



# Appendix B

## Waste Management Plan

### Battery Energy Storage Systems - Jindera

FOR: BESS Atlantic Pty Ltd c/o Gransolar Development Australia Pty Ltd

SLR PROJECT No: 620.041088.00008

Revision: 2.0



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| 2.0<br>Update with<br>RTS | 27 November 2025 | Clare Brennock                                                  | Clare Brennock                  | Clare Brennock |

## Basis of Report

This report has been prepared by SLR Consulting Australia (SLR) with all reasonable skill, care and diligence, and taking account of the timescale and resources allocated to it by agreement with BESS Atlantic Pty Ltd c/o GDA Pty Ltd (the Client). Information reported herein is based on the interpretation of data collected, which has been accepted in good faith as being accurate and valid.

This report is for the exclusive use of the Client. No warranties or guarantees are expressed or should be inferred by any third parties. This report may not be relied upon by other parties without written consent from SLR.

SLR disclaims any responsibility to the Client and others in respect of any matters outside the agreed scope of the work.



## Executive Summary

BESS Atlantic Pty Ltd (BESS Atlantic) c/o GDA Pty Ltd seeks to establish a Battery Energy Storage System (BESS) facility with a connection to the electricity grid via an above ground transmission line (TL) to the existing Transgrid JINDER A 330/132 kilovolt (kV) Transmission Substation (TS) (herein referred to as the 'Project').

The BESS is proposed on a portion of Lot 204 DP 753342 at 204 Ortlipp Road, Glenellen New South Wales (NSW) 2642 (the 'BESS Site'). The existing JINDER A 330/132 kV TS is located on Lot 1 DP 588720, 140 Ortlipp Road, Jindera NSW 2642 (the 'Substation Site'), approximately 500m south of the BESS Site and proposes upgrade work and the TL will traverse an area of unformed crown road. The existing Council watermain will be upgraded and extended along Lindner and Ortlipp Road. Collectively, these properties are hereafter referred to as the 'Subject Sites.'

The BESS has a capacity of 250MW / 625 MWh and comprises of 200 lithium batteries, each contained individually within a modular container. A total of 100 inverters (one per every two batteries) will be located externally to the modular containers. Batteries and inverters are fixed to hardstand footings where they are accessible by an internal road.

Other physical features of the Project include a TL towers, control room/switchgear and auxiliary transmission, acoustic wall, car parking, landscaping, security fencing/lighting, and a single storage structure.



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## Acronyms and Abbreviations

|                |                                                                                                                 |
|----------------|-----------------------------------------------------------------------------------------------------------------|
| BESS           | Battery energy storage system                                                                                   |
| C&I Guidelines | NSW EPA's Better Practice Guidelines for Waste Management and Recycling in Commercial and Industrial Facilities |
| FTE            | Full time equivalent                                                                                            |
| FOGO           | Food and garden organics                                                                                        |
| kV             | Kilovolt                                                                                                        |
| NSW EPA        | NSW Environment Protection Authority                                                                            |
| POEO Act       | <i>Protection of the Environment Operations Act 1997</i>                                                        |
| SEARs          | Secretary's environmental assessment requirements                                                               |
| TL             | Transmission line                                                                                               |
| TS             | Transmission substation                                                                                         |
| WARR Act       | <i>Waste and Resource Recovery Act 2001</i>                                                                     |



## 1.0 Introduction

### 1.1 Project Description

BESS Atlantic Pty Ltd (BESS Atlantic) c/o GDA Pty Ltd seeks to establish a Battery Energy Storage System (BESS) facility with a connection to the electricity grid via an above ground transmission line (TL) to the existing Transgrid JINDERA 330/132 kilovolt (kV) Transmission Substation (TS) (herein referred to as the 'Project').

The BESS is proposed on a portion of Lot 204 DP 753342 at 204 Ortlipp Road, Glenellen New South Wales (NSW) 2642 (the 'BESS Site'). The existing JINDERA 330/132 kV TS is located on Lot 1 DP 588720, 140 Ortlipp Road, Jindera NSW 2642 (the 'Substation Site'), approximately 500m south of the BESS Site and proposes upgrade work and the TL will traverse an area of unformed crown road. The existing Council watermain will be upgraded and extended along Lindner and Ortlipp Road. Collectively, these properties are hereafter referred to as the 'Subject Sites.'

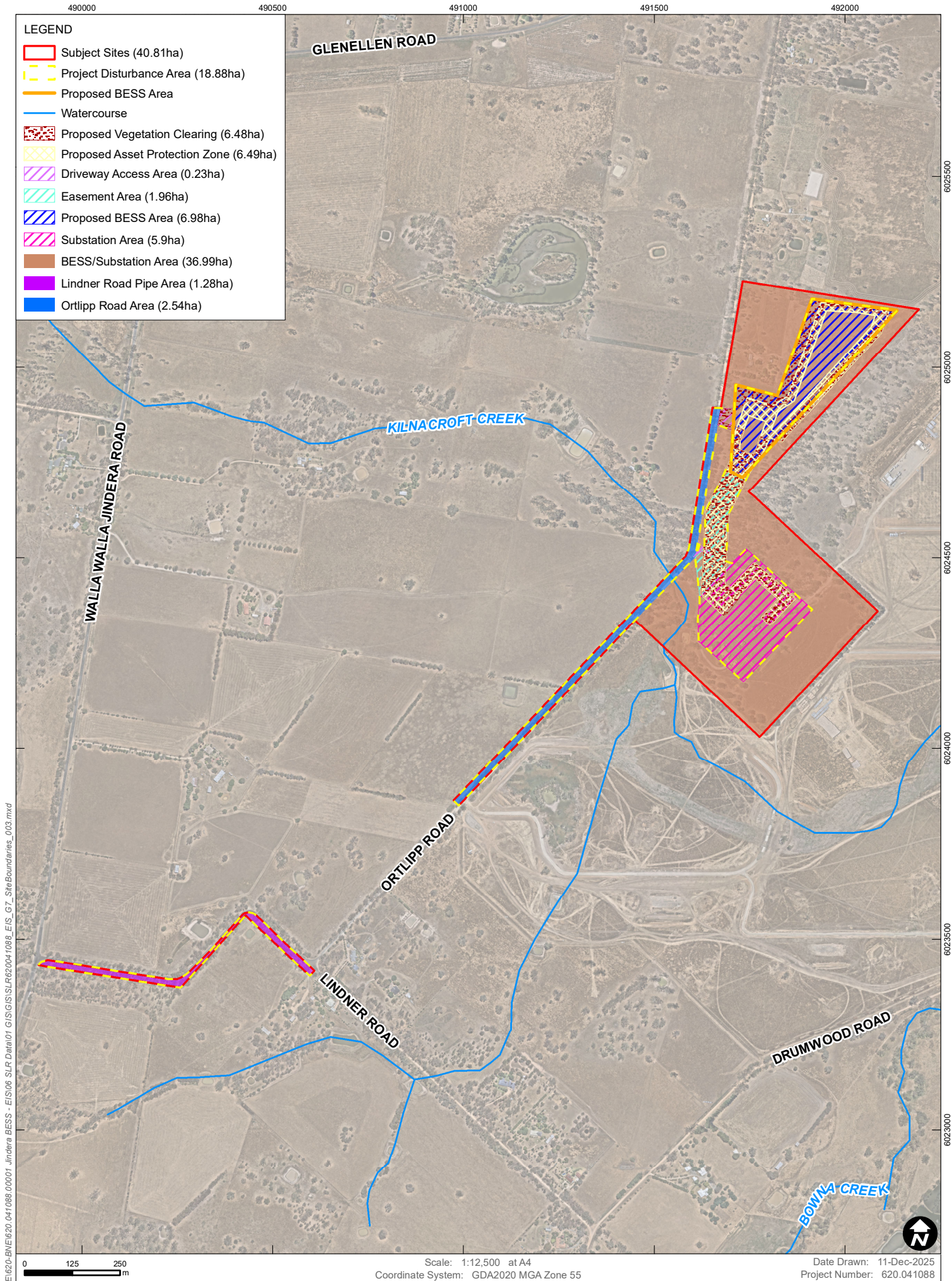
The BESS has a capacity of 250MW / 625 MWh and comprises of 200 lithium batteries, each contained individually within a modular container. A total of 100 inverters (one per every two batteries) will be located externally to the modular containers. Batteries and inverters are fixed to hardstand footings where they are accessible by an internal road.

Other physical features of the Project include a TL towers, control room/switchgear and auxiliary transmission, acoustic wall, car parking, landscaping, security fencing/lighting, and a single storage structure.

The Site overview and Lindner Road overview are shown in Figure 1 and Figure 2 below.







H:\Projects\SLR\620-BNE\620-BNE\620-041088-00001 Jindera BESS - EIS\06 SLR Data\01 GIS\GIS\SLR\620041088\_EIS\_G7\_StateBoundaries\_003.mxd

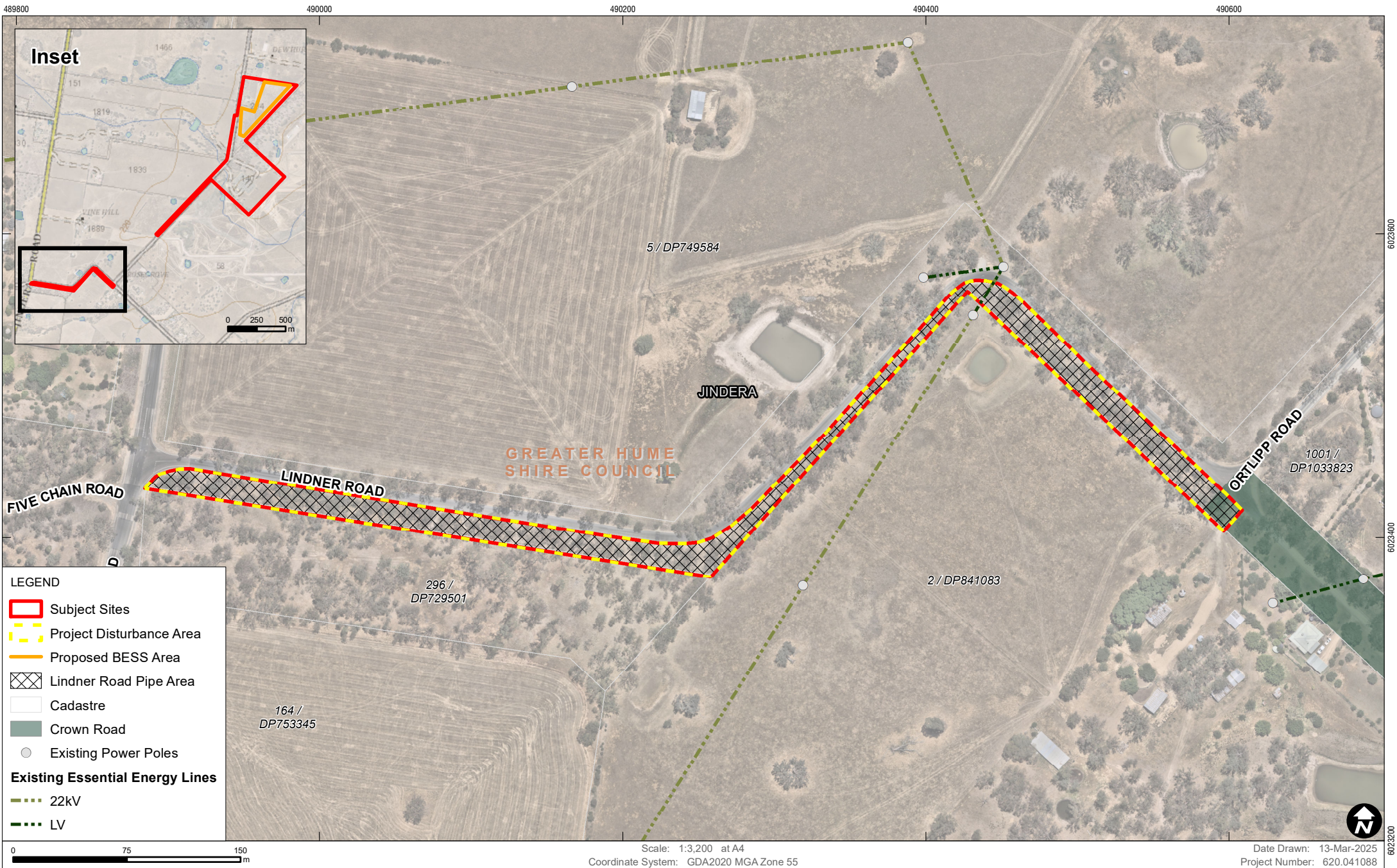


Data Source: basedata supplied by NSW SS, June 2024  
Aerial imagery supplied by Nearmap, November 2024  
Other data sources include Gransolar Group

Site Overview

FIGURE 1





Data Source: basedata supplied by NSW SS, June 2024  
Aerial imagery supplied by Nearmap, November 2024  
Other data sources include Gransolar Group, Look up & Live (LUAL)



Lindner Road Overview

FIGURE 2



## **1.2 Operation**

### **1.2.1 Operation Activities and Equipment**

The operation of the Project will involve the following general activities:

- Maintenance and management of equipment, site buildings, and landscaping.
- General administrative activities.
- Waste removal from maintenance and administration activities.

Minimal plant and equipment will be required for operation of the facility, primarily for staff access and maintenance vehicles.

### **1.2.2 Operational Hours and Personnel**

The Project is proposed to self-operate 24 hours a day seven days a week and will be monitored remotely. It is anticipated the BESS will require periodic and irregular maintenance by authorised staff, otherwise the facility is restricted to the public.

During operation, it is anticipated that approximately two full time equivalent (FTE) positions will be required remotely.

### **1.2.3 Site Access**

It is proposed that access to and from the BESS site will be provided from a new driveway crossover from Ortlipp Road. An internal access road will accommodate heavy vehicles associated with the construction of the Project.

### **1.2.4 Removal of Vegetation**

Although the majority of the Subject Sites comprise cleared pasture lands, the proposed access road and TL routes require the clearing of native vegetation. A buffer of 30 m either side of the proposed TL route and associated towers will be required.

The vegetation area to be cleared comprises an area of 2.88ha and total disturbance footprint of 10.81ha.

### **1.2.5 Ancillary Infrastructure**

The following ancillary infrastructure will be undertaken in conjunction with the BESS:

- Earthworks for minor cut and fill and preparing the pad sites.
- Stormwater management works.
- Temporary construction facilities (temporary parking, storage containers).
- Landscaping for screening around the perimeter of the BESS units.

### **1.2.6 Fencing and Lighting**

The BESS site will be secured by up to 2.1 m tall chainmesh security fencing and access gates which shall remain during operation.

A 4m acoustic wall is proposed along the western frontage of the BESS units.

Lighting for the Project will be installed for security purposes, illuminating during night-time, seven days per week.



### 1.3 Decommissioning

The Project is proposed to be decommissioned, and the infrastructure removed following the end of life of the BESS, with works required to return the Subject Sites as close as possible to its original state and use. All decommissioning and restoration activities shall be in accordance with permits, approvals and regulatory requirements at the time.

The operational life of the Project will be determined by the evolving nature of the technology, however, is anticipated that the lifespan will be approximately 20 to 25 years.

The standard construction hours, heavy vehicles, plant, and equipment required for the construction of the Project shall also apply to the decommissioning phase.

### 1.4 Assessment Methodology

The purpose of this report is to provide supporting information and coverage of the waste management and resource recovery requirements of the EIS being prepared for the SSD application for the Project as outlined in the secretary's environmental assessment requirements (SEARs). In order to estimate the waste types and quantities and to identify potential impacts and mitigation measures, a desktop assessment was conducted. The method involved the following:

- Review of the relevant legislation and regulatory framework related to waste management.
- Identification of potential waste generating activities during site preparation, construction, operational and decommissioning phases.
- Estimation of potential waste generating activities during site preparation, construction, operational and decommissioning phases.
- Identification of likely classification of waste types in accordance with relevant legislation and guidelines.
- Description and management methods of the key identified waste streams.
- Identification of lawful disposal or recycling facilities.

The waste types and quantities estimated in this waste assessment are indicative and have been identified for the purpose of providing potential waste management options. The final quantities of waste will be determined in the later stages of the Project.



## 2.0 Requirements

### 2.1 SEARs

The SEARs relevant to this study and where they are addressed in this report are listed in Table 1 below.

**Table 1 SEARs Requirements – SSD-68815961**

| Relevant SEARs Requirements                                                                                                                                                                                                                               | Report section where addressed                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>Waste</b> – including a waste management assessment or plan (as appropriate) to</p> <ul style="list-style-type: none"> <li>Identify, quantify and classify the likely waste streams to be generated throughout all stages of the project</li> </ul> | <p>For construction waste see:</p> <ul style="list-style-type: none"> <li>Section 3.4</li> <li>Section 3.5</li> <li>Table 2 Potential Waste Types, Classifications, and Management Methods – Site preparation and construction</li> </ul> <p>For operational waste see:</p> <ul style="list-style-type: none"> <li>Section 4.1</li> <li>Table 7 Anticipated waste streams, classification and management</li> </ul>                                                                                 |
| <ul style="list-style-type: none"> <li>Describe the measures to be implemented to reduce waste generation, manage, reuse, recycle and safely dispose of this waste</li> </ul>                                                                             | <p>For construction waste see:</p> <ul style="list-style-type: none"> <li>Section 3.7</li> <li>Section 3.8</li> <li>Section 3.9</li> <li>Section 3.10</li> <li>Table 2 Potential Waste Types, Classifications, and Management Methods – Site preparation and construction</li> </ul> <p>For operational waste see:</p> <ul style="list-style-type: none"> <li>Section 4.2 Waste Avoidance</li> <li>Section 4.3</li> <li>Table 7 Anticipated waste streams, classification and management</li> </ul> |
| <ul style="list-style-type: none"> <li>An assessment of sewerage (if required).</li> </ul>                                                                                                                                                                | <p>See:</p> <ul style="list-style-type: none"> <li>Section 3.5.2</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                         |

## 2.2 Legislation, Policy and Guidelines

This section contains an outline of the relevant legislation, policies and guidelines that have influenced how waste is management during each phase of the Project.

### 2.2.1 Protection of the Environment Operations Act 1997 and Protection of the Environment Operations Amendment Act 2011

The *Protection of the Environment Operations Act 1997* (POEO Act) and *Protection of the Environment Operations Amendment Act 2011* are administered by the NSW Environment Protection Authority (NSW EPA) to enable the NSW Government to establish instruments for setting environmental standards, goals, protocols and guidelines. They outline the relevant regulatory requirements for lawful disposal of waste generated during the construction, and operational phases of a development, as well as the system for licencing waste transport and disposal.



The POEO Act:

- Defines 'waste' for regulatory purposes.
- Establishes management and licensing requirements for waste.
- Defines offences relating to waste and sets penalties.
- Establishes the ability to set various waste management requirements via the *Protection of the Environment Operations (Waste) Regulation 2014* (the Waste Regulation) and *The Waste Avoidance and Resource Recovery Act 2007* (WARR Act).

Schedule 5 of the POEO Act defines waste as:

- Any substance (whether solid, liquid or gaseous) that is discharged, emitted or deposited in the environment in such volume, constituency or manner as to cause and alteration in the environment.*
- Any discarded, rejected, unwanted, surplus of abandoned substance.*
- Any otherwise, discarded, rejected unwanted, surplus or abandoned substance intended for sale or recycling, processing, recovery or purification by a separate operation from that which produce the substance.*
- Any processed, recycled reused or recovered substance produces wholly or partly form waste that is applied to land, or used as fuel, but only int the circumstances prescribed by the regulations.*
- Any substance prescribed by the regulations to be waste.*

### **2.2.2 NSW Waste and Sustainable Materials Strategy 2041: Stage 1 – 2021-2027**

Replacing the NSW Waste Avoidance and Resource Recovery Strategy (2014-2021), the NSW Waste and Sustainable Materials Strategy 2041 focuses on the transition of NSW to a circular economy. The strategy focuses on minimising what is thrown away, and to use and reuse resources more efficiently, making them as productive as possible. The strategy identifies the need to identify infrastructure needs, the mandating of separation of some organic waste streams, and incentivising biogas generation from waste materials.

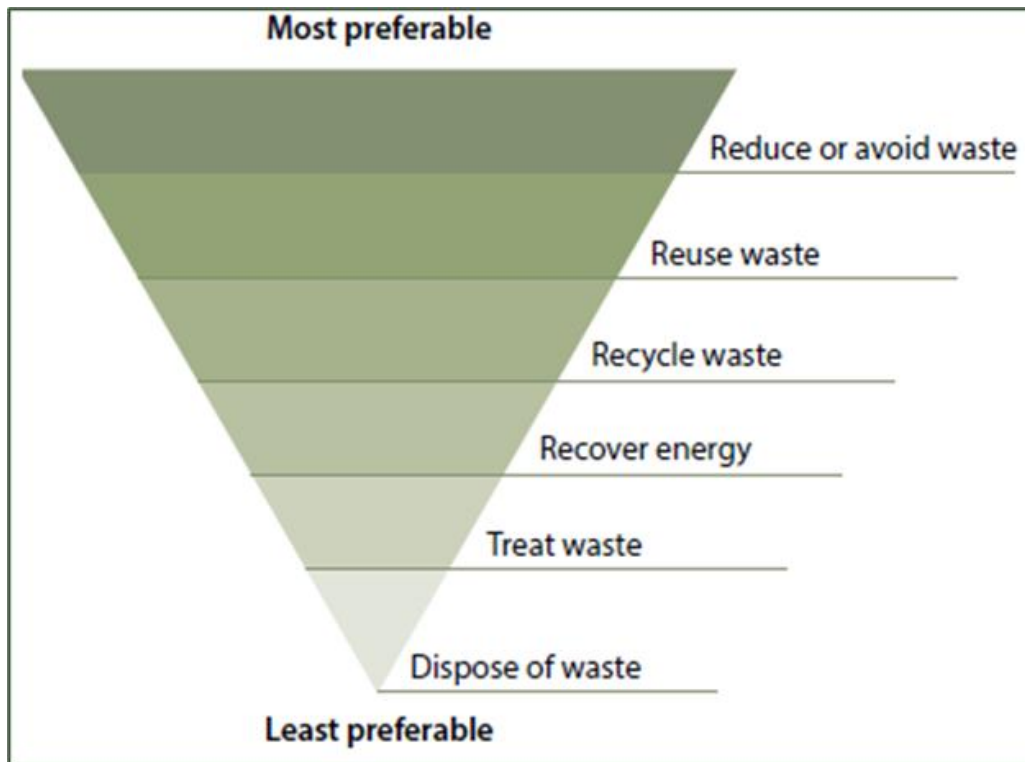
The Strategy also promotes the waste management hierarchy (Figure 3) which comprises the following principles, listed from most to least preferable:

- Waste avoidance, prevention or reduction of waste generation. Achievable through better design and purchasing choices.
- Waste reuse, reuse without substantially changing the form of the waste.
- Waste recycling, treatment of waste that is no longer usable in its current form to produce new products.
- Energy recovery, processing of residual waste materials to recover energy.
- Waste treatment, reduce potential environmental, health and safety risks.
- Waste disposal, in a manner that causes the least harm to the natural environment.

The waste management measures outlined in this WMP have been identified taking into consideration the above principles.







**Figure 3 Waste Management Hierarchy**

### **2.2.3 Waste and Resource Recovery Act 2001**

The WARR Act aims to promote waste avoidance and resource recovery and repeals the *Waste Minimisation and Management Act 1995*. Specific objectives of the WARR Act include:

- Encouraging efficient use of resources.
- Minimising the consumption of natural resources and the final disposal of waste by encouraging the avoidance of waste and the reuse and recycling of waste.
- Ensuring industry and the community share responsibility in reducing and dealing with waste.
- Efficiently funding of waste and resource management planning, programs and service delivery.

### **2.2.4 NSW EPA's Waste Classification Guidelines 2014**

The NSW EPA Waste Classification Guidelines assist waste generators to effectively manage, treat and dispose of waste to ensure the environmental and human health risks associated with waste are managed appropriately and in accordance with the POEO Act and its associated regulations. Waste generated throughout the construction, and operational stages can be classified according to these guidelines.



## 3.0 Site Preparation and Construction Waste Management

### 3.1 Introduction

It is anticipated that the construction and commissioning phase will last approximately 10 months. Over that time, the main construction activities will include:

- Transport of construction personnel, associated heavy and light vehicles, and materials to and from the Subject Sites each day depending on the construction schedule.
- Site establishment works including vegetation clearing (6.48ha total) within the BESS boundary and TL footprint, minor earthworks, and a temporary construction compound.
- Road works to formalise internal site access road to accommodate heavy vehicles and a new driveway crossing and temporary upgrades to Ortlipp Road.
- Construction of hardstand, paved internal roads, control room and switch gear, auxiliary transformer, battery enclosures, and inverter and transformer stations.
- Construction of overhead 330 kV TL to facilitate connection to the existing JINDER A 330/132 kV TS and associated high voltage steel poles.
- Acoustic attenuation measures.
- Construction of ancillary works including:
  - Construction parking area.
  - Water tank.
  - Containers used as sheds as storage structures for ongoing use.
  - Stormwater management infrastructure.
  - Security lighting and fencing.
- Vegetative screening along the acoustic wall.
- Providing reticulated water to the site:
  - Extension of the council water main along a portion of Ortlipp Road.
  - Upgrade of existing water main along Lindner Road.
- Removal of temporary construction facilities, and rehabilitation of disturbed areas following completion of construction of the Project.

### 3.2 Construction Materials

The following materials will be transported to the Subject Sites to facilitate construction of the Project and ancillary facilities and infrastructure:

- |                                                            |                                                                       |
|------------------------------------------------------------|-----------------------------------------------------------------------|
| • 200 lithium-ion batteries in modular containers.         | required for the expansion of the JINDER A 330/132 kV TS footprint.   |
| • 100 Inverter and transformer stations.                   | • Additional connection infrastructure at the JINDER A 330/132 kV TS. |
| • Hardstand works materials and equipment, including those | • Bulk earthworks materials and equipment.                            |



- Piling.
- Cabling.
- Building structures, including temporary structures for construction crew and management.
- Internal roads and parking areas.
- Control room and 33 kV switchgear.
- Auxiliary transformer.
- Fence, gates and lighting.
- Fire safety system.
- High voltage steel poles.
- High voltage cabling and.
- 330/33 kV main transformer.

Site preparation and construction activities have the potential to generate waste through excess construction materials, waste generation from construction offices and excess spoil from excavation and foundation works. The construction activities for the Project would be undertaken according to a construction environmental management plan developed by the construction contractor that addresses waste management and reduction practices.

### 3.3 Construction Personnel

Construction of the Project is anticipated to take approximately 10 months. During construction, it is anticipated that approximately 80 FTE jobs will be required during the peak of site activity. Employment numbers will fluctuate starting with about 20 workers on-site for one to two months. Worker numbers then progressively increase to 80 staff at about the 65% completion stage for several months before tailing off toward completion and the start of commissioning. About 5-10 staff are required for commissioning.

The workforce will be sourced from the local area where possible, and the wider region where worker deficits arise. It is expected the peak period would extend for approximately four months. Outside of this period, approximately 10-20 workers will be required at any one time.

### 3.4 Waste Streams

During site preparation and construction phases, the following broad waste streams are expected to be generated:

- Excavation waste - spoil
- Green waste - vegetation from site preparation and tree removal
- Mixed construction waste - metal and timber offcuts
- Plant maintenance waste - oils and tyres
- Packaging waste - plastic wrap, straps, pallets, drums and cardboard
- Work compound waste - lunch waste and drink containers
- Faulty, damaged or broken battery units
- Wastewater from minor dewatering excavations (if required), plant maintenance and construction activities.

An initial desktop waste classification has been undertaken in accordance with the Waste Classification Guidelines (NSW EPA, 2014). The management strategies for the Project have been prepared to comply with the relevant legislative requirements and guidelines outlined in Section 2.0 to achieve environmental objectives.





Details of the likely key waste types from excavation, and construction activities, along with their waste classifications and proposed management methods, is provided in Table 2 below.



**Table 2 Potential Waste Types, Classifications, and Management Methods – Site preparation and construction**

| Waste Types and Activities                                                           | NSW EPA Waste Pre-Classification      | Avoidance and Reuse                                                                                                                                       | Storage and Collection                                                                                                                | Recycling/Disposal                                                                                                                                                                                  |
|--------------------------------------------------------------------------------------|---------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Soil from earthworks spoil to prepare the access road, construction laydown areas    | General solid (non-putrescible) waste | On-site reuse of topsoil for landscaping of the site.                                                                                                     | Separate materials requiring off-site recovery                                                                                        | Will be sent off-site for disposal at a facility lawfully able to accept it or landscaping off-site                                                                                                 |
| Green waste - grasses, trees, roots, and associated topsoil                          | General solid (non-putrescible) waste | On-site reuse of topsoil and mulch for landscaping of the site<br>Offering felled timber to local community                                               | Stored in bins or other contained area                                                                                                | Waste that can't be recycled on-site will be sent off-site for disposal to recycling facility or landfill lawfully able to accept it.                                                               |
| Construction waste - metal off-cuts, mainly from operations and maintenance building | General solid (non-putrescible) waste | Recycle scrap metal                                                                                                                                       | Separate, stockpile, reuse on-site<br>Separate materials requiring off-site recovery                                                  | Dispose waste that cannot be reused on-site at a facility lawfully able to accept it.<br>Recyclable materials will be reused on-site or sent to a facility lawfully able to accept it for recycling |
| Construction waste - timber off-cuts, packaging, glass, plastic, and rubber          | General solid (non-putrescible) waste | Pallets to be returned to the supplier, if possible.<br>Appropriate procurement processes to avoid ordering and delivery of excess materials and supplies | Off-site timber recycling, chip for landscaping, sell for firewood<br>Remainder to landscape supplies.<br>Reused for similar projects | Dispose waste that cannot be reused on-site at a facility lawfully able to accept it.<br>Recyclable materials will be reused on-site or sent to a facility lawfully able to accept it for recycling |



| Waste Types and Activities                                                                                                                                                                                                              | NSW EPA Waste Pre-Classification      | Avoidance and Reuse                                                                                                                                 | Storage and Collection                                                                                                                                            | Recycling/Disposal                                                                                                                                          |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Empty oil and other drums or containers, such as fuel, chemicals, paints, spill clean ups. Containers were previously used to store Dangerous Goods (Class 1, 3, 4, 5 or 8) and residues have not been removed by washing or vacuuming. | Hazardous waste                       | Conduct refuels and maintenance activities away from receptors, signage and labelling, on-site spill kits, adhere to the site Spill Management Plan | Transport to comply with the transport of Dangerous Goods Code applies in preparation for off-site recycling or disposal at a facility lawfully able to accept it | Transport to comply with the Australian Dangerous Goods Code, spill kits consistent with Australian Standards.                                              |
| Empty oil and other drums or containers, such as fuel, chemicals, paints, spill clean ups. Containers have been cleaned by washing or vacuuming.                                                                                        | General solid waste (non-putrescible) |                                                                                                                                                     |                                                                                                                                                                   |                                                                                                                                                             |
| Air filters and rags, oil filters, drained                                                                                                                                                                                              | General solid waste (non-putrescible) |                                                                                                                                                     | Off-site disposal or recycling                                                                                                                                    |                                                                                                                                                             |
| Paper, cardboard and comingled recycling including containers from office activities, food and beverage                                                                                                                                 | General solid waste (non-putrescible) | Procurement of products delivered in reusable or returnable containers.                                                                             | Separation and storage of recyclables in designated bins in waste storage area                                                                                    | Collected by a contractor and delivered to a recycling facility lawfully able to accept it. Redeemed through 'Return and Earn' NSW container deposit scheme |
| Food waste - such as food scraps generated by staff.                                                                                                                                                                                    | General solid (putrescible) waste     |                                                                                                                                                     | Food waste bins to always have closed lids. Dispose to landfill with general garbage.                                                                             | Food waste collected and taken off site for disposal.                                                                                                       |
| Sewage and greywater from washdown activities and staff amenities                                                                                                                                                                       | Liquid waste                          | Wastewater treatment plant                                                                                                                          | Portable amenities or on-site amenities                                                                                                                           | Transported off-site or direct to treatment plant                                                                                                           |



## 3.5 Waste Quantities

### 3.5.1 Site Preparation and Construction

Large quantities of waste are not expected to be generated during the site preparation and construction phases. Construction will require heavy vehicles, plant, and equipment for the transportation of components and installation at the Project.

Most waste generated through construction activities is expected to come from site preparation, earthworks, connection of services and temporary office installation (refer to Table 2 above). Small quantities of waste are also expected to be generated from building materials such as concrete, timber, aggregate, metals and packaging.

While different waste types are identified in Table 2, actual quantities of waste are estimated to be minimal. Waste will be placed in separate bins or skips and transported to a facility lawfully able to accept it for recovery.

### 3.5.2 Wastewater Quantities

The on-site effluent or sewage generation during construction was estimated based on Water Services Association of Australia (WSAA) code. The sewage generation rate was calculated using average daily sanitary flow<sup>1</sup> into a sewer from domestic, commercial and industrial sources.

An estimated daily wastewater generation rate of 30 litres per person has been adopted, accounting for up to 10 litres per person per day for drinking and general consumption, plus an additional 20 litres for cooking, hand washing, and other sanitary uses, all of which contribute to the wastewater output.

Table 3 below shows the estimated total daily wastewater generation rate for a peak construction workforce of 80 people.

**Table 3 Estimated wastewater generation**

| Daily generation rate per person | Number of people | Daily generation rate for 80 people |
|----------------------------------|------------------|-------------------------------------|
| 30 L                             | 80               | 2,400 L                             |

The table shows that daily waste water generation could be about 2.4 kL.

It is expected that wastewater would be temporarily stored in tanks on-site, from where it would be transported by a licensed contractor and disposed to a nearby wastewater treatment facility.

Moreover, it is anticipated that the average workforce will be around 40 people per day per month, which would reduce the daily wastewater generation and decrease the frequency at which the on-site storage tanks would need to be emptied by a licensed contractor.

1

[https://www.wsaa.asn.au/sites/default/files/publication/download/Appendix%20C\\_Flow%20Estimation%20for%20Undeveloped%20Areas\\_MRWA.pdf#:~:text=PDWF%20%3D%20d%20%2A%20ADWF%20where%3A%20ADWF%20is,deemed%20to%20be%20180%20L%2Fd%20or%200.0021%20L%2Fs%20FEP](https://www.wsaa.asn.au/sites/default/files/publication/download/Appendix%20C_Flow%20Estimation%20for%20Undeveloped%20Areas_MRWA.pdf#:~:text=PDWF%20%3D%20d%20%2A%20ADWF%20where%3A%20ADWF%20is,deemed%20to%20be%20180%20L%2Fd%20or%200.0021%20L%2Fs%20FEP)





### 3.5.3 Solid Waste Generated by Staff

It is anticipated that the following types of waste would be generated by staff during the site preparation and construction stage:

- General waste including food
- Paper and cardboard and
- Recyclable containers.

It is anticipated that there will be a maximum of 80 staff on-site per day during construction. SLR has estimated that each person will generate an average of 0.5 L of waste and 0.5 L of recyclable containers per shift.

The estimated weekly waste generation by work compound staff is shown in Table 4 below.

**Table 4 Estimates of staff waste quantities**

| Area          | Measure   | Number of days operation per week | Quantities per week (L) |                       |
|---------------|-----------|-----------------------------------|-------------------------|-----------------------|
|               |           |                                   | Garbage                 | Recyclable Containers |
| Work compound | 80 people | 5                                 | 200                     | 200                   |

The waste is anticipated to be stored in 240 L mobile bins. Worker waste is anticipated to be collected by a contractor and disposed of at a site lawfully able to accept it. Other possible recycling and disposal facilities are detailed in Section 5.2.

## 3.6 Potential Impacts

If not appropriately managed, potential environmental impacts from waste generated during the site preparation and construction phases could include pollution of land and waterways, including surface and ground water pollution from potential spills, solid waste, runoff and litter.

The mitigation measure to address these possible impacts are summarised in Section 3.15.

## 3.7 Management of Waste Streams – Site Preparation Works, and Construction

Waste generated during the site preparation and construction phases would be managed in line with the legislation and policies outlined in Section 2.2, particularly in accordance with the waste hierarchy through effective design and planning.

## 3.8 Waste Avoidance

In accordance with better practice waste management, the Building Contractor, Building Designer and/or those in equivalent roles should:

- Develop a purchasing policy based on the approximate quantities of materials to be used so that the correct quantities are purchased.
- Arrange for delivery of materials 'as needed' to avoid material degradation through weathering and moisture damage.
- Communicate strategies to handle and store waste to minimise environmental, health and amenity impacts.



- Select materials with a low environmental impact over the lifecycle of the building.
- Choose timber from certified plantations and avoid unsustainable timber imports including western red cedar, oregon, meranti, luan or merbau.
- Use leased equipment rather than purchase and disposal, where possible.
- Minimise site disturbance and unnecessary excavation.
- Incorporate existing trees and shrubs into the landscape plan.
- Design the Project to require standard material sizes or make arrangements with manufacturers for the supply of non-standard material sizes.
- Design works for de-construction.
- Reduce packaging waste by:
  - Returning packaging to suppliers where practicable to reduce waste further along the supply chain
  - Purchasing in bulk
  - Requesting cardboard or metal drums rather than plastics
  - Requesting metal straps rather than shrink wrap, and
  - Using returnable packaging such as pallets and reels.
  - Use prefabricated materials.
- Select materials for Project works with low embodied energy properties or materials that have been salvaged or recycled for the construction of the Project including concrete that utilises slag and fly ash content, structural and reinforced steel that uses recycled steel content or bulk insulation products that contain recycled content, such as recycled glass in glass-wool.
- Preferentially use paints, floor coverings and adhesives with low VOC (volatile organic compound) content.
- Reduce the use of polyvinyl chloride products.
- Implement measures to prevent the occurrence of windblown litter, dust and stormwater pollution.
- Ensure subcontractors are informed of and implement site waste minimisation and management procedures.

### 3.9 Reuse, Recycling and Disposal

Construction materials and construction waste will be effectively managed, including implementation of options for reuse and recycling where applicable and practicable. Only waste that cannot be cost-effectively reused or recycled will be sent to landfill or appropriate disposal facilities.

In accordance with best practice waste management, the following specific procedures should be implemented:

- Maximise reuse and recycling of building and construction materials and minimise disposal of materials to landfill.
- Ensure waste is minimised by the reuse and recycling of excavated and building materials on-site or in the design and construction of the building or other buildings.



- Identify and nominate opportunities to reuse materials from the excavation phase for the proposed new use as well as potential waste materials, such as recyclable packaging, off-cuts and other excess materials as part of the construction process.
- Reuse timber formwork or waste corrugated iron as formwork and examine the useability of other materials for productive purposes.
- Maximise reuse and recycling of materials from construction which can be assisted by deconstruction, where the various building components are carefully dismantled and sorted.
- Separation of offcuts to facilitate reuse, resale or efficient recycling.
- Temporary stockpiling of surplus materials for use in later stages.
- Store waste on-site appropriately to prevent cross-contamination and guarantee the highest possible re-use value.
- Consider the potential of any new materials to be re-used and recycled at the end of the Project's life.
- Retain used crates for storage purposes unless damaged.
- Recycle cardboard, glass and metal waste.
- Recycle or dispose of solid waste timber, brick, concrete, asphalt and rock, where such waste cannot be re-used on-site, to an appropriately licenced construction waste recycling facility or an appropriately licenced landfill.
- Deliver batteries and florescent lights to off-site recycling facility.
- Return excess materials and packaging to the supplier or manufacturer.
- Dispose of all garbage during operations appropriately.

### **3.10 Waste Storage and Servicing**

#### **3.10.1 Waste Segregation and Storage**

Under better practice waste management protocols, waste materials from site preparation and construction activities should be separated at the source and stored separately on-site.

It is anticipated that the construction plan will allow for the siting of bins and areas on-site for sorting, recycling, and disposal of waste. There should be enough space for separate skip bins and appropriately managed stockpiles for the following waste types:

- Landfill waste - non-recyclable commercial and industrial waste
- Recyclable waste
  - Bricks and concrete
  - Steel and other metals in a suitable condition for recycling
  - Timber
  - Glass
  - Hardstand rubble
  - Paper and cardboard
  - Recyclable containers



- Reusable materials
- Uncontaminated excavation spoil and
- Regulated waste, if present.

If there is insufficient space on-site for full separations of waste types, the Site Manager, or equivalent role, should consult with the waste and recycling collection contractor to confirm which waste types may be stored together before removal from the Project.

### **3.10.2 Waste Storage Areas**

During construction waste storage areas will be accessible and will be large enough for all storage and servicing requirements. The storage areas will also be flexible in order to cater for change of use through the construction phase. Where space is restricted, dedicated stockpile areas are to be delineated on the Project site, with regular transfers to dedicated skip bins for sorting.

All waste placed in skips or bins for disposal or recycling will be adequately contained to ensure that the contents do not fall, blow, wash or otherwise escape from the Project. Waste containers and storage areas will be kept clean and in a good state of repair.

In accordance with better practice waste management, areas designated for waste storage should:

- Allow for appropriate vehicular access to enable the removal of waste materials for reuse, recycling and/or disposal.
- Ensure construction materials are stored separately from waste and recycling materials to enable easy access for waste collectors.
- Allow unimpeded access by site personnel and waste contractors
- Consider environmental factors which could potentially cause an impact to the waste storage, such as slope, drainage and the location of watercourses and native vegetation
- Not present hazards to human health or the environment.

Stockpiles of topsoil, sand, aggregate, soil or other similar material should not be located on any drainage line or easement, natural watercourse, footpath or roadway and shall be protected with adequate sediment controls.

#### **3.10.2.1 Waste Storage Area Location**

The designated construction waste storage area is indicated to be located adjacent to the proposed laydown area. No processing, screening, crushing or mechanical separation of waste is expected to take place on-site. Some preliminary separation of materials and removal of contaminated material will be undertaken to improve the quality of recoverable materials and prepare for transport.

#### **3.10.2.2 Waste Servicing and Transport**

The frequency of waste removal will, in most cases, be dictated by the quantities of material being deposited into skip bins or accumulating in stockpiles.

All materials will be transported off-site for recovery or disposal by licenced contractors using appropriate vehicles and equipment. All loads leaving the Project will be covered with a suitable tarpaulin, or other method, to ensure the contents do not spill in transit.





### 3.10.3 Waste Servicing and Record Keeping

Records will be maintained for all waste quantities that are recycled, reused or removed by a contractor. Documentation, such as receipts or weighbridge dockets for the transport and disposal of waste and recycling materials from the Project will be retained. Waste disposal dockets must show:

- The name of the facility to which the materials were delivered for recycling or disposal.
- The registration number of the vehicle delivering the materials
- The time and date of delivery
- The net weight of the load
- A description of the material being delivered.

Daily visual inspections of the waste storage areas will be undertaken by site personnel and inspection checklists and logs recorded for reporting to the site manager or equivalent role each week or as required. These inspections will be used to identify and rectify any resource and waste management issues.

Waste audits may be carried out by the Construction Manager or equivalent role to gauge the effectiveness and efficiency of waste separation procedures and recycling and reuse initiatives. Where audits show that the proposed procedures are not carried out effectively, additional staff training will be undertaken, and signage will be re-examined.

The Site Manager or equivalent role will:

- Keep records of waste disposal, waste or tipping receipts or dockets
- Arrange for suitable waste collection contractors to remove construction waste from site.
- Provide designated areas on-site, sufficient colour coded or labelled storage bins, containers or stockpiles for separated materials and any left-over waste from the construction process in locations with convenient vehicle access for removal by the waste contractor.
- Ensure waste bins are not filled beyond recommended filling levels.
- Ensure that all bins and loads of waste materials leaving site are covered and
- Remove waste only during approved hours.

If skips and bins are reaching capacity, removal and replacement should be organised as soon as possible. All site-generated building waste collected in skips and bins leaving the Project will be delivered to a facility lawfully able to accept it.

Any contaminated material to be removed from the Project will be disposed of at a facility lawfully able to accept it.

### 3.11 Site Inductions

All staff, including sub-contractors and labourers, employed during the site preparation and construction phases of the Project will undergo waste management induction training for the Project.

Induction training will cover, as a minimum, an outline of the WMP including:

- Legal obligations and targets.



- Emergency response procedures on-site
- Waste priorities and opportunities for reduction, reuse and recycling
- Waste storage locations and separation of waste
- Procedures for suspected contaminated and hazardous waste
- Waste related signage
- Site safety
- The implications of poor waste management practices and
- Responsibilities and reporting, including identification of personnel responsible for waste management and individual responsibilities.

### 3.12 Quality Control

All materials delivered to the waste storage area or to the other stockpile areas will be inspected. Materials suspected to contain hazardous material will be isolated until they can be inspected and tested.

### 3.13 Roles and Responsibilities

All personnel have a responsibility for their own environmental performance and compliance with all legislation. It will be the responsibility of the Building Contractor to implement the WMP, and an employee and subcontractor responsibility to ensure that they always comply with the WMP. Where possible, an Environmental Manager should be appointed for the Project. Suggested roles and responsibilities are provided in Table 5 below.

**Table 5 Suggested roles and responsibilities for site preparation and construction waste management**

| Responsible Person                               | General Tasks                                                                                                                                                                                                                                                                |
|--------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Construction Site Manager                        | Ensuring plant and equipment are well maintained.                                                                                                                                                                                                                            |
|                                                  | Ordering only the required amounts of materials.                                                                                                                                                                                                                             |
|                                                  | Keeping materials separated to maximise reuse and recycling.                                                                                                                                                                                                                 |
|                                                  | Ultimately responsible for routinely checking waste sorting and storage areas for cleanliness, hygiene and safety issues, contaminated waste materials, and also ensuring that all monitoring and audit results are well documented and carried out as specified in the WMP. |
| Construction Environmental Manager or equivalent | Approaching and establishing the local commercial reuse of materials where reuse on-site is not practical.                                                                                                                                                                   |
|                                                  | Establishing separate skips and recycling bins for effective waste segregation and recycling purposes.                                                                                                                                                                       |
|                                                  | Ensuring staff and contractors are aware of site requirements.                                                                                                                                                                                                               |
|                                                  | Provision of training of the requirements of the WMP and specific waste management strategies adopted for the Project.                                                                                                                                                       |
|                                                  | Contaminated waste management and approval of off-site waste transport, disposal locations and checking licensing requirements.                                                                                                                                              |
|                                                  | Approval of off-site waste disposal locations and checking licensing requirements.                                                                                                                                                                                           |



| Responsible Person | General Tasks                                                                                      |
|--------------------|----------------------------------------------------------------------------------------------------|
|                    | Assessment of suspicious potentially contaminated materials, hazardous materials and liquid waste. |
|                    | Monitoring, inspection and reporting requirements.                                                 |

Daily visual inspections of waste storage areas may be delegated to other on-site staff. All subcontractors will be responsible for ensuring that their work complies with the WMP through the Project induction and contract engagement process.

### 3.14 Waste Signage

Appropriate signage will be installed to clearly identify waste management procedures and provisions to staff and visitors. Key signage considerations are:

- Clear and correct labelling on all waste and recycling bins, indicating the correct types of waste that can be placed into a given bin (see Figure 4 for examples)
- Signposts and/or directions to location of waste storage areas
- Clear signage in all waste storage areas to instruct users how to correctly source separate waste and recycling
- Maintaining a consistent style colour scheme and system for signs throughout the facility
- Emergency contact information for reporting issues associate with waste or recycling management.
- Standard signage is to be posted in all waste storage and collection areas.
- All waste containers should be labelled correctly and clearly to identify stored materials.

Colour-coded and labelled bin lids are necessary for identifying bins and the Australian Standard AS 4123.7-2006 (R2017) Mobile waste containers Part 7: Colours, markings, and designation requirements provides recommendations for the designated colours for waste bins depending on the type of waste the bins are to receive. All signage should conform to the relevant Australian Standard.

Signs approved by the NSW EPA for labelling of waste materials are available online<sup>2</sup> and should be used where applicable. A selection of signs prepared by NSW EPA is provided in Figure 4 below.

<sup>2</sup> NSW EPA approved waste materials signage <https://www.epa.nsw.gov.au/your-environment/recycling-and-reuse/business-government-recycling/standard-recycling-signs>





**Figure 4 Example Site Preparation and Construction Labels**

### 3.15 Mitigation Measures

Table 6 below summarises the key mitigation measures to address the potential environmental impacts from waste generated through site preparation and construction works.

**Table 6 Potential Environmental Impacts Site Preparation and Construction Waste**

| Reference | Potential Impact                                                                                                                     | Proposed Mitigation Measure                                                                                                                                                              |
|-----------|--------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| WM1       | Pollution of land and waterways including surface and ground water pollution from potential spills, solid waste, runoff among others | Waste will be managed according to the provisions of this WMP including methods for managing waste or wastewater including appropriate liquid storage equipment, spill containment kits. |
| WM2       | Emission of dust and litter                                                                                                          | Waste will be managed according to the provisions of this WMP.                                                                                                                           |

## 4.0 Operational Waste Management

### 4.1 Waste Types and Quantities

During the operational phase of the Project, waste will be generated by on-site staff and during the maintenance of the Project. These waste streams include:

- Spent lithium-Ion batteries.
- General waste – lunch waste, food scraps, soiled paper and cardboard
- Recyclable containers - aluminium and steel cans, plastics and glass bottles.
- Recyclable paper and cardboard
- Bulky waste – broken and non-reusable timber pallets, non-recyclable plastics, scrap metal.
- Waste oils and grease, chemical waste – small quantities of residual chemicals, cleaning materials, paint.

More details of these waste types and possible avoidance, storage, collection and disposal strategies are described in Table 7 below.





**Table 7 Anticipated waste streams, classification and management**

| Waste Stream                                    | Activity                                                   | Classification                        | Avoidance and Reuse                                                                                                                         | Storage and collection                                                                       | Disposal                                                                                                                    |
|-------------------------------------------------|------------------------------------------------------------|---------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| General waste including non-recyclable plastics | Office activities                                          | General solid (non-putrescible) waste | -                                                                                                                                           | Store in bins provided on site for collection and taken off site for disposal when required. | Taken by staff when leaving and disposed of or recycled lawfully and responsibly.                                           |
| Commingled containers                           | Office activities, food and beverage                       | General solid (non-putrescible) waste | Procurement of products delivered in reusable or returnable containers<br>Food and beverage container return system (deposit on containers) | Store in bins provided on site for collection and taken off site for disposal when required. |                                                                                                                             |
| Food waste                                      | Office activities                                          | General solid (non-putrescible) waste | Optimised serving sizes.<br>Small refrigerator for storing staff food                                                                       | Staff take food waste home.                                                                  |                                                                                                                             |
| Cardboard                                       | Maintenance parts packaging, office activities             | General solid (non-putrescible) waste | -                                                                                                                                           | Store in bins provided on site for collection and taken off site for disposal when required. |                                                                                                                             |
| Office paper                                    | Office activities                                          | General solid (non-putrescible) waste | Reduce printing On-site<br>Procurement of recycled paper                                                                                    |                                                                                              |                                                                                                                             |
| Plastic film and wrapping                       | Plastic film and wrapping from maintenance parts packaging | General solid (non-putrescible) waste | Implement procurement management measures to minimise ordering products wrapped in plastic film                                             | Store in bins provided on site for collection and taken off site for disposal when required. |                                                                                                                             |
| Lithium-ion (Li-ion) Batteries                  | Spent Li-ion batteries during the BESS operation           | Hazardous waste                       | -                                                                                                                                           | Storage of batteries in appropriate sealed containers for commercial collection              | Waste transported to licensed recycling facility by licensed contractor.<br>Batteries returned to manufacturer and recycled |



#### **4.1.1 Operational Waste Estimates – On-site Staff**

The operation of the BESS facility will be managed and supervised remotely, so quantities of waste generated at the Project will be minimal. However, staff will still be required to attend the Project from time to time to perform maintenance and repairs. If any waste is generated by staff while on site, it will be removed by staff when they leave the site.

#### **4.1.2 Operational Waste Estimates – BESS Operation**

Minor quantities of waste are expected to be generated during the operation of the proposed project. All waste, including batteries, will be collected, and transported to facilities lawfully able to accept them, see Table 9.

#### **4.1.3 Waste Storage Area**

As waste will be taken by staff when they leave the site, no dedicated waste storage area is required or proposed.

#### **4.1.4 Potential Impacts**

The potential impacts from waste generated during operations are as follows:

- Land, surface, and groundwater contamination, transportation, and disposal of solid and liquid waste.
- Emission of dust, litter, potentially offensive odours, and vermin resulting from improper storage and collection of solid residues and putrescible waste.
- Off-site water pollution due to inappropriate handling and transportation of wastewater.

The mitigation measure to address to these subsequent impacts are summarised in the Section 4.9.

### **4.2 Waste Avoidance**

Waste avoidance during operation may include:

- Participating in take-back services to suppliers to reduce waste further along the supply chain.
- Avoid printing where possible.
- Purchasing consumables in bulk to avoid unnecessary packaging, and
- Waste reduction initiatives included in staff training.

### **4.3 Recycling and Reuse**

- Separating recyclable materials such as plastic bottles, cans, paper and cardboard from the general waste stream.
- Flatten cardboard to reduce storage capacity.
- Redeem beverage containers through Return and Earn.
- Develop a buy recycled purchasing policy.



## 4.4 Litter Management

For the health and safety of staff and visitors, careful consideration should be given to litter management. Good practice litter management is encouraged to reduce the impact of the Project on the surrounding environment, increase amenity for visitors, and staff to minimise the likelihood of vermin and insects.

Good practice litter management controls include:

- The use of tap water to discourage single-use plastic water bottles.
- The use of clear signage throughout the Project to label bins, direct visitors and staff to bin locations and encourage disposal of waste and recyclables in an appropriate way.
- Any visiting staff to inspect site for litter and remove any before leaving the site.

## 4.5 Communication Strategies

Waste management initiatives and management measures should be clearly communicated. The benefits of providing this communication include:

- Improved amenity and safety.
- Increased awareness or achievement of environmental goals and targets.
- Reduced contamination of recyclables stream.
- Increased recovery of recyclables and organics material, if implemented, and
- Greater contribution to targets for waste reduction and resource recovery, the environment and conservation.

To realise the above benefits, the following communication strategies should be considered:

- Use consistent signage and colour coding throughout the Project.
- Provide directional signage to show location of, and routes, to waste storage area.
- General waste and recycling bins be clearly labelled and colour-coded to ensure no cross contamination and
- Repair signs and labels promptly to avoid breakdown of communications.

## 4.6 Signage

As there is no dedicated waste storage area, no signage is required.

## 4.7 Monitoring and Reporting

As waste will be taken by staff when they leave the site and no dedicated waste storage area is required or proposed, monitoring of the waste system is not required.

## 4.8 Roles and Responsibilities

It is the responsibility of any staff using or visiting the site to remove any waste generated during their visit to take that waste with them when they leave the site after which it will be disposed of or recycled lawfully and responsibly.



## 4.9 Mitigation Measures

The following table shows the mitigation measures that address the subsequent impacts from waste generated during operations.

**Table 8 Summary of Potential Impacts and Proposed Mitigation for Operational Waste**

| Reference | Potential Impact                                                                                                                                                                   | Proposed Mitigation Measure                                                                                                                                                          |
|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| WM3       | Land, surface, and groundwater contamination, transportation, and disposal of solid and liquid waste                                                                               | Manager waste and recyclables as detailed in Section 4.1.<br>Undertake litter mitigation measure as specified in Section 4.4                                                         |
| WM4       | Emission of dust, litter, potentially offensive odours, and vermin resulting from improper storage and collection of solid residues and putrescible waste                          |                                                                                                                                                                                      |
| WM5       | Off-site water pollution due to inappropriate handling and transportation of wastewater                                                                                            | Wastewater would be transported by licenced contractors and disposed of at appropriately licensed wastewater treatment plants.                                                       |
| WM6       | Human and animal injury or loss of life, toxic and particulate emissions and other environmental damage due to fire or explosion at end of battery life or during decommissioning. | Decommissioning will be managed by a suitably qualified contractor or operator. End of life batteries will be delivered to a facility lawfully able to accept them. See Section 5.0. |

## 5.0 End of Life

### 5.1 Decommissioning

Decommissioning will be managed by a suitably qualified contractor or operator. Waste types and quantities generated during the decommissioning phase of the project would be managed similarly to construction phase, and in accordance with the waste hierarchy to avoid, reduce, re-use, recycle and recover materials where possible, through effective planning.

The decommissioning phase is anticipated to generate waste such as end of life Li-ion batteries and associated infrastructure, such as cabling, inverters, transformers and other electrical and structural components. Most materials will be reused or recycled at a facility lawfully able to accept them. Any waste that cannot be reused or recycled would be collected by a licenced contractor and disposed of at a site lawfully able to accept it.

As far as practical, batteries in the battery energy storage system would be recycled at approved battery recycling facilities, or subject to confirmation, could be returned to the original equipment manufacturer for refurbishment and recycling. Where spent batteries are unable to be recycled, they would be disposed of at a facility lawfully able to accept them.

### 5.2 Recycling and Disposal Sites

Waste and recycling generated during the construction and operational phases of the project will be delivered to facilities lawfully able to accept them for recycling or disposal. The quantities and types of waste generated will be within the capacity of the waste management facilities closest to the Project and other identified facilities.



Separated recyclable materials such as cardboard and containers, will be taken by staff when they leave the site after which it will be disposed of or recycled lawfully and responsibly.

Waste facilities licensed to accept general solid waste (putrescible and non-putrescible) for the project site are listed in the Table 9 below. Waste could be delivered by staff to the AWMC or any of the other facilities listed.

**Table 9 Waste Management Facilities**

| Facility Name                                                                                     | Distance (km) | Approximate Travel Time (minutes) |
|---------------------------------------------------------------------------------------------------|---------------|-----------------------------------|
| <b>Waste facilities, licensed to accept general solid waste (putrescible and non-putrescible)</b> |               |                                   |
| Albury Waste Management Centre – Albury City Council                                              | 19            | 21                                |
| Howlong Waste Management Centre – Federation Council                                              | 43            | 32                                |
| Corowa Waste Management Centre – Federation Council                                               | 57            | 46                                |
| Oaklands Landfill – Federation Council                                                            | 103           | 70                                |
| Mulwala Transfer Station – Urana Waste Disposal Centre                                            | 104           | 75                                |
| Urana Waste Disposal Centre – Urana Waste Disposal Centre                                         | 124           | 83                                |
| <b>Wastewater Treatment Plants</b>                                                                |               |                                   |
| Walla Walla Sewage Treatment Works and Effluent Reuse Area                                        | 21            | 17                                |
| Culcairn Sewage Treatment Works and Effluent Reuse Area                                           | 34            | 26                                |
| Henty Sewage Treatment Works and Effluent Reuse Area                                              | 52            | 40                                |
| Holbrook Sewage Treatment Works                                                                   | 30            | 44                                |
| <b>Battery Recycling Facilities</b>                                                               |               |                                   |
| Envirostream Battery Recycling Facility - 17-19 Maria Street, Laverton North, Victoria            | 249           | 223<br>(3 hours 43 minutes)       |
| Ecocycle Recovery and Recycling and EcoBatt - 5-11 Reo Crescent Campbellfield, Victoria           | 315           | 224<br>(3 hours 44 minutes)       |

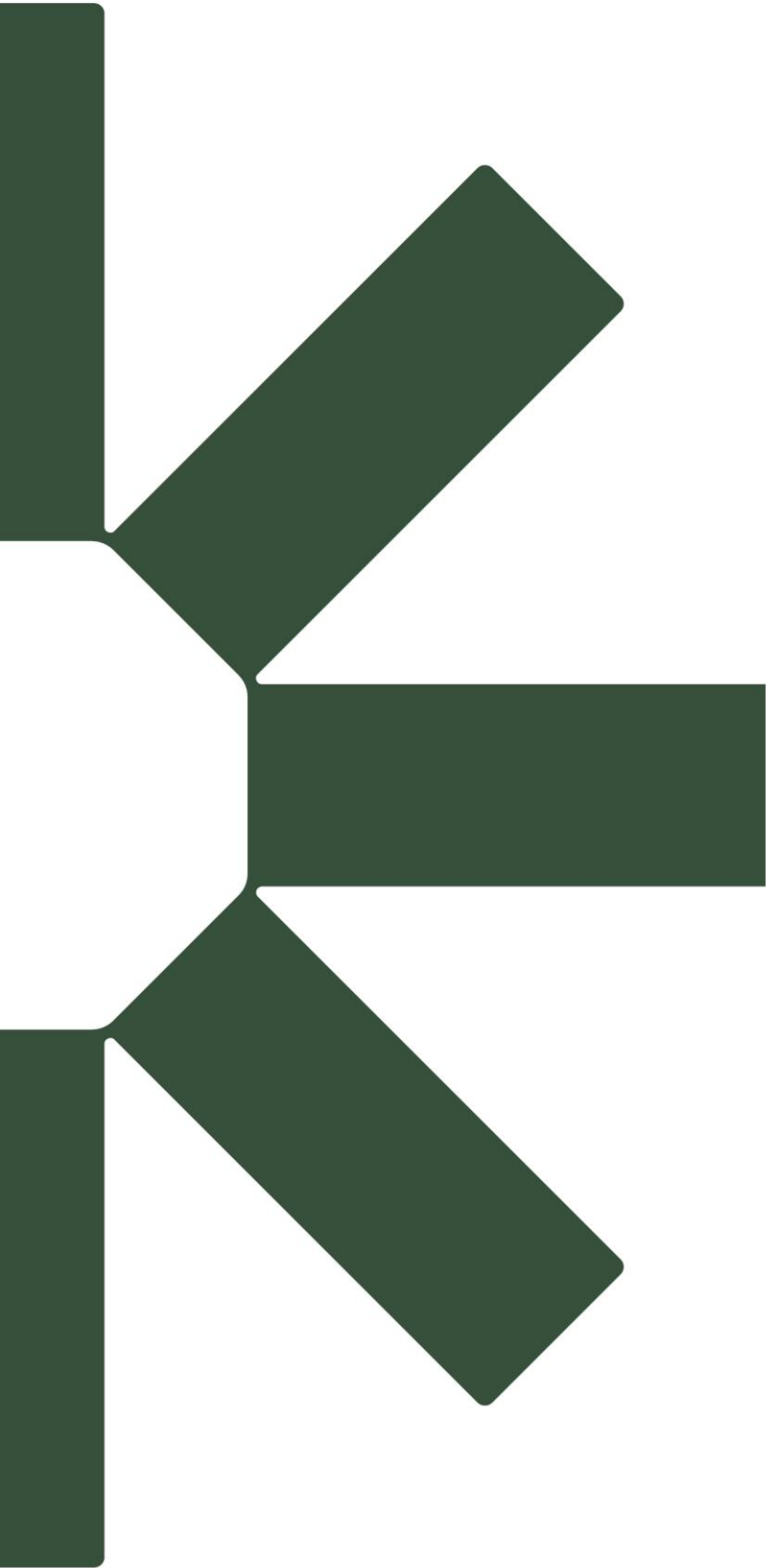




## 6.0 Conclusion

This Waste Management Plan outlines a comprehensive approach to managing waste generated during the construction, operation, and decommissioning of the Jindera Battery Energy Storage System. Informed by legislative requirements and best-practice waste hierarchy principles, the plan identifies waste streams, estimates quantities, and details mitigation measures to minimise environmental impact. Effective implementation of the plan will ensure that waste is managed lawfully and responsibly, with a strong emphasis on avoidance, reuse, recycling, and safe disposal. The proposed strategies will support the Project's environmental compliance and contribute to sustainable outcomes throughout its lifecycle.





Making Sustainability Happen