

ACENERGY PTY LTD

Holbrook Distribution Battery Energy Storage System

STATEMENT OF ENVIRONMENTAL EFFECTS






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1. INTRODUCTION

Premise Australia Pty Ltd (Premise) has been commissioned by ACEnergy Pty Ltd to prepare a Statement of Environmental Effects (SEE) to accompany a Development Application (DA) for the development of a Distribution Battery Energy Storage System (DBESS) on land near Bendemeer Lane, Holbrook, NSW. The site of the proposed DBESS is located within a land parcel legally described as Lot 22 DP809338 (otherwise referred to as the 'host lot').

The site is located in the Greater Hume Shire Council (GHSC) Local Government Area (LGA) and is situated within land zoned as RU1 – Primary Production via the *Greater Hume Local Environment Plan 2012* (LEP). The proposed development is consistent with the definition of 'electricity generating works' pursuant to the LEP and is to be located in the northeastern extent of Lot 22 DP809338. The DBESS is to have an approximate capacity of 5 megawatts (MW).

This SEE has been prepared pursuant to the relevant provisions of the *Environmental Planning and Assessment Act 1979* (EP&A Act) and *Environmental Planning and Assessment Regulation 2021* (EP&A Regulation).

The proposed development:

- > Is not designated development by reference to Section 24 of Schedule 3 of the EP&A Regulation as it does not supply (nor is it capable of supplying) 30 MW of electrical power;
- > Is not State significant development (SSD) by reference to Section 20 of Schedule 1 of the *State Environmental Planning Policy (Planning Systems) 2021* (the Systems SEPP) as it does not have a capital investment value (CIV) of more than \$30 million, nor is it located within an environmentally sensitive area of State significance; and
- > Is not regionally significant development (RSD) by reference to Section 5 of Schedule 6 of the Systems SEPP as it does not have a CIV of more than \$5 million.

This SEE is provided in the following format:

- > **Section 2** of this report provides a description of the subject site and its locality.
- > **Section 3** outlines the proposed development.
- > **Section 4** details the planning framework applicable to the subject site and proposed development.
- > **Section 5** identifies the impacts of the proposed development.
- > **Section 6** provides a conclusion to the SEE.

2. THE SITE & ITS LOCALITY

2.1 The locality

The site of the proposed development is Lot 22 DP809338, located approximately 5.1 km south of the centre of Holbrook. There are a number of surrounding population centres, including Walbundrie, approximately 50 km to the west, Albury, approximately 55 km to the south, Wagga Wagga, approximately 66 km to the north and Tumbarumba, approximately 66 km to the east. The locality of the site is depicted in **Figure 1**.

The site is located alongside and will be accessible via a new driveway connected to Bendemeer Lane. Bendemeer Lane extends in a general east to west alignment to the north of the site and features several driveways providing access for properties to the west and north of the site. Bendemeer Lane terminates approximately 660 m to west of the site and provides a connection to the Hume Highway approximately 190 m to the east of the proposed access arrangement. The Hume Highway extends in a general north to south alignment approximately 100 m to the east of the site and is adjacent to the eastern boundary of Lot 22 DP809338.

The town of Holbrook consists of a mixture of rural, residential commercial and industrial land uses. It accommodates a collection of commercial and industrial businesses, a full range of housing options, a hospital, a primary education facility and a network of recreational spaces and sporting facilities. Holbrook is located along major transportation routes and is situated at the junction of several main roadways including:

- > The Hume Highway (SCR No. 0000002), extending south to connect Holbrook with Albury and northeast to connect with Sydney.
- > Holbrook Wagga Road (SCR No. 0000211), extending north to connect Holbrook with Wagga Wagga.
- > Culcairn Holbrook Road (SCR No. 0000331), extending west to connect Holbrook with Culcairn.
- > Young Street (SCR No. 0000331), passing through Holbrook to connect Culcairn Holbrook Road to Jingellic Road.
- > Jingellic Road (SCR No. 0000331), extending east prior to separating to extend north to connect with Tumbarumba Road and south to connect with Jingellic near the Murray River.

The locality surrounding the project site is predominantly characterised by rural land uses and living, including several dwellings, scattered vegetation and a mixture of cropping and grazing activities.

The site is located in the northeastern corner of Lot 22 DP809338 (the 'host lot'). The host lot occupies a total area of approximately 58.5 hectares and currently features a single residential dwelling with development ancillary to the existing agricultural land use including farm dams, fences, scattered paddock trees, sheds and driveways.

While the locality is predominantly rural, and land in the immediate proximity of the proposal is generally vacant, there are 13 receivers within a 2 km radius of the land holding hosting the development site (refer to **Figure 4**). As shown in the project drawings at **Appendix A**, the closest residential receiver is R1, which is an associated receiver located approximately 300 m to the southwest of the development site and within

the host lot. The next two closest receivers (R02 and R03) are situated further to the west approximately 600 m and 960 m respectively from the development site. Remaining receivers and residential land uses are scattered throughout the locality and located on land zoned via the LEP as RU1 - Primary Production.

One (1) overhead 22 kV Essential Energy distribution line traverses land to the east of the site in a general north to south alignment (refer **Figure 1**). This 22 kV distribution line extends northwards along the western side of the Hume Highway before connecting to an existing substation located approximately 4.2 km northeast of the site, along Jingellic Road. A separate overhead 22 kV Essential Energy distribution line extends in an east to west alignment, from a node with the eastern distribution line, transecting land to the north of the site along Bendemeer Lane. This distribution line transects the proposed access arrangement and facilitates connections for surrounding receivers located to the north and west.

An existing Telstra copper cable connection extends westward from the Hume Highway passing through the host lot in a general east to west alignment. The Telstra cable passes along the northern boundary of the development site and transects the proposed access arrangement.

No national parks and reserves are identified in the immediate vicinity of the site. Land mapped as containing biodiversity value, however, is located within the host lot approximately 400 m west of the site, along Sandy Creek.

A Crown land reserve (R62926) is mapped over Lot 73 DP753349, an adjacent land parcel situated approximately 530 m to the south of the site. The locality features one other Crown land parcel located along the Hume Highway, approximately 826 m south of the development.

2021 Census data for the suburbs and locality of Holbrook identifies an estimated population of approximately 1650 people. The economic production of the town is predominately characterised by agricultural activities with major industries of employment including beef cattle farming (specialised), road freight transport, local government administration, sheep farming (specialised) and aged care residential services (ABS, 2021).

2.2 The development site

The development site is situated at Hume Highway, Holbrook and is confined to the northeastern corner of the host lot. The entirety of the development site is zoned RU1 - Primary Production, pursuant to the LEP, and occupies an area of approximately 0.5 ha. The site is depicted in **Figure 2**.

The site is generally level and no distinct drainage lines are mapped as impacting the footprint of the development. There are no waterbodies located within the site, with surrounding water sources limited to Sandy Creek approximately 400 m to the west and several farm dams scattered throughout the locality. The closest farm dam is situated within the host lot approximately 40 m to the east of the development site and occupies an area of approximately 2600 m².

The development site is currently used for agricultural activities, particularly grazing, and is located within a farming paddock cleared of trees. Established vegetation is located to the north of the site, on the northern side of Bendemeer Lane. No tree removal is necessary to enable the development as proposed.



Access to the development site is to be provided via a new driveway connection to Bendemeer Lane. The new driveway would provide exclusive access to the DBESS development. The proposed security gate for the site is to be setback approximately 25 m for the edge of Bendemeer Lane.

As detailed above, two sets of existing overhead power lines and a Telstra copper cable are located in the immediate vicinity of the project site. An electrical connection between the site and existing overhead powerlines would be provided to facilitate the operation of the DBESS.



Figure 1 – The Locality



Figure 2 – The Site



Figure 3 – Land Zoning

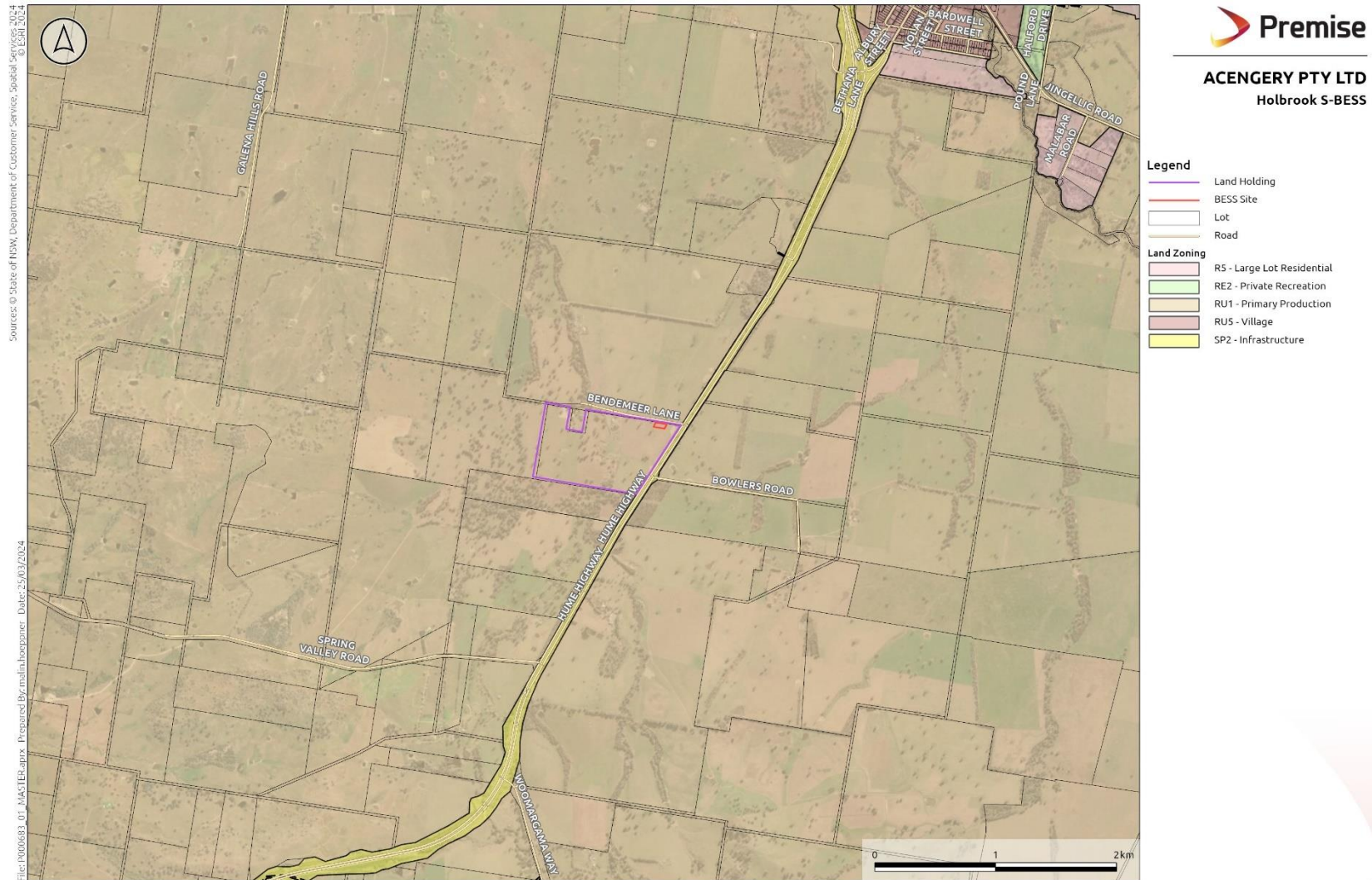
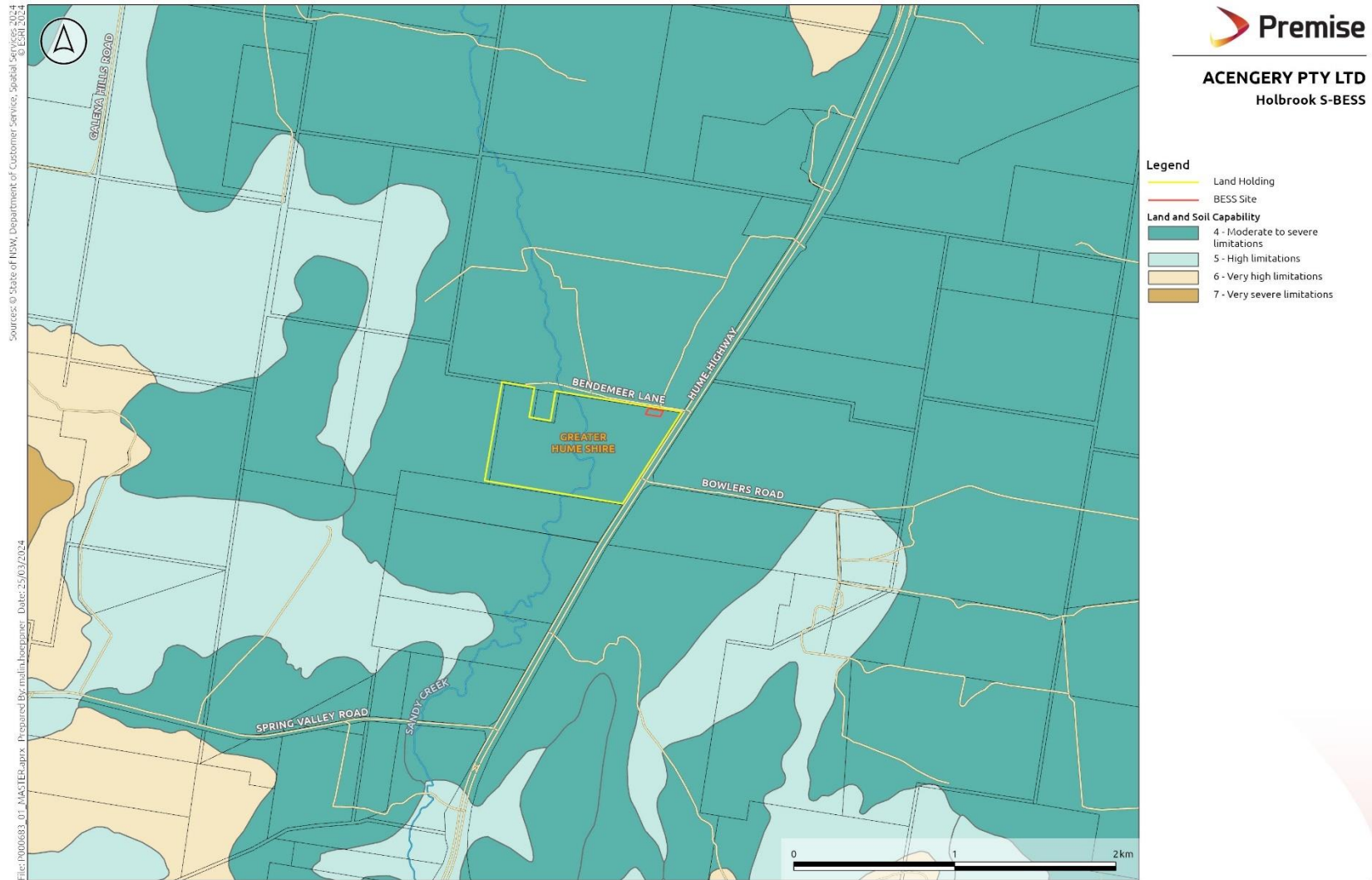


Figure 4 – Receivers



Figure 5 – Land Capability



3. THE DEVELOPMENT

3.1 Development description

The project comprises a DBESS and associated infrastructure that will occupy a footprint of approximately 0.5 hectares. The proposed DBESS is situated in the northeastern corner of the host lot and will have a capacity of approximately 5 MW. The proposed DBESS, associated infrastructure and development footprint will largely align with, and be contained within, the development area shown in **Figure 2**.

The project will be designed to provide grid flexibility services. It will support the efficiency of the electrical network by charging from the grid during periods of low demand and discharging back to the grid during periods of higher demand. It would also have the capacity to charge or discharge when power system services are required, assisting to maintain the stability of the broader electricity grid by making stored energy available during high demand periods.

Power would transition to and from the DBESS switching station via a new 22 kV line connected to the existing 22 kV distribution lines to the east. The power conversion systems rectify the power into a form that is suitable for storage in the facility's batteries. The DBESS strengthens the power network by providing greater flexibility in grid management.

The key project infrastructure includes:

- > The installation of a new driveway from Bendemeer Lane leading to a gated entry to the DBESS.
- > Security fencing and landscaping around the DBESS.
- > Electrical components of the DBESS, including 10 battery containers (separated into blocks); a medium voltage power station (MVPS) and high voltage switchgear; and
- > Ancillary electrical sub-transmission lines to connect the DBESS to the existing powerlines to the east.

The project would include the implementation of mitigation measures considered necessary to minimise risks posed by and to the proposed development.

4. STATUTORY PLANNING

4.1 Biodiversity

Section 1.7 of the *Environmental Planning and Assessment Act 1979* (the EP&A Act) provides that the EP&A Act has effect subject to the provisions of Part 7 of the *Biodiversity Conservation Act 2016* (the BC Act) and Part 7A of the *Fisheries Management Act 1994* (the Fisheries Act).

Subsection 7.2(1) in Part 7 of the BC Act provides the three triggers for development or activities to be considered as "likely to significantly affect threatened species". Under subsection 7.7(2) of the BC Act, the development application is required to be accompanied by a development assessment report (BDAR) if it meets one or more of conditions for "likely to significantly affect threatened species".



The proposed development is considered against the three triggers in **Table 1**.

Table 1 – Section 7.2 of the BC Act

Test	Assessment
(a) it is likely to significantly affect threatened species or ecological communities, or their habitats, according to the test in section 7.3, or	<p>The site is disturbed as a result of previous land clearing and agricultural development. Accordingly, vegetation within the site is generally limited to non-native species planted in conjunction with the current agricultural land use.</p> <p>An assessment of potential impacts to biodiversity is provided in Section 5.7 together with a Flora and Fauna Assessment Report (FFAR) in Appendix C. No significant impacts to threatened species or ecological communities, or their habitats are anticipated.</p>
(b) the development exceeds the biodiversity offsets scheme threshold if the biodiversity offsets scheme applies to the impacts of the development on biodiversity values, or	<p>As per Section 7.4 of the BC Act, development exceeds the biodiversity offsets scheme threshold if it is:</p> <p>(a) Of an area declared by clause 7.2 of the BC Regulation as exceeding the threshold, or</p> <p>(b) On land included on the Biodiversity Values Map published under clause 7.3.</p> <p>As the site has a mapped minimum lot size of 100 hectares, the relevant clearing threshold for the site is 1 hectare. The development does not propose to clear more than 1 hectare of native vegetation.</p> <p>The site does not contain land mapped via the Biodiversity Values Map.</p> <p>A BDAR is not required.</p>
(c) it is carried out in a declared area of outstanding biodiversity value.	The site is not located within a declared area of outstanding biodiversity value under Part 3 of the BC Regulation.

4.2 Designated development

Section 4.10 of the EP&A Act and Schedule 3 of the EP&A Regulation provide outline that certain types of development are classified as designated development. Designated development requires the preparation of an Environmental Impact Assessment to support a development application.

The proposed DBESS represents a 'battery storage facility' for the purposes of Section 7 of Schedule 3 of the EP&A Regulation.

The approximate capacity of the proposed DBESS of approximately 5 MW is below the threshold of 30 MW provided by the EP&A Regulation such that the development is not classified as designated development.

4.3 Bush fire prone land

Section 4.14 of the EP&A Act provides that development consent cannot be granted for any development for any propose if located on bush fire prone land unless the consent authority.

(a) is satisfied that the development conforms to the specifications and requirements of the version (as prescribed by the regulations) of the document entitled Planning for Bush Fire Protection prepared by the NSW Rural Fire Service in co-operation with the Department (or, if another document is prescribed by the regulations for the purposes of this paragraph, that document) that are relevant to the development (the relevant specifications and requirements), or

(b) has been provided with a certificate by a person who is recognised by the NSW Rural Fire Service as a qualified consultant in bush fire risk assessment stating that the development conforms to the relevant specifications and requirements.

The project is not identified as a subdivision of land that could be used for residential purposes or rural residential purposes or development for a special fire protection purposes under 4.14(1) of the EP&A Act and it is not considered integrated development under Section 4.46 as no approval under section 100B of the *Rural Fires Act 1997* (RF Act) is required (refer to **Section 4.4**)

The site of the proposed development is not mapped as containing bush fire prone land.

Notwithstanding, an assessment of potential bush fire impacts associated with the proposed development is provided within **Section 5.14.2**.

4.4 Integrated development

Section 4.46 of the EP&A Act states that development requiring consent and another activity approval is defined as Integrated Development. The proposed development is not classified as Integrated Development as it does not require any approvals identified via Section 4.46 of the EP&A Act.

Bendemeer Lane is not identified as a state classified road under section 2.118 of the Infrastructure SEPP. The proposed development therefore does not require consent to connect to a classified road. Notwithstanding the requirement to obtain a consent under section 138 of the *Roads Act 1993*, the proposed development is not classified as integrated development where the consent authority is also the roads authority, pursuant to section 4.46(3) of the EP&A Act.

4.5 Environmental Planning Instruments

The EP&A Act facilitates the preparation of Environmental Planning Instruments (EPIs), including State Environmental Planning Policies (SEPP) and Local Environmental Plans (LEP).

In relation to the site and proposed development, the relevant EPIs include:

- > *Greater Hume Local Environmental Plan 2012*: Refer to **Section 4.5.1**.
- > *State Environmental Planning Policy (Biodiversity and Conservation) 2021*: Refer to **Section 4.5.2**.
- > *State Environmental Planning Policy (Resilience and Hazards) 2021*: Refer to **Section 4.5.3**.
- > *State Environmental Planning Policy (Transport and Infrastructure) 2021*: Refer to **Section 4.5.4**.

4.5.1 GREATER HUME LOCAL ENVIRONMENTAL PLAN 2012

The following relevant provisions of the *Greater Hume Local Environmental Plan 2012* (LEP) are addressed in the following subsections:

- > Clause 2.3 Land Use Zoning: Refer to **Section 4.5.1.1**.
- > Clause 6.1 Earthworks: Refer to **Section 4.5.1.2**.
- > Clause 6.7 Essential Services: Refer to **Section 4.5.1.3**.

4.5.1.1 Clause 2.3 Land Use Zoning

The site is located on land zoned, RU1 – Primary Production (refer to **Figure 3**). The proposed development consists of a DBESS, which is most appropriately defined as (emphasis added):

electricity generating works means a building or place used for the purpose of:

- a) *making or generating electricity,*
- b) *or **electricity storage**.*

Development for the purposes of electricity generating works is prohibited within the RU1 land use zone applying to the site under clause 2.3.

Notwithstanding this, Division 4 of *State Environmental Planning Policy (Transport and Infrastructure) 2021* (Infrastructure SEPP) provides that development for the purposes of electricity generating works including electricity storage, is permitted with consent in a prescribed non-residential zone (refer to **Section 4.5.4**). The Infrastructure SEPP prevails to the extent of any inconsistency with another planning instrument. The RU1 zone is a prescribed non-residential zone and therefore the development is permitted with consent.

The proposed DBESS is not unsympathetic to the objectives of the RU1 land zone. The implementation of appropriate mitigation measures as part of the design of the project and during the construction and operational phases would seek to minimise significant impacts to the objectives of the land zone and surrounding land uses.

4.5.1.2 Clause 6.1 Earthworks

Section 6.1 of the LEP requires consideration of a range of factors prior to granting consent for earthworks. It provides that development involving earthworks must not have a detrimental impact on environmental functions and processes, neighbouring uses, cultural or heritage items or features of the surrounding landscape.

Subclause 6.1(2) of the LEP provides that development consent is required for earthworks unless they are exempt development under the LEP or another applicable EPI, or ancillary to other development for which consent has been given. Where consent is required, the consent authority is required to consider the matters in subclause 6.1(3) before granting development consent.

The proposed works are considered in the context of the matters in subclause 6.1 (3) in **Table 2**.

Table 2 – Earthworks Considerations

Matters for Consideration		Comment	
(a)	The likely disruption of, or any detrimental effect on, drainage patterns and soil stability in the locality of the development	The proposed earthworks are limited to minor volumes associated with the installation of a 5 MW DBESS and therefore will not result in any impacts on drainage patterns and soil stability in the locality. Ground would be remediated post work to ensure a stable environment, with no additional run-off.	✓
(b)	The effect of the development on the likely future use or redevelopment of the land	The proposed earthworks are associated with the installation and operation of a sub 5 MW DBESS. Earthworks are minor and unlikely to result in any demonstrable changes in land levels.	✓
(c)	The quality of the fill or the soil to be excavated	Excavation works will be limited to establishing footings/slabs for the proposed development and trenching for cables, with only minor amounts of soil excavated. In the event that excavated soil requires removal from the site it will be transferred as required to an appropriately licenced facility. Standard checking and tracking requirements will be applied.	✓
(d)	The effect of the development on the existing and likely amenity of adjoining properties	Levels near the site boundaries would be maintained, ensuring that the earthworks would not impact on the amenity of adjoining properties.	✓
(e)	The source of the fill material and the destination of the excavated material	The source any fill material and destination of any excavated material is to comply with Council's requirements.	✓
(f)	The likelihood of disturbing relics	The likelihood of disturbing relics is low as the site is located within a pre-disturbed rural setting. The development footprint is considered unlikely to contain any of the natural features	✓

Matters for Consideration		Comment	
		typically associated with Aboriginal sites or places.	
(g)	The proximity to, and potential for adverse impacts on, a waterway, drinking water catchment or environmentally sensitive area	<p>The site is not located within a mapped environmentally sensitive area.</p> <p>The closest watercourse to the site Sandy Creek, is located approximately 400 m to the west of the site. A farm dam is additionally situated in the northeastern corner of the host lot approximately 40 m west of the site.</p> <p>Due to the distance between the development and surrounding watercourses, and subject to the implementation of appropriate mitigation measures, no adverse impacts to watercourses are anticipated to result from the proposed development.</p>	✓
(h)	Appropriate measures proposed to avoid, minimise or mitigate the impacts of the development	No additional measures are required to minimise or mitigate the impacts referred in paragraph (g).	N/A

4.5.1.3 Clause 6.7 Essential Services

Clause 6.7 of the LEP prevents the consent authority from granting consent unless it is satisfied that essential services are available or that adequate arrangements have been made to make them available when required. These include the supply of water and electricity, disposal and management of sewage, stormwater drainage or on-site conservation and suitable vehicular access.

The following is noted in the context of Clause 6.7:

- a. No reticulated water network is available for the proposed development. It is anticipated that water for the construction activities would be sourced and transported to the site via water trucks. Water supply arrangements would be confirmed in consultation with Council, Regulatory Authorities, and the existing landowner prior to construction and during the refinement of detailed design, ensuring a sufficient supply of water is available for the operation of the project – refer to **Section 5.6**.
- b. The development would include the installation of ancillary electrical infrastructure. The proposed electrical connection would extend northeast from the proposed DBESS, connecting to an existing 22 kV essential energy overhead transmission line located adjacent to the host lot. This 22 kV line extends northwards along the western side of the Hume Highway before turning to connect to an existing substation located approximately 4.2 km northeast of the site, along Jingellic Road – Refer to **Figure 1**.
- c. No permanent connection to a reticulated sewer network is proposed. Portable ablution facilities would be temporarily installed on site during the construction phase of the project. It is anticipated that chemical port-a-loo's, as temporary portable ablution facilities, will be provided at strategic locations

around the site for use by personnel during the construction and decommissioning phases of the project. Where possible these port-a-loo's will be located on a trailer to allow for easy redistribution. Waste from port-a-loo's will be disposed of offsite at a licensed treatment facility. The site is generally unmanned, and as such, there is no requirement to provide permanent ablution facilities.

- d. The proposed development is not anticipated to result in significant impacts to surrounding water courses. Stormwater management measures would be provided as appropriate to minimise the potential for adverse impacts - refer to **Section 5.6** and Drawings provided in **Appendix A**.
- e. The development includes the installation a new driveway and access arrangement connected to Bendemeer Lane. The access arrangement would be designed to provide safe ingress and egress for vehicles associated with the project – refer to **Section 5.9** and Drawings provided in **Appendix A**.

On the basis of the above, the development is considered to be acceptable in the context of clause 6.7 of the LEP.

4.5.2 STATE ENVIRONMENTAL PLANNING POLICY (BIODIVERSITY AND CONSERVATION) 2021

4.5.2.1 Chapter 2 Vegetation in non-rural areas

Chapter 2 of the Biodiversity SEPP relates to vegetation in “non-rural areas of the State”, defined in section 2.3 as land with any non-rural zoning. This includes the RU1 – Primary Production land zone applying to the site under the LEP.

Section 2.6 of the SEPP provides that a person must not clear native vegetation in a non-rural area of the State:

- 1. To which Part 2.3 of the Biodiversity SEPP applies without the authority conferred by a permit granted by Council under that Part; or
- 2. That exceeds the biodiversity offsets scheme threshold without the authority conferred by an approval granted by the Native Vegetation Panel under Part 2.4.

Section 2.9 of the SEPP provides that Part 2.3 applies to any vegetation in a non-rural area of the State that is declared by a development control plan (DCP) by reference to the species, size or location of vegetation or the presence of vegetation in an ecological community or in the habitat of a threatened species. A review of the Greater Hume DCP did not identify any controls relevant to the removal of vegetation within the RU1 Land Zone (Refer to **Section 4.5.6**).

An assessment of potential biodiversity impacts resulting from the proposed project is provided in **Section 5.7**. The assessment has concluded that the proposed development is unlikely to result in significant impacts to biodiversity. A BDAR is therefore not required.

For the avoidance of doubt the proposed project is not anticipated to require the removal of native vegetation and does not exceed the clearing threshold applying under Section 7.4 of the BC Act and Section 7.1(1) of the BC Regulation (Refer to **Section 4.1**).

4.5.2.2 Chapter 3 Koala habitat protection 2020

Under Section 3.3(1) of the Biodiversity SEPP, this Chapter applies to land within the RU1 Primary Production, RU2 Rural Landscape and RU3 Forestry and equivalent zones in an LGA not marked with a '*' in Schedule 2 of the SEPP. A three-step process applies where the SEPP applies and the site (including adjoining land in the same ownership) has an area of more than one hectare.

The site includes land within the RU1 zone and therefore, Chapter 3 applies to the proposed development.

As detailed in **Section 5.7**, the proposed activity is on land previously disturbed by agricultural operations.

Given existing disturbance and the minimal extent of vegetation impacted no significant impacts to koalas or koala habitat are expected. This is further discussed in **Appendix C**.

4.5.2.3 Chapter 4 Koala habitat protection 2021

Under Section 4.4(1) of the Biodiversity SEPP, the Chapter applies to the LGAs listed in Schedule 2 of the SEPP, unless the site is located within the RU1 Primary Production, RU2 Rural Landscape or RU3 Forestry zone in an LGA that isn't marked with a '*' in Schedule 1.

The site is located within the RU1 zone. Chapter 4 therefore does not apply.

4.5.3 STATE ENVIRONMENTAL PLANNING POLICY (RESILIENCE AND HAZARDS) 2021

4.5.3.1 Chapter 3 Hazardous and Offensive Development

Section 3.7 of the *State Environmental Planning Policy (Resilience and Hazards) 2021* (The Hazards SEPP) requires the consideration of current circulars or guidelines prepared by the Department of Planning in determining whether a development is:

- > hazardous storage establishment, hazardous industry or other potentially hazardous industry; or
- > offensive storage establishment, offensive industry or other potentially offensive industry.

The current and most recent guidelines prepared by the Department of Planning, the *Hazardous and Offensive Development Application Guidelines – Applying SEPP 33* (Applying SEPP 33 Guideline; Department of Planning 2011), includes the screening tests to be used to determine whether a development is potentially hazardous development. If the screening tests indicate that a development is potentially hazardous development, a preliminary hazard analysis (PHA) is required to be provided as part of the DA. The type of screening test to be used is dependent upon the class, as categorised under the Australian Dangerous Goods Code (the ADG code; National Transport Commission 2020) of dangerous goods proposed to be accommodated on-site.

The project includes delivery of a DBESS. The dangerous good associated with DBESS are lithium batteries which are a class 9 dangerous good under the ADG Code. Class 9 goods do not exceed the screening thresholds under the guidelines under the Applying SEPP 33 Guideline as they "pose little threat to people

or property” (Department of Planning 2011, p. 33). The proposed development is therefore considered unlikely to pose a significant hazard or risk associated with the use of lithium batteries.

4.5.3.2 Chapter 4 Remediation of Land

Section 4.6(1) of the Hazards SEPP states that a consent authority must not consent to the carrying out of development unless it has considered whether the land is 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 search of the NSW EPA Contaminated land record was completed on 21 March 2024 for contaminated land within the Greater Hume Shire LGA. No records were identified within the LGA.

The EPA’s list of notified sites dated 11 March 2024 was reviewed for suburbs within the Greater Hume Shire LGA. The search did not identify any sites at or within the vicinity of the project site. The closest site identified, a Caltex truck stop, is located approximately 5.1 km north of the site in Holbrook.

Notwithstanding the above, the proposed activity is located on a site historically used for agricultural purposes and there is therefore the potential for contamination on site.

Through the discussions with the landowner, and a review of available historical aerial photography (refer **Section 5.1**), there is no indications of historic use of the land for a potentially contaminating purpose. Whilst no known contamination risks have been identified, appropriate safeguards and mitigation measures are recommended for implementation during the completion of site works and operation of the proposed activity to minimise any residual risks associated with the project (refer **Section 5.3**). The land is considered to be appropriate for the proposed purpose and remediation is not required.

The implementation of waste management measures (refer **Section 5.13**) together with appropriate soil and water management measures (refer **Section 5.2** and **5.6**) would assist to reduce the risk of site contamination occurring as a result of the proposed activity.

Accordingly, the development is considered to satisfy the requirements of Chapter 4 of the Hazards SEPP.

4.5.4 STATE ENVIRONMENTAL PLANNING POLICY (TRANSPORT AND INFRASTRUCTURE) 2021

Division 4 of *State Environmental Planning Policy (Transport and Infrastructure) 2021* (The Infrastructure SEPP) provides that development for the purposes of electricity generating works is permitted with consent in a prescribed non-residential zone. The RU1 zone applying to the site is a prescribed zone under Section 2.35 of Division 4.

The Infrastructure SEPP prevails over the LEP to the extent of an inconsistency pursuant to Part 2.1 Section 2.7, permitting the proposed development of electricity generating works to be undertaken with development consent on land within the RU1 Primary Production zone. The proposed activity therefore is permissible with development consent on the basis that it is development permitted with consent via an EPI, the Infrastructure SEPP.

Other provisions of the Infrastructure SEPP are discussed in **Table 3**.

Table 3 – Infrastructure SEPP

Relevant Infrastructure SEPP provisions		Assessment
Section 2.36	Development for the purpose of electricity generating works permitted with consent.	<p>The project is for the purpose of electricity generating works.</p> <p>Development for the purpose of electricity generating works may be carried out by any person with consent on land in a prescribed non-residential zone via Section 2.36(1)(b).</p> <p>The subject site is zoned RU1 land, which is a prescribed non-residential zone. As such the project is permitted with consent.</p>
Section 2.118 and Section 2.119	Development on a proposed classified road and development with a frontage to a classified road	<p>The proposed project does not include development on a proposed classified road such that Section 2.119 does not apply.</p> <p>The site of the development is situated adjacent to the Hume Highway which is a state classified road. No frontage or direct connection from the site to the road reserve of the Hume Highway is proposed and therefore Section 2.119 does not apply.</p> <p>Notwithstanding the above an approval under Section 138 of the <i>Roads Act 1993</i> is required for road works associated with the project including the connection to Bendemeer Lane.</p> <p>An assessment of potential traffic related impacts is provided in Section 5.9.</p>
Section 2.122	Traffic generating development	<p>The project is not identified as traffic generating development under Schedule 3 of the Infrastructure SEPP.</p> <p>An assessment of potential traffic related impacts is provided in Section 5.9.</p>

4.5.5 DRAFT ENVIRONMENTAL PLANNING INSTRUMENTS

A review of the NSW Government LEP planning proposal tracking website did not identify any draft planning instrument currently under assessment in the Greater Hume Shire LGA.

4.5.6 DEVELOPMENT CONTROL PLAN

The *Greater Hume Council Development Control Plan 2013* (DCP) currently applies to the proposed development site.

The existing DCP, available via the Greater Hume Council website, contains a number of development controls specific to Residential Industrial and Commercial development together with other controls specific to vegetation removal, flood liable land, heritage conservation areas, notification policy and site-specific controls related to Holbrook Air Park.

A review of the DCP, however, did not identify any development controls which need to be address in relation to the development type proposed.

Notwithstanding this, the *Greater Hume Council Local Strategic Planning Statement* (LSPS) (GHSC, 2018) provides a 20 year plan for the LGA and is intended to inform ongoing reviews on the implementation of the DCP. The LSPS provides a commitment for Greater Hume Council to undertake reviews of planning controls implemented as part of the DCP and LEP every five years. While no specific requirements for battery developments are currently provided, the LSPS identifies, in reference to 'planning priority seven - resources', that the LGA is 'a desirable location for large scale solar, energy storage, and associated renewable energy generation technologies' and that there are benefits from these projects that the LGA 'could leverage to provide necessary infrastructure, energy security, employment, education and community investments that can benefit both the economy and local residents'.

4.5.7 DEVELOPMENT CONTRIBUTIONS PLAN

The *Greater Hume Council Section 7.12 Development Contributions Plan 2023* (GHSC, 2024) applies to the project site. The contribution plan outlines the application of levies to applications for development consent and applications for complying development certificates under Part 4 of the EP&A Act, except where exempt under section 1.6 of the plan.

Subject to the proposed cost of development in reference to section 1.5 of the plan, section 1.7 of the contributions plan stipulates that council will not impose a levy in respect of development :

- *where the proposed cost of carrying out the development is \$100,000 or less; or*
- *for the purpose of disabled access; or*
- *for the sole purpose of providing affordable housing; or*
- *for the purpose of reducing a building's use of potable water (where supplied from water mains) or energy; or*
- *for the sole purpose of the adaptive reuse of an item of environmental heritage; or*
- *other than the subdivision of land, where a condition under section 7.11 of the EP&A Act has been imposed under a previous development consent relating to the subdivision of the land on which the development is proposed to be carried out.*

The proposed development comprises the installation of a DBESS consistent with a battery storage facility and does not satisfy any of the exemption conditions listed above. Contributions will therefore apply to the proposed development (subject to confirmation from GHSC). A cost estimate of the project costs has been provided with the application prepared in accordance with Section 208 of the EP&A Regulations.

5. LIKELY IMPACTS OF THE DEVELOPMENT

The impacts have been identified through an assessment of the proposed development against the provisions of section 4.15(1)(b). This section also addresses the consideration at Section 4.15(c) and Section 4.15(e) of the Act that relate to the suitability of the site for the development and the public interest.

The assessment is constrained to the proposed development as described in Section 3 of this report. Impacts resulting from previously approved land uses and development within the site are not required to be considered as part of this report.

5.1 Context and Setting

The site is located in an area zoned for the purpose of primary production and is characterised by agricultural land uses.

The proposed DBESS is permissible within the RU1 zone and has minimal ongoing impacts associated with its operation. The proposed electricity storage works would be generally low scale and are capable of being designed with minimal impact to the existing character of the locality.

A review of the site via the NSW Historical Imagery Viewer has been undertaken to assess the sites context and previous land uses. Historical imagery between 1959 and 1998 portrays that the site and surrounding locality have historically been used for agricultural production. The historical imagery of the site identifies that vegetation in the immediate vicinity of the site has remained generally consistent with what currently exists onsite. The dwelling within the host lot appears to have been developed during the 1960s with the dam to the east of the site installed by 1983. No significant contamination is anticipated to have resulted from the previous agricultural land use of the site.

5.2 Soils

The extent of the activity is mapped via the Land and Soil Capability Mapping for NSW (DPIE 2021) as having a land capability of Class 4 (moderate to severe limitations) – refer **Figure 5**.

The site of the proposed activity is not mapped as containing Biophysical Strategic Agricultural Land (BSAL) and does not include any land mapped on the draft State Significant Agricultural (SSA) Land Map.

The site is located within the Mountain Creek soil landscape area (8326mc) which is identified with the following soil limitations: moderate erosion hazard, localised acidity, localised waterlogging and poor drainage, localised sodicity, locally hard setting and foundation hazard where sodic. Minor excavation and trenching is required to prepare the site for installation of the DBESS unit, with the potential for minor changes to access treatments and internal roads/driveways.

Soil impacts are anticipated to be limited to the construction phase of the project with no significant impact anticipated to result from the DBESS operation. Potential impacts on soil resulting from the proposed development include:

- > Soil erosion and sedimentation.
- > Soil contamination via spills from vehicles and vehicles during the construction phase.
- > Potential disturbance of unknown contaminated soil.
- > Encountering rock units with the capacity to accommodate naturally occurring asbestos.

Subject to the implementation of appropriate mitigation measures, including standard erosion and sediment controls during construction, the proposed development is not expected to result in significant impacts.

5.3 Contamination

A review of contamination records on 21 March 2024 did not identify any contaminated land within or in vicinity of the project site.

The site is substantially separated from recorded contaminated sites such that no significant impacts from previous contamination are anticipated. In the unlikely event that contaminated soils are located within the site, these are unlikely to be substantially disturbed due to the extent of works proposed. No substantial soil movement or sub-surface works are expected to form part of the proposed DBESS development.

A review of historical imagery has determined that the site has historically been used for agricultural land use (refer **Section 5.1**). No significant contamination is anticipated to have resulted from the previous agricultural use of the site.

5.4 Heritage

5.4.1 ABORIGINAL HERITAGE

A basic search of the Aboriginal Heritage Information Management System (AHIMS) online database was undertaken on 26 March 2024 to determine the potential for adverse impacts to aboriginal heritage. The search did not identify any known Aboriginal sites or places of heritage significance occurring at or near the project site (refer to **Appendix B**).

A review of Native Title Vision mapping was undertaken on 26 March 2024 and did not identify any Native Title Determination Areas located at or near the project site.

Given the existing use of the project site and the absence of known sites or places of Aboriginal heritage significance heritage, the proposed activity is considered unlikely to result in significant impacts to Aboriginal heritage.

Notwithstanding the above there is potential for unknown archaeological remains to be discovered and encountered during the construction of the proposed activity. While the potential to discover items of heritage significance is considered low, a precautionary principle applies. Appropriate mitigation measures would be implemented during the construction phase of the project to minimise the potential for adverse impacts.

5.4.2 NON-INDIGENOUS HERITAGE

A review of the State Heritage Inventory (SHI) online database for the LGA and Schedule 5 of the LEP 2012 was undertaken on 26 March 2024. No items of local or state heritage significance were identified at the subject site. The closest listed heritage item, a former Masonic Hall (I105) is of local heritage significance and is located approximately 4 km north of the project site within Holbrook.

Given the separation distance the proposed development is considered unlikely to result in any adverse impact to these heritage items.

Notwithstanding the above there is potential for unknown archaeological remains to be discovered and encountered during the construction of the proposed activity. While the potential to discover items of heritage significance is considered low, a precautionary principle applies. Appropriate mitigation measures would be implemented during the construction phase of the project to minimise the potential for adverse impacts.

5.5 Other Land Resources

The construction of the proposed development may result in some temporary disturbance to the existing agricultural use of the site, including through impacts associated with traffic, air and microclimate, waste and noise and vibration during the construction phase.

As detailed in **Section 5.2**, the proposed development is to occur with land mapped as Class 4 on the Land and Soil Capability Mapping for NSW (DPIE 2021). Class 4 land is described by the Land and Soil Capability Assessment Scheme (OEH, 2012) as:

Moderate capability land: Land has moderate to high limitations for high-impact land uses. Will restrict land management options for regular high-impact land uses such as cropping, high-intensity grazing and horticulture. These limitations can only be managed by specialised management practices with a high level of knowledge, expertise, inputs, investment and technology.

The proposal occupies a very small portion of the available area and retains the vast majority of the site for agricultural purposes.

Accordingly, the proposed development is considered unlikely to result in any significant impacts to agricultural land resources. Mitigation measures implemented throughout the construction, operation and decommissioning phases of the proposed development would be designed to minimise the potential for adverse impacts to the land and soil capability. During decommissioning the site would be returned (as far as reasonably practical) to its existing state, ensuring that the land remains suitable for future agricultural activities.

A review of Minview mapping has identified that a mining exploration licence EL9556, owned by Jamieson Minerals Pty Ltd, currently applies to the entirety of the lot and surrounding area, including the proposed

development site. This exploration licence was granted on 20 April 2022 for the exploration of Group 1 minerals and has an expiry date of 20 April 2025.

The site is not located within a Mine Subsidence District and no mining or drilling approvals are known to have been granted in relation to the site. Given the proximity of the site to the Hume Highway it is considered unlikely that the area of the DBESS would be utilised for future mining activities. It is also noted that the project is of a limited duration (approximately 30 years) and thus the future use of the land for mining purposes is not precluded.

Consultation between the applicant and Jamieson Minerals Pty Ltd would occur prior to commencement of construction to identify any potential conflicts and intentions to drill or explore in the area of the proposed DBESS.

No disruption to other land resources is considered likely to result from the proposed development.

5.6 Water

5.6.1 SURFACE WATER

There are no surface water features located within the confines of the site.

Water sources in proximity to the site are limited to Sandy Creek approximately 400 m to the west and several farm dams scattered throughout the locality. The closest farm dam is situated within the host lot approximately 40 m to the east of the development site and occupies an area of approximately 2600 m².

The proposed development is considered unlikely to result in any significant impact to any surrounding watercourses. Subject to the implementation of appropriate mitigation measures the proposed project is not anticipated to result in any significant adverse impacts.

The implementation of a soil and erosion management plan and other standard construction measures would limit the potential for the proposed development to result in adverse impacts to the surrounding water environment during the construction phase. The following mitigation measures are recommended to minimise the potential for adverse impacts:

- > Minimise the extent of ground disturbance and associated loss of groundcover as far as practical to reduce the potential sediment movement.
- > Implement rehabilitation with a capacity to best utilise seasonally opportunities and needs;
- > Activities with the potential for spills (refuelling) would not be undertaken within 50 m of any watercourse and a suitable spill response and containment kit available on site whenever and wherever these type of higher risk activities are undertaken.
- > Ensure that the DBESS is appropriately designed and maintained during operation to minimise the potential for spills and soil contamination.

5.6.2 GROUNDWATER

The site is not mapped as containing groundwater vulnerability via the ePlanning spatial viewer or LEP.

A review of the WaterNSW All Groundwater Map did not identify any registered groundwater bores within the boundaries of the site or the host lot. The closest registered bore GW007572 is situated approximately 1.3 km southeast of the project site and is recorded with a drill depth of 38.1 m.

A review of the Groundwater Dependent Ecosystems Atlas (BoM, 2024) and NSW SEED Portal (2024) did not identify any aquatic or subterranean Groundwater Dependent Ecosystems (GDE) occurring within the development site. Low potential terrestrial GDEs are mapped approximately 100 m east of the site along the alignment of the Hume Highway, and approximately 650 m to the west and 520 m to the south of the development site within the host lot. A very low potential GDE is mapped within the host lot approximately 400m west of the site near Sandy Creek.

Given the relatively shallow depth of excavation for installation the DBESS and associated electrical connection infrastructure (i.e. footings and power poles), interaction with groundwater resources is not anticipated. No groundwater extraction is proposed to facilitate the construction or operation of the project.

No significant volumes of potential contaminants are expected to be stored on the subject site during the construction and operational phases of the project. The battery units utilised are self-contained, minimising the potential for leaks and preventing the leaching of metals and contaminants into the soil and groundwater. Should significant volumes of fuels or other potential contaminants required storage on-site appropriate bunding and maintenance activities would limit the potential for any significant impact. It is anticipated that management plans would be implemented, detailing appropriate procedures to prevent and manage any spills occurring during the construction phase of the project. The self-contained design of the batteries and ongoing maintenance activities during the operation of the site, would further limit the potential for any significant impacts to groundwater resources.

The proposed development is therefore considered unlikely to result in any significant impact to surrounding groundwater resources. The implementation of surface water management measures, as detailed in **Section 7.4.6.1**, including a soil and erosion management plan, would assist to further minimise the potential for adverse impacts to groundwater.

5.7 Flora and Fauna

The site is not mapped as containing terrestrial biodiversity via the LEP and does not contain any land mapped with biodiversity values via the Biodiversity Values Map. The closest land mapped as containing terrestrial biodiversity is located at the southwestern corner of the host lot approximately 980 m from the development site. The closest land mapped as containing biodiversity value is located approximately 400 m west of the development site, within the host lot along Sandy Creek.

A review of the NSW State Vegetation Type Map via the NSW SEED Portal (2024) did not identify any Plant Community Types (PCTs) mapped within the site.

A Flora and Fauna Assessment Report (FFAR) prepared by Habitat Planning (2024) forms part of this application and is provided in **Appendix C**.



The FFAR included a desktop assessment of existing flora and fauna together with the completion of a site visit to assess the condition and extent of vegetation in January 2024. The FFAR details that most of the vegetation present is consistent with non-native agricultural cropland and that the majority of the study area does not contain an assemblage of native plant species that is representative of a native Plant Community Type (PCT). The following PCTs, however, were identified within the Study Area of the FFAR.

- > PCT 277 - Blakelys Red Gum - Yellow Box grassy tall woodland of the NSW South Western Slopes Bioregion.

PCT 277 is situated approximately 20 m to the south of the development site as well as along the northern and eastern boundary to the south and north of the development site. The FFAR concludes that vegetation impacts arising from the proposed development is limited to 0.47 ha of non-native agricultural land with no direct impacts to vegetation forming part of PCT 277.

With respect to fauna, it is determined in the FFAR that the site does not represent important habitat for locally occurring species and that the development will not impact on potential foraging or breeding habitats. An assessment of significance, pursuant to Section 7.3 of the BC Act is provided as part of the FFAR and has concluded that impacts of the proposed development on threatened biota are unlikely given no areas of Critically Endangered Ecological Community's (CEEC) will be directly impacted.

Overall, the development is considered unlikely to cause a significant impact to any threatened species, populations, or ecological communities listed under the NSW BC Act or the EPBC Act.

Subject to compliance with mitigation measures, the proposed development is considered unlikely to generate any significant adverse impacts on the life cycle or habitat of any of threatened species or threatened ecological communities.

5.8 Visual Amenity

The visual landscape of the locality is characterised by a range of rural land uses, consisting of large agricultural lots with pastures and scattered rural residential dwellings.

Construction activities would involve the operation of plant and equipment in visible locations. These works, however, would be temporary and short lived, unlikely to result in any significant visual impacts.

The proposed development would represent a change in the appearance of the land compared to the current visual landscapes. Given the limited extent of works and proximity of the Hume Highway, no significant adverse impacts to visual amenity are anticipated. The topography of the site, together with the separation distance from non-associated receivers and vegetation surrounding the site further assists to obscure direct views of the site minimising the potential for ongoing visual impacts.

A landscaping plan is provided in **Appendix H** and details the inclusion of a landscaping area exterior to the fenced area of the DBESS. The provision of a 5 m wide vegetation buffer consisting of 381 individual plants surrounding the development will effectively minimise any residual visual impacts.

5.9 Access, Transport and Traffic

The proposed site is located within a rural agricultural setting with vehicular access to be provided to the site via a new driveway connected to Bendemeer Lane.

The proposed access arrangement is situated to the east of an existing intersection between Bendemeer Lane and the Hume Highway. The Hume Highway is a state classified road (Gazetted Road Number 2) and is located approximately 100 m east of the site and 200 m east of the site access arrangement.

The access arrangement has been designed to satisfy a minimum entering sight distance of 160 m with a security gate setback approximately 25 m from the edge of Bendemeer Lane, capable of accommodating the storage of a 19 metre semi-trailer clear of the traffic lane. Bendemeer Lane is relatively straight and flat allowing for good sightlines in both directions and minimising the potential for adverse traffic impacts.

The proposed development has the potential to generate some minimal traffic impacts during the construction phase associated with staff and equipment coming to and from the site consisting of a mix of light and heavy vehicles, as well as construction waste being removed from site via heavy vehicles. Impacts of additional movements would be predominantly restricted to the construction phase, including:

- > Short term delays for travelling public; and
- > Reduced road safety.

Potential impacts associated with changes to existing traffic conditions would be managed through a construction management plan, to be prepared through the detailed design phase. The construction management plan would minimise the potential for adverse traffic impacts and is expected to include the implementation of a traffic management plan during construction to control access to the site, provide appropriate traffic controls, and to ensure all construction vehicles and materials are contained within the site at all times.

Following the completion of construction works and installation of the DBESS, no significant traffic impacts are anticipated. No significant change to existing traffic conditions during operation, in comparison to what is already experienced along Bendemeer Lane, is expected to occur as a result of the proposed development. Traffic during the operational phase would be limited to occasional maintenance activities.

A Traffic Impact Assessment (TIA) prepared by Traffic Works (2024) forms part of this application and is provided in **Appendix D**. The TIA concludes that there are no traffic engineering reasons that would prevent the development from proceeding. The following conclusions are provided in respect of potential traffic impacts associated with the proposed development:

- > *The peak hour traffic generation is likely to occur during the construction phase of the development, where the peak hour traffic volumes are expected to be:*
 - 3 light vehicles
 - 1 heavy vehicle
- > *The construction phase is expected to take 4 weeks.*

- > *The subject site will generate a peak car parking demand of 3 spaces during the construction period and 2 spaces post-opening.*
- > *The development plan includes a designated parking area that will satisfy the parking demand.*
- > *Adequate sight distance can be achieved at the intersection of Bendemeer Lane and the Hume Highway; no further treatment is required.*
- > *The proposed site access driveway along Bendemeer Lane satisfies the minimum entering sight distance of 160 m, as specified in AS/NZS 2890.1.*
- > *The setback of the proposed security gate is about 25 m from the edge of Bendemeer Lane and will accommodate the storage of a 19 m semi-trailer clear of the traffic lane.*
- > *No turn lane treatments are required at the Bendemeer Lane/site access intersection for the construction phase of the development.*

The following recommendation is provided as a conclusion to the TIA:

- > **Recommendation 1:** *the subject site access driveway should be construction per Figure 7.4 in Austroads Guide to Road Design Part 4 requirements and to the council's satisfaction.*

Subject to compliance with mitigation measures provided in the TIA, the proposed development is considered unlikely to generate any significant adverse impacts to existing access and traffic conditions.

5.10 Noise and Vibration

As shown in **Figure 4**, the closest non-associated receiver is located approximately 560 m to the west of the development site.

The proposed development will generate minimal noise and vibration impacts during the construction and operational phase. Construction impacts are expected to be limited to site development works and traffic movements and will be managed through a construction management plan, to be provided following DA approval.

Following the completion of construction works, no significant noise and vibration impacts are anticipated. Noise during operation would be limited to that generated by the battery infrastructure and maintenance traffic movements. Surrounding receivers are substantially separated from the extent of the battery such that no significant noise and vibration impacts during the operation of the development are anticipated. Accordingly, the proposed development is considered unlikely to significantly affect surrounding receivers through noise and vibration impacts.

An Acoustic Report (AR) prepared by Watson Moss Growcott Acoustics (2024) forms part of this application and is provided in **Appendix G**. The findings of the assessment have concluded that operational noise and vibration emissions associated with the proposal will comply with relevant criteria at sensitive receptors in the absence of any noise mitigations strategies. The following conclusions are provided in respect of noise generated by construction activities and road traffic associated with the proposed development:

- > Noise due to construction vehicle movements is predicted to be below noise level criteria nominated within the Road Noise Policy.

- > Noise emissions due to some construction activities have been predicted to exceed NMLs at receptors. In these instances, WMG has provided suitable noise mitigation strategies to minimise the potential for adverse impacts on the relevant sensitive receptors.
- > The client has advised that vibration intense activities will not form part of the project construction or operational phase and have therefore not been considered within the assessment.

The following recommendation is provided as a conclusion to the AR:

- > Given the preliminary nature of the assessment, WMG would recommend that the finalised detailed design is reviewed by an acoustic consultant to ensure that the outcomes comply with relevant criteria.

Subject to compliance with mitigation measures provided in the AR, the proposed development is considered unlikely to generate any significant adverse noise and vibration impacts.

5.11 Air and Microclimate

The proposed development would result in minimal impacts to the air and/or microclimate during the construction of the DBESS. These impacts would be managed through a construction environmental management plan (CEMP), to be provided following DA approval. The CEMP is expected to include the following measures to minimise the potential for adverse impacts to air quality:

- > Stockpiled topsoil and other materials that exhibit significant dust lift off would be wet down routinely and as appropriate.
- > Stabilising techniques and/or environmentally acceptable dust palliatives will be utilised if the wetting down of surfaces prove to be ineffective.
- > All equipment is maintained accordance with the manufacturers specifications.

Once the DBESS is operational, no adverse impacts to the air or microclimate are anticipated.

5.12 Servicing

All in-ground and above-ground services that are to be retained on site would be identified prior to works commencing. Subject to the identification of all in-ground and above-ground services for retention prior to works commencing and carrying out works in accordance with relevant standards and safe work practices, the proposed DBESS is not anticipated to generate any significant risks to existing services.

Servicing arrangements for the proposed DBESS would be refined during detailed design and confirmed in consultation with Council and relevant regulatory authorities prior to construction. The following is noted with respect to servicing requirements:

- > Electrical services associated with installing the DBESS would be limited to the augmentation and provision of sufficient electrical connections to connect the development with the local electrical network.

- > Water use for the construction of the DBESS would be minimal and likely limited to that required for dust suppression during the construction phase. Water for construction activities is expected to be sourced and transported to the site via water trucks.
- > It is anticipated that chemical port-a-loo's, as temporary portable ablution facilities, will be provided at strategic locations around the site for use by personnel during the construction and decommissioning phases of the project. Where possible these port-a-loo's will be located on a trailer to allow for easy redistribution. Waste from port-a-loo's will be disposed of offsite at an appropriately licensed treatment facility. No ablution facilities are proposed for the operational phase of the project. During Operation visitors to the site would be limited to occasional maintenance staff.
- > In accordance with the measures to minimise bush fire risks (refer **Section 5.14.2**) a minimum 10,000 litres static water supply is to be provided to ensure adequate water is available for firefighting activities.

5.13 Waste

The proposed development will generate waste during the construction phase. The following waste types are likely to be generated by construction activities.

- > Packaging materials
- > Excess building materials
- > Cabling
- > Metal off-cuts
- > Plastic and masonry products
- > General refuse and other non-putrescible general solid wastes.

Waste generated through the construction phase would be stored temporarily on-site in skips prior to removal and delivery to an approved waste facility in accordance with a construction management plan, to be provided following DA approval. Following the completion of construction works, no significant waste impacts are anticipated.

During the operational phase of the DBESS, waste generation would be limited to maintenance activities. This has the potential to include the replacement of site infrastructure and components of the DBESS. Waste if generated during the operational phase of the development, would be removed from the site and either recycled or disposed of at an appropriate waste disposal facility.

5.14 Hazards

5.14.1 FLOODING

The proposed development is not considered likely to be significantly impacted by flooding hazards.

A Flood and Groundwater Assessment Report prepared by Water Technology (2024) forms part of this application and is provided in **Appendix I**. The assessment concludes that there are no significant overland flow paths across the site. Modelling for the 1% Annual Exceedance Probability (AEP) flood event identified

that the maximum flood depth within the site is less than 100 mm with maximum velocities less than 0.05 m/s. On this basis the site is classified as flood hazard H1 and is considered generally safe for people, vehicles and buildings.

The following recommendation is provided in the conclusion of the Flood and Groundwater assessment with respect to surface water and flooding hazards:

- > *Based on the findings of the flood modelling it is recommended to set any batteries and critical infrastructure at least 200 mm above the ground level, and if available detailed topographic data should be used as the basis for additional modelling*

Subject to the implementation of appropriate mitigation measures, including standard erosion and sediment controls during construction and compliance with the recommendations of the flood and groundwater assessment report, the proposed project is not anticipated to result in any significant adverse impacts to surrounding watercourses or flooding behaviour.

5.14.2 BUSHFIRE

A review bushfire mapping provided via the ePlanning Spatial Viewer, SEED Portal and the Greater Hume Shire Council's Bushfire Map available via the council's website did not identify any bush fire prone land (BFPL) at or within the immediate vicinity of the development site. The current LEP does not contain any mapping identifying BFPL.

The development footprint is substantially separated from land identified via the Bush Fire Prone Land Map. The closest BFPL is located approximately 3.6 km to the northeast of the development near Holbrook.

While the site is not located within BFPL, it has been identified that the development type and vegetation located within and surrounding the site would benefit from a bush fire assessment. A Bush Fire Assessment Report (BFAR) prepared by Bushfire Environmental Management Consultancy (BEMC) (2024) forms part of this application and is provided in **Appendix E**.

The BFAR has been prepared in accordance with the requirements of *Planning for Bushfire Protection 2019*. To determine the planning and construction requirements for the development the BFAR has undertaken a review of vegetation, slope and other relevant bushfire characteristics within and surrounding the development site. To ensure compliance with the requirements of PBP 2019 the BFAR includes mitigation measures to ensure bushfire risks are appropriately managed. The proposed development will be managed in accordance with recommendations and measures identified in the BFAR.

A Bush Fire Emergency Management and Operations Plan (BFEMOP) prepared by BEMC (2024) also forms part of this application and is provided in **Appendix E**. The BFEMOP details bush fire risks applicable to the development and provides a number of strategies to protect the facility and neighbouring landowners from bushfire risks together with management procedures for the ongoing operation of the site and during emergency events.

The BFAR and BFEMOP collectively provide measures to minimise the potential for adverse bushfire hazards, including measures to:

- > Prevent or mitigate fire ignition, including maintenance of the DBESS and an Asset Protection Zone to create a buffer from bush fire prone vegetation and a defensible space for fire fighting operations.
- > Ensure that landscaping of the DBESS is implemented and managed in a manner that minimises bushfire risks.
- > Ensure that the DBESS is designed and built in accordance with relevant construction standards including the implementation of non-combustible materials and requirements for support equipment.
- > Ensure that appropriate access is provided for the DBESS including a perimeter road located within the 10m internal APZ designed to accommodate bushfire fighting activities.
- > Ensure the availability of fire-suppression equipment, access and water, including the provision of a static water supply with a minimum capacity of 10,000-litres. The water supply should be constructed of suitable materials and to appropriate standards, ensuring water is accessible for firefighting activities as per the requirements of the BFAR
- > Prioritise the placement of electrical connections underground where practical and ensure compliance with appropriate vegetation management standards where overhead power supply is implemented.
- > Ensure the appropriate storage and maintenance of fuels and other flammable materials.
- > Ensure notification is provided to the local NSW RFS Fire Control Centre for any works that have the potential to ignite surrounding vegetation or that are proposed to be carried out during a bush-fire fire danger period in order to ensure weather conditions are appropriate.
- > Ensure appropriate bush fire emergency management planning and responses.

It should be noted that development for the purposes of electricity generating works (BESS) is not categorised as “special fire protection purposes” and therefore the development does not require a 100B Certificate under the *Rural Fires Act 1997* (refer to **Section 4.3**).

Subject to compliance with mitigation measures, the proposed development is considered unlikely to generate any significant adverse impacts associated with bush fire risks.

5.14.3 TECHNOLOGICAL HAZARDS

The proposed development is not anticipated to generate any technological hazards, subject to:

- > The identification of all in-ground and above-ground services for retention prior to works commencing,
- > The completion of any removal, relocation and or replacement of existing services where required within impacted areas,
- > The capping of any adjacent services, where required and
- > The carrying out of works in accordance with relevant standards and safe work practices.

The portion of the site on which the DBESS is proposed to be installed is considered unlikely to be contaminated (refer to **Section 5.3**).

Electric and magnetic fields (EMF) are produced naturally as well as by human activity. The earth has both a magnetic field, produced in the earth’s core, and an electric field, produced by electrical activity like storms

in the atmosphere. Electrical equipment of all sizes and voltages produces EMF. Both fields drop away rapidly with distance from the source, or due to shielding by insulation or earth (in the case of buried installations).

The International Commission on Non-Ionizing Radiation Protection (ICNIRP) has issued Guidelines for Limiting Exposure to Time-Varying Electric and Magnetic Fields. The relevant authority in Australia is the Australian Radiation Protection and Nuclear Safety Agency (ARPNSA) and they refer to the ICNIRP guidelines. These supersede earlier guidelines published by National Health and Medical Research Council (NHMRC).

The ICNIRP EMF guidelines provide relevant limits for the general public for 50 Hz sources as follows:

- > Electrical Field Strength (E): 5 kilo Volts per metre (kV/m)
- > Magnetic Flux Density (B): 200 micro Teslas (μ T)

EMF increases with voltage and proximity to the apparatus producing, transmitting or consuming electricity. EMF varies according to specific design and construction parameters such as conductor height, electrical load and phasing, and most importantly, whether the conductors are overhead or buried.

The DBESS is located within a secure site and will not be open to the general public. The closest dwelling is located in excess of 150 metres from the DBESS, and at that distance EMF emission levels are not anticipated to be any higher than what currently exists. No significant impacts associated with technological hazards are therefore anticipated.

5.15 Safety Security and Crime Prevention

The guidelines prepared by the NSW Department of Urban Affairs and Planning (DUAP 2001) identify four (4) Crime Prevention Through Environmental Design (CPTED) principles to be considered in a Development Application to ensure developments do not create or exacerbate crime risk. The four key principles of the guidelines include surveillance, access control, territorial reinforcement, and space management.

The proposed development has been designed with consideration of safety, security and crime prevention. Fencing of the DBESS site and periodic maintenance activities are anticipated to have a positive impact on surveillance, access control, territorial reinforcement and space management, enabling the continued use of the site for electrical storage alongside surrounding agricultural activities.

5.16 Public Domain

The proposed development will generate minimal impacts on the public domain during the construction phase predominately associated with the increased of traffic to the site (refer **Section 7.4.8**).

Any necessary approvals for works within the public domain would be secured following DA approval. The impacts of these activities would be managed through a construction management plan, also to be provided following DA approval.

Following the completion of construction works, no significant impacts to the public domain are anticipated.

5.17 Social Impact

As defined by the NSW Government Office on Social Policy, social impacts are significant events experienced by people as changes in one or more of the following are experienced:

- > peoples' way of life (how they live, work or play and interact with one another on a day-to-day basis);
- > their culture (shared beliefs, customs and values); or
- > their community (its cohesion, stability, character, services and facilities).

The proposed development will have a minimal social impact predominantly through the increase of traffic, air and microclimate impacts, waste generation and an increase in noise and vibration during the construction phase. These impacts are capable of being managed through a construction management plan, to be provided following DA approval. The impacts are also overcome by the benefits of the works, providing greater flexibility for the electrical network

5.18 Economic Impact

The proposed development would have minimal economic impact associated with impacts to surrounding businesses during the construction phase. These impacts are capable of being managed through a construction management plan, to be provided following DA approval.

The potential for adverse impacts is offset by the creation of economic benefits as a result of the development. Short term economic benefits are expected during the construction phase of the project with expenditure on local goods accommodation and materials together with the generation of employment opportunities for local contractors. The operation of the project will continue to enable ongoing employment opportunities for operation and maintenance activities together with follow on economic benefits associated with improving the reliability and flexibility of the electrical network.

5.19 Construction Impacts

Construction impacts would be short-lived and manageable. The following standard construction management measures would be implemented to ensure impacts to the locality are minimised:

- > Standard construction hours (7 am to 6 pm Monday to Friday and 8 am to 1 pm Saturday and at no times on Public holidays) would be implemented;
- > Avoiding dust generating activities during windy and dry conditions; and
- > Maintaining all equipment in good working condition such that the construction contractor and site manager ensure the prevention of the release of smoke by construction equipment, which would be in contravention of Section 124 of the *Protection of the Environment Operations Act 1997* and Clause 16 of the *Protection of the Environment Operations (Clean Air) Regulation 2010*.

5.20 Cumulative Impacts

It is not anticipated that the development would result in any cumulative impacts including:

- > individual impacts so close in time that the effects of one are not dissipated before the next (time crowded effects);
- > individual impacts so close in space that the effects overlap (space crowded effects);
- > repetitive, often minor impacts eroding environmental conditions (nibbling effects); or
- > different types of disturbances interacting to produce an effect which is greater or different than the sum of the separate effects (synergistic effects).

5.21 Suitability of the Site for Development

The site is considered suitable for the proposed development based on the following:

- > It is generally level and located within an environment historically disturbed by agricultural activities.
- > It is unlikely to be contaminated given existing records from the NSW EPA list of Notified Sites and The EPA Contaminated Land Record.
- > It is unlikely to contain Aboriginal sites or places and is not mapped as being within a heritage conservation area under the LEP 2012.
- > It is not mapped as containing or being within 40 metres of a watercourse and is considered unlikely to be significantly impacted by flooding.
- > A FFAR has determined that the proposed development is unlikely to result in any to threatened biota including any significant impacts on the life cycle or habitat of any of threatened species or threatened ecological communities.
- > The site is not mapped as bush fire prone land and the development is capable of implementing appropriate measures to minimise fire risks as identified via a BFAR and BFEMOP.
- > It is not anticipated to significantly increase the demand for essential services and is located in close proximity to existing electrical transmission infrastructure minimising the disturbance for providing appropriate electrical connections.

5.22 The Public Interest

The proposed development is in the public interest on the following grounds:

- > Is consistent with applicable EPIs including all relevant SEPPs and the LEP 2012. With respect to the latter, it is permitted with consent and enables future development for permissible uses that are consistent with the objectives of the zone.
- > Will have minimal impacts limited to traffic, public domain, air and microclimate, waste and noise and vibration impacts during the construction phase. These impacts are capable of being managed through a construction management plan, to be provided following DA approval.

- > Is within a suitable site for the proposed works, which is generally level, located within a rural environment unconstrained in terms of soils, heritage, watercourses, vegetation or hazards such as bushfires or flood events.

Therefore, the proposed development is recommended for approval subject to the council's standard conditions of consent.

6. CONCLUSION

This SEE has been prepared by Premise to assess impacts associated with the proposed development of electricity generating works (DBESS) in a site located near Hume Highway, Holbrook and considers the development in the context of Section 4.15(1) of the EP&A Act. This includes a consideration of the relevant environmental planning instruments, the likely impacts of the development, the suitability of the site and the public interest.

In terms of environmental planning instruments, the proposed development is permitted with consent on RU1 land use zone by reference to Section 2.36 of the Transport and Infrastructure SEPP and is compliant with all other relevant provisions under the LEP.

With respect to impacts, the assessment in this SEE and supporting documentation has determined that the proposed development will have minimal or acceptable impacts on the environment and public. This includes the local context, soils, heritage, other land resources (i.e. agriculture and mining), water, flora and fauna, visual amenity, access, transport and traffic, noise and vibration, air and microclimate, servicing, wastes, hazards, social and economic impacts.

The site is suitable for the development as it is unlikely to be contaminated or contain Aboriginal sites or places in the vicinity of the proposed development. It isn't mapped under the LEP as being or adjoining an item of heritage significance, within a heritage conservation area or within an area identified with wetlands. The site is mapped as having severe limitations for agricultural uses, is considered unlikely to contain significant native vegetation and doesn't have any flood or bush fire prone land identified in the immediate vicinity of the proposed development. Finally, the site is considered suitable for the proposed development by facilitating an opportunity for electrical storage in close proximity to existing electrical distribution and generating infrastructure, with accessible transportation routes supporting the transport of staff and equipment and local population centres for sourcing labour.

The proposed development will provide a benefit to the public, improving the reliability and flexibility of the electrical network by facilitating the storage of electricity. For the reasons set out above, the proposed development is in the public interest and is recommended for approval subject to council's standard conditions of consent.

APPENDIX A

PROJECT DRAWINGS



APPENDIX B

AHIMS SEARCH RESULT



APPENDIX C

FLORA AND FAUNA ASSESSMENT REPORT



APPENDIX D

TRAFFIC IMPACT ASSESSMENT



APPENDIX E

BUSH FIRE ASSESSMENT REPORT



APPENDIX F

BUSH FIRE MANAGEMENT AND OPERATIONS PLAN



APPENDIX G

ACOUSTIC REPORT



APPENDIX H

LANDSCAPING PLAN



APPENDIX I

FLOOD RISK ASSESSMENT



