

S4.55(1A) Modification Report

Tract



Calala Battery Energy Storage System

SSD-52786213

Prepared for The Trustee for the Equis Energy (Australia) Ngumi 4 Holding Trust

Acknowledgement of Country

We pay our respects to the Traditional Custodians of Country throughout Australia, their Elders and ancestors, recognising their rich heritage and enduring connection to Country and acknowledging the ongoing sovereignty of all Aboriginal and Torres Strait Islander Nations.

We recognise the profound connection to land, waters, sky and community of the First Nations peoples, with continuing cultures that are among the oldest in human history. We recognise that they are skilled land shapers and place makers, with a deep and rich knowledge of this land which they have cared for, protected and balanced for millennia.

Our Country, 2022

88 x 119 cm Acrylic on canvas

Original artwork by

Alfred Carter

Gunaikurnai

Quality Assurance

S4.55(1A) Modification Report
Calala Battery Energy Storage System
SSD-52786213

Project Number
222-0027-01

Revisions

No.	Date	Description	Prepared By	Reviewed By	Project Principal
00	19 / 12 / 2024	Draft for Initial Review	Kirsten Picard Leonard Slabbert	Corné van Rooyen Karmi Palafox	Leonard Slabbert
01	05 / 06 / 2025	Updated Draft	Kirsten Picard	Karmi Palafox	Leonard Slabbert
02	09 / 09 / 2025	Draft for Client Review	Naveen Raju	Karmi Palafox	Leonard Slabbert
03	12 / 09 / 2025	Updated Draft for Client Review	Naveen Raju	Karmi Palafox	Leonard Slabbert
04	15 / 09 / 2025	Updated Draft	Naveen Raju	Karmi Palafox	Leonard Slabbert
05	25 / 09 / 2025	Final Report	Naveen Raju	Karmi Palafox	Leonard Slabbert

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Executive Summary

This Modification Report has been prepared by Tract Consultants Pty Ltd ('Tract') on behalf of the Trustee for the Equis Energy (Australia) Ngumi 4 Holding Trust ('Equis', or the 'Applicant') for the amendment of a State Significant Development Application (SSD-52786213). The approved project involves the construction of a new Battery Energy Storage System, with storage capacity of up to 300 megawatts (MW) and discharge capacity of 600 MW-hour (MWh), a connection to the existing Tamworth Substation via underground transmission cable, and ancillary works.

The land to which this project applies has not changed from what was previously approved. The primary project address is 474 Calala Lane, Calala (Lot 17 DP629969) with ancillary works included on portions of Lot 16 DP629969, Lot 3 DP244399, Lot 4 DP244399, and Lot 6 DP219993 within the defined Site Boundary as indicated on Plan 1 CAL/00/P/00-GN/PLN/0001R2 in Appendix E of this Modification Report.

The Calala BESS Environmental Impact Statement (EIS) dated 3 October 2023, the associated Amendment Report dated 24 May 2024, and supporting documentation were considered by the Minister and approval was subsequently granted on 28 June 2024, in accordance with Section 4.28 of the *Environmental Planning & Assessment Act 1979*.

This application is made under Section 4.55(1A) of the *Environmental Planning & Assessment Act 1979* (EP&A Act 1979) and involves modification of the approved State Significant Development Application (SSDA) consent with minimal environmental impact. Works associated with this modification include:

- Three (3) vehicle turning bays along the transmission line corridor.
- Road and vehicle access off Burgmanns Lane.
- General minor works at the Tamworth Substation and BESS facility, including but not limited to:
 - Temporary construction laydown, site compound and vehicle parking within the Tamworth Substation land. The additional proposed laydown area is approximately 3.07ha.
 - Minor increase to the size of the existing retarding basin capacity.
 - Minor increase in the overall length of the grassed landscape mound located to the northwest of the BESS.
 - Site boundary reduction.
 - Additional grassed landscaped mound located to the north of the BESS facility.
- Minor correction to boundaries to align with a title re-establishment survey and align more closely with the development footprint.

This report includes:

- Updated project description.
- Updated statutory compliance table and updated mitigation measures table.
- Landowners' consent for the proposed modification works.

The following specialist documentation were commissioned to reflect the modification and amendments:

- Updated Site Layout Plan and Drawing Set.
- Biodiversity Development Assessment Report Addendum.
- Transport Impact Statement.
- Aboriginal and Historical Heritage Statement.
- Landscape Character and Visual Impact Assessment Addendum.
- Hydrology and Flooding Impact Assessment.

The proposed modifications will not result in any additional or discernible community or environmental impacts. It is considered that the proposed modifications will ultimately result in an improved project outcome.

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Calala BESS MOD Report

1 Introduction

This Modification Report relates to the Battery Energy Storage System (BESS) proposed under SSD-52786213 by the Applicant. This application is made under Section 4.55(1A) of the *Environmental Planning & Assessment Act 1979* (EP&A Act 1979) and involves modification of an approved State Significant Development (SSD) application, with minimal environmental impact.

The original SSD application was lodged with the Department of Planning, Housing and Infrastructure (DPHI, former DPE) in November 2023 (Ref: SSD-52786213). The application was placed on public exhibition for 28 days between 16 November and 13 December 2023.

An amendment report was submitted in May 2024, which proposed to amend several elements of the original application, including reducing the total number of battery enclosures from 900 to 164.

The application was approved on 28 June 2024 in accordance with Section 4.28 of the EP&A Act 1979.

The Applicant proposes the following as part of this Section 4.55(1A) Modification application:

- Three (3) vehicle turning bays along the transmission line corridor.
- Two (2) additional access points off Burgmanns Lane, one from the existing Tamworth Substation and an additional new access point approximately 180m east from the intersection between Burgmanns Lane and Burgess Lane.
- General minor works at the Tamworth Substation and BESS facility, including but not limited to:
 - Temporary construction laydown, site compound and vehicle parking within the Tamworth Substation land.
 - Minor increase to the size of the existing retarding basin capacity.
 - Minor increase in the overall length of the grassed landscape mound located to the northwest of the BESS facility.
 - Additional grassed landscaped mound located to the north of the BESS facility.
 - Site boundary reduction
- Minor correction to boundaries to align with a title re-establishment survey and align more closely with the Development footprint.

This report is structured in two parts in accordance with the SSD Guidelines – Preparing a Modification Report (DPIE – October 2022).

The main report describes the proposed modifications and considers any potential environmental impacts as a result of the modification. The second part is made up of the appendices to the main report, which includes:

- TransGrid Land Management Agreement (Appendix A).

- Modified Project Summary Table (Appendix B)
- Updated Statutory Compliance Table (Appendix C).
- Updated Mitigation Measures Table (Appendix D).
- Updated Site Layout Plan and Drawing Set (Appendix E).
- Biodiversity Development Assessment Report Addendum (Appendix F).
- Transport Impact Statement (Appendix G).
- Aboriginal and Historical Heritage Statement (Appendix H).
- Landscape Character and Visual Impact Assessment Addendum (Appendix I).
- Hydrology and Flooding Impact Assessment (Appendix J).
- Landowners' Consent (Appendix K).

1.1 The Applicant

The applicant is the Trustee for the Equis Energy (Australia) Ngumi 4 Holding Trust (Equis), with registered address at First Floor, 40 Esplanade, Brighton, Melbourne VIC 3186.

Equis is one of Asia Pacific's leading infrastructure developers and is actively pursuing renewables development and investment across the region. Equis has successfully developed over 11GW of renewable energy and over 220 renewable energy projects around the world.

Equis has extensive experience developing renewable energy assets across the country. More information about Equis is available at Equis Australia's webpage at: <https://www.equis.com.au/>

1.2 Approved Project

The approved project (SSD-52786213) involves the construction of a new BESS, with a storage capacity of up to 300 megawatts (MW) and discharge capacity of up to 600 MW-hour (MWh), a connection to the existing Tamworth Substation via underground transmission cable, and ancillary works.

Construction of the BESS commenced on 18 June 2025 and construction work hours are limited between Monday to Friday, 7 am to 6 pm, and Saturday 8 am to 1 pm. The site is accessed via a newly constructed driveway off Calala Lane to the north. The project also allows for the upgrading and decommissioning of equipment over time. The expected operational life of the project is 25 years with the possibility to extend if required.

The key components of the approved Project are listed below in **Table 1**.

Table 1. Main Components of the Approved Project

Aspect	Description
Project summary	The project includes: • Site establishment including earthworks and installation of erosion and sediment control measures; • Construction of a BESS with storage capacity up to 300 MW and up to 600 MWh discharge capacity comprising battery modules, a substation, inverter stations, distribution kiosks, a control room and switch room, and a warehouse; • Installation of an underground transmission cable from the BESS to the TransGrid 330 kV Tamworth Substation; • Vehicular access from Calala Lane;

	- Tree removal and landscaping works; and - Installation of a noise barrier on the western side and security fencing.
Project location	- Development footprint: 474 Calala Lane, Calala (Lot 17 DP629969). - Transmission connection: 57 Burgess Lane, Calala (Lot 16 DP629969) - Burgmanns Lane, Calala (Lot 3 DP244399) - Burgess Lane, Calala (Lot 4 DP244399) 707 Burgmanns Lane, Calala (Lot 6 DP219993).
Site area	57.04 hectares (ha)
Development footprint	11.4 ha
Access route	- Heavy vehicles would travel to the site via the New England Highway, Nundle Road, O'Briens Lane and Calala Lane. - Light vehicles and heavy vehicles requiring escort would travel to the site via the New England Highway and Calala Lane.
Site access	The site would be accessed via a newly constructed access off Calala Lane.
Construction works	The project commenced on 18 June 2025. Construction will be ongoing for approximately eighteen (18) months. Hours would be limited to Monday to Friday, 7 am to 6 pm and Saturday 8 am to 1 pm.
Decommissioning and rehabilitation	The site would be progressively rehabilitated during and following the construction period, including removal of the temporary construction facilities. At the end of operational life, aboveground components would be removed and the land rehabilitated to pre-development conditions.
Hours of operation	24 hours, 7 days per week.
Employment	Up to 170 jobs during construction and seven jobs during operations.
Capital Investment Value (CIV)	Exceeding \$30million
Voluntary Planning Agreement (VPA)	- Monetary contribution of 0.31% of finalised Capital Investment Value (at the time of Financial Close), to be paid as a lump sum within 20 business days following the execution of the VPA. - A further payment annually of \$200,000 (CPI adjusted) for the first three years of operation of the project, either paid via the VPA or as a separate Community.

Key environmental risks identified during the Environmental Impact Statement (EIS) stage:

- Biodiversity impacts
- Aboriginal heritage impacts
- Access and traffic impacts
- Noise impacts
- Cumulative impacts.
- Other environmental risks were also identified, which included:
 - Bushfire
 - Hazards and risks
 - Visual Impact
 - Non-aboriginal heritage.

All impacts were considered acceptable and manageable through appropriate mitigation measures, included as part of the project's environmental mitigation measures.

The site context is provided in Figure 1 below and the approved project layout is shown in Figure 2.

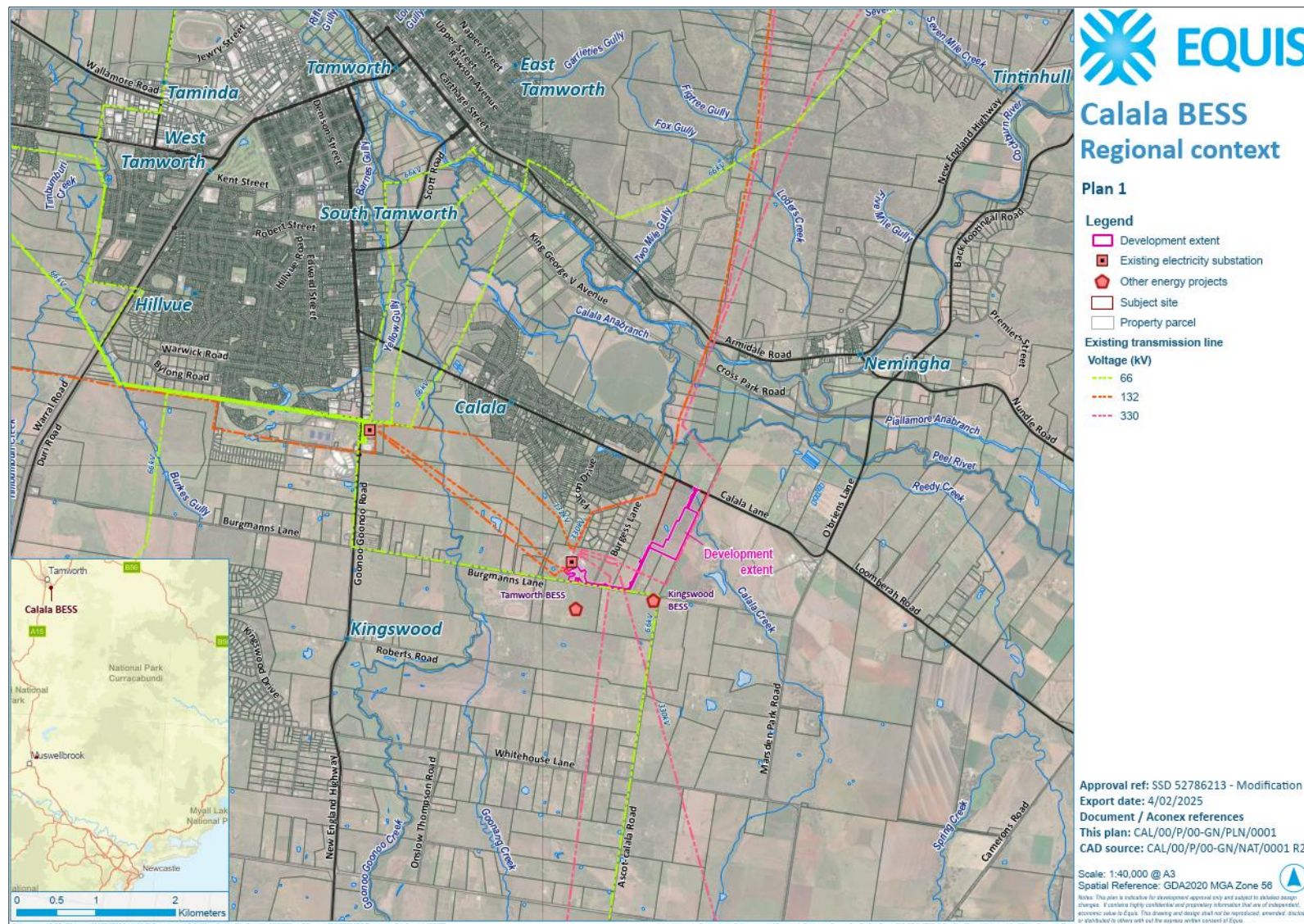


Figure 1: Site Regional Context Plan (Source: Equis 2025)

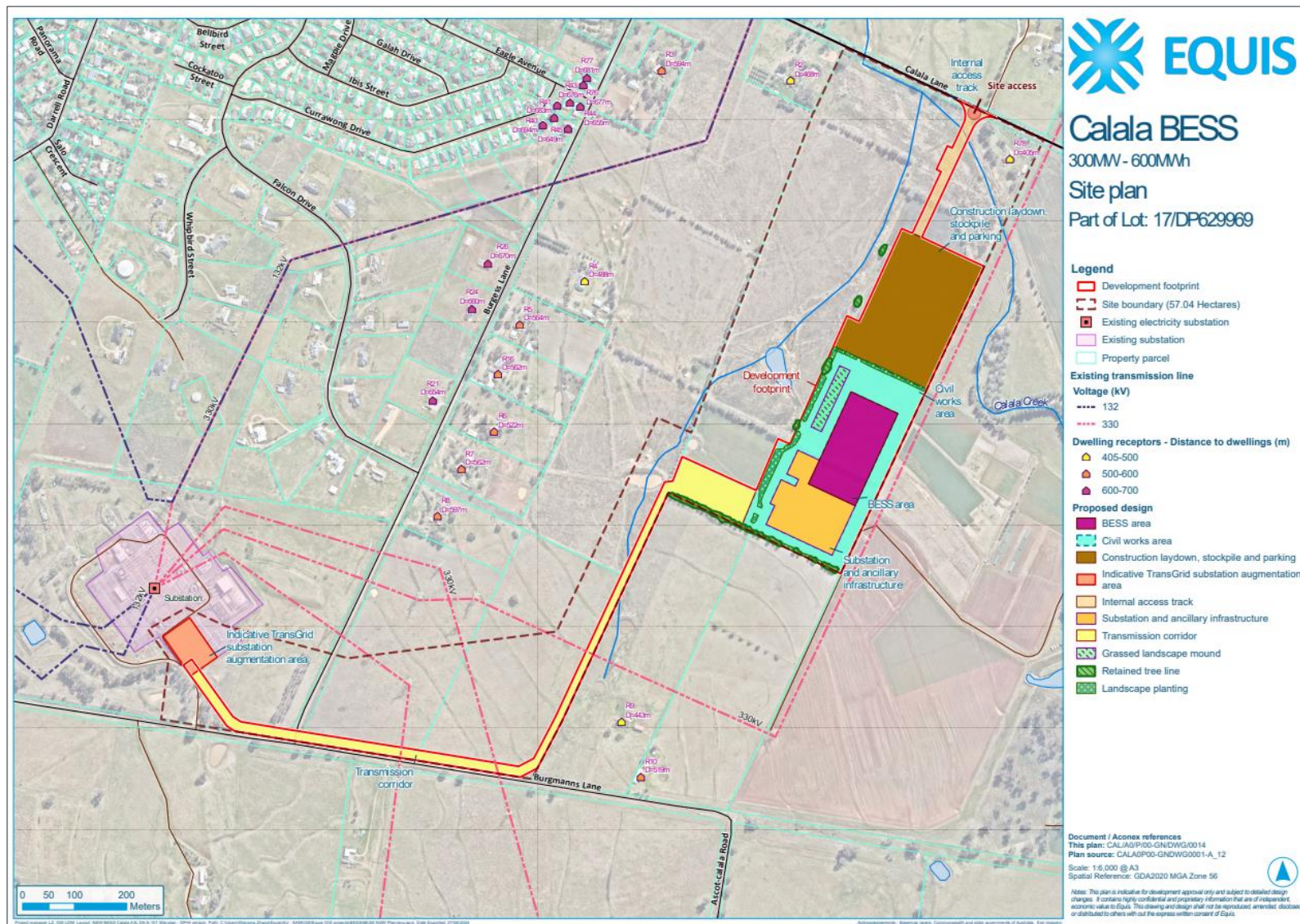


Figure 2: Site Plan as Approved (Source: Equis 2024)

1.3 Description of Modification

1.3.1 Background information

Since the award of the Development Consent in June 2024, the Applicant has been progressing the Project to ensure compliance with the conditions of consent. Construction commenced on 18 June 2025.

In order to ensure compliance with the post approval requirements, the Applicant and contractor have identified several matters which require modification to the previous consent granted. Each element of the proposed modification is listed below. Note that a detailed description of each modification is provided in Section 3 of this report.

1.3.2 Modification Summary

Details of the proposed modification include:

Item	Subject	Details
1.	Vehicle turning bays along the transmission line corridor	Three (3) construction vehicle turning bays are required to enable vehicular navigation within the transmission line corridor. The approximate dimensions of the turning bays are: · 20m x 25m (eastern bay) · 20m x 20m (centre turning bay) · 30m x 19m (western turning bay).
2.	Road and vehicle access off Burgmanns Lane for access to the existing Tamworth Substation and proposed underground cable corridor	Vehicle access is required into the existing Tamworth Substation for the minor additional works described in item 3 below via the existing entrance off Burgmanns Lane. An additional access points off Burgmanns Lane will be constructed approximately 180m east from the intersection between Burgmanns Lane and Burgess Lane, providing direct access to the underground transmission cable corridor. The modification only impacts Burgmanns Lane from a traffic and road perspective, with all other impacts to the road network unchanged. Vehicle access to the BESS site will continue to be via Calala Lane for all on-site works, as previously approved.
3.	General minor works at the Tamworth Substation and BESS facility	Additional space is required for construction laydown, site compound and vehicle parking area within the Tamworth Substation land. The proposed additional laydown area covers approximately 3.07 hectares and will support construction operations and activities. Minor increase to the size of the existing retarding basin capacity on the Tamworth Substation land. Minor increase in the overall length of the grassed landscape mound located to the northwest of the BESS facility. The additional area associated with this grassed landscaped mound will be approximately 60m x 22m. Additional grassed landscaped mound (approximately 110.75m wide x 128.50m long x 5.0m high) located north of the BESS and within the existing impact footprint.
4.	Minor correction to boundaries	The project Site boundary has been repositioned to align more closely with the Development footprint while maintaining an additional buffer for weed control and maintenance, consistent with best practice environmental management. The BESS facility and

		transmission cable corridor have been micro sited to align with a title re-establishment survey. Consequently, a minor net-reduction to vegetation impacts within the transmission cable corridor has resulted.
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1.3.3 Modification Assessment

The accompanying documentation have been updated to consider the modified project:

- Updated site layout plan and drawing set, prepared by Equis (dated 26/08/2025) and attached as **Appendix E**.
- Biodiversity Development Assessment Report Addendum, prepared by Biosis (dated 11/09/2025) and attached as **Appendix F**.
- Transport Impact Statement, prepared by Stantec (dated 22/09/2025) and attached as **Appendix G**.
- Aboriginal and Historical Heritage Statement, prepared by Biosis (dated 03/09/2025) and attached as **Appendix H**.
- Landscape Character and Visual Impact Assessment Addendum, prepared by Envisage Consulting (dated 21/09/2025) and attached as **Appendix I**.
- Hydrology and Flooding Impact Assessment, prepared by Umwelt (dated 09/09/2025) and attached as **Appendix J**.

1.4 Schedule of Conditions Subject to Modification

The following conditions from the original application (Ref: SSD-52786213) require modification to reflect the scope of the updated proposal:

- **Part B Environmental Conditions – General.**
Transport:
 - B1 – To reflect the Transport Impact Statement for the modification application.
 - B3 – To reflect the Transport Impact Statement for the modification application.
 - B4 – To reflect the Transport Impact Statement for the modification application.
 - B5 – To reflect the Transport Impact Statement for the modification application.
 - B8 – To reflect the Transport Impact Statement for the modification application.**Landscaping:**
 - B14 – To reflect the BDAR Addendum.
 - B16 – To reflect the BDAR Addendum.
- **Appendix 1: To reflect the modified development layout**
- **Appendix 2: To now include Burgmanns Lane as a Road Corridor**
- **Appendix 3: To reflect the updated site access route.**

Please refer to Section 3.3 of this report for more information.

2 Strategic Context

The strategic context of the Modification remains consistent with Section 2 of the Calala BESS EIA (Mecone, 2023) and Section 2 of the Calala BESS Addendum Report (Mecone, 2024) as approved. The strategic context most relevant to this Modification Application is summarised below.

2.1 Strategic Alignment

The Project is justified by the need for battery storage to support renewable energy sources, making them reliable and responsive to consumer demand. As per the recent approved Amendment Report, this alignment is demonstrated through:

NSW Net Zero Plan: Stage 1: 2020-2030: This Plan sets out how NSW will remain committed to maintaining a strong economy, improving the quality of life for its residents and protecting the environment while achieving net zero by 2050. The project will support this plan in delivering lower electricity prices and assisting in stabilising supply while creating new job opportunities.

NSW Electricity Infrastructure Roadmap 2020: The project aligns with the Roadmap's five foundational pillars by -

- Driving over \$30 million investment in Regional NSW, creating significant employment opportunities and ensuring compatibility with the rural context.
- Enhancing energy storage infrastructure to firm the volatile nature of renewable energy, thus improving the electricity system's reliability.
- Supporting the New England Renewable Energy Zone by its proximity, enhancing the integration of renewable energy into the grid.
- Contributing to grid security and reliability by providing up to 300MW of storage capacity, addressing future storage capacity requirements.
- Attracting businesses and fostering new industries through access to reliable and clean energy, underscoring the project's role in transitioning to a low-carbon future.
- The Roadmap is enabled by the Electricity Infrastructure Investment Act 2020.

NSW Electricity Strategy: The project aligns with the Strategy by -

- Providing additional infrastructure in support of a modern energy system, which aligns with the principles of reducing electricity prices while ensuring reliable supply.
- Facilitating new energy generation sources to reduce electricity prices and protect the environment.
- Creating additional job opportunities in Regional NSW.
- **AEMO 2022 Integrated System Plan (ISP):** The ISP provides a comprehensive roadmap for the National Electricity Market. It draws on extensive stakeholder engagement and power system expertise to develop a roadmap that optimises consumer benefits through a transition period of greater complexity and uncertainty.

The Project is recognised for its role in providing storage capacity to support the variability of renewable energy supply and meet peak energy demands, contributing to the national goal of tripling generation and storage capacity by 2050.

The Calala BESS project, therefore, continues to align with the ISP.

Other Plans and Policies: The project further aligns with -

- The New England Northwest Regional Plan
- Tamworth Regional Local Strategic Planning Statement.

- The BESS demonstrates strong strategic alignment through its consistency with state and local policies, while actively advancing NSW's energy transition and sustainability objectives.

2.2 Project Benefits

In addition to the strategic alignment listed above, the Project demonstrates its compatibility with regional growth, resilience, and sustainability objectives. It supports economic growth and community resilience without adversely impacting cultural or heritage values. It further represents a significant infrastructure upgrade, increasing electricity security and reliability for the region.

The approved Project benefits will not change as a result of this proposed Modification.

2.3 Objectives

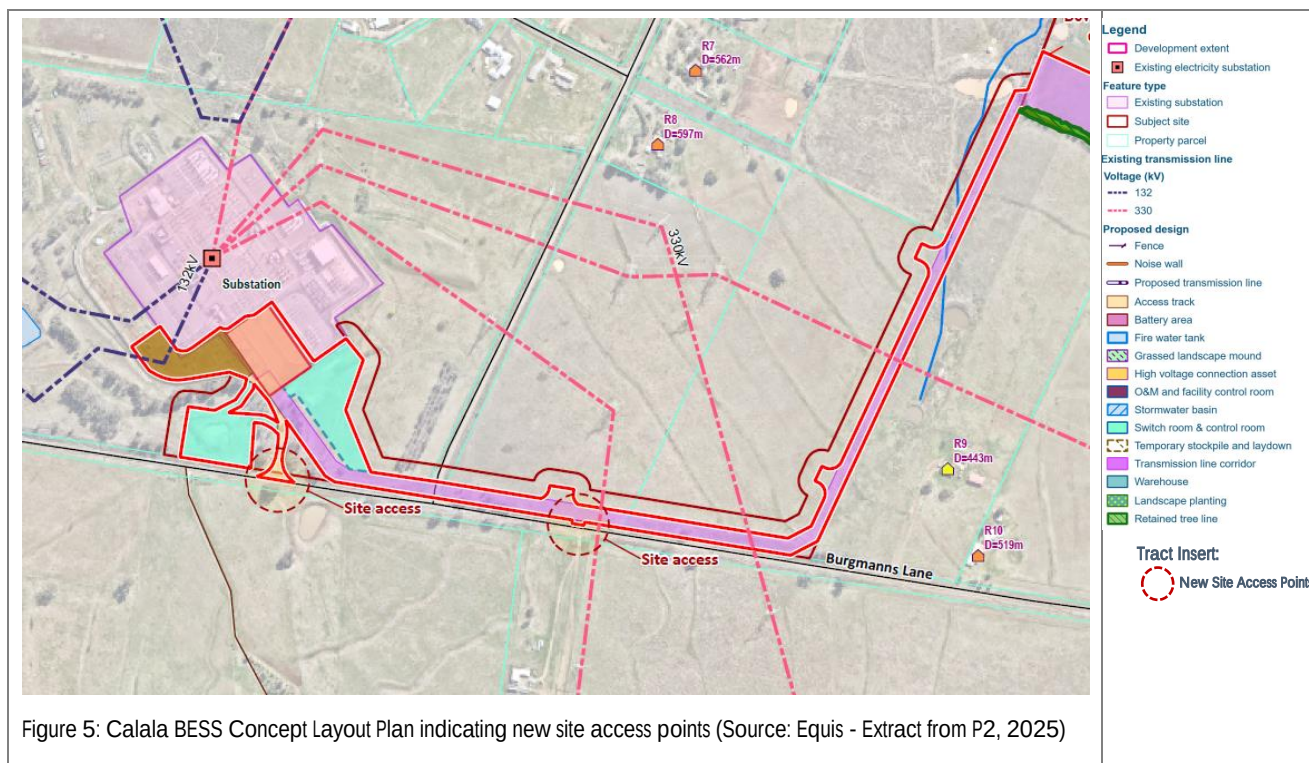
The objectives of the Project remain unchanged from the justification provided in Section 2 of the Calala BESS EIS (Mecone, 2023) and Section 7 of the Calala BESS Addendum Report (Mecone, 2024). These are as follows:

- Develop a facility to store and discharge energy economically into the energy grid that will improve network stability.
- Provide new industries and opportunities to Tamworth and the broader region.
- Minimise environmental impacts while maximising social license to operate.
- Contribute to NSW's objectives of achieving net-zero emissions by 2050.
- Be strategically located to take advantage of existing electrical network infrastructure.
- Include broader community benefits, including but not limited to employment and training opportunities and economic stimulus.
- Clearly identify and mitigate impacts that cannot be avoided, in consultation with the community and other relevant stakeholders.
- The approved Project objectives will not change as a result of this proposed Modification.

2.4 Policy Changes

Since the Project was approved in June 2024, no significant additional policy instruments have been implemented.

The BESS aligns with international, Commonwealth, and NSW policies by contributing to emission reduction targets, supporting renewable energy through the Large Scale Renewable Energy Target, and aiding in achieving net-zero emissions as outlined in Australia's Long-Term Emissions Reduction Plan and the NSW Climate Change Policy Framework.



The proposal requires an amended site access route to allow construction vehicle access via Burgmanns Lane. Primary vehicle access will continue to be via Calala Lane for all on-site works, as approved.

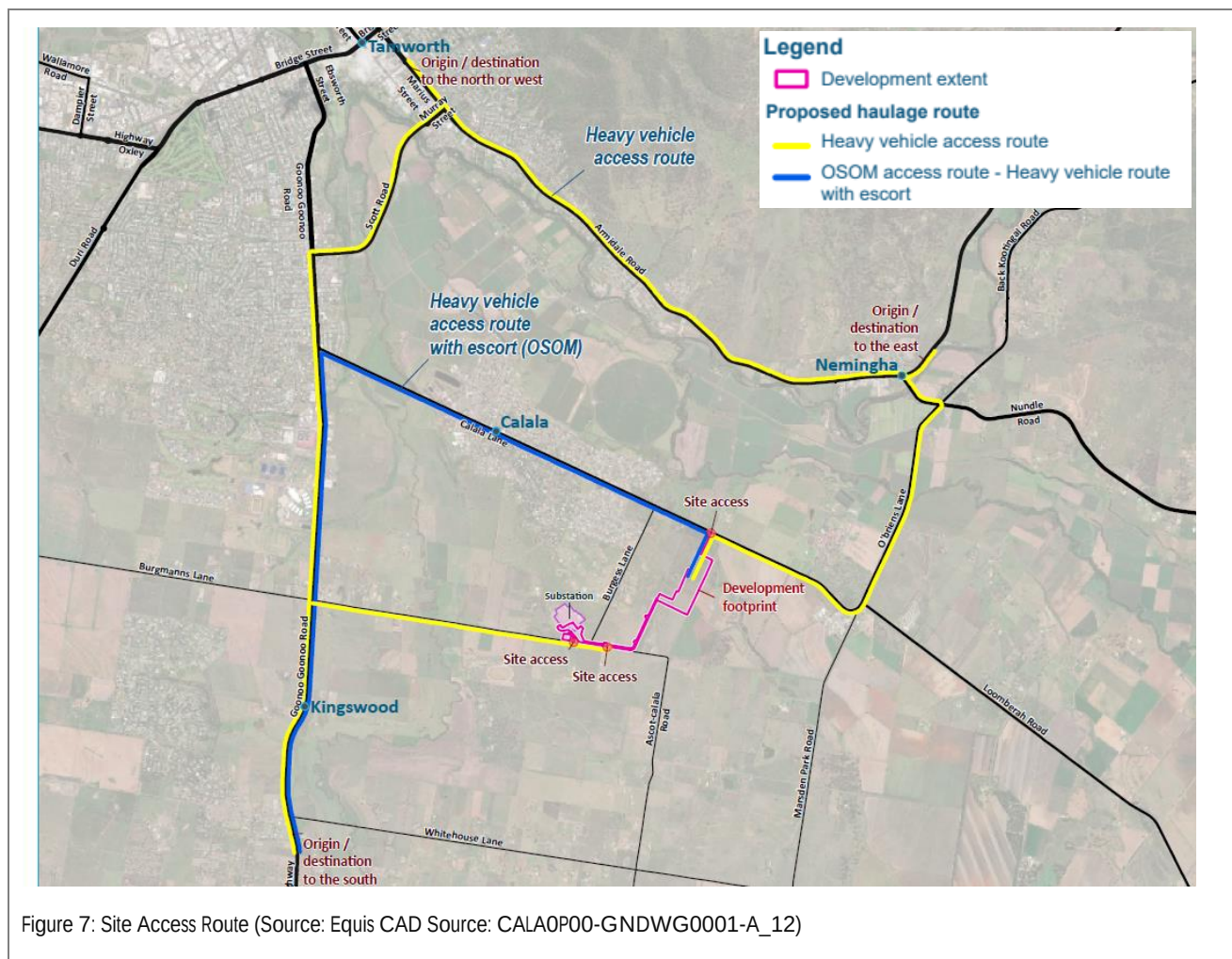


Figure 7: Site Access Route (Source: Equis CAD Source: CALAOP00-GNDWG0001-A_12)

Considering the largest construction vehicles coming into the Tamworth Substation site will be 26-metre B-doubles, traffic controllers are recommended to be present at the intersection of Goonoo Goonoo Road / Burgmanns Lane to manage heavy vehicle movements where vehicles are required to cross the road centreline of Burgmanns Lane to complete turning manoeuvres (vehicles larger than a 19-metre truck and dog combination). The swept paths demonstrate that vehicles up to a 19-metre truck and dog combination can maintain appropriate lane discipline thus requiring no additional control measures. All construction vehicles will be restricted to the State and Regional Road network where practicable. All inbound and outbound vehicles travelling to and from the site via Burgmanns Lane will travel from the nearest State Road, which is Goonoo Goonoo Road.

No queuing or marshalling of construction vehicles will be permitted on public roads. Refer to Section 6 of this report and the attached **Appendix G - Traffic Impact Statement** (Section 3) for more information.

3.1.3 General minor works

Tamworth Substation land

The existing substation footprint area does not allow for the necessary operational and storage space required by TransGrid and its contractor to carry out the Tamworth Substation connection works. The Modification therefore requires additional space for construction laydown, civil works area, site compound and vehicle parking within the Tamworth Substation land. The proposed additional laydown area, covering approximately 3.07 ha, will support construction activities while facilitating effective stormwater infiltration.

The Modification will also require a minor increase to the size of the existing retarding basin capacity on the Tamworth Substation Land.

See below Figure 8 for an extract of the Modification Impact Footprint Plan for more information.

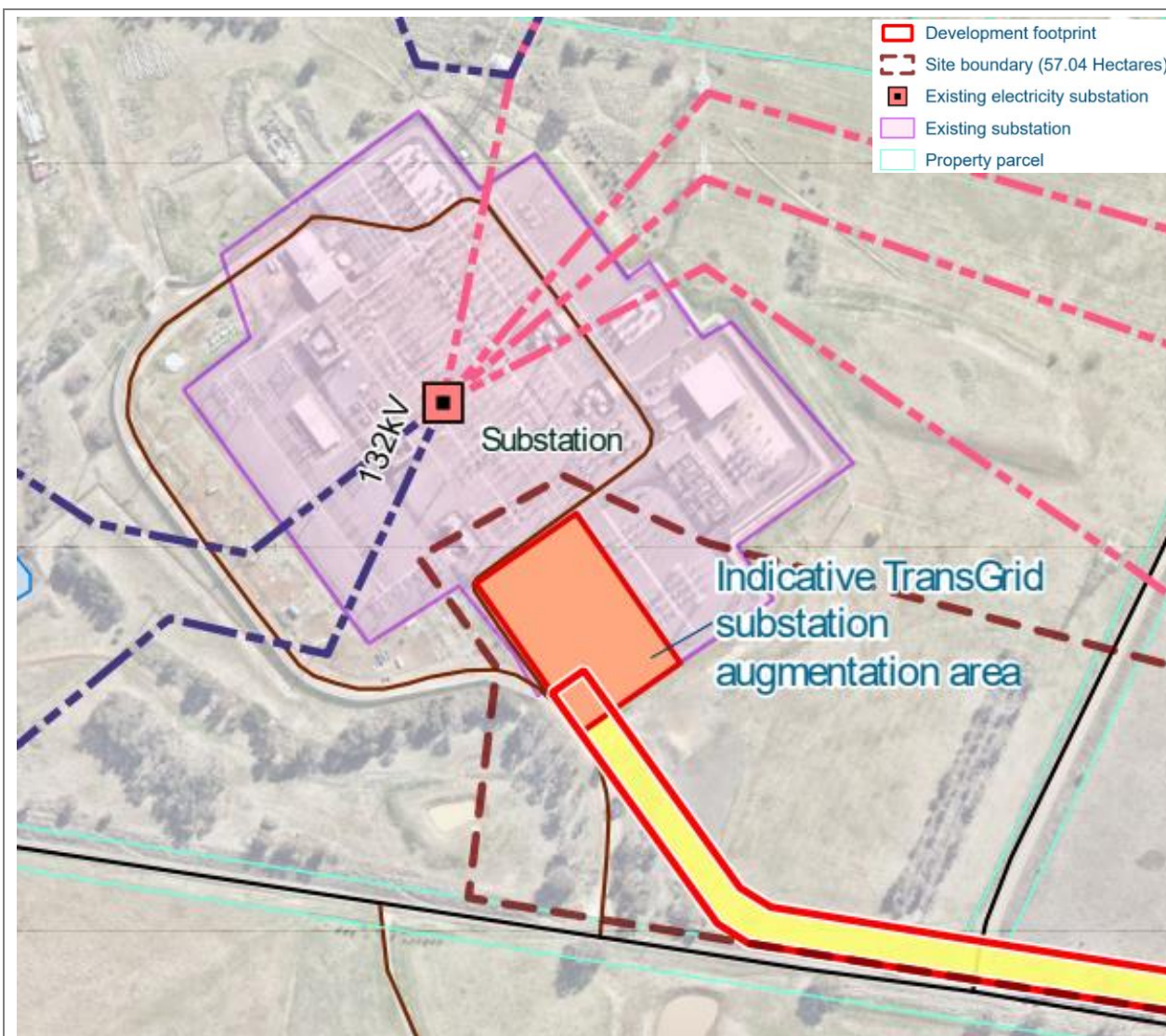


Figure 8: Original approved Tamworth Substation Layout as per SSD-52786213 (Source: Equis extract from approved CALA0P00-GNDWG0001-A_12)

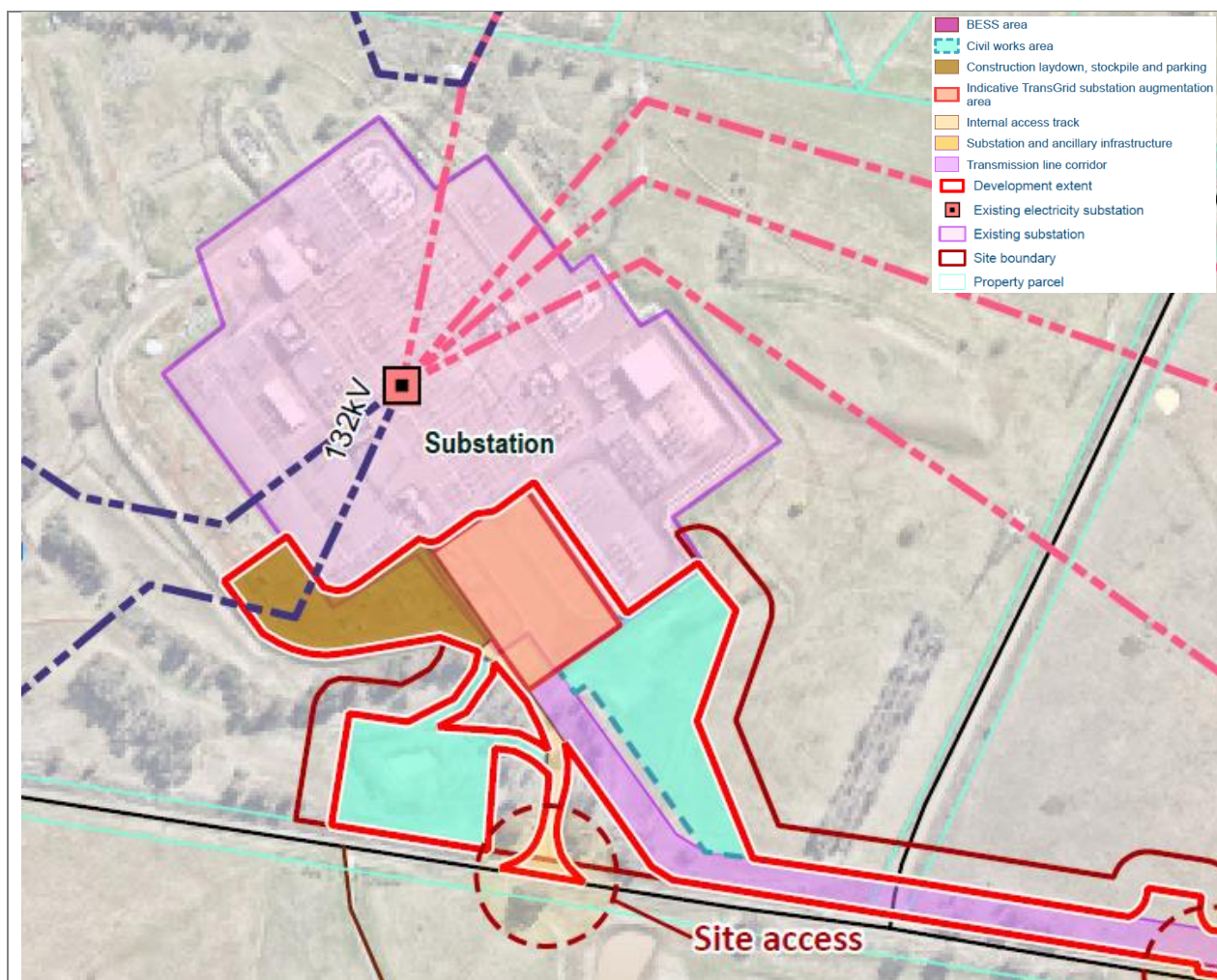


Figure 9: Tamworth Substation Impact Footprint and components associated with the proposed modification (Source: Equis - Extract from P2, 2025)

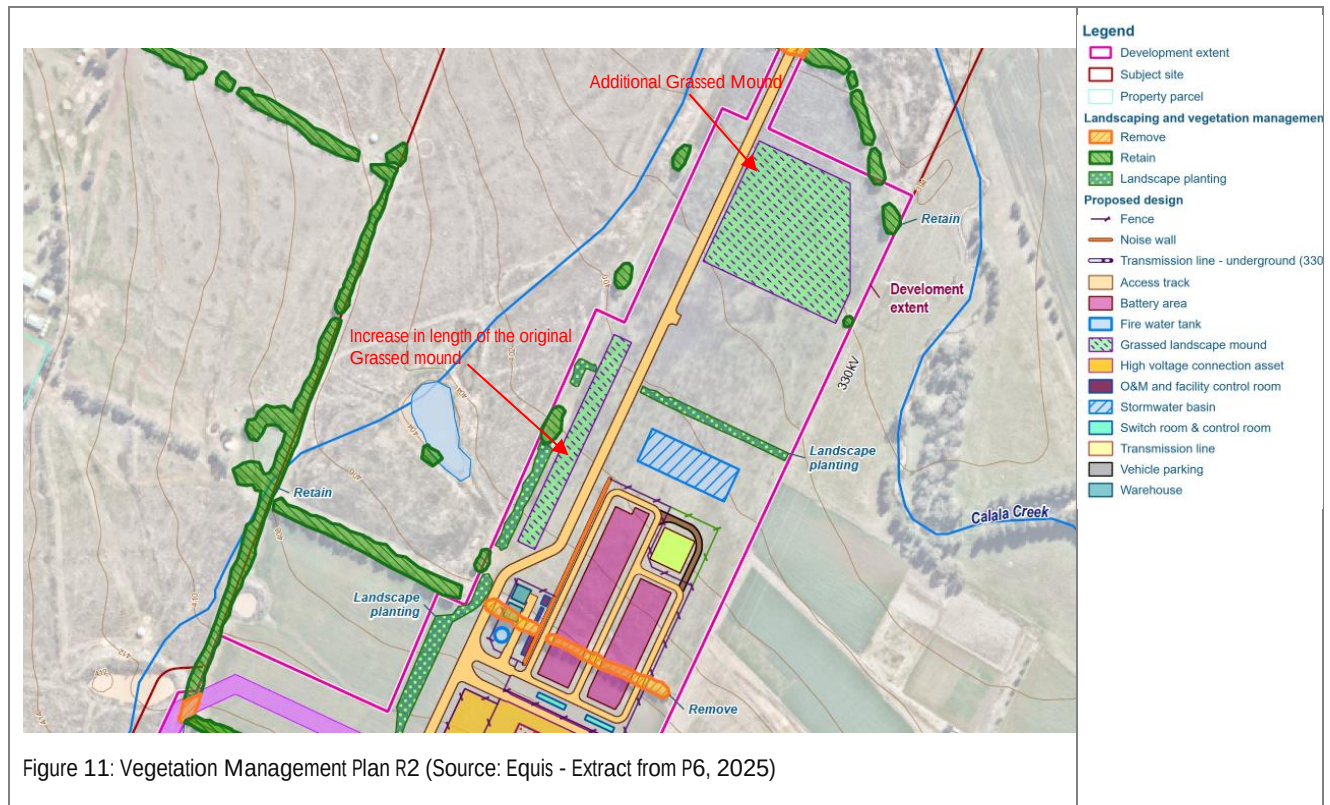


Figure 10: Existing Tamworth Substation Compound (Source: Equis, 2024)

Grassed landscape mound

- The following minor works are proposed as part of this Modification:
- A minor increase in the overall length of the originally approved grassed landscape mound located to the northwest of the BESS facility. The additional area associated with this grassed landscaped mound will be approx. 60m x 22m.
- Additional new grassed landscaped mound (approximately 110m wide x 128m long x 5.0m high) located north of the BESS and within the existing impact footprint.

Figure 11 below illustrates the location and context of the grassed mounds.



This will allow Equis to retain more soil on-site rather than disposing it off-site. Retaining the soil on-site offers a cost-effective and sustainable alternative to off-site disposal, eliminating transport and tipping fees while reducing carbon emissions and landfill use. The soil will be integrated into the site design as an aesthetic and functional landscape feature and visual buffer, enhancing biodiversity, stormwater management, and erosion control through grass cover.

Views to the BESS from the immediate north and west will be slightly improved as this will provide additional landscape screening of the BESS facility.

3.1.4 Minor correction to boundaries

The project Site boundary has been repositioned to align more closely with the development footprint while maintaining an additional buffer for weed control and maintenance, consistent with best practice environmental management.

Notably, the Site Boundary shown in Appendix A of the original EIS was based on an old Bosis Survey boundary rather than any project specific matter.

The Modification application seeks to amend this by repositioning the 'Site Boundary' closer to the development extent with an additional buffer for weed control and maintenance beyond the impact area.

The Modified Plans indicate land parcels, impact footprint, the development extent and the site boundary (as indicated in **Appendix E** of this Modification Application) incorporating the recent title re-establishment survey.

3.2 Concept Plan

Figure 12 includes the updated Concept Layout Plan and outlines the following:

- Development extent
- BESS footprint with the associated substation and ancillary infrastructure
- Existing Tamworth Substation
- Construction laydown, stockpile and parking areas
- Civil works areas
- Internal TransGrid substation augmentation area
- Internal access track
- Substation and ancillary infrastructure
- Transmission corridor, with three associated turning bays
- Two site access points along Burgmanns Lane and main site access off Calala Lane
- Existing tree line and landscape planting
- Grassed landscape mounds
- Existing transmission line network
- Site boundary.

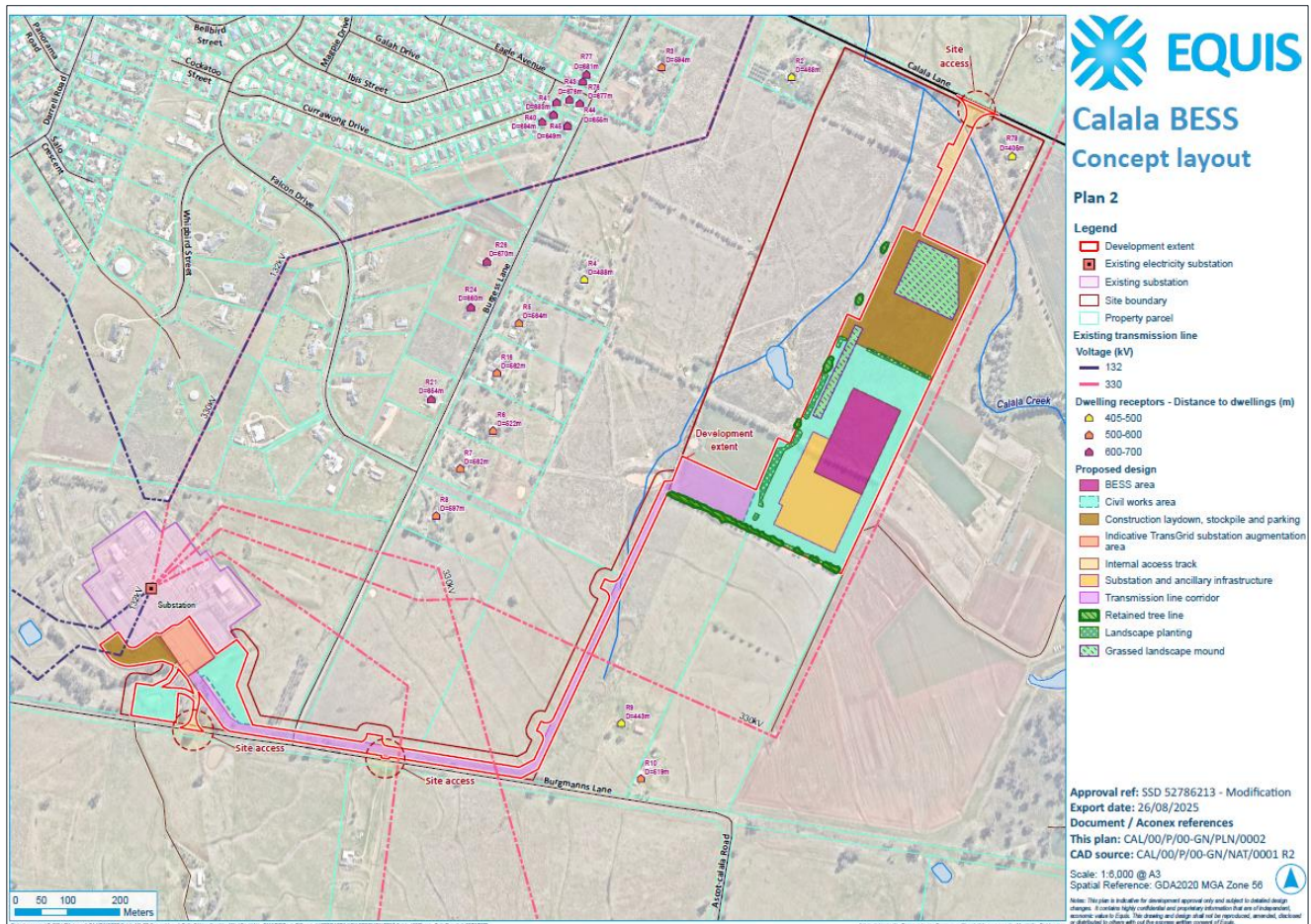


Figure 12: Concept Layout Plan R2 (Source: Equis, 2025)

3.3 Conditions of consent to be modified

The following Conditions from the Original Application SSD-52786213 have been identified for modification as these align with the scope of the modified proposal:

Table 2: Conditions of consent to be modified

Condition No.	Modify / New	Proposed Modified Conditions
B1	Modify	The Applicant must ensure that the: (a) development does not generate more than: (i) 120 heavy vehicle movements a day (a maximum of 22 heavy vehicles movements per hour) during construction, upgrading or decommissioning. (ii) 145 light vehicle movements a day during construction, upgrading, or decommissioning; and (iii) 7 movements of a heavy vehicle requiring escort during construction, upgrading, or decommissioning; and (b) length of any vehicles (excluding heavy vehicles requiring escort) used for the development does not exceed 26 metres, unless the Planning Secretary agrees otherwise. <i>Note: If required by DPHI, the modification application could include specific reference to the scope of works and associated trip generation as referenced in the Traffic Impact Statement - Appendix G.</i>
B3	Modify	Unless the Planning Secretary agrees otherwise, all heavy vehicles associated with the development accessing the site via Calala Lane must travel to and from the site via New England Highway, Nundle Road, O'Briens Lane and Calala Lane as identified in Appendix 3. Unless the Planning Secretary agrees otherwise, all heavy vehicles associated with the development accessing the site via Burgmanns Lane must travel to and from site via New England Highway / Goonoo Goonoo Road, and Burgmanns Lane as identified in <i>Appendix tbc</i>.
B4	Modify	Unless the Planning Secretary agrees otherwise, all heavy vehicles requiring escort and light vehicles associated with the development must travel to and from the site via the New England Highway, Goonoo Goonoo Road and Calala Lane as identified in Appendix 3. Unless the Planning Secretary agrees otherwise, all light vehicles associated with the development accessing the site via Burgmanns Lane must travel to and from site travel to and from the site via New England Highway / Goonoo Goonoo Road, and Burgmanns Lane as identified in <i>Appendix tbc</i>.
B5	Modify	All vehicles associated with the development must enter and exit the site via the site access point off Calala Lane, or off Burgmanns Lane, as identified in <i>Appendix tbc</i>
B8	Modify	The Applicant must: (a) undertake an independent dilapidation survey to assess the: (i) existing condition of Nundle Road, O'Briens Lane and Calala Lane on the transport route, prior to construction, upgrading and decommissioning activities; and

Condition No.	Modify / New	Proposed Modified Conditions									
		(ii) condition of Nundle Road, O'Briens Lane and Calala Lane on the transport route, following the completion of construction, upgrading and decommissioning activities; (iii) condition of Burgmanns Lane on the transport route prior to site access via Burgmanns Lane for any construction, upgrading and decommissioning activities. (iv) condition of Burgmanns Lane on the transport route following the completion of site access via Burgmanns Lane for any construction, upgrading and decommissioning activities. (b) on completion of the dilapidation reports undertaken in B8(a)(i), (ii), (iii) and (iv) provide a copy to the relevant roads' authorities; and (c) repair the roads identified in condition B8(a)(i), (ii), (iii) and (iv) if dilapidation surveys identify that the roads have been damaged due to development-related traffic during construction, upgrading or decommissioning works in consultation with the relevant road authority. If there is a dispute between the Applicant and the relevant roads authority about repairs required under this condition then either party may refer the matter to the Planning Secretary for resolution.									
B14	Modify	Prior to carrying out any development that could directly or indirectly impact the biodiversity values requiring offset, the Applicant must retire biodiversity credits as specified in Table 1 below, unless the Planning Secretary agrees otherwise. The retirement of these credits must be carried out in accordance with the <i>NSW Biodiversity Offsets Scheme</i> and can be achieved by: (a) acquiring or retiring 'biodiversity credits' within the meaning of the <i>Biodiversity Conservation Act 2016</i>; (b) making payments into an offset fund that has been developed by the NSW Government; and / or (c) funding a biodiversity conservation action that benefits the entity impacted and is listed in the ancillary rules of the biodiversity offset scheme. Table 1: Ecosystem Credit Requirements, as previously approved in Biodiversity Development Assessment Report (dated 8 May 2024) and retired: <table> <tr> <th>Vegetation Community</th><th>PCT ID</th><th>Credits Retired</th></tr> <tr> <td>River Oak - Rough-barked Apple - red gum - box riparian tall woodland (wetland) of the Brigalow Belt South Bioregion and Nandewar Bioregion</td><td>PCT 84_DNG</td><td>2</td></tr> <tr> <td>Blakely's Red Gum - Yellow Box grassy tall woodland on flats and hills in the Brigalow Belt South</td><td>PCT 599_DNG</td><td>32</td></tr> </table>	Vegetation Community	PCT ID	Credits Retired	River Oak - Rough-barked Apple - red gum - box riparian tall woodland (wetland) of the Brigalow Belt South Bioregion and Nandewar Bioregion	PCT 84_DNG	2	Blakely's Red Gum - Yellow Box grassy tall woodland on flats and hills in the Brigalow Belt South	PCT 599_DNG	32
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Condition No.	Modify / New	Proposed Modified Conditions																		
		<table> <tr> <td>Bioregion and Nandewar Bioregion (DNG)</td><td></td><td></td></tr> <tr> <td>Blakely's Red Gum - Yellow Box grassy tall woodland on flats and hills in the Brigalow Belt South Bioregion and Nandewar Bioregion (Woodland)</td><td>PCT 599_Woodland</td><td>1</td></tr> </table> Table 2: Ecosystem Credit Requirements as a result of the proposed modifications as listed in the Biodiversity Development Assessment Report Addendum (dated 11 September 2025): <table> <tr> <th>Vegetation Community</th><th>PCT ID</th><th>Credits Mod</th></tr> <tr> <td>Blakely's Red Gum - Yellow Box grassy tall woodland on flats and hills in the Brigalow Belt South Bioregion and Nandewar Bioregion</td><td>PCT 599_DNG</td><td>3</td></tr> <tr> <td>Blakely's Red Gum - Yellow Box grassy tall woodland on flats and hills in the Brigalow Belt South Bioregion and Nandewar Bioregion</td><td>PCT 599_DNG_Low</td><td>4</td></tr> <tr> <td>Blakely's Red Gum - Yellow Box grassy tall woodland on flats and hills in the Brigalow Belt South Bioregion and Nandewar Bioregion</td><td>PCT 599_Woodland</td><td>2</td></tr> </table>	Bioregion and Nandewar Bioregion (DNG)			Blakely's Red Gum - Yellow Box grassy tall woodland on flats and hills in the Brigalow Belt South Bioregion and Nandewar Bioregion (Woodland)	PCT 599_Woodland	1	Vegetation Community	PCT ID	Credits Mod	Blakely's Red Gum - Yellow Box grassy tall woodland on flats and hills in the Brigalow Belt South Bioregion and Nandewar Bioregion	PCT 599_DNG	3	Blakely's Red Gum - Yellow Box grassy tall woodland on flats and hills in the Brigalow Belt South Bioregion and Nandewar Bioregion	PCT 599_DNG_Low	4	Blakely's Red Gum - Yellow Box grassy tall woodland on flats and hills in the Brigalow Belt South Bioregion and Nandewar Bioregion	PCT 599_Woodland	2
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B16	Modify	Prior to carrying out any development that could directly or indirectly impact biodiversity values, the Applicant must prepare a Biodiversity Management Plan for the project in consultation with BCS, and to the satisfaction of the Planning Secretary. This plan must: (a) be prepared in accordance with the Biodiversity Development Assessment Report (dated 11 September 2025); (b) include a description of the measures and timeframes that would be implemented for: (i) protecting vegetation and fauna habitat outside the approved disturbance areas; (ii) minimising clearing and avoiding unnecessary disturbance of vegetation that is associated with the construction and operation of the development; (iii) minimising the impacts to fauna on site and implementing fauna management protocols;																		

Condition No.	Modify / New	Proposed Modified Conditions
		(iv) rehabilitating and revegetating temporary disturbance areas with native species that are appropriate to the sites ecology and conditions; (v) maximising the salvage of vegetative and soil resources within the approved disturbance area for beneficial reuse in the enhancement or the rehabilitation of the site; and (vi) controlling weeds, feral pests and pathogens; (c) include a program to monitor and report on the effectiveness of mitigation measures; (d) include an incidental threatened species finds protocol to identify the avoid and / or minimise and / or offset options to be implemented if additional threatened species are discovered on site; and (e) include details of who would be responsible for monitoring, reviewing and implementing the plan.

4 Statutory Context

The statutory context of the Proposal remains consistent with Section 4 of the originally submitted EIS (Mecone, 2023) and Section 4 of the Calala BESS EIS Addendum Report (Mecone, 2024).

There have been no relevant changes to the following Acts and legislative instruments that affect this application:

- Environmental Planning and Assessment Act 1979
- Biodiversity Conservation Act 2016
- Tamworth Regional Local Environmental Plan 2010
- State Environmental Planning Policy (Resilience and Hazards) 2021
- State Environmental Planning Policy (Transport and Infrastructure) 2021
- State Environmental Planning Policy (Biodiversity and Conservation) 2021.
- The statutory requirements relevant to the modification are identified in Table 2 below. An updated statutory compliance table is included as **Appendix C** of this report.

Table 3. Relevant statutory context for the Modified Project

Statutory Reference	Mandatory consideration	Relevance to Modification
EP&A Act and the EP&A Regulations		
Section 4.55	<i>(1A) Modifications involving minimal environmental impact.</i> <i>A consent authority may, on application being made by the applicant or any other person entitled to act on a consent granted by the consent authority and subject to and in accordance with the regulations, modify the consent if—</i> <i>(a) it is satisfied that the proposed modification is of minimal environmental impact, and</i> <i>(b) it is satisfied that the development to which the consent as modified relates is substantially the same development as the development for which the consent was originally granted and before that consent as originally granted was modified (if at all).</i>	Through this modification report, the project demonstrates that it will be of minimal environmental impact and substantially the same development as that previously approved. Land and Environment Court Case Law, including in the cases of North Sydney Council v Michael Standley & Associates [1998] 43 NSWSC 163 & Moto Projects (No 2) Pty Ltd v North Sydney [1999] NSWLEC 280, , clarifies that the “substantially the same development” test requires consideration of both <u>quantitative</u> and <u>qualitative</u> changes, whereby the modified development must be “essentially or materially” the same as the approved development. Qualitatively, the proposed modifications are broadly consistent with those outlined in the Environmental Impact Statement (EIS). There is no change to the proposed

		use and the majority of the modifications result in an overall improved outcome to the amenity of the site and the streetscape. Quantitatively, · The modifications are minor in nature with no alteration to the storage capacity and discharge capacity of the approved BESS. · The modification involves general minor works around the Tamworth substation and the BESS facility. As elaborated throughout this report, these would not cause any significant numerical increases that would adversely affect the approved development or EIS. · The additional vehicle turning bays along the transmission corridors and the vehicular access points off Burgmanns Lane are minor and essential to enable safe and efficient vehicular access in support of the planned construction works. For all intents and purposes, the proposed modifications will result in an end development to which the consent as modified relates, that is substantially the same development as the development for which the consent was originally granted.
Biodiversity Conservation Act 2016		
Section 7.14	<i>The likely impact of the proposed development on biodiversity values as assessed in the biodiversity development assessment report. The Minister for Planning may (but is not required to) further consider under that Act the likely impact of the proposed development on biodiversity values.</i>	Please refer to the BDAR Addendum for a detailed description of the modified Project.
Environmental Protection and Biodiversity Conservation Act 1999		
Matters of National Environmental Significance	Under the EPBC Act, if the Minister determines that an action is a 'controlled action' which would have or is likely to have a significant impact on a MNES or Commonwealth land, then the action may not be undertaken without prior approval of the Minister.	The BDAR Addendum concluded that the approved project was unlikely to cause a significant impact to MNES. The modified Project is therefore not expected to generate a significant impact as a result of the modification. It is

		considered that a referral is not required in this regard.
<i>State Environmental Planning Policy (Planning Systems) 2021</i>		
Section 20 – Schedule 1	<i>Development for the purpose of electricity generating works or heat or their co-generation (using any energy source, including gas, coal, biofuel, distillate, waste, hydro, wave, solar or wind power) that: (a) has a capital investment value of more than \$30 million, or (b) has a capital investment value of more than \$10 million and is located in an environmentally sensitive area of State significance.</i>	The project is still considered electricity generating works, with a capital investment value of more than \$30 million inclusive of the proposed modifications.
Approving Authority		
DPHI	The Department of Planning, Housing and Infrastructure previously approved the SSD application.	DPHI remains the approving authority for this modification application.

5 Engagement

5.1 Access to information

Since approval of the application in June 2024, Equis ensured the following information was available to the public:

- Dedicated website for the Calala BESS
 - <https://energyinfrastructureaustralia.com/equis/calala>
- SSD approval documents available online and linked to the NSW Major Project Portal
 - <https://www.planningportal.nsw.gov.au/major-projects/projects/calala-battery-energy-storage-system>
- Dedicated toll-free number and project email address:
 - 1800 161 249 or AUProjects@equis.com
- Feedback and complaints for via the Equis Engagement Hub
- Anticipated project timeline from site selection through to operation
- Information on how to register your interest and Benefit Sharing.

5.2 Consultation

Additional consultation undertaken to support the Modification is summarised below.

Table 4. Consultation Undertaken for this Modification

Stakeholder	Scope of Engagement	Outcomes
DPHI	Consultation	An online pre-application engagement meeting was held on 18 December 2024 to discuss the modification works. The Department provided feedback on the assessment pathway and also comments regarding key matters for assessment as part of the application going forward. The Department stressed the importance of consultation with Tamworth Council regarding the proposed access route changes and site access point additions to ensure Council's advice is suitably addressed in the modification assessment. Fortnightly project meetings have been held with the Department between January and August 2025.
TransGrid	Letter of consent	A consent letter to lodge the modification has been received from TransGrid and is included in Appendix K.
Tamworth Regional Council	Consultation	An online pre-application engagement meeting was held on 9 January 2025 to discuss the modification works. The meeting included: · The Applicant · Tract

		· Tamworth Development Division. A second meeting was conducted at Council offices on 9 July 2025 between Equis and a broad cross section of Council staff. Council confirmed its support for the modification works and the proposal to use Burgmanns Lane for site access. Council is expecting that the proposed works and uses will be reflected in the modification application. Council also confirmed via email correspondence that their landowner's consent dated 8 May 2024 covers this modification application.
Involved Landowner	Letter of consent	The letter of consent from the relevant landowner to lodge the modification has been received and is included in Appendix K .
Registered Aboriginal parties (RAPs)	Updated AHIMS Search	An updated AHIMS search performed on 5 December 2024 confirms that no AHIMS sites are located within the study area. This was further confirmed by Biosis' aboriginal and historical heritage assessment (Refer to Appendix H of this modification report).

Considering the proposed minor works associated with this modification, no further engagement reports have been prepared.

It is expected that DPHI will confirm if the public exhibition of the modification application will be required.

6 Assessment of Impacts

6.1 Identification of Impacts

The Calala BESS is a State Significant Development (SSD) because it is a private electricity supply project with a capital investment value greater than \$30 million. The *State Environmental Planning Policy (Planning Systems) 2021* (SEPP Planning Systems) dictates the environmental assessment must be undertaken in accordance with:

- Part 4 of the Environmental Planning and Assessment Act 1979
- Schedule 2 of the Environmental Planning and Assessment Regulation 2021
- The Project-specific Secretary's Environmental Assessment Requirements (SEARs).

In relation to this modification, the key environmental risks identified and assessed in the EIS (Mecone, 2023) and through the EIS Amendment Report (Mecone, 2024) are set out below:

- Biodiversity impacts – additional impact areas warrant additional investigation
- Heritage impacts – additional impact areas warrant additional investigation
- Access and traffic impacts – additional access points and new access route warrant additional investigation
- Visual amenity impacts – additional impact areas warrant additional investigation
- Flooding Impacts – potential impacts for the modifications in relation to flooding, hydrology and erosion.

The above listed environmental impacts are assessed in detail in Section 6.2.

Lower risk issues were also considered and assessed as follows:

- Noise impacts – no change to extent and location of works
- Bushfire impacts – no change to bushfire risks
- Hazards and risks – no change to hazards or risks.

6.2 Detailed Assessment

6.2.1 Biodiversity

Biosis Pty Ltd was previously commissioned by the proponent to undertake a biodiversity assessment for the Environmental Impact Statement (EIS) phase of the Calala BESS project, which included the preparation of a Biodiversity Development Assessment Report (BDAR) (Biosis 2024). The project was approved by the NSW Minister for Planning on 28 June 2024 (SSD-52786213).

A BDAR Addendum has subsequently been prepared by Biosis Pty Ltd to assess the potential changes in the project's biodiversity impacts as a result of the proposed modifications. Assessments have been undertaken in accordance with the *Biodiversity Conservation Act 2016* (NSW) (BC Act) and BAM to address expected changes to direct, indirect and prescribed impacts, as well an assessment of changes to impacts associated with Matters of National Environmental Significant (MNES) listed under the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act).

The BDAR Addendum is to be read in conjunction with the Project's BDAR (Biosis 2024).

Methods

Field investigation of the proposed modification locations was undertaken, and the survey methods were conducted in accordance with the BAM, and consistent with those described in the BDAR. The Plant Community Types (PCTs)

included in the current assessment of the impacts associated with the proposed modifications remain consistent with the PCTs included in the BDAR.

Species credit species

The BAM-C case opened for the purposes of this addendum report did not generate any additional species credit species requiring consideration when compared to the Project BDAR.

Matters of National Environmental Significance

MNES Assessments have been undertaken and are presented in the BDAR. This included assessments in accordance with the Significant Impact Guidelines 1.1 - Matters of National Environmental Significance (DoE 2013), for *White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland* (Critically Endangered, EPBC Act) and Bluegrass *Dichanthium setosum* (Vulnerable, EPBC Act). The conclusions of the BDAR were that the approved project is unlikely to cause a significant impact to either entity.

Table 5 provides a summary of impacts to MNES as a result of the proposed modifications only, compared to the approved project.

Table 5. Assessment of MNES entities (Source: Biosis 2025)

Matter of NES	Project specifics	Assessment against Commonwealth of Australia (2013)
Threatened species (flora and fauna)	Bluegrass. Disturbance of potential Bluegrass habitat will increase from 1.63 ha to 1.86 ha with the proposed modifications.	The proposed modifications are considered not to alter the conclusions of the previously completed BDAR (Biosis 2024) given the small increase in impact. An updated assessment against the Significant Impact Criteria (DoE 2013) has been prepared and provided in Appendix 2 of the BDAR Addendum.
Threatened ecological communities (TEC)	One EPBC Act listed TEC, <i>White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland</i> , is located within the area subject to the proposed modifications. Impact to this TEC will increase from 1.31 ha to 1.55 ha.	The proposed modifications are considered not to alter the conclusions of the previously completed BDAR (Biosis 2024) given the small increase in impact. An updated assessment against the Significant Impact Criteria (DoE 2013) has been prepared and provided in Appendix 2 of the BDAR Addendum.
Migratory species	No change to impacts on migratory species are expected as a result of the proposed modifications.	Refer to the BDAR (Biosis 2024).

Application of avoid and minimise principles

The proposed modifications subject to this assessment, continues to follow the avoid and minimise impact principles, as outlined in Section 5 of the BDAR. The proposed modifications, aside from small additional areas of woody vegetation removal, are all located on previously cleared areas and those within Lot 6 DP219993 largely impact Category 1 land only.

Updated direct impacts to native vegetation

The proposed modifications have resulted in a change in the project's direct impacts to native vegetation and BC Act and EPBC Act listed TECs. Impacts listed in Table 6 as 'approved' are based on those assessed as part of the approved Project (SSD-52786213).

The modified impacts to PCTs, vegetation zones, and TECs are depicted in Table 6. Avoidance of threatened species habitat is illustrated on Figure 9 of the BDAR Addendum.

Table 6. Changes in direct impacts as a result of proposed modifications (Source: Biosis 2025)

PCT / Species	Listing status	Approved impact (SSD-52786213)	Impact after proposed modification	Change in impacts
599: Blakely's Red Gum - Yellow Box grassy tall woodland on flats and hills in the Brigalow Belt South Bioregion and Nandewar Bioregion	Box Gum Woodland (CEEC BC Act and EPBC Act)	599_DNG: 1.60 ha 599_Woodland: 0.03 ha Total: 1.63 ha	599_DNG: 1.77 ha 599_DNG_Low: 0.37 ha 599_Woodland: 0.09 ha Total: 2.23 ha	599_DNG: 0.17 ha 599_DNG_Low: 0.37 599_Woodland: 0.06 ha Total: 0.60 ha

* Note: Due to the nature of these updates often dealing with a small change in square meters of impact, some rounding errors may appear in the above table when changes in impacts are presented in hectares.

BAM impact assessment

The BDAR Addendum includes an updated assessment of residual project impacts (modified direct and indirect impacts) as a result of the proposed modifications.

Modified direct impacts

The direct impacts relating to the entire project following the proposed modifications are detailed below in Table 7.

Table 7. Summary of direct impacts as a result of the proposed modification (Source: Biosis 2025)

PCT / Species	Listing status	Modified direct impacts
Plant community types		
599: Blakely's Red Gum - Yellow Box grassy tall woodland on flats and hills in the Brigalow Belt South Bioregion and Nandewar Bioregion	Box Gum Woodland (CEEC BC Act and EPBC Act)	599_DNG: 1.77 ha 599_DNG_Low: 0.37 ha 599_Woodland: 0.09 ha Total: 2.23 ha

Modified indirect and BAM prescribed impacts

The indirect and BAM prescribed impacts as a result of the proposed modifications are detailed below in Table 8. The table only provides a summary of what is included in the BDAR Addendum, as all other indirect impacts remain as per the impact assessment outlined in the Project BDAR.

Table 8. Summary of indirect and BAM prescribed impacts as a result of the proposed modifications (Source: Biosis 2025)

Potential impact	Location / description of impact	Significance of impact
Indirect impacts		
Inadvertent impacts on	Inadvertent impacts that may occur within this wider area are expected to be most	Generally, the potential for the approved Project and proposed modifications to cause substantial indirect impacts to vegetation and

adjacent habitat or vegetation	likely during the construction phase of the project, and include factors such as: · Clearing, or excavation, of vegetation and habitats (including threatened species habitats) outside the approved extents or over and above approved areas. · Impacts associated with soil compression, trampling and dumping via access to the impact area. · Stockpiling of materials outside approved areas. · Sedimentation of areas resulting from poor environmental controls surrounding excavations. · Introduction and / or spreading of exotic weed species.	habitats adjacent or further afield from the development footprint is very low. · Whilst there is some potential that inadvertent impacts, such as those listed adjacent may occur, construction safeguards (as outlined in Section 7 of the BDAR) will be implemented and documented in a Construction Environmental Management Plan. · It can be expected that these safeguards will be implemented by the professional contractors engaged to construct the project, and this will be sufficient to manage the potential for inadvertent impacts to adjacent habitats or vegetation. · The proposed modifications are not likely to have changed the risk of these inadvertent impacts occurring. They generally utilise Category 1 land or derived native grasslands. Clearing limits in woodland areas can be effectively demarcated and managed.
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Amendments to mitigation measures

The proposed modifications do not require any additional specific mitigation measures or strategies to ensure impacts to biodiversity values continue to be avoided and minimised through construction and operational phases of the Project.

Amended Serious and Irreversible Impact Assessment

The approved Project was found to result in impacts to one threatened entity considered to be at risk of Serious and Irreversible Impact (SAIL), and as such an SAIL assessments was prepared.

As the proposed modifications have increased the total area of impact to the TEC and altered aspects of potential fragmentation and impacts associated with edge effects, the SAIL assessment prepared for the TEC in the BDAR has been updated.

Given the absence of definitive impact thresholds stated for the community, the potential for a SAIL will be determined by the consent authority, guided by the additional assessment provided in Table 10 of the BDAR Addendum.

EPBC Act assessment amendments

MNES Assessments have been undertaken and are presented in the BDAR.

Significant impacts have previously been assessed as unlikely to occur to these MNES as a result of the Project and this conclusion remains valid following the proposed modifications presented in this report. This is due to the overall minimal increase in impacts to those MNES considered most at risk of potential significant impact.

Biodiversity Offset Strategy

The BDAR concluded that there will not be residual significant impacts to MNES listed under the Commonwealth EPBC Act, which has not changed as a result of the proposed modifications, and therefore biodiversity offsets are not required to meet the criteria outlined in *EPBC Act Environmental Offsets Policy* (DSEWPC 2012). Residual impacts to MNES will however be offset in accordance with the requirements of the NSW BOS.

Table 9 provides the project's updated biodiversity credit requirement, as a result of the proposed modifications. The updated BAM Credit Summary Report, based on the proposed modifications, is included in Appendix 3 of the BDAR Addendum.

The proponent is committed to securing the required number and type biodiversity credit to offset residual impacts of the proposed modifications through payment to the Biodiversity Conservation Fund managed by the Biodiversity Conservation Trust.

Table 9. Offsets required (ecosystem credits) by the proposed modifications (Source: Adopted from Table 11 Biosis 2025)

Vegetation zone	VI Score	Offset Required	TEC	HBTs	Area – SSD 52786213	Credits retired (SSD-52786213)	Area-Mod (Ha)	Credits (MOD)
599_DNG	33.1	Yes	Yes	No	1.60	32	0.17	3
599_Woodland	63.8	Yes	Yes	No	0.03	1	0.06	2
599_DNG_Low	18.6	Yes	Yes	No	0.00	0	0.37	4

As outlined in Section 9.2.2 of the BAM, an offset is also required for the impacts to habitat of threatened species that require species credits. In this instance, as no species credit species habitat or individuals is considered present within the development footprint, no species credit offsets are required for the Project and proposed modifications.

Conclusion

This BDAR Addendum supports the conclusions of the BDAR (Biosis 2024) and provides an updated biodiversity offset credit requirement for the Project.

6.2.2 Traffic Impact Statement

Background

Equis engaged Stantec to complete a Transport Impact Statement (TIS) for the modification application. The statement provides an analysis of all the transport related matters relevant to the updated site access points and vehicle access routes associated with the Tamworth Substation and transmission cable corridor. It should be read in conjunction with:

- 57 Burgess Lane, Calala also known as 474 Calala Lane, Calala – Transport Impact Assessment (Stantec, dated 2 November 2023).
- Calala Battery Energy Storage System – Response to Submissions and Request for Further Information (Stantec, dated 23 May 2024).
- Calala Battery Energy Storage System – Traffic Management Plan (Stantec, dated 11 June 2025)
- It should be noted that this modification only impacts Burgmanns Lane from a traffic perspective, with all other roads relevant to the Project assessed in the previous documents outlined above.

Traffic Volumes

- For the purposes of this application, background traffic growth has been sourced from the *Kingswood Battery Energy Storage System – Traffic Impact Assessment*, as prepared by Arcadis, 2024. Traffic data for **Burgmanns Lane** (300m east of Goonoo Goonoo Road) has been sourced from the same report. The average two-way daily traffic volume was found to be 1,320 vehicles per day, with approximately 6% being heavy vehicles. Using a 0.42% per annum growth rate, this equates to 1,360 vehicles per day in 2025. It was assumed that peak hour volumes are approximately 10% of the daily traffic.
- It is noted that Burgmanns Lane causeway upgrade works are being carried out by Council and were due to be completed in June 2025. The new causeway will have a higher flood immunity than the current arrangement and will be less of an impediment for heavy vehicles by virtue of a more generous vertical profile. As such, Burgmanns Lane would be available for general project traffic from that date onwards.

- Intersection traffic counts for the Goonoo Goonoo Road and Burgmanns Lane intersection have been sourced from the *Tamworth Battery Energy Storage System (BESS): Tamworth NSW – Traffic Impact Statement*, prepared by Impact Traffic Engineering, (2024). The following weekday peak periods were used as part of the traffic counts:
- AM Peak: 8:00am – 9:00am
- PM Peak: 4:45pm – 5:45pm.
- The below figure provides a summary of the AM and PM peak hour traffic volumes for the intersection.

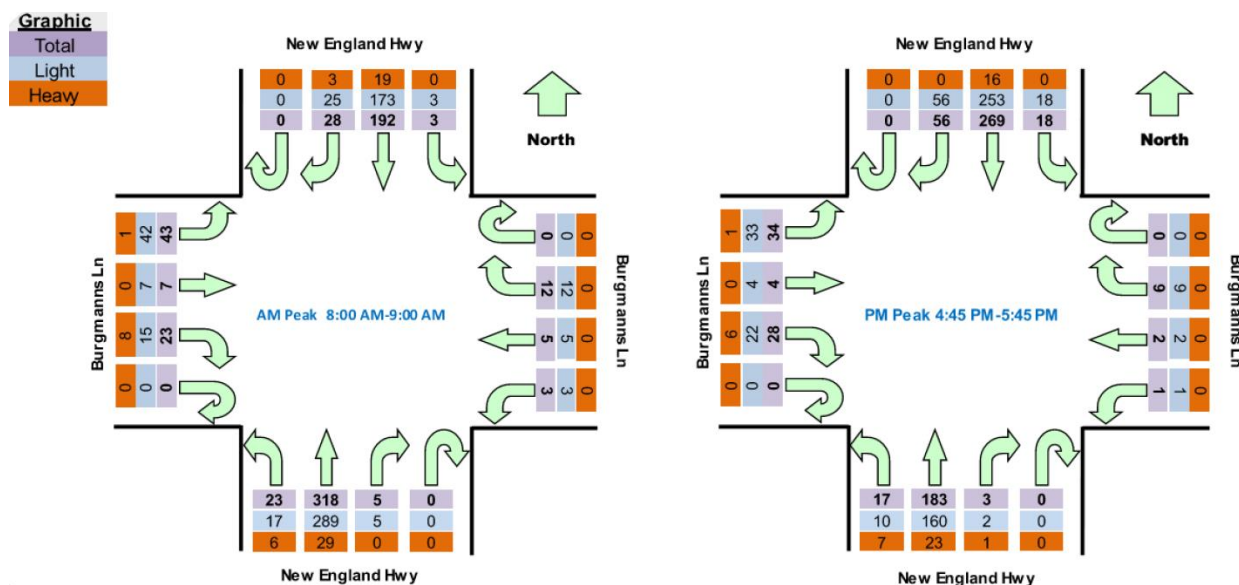


Figure 13: Tamworth BESS: Tamworth, NSW - Traffic Impact Assessment (Impact, 2024)

Construction Activities

In addition to the already assessed (and approved) primary site access point on Calala Lane, construction vehicles will require use of two secondary site access points from Burgmanns Lane. The Stantec report notes that no changes are proposed to the construction staging or work hours approved for the Project. It is still expected that the duration of the works is approximately 18 months, commencing in Q2 2025 and concluding approximately in Q4 2026, subject to the necessary approvals. It is expected that the TransGrid substation works will only commence in approximately Q2 2026.

- While the exact parking supply will be confirmed at a later stage as part of the detailed design stage, worker parking will be provided within the Tamworth Substation site. No construction related vehicles will be permitted to park on public roads at any time.
- As mentioned earlier, the primary site access will remain via Calala Lane for all on-site works. It is however proposed that two secondary site access points along Burgmanns Lane be constructed, to enable access to the Tamworth substation compound and transmission cable corridor.
- The first secondary access point will be the existing access to the Tamworth substation.
- The second secondary access point will be located approximately 180m east of the Burgmanns Lane and Burgess Lane intersection, to enable direct access to the transmission cable corridor.
- Refer to Section 3.2 of this Modification Report for more information on the location of the new access point.

The Stantec report states that the vehicle accesses have been designed to accommodate the largest vehicle accessing the Tamworth Substation site from Burgmanns Lane, which will be a 26-metre B-double design vehicle. The swept path analysis of a 26-metre B-double design vehicle (the maximum length vehicle, consistent with the approved development) entering and exiting from both existing and proposed site accesses from Burgmanns Lane is shown in Appendix A of the Transport Impact Statement and details of the proposed site access dimensions and proposed extents are shown in Appendix B of the Transport Impact Statement. Accredited traffic controllers will be present at the intersection of Goonoo

Goonoo Road / Burgmanns Lane to manage heavy vehicle movements where vehicles are required to cross the road centreline of Burgmanns Lane to complete turning manoeuvres.

Before the proposed site accesses are constructed, Section 138 approval will be required from Council to undertake works within the Burgmanns Lane road reserve.

The Stantec report states that for the majority of the construction program (12-17 of the planned 18 months), the transmission cable works are expected to generate around 105 vehicles per day on Burgmanns Lane, comprising around 60 light vehicles and 45 heavy vehicles. For the peak two months (which will occur within the above mentioned 5-month period), the site is expected to generate peak traffic movements of up to 110 vehicles per day on Burgmanns Lane, comprising 60 light vehicles and 50 heavy vehicles.

For the purposes of a cumulative assessment, the Kingswood BESS and Tamworth BESS projects have been considered given they have proposed similar timeframes to Calala BESS and also have a construction traffic route on Burgmanns Lane.

Peak hour volumes are assumed to equal 10 percent of the daily volume. Therefore, up to 11 vehicles and a maximum of 22 vehicle movements could be expected on Burgmanns Lane during the peak hour of the peak traffic generation period (one vehicle every 3 minutes).

The TIS confirmed that there will only be an addition of 22 peak hour vehicles to Burgmanns Lane. This is not expected to have a material impact to Burgmanns Lane. Burgmanns Lane will continue to operate well within the capacity of the road.

Note that recent discussions with Tamworth Regional Council indicate that the construction traffic routes for the Kingswood and Tamworth BESS projects are still being finalised and may not use Burgmanns Lane. Given these projects are not yet approved, there may only be a partial overlap in construction programs. As such, the above cumulative assessment is conservative.

Turn Warrant Assessment

A cumulative turn warrant assessment has been considered for the intersection of Goonoo Goonoo Road and Burgmanns Lane, in accordance with *Austroads Guide to Traffic Management Part 6: Intersections, Interchanges and Crossing Management*. The information is included under Table 4.1 and Figure 4.1 of the Stantec TIS.

The analysis shows that a short channelised right turn lane and short auxiliary left turn lane are both warranted on Goonoo Goonoo Road. Therefore, no changes are required to the existing turn lanes, which meet this requirement. The analysis also shows that some variation in the identified turning volumes would not impact the recommended turn treatments.

Findings

- The Modification proposes two access points for the transmission cable works from Burgmanns Lane – one utilises the existing access road to the Tamworth substation, and the other is a new access point approximately 180 metres east of the Burgmanns Lane / Burgess Lane intersection.
- All construction works for the transmission cable works would be contained within the Tamworth Substation site land and the transmission cable corridor.
- The cumulative Project traffic associated with the BESS site construction works (accessed via Calala Lane) and the transmission line works (accessed via Burgmanns Lane) is an increase of up to 25 vehicles per day with a peak of 245 vehicles per day, compared with the approved 220 vehicles per day. There is also a difference in the breakdown between light and heavy vehicles, with a greater number of light vehicles than heavy vehicles required during this period.
- The anticipated traffic volumes of up to 110 vehicles per day and up to 22 vehicle movements per hour during peak periods on Burgmanns Lane would have a minor impact on Burgmanns Lane and the Goonoo Goonoo Road / Burgmanns Lane intersection.
- The Project traffic generated on Burgmanns Lane, in addition to the cumulative traffic from Kingswood BESS and Tamworth BESS, is expected to have no material impact on the road capacity of Burgmanns Lane, or the turning lane capacity at the Goonoo Goonoo Road / Burgmanns Lane intersection.

- There are no pedestrian, cyclist or public transport services or facilities on Burgmanns Lane that would be impacted by the additional Project traffic.
- Several additional traffic safety management measures are proposed to address the use of unsealed roads during significant rainfall events.
- Consultation with Tamworth Regional Council on 9 January 2025 confirmed that Council supports the use of Burgmanns Lane, following completion of the current causeway works and subject to a dilapidation report.
- The Stantec report concludes that the proposed modification can be supported from a traffic and transport perspective.

6.2.3 Aboriginal and Historical Heritage

Biosis was commissioned by Equis to provide a letter to support the modification application under S4.55(1) of the EP&A Act. Assessments prepared for the approved SSD application included an Aboriginal Cultural Heritage Assessment (ACHA) and a Historical Archaeological Impact Statement (HAIS). An addendum letter was completed in 2025 for additional areas of impact that were outside of the previous study area.

An extensive Aboriginal Heritage Information Management System (AHIMS) search was undertaken on 5 December 2024. The search identified 74 Aboriginal sites within an 8x8 kilometre search area. No AHIMS sites are located within the study area. There are two restricted sites located within the AHIMS search results. Biosis confirmed with AHIMS that these sites are not located within the study area (previously also confirmed in March 2024 as part of the SSD EIS Amendment Report). There is no identified heritage item located within the additional impact areas.

The ACHA and HAIS identified that the study area for the Calala BESS has been disturbed and that there is low potential for Aboriginal sites and historical archaeological remains to be present within the study area. The proposed works associated with the modification are contained to areas that have been previously disturbed.

Based on the assessment of the ACHA and HAIS, Biosis found that there is low potential for Aboriginal or historical archaeological remains to be present. As a result, the recommendations of the 2023 ACHA and HAIS are still applicable to this modification. No further assessment of Aboriginal and historical heritage is required.

6.2.4 Landscape Character Visual Impact Assessment

Background

Envisage Consulting was engaged by Equis to prepare a Landscape Character Visual Impact Assessment (LCVIA) Addendum Report to assess proposed modifications associated with the project. A LCVIA was previously prepared by Envisage Consulting to inform the EIS as part of the SSD application. Subsequently to its approval, an Addendum to the LCVIA was also prepared by Envisage Consulting to assess the Amended Project (as part of the approved EIS Amendment Report).

Since approval of that EIS Amendment Report in June 2024, the current detailed design phase has led to Equis now proposing some design changes under this modification application. The LCVIA addendum assesses the landscape character and visual impacts of:

- The proposed 5m high earth mound, which is the main proposed element that could lead to discernible changes of particular relevance to the assessment.
- The proposed extension of the approved grassed landscape mound to the north-west of the BESS.

Changes to visual impact

The original 12 viewpoints (as shown in Figure 1 of the LCVIA) assessed for the original EIS and the Amended Project have been utilised once again to assess the subject modification application. The parameters established for the original assessment have remained unaltered. Table 1 of the LCVIA for the modification application provides a comprehensive Visual Impact Assessment. The following is the summary of the assessment:

- **Sensitivity:** There is no change to the rating of visual sensitivity for any viewpoint.
- **Magnitude:** There is no change to the 'magnitude rating' for all viewpoints.
- **Visual Impact:**

- No change to the visual impact rating for any viewpoints.
- Majority of the viewpoints are assessed as having a low impact with four assessed as moderately low.
- It is importantly noted; these ratings are provided prior to the growth of any landscape screening. It is thus anticipated that as landscape matures, visual impacts (if any) will be further diminished.
- Residual Impact:
 - Residual impacts would refer to the remaining adverse visual impacts following implementation of all recommended measures.
 - The residual impact to all viewpoints as a result of the modification application remains low.

The LCVIA report concludes that views from the east would not result in any noticeable change. The views from the north are mostly screened by existing trees, however, from some locations there maybe partial views of the proposed 5m high grassed mound. The mound would act as an additional screen to some views from Calala Lane. There are no major adverse impacts envisaged as a result of the proposed grass mound. Views from the west would continue to be largely screened by existing trees and overtime, the proposed landscape screening would further reduce visibility. Views from the east would not result in a noticeable change.

6.2.5 Hydrology and Flooding Impacts

Umwelt prepared a Hydrology and Flooding Impact Assessment to support the subject modification application under S4.55(1A) of the EP&A Act by the request of the DPHI.

DPHI requested the following in response to the Letter of Intent (LOI) submitted by Equis in 2025:

"Hydrology and Flooding Impacts: The supporting documentation should include an assessment of any changes to hydrology and flooding as a result of the modification. This should specifically address changes in water flow due to proposed mounds, the increase in hardstand areas and alterations to the stormwater retarding basin on TransGrid's site".

Receiving Environment

The subject site is located within the catchment of Calala Creek. An unnamed tributary of Calala Creek runs through the subject site and is the closest identifiable watercourse to the proposed development (inclusive of modifications).

The proposed modifications do not impact any new waterways and as such the downstream receiving environment¹ (values and receptors) for the Calala BESS project remain unchanged from the approval.

Impact Assessment

Table 3.1 of the Umwelt's Hydrology and Flooding Impact Assessment report provides a comprehensive risk assessment of the potential impacts associated with the proposed modifications in relation to flooding, hydrology and erosion.

Mitigation, Management Measures and Corrective Actions (MMMCA) are proposed based on standard industry practices that are agreed upon with the project owner.

The following is a summary of the potential impacts from the risk assessment:

- Soil Mounds: Interaction with Creek Flooding -
 - No potential impacts envisaged as the landscape mounds are located outside the 100yr ARI flood extent of Calala Creek.
 - Likelihood of the event occurring is rare with insignificant consequences.
 - Risk Rating of 1(L) and Residual Risk Rating of 1(L)².
 - MMMCA to ensure that soil mounds are located outside the mapped 100yr ARI flood extent of Calala Creek
- Soil mounds: Sediment runoff into Calala Creek -

¹ Downstream receiving environment is the natural aquatic environment that receives any deposit or discharge of waste, including seepage or minewater, from a project.

Ref: NSW Department of Planning and Environment – Water, 2025. *Pre-requisite policy measures*. [online] Available at: <https://water.dpie.nsw.gov.au/our-work/projects-and-programs/environmental-water-management-in-nsw/what-we-are-working-on-now/pre-requisite-policy-measures> [Accessed 2 Sep. 2025].

² Refer to Appendix C of the Hydrology and Flooding Impact Assessment for the Risk Assessment Matrix

- Erosion of material from the mounds which could be mobilised during storm events, leading to increased sediment loads entering Calala Creek, which may impact water quality and aquatic habitats.
- There is a possible likelihood of the event happening with moderate consequences.
- Risk Rating of 14(H) and Residual Risk Rating of 4(L).
- MMMCA would be the implementation of appropriate erosion and sediment control (ESC) measures in accordance with Landcom's Managing Urban Stormwater (2004): Soils and construction guidelines (Refer table 3.1 of the Hydrology and Flooding Impact Assessment report).
- Retarding basin: Increase in spill risk and erosion -
 - This includes work areas around Tamworth substation such as temporary laydown zones, parking and compound areas.
 - There is a potential minor increase in runoff volumes and 2% increase in peak flows entering the existing basin.
 - The retarding basin has storage capacity of 300m³ that is sufficient to contain runoff from a 50-year ARI event.
 - The basin's spillway is designed to convey peak flows from a 100-year ARI event. The peak flow is expected to rise with the proposed modifications, potentially exceeding the spillway's design capacity.
 - There is a rare likelihood of the event occurring with a moderate consequence.
 - Risk Rating of 2(L) and Residual Risk Rating of 1(L).

MMMCA can be accommodated by raising the dam embankment and adjusting the spillway invert level, if deemed necessary based on the detailed engineering design.

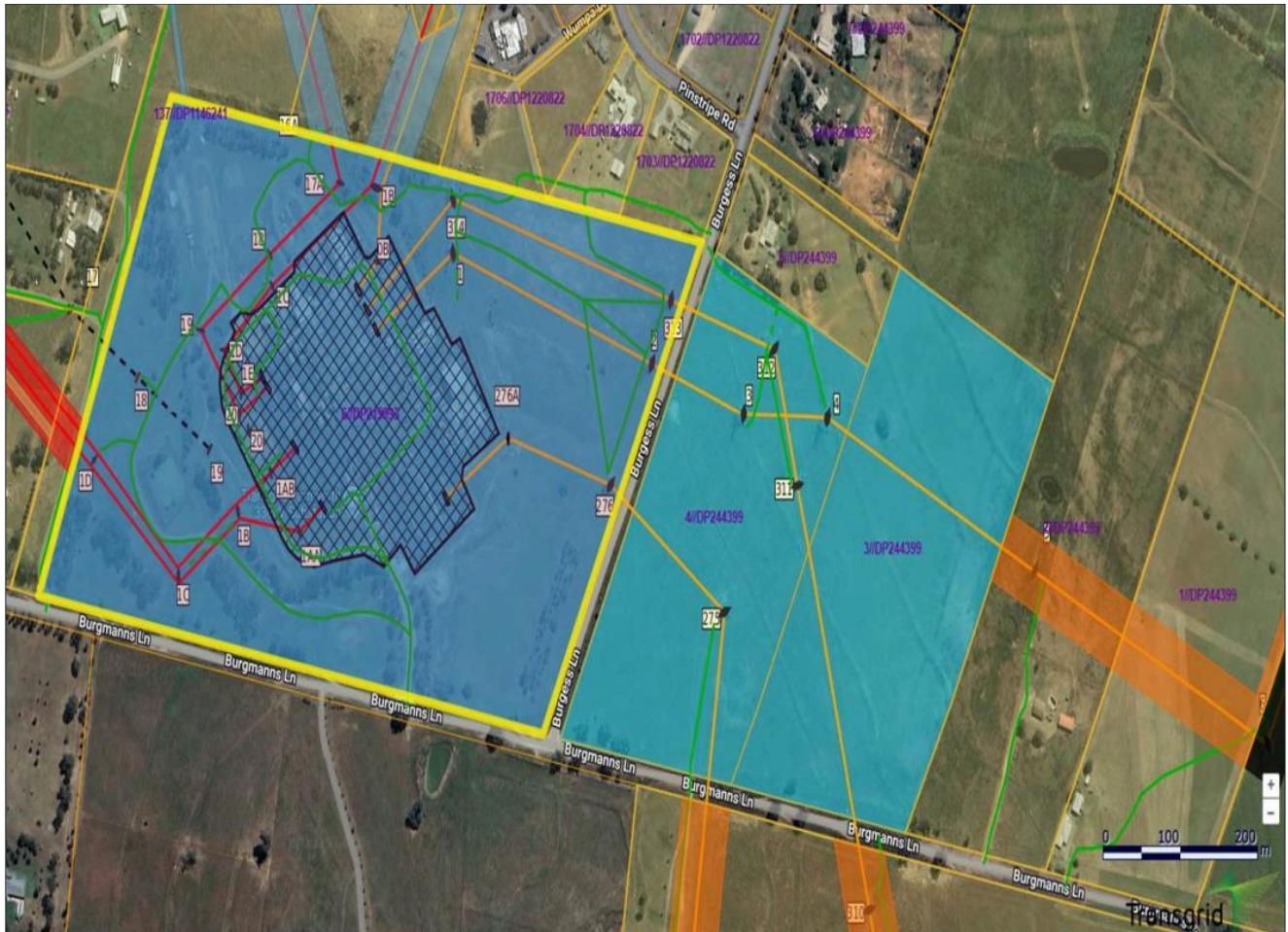
6.2.6 TransGrid Land Management

A formal letter from TransGrid is provided and attached as **Appendix A** of this Modification Application. The letter presents detailed information demonstrating how TransGrid intends to manage and maintain the land following the reduction of the site boundary, with particular emphasis on the TransGrid lots situated along the transmission line.

TransGrid is the landowner of Lot 3 DP 244399, Lot 4 DP 244399 and Lot 6 DP 219993 (the substation).

The letter identifies key activities that partake in this area:

- **Grazing activities and agreements:** Lot 3 DP 244399 and Lot 4 DP 244399 have a Grazing Licence currently held by a long-term grazer that manages the livestock on the land. The livestock help facilitate in maintaining existing vegetation.
 - Management measure: Vegetation slashing within these allotments is prohibited in accordance with the terms of the Licence. Measures will be in place with period monitoring to ensure compliance at all times.
- **Vegetation Protection / Grass Slashing Regime / Routine Maintenance / Weed Management Regime:** Lot 6 DP 219993 involves Weed Management, Routine Maintenance and Vegetation Management
 - Management measure 1: An approximate 3m vegetation buffer is maintained around the Tamworth substation. The buffer will be maintained quarterly or as needed to minimise any potential fuel loads for fire management. The buffer is additionally maintained to control weed growth.
 - Management measure 2: The vegetation easement within the transmission line assets is actively monitored on a yearly basis through LIDAR Imagery. This is to ensure fuel loads or fire regimes are minimised and adhere to vegetation encroachments to the Conductor Safe Approach distances (SADs).
 - Management measure 3: The identified easements are maintained on a three- or five-year cycles or as required for specific occasions. The maintenance involves trimming, slashing or hand cutting of vegetation that is encroaching the SAD to the lines.



- Additional development footprint areas will result in minor changes to species credits and is predicted to have a negligible impact on regional and local cumulative biodiversity impacts.
- Visual and landscape character impacts:
 - With no anticipated additional visual impacts resulting from the proposed modifications, the likelihood of further cumulative visual and landscape character impacts is very low.
- Traffic impacts:
 - The estimated additional 22 peak hour vehicle movements on Burgmanns Lane are not expected to have a material impact on the road.
 - Given that the proposed Kingswood BESS and Tamworth BESS share similar timeframes and construction traffic routes via Burgmanns Lane, they were considered in a cumulative traffic assessment. However, as these projects are not yet approved and they may be only partially overlap in their construction programs, no cumulative traffic impacts are anticipated.
- Noise impacts:
 - Additional impacts associated with noise and vibration as a result of the modification are considered negligible.
- Agricultural impacts:
 - Additional impacts associated with loss of agricultural land as a result of the modification are considered negligible.
- Flood Impacts:
 - There are negligible adverse implications (if any) with regard to flooding as a result of the proposed modifications. Appropriate recommendations ensure any perceived impacts would be appropriately mitigated.

6.3 Updated Mitigation Measures

Mitigation measures are essential components of the planning and assessment framework for SSD projects. They are designed to avoid, minimise or offset potential adverse impacts of a development on the surrounding environment, community and infrastructure. These measures ensure that the development proceeds in a manner that is consistent with environmental sustainability, planning objectives and community expectations.

Measures originally identified as part of the approved project included an assessment and consideration of a comprehensive suite of planning documents, including:

- EIS prepared by Mecone (2023)
- EIS Amendment Report prepared by Mecone (2024)
- Submissions Report prepared by Mecone (2024)
- SSD assessment report prepared by DPHI (2024).
- These documents collectively informed the original mitigation framework, which was embedded in the project's Statement of Commitments and conditions of consent.
- As part of this modification application, updated inputs have been received from specialist consultants as discussed in Section 6 of this report. These updates reflect minor design refinements and operational adjustments proposed as part of the modification. Consequently, the mitigation measures require revision to ensure they remain:
 - Technically accurate, based on the latest specialist assessments
 - Proportionate to the modified impacts of the development
 - Consistent with applicable planning controls and policy frameworks
 - Effective in maintaining environmental and social performance standards.

The updated mitigation measures respond to the following refined impact areas:

- **Biodiversity:** No new mitigation measures are required - existing strategies from the BDAR (Biosis, 2024) remain applicable and will be spatially expanded to cover modified areas.

- **Traffic and Transport:** Construction traffic will continue to be managed under the original EIS measures, including provisions for pedestrian safety, public transport, emergency access, and stakeholder consultation.
- **Heritage:** The 2023 ACHA and HAIIS assessments confirm low archaeological potential; existing recommendations remain valid and no further heritage assessment is required.
- **Visual Impact and Landscape Character:** Minor design changes will be addressed through existing visual mitigation measures, including screening, landscape buffering, and material selection to maintain rural character.
- **Hydrology and Flooding Impacts:** Erosion and sediment control measures will be implemented per Landcom (2004) guidelines, and the retarding basin will be upgraded to accommodate increased runoff and convey 100-year ARI peak flows.

These revisions are necessary to ensure the Calala BESS Project continues to meet its approved objectives while maintaining compliance with the conditions of consent and minimising impacts on the surrounding environment and community.

An updated Table of Consolidated Mitigation Measures specific to this modification application is attached as **Appendix D** with this report.

Apart from those identified within **Appendix D** and any additional mitigation measures stated above, no other changes to mitigation measures are required apart from those identified during the original EIS Approval. No additional Aboriginal heritage, visual, or cumulative impacts are predicted. Negligible construction noise and no operational noise increases are predicted.

Refer to **Appendix D** for the full list of updated consolidated mitigation measures.

7 Justification of Amendment

7.1 Project Objectives

The justification for the Project remains consistent with the final justification of the EIS (Mecone, 2023), EIS Amendment Report (Mecone, 2024), the Submissions Report (Mecone, 2024) and the DPHI SSD Assessment Report (DPHI, 2024). The increased impact area of the additional works has been appropriately assessed and the potential additional impacts are not considered significant following consideration of additional mitigation measures.

The Calala BESS and this subsequent modification has been designed with the following objectives:

- Develop a BESS to store and discharge energy to help facilitate the effective delivery and increase of renewable energy in NSW.
- Contribute to the reduction of greenhouse gas emissions and the State's dependency on coal power stations.
- Contribute to NSW's objectives of achieving net-zero emissions by 2050.
- Be strategically located in close proximity to the existing Tamworth Substation and associated infrastructure.
- Improve the stability of the electrical network / grid.
- Provide economic opportunities to the Calala township.
- Provide broader benefits to the wider community.
- In addition to the above, this Modification Report demonstrates that the Project can be approved because:
 - The project meets the relevant planning requirements.
 - The environmental risks associated with the Project are well understood and manageable.
 - The project is not substantially different from what was previously approved.

7.2 Design of the Project

In accordance with the approval issued by DPHI in June 2024, the Project will consist of:

- Construction and operation of a large-scale BESS with capacity to generate up to 300 MW and up to 600 MWh of battery storage capacity or 2 hours of storage duration.
- Installation of battery enclosures, DC and AC combiner boxes, transformers and auxiliary components.
- 33 / 330 kV switchyard.
- Underground transmission cable connection between the BESS and the nearby TransGrid Tamworth 330 kV substation.
- Tamworth Substation augmentation and ancillary works.
- Ancillary elements including:
 - Main site access from Calala Lane
 - internal access roads and parking
 - control room and staff amenities, warehouse
 - stormwater and fire management infrastructure, utilities
 - signage, fencing, security systems
 - noise attenuation walls and landscape.
- Additional works included as part of this modification application:

- Temporary construction laydown, site compound and vehicle parking within the Tamworth Substation land.
- Three vehicle turning bays along the transmission line corridor.
- Road vehicle access from Burgmanns Lane utilising the existing access road to the Tamworth Substation.
- Additional site access point off Burgmanns Lane to provide direct access to the transmission cable corridor.
- Minor works to modify the Tamworth Substation retarding basin, additional landscape mounds and minor internal reconfigurations to BESS facility.
- Site boundary reduction to better align with the Development footprint and other micro-siting corrections to align with a title re-establishment survey.

The proposed development has been designed to meet the relevant planning provisions and guidelines.

7.3 Consistency with Strategic Context

The proposed development is suitable for the subject site which is a large vacant property located within proximity to an existing substation. The Project is justified by the need for battery storage to support renewable energy sources, making them reliable and responsive to consumer demand. Further, the site is in the New England Region and is located to the southwest of the New England Renewable Energy Zone.

The assessment of the proposal against relevant strategies has been considered in Section 2 of this Modification Report. It is noted that the proposed modification remains consistent with the objectives of the approved project.

7.4 Economic, Social and Environmental Impacts

The following potential social, economic and environmental impacts remain as part of the amended proposed development.

Economic impacts

- The proposed development will provide significant benefits including jobs throughout the construction and operation of the BESS.
- The proposal will contribute to the provision of renewable energy resources and infrastructure in a suitable location.
- Cheaper household electricity costs.
- Total economic investment exceeding \$30 million.
- Generates 170 total jobs during construction.
- Generates 7 permanent jobs during operation.
- Direct and indirect purchases in the local economy.

Social impacts

- The proposed development includes opportunities for employment for Calala residents and the broader Tamworth LGA.
- The proposed development contributes to employment diversity within the Tamworth LGA through provision of renewable energy infrastructure as an emerging theme within the rural areas of NSW.

Environmental impacts

- Impacts on biodiversity have been avoided and minimised wherever possible, with appropriate management and mitigation measures adopted to further minimise any adverse impacts.
- The proposed amendment to the development will not result in any adverse impacts on Aboriginal or European heritage.
- The proposed development incorporates appropriate mitigation measures to ensure the development complies with the relevant noise criteria to minimise any adverse impacts on nearby sensitive receivers.
- Proposed development complies with the requirements of *Planning for Bush Fire Protection 2019*.

Project not Proceeding

The consequences of not proceeding with the Project would result in:

- Loss of opportunity to move towards cleaner, efficient energy storage
- Loss of energy supply that would assist in reaching the NSW energy targets
- Loss of additional electricity storage and supply into the National Grid
- Loss of social and economic benefits created through the provision of direct and indirect employment opportunities during the construction and operation of the BESS.

7.5 Compliance monitoring and communication

Compliance of the development with the key statutory controls and conditions of consent will be monitored and communicated with all project staff by the development and project managers.

As previously approved, mitigation measures have been developed to ensure the appropriate monitoring and communication channels are left opened throughout the project's life span. Updated measures have been provided as part of this application.

7.6 Key Uncertainties

The proposed development and its various components have been assessed in accordance with relevant legislation and instruments. This modification application is supported by specialist reports. As such, it has been determined that there are no key uncertainties associated with the project.

The Project forms an important part of Australia's transition to efficient energy storage. It is considered that the proposed modification works are justifiable and acceptable.

8 References

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Appendices

Appendix A	TransGrid Land Management Letter
Appendix B	Modified Project Summary Table
Appendix C	Updated Statutory Compliance Table
Appendix D	Updated Table of Consolidated Mitigation Measures for the Modification Application
Appendix E	Equis Drawing Set
Appendix F	Biodiversity Development Assessment Report Addendum
Appendix G	Transport Impact Statement
Appendix H	Aboriginal and Historical Heritage Statement
Appendix I	Landscape Character and Visual Impact Assessment Addendum
Appendix J	Hydrology and Flooding Impact Assessment
Appendix K	Landowners' Consent

Appendix B Modified Project Summary Table

Element	Original Project	Modified Project
1. Vehicle turning bays along the transmission line corridor	No turning bays present along transmission line corridor	Three (3) construction vehicle turning bays are proposed for vehicular navigation within the transmission line corridor. The approximate dimensions of the turning bays are: · 20m x 25m (eastern bay) · 20m x 20m (centre turning bay) · 30m x 19m (western turning bay).
2. Road and vehicle access off Burgmanns Lane for access to the existing Tamworth Substation and proposed underground cable corridor	No vehicular access off Burgmanns Lane initially proposed.	Vehicle access is required into the existing Tamworth Substation for the minor additional works described in item 3 below via the existing entrance off Burgmanns Lane. An additional access points off Burgmanns Lane will be constructed approximately 180m east from the intersection between Burgmanns Lane and Burgess Lane, providing direct access to the underground transmission cable corridor. The modification only impacts Burgmanns Lane from a traffic and road perspective, with all other impacts to the road network unchanged. Vehicle access to the BESS site will continue to be via Calala Lane for all on-site works, as previously approved.
3. General minor works at the Tamworth Substation and BESS facility	Tamworth Substation: Augmentation Area proposed around the Tamworth Substation. BESS Facility · BESS Area, Civil works areas, Construction laydown, stockpile and parking · Internal Access Track · Substation and Ancillary Infrastructure · Grassed Landscape mound · Retained Tree Line · Landscape Planting	Tamworth substation: · Augmentation Area remains unaltered. · Additional space is required for construction laydown, site compound and vehicle parking area within the Tamworth Substation land. The proposed additional laydown area covers approximately 3.07 hectares and will support construction operations and activities. · Minor increase to the size of the existing retarding basin capacity on the Tamworth Substation land. BESS Facility: · Minor increase in the overall length of the grassed landscape mound located to the northwest of the BESS facility. The additional area associated with this grassed landscaped mound will be approximately 60m x 22m.

		Additional grassed landscaped mound (approximately 110.75m wide x 128.50m long x 5.0m high) located north of the BESS and within the existing impact footprint.
4. Minor correction to boundaries	The Site Boundary shown in Appendix A of the original EIS was based on an old Biosis Survey boundary rather than any project specific matter	The project Site boundary has been repositioned to align more closely with the Development footprint while maintaining an additional buffer for weed control and maintenance, consistent with best practice environmental management. The BESS facility and transmission cable corridor have been micro sited to align with a title re-establishment survey. Consequently, a minor net-reduction to vegetation impacts within the transmission cable corridor has resulted.

Appendix C Updated Statutory Compliance Table

Statutory Reference	Mandatory consideration	Relevance to Modification
EP&A Act and the EP&A Regulations		
Section 4.55	<i>(1A) Modifications involving minimal environmental impact.</i> <i>A consent authority may, on application being made by the applicant or any other person entitled to act on a consent granted by the consent authority and subject to and in accordance with the regulations, modify the consent if—</i> <i>(a) it is satisfied that the proposed modification is of minimal environmental impact, and</i> <i>(b) it is satisfied that the development to which the consent as modified relates is substantially the same development as the development for which the consent was originally granted and before that consent as originally granted was modified (if at all).</i>	Through this modification report, the project demonstrates that it will be of minimal environmental impact and substantially the same development as that previously approved. Land and Environment Court Case Law, including in the cases of <i>North Sydney Council v Michael Standley & Associates [1998] 43 NSWSC 163</i> & <i>Moto Projects (No 2) Pty Ltd v North Sydney [1999] NSWLEC 280</i>, clarifies that the substantially the same development test requires consideration of both <u>quantitative</u> and <u>qualitative</u> changes, whereby the modified development must be "essentially or materially" the same as the approved development. Qualitatively, the proposed modifications are broadly consistent with those outlined in the Environmental Impact Assessment (EIS). There is no change to the proposed use with majority of the modifications resulting in an overall improved outcome to the amenity of the site and the streetscape. Quantitatively, The modifications are minor in nature with no alteration to the storage capacity and discharge capacity of the approved BESS.

		The modification involves general minor works around the Tamworth substation and the BESS facility as elaborated throughout this report which would not cause any significant numerical increases that would adversely affect the approved development. The additional vehicle turning bays along the transmission corridors and the vehicular access points off Burgmanns Lane are essential to enable safe and efficient vehicular access in support of the planned construction works. For all intents and purposes, the proposed modifications will result in an end development to which the consent as modified relates, that is substantially the same development as the development for which the consent was originally granted.
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Biodiversity Conservation Act 2016

Section 7.14	<i>The likely impact of the proposed development on biodiversity values as assessed in the biodiversity development assessment report. The Minister for Planning may (but is not required to) further consider under that Act the likely impact of the proposed development on biodiversity values.</i>	The BDAR Addendum addresses the modified Project in this regard.
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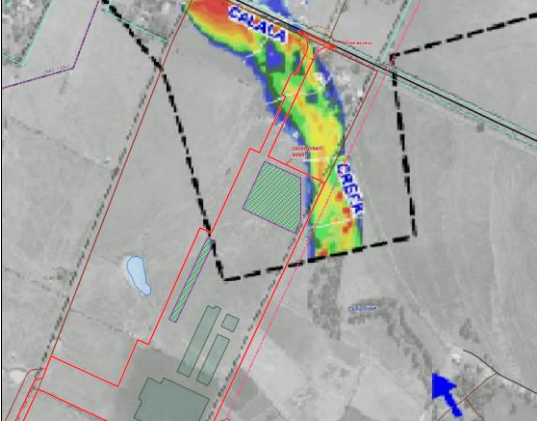
Environmental Protection and Biodiversity Conservation Act 1999

Matters of National Environmental Significance	Under the EPBC Act, if the Minister determines that an action is a 'controlled action' which would have or is likely to have a significant impact on a MNES or Commonwealth land, then the action may not be undertaken without prior approval of the Minister.	The BDAR report concluded that the approved project was unlikely to cause a significant impact to MNES. The modified Project is therefore not expected to generate a significant impact as a result of the modification. It is considered that a referral is not required in this regard.
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State Environmental Planning Policy (Planning Systems) 2021

Section 20 – Schedule 1	<i>Development for the purpose of electricity generating works or heat or their co-generation (using any energy source, including gas, coal, biofuel, distillate, waste, hydro, wave, solar or wind power) that: (a) has a capital investment value of more than \$30 million, or (b) has a capital</i>	The project is still considered electricity generating works, with a capital investment value of more than \$30 million inclusive of the proposed modifications.
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	<i>investment value of more than \$10 million and is located in an environmentally sensitive area of State significance.</i>	
State Environmental Planning Policy (Resilience and Hazards) 2021		
Chapter 3 Part 2 Section 3.7	The Section requires the consideration of current circulars or guidelines prepared by the Department of Planning in determining whether a development is a hazardous storage establishment, hazardous industry or other potentially hazardous industry, or an offensive storage establishment, offensive industry or other potentially offensive industry. Where a conclusion is reached that a project is a potentially hazardous or offensive development, a PHA must be prepared.	A Preliminary Hazard Analysis (PHA) accompanied the original EIS with consideration of the relevant hazard risks associated. The proposed modifications will have no additional implications. The modifications will not alter the original assessment and recommendations in this regard.
Chapter 4 Section 4.6	The Section states that a consent authority must not consent to the carrying out of development unless it is satisfied that the land is not contaminated. If the land is contaminated, the consent authority must not consent to the carrying out of development unless it is suitable for the proposed use in its contaminated state or will be suitably remediated before the land is used for that purpose.	A Preliminary Site Investigation (PSI) was attached as Appendix T of the original EIS concluding that the site was suitable for the proposed use. The proposed modifications will have no additional implications. The modifications will not alter the original assessment and recommendations in this regard.
State Environmental Planning Policy (Transport and Infrastructure) 2021		
Chapter 2 Part 2.3 Division 4 Section 2.42	Development within a regional city for the purpose of electricity generating works must not be granted unless it is located to avoid significant land use conflict and is unlikely to have a significant impact on the city's capacity for growth for scenic quality and landscape character.	The application is accompanied by a Landscape Character and Visual Impact Assessment Addendum attached as Appendix I concluding a sustainable impact in this regard as elaborated in section 6.2.4 of this EIS.
Division 5 Subdivision 1 Section 2.48	For development within or adjacent to an electricity easement or adjacent to a substation, the consent authority must give written notice to the electricity supply authority and take into consideration their response.	There is a transmission line easement within the site, and the proposed transmission line easement crosses multiple transmission line easements and connects to the Tamworth substation. The original application was referred to the electricity supply authority that found the proposed development appropriate. Given the nature of the proposed modifications, a re-referral would not be warranted in this regard.
Tamworth Regional Local Environmental Plan (LEP) 2010		
Land Use	The subject site is Zoned RU4 Primary Production Small Lots under the <i>Tamworth Regional LEP 2010</i> .	The proposed modifications will not alter the approved land use and will remain

	"Electricity generating works", are permitted with consent in the RU4 zone.	consistent with the relevant objectives of the Zone.
4.3 Height of Buildings	The site is not subject to a height of buildings control.	N / A
4.4 Floor Space Ratio	The site is not subject to a floor space ratio control.	N / A
5.21 Flood Planning	Tamworth Regional Council has completed the Tamworth City-wide Flood Risk Management Study and Plan, and the flood modelling includes Calala Creek in the vicinity of the site  Source: Equis (P1) 1% AEP – Flood Extent	Consideration has been given to the impacts of flooding from Calala Creek which traverses the northern portion of the site. The Hydrology and Flooding Impact Assessment accompanies the application as Appendix J detailing the relevant implications in this regard. Further detailed discusses are completed in Section 6.2.5 of this report.
7.1 Earthworks	To ensure that earthworks for which development consent is required will not have a detrimental impact on environmental functions and processes, neighbouring uses, cultural or heritage items or features of the surrounding land. To allow earthworks of a minor nature without separate development consent.	Minimal ancillary earthworks within Council requirements would be required to facilitate the proposed modifications. No discernible change from the original EIS assessment is envisaged in this regard.
<i>Approving Authority</i>		
DPHI	The Department of Planning, Housing and Infrastructure previously approved the SSD application.	DPHI remains the approving authority for this modification application.

Appendix D Updated Table of Consolidated Mitigation Measures for the Modification Application

Environmental Impact	Mitigation Measures	Where addressed
Biodiversity	The proposed modifications do not require any additional specific mitigation measures or strategies to ensure impacts to biodiversity values continue to be avoided and minimised through construction and operational phases of the Project. Relevant mitigation measures are outlined in Section 7 of the BDAR (Biosis 2024) and these are proposed to be spatially expanded to include areas subject to the proposed modifications.	Appendix F Section 6.2.1 of this report
Traffic, Transport and Accessibility	Mitigation measures are provided in terms of Construction Traffic Management in terms of: · Pedestrian and Cyclist Management · Public Transport · Emergency Vehicle Access · Consultation No additional mitigation measures aside from those identified within the original EIS are recommended.	Appendix G Section 6.2.2 of this report
Heritage	Based on the assessment of the ACHA and HAIS, Biosis found that there is a low potential for Aboriginal or historical archaeological remains to be present. As a result, the recommendations of the 2023 ACHA and HAIS are still applicable to this modification. No further assessment of Aboriginal and historic heritage is required	Appendix H Section 6.2.3 of this report
Visual Impact and Landscape Character	No additional mitigation measures aside from those identified within the original EIS are recommended.	Appendix I Section 6.2.4 of this report
Hydrology and Flooding Impacts	The following mitigation and Management Measure, and corrective actions are proposed: · <i>Risk Event: Soil mounds - Interaction with Creek Flooding.</i> Ensure soil mounds are located outside the mapped 100 yr ARI flood extent of Calala Creek to avoid direct interaction with floodwaters. The proposed soil mounds will maintain sufficient offset from the	Appendix J Section 6.2.5 of this report.

100 yr ARI flood extent of Calala Creek to allow for placement of erosion and sediment control measures as necessary.

Risk Event: Soil mounds – Sediment runoff into Calala Creek.

Implementing appropriate erosion and sediment control (ESC) measures in accordance with Landcom's Managing Urban Stormwater (2004): Soils and Construction guidelines, including but not limited to:

- Preparation of an erosion and sediment control plan prior to construction works commencing.
- Monitor weather forecast to avoid construction during high rainfall or flood prone conditions.
- Rehabilitating and revegetating the temporary disturbed areas.
- Installing sediment fences or barriers to trap sediment.
- Scheduling regular inspections and maintenance of ESC measures, especially after rainfall events.
- Ensuring all mitigation measures comply with local council, water authority, and environmental regulations, and are approved by relevant stakeholders.

Retarding basin: Increase in spill risk and erosion: These works are intended to be temporary and are expected to occur during the dry season, subject to construction scheduling. Upon completion, the area is proposed to be remediated. As part of the proposed modifications, the existing retarding basin will be upgraded to meet the design criteria for a 50-year ARI event. While the total catchment area draining to the basin remains unchanged, the 13% of the unpaved area runoff coefficient increases from 0.6 to 0.75 (see Table 3.3). Concept-level assessment indicate that this change will result in less than a 5% increase in the required storage capacity, refer to Section 3.1.1. This additional volume can be accommodated by raising the dam embankment and adjusting the spillway invert level. To support the detailed design of these upgrade works, detailed hydrological modelling will be undertaken to accurately assess peak flows and storage requirements.

The spillway Flood Depth is recommended to be 370mm (within 500mm spillway depth) which would be sufficient to convey 100yr ARI peak flow.

