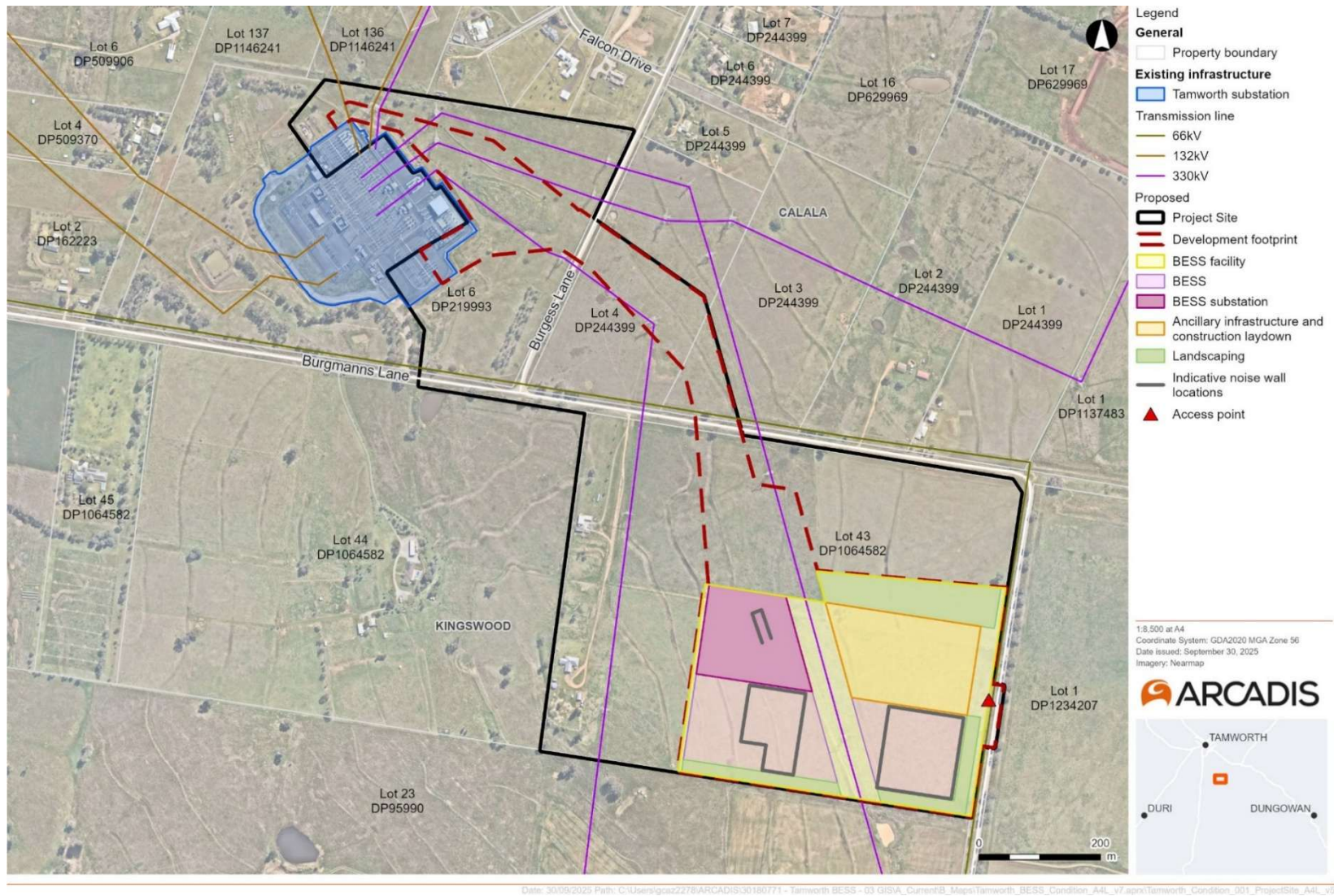


Figure 1-1: Overview of the Project (as per Amendment Report 1)

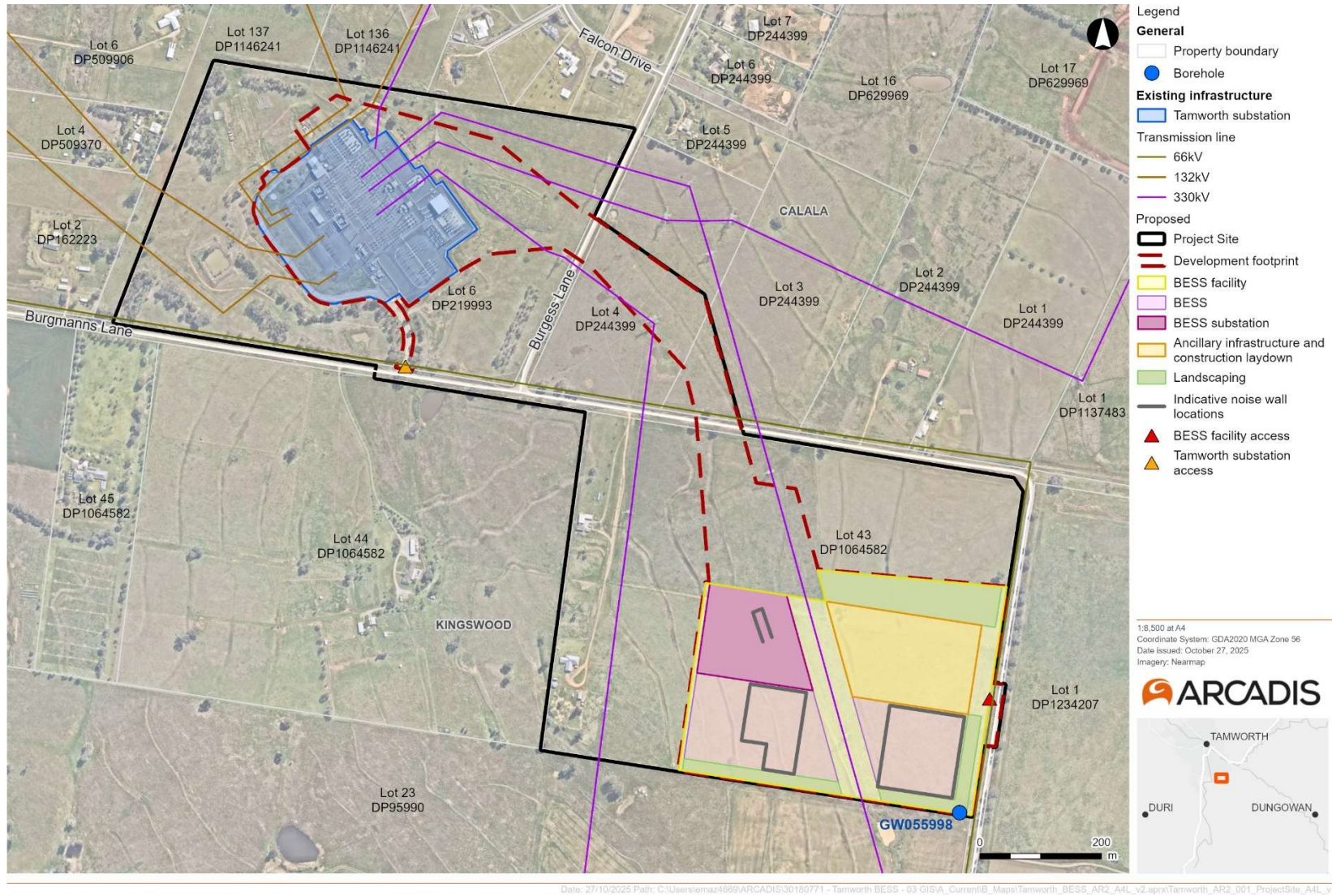
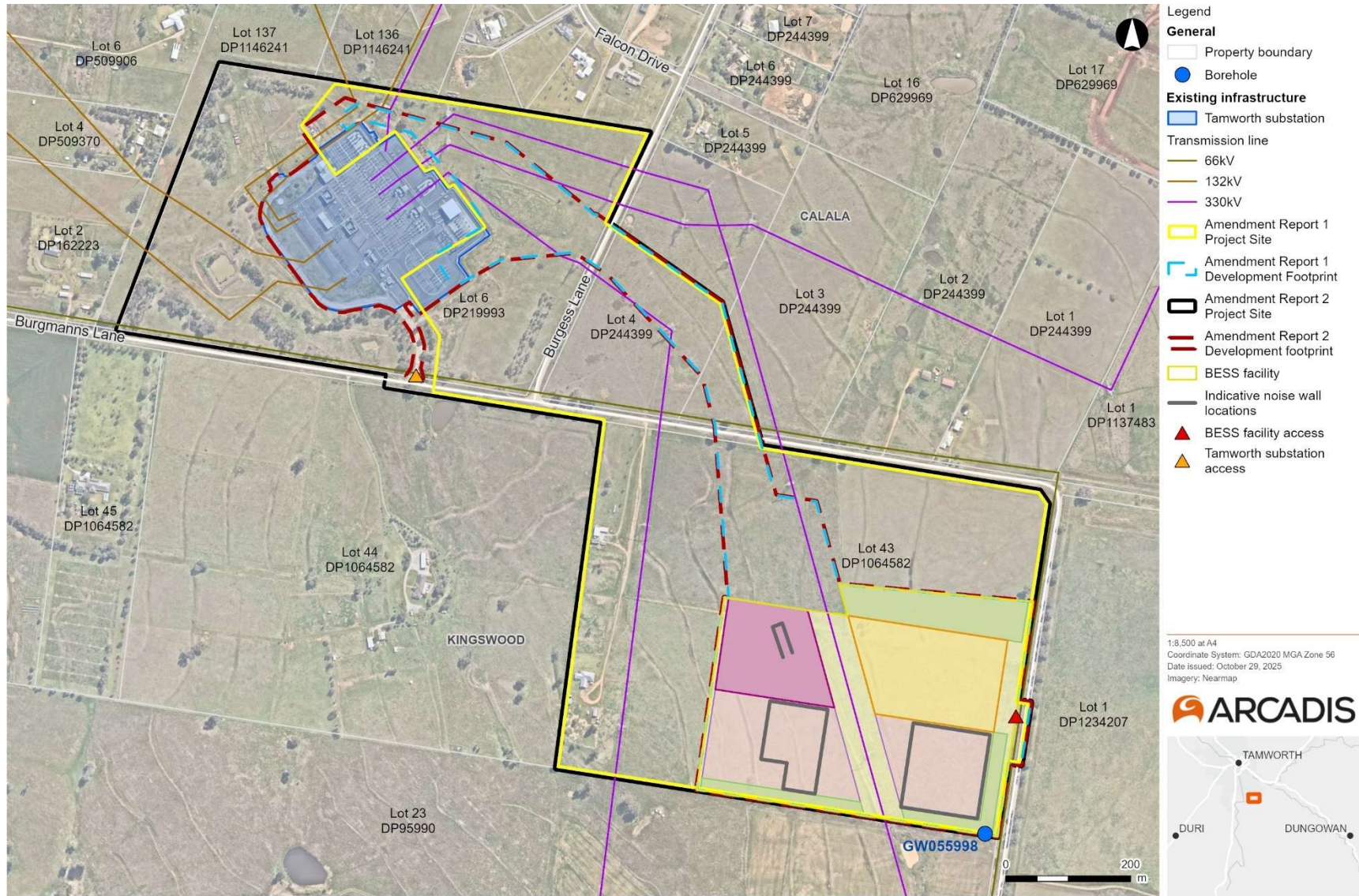


Figure 1-2: Overview of the amended Project



Date: 29/10/2025 Path: C:\Users\lemaz4669\ARCADIS\30180771 - Tamworth BESS - 03 GIS\A_Current\B_Maps\Tamworth_BESS_AR2_A4L_v2.aprx\Tamworth_AR2_004_Comparison_A4L_v1

Figure 1-3: A comparison of the amended Project Site and Development Footprint

2 Strategic context

This chapter summarises the strategic context for the Project as presented in Chapter 2 of the EIS (June 2024) and Amendment Report 1 (April 2025). The proposed amendments in this Amendment Report do not change how the Project aligns to this strategic context.

3 Description of the amendments

Table 3-1 provides a direct comparison of the Project as assessed in Amendment Report 1 (April 2025) and this Amendment Report.

Table 3-1: Key features of the Project as assessed in Amendment Report 1 (April 2025) and this Amendment Report

Project component	Amendment Report 1 (April 2025)	Amendment Report 2 (this Amendment Report)
Site details		
Application lots	<ul style="list-style-type: none"> Lot 43, DP1064582 Lot 3, DP 244399 Lot 4, DP 244399 Lot 6, DP 219993 	No change.
Zoning	<ul style="list-style-type: none"> RU4 – Primary Productions Small Lots 	No change.
Project Site	<ul style="list-style-type: none"> 61.55 ha 	<ul style="list-style-type: none"> 79.00 ha
Development Footprint	<ul style="list-style-type: none"> 27.95 ha 	<ul style="list-style-type: none"> 35.58 ha
Subdivision	<ul style="list-style-type: none"> The Project does not propose to subdivide the lot which it is situated on 	No change.
Access	<ul style="list-style-type: none"> New access driveway via Ascot-Calala Road The heavy vehicle route to the Project is proposed via Goonoo Goonoo Road/New England Highway, Whitehouse Lane and Ascot-Calala Road 	<ul style="list-style-type: none"> Additional access point via the existing Tamworth substation access road off Burgmanns Lane (see Figure 3-3) The heavy vehicles route to the additional access point into Tamworth substation would be via Goonoo Goonoo Road/New England Highway, Whitehouse Lane, Ascot-Calala Road and Burgmanns Lane The light vehicles route to the additional access point would be from either Whitehouse Lane or Burgmanns Lane.
Project design and built form		
Layout	<p>The Project would generally comprise the following key built form features:</p> <ul style="list-style-type: none"> BESS including battery enclosures, inverters, transformers, switch gear and control building On-site 33/330 kV BESS substation Transmission connection between the BESS and the Tamworth substation via one of the following solutions: <ul style="list-style-type: none"> High voltage transmission connection (above ground and/or below ground) between the BESS and the Tamworth substation Underground cable northern bay alignment 	No change.

Project component	Amendment Report 1 (April 2025)	Amendment Report 2 (this Amendment Report)
	<ul style="list-style-type: none"> – Connection to existing overhead transmission line • Ancillary infrastructure and mitigative features 	
BESS capacity	<ul style="list-style-type: none"> • Up to 270 MW active power • Up to 1,080 MWh battery storage capacity 	No change.
BESS	<p>The BESS would comprise the following components:</p> <ul style="list-style-type: none"> • Lithium-ion battery technology consisting of pre-assembled battery enclosures housing lithium-ion type battery cells, associated control systems and HVAC (heating, ventilation and air conditioning) units • Power conversion system (PCS) incorporating inverters and transformers • Ancillary infrastructure (electrical switchroom, control and office building, security fencing) 	No change.
33/330 kV substation	<p>The on-site substation would comprise:</p> <ul style="list-style-type: none"> • Four high voltage (HV) and two low voltage (LV) switch bays • 33 kV indoor switchgear housed in portable substation containers 	No change.
Transmission connection	<p>The following potential connection solutions have been developed in consultation with Transgrid, however only one connection solution will ultimately be pursued as the preferred solution and will be confirmed through continued discussion with Transgrid:</p> <ul style="list-style-type: none"> • Solution 1 (as described in the EIS) – A 330 kV transmission line (either above and/or below ground) of approximately 800 metres would extend from the BESS substation to the Tamworth substation • Solution 2 – Underground cable northern bay alignment • Solution 3 – Connection to existing overhead transmission line 	<p>Extension of the Development Footprint would allow for the installation of a new switchbay to facilitate the BESS’s connection to the grid. To support these works and associated high voltage equipment, the existing switchyard bench will be extended at the north end of the Tamworth substation. Both overhead and underground connections would be constructed within the switchyard to link the new equipment. Secondary systems used for monitoring, protection and control of high voltage assets would also be upgraded or modified within the Tamworth substation as needed during operation and maintenance.</p>
Ancillary infrastructure	<ul style="list-style-type: none"> • Site access to the BESS from Ascot-Calala Road • Internal site access road and parking • Operational and maintenance (O&M) building 	<ul style="list-style-type: none"> • Ancillary infrastructure detailed in Amendment Report 1 (April 2025) would be consistent with that proposed in this Amendment Report

Project component	Amendment Report 1 (April 2025)	Amendment Report 2 (this Amendment Report)
	<ul style="list-style-type: none"> • Permanent office and staff amenities • Stormwater management infrastructure • Lighting, fencing and security devices • Noise acoustic barriers • Water tank • Landscaping and screening vegetation 	<ul style="list-style-type: none"> • Additional access into Tamworth substation to facilitate BESS connection from Burgmanns Lane.
Design mitigation	<p>The Project has been sited to avoid and / or minimise environmental impacts whilst minimising distances to the Tamworth substation. Key mitigation measures considered in the Project design include:</p> <ul style="list-style-type: none"> • Siting of the BESS to maximise distance from non-associated receivers • Suitable asset protection zones and separation distances incorporated into the design of proposed infrastructure and disturbance footprint • Planted landscaping around project infrastructure to minimise visual impacts • Noise acoustic barriers and silencers • Siting of Project infrastructure outside of existing easements 	No change.
Design elements subject to change during detailed design	<ul style="list-style-type: none"> • Detailed design for the Project has yet to be completed. The following design elements may be amended through the detailed design process: <ul style="list-style-type: none"> – Layout of the battery enclosures and infrastructure within the development envelope – Transmission line alignment and arrangement – Location and height of attenuation features (noise acoustic barriers) and fencing 	No change.
Construction		
Capital investment value (CIV)	<ul style="list-style-type: none"> • Greater than \$30 million 	No change.
Activities	<p>Construction of the Project is expected to comprise:</p> <ul style="list-style-type: none"> • Civil and enabling works • Structural, mechanical and electrical works • Commissioning • Demobilisation 	No change.

Project component	Amendment Report 1 (April 2025)	Amendment Report 2 (this Amendment Report)
Program and staging	<ul style="list-style-type: none"> • Construction is expected to commence in Quarter 2 of 2025 • The Project is anticipated to take approximately 12–15 months to construct • Construction of the Project would be undertaken as a single stage (no staging is proposed) 	<ul style="list-style-type: none"> • Construction is expected to commence in Quarter 3 of 2026 • The Project is anticipated to take approximately 12-15 months to construct (no change) • Peak construction period is expected to occur for approximately six months • Construction of the Project would be undertaken as a single stage (no staging is proposed) (no change)
Hours	<ul style="list-style-type: none"> • Standard working hours: <ul style="list-style-type: none"> – 7am to 6pm Monday to Friday – 8am to 1pm Saturdays – No works on Sundays or public holidays. • Some work outside of these hours (e.g., oversized deliveries, emergencies) as required. 	No change.
Workforce	<ul style="list-style-type: none"> • Up to approximately 100 full-time equivalents (FTE) would be required for construction during the Project peak 	No change.
Vehicle movements	<ul style="list-style-type: none"> • The following maximum vehicle movements are predicted (subject to detailed design): <ul style="list-style-type: none"> – Up to 80 light vehicles per day (80 in and 80 out) during the construction works phase – Up to 60 heavy vehicles per day (60 in and 60 out) during the construction works phase (inclusive of oversized overmass (OSOM) vehicles movements) • Average daily heavy vehicle movements during the construction phase would be significantly lower than outlined above 	<ul style="list-style-type: none"> • The following maximum vehicle movements are predicted (subject to detailed design): <ul style="list-style-type: none"> – Up to 80 light vehicles per day (80 in and 80 out) during the construction works phase (no change) – Up to 80 heavy vehicles per day (80 in and 80 out) during the construction works phase (inclusive of oversized overmass (OSOM) vehicles movements) • Average daily heavy vehicle movements during the construction phase would be significantly lower than outlined above (no change).
OSOM route and associated road upgrades	<ul style="list-style-type: none"> • OSOM route as proposed in the TIA (Update) (September 2025) 	<p>The OSOM route is consistent with the OSOM route detailed in the TIA (Update) (September 2025), only deviating at the township of Mount Thorley where an alternate route has been proposed using the Jerry’s Plain Road Off-ramp, and at Muswellbrook where two potential route options are proposed:</p> <ul style="list-style-type: none"> • Option 1 (preferred): Traverses Muswellbrook via Denman Road, Thomas Mitchell Drive, New England Highway/

Project component	Amendment Report 1 (April 2025)	Amendment Report 2 (this Amendment Report)
		<p>Maitand Street, Bell Street, Victoria Street/ Market Street, New England Highway</p> <ul style="list-style-type: none"> Option 2 (alternate): Traverses Muswellbrook via Denman Road, Bengalla Road, Kayuga Road, Ivermein Street, Stair Street, Dartbrook Private Mine Access Road and New England Highway. <p>Proposed road upgrades along the proposed OSOM route at the Whitehouse Lane/Ascot-Calala Road intersection.</p> <p>Proposed road upgrades at The New England Highway / Burgmanns Lane and The New England Highway / Whitehouse Lane intersections to extend the length of the right turn lane to be compliant with a Channelised Right Turn (CHR), as per Austroads Guide to Road Design, Part 4A. Potential works required would be extending the right turn lane, adjusting signs, line marking, and/or nearby road shoulders to match.</p>
Transport	<ul style="list-style-type: none"> It is anticipated that the majority of the BESS infrastructure (eg batteries, enclosures, PCS components and substation components) would be transported from Sydney/Newcastle via approved B-double routes Construction materials would be sourced from surrounding concrete batching plants and hard rock quarries Construction labour, equipment and plant would likely be sourced from Tamworth and other surrounding regional centres 	<ul style="list-style-type: none"> It is anticipated that the majority of the BESS infrastructure (e.g. batteries, enclosures, PCS components and substation components) would likely be transported from Sydney/Newcastle via approved B-double routes. The exact transport origin and haulage arrangements will be confirmed once final equipment suppliers are selected and detailed logistics planning is undertaken during the pre-construction phase Construction materials are expected to be sourced locally where feasible, including from surrounding concrete batching plants and hard rock quarries Construction labour, equipment and plant would likely be sourced from Tamworth and other surrounding regional centres.
Water	<ul style="list-style-type: none"> Water for the Project would primarily be used for dust suppression and construction activities Water sources would be confirmed during detailed design but are likely to include a combination of bore water to be sourced and located on the participating landholder’s land, captured stormwater, municipal water supply (in 	No change.

Project component	Amendment Report 1 (April 2025)	Amendment Report 2 (this Amendment Report)
	agreement with the relevant authority) and/or imported water in portable tanks	
Operation		
Life of BESS	<ul style="list-style-type: none"> The estimated life of the initial BESS equipment is 20 years At the end of operational life, this may be extended subject to the replacement and/or refurbishment of components and market conditions 	No change.
Workforce	<ul style="list-style-type: none"> The Project would contribute to the employment of up to two FTE employees during operation The Project would be managed remotely, with two to four employees required to attend the Project Site periodically for maintenance activities 	No change.
Operational hours	<ul style="list-style-type: none"> 24 hours, 7 days a week 	No change.
Vehicle movements	<ul style="list-style-type: none"> Vehicle movements to and from the Project Site would occur infrequently during operations, primarily for scheduled maintenance. 	No change.
Decommissioning		
Decommissioning of BESS infrastructure	<ul style="list-style-type: none"> Decommissioning as detailed in the EIS (June 2024) and Submissions Report (April 2025) 	No change.

3.1 Amendment to the Project Site and Development Footprint

Ongoing consultation with Transgrid has resulted in an amendment to the Project Site (previously referred to as the Development Envelope) and the Development Footprint as described in Amendment Report 1 (April 2025). These amendments are shown in Figure 1-1.

3.1.1 Project Site

The Project Site described in this Amendment Report would equate to 79 hectares and would include the entirety of Lot 6 DP219993, on which the Tamworth substation is located. The extension has been proposed to provide flexibility during design development.

3.1.2 Development Footprint

The Development Footprint, as described in this Amendment Report, would equate to 35.58 hectares, and has been extended to include:

- the Tamworth substation
- the existing Tamworth substation access road, off Burgmanns Lane

- a small portion of land on the northern side of Tamworth substation to accommodate a potential switchyard bay extension required for the Project’s northern 330kV connection.

The extended Development Footprint reflects refinements made through ongoing consultation with Transgrid to ensure that all areas potentially required for the BESS connection and associated works are appropriately captured within the SSD approval boundary.

To enable the Project’s connection to the Tamworth substation, the proposed Development Footprint extension would allow for use of the existing Tamworth substation access road to construct and maintain the BESS’s connection to the substation as well as allow for the installation of a new switchbay to facilitate the BESS’s connection to the grid. To support these works and associated high voltage equipment, the existing switchyard bench will be extended at the north end of the Tamworth substation. Both overhead and underground connections would be constructed within the switchyard to link the new equipment. Secondary systems used for monitoring, protection and control of high voltage assets would also be upgraded or modified within the Tamworth substation as needed during operation and maintenance.

3.2 Oversize Overmass route revision

The proposed amendments include the assessment of revised oversize overmass (OSOM) routes in and around the township of Muswellbrook following, consultation with Muswellbrook Shire Council, and a revised route at Mount Thorley.



Two OSOM route options are proposed:

- Option 1 – preferred OSOM route - which utilises Thomas Mitchell Drive (an approved haulage route for mining)
- Option 2 – alternate OSOM route (‘Muswellbrook Detour Stage 1b’).

3.2.1 Option 1 – preferred OSOM route

Option 1 is consistent with the OSOM route proposed in the TIA (Update) (September 2025), only deviating at Mount Thorley at the Golden Highway/Jerry’s Plain Road Off-ramp intersection and at the township of Muswellbrook. Table 3-2 details the change in route for OSOM vehicles.

Table 3-2: Change of OSOM routes

TIA (Update) (September 2025)	TIA (Update) (October 2025) – Option 1
<p data-bbox="165 1509 791 1536">Golden Highway / On-ramp of Mount Thorley Road intersection</p> 	<p data-bbox="845 1509 1407 1536">Golden Highway/Jerry's Plain Road Off-ramp intersection</p> 

TIA (Update) (September 2025)	TIA (Update) (October 2025) – Option 1
<p>Denman Road/Sydney Street -> Skellatar Stock Route</p> 	<p>Denman Road -> Thomas Mitchell Drive</p> 
<p>Ironbark Road -> Rutherford Road</p> 	<p>Thomas Mitchell Drive -> New England Highway</p> 
<p>Rutherford Road -> New England Highway</p> 	<p>Maitland Street -> Bell Street</p> 
<p>Maitland Street -> Bell Street</p> 	<p>Bell Street -> Victoria Street</p> 
<p>Bell Street -> Victoria Street</p>	<p>Market Street -> New England Highway</p>

TIA (Update) (September 2025)	TIA (Update) (October 2025) – Option 1
<p>Market Street -> New England Highway</p>	

Comparisons between the previously proposed OSOM route (September 2025) and OSOM route Option 1 proposed in this Amendment Report are shown in Figure 3-1 and Figure 3-2 respectively.

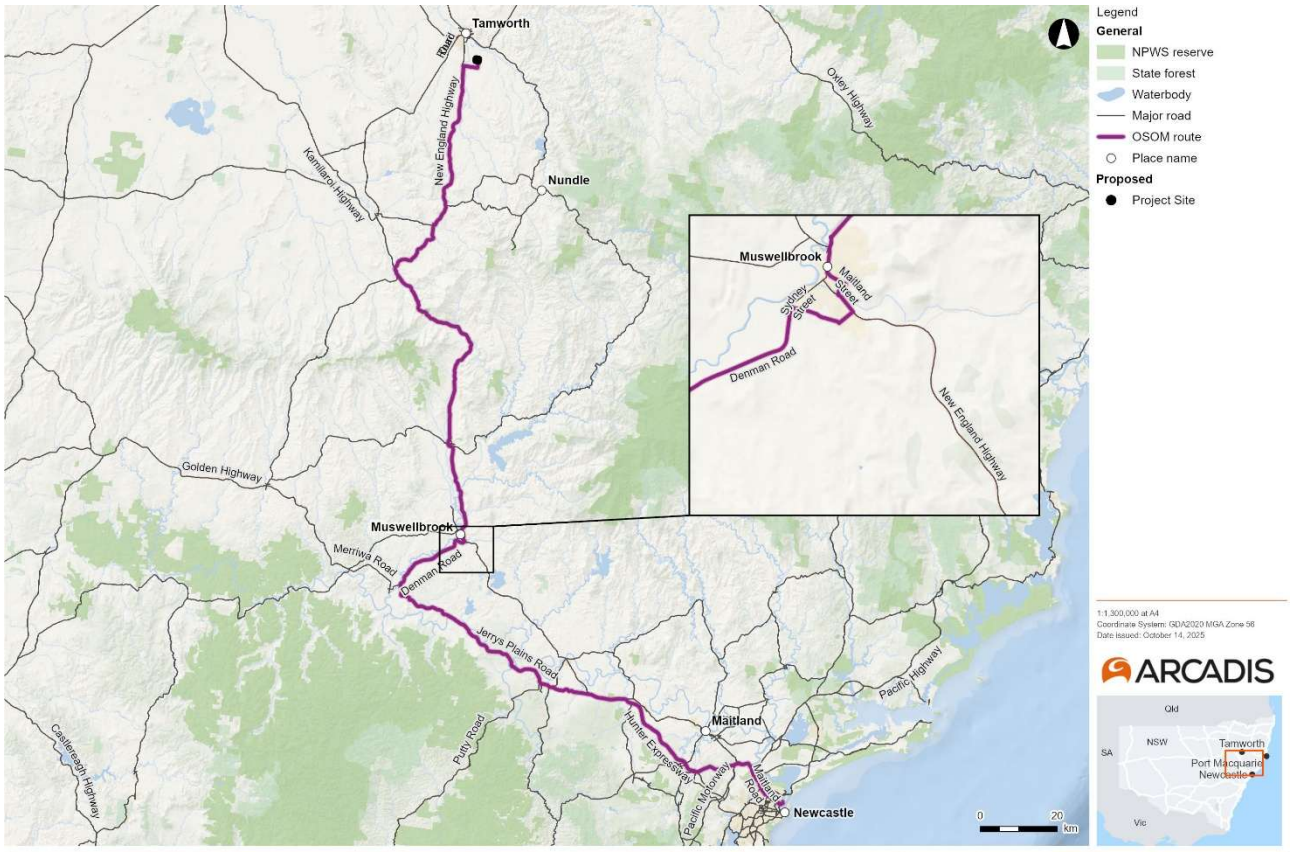


Figure 3-1: OSOM route proposed in the TIA (Update) (September 2025) (Source: NVHR Route Planner Tool)

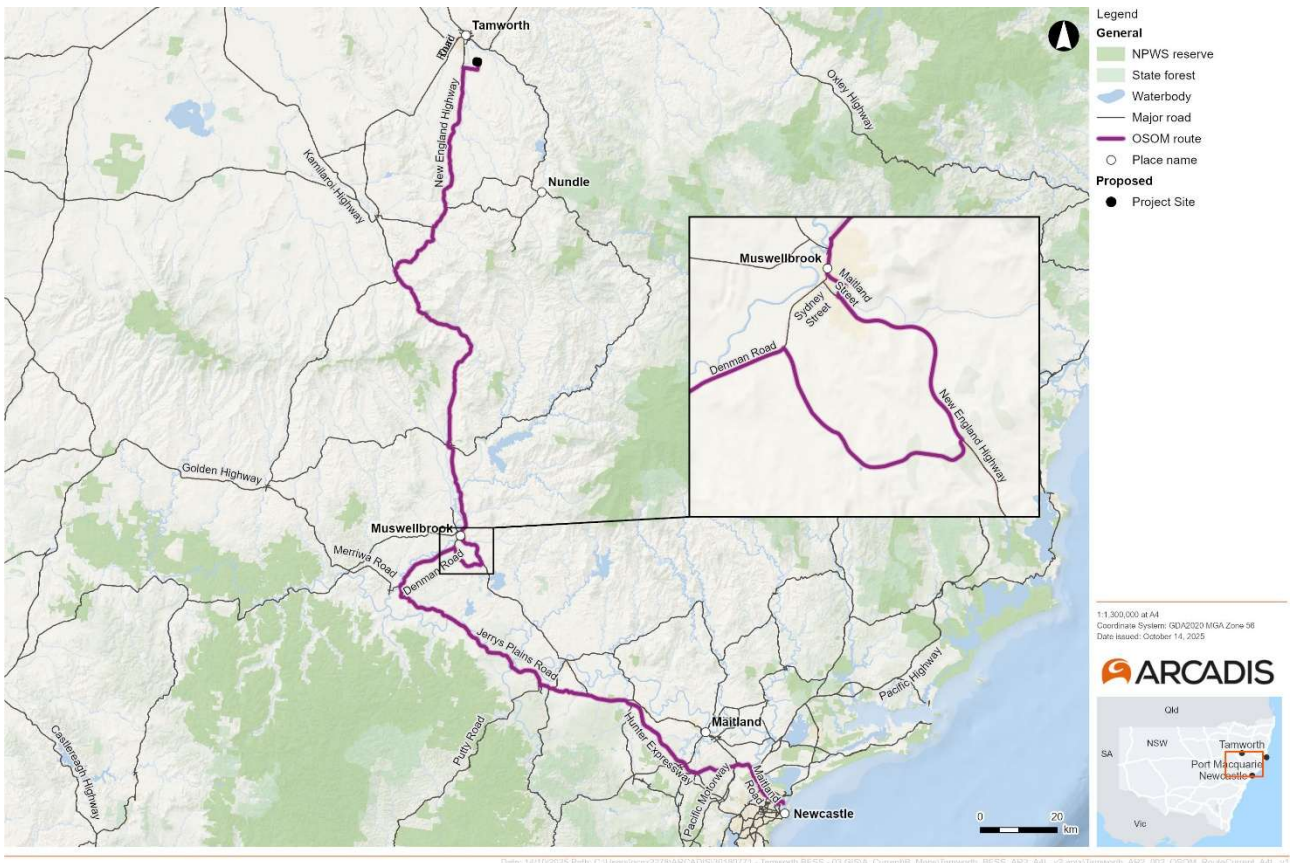


Figure 3-2: OSOM route proposed in the TIA (Update) (October 2025) (Source: NVHR Route Planner Tool) – Option 1

3.2.2 Option 2 – alternate route ('Muswellbrook Detour Stage 1b')

Option 2 is an alternate route for travel around the Muswellbrook area that avoids the developed areas of Denman Road, Thomas Mitchell Drive and Maitland Street. This option is known as the 'Muswellbrook Detour Stage 1b' and utilises Bengalla Road, Kayuga Road, Invermein Street, Stair Street and Dartbrook Private Mine Access Road to the intersection with New England Highway. The alternate route is part of a commitment by Transport for NSW (TfNSW) and Energy Corporation regarding State Road Upgrades between Port of Newcastle and the Central-West Orana Renewable Energy Zone and the New England Renewable Energy Zone (letter received from TfNSW to DPHI on 18 December 2024).

In the event that Option 1 is not feasible, further analysis will be undertaken on this alternate route with the assumption that any required road upgrades will be completed by Energy Corporation in time for the delivery of the Kingswood BESS project.

3.2.3 Proposed road upgrades

Upgrades to intersections along the proposed OSOM route may include:

- Traffic sign relocation and potential temporary fill at Whitehouse Lane/Ascot-Calala Road intersection, as detailed in section 4.3 of the Traffic Impact Assessment (TIA) (refer to Appendix D of the TIA).
- Potential road upgrade works required to extend the length of the right turn lanes at The New England Highway / Burgmanns Lane and New England Highway / Whitehouse Lane intersections to be compliant with a Channelised Right Turn (CHR), as per Austroads Guide to Road Design Part 4A. As detailed in section 4.1.2.2 and Appendix F of the TIA (Updated) (October 2025).

Project site footprints of the proposed road upgrade works are shown in Appendix B of this Report.

To address a further clarification from TfNSW received on 1 October 2025, updated figures with requested labels have also been prepared and included in the updated TIA (refer to Appendix F).

3.3 Access to the Project Site and Development Footprint

3.3.1 Additional site access off Burgmanns Lane

Following ongoing consultation with Transgrid, this Amendment Report proposes an additional site access at the existing Tamworth substation access road, off Burgmanns Lane (refer to Figure 3-3). This site access would provide an additional point of access during construction to facilitate connection of the BESS to the grid, as well as allow for required maintenance during operation. Heavy vehicles using the existing Tamworth substation access road would do so from Goonoo Goonoo Road/New England Highway, via Whitehouse Lane, Ascot-Calala Road and Burgmanns Lane. Light vehicles using the additional access would do so via the heavy vehicle route or via Goonoo Goonoo Rod/New England Highway and Burgmanns Lane.

3.3.2 Site access off Ascot-Calala Road

Consistent with the EIS (June 2024), the Project proposes the construction of a new site entrance off Ascot-Calala Road (refer to Figure 3-3) which would be used during construction and operation of the BESS. Following consultation with DPHI and Tamworth Regional Council, additional detail has been provided on how the Project would access Lots 3, 4 and 6. It is proposed that this would be done from within the Development Footprint, crossing Burgmanns Lane and Burgess Lane. Details regarding how safe crossing of Burgmanns and Burgess Lane would be facilitated is included in Section 6.1.2.3.

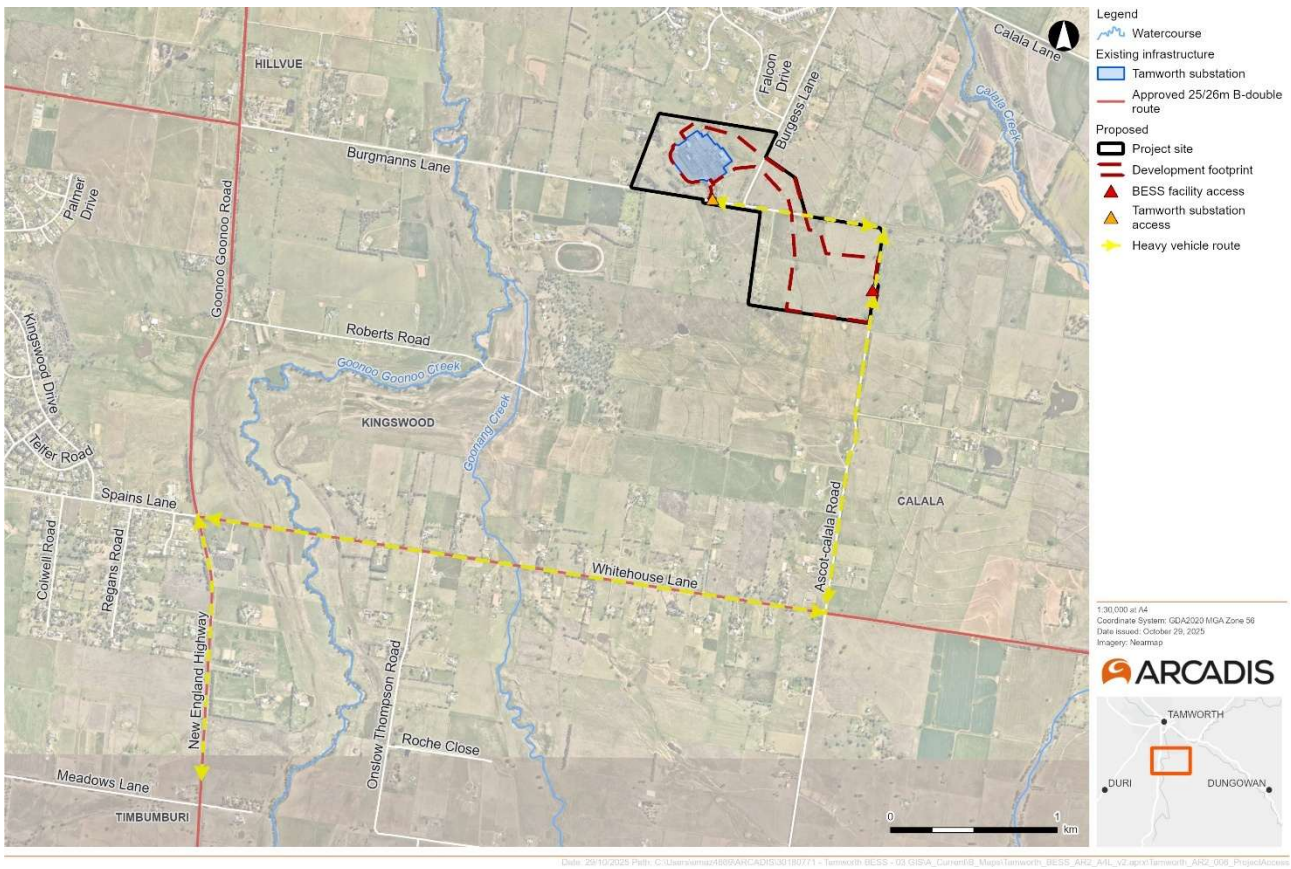


Figure 3-3: Heavy vehicle access route via Whitehouse Lane, Ascot-Calala Road and Burgmanns Lane

3.4 Revised peak daily heavy vehicle movements

As outlined in the TIA (Update) (September 2025), the Project is anticipated to generate 60 heavy vehicle movements (60 in and 60 out) per day. Following further review of the indicative construction methodology, it is proposed to increase the number of peak daily heavy vehicle movements to 80 (80 in and 80 out).

4 Statutory context

The statutory context of the Project remains consistent with that described in Chapter 4 of the EIS (June 2024) and Amendment Report 1 (April 2025). There have been no changes to the following Acts and legislative instruments that affect this application:

- *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act)
- *Native Title Act 1993*
- *State Environmental Planning Policy (Transport and Infrastructure) 2021* (T&I SEPP)
- *State Environmental Planning Policy (Planning Systems) 2021* (Planning Systems SEPP)
- *Environmental Planning and Assessment Act 1979* (EP&A Act)
- *State Environmental Planning Policy (Biodiversity and Conservation) 2021* (B&C SEPP)
- *State Environmental Planning Policy (Resilience and Hazards) 2021* (R&H SEPP)
- *Biosecurity Act 2015*
- *Biodiversity Conservation Act 2016* (BC Act)
- *Contaminated Land Management Act 1997* (CLM Act)
- *Rural Fires Act 1997* (RF Act)
- *Roads Act 1993*.

Under Section 138 of the *Roads Act 1993*, approval from Tamworth Regional Council would be required for the potential upgrades at the intersection of Whitehouse Lane/Ascot-Calala Road to facilitate OSOM movements and The Newell Highway/Whitehouse Lane and The Newell Highway/Burgmanns Lane intersections to facilitate channelised right-turns for OSOM and heavy/light vehicle movements to the Project Site.

Approval from TRC would also be required to allow for construction vehicles and machinery/equipment to cross both Burgmanns Lane and Burgess Lane, within the Development Footprint, during construction of the transmission line.

The proposed amendments do not change the permissibility of the Project or approvals required. An updated statutory compliance table for the amended Project is provided in Appendix C of this Report.

4.1 Appendices to the Amendment Report

In accordance with the *State significant development guidelines – preparing and amendment report* (DPIE, 2022), an updated Project description has been included in Appendix A.

An updated statutory compliance table and mitigation measures table have been included in Appendix C and Appendix D respectively.

The updated Traffic Impact Assessment is provided in Appendix F.

5 Consultation

Consultation with the following agencies has been undertaken for the amendments proposed in this report:

- **DPHI** - regular briefings and additional meetings held to discuss transport and access matters
- **Transgrid** - in relation to connection of the BESS to the Tamworth substation, the proposed Project Site and Development footprint, and Transgrid's requirement to use the existing Tamworth substation access road
- **TfNSW** - in relation to the TIA (Update) (September 2025) to address matters raised in their request for information (dated: 1 October 2025) as well as a request to complete a bridge assessment for the proposed OSOM route, in consultation with the TfNSW Freight Branch
- **TRC** - in relation to the potential road upgrades proposed in the TIA (Update) (October 2025). TRC was also consulted about the proposed changes assessed in this Amendment Report, landowners consent and the status of the Voluntary Planning Agreement
- **Muswellbrook Shire Council** - in relation to a suitable OSOM route around the township of Muswellbrook.

Due to the minor nature of the proposed amendments, specific community consultation has not been undertaken.

6 Assessment of impacts

Chapter 6 of the EIS (June 2024) provided an assessment of the key environmental issues for the Project as identified in the SEARs issued by the Secretary of DPHI in October 2023. The assessments carried out on the Project are described in Chapter 3 of the EIS (June 2024).

A request to amend the Project, as amended in April 2025, was submitted to DPHI on the 10 October 2025 and DPHI confirmed a second Amendment Report would be appropriate to address the environmental impacts associated with the amended Project. No additional or updated SEARs were issued by DPHI.

The amended Project, as described in Chapter 3 of this Amendment Report, has been assessed against each of the key issues set out in the SEARs.

Table 6-1 provides a summary of environmental aspects with the potential to be impacted by the amended Project. Where Table 6-1 indicates no additional impacts are predicted, impacts to the environmental aspect would remain consistent with what was assessed in the EIS (June 2024) and Amendment Report 1 (April 2025).

Table 6-1: Overview of impacts

Environmental aspect	Amendment to Project Site and Development Footprint	OSOM route revision	Proposed road upgrade works	Access to the Project Site and Development Footprint	Revised peak daily heavy vehicle movements
Traffic and transport	The amended Project Site and Development Footprint would not result in additional traffic and transport impacts.	Refer to Section 6.1	Refer to Section 6.1	Refer to Section 6.1	Refer to Section 6.1
Noise and vibration	The proposed amendments would not result in additional noise and vibration impacts to surrounding receivers beyond those assessed in the EIS and Amendment Report 1 (April 2025).				
Biodiversity	Additional vegetation clearing would not be required to accommodate the updated Project Site and Development Footprint. As such, the proposed amendments would not result in additional biodiversity impacts beyond those assessed in the EIS and Amendment Report 1 (April 2025). Figure E-1 in Appendix E shows an updated figure with the extended Project Site, Development footprint and Subject Land and the ground-truthed native vegetation. This confirms no additional impacts are predicted.				
Hazards and risk	Changes to the configuration of the BESS facility are not proposed as part of this Amendment Report. As such, the proposed amendments would not result in additional hazard and risks beyond those assessed in the EIS and Amendment Report 1 (April 2025).				
Bushfire	Changes to the configuration of the BESS facility, including asset protection zones, access arrangement, water supply and emergency management arrangements are not proposed as part of this Amendment Report. As such, the proposed amendments would not result in additional bushfire impacts beyond those assessed in the EIS and Amendment Report 1 (April 2025).				
Heritage	Amendments to the Development Footprint are mostly limited to the disturbed area within the Tamworth substation and access road. The amended Development Footprint would also extend about 60 metres on the north side of the Tamworth substation. A search of the Aboriginal Heritage Information Management System was completed on 14 October 2025, with no Aboriginal heritage items located within or near the amended Project Site and Development Footprint. As such, the proposed amendments				

Environmental aspect	Amendment to Project Site and Development Footprint	OSOM route revision	Potential road upgrade works	Access to the Project Site and Development Footprint	Revised peak daily heavy vehicle movements
	are not expected to result in additional impacts beyond those assessed in the EIS and Amendment Report 1 (April 2025).				
Visual amenity	No additional visual elements, beyond those assessed in the EIS and Amendment Report 1 (April 2025), are proposed as part of this Amendment Report. As a result, the proposed amendments would not result in additional visual impacts.				
Land	The Development Footprint would not constitute a substantial increase, about 7.63 hectares, and as such is not expected to impact agriculture or land use. Further to this, the proposed amendments would not result in additional land impacts, including erosion and sedimentation, acid sulfate soils and contamination.				
Socio-economic	The construction workforce and workforce procurement would remain consistent with that detailed in the EIS prepared for the Project. As such, the proposed amendments would not result in additional social and economic impacts, beyond those assessed in the EIS (June 2024).				
Water	The proposed amendments would not result in changes to the water demand of the Project or impacts surface water quality and quantity, flooding or groundwater, beyond those assessed in the EIS (June 2024) and Submissions Report (April 2025).				
Waste	No changes to likely waste streams and waste management are proposed, beyond what has been identified in the EIS (June 2024). As a result, the proposed amendments would not result in additional waste impacts for the Project.				
Air quality	The proposed amendments would be able to be accommodated within the construction activities identified in the EIS (June 2024). As such, the proposed amendments would not result in air quality impacts beyond those assessed in the EIS (June 2024).				
Cumulative	<p>At the time of preparing this Amendment Report, the Burgmanns Lane Cause replacement works are still ongoing, with completion of the works scheduled for 7 November 2025.</p> <p>It is expected that works associated with the causeway replacement would be completed before commencement of construction for the Kingswood BESS.</p>				

6.1 Traffic and transport

A Traffic Impact Assessment (TIA) was prepared by Arcadis for the Project which detailed the existing conditions surrounding the Project and assessed construction and operational traffic volumes, route assessments, site access, parking and public and active transport. The TIA has undergone a number of updates throughout the Project's approval history to date. This includes:

- TIA prepared for the EIS, submitted to DPHI 27 June 2024
- TIA (Update) prepared for the Submissions Report to address agency submissions received during exhibition of the EIS, submitted to DPHI 15 April 2025
- TIA (Update) prepared to address RFIs received from TfNSW (23 May 2025) and TRC (22 May 2025) on the Submissions Report and Amendment Report 1 (April 2025), submitted to DPHI 5 September 2025.

The TIA (Update) (October 2025) included in this Amendment Report (refer to Appendix F of this Report) has been updated to address additional clarifications received from TfNSW on 1 October 2025. The TIA (Update) (October 2025) has also been updated to assess potential impacts resulting from amendments outlined in Section 3.

The below sections provide a summary of the potential traffic and transport impacts resulting from the amended Project. This section should be read in conjunction with Section 6.1 of EIS, Section 6.1 of the Amendment Report 1 (April 2025) and the TIA (Update) (October 2025) (refer to Appendix F of this Report).

6.1.1 Existing environment

The existing environment has not changed since the preparation of the EIS (June 2024), with the environment described in Section 6.1.2 of the EIS (June 2024) still applicable to the amended Project.

6.1.2 Assessment of potential impacts

6.1.2.1 Oversize overmass route revision

Bridge assessment

A bridge assessment, included in Section 4.3.2 and Appendix G of the TIA (Update) (October 2025) (refer to Appendix F of this Report) was undertaken for the previous revision of the OSOM route (September 2025), assuming the use of a 40 metre vehicle. The assessment concluded that the nominated OSOM vehicle can be permitted to travel along the proposed route, subject to the conditions outlined in mitigation measure T15 in Appendix D.

As noted in Section 3.2, the OSOM route has since been revised. As there are no bridges located along the amended OSOM route through Muswellbrook, the outcomes of bridge assessment are still applicable.

Swept path analysis

Revisions to the proposed OSOM route through Muswellbrook (as shown in Figure 3-2) and at Mount Thorley has been supported by the completion of a swept path analysis, included in Appendix D of the TIA (Update) (October 2025) (refer to Appendix F of this Report). The swept path analysis confirmed that OSOM vehicles for the Project would be able to successfully navigate the proposed route without the need for road modification works.

6.1.2.2 Proposed road upgrades

Proposed road upgrades for the Project would include:

- Traffic sign relocation and potential temporary fill at Whitehouse Lane/Ascot-Calala Road intersection, as detailed in section 4.3 of the Traffic Impact Assessment (TIA) (refer to Appendix D). These are local roads are managed by Tamworth Regional Council, for which landowners' consent has been granted.
- Road upgrade works required to extend the length of the right turn lanes at The New England Highway / Burgmanns Lane and New England Highway / Whitehouse Lane intersections to be compliant with a Channelised Right Turn (CHR), as per Austroads Guide to Road Design Part 4A, as detailed in section 4.1.2.2 and Appendix F of the TIA (Updated) (October 2025). These are local roads are managed by Tamworth Regional Council, for which landowners' consent has been granted.

These road upgrade works would occur entirely within the road corridor and result in temporary minor impacts to the local road network as a result of temporary lane closures and traffic management measures.

Potential impacts would be managed with the implementation of measures outlined in a CTMP (T1). The road upgrade works will be finalised and confirmed during detailed design by the contractor.

6.1.2.3 Access to the Project Site and Development Footprint

Site access off Burgmanns Lane

A swept path analysis was completed for heavy vehicles which would be travelling to the additional access point at the existing Tamworth substation access road, off Burgmanns Lane (refer to Figure 3-3).

As shown in Appendix D of the TIA (Update) (October 2025) (Appendix F), heavy vehicles would be able to successfully navigate the turns from Ascot-Calala Road onto Burgmanns Lane and from Burgmanns Lane onto the Tamworth substation access road.

Site access off Ascot-Calala Road

As noted in Section **Error! Reference source not found.** and consistent with the EIS (June 2024), construction of the transmission connection from the BESS into Tamworth substation would require some construction vehicles and machinery/equipment (e.g. excavators) to cross both Burgmanns Lane and Burgess Lane within the Development Footprint. These works are expected to require temporary partial road closures to enable safe crossing of these roads and installation of transmission infrastructure and associated civil works. Temporary access points may be established along these roads during construction, but no permanent changes to existing road alignments are proposed. In consultation with DPHI, the safe crossing of these roads will be managed with the implementation of measures outlined in a CTMP (T1).

6.1.2.4 Revised peak daily heavy vehicle movements

Construction vehicle movements, including the additional 20 heavy vehicles vehicle movements per day (totalling 80 in and 80 out) proposed as part of this Amendment Report, would be relatively minor compared to the existing daily traffic volumes on the surrounding road network. In the event that all three BESS projects and the Goonoo Goonoo Road Upgrade are constructed at the same time, a Level of Service C or better would be maintained on the Goonoo Goonoo Road/New England Highway, Whitehouse Lane and Burgmanns Lane.

6.1.3 Environmental mitigation measures

Traffic and transport impacts associated with the above amendments are generally consistent with impacts described in the EIS (June 2024) and would therefore be managed through the implementation of the proposed mitigation measures described in Section 6.1.5 and Appendix D of the EIS (June 2024).

Minor updates to mitigation measure T1 and T4 have been made in line with recommendations made in the TIA (Update) (October 2025) (Appendix F of this Report). An additional mitigation measure (T15) has also been included which outlines conditions from the bridge assessment (Appendix G of the TIA (Update) (October 2025)).

7 Conclusion and justification of the amended project

Iberdrola proposes to amend the Project as a result of ongoing discussions held with Transgrid, Transport for NSW, Tamworth Regional Council and Muswellbrook Shire councils. The amended Project would maintain consistency with the projects strategic context. As such, the justification of the project is consistent with that provided as part of the EIS (June 2024).

This Amendment Report includes an update to the Project Site and Development Footprint compared to that shown in Amendment Report 1 (April 2025) (refer to Figure 1-2). The proposed update to the Project Site would provide flexibility during design development. Updates to the Development Footprint would facilitate connection of the BESS to the Tamworth substation and allow for use of the existing Tamworth substation access road.

This Amendment Report also details:

- Revisions made to the oversize overmass (OSOM) route nominated in the TIA (Update) (September 2025)
- Potential road upgrade works associated with the OSOM route proposed in the TIA (Update) (September 2025)
- An additional access into the Project Site and Development Footprint via the existing Tamworth substation access road off Burgmanns Lane. The additional access would be used both during construction and operation and maintenance work. Heavy vehicles using the additional access would do so via Goonoo Goonoo Road/New England Highway, Whitehouse Lane, Ascot-Calala Road and Burgmanns Lane. Light vehicles using the additional access would do so via the heavy vehicle route or via Goonoo Goonoo Road/New England Highway and Burgmanns Lane
- Revised daily peak daily heavy vehicle movements from 60 (60 in and 60 out) to 80 (80 in and 80 out).

An TIA (Update) (October 2025) (refer to Appendix F of this Report) was prepared to assess potential traffic and transport impacts that may arise as a result of the amendments to the Project. Findings from the TIA (Update) (October 2025) are detailed in Section 6, where it was concluded that no additional impacts, beyond those assessed in the EIS (June 2024) and Amendment Report 1 (April 2025), are anticipated.

As documented in Section 6 of this Amendment Report, impacts associated with the proposed amendments are generally consistent with the impacts described in the EIS (June 2024). The Project would still result in impacts due to:

- Temporary reduction in the capacity of the surrounding road network in the event concurrent nearby developments were constructed at the same time
- Temporary noise impacts during construction
- Temporary visual impacts during construction
- Removal of 0.22 hectares of native vegetation
- Low visual impacts at two of the viewpoints assessed
- Social impacts including additional demand for accommodation during construction
- Potential impacts to health and wellbeing
- A change in surroundings
- Employment opportunities.

The Project would still provide a range of long-term economic benefits at the regional and State level contributing to a more resilient, efficient, and sustainable energy system. The Project is expected to require up to 100 construction personnel (or 271 job years based on the estimated development cost for the Project) and is estimated to directly increase Tamworth LGA's economic output by around \$124.9 million.

The amended Project is considered justified in relation to its strategic need supporting the Commonwealth and State governments to achieve their respective renewable energy and greenhouse gas emissions reduction targets, taking

into account biophysical, economic and social considerations, including ecologically sustainable development and cumulative impacts.

APPENDIX A UPDATED PROJECT DESCRIPTION

APPENDIX B PROPOSED ROAD UPGRADE WORKS

APPENDIX C UPDATED STATUTORY COMPLIANCE TABLE

APPENDIX D UPDATED MITIGATION MEASURES TABLE

Mitigation measures have been summarised below. These measures have been reviewed and updated to address issues raised in the submissions. The changes made to the mitigation measures as presented in the EIS are shown in **bold** and ~~strikethrough~~.

APPENDIX E NATIVE VEGETATION FIGURE

APPENDIX F TRAFFIC IMPACT ASSESSMENT (UPDATE)