

Our Ref: 222069\_MOD\_001C

28 March 2022

The General Manager  
Penrith City Council  
PO Box 60  
PENRITH NSW 2751

Dear Mr Winn

**RE: REQUEST FOR MODIFICATION OF CONSENT – S4.55(1A) EP&A ACT  
DEVELOPMENT CONSENT 20/0360  
2235-2249 CASTLEREAGH ROAD, PENRITH NSW 2750 (LOT 5 DP1017480)**

## 1. Introduction

Premise hereby make an application to the consent authority, being Penrith City Council, to modify development consent 20/0360 under s4.55(1A) of the *Environmental Planning and Assessment Act 1979* (EP&A Act). The consent applies to the land at 2235-2249 Castlereagh Road, Penrith, also described as Lot 5 DP1017480.

The proposed changes relate to the development of detailed plans for the approved battery energy storage system and changes to the construction methodology and project components.

This letter provides the mandatory information set out at s100(1) of the *Environmental Planning and Assessment Regulation 2021* (EP&A Regulation). The following are attached in support of this application:

- Appendix A – Development consent 20/0360
- Appendix B - Updated Project Drawings prepared by Premise
- Appendix C – Assured Environmental Noise Impact Assessment
- Appendix D – Iris Visual and Planning visual impact assessment memo
- Appendix E – Land Owners Consent
- Appendix F – Stormwater management memo inc. MUSIC modelling results

## 2. Background

The site the subject of this application is 2235-2249 Castlereagh Road, Penrith (Lot 5 DP1017480). The site currently hosts the Endeavour Energy Substation in Penrith. The Land Registrar General has notified the developers that a subdivision is not required to facilitate the proposed lease of the land, so Lot 5 will remain as a consistent reference for the project lifecycle. However, as the lease arrangements have not been formalised by the Registrar General,

it is proposed to retain the capacity to subdivide via the consent should it prove necessary in the future. This part of the consent will, however, not be acted upon at this time.

The site has an area of approximately 3.3 hectares and a frontage to Castlereagh Road in the north west of 148 metres, a frontage to Thornton Road to the north-east of 187 metres and a frontage to Museum Drive in the south of 177 metres. Access to the site is via Thornton Road and Museum Drive.

In this location, Castlereagh Road is a busy four-five lane road, Thornton Road is a four lane collector road and Museum Drive is a two lane local access road.

There is a significant amount of overhead electricity infrastructure location, reflective of the role this site plays in providing power services to the locality.

The subject site is reflected in **Figure 1**.

**Figure 1 – Subject Site**



The original application granting consent for this development (Council reference 20/0360) was approved by the Sydney Western City Regional Planning Panel on the 12 May 2021. The approved application provided for the approval of a containerised installation of a 20MW Battery Energy Storage System (BESS) within the Endeavour Energy Penrith substation with the stated purpose of supporting the National Electricity Grid, enabling the growth of Penrith City without requiring the development of an additional substation for servicing peak electricity demand. No other modifications have been lodged in relation to this approval.

### 3. Owner’s Consent

In accordance with s.100(1i) of the EP&A Regulation, Premise confirms that this application is made with the consent of the owner of the land, being Endeavour Energy (refer **Appendix E**).

### 4. Proposed modifications to consent

The proposed modifications seek to a number of key changes to the consent to facilitate the detailed design of the project, reflected via the provision of modified drawings, together with a minor change condition 4 and the deletion of condition 15. The minor change to condition 4 is to provide the capacity for initial enabling works to occur prior to a CC being issued. The deletion of condition 15 is justified on the basis of the noise report provided at Appendix C which demonstrates that the development is compliant with adopted criteria – refer **Section 6.5**.

The proposed modifications to the design are noted to result in:

- A reduction in the scale and size of necessary civil works to prepare the site to accommodate the approved batteries;
- A reduction in the physical scale of the development as a result of improved technological opportunities, including a reduction from 12 inverters skids to 6 and removal of 2 x harmonic filters;
- Improvements to design that lead to improved outcomes for site workers during the operations and maintenance with respect to safety and site access;
- No change to the number of car parking spaces provided;
- No change to the access arrangements to the site.

### 5. Type of modification application

Section 4.55 of the EP&A Act provides three pathways for modifying a development consent:

- 4.55(1) – modification to correct an error or misdirection;
- 4.55(1A) – modification involving minimal environmental impacts; and
- 4.55(2) – all other modifications.

The proposed modifications in this instance are considered to be suitable for assessment as a s4.55(1A) modification. The EP&A Act allows the consent authority to modify a consent under this section if the criteria set out in **Table 1** below are met. Responses to each of the criteria are provided within the table.

**Table 1 – Assessment against s4.55(1A) criteria**

Criteria	Assessment response
<i>a. it is satisfied that the proposed modification is of minimal environmental impact, and</i>	As demonstrated via the assessment in Section 6 of this report, the proposal would result in only minor or beneficial environmental impacts, and thus acceptable on the basis of clause (a).
<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</i>	It is considered that if approved, the proposed modifications will give rise to development which is substantially the same as the originally approved development for the following reasons:

Criteria	Assessment response
<p><i>consent as originally granted was modified (if at all), and</i></p>	<ul style="list-style-type: none"> <li>• The proposed modifications do not introduce any new land uses;</li> <li>• The proposed modifications do not involve any additional land;</li> <li>• The proposed changes consist primarily of a change in construction methodology occurring as a result of the development of design, the introduction of a delivery partner with recommended improvements for safe operation and maintenance, and the procurement of appropriate technology. This is further discussed in <b>Section 4</b>.</li> <li>• The proposed changes do not materially change the essence of the approved development;</li> <li>• The proposed modifications will not give rise to environmental impacts which vary significantly from the originally approved development. This is further discussed in <b>Section 6</b>.</li> </ul>
<p><b>c.</b> <i>it has notified the application in accordance with:</i></p> <p><i>i. the regulations, if the regulations so require, or</i></p> <p><i>ii. a development control plan, if the consent authority is a council that has made a development control plan that requires the notification or advertising of applications for modification of a development consent, and</i></p>	<p>As per s105(2) of the EP&amp;A Regulation, notification requirements apply where an adopted community participation plan require them. A review of the PCC CPP confirm that modification applications require notification for a period of 14 days.</p>
<p><b>d.</b> <i>it has considered any submissions made concerning the proposed modification within any period prescribed by the regulations or provided by the development control plan, as the case may be.</i></p>	<p>PCC to address this requirement via their assessment.</p>

## 6. Assessments of Impact

In accordance with s4.55(1A)(b), the following assessment of environmental impacts associated with the proposed modification focuses on the differences between the proposed development and the originally approved development. Furthermore, the analysis of impacts provided is limited to impacts arising from the additional changes proposed as part of this modification application and excludes impacts of changes addressed and approved by the original application and to which no changes are proposed.

**Table 2 – Summary of environmental impact assessment**

<b>Areas of consideration</b>	<b>Potential for impacts (Y/N)</b>	<b>Comments/assessment</b>
Context and setting	N	The proposal would not result in any significant change to the context and setting of the proposal. The proposal site remains suitable for the purpose and the proposed modification does not impact this conclusion.
Visual impacts	Y	The proposed modification has the potential to result in visual impacts. These are discussed in <b>Section 6.1</b> .
Access, transport and traffic	N	No changes to access arrangements or parking are proposed. Approved internal access roads are removed to simplify the site arrangement, however this would not lead to any impacts.
Public domain	Y	The proposed modification has the potential to result in impacts to the public domain impacts. These are discussed in <b>Section 6.7</b> .
Servicing	N	The proposed modifications do not necessitate changes to existing and approved servicing arrangements.
Heritage	Y	The proposed modification has the potential to result in impacts to areas of heritage value. These are discussed in <b>Section 6.2</b> .
Other land resources	N	The proposal would not result in any changes likely to affect land allocated for other purposes.
Water	Y	The proposed modification has the potential to result in changes to flood affected land. These are discussed in <b>Section 6.3</b> .
Soils	Y	The proposed modification has the potential to result in impacts to the local soil environment. These are discussed in <b>Section 6.4</b> .
Air and microclimate	N	The proposed modifications are not expected to generate increased impacts to air and microclimate during either construction or operational phases.
Flora and fauna	N	The nature of the proposed modification is such that increased impacts to flora and fauna values is unlikely.
Waste	N	The proposed modifications are not expected to generate increased waste impacts during either construction or operational phases.
Stormwater	Y	The proposed modification has the potential to result in changes to stormwater management arrangements. These are discussed in <b>Section 6.3</b> .
Energy	N	The proposed modifications will not materially affect the energy efficiency of the buildings.
Noise and vibration	Y	The proposed modification seeks to delete condition 15 relating to noise limits. This is discussed in <b>Section 6.5</b> .
Natural hazards	Y	The proposed modification has the potential to result in changes to flood affected land. These are discussed in <b>Section 6.3</b> .
Technological hazards	N	The proposal is not demonstrably different to the approved arrangement such that technological impacts are anticipated.

Areas of consideration	Potential for impacts (Y/N)	Comments/assessment
Safety, security and crime prevention	N	The proposed modifications do not propose changes that would result in changes to site security or lead to additional opportunities for crime.
Social impacts	Y	The proposed modification has the potential to result in impacts to social. These are discussed in <b>Section 6.7</b> .
Economic impacts	N	The proposed modifications are not expected to generate economic impacts which vary from the originally approved development.
Site design and internal design	Y	Modifications to design could generate social impacts. Refer to <b>Section 6.7</b> .
Cumulative impacts	N	The proposed development is generally consistent with the approved development, with minor changes to reflect improvements in design identified through detailed design. The scale and nature of the use remains unchanged, and therefore unlikely to result in any cumulative impacts to the surrounding locality.
The public interest	N	Due to the localised nature of impacts, the proposal is unlikely to generate significant public interest. The development of infrastructure that supports the efficient and economic delivery of power supply to the community is considered to be in the public interest.

## 6.1 Visual impacts

The original application was submitted by a visual assessment prepared by Iris Visual and Planning (Iris). Iris have been engaged to prepare an updated assessment to support this modification.

Iris conclude that:

*The site has a limited visual catchment, being mainly contained by surrounding industrial development and existing trees. There would be minor adverse visual impacts on views from The Museum of Fire and Museum Drive and negligible visual impacts from Castlereagh Road and all other areas. This is consistent with the visual impacts identified for the approved project.*

Iris provide the following recommended mitigation measures:

*The revised layout of the facility, and reduced overall height, responds to the visibility of the site in locating the smaller structures (battery cube clusters and inverter stations) along Museum Drive and setting the more visually prominent structures (the Switching control station) towards the north of the site and adjacent to the existing larger scale infrastructure associated with the existing substation.*

*Due to the small visual catchment of the site, low potential visual impact and the compatibility of the proposed battery storage facility with the surrounding industrial setting, there are no further mitigation measures necessary to address the scenic values of the locality.*

On the basis of the above, it is considered that the proposed modification results in a minor visual impacts and would not lead to any greater impacts than the approved development.

## 6.2 Heritage

A review of Schedule 5 of the Penrith LEP confirms that the site does not contain any sites of local or state heritage significance.

The nearest site of local significant is the land to the south-east, being the Museum of Fire. The Museum of Fire also contains a number of state significant heritage items, including a switchboard, mobile canteen, heritage vehicles, number plates and a range of other items. These items are all internal to the heritage building.

The proposed modified BESS arrangement remains consistent in scale and function to the adjacent electrical infrastructure, and to the original approved development, and would not result in any significant change to the character or appearance of the site, such that a detrimental impact to the heritage significance of the adjacent items would be anticipated.

The site is highly disturbed and the likelihood of encountering items of Aboriginal heritage significance is low. A search of the Aboriginal Heritage Information Management System (AHIMS) database confirms the site does not contain any known or mapped sites of Aboriginal heritage significance.

## 6.3 Water and stormwater

An updated stormwater management memo is provided at **Appendix F**.

This memo concludes:

- a. *The proposed columns displace approximately 43m<sup>3</sup> of floodplain storage, sheet C100 of Plans Rev4 show minor site earthworks to remove trap low point within the affected area having a net removal of 52m<sup>3</sup>*
- b. *The Premise Memo provides the original sites' floodplain storage as 635m<sup>3</sup>, the Plans Rev4 now provides 644m<sup>3</sup>, an increase in floodplain storage of 9m<sup>3</sup>*
- c. *As per Premise Memo, the Penrith CBD Overland Flow Study (2015) (Cardno 2015) does not include Part 5 works undertaken in 2008 and 2017 that potentially improve the conveyance of stormwater through the site. The Plans Rev4 elevate all proposed infrastructure clear of the RL25.81AHD flood level and proposes to maintain a similar finish to the existing surface*
- d. *All proposed works within Plans Rev4 are clear of the existing easement for drainage 3m wide*
- e. *Updated swept paths are provided for the proposed parking. It is noted the proposed access ramp is as per the battery detail plans and will provide forklift access only*

On the basis of the above, the proposal is considered to result in minor impacts by comparison to the approved arrangement, and is therefore acceptable.

## 6.4 Soil

The proposed arrangements simplifies the construction methodology and minimises site disturbance in the context of cut and fill. The proposal maintains the natural ground level and provides a decrease in erosion risk as a result of the adopted construction method. The proposal leads to an improved situation in this regard.

## 6.5 Noise

The approved BESS site is located adjacent to the Penrith Zone substation and is within a locality characterised by busy roads and industrial/commercial land uses. The nearest residential zoned land is located approximately 200 metres to the east.

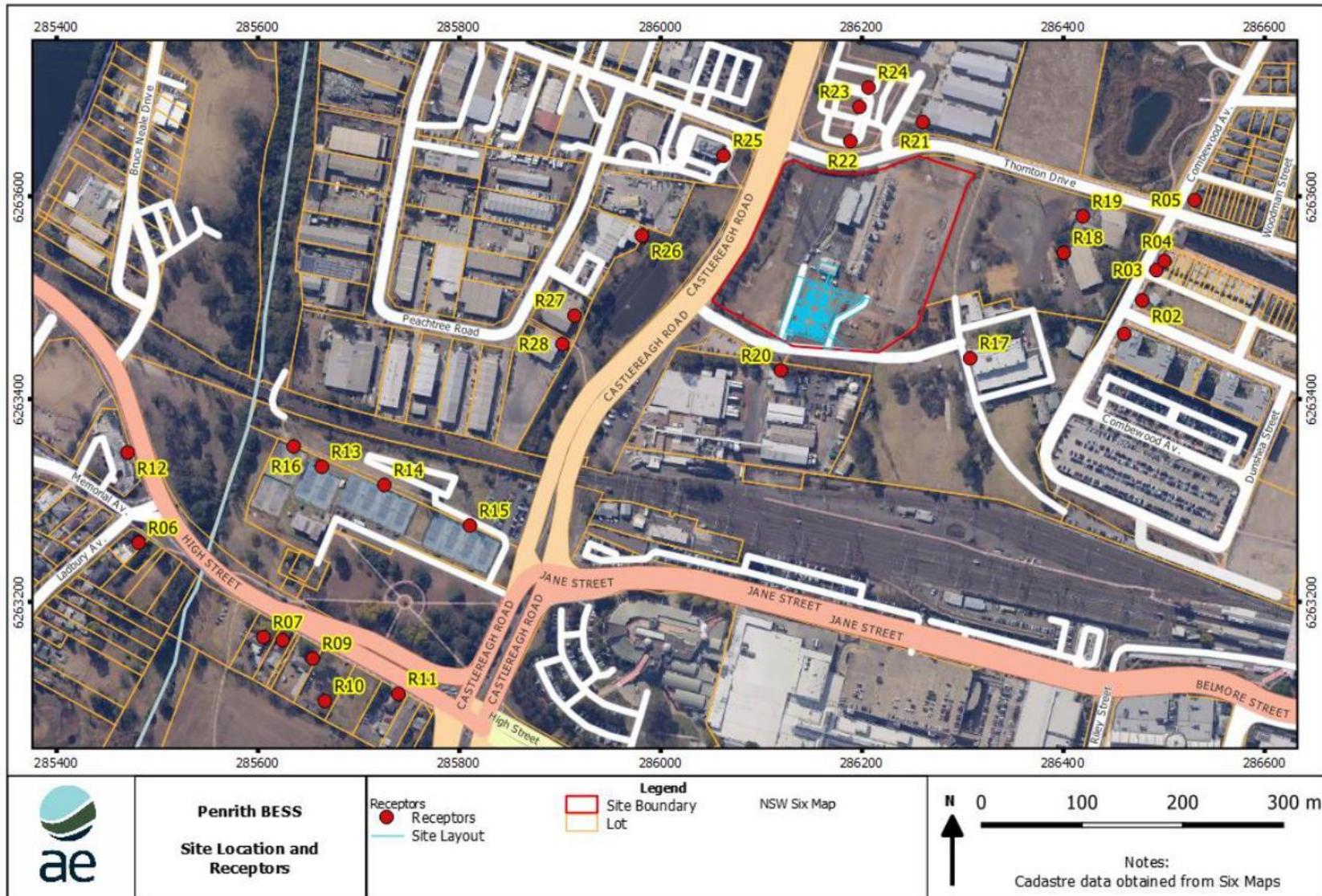
Condition 15 of consent requires that operating noise levels from plant and equipment shall not exceed 5 dB(A) above the background noise level measured at the property boundaries.

Penrith Smart Battery engaged Assured Environmental to prepare a noise impact assessment (NIA) - refer **Appendix C**. The NIA generated predicted noise levels during the operational phase of the BESS for the source locations reflected in Figure 5 of the NIA, and by reference to receptors mapped in Figure 1 of the NIA – Figure 1 reproduced as **Figure 2**.

Background noise monitoring was completed for a period of 7 days to establish a baseline.

Assured Environmental form the conclusion that the proposed modified development is capable of achieving compliance with the adopted criteria at all off-site receivers.

Figure 2 – Site location and receptors



## 6.6 Natural hazards

The Nepean River Flood Study (NRFS) was completed in 2018 to develop the initial findings of the overland flood study. The NRFS reflects that the eastern extent of the site is affected by the 100 year ARI flood level. Parts of the subject site have a mapped hazard level of H1, with a smaller area of H2 and the remainder having no hazard mapping. H1 designation means that the mapped area is 'Generally safe for vehicles, people and buildings' and H2 means *unsafe for small vehicles*. By reference to Figure 41 of the NRFS, the H1 hazard category is reflective of velocity of no more than 2 metres per second and depths of no more than 300 mm and the H2 hazard category also has a velocity of less than 2 m/s and a depth of less than 500 mm. The approved design provided a containerised design solution, with the height of batteries being above the flood planning level, however this still requires bulk earthworks within the development footprint to provide for footings etc. This approach leads to some residual risk to staff and workers accessing the batteries in a flood event.

The modified design seeks to minimise risk to workers by providing the whole design on an elevated slab, allowing capacity for flood waters to move beneath the building, and provide safe access to workers.

As noted in **Section 6.3**, an updated memo has been prepared (to consider the likely implications of the modification from a stormwater and flooding perspective). The memo notes:

- a. *The proposed columns displace approximately 43m<sup>3</sup> of floodplain storage, sheet C100 of Plans Rev4 show minor site earthworks to remove trap low point within the affected area having a net removal of 52m<sup>3</sup>*
- b. *The Premise Memo provides the original sites' floodplain storage as 635m<sup>3</sup>, the Plans Rev4 now provides 644m<sup>3</sup>, an increase in floodplain storage of 9m<sup>3</sup>*
- c. *As per Premise Memo, the Penrith CBD Overland Flow Study (2015) (Cardno 2015) does not include Part 5 works undertaken in 2008 and 2017 that potentially improve the conveyance of stormwater through the site. The Plans Rev4 elevate all proposed infrastructure clear of the RL25.81AHD flood level and proposes to maintain a similar finish to the existing surface*

Via this approach, the modified development results in a reduced impact by comparison to the approved arrangement, and provides an improved outcome with respect to mitigating floor water storage impacts, and is therefore a preferred outcome.

## 6.7 Social impacts

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 minor changes to the project arrangement are unlikely to give risk to social impacts to residents and businesses in the surrounding locality given the consistency of the design with the approved arrangements, together with the conclusions of the range of studies completed to consider the impacts of the modification. The proposal is therefore unlikely to result in detrimental impacts to peoples way of life, their culture or community.

## 7. Modifications to conditions of consent

Modifications are sought to a number of conditions of consent as follows:

- Condition 1 – modify to reflect new project drawings
- Condition 4 – modify the wording as follows:
  - A construction certificate shall be obtained prior to commencement of any **building** works.
- Condition 15 - delete

## **8. Conclusion**

The proposed modifications are minor in nature and seek to optimise site design to provide a safe and low impact development facilitating a more efficient layout. The proposed development remains well aligned with the essence of the originally approved development and the modifications sought are considered to give rise to minimal environmental impacts. Accordingly, and based on the facts and circumstances presented herein, it is recommended that the proposed modifications be approved by Council and the conditions of consent be amended accordingly.

Yours sincerely



**DAVID WALKER**

Town Planning Discipline Lead



# APPENDIX A

## DA 20/0360 – NOTICE OF CONSENT



# APPENDIX B

## MODIFIED PROJECT DRAWINGS



# APPENDIX C

## NOISE IMPACT ASSESSMENT



APPENDIX D  
VISUAL ASSESSMENT MEMO



APPENDIX E  
LAND OWNERS CONSENT



# APPENDIX F

## STORMWATER MEMO AND MODELLING RESULTS



**Premise**

[premise.com.au](https://premise.com.au)