

# Construction Environmental Management Plan



## Riverina Battery Energy Storage System (BESS) & Riverina BESS Connection

### State Significant Development (SSD 8392)



#### CPP Project No: 11291 & 12005

##### Current Revision

Revision: 2.5 Revision Date: 6/04/2023

**Task:** **Responsibility:** **Date:** **Signature:**

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From	To	Summary of Changes
<b>Rev A</b>	<b>Rev 0</b>	<ul style="list-style-type: none"> <li>General update to align with project documentation and overarching plans</li> <li>Minor wording amendment in section 2</li> <li>Update Project Manager, Site Manager and SQE Advisor details</li> <li>Minor wording amendment on section 4.4</li> <li>Minor wording amendment in the table in section 6.1</li> <li>Updating EPA acronym in section 3.1 and 16.1.1</li> <li>Updating working hours to align with DA Consent in section 6.10.3</li> <li>Adding Environment topics to prestart meeting and toolbox in section 11.13 and 11.14</li> <li>Minor wording amendment in section 15.4</li> <li>Minor wording amendment in section 6.5.3</li> <li>Minor wording amendment in section 10.3</li> </ul>
<b>Rev 0</b>	<b>Rev 1</b>	<ul style="list-style-type: none"> <li>Updated to address Darlington Point Solar (SSD-8392-PA-22) Construction Environmental Management Plan - Request for Additional Information from DPIE</li> </ul>
<b>Rev 1</b>	<b>Rev 1.1</b>	<ul style="list-style-type: none"> <li>Updated to address Darlington Point Solar (SSD-8392-PA-22) Construction Environmental Management Plan - Request for Additional Information from DPIE received 10/06/2022</li> </ul>
<b>Rev 1.1</b>	<b>Rev 1.2</b>	<ul style="list-style-type: none"> <li>Updated to address Darlington Point Solar (SSD-8392-PA-22) Construction Environmental Management Plan - Request for Additional Information from DPIE received 15/06/2022</li> </ul>
<b>Rev 1.2</b>	<b>Rev 1.3</b>	<ul style="list-style-type: none"> <li>Updated Construction Activity Zone Map</li> </ul>
<b>Rev 1.3</b>	<b>Rev 1.4</b>	<ul style="list-style-type: none"> <li>Updated to include Scope of Works for Stage 2b of the Project</li> </ul>
<b>Rev 1.4</b>	<b>Rev 1.5</b>	<ul style="list-style-type: none"> <li>Updated to include revised staging of Stage 2b (2b(i)/2b(ii)/2b(iii)) of the Project</li> <li>Updated to include revised contracting structure</li> <li>NOTE: the scope of this plan is limited to Stage 2b(i)</li> </ul>
<b>Rev 1.5</b>	<b>Rev 1.6</b>	<ul style="list-style-type: none"> <li>Updated to include email comments from DPIE 19/10/2022</li> <li>NOTE: the scope of this plan is limited to Stage 2b(i)</li> </ul>
<b>Rev 1.6</b>	<b>Rev 2</b>	<ul style="list-style-type: none"> <li>Updated to reflect details of 11291 Biodiversity Management Plan - Rev 1.1</li> <li>Updated to reflect amended Consent Conditions</li> <li>Updated Organisation Structure for Substation</li> <li>Updated Section 6.7 in accordance with improvement opportunity from Independent Environmental Audit (November 2022)</li> <li>Updated Section 11.3.2 to reference Edify email address for complaints</li> <li>NOTE: the scope of this plan is limited to Stage 2b(ii)</li> </ul>
<b>Rev 2</b>	<b>Rev 2.1</b>	<ul style="list-style-type: none"> <li>Updated to include Stage 2b(iii)</li> </ul>
<b>Rev 2.1</b>	<b>Rev 2.2</b>	<ul style="list-style-type: none"> <li>Updated to address comments from DPIE on Rev 2.1</li> </ul>
<b>Rev 2.2</b>	<b>Rev 2.3</b>	<ul style="list-style-type: none"> <li>Updated to address comments from DPIE on Rev 2.2</li> </ul>
<b>Rev 2.3</b>	<b>Rev 2.4</b>	<ul style="list-style-type: none"> <li>Updated to address comments from DPIE on Rev 2.3</li> </ul>
<b>Rev 2.4</b>	<b>Rev 2.5</b>	<ul style="list-style-type: none"> <li>Updated to address comments from DPIE on Rev 2.4</li> </ul>

## 1 INTRODUCTION

Consolidated Power Projects (CPP) specialises in providing full turnkey high voltage solutions for power utility, industrial, resource and renewable energy sectors.

We offer specialist design, construction, commissioning and maintenance of high voltage infrastructure. As a trusted partner to Australia's largest renewable and power transmission utility companies, we continue to deliver successful, large-scale projects including battery infrastructure, solar and wind farms, and high voltage transmission substations.

This Construction Environmental Management Plan (CEMP) also referred to as the Project Environmental Management Strategy (EMS) describes the environmental strategy, methods, controls and requirements for the execution of CPP Projects including project specific requirements. A copy of this plan, together with the relevant appendices, shall be made available to all CPP staff and supplied to all subcontractors prior to commencing work on any project.

Staff and subcontractors shall conform to the requirements of this CEMP.

A copy of the plan and or any revisions to the plan shall be retained for the duration of the project.

This plan shall be amended following any significant events, or if there are significant changes to project scope, methodology, risk profile or legislation and ensure that each relevant person affected by the amendment is advised of the details of the amendment or given a copy of the amendment.

Implementation of this plan shall be monitored via the internal audit process and site inspections.

The Project Manager is the owner responsible for the implementation of this plan.

As a company, CPP strives for continuous improvement daily, both as individuals as well as an organisation. Our core values reflect who we are and define our approach to doing business.

### **Consolidated Power Projects core values are:**

**Team Work** - One team, together we achieve;

**Integrity** - Doing the right thing / doing what's right;

**Innovation** - Always learning, creating, adapting; and

**Sustainability** - Ensuring our future.

***“Strive for Environmental Excellence”***

## 2 SCOPE

This CEMP provides a framework for environmental management of the construction phases of the Riverina Energy Storage System, being the Battery Energy Storage System (BESS) stage (the Project) of the Darlington Point Solar Farm (DPSF) development (the Development), as relating to the scope of works within Lot 1 DP1249830 and Lot 2 DP1249830, namely Stage 2a. Stage 2b(i) of the Project also involves a scope of works for the BESS Mechanical and Electrical Installation and connection switch bay construction at the Transgrid Darlington Point (TG DP Sub) on Lot 2 DP628785.

As this BESS stage of the Development is a separate project, to the extent the Solar Farm and BESS required different scope of works and construction contractors, and are and will be managed and operated by different parties, it has been determined a standalone CEMP (this document) is required for the BESS project.

**This CEMP applies exclusively to the Stage 2a, Stage 2b(i), Stage 2b(ii) and Stage 2b(iii) works associated with the Darlington Point BESS, inclusive of the connection being the Riverina BESS 132/33kV Substation (RBESS Sub) associated, the switchbay at the TG DP Sub, and BESS connections to the Transgrid Substation.** Other works associated with the Darlington Point Solar Farm are not covered by or detailed in this plan. Please note that the construction and commissioning for the Darlington Point Solar Farm has been completed as part of a previous stage of the Development.

This CEMP forms the Environmental Management System (EMS) for the project. The EMS provides a strategic framework for all environmental management plans as required by the Development Consent (SSD 8392).

The CEMP should be read in conjunction with the following plans for the Project:

- Biodiversity Management Plan
- Accommodation and Employment Strategy
- Traffic Management Plan
- Chance Find Protocol (Signal Energy)
- Emergency Management Plan
- Community Consultation and Engagement Plan (Edify)
- CPP Policies and Procedures

The structure of the CEMP/EMS for the Project and the relationship between documents is detailed below in Figure 1:

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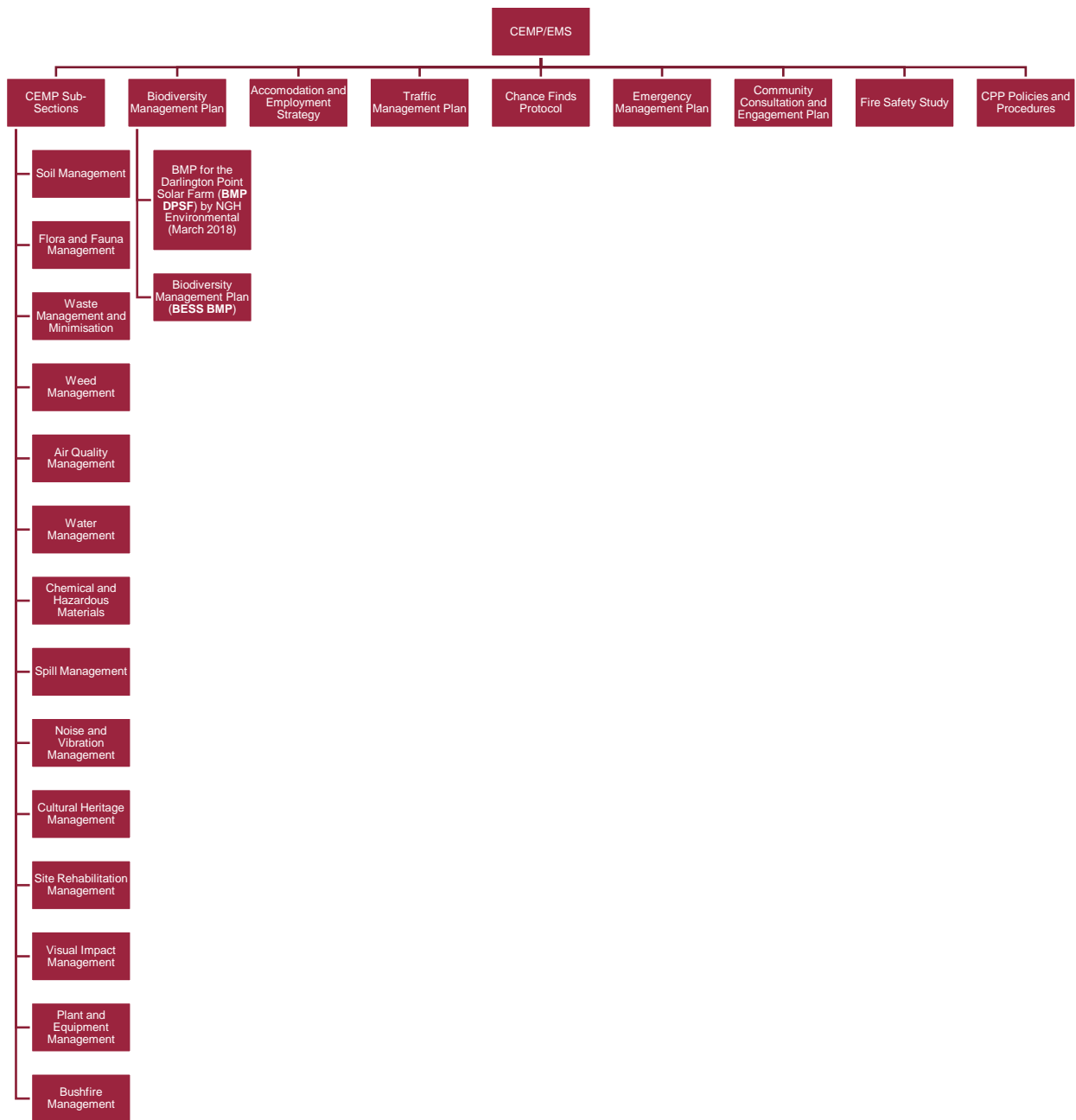


Figure 1 Structure of the CEMP/EMS for the Project

## 3 PURPOSE

The purpose of the CEMP is to enable the achievement of the objectives and targets set for the project with respect to the project environmental approvals and environmental conditions of the development consent. The CEMP establishes the management controls to be followed by CPP and its subcontractors and consultants in carrying out the scope of works for this Project. This CEMP has been developed for the BESS project to fulfil the requirement of the EMS described within the Consolidated Consent and Conditions of Consent (COC).

## 3.1 Plan Development

This CEMP has been developed in accordance with the requirements of:

- Environmental Legislation, Regulatory and Other Requirements listed in Table 6
- Relevant Client and CPP guidelines and procedures
- Relevant Client project documentation including:
  - RESS EPC Schedule 04 – Permits
  - Edify Energy – Darlington Point State Significant Development (SSD 8392) Modification Report – Battery Energy Storage System – June 2021, including Appendix A and B, Modification (**SSD-8392-MOD-1**), and Modification (**SSD-8392-MOD-2**)
  - Edify Energy – Darlington Point Solar Farm – Environmental Impact Assessment – Final 16 April 2018, including Appendix A to I
  - Darlington Point Solar Farm Modification Report, dated June 2021 and additional information provided on 29 June 2021.
  - Darlington Point Solar Farm Modification Report dated July 2022 and Darlington Point Submissions Report dated 26 September 2022
- Consolidated Consent SSD 8392 Schedule 3 – Environmental Conditions
- Consolidated Consent SSD 8392 Schedule 4 – Environmental Management and Reporting

## 3.2 Environmental Management Plan Revisions

Management plan updates will be managed a revision table at the start of the plan. A summary of changes will be listed in this table.

All updates are to be included when either:

- A major update is released; or
- Every 3 months

Major revisions (1.0, 2.0, 3.0 ....):

- are where there is a significant change to environmental requirements or project management methodology;
- major revisions will be required to be resubmitted to the client and authorised by the Project Manager.

Minor revisions (2.1, 2.2, 2.3 ....):

- are likely to include items such as changes of a minor nature following a management review of the CEMP or referenced documents, any change in the name or numbering of a referenced document, changes to names or contact numbers of key personnel contacts;
- minor revisions require approval by the Project Manager but do not require submission to the client.

Prior to carrying out any upgrading or decommissioning activities on site this management plan must be updated and approved by the Planning Secretary or a subsequent plan shall be submitted and approved by the Planning Secretary.

Review and, if necessary, revise this management plan required under this consent to the satisfaction of the Planning Secretary within 1 month of the following:

- submission of an incident report under condition 4 of Schedule 4 of the COC;

- submission of an audit report under condition 6 or 7 of Schedule 4 of the COC; or
- any modification to the conditions of the COC.

### 3.3 Consolidated Power Projects (CPP) Commitment

Our Project CEMP encompasses policy and reflects our commitment to ensuring all works have minimal impact on our environment and community. Our commitment extends to all associated with our works including our employees, subcontractors, clients and members of the community.

### 3.4 Environmental Essentials

- CPP's Environmental Essentials represent some of the high-risk tasks undertaken on our sites and require special attention to ensure the land and environment upon which these tasks are undertaken remain free from impact.
- The Environmental Essentials set down the expectations that we have for all employees, visitors, subcontractors and third-party workers whilst working at our sites.
- The Environmental Essentials shall be adhered to at all times.

Non-compliance to these rules exposes the environment to potential significant impact resulting in removal from the site.

- It is CPP's aim to ensure everyone conducting work related to the Environmental Essentials, will strive for environmental excellence and do everything they can to comply with the required controls and keep environment free from impact.
- The Environmental Essentials are located in APPENDIX A.

### 3.5 Consultation

The Consolidated Consent requires this plan to be developed to the satisfaction of the Planning Secretary.

CPP submitted the draft plans to Tesla on 21 January 2022. Formal comments were received from Tesla and Edify on 24 February 2022. CPP have addressed these comments and updated the CEMP accordingly.

This CEMP was submitted to the Department for Planning Industry and Environment (DPIE) for review and comment on 16 March 2022 by Tesla. A Request for Additional Information (RFI) from DPIE to Tesla was provided on 16 May 2022. Revision 1 of the CEMP was resubmitted to DPIE for review.

Additional RFI's from DPIE to Tesla were provided on 10 June 2022 and 15 June 2022. Revision 1.2 of the CEMP seeks to address and close out the comments within the RFI's and has been approved by DPIE for Stage 2a of the Project.

Revision 1.6 for Stage 2b(i) of the Development was approved by DPIE on 21/10/2022.

Revision 2 for Stage 2b(ii) of the Development was approved by DPIE on 11/12/2022.

This revision of the CEMP will be submitted to DPIE for Stage 2b(iii) of the Development.

## 4 PROJECT SPECIFIC DETAILS

### 4.1 Development Staging

The Development will be undertaken in four distinct stages, those being:

- Stage 1 – Construction and operation of the solar farm;
- Stage 2a – Site Preparation for the BESS (see Figure 3 and Figure 4);
- Stage 2b – BESS battery components and connections to the Transgrid Substation;
  - Stage 2b (i) – BESS Mechanical and Electrical Installation (see Figure 3, Figure 4 and Figure 7);
  - Stage 2b (ii) – BESS connections to the Transgrid Substation (see Figure 5 and Figure 6);
  - Stage 2b (iii) – BESS connections to battery components (see Figure 3 and Figure 4);
- Stage 3 – Operations; and
- Stage 4 – Decommissioning.

#### Stage 1 Construction and operation of the solar farm

- This work has been completed and the solar farm is now operational.

#### Stage 2a Site Preparation for the BESS - June to September 2022

- Preparation of construction, compound, laydown and parking areas
- Bulk earthworks inclusive of topsoil stripping, cut to fill, import to fill, capping layer and surfacing layer
- Road works including internal roads, kerbing, surfacing and interface with existing solar farm access road
- Security fencing delivery and installation, including post and sill foundations, perimeter chainmesh and weldmesh fencing and gates
- Landscaping and rehabilitation inclusive of trimming batters, table drainage, earth shaping and seeding
- Earth grid installation
- Stormwater drainage system inclusive of pits, pipes, headwalls and table drains
- Spill oil drainage system inclusive of pits, pipes, spill oil tank and headwalls
- 33kV direct buried cable installation within BESS yard (from RMU's to 33kV Switchgear building)
- Electrical pit and conduit system installation
- Equipment, structure and building foundations inclusive of major and minor foundations for the
- BESS and associated substation
- Ancillary equipment and minor structure deliveries

## **Stage 2b BESS battery components and connections to the Transgrid Substation - September 2022 to June 2023**

### Stage 2b(i) BESS Mechanical and Electrical Installation - (indicative timing: September 2022 to June 2023)

Stage 2b(i) activities are summarised below and comprise the delivery and landing of transformers, Megapacks, control and switchgear buildings, and electrical and mechanical installation aspects, excluding the battery connection and the HV transmission and communication cable works. Stage 2b(i) does not involve any native vegetation impacts.

- Major equipment delivery and landing/erection inclusive transformers
- Delivery and landing only of the Megapacks. The Megapacks must not be connected to any other equipment and specifically no cable terminations
- Control and switchgear buildings delivery and landing
- Mechanical and electrical installation of equipment inclusive of structural erection, landing of equipment, cable reticulation works, cabling and terminations (excluding Megapacks electrical installation)
- Connection switch bay construction at Darlington Point Substation

### Stage 2b(ii) BESS connections to the Transgrid Substation - (indicative timing: January 2023 to February 2023)

Stage 2b(ii) works comprise the installation of the HV transmission and communication cable/s to the Transgrid substation, and the preparation and use of the temporary construction areas within the TransGrid Darlington Point Substation on Lot 2 DP628785. These activities are the subject of SSD-8392-MOD-2.

- Preparation and use of laydown, stockpile and office hardstand areas within Lot 2 DP628785
- 132kV underground cable works between Riverina BESS Substation and Transgrid Darlington Point Substation
- Electrical pit and conduit system installation between Riverina BESS Substation and Transgrid Darlington Point Substation
- Communications cable between Riverina BESS substation and Transgrid Darlington Point Substation

### Stage 2b(iii) BESS connections to battery components - (indicative timing: March 2023 to June 2023)

Stage 2b(iii) works comprise the electrical works associated with the battery components.

- Electrical installation of the Megapacks inclusive of cabling and terminations, specifically connection of the MegaPack's to other equipment within the BESS facility (Lot 1 DP1249830).
- Testing and commissioning, specifically energisation of the MegaPack battery units and Hold Point Testing of the BESS (within Lot 1 DP1249830).

## **Stage 3 Operations, from 2023 through to 2048**

- Operation of the plant for its 25yr life



## Stage 4 Decommissioning, at end of life

- Full decommissioning of the site including removal and disposal of all installed components

## 4.2 Project Details

Table 1 Project Specific Details

<b>Proponent:</b>	<b>Edify Energy</b>
<b>Client:</b>	Tesla Motors Pty Ltd (BESS) Transgrid (Substation and connections)
<b>Principal Contractor:</b>	Consolidated Power Projects Pty Ltd
<b>Project Name:</b>	Riverina Battery Energy Storage System Riverina BESS Connection
<b>Project Number:</b>	11291 12005
<b>Project Address:</b>	336 Donald Ross Dr, Darlington Point NSW 2706
<b>Project Manager:</b>	Luke Perabo
<b>Site Manager:</b>	Rodney Cusbert (11291) Michael Greaves (12005)
<b>Site SQE Advisor</b>	Jarrold Erbs

### 4.3 Map of Project

#### APPENDIX 1: GENERAL LAYOUT OF DEVELOPMENT

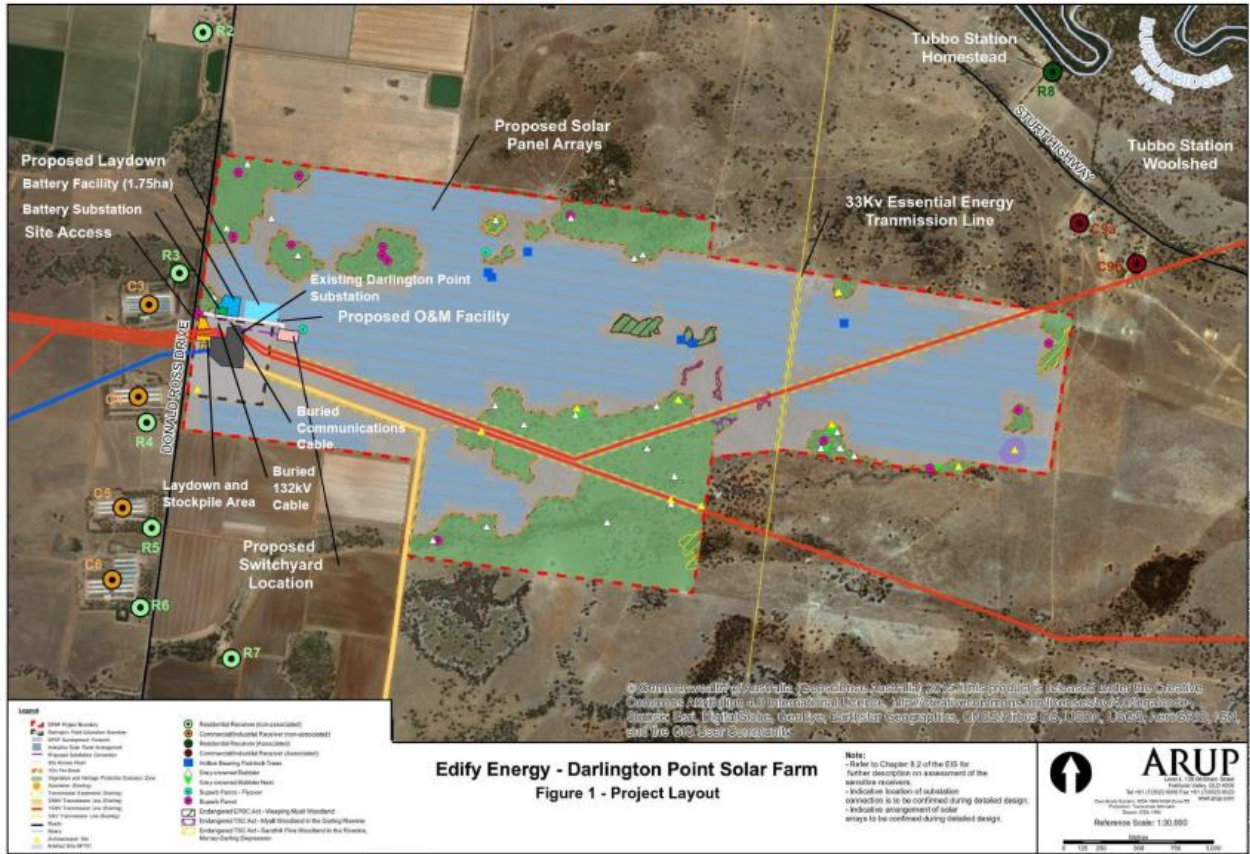


Figure 2: Site Map Source: SSD-8392 Development Consent (Consolidated Consent) SSD-8392-Mod-2 October 2022 Development

# Construction Environmental Management Plan

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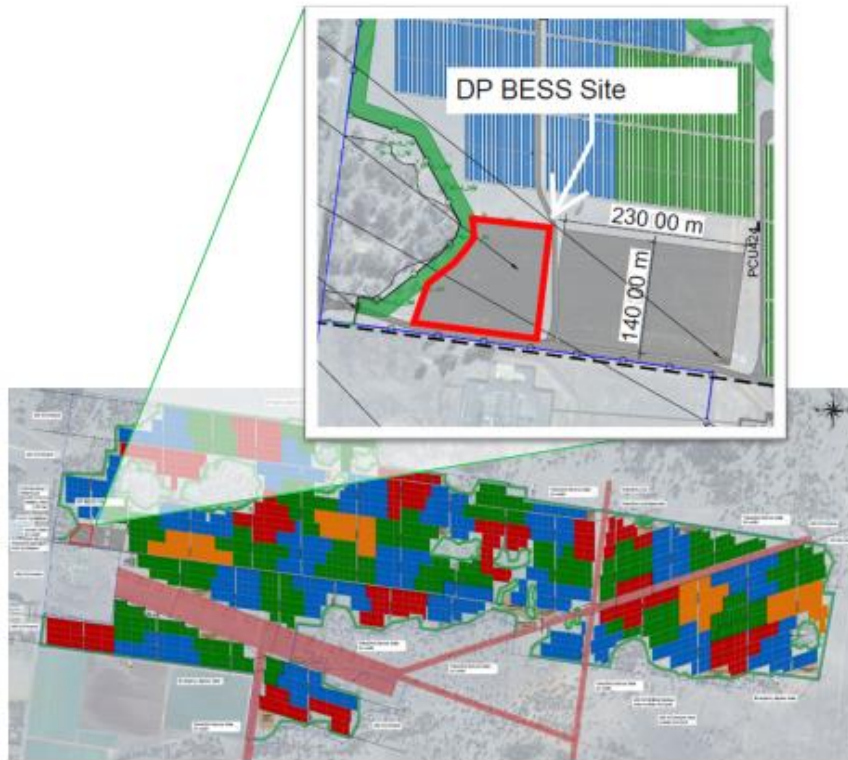


Figure 3: Inset Map Lot 1 DP1249830 - Stage 2a, Stage 2b of the Project (excluding Stage 2b(ii)). Source: SSD-8392-MOD-2 Modification Report 2022



Figure 4: Lot 1 DP1249830 and Lot 2DP1249830 - Stage 2a and Stage 2b (excluding Stage 2b(ii)) Detailed Map - BESS Project site including Construction Compound Area



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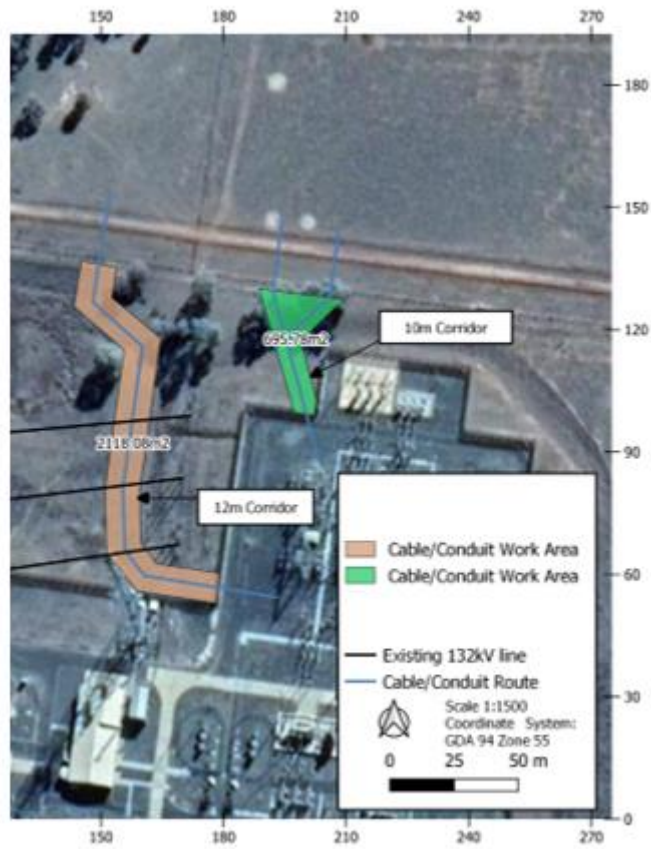


Figure 5: Stage 2b(ii) Detailed Map – 132kV Underground Cable and Conduits connection into the TG DP Sub via 132kV underground cable, control and communication conduits on Lot 2 DP628785

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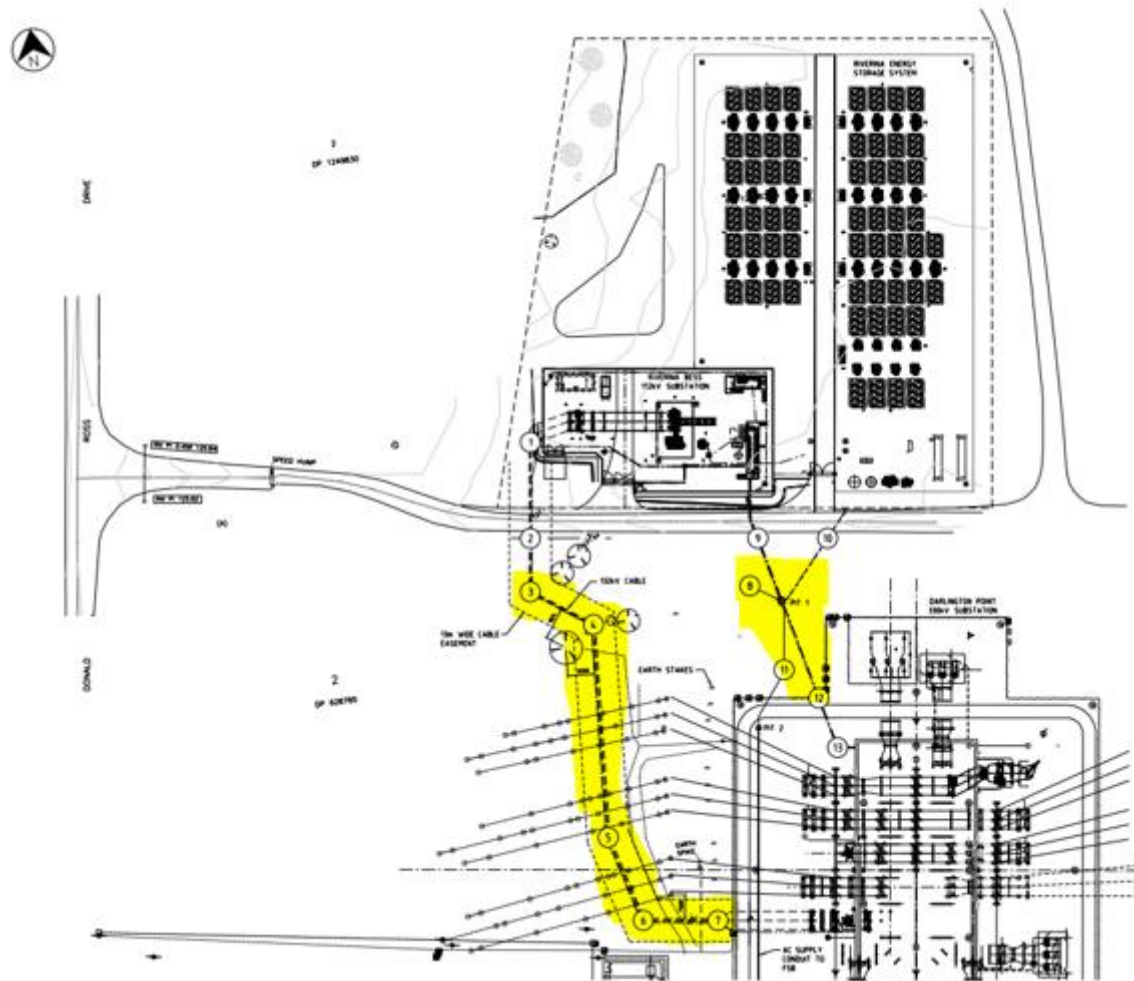


Figure 6: Stage 2b(ii) Connection into the TG DP Sub via 132kV underground cable, control and communications conduits on Lot 2 DP628785 (Project works highlighted in YELLOW)

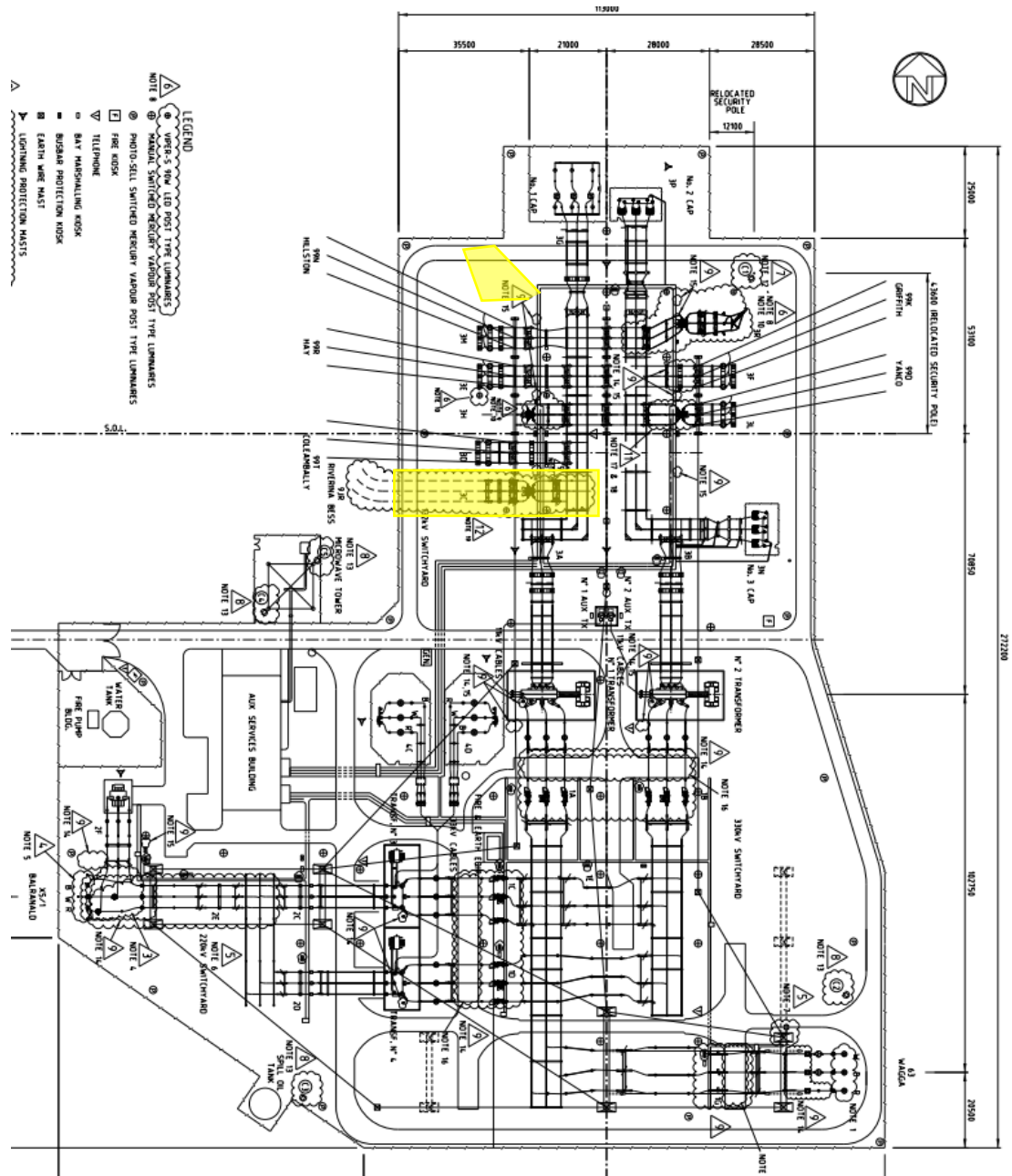


Figure 7: Part of Stage 2b(i) Connection switch bay construction at Darlington Point Substation on Lot 2 DP628785 (Project works highlighted in YELLOW)

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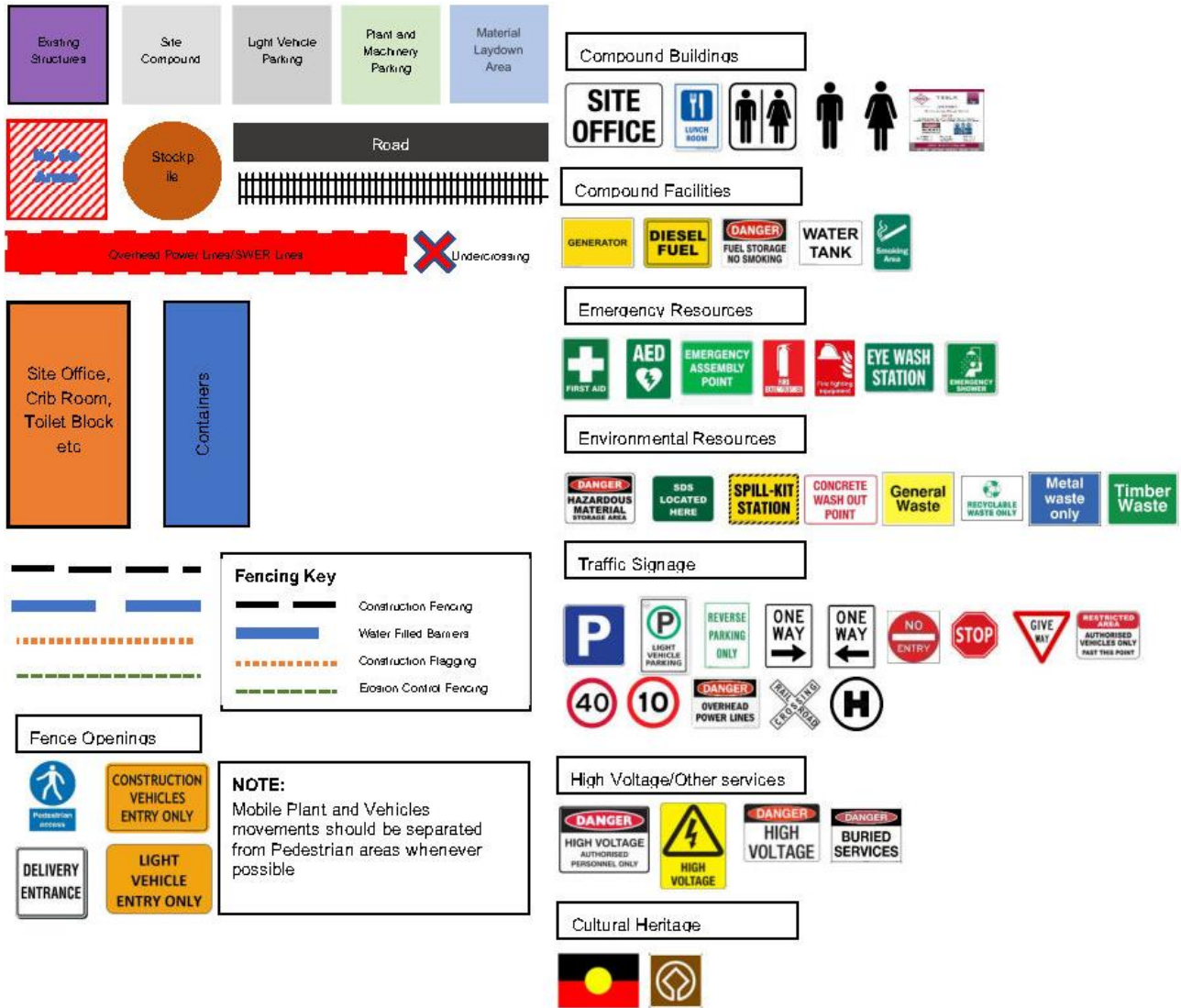


Figure 8 - Legend and Signage



## 4.4 Construction Activities Zone

Construction Activity Zone (CAZ) Map – 11291 Riverina Energy Storage System.



Figure 9 - Construction Activities Zone

## 4.5 Site Location

The project site is located at Lot 1 DP 1249830, Lot 2 DP1249830 and Lot 2 DP628785, 336 Donald Ross Dr, Darlington Point NSW 2706.

The site coordinates are approximately 34°38'49.3"S 146°02'02.9"E

The site's sole access point during construction and operation will be via the existing ingress on Donald Ross Drive.



Google Maps Sydney NSW to Darlington Point Solar Farm

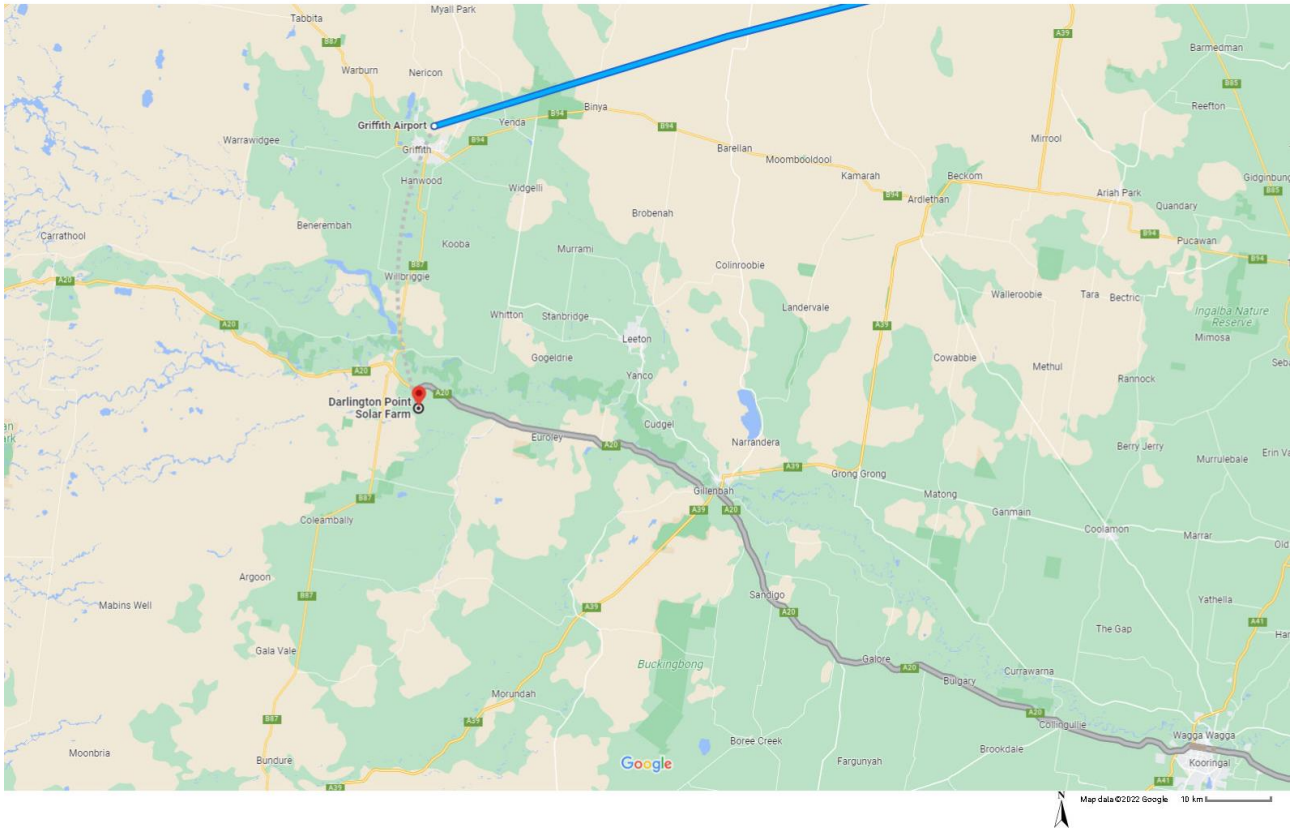


Figure 10 - Site Location

## 5 COMMUNITY AND ENVIRONMENT POLICY

- The *Environment Policy* communicates CPP's commitment toward avoiding, reducing or controlling environmental impact and will be communicated during the Site Induction and displayed in visible locations on sites and in offices. Refer to **APPENDIX B**.

**Referenced Documents:**

POL-S002 Community and Environment Policy

## 6 PLANNING

### 6.1 Environmental Planning

#### 6.1.1 Environmental Assessment Requirements

- Relevant legislation was examined and addressed along with the review of the *Development Application SSD 8392 incl. Appendices* (also inclusive of the Modified Reports and Appendices).
- A copy of the Development Application incl. Appendices (also inclusive of the Modified Report and Appendices) will be retained at the site during the project.
- The conditions relevant to CPP in the *Development Application SSD 8392 incl. Appendices* with the requirements or mitigation measures and the section in which they appear in this management plan are summarised in Table 2 below.
- If during the project, supplementary environmental assessments are determined, any new or additional or changed mitigation measures will be updated and added to this CEMP.

Table 2 COC Summary and CEMP Section References

Area	Relevant Sch./Clause No.	Requirement	Reference Section in this Plan
Consolidated Consent SSD8392	Sch. 2 Clause 1	In meeting the specific environmental performance criteria established under this consent, the Applicant must implement all reasonable and feasible measures to prevent and/or minimise any material harm to the environment that may result from the construction, operation, upgrading or decommissioning of the development.	This CEMP sets out reasonable and feasible measures to carry out the construction to best align with the conditions set out in the Consolidated Consent SSD8392 and EIS.
Consolidated Consent SSD8392	Sch. 2 Clause 2	The Applicant must carry out the development: (a) generally in accordance with the EIS; and (b) in accordance with the conditions of this consent. Note: The general layout of the development is shown in Appendix 1 [of the Consolidated Consent].	This CEMP sets out reasonable and feasible measures to carry out the construction to best align with the conditions set out in the Consolidated Consent SSD8392 and EIS.
Consolidated Consent SSD8392	Sch. 2 Clause 10	The Applicant must ensure that all new buildings and structures, and any alterations or additions to existing buildings and structures, are constructed in accordance with the relevant requirements of the Building Code of Australia.  Notes:	CPP will nominate a Principal Certifier for the Project. Where necessary based on the delivery of the for construction drawings and staging of the Project, a staged Construction Certificate (CC) and Occupation Certificate (OC) process will be completed for the Project.

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		<ul style="list-style-type: none"> <li>• Under Part 6 of the EP&amp;A Act, the Applicant is required to obtain construction and occupation certificates for the proposed building works.</li> <li>• Part 8 of the EP&amp;A Regulation sets out the requirements for the certification of the development</li> </ul>	Refer to Section 7
Consolidated Consent SSD8392	Sch. Clause 13	2 The Applicant must ensure that all plant and equipment used on site, or in connection with the development, is: (a) maintained in a proper and efficient condition; and (b) operated in a proper and efficient manner.	Refer to Section 6.14
Consolidated Consent SSD8392	Sch. Clause 14	2 The capacity of the battery storage facility must not exceed a total: (a) delivery capacity of 200 MW; or (b) storage capacity of 400 MWh.	DPSF BESS will be a 150MW / 302.7MWh BESS comprised of:  <ul style="list-style-type: none"> <li>• RESS1 – BESS with maximum import export power of 60MW and capacity of 122.7 MWh;</li> <li>• RESS2 – BESS with maximum import export power of 65MW and capacity of 130MWh;</li> <li>• DPES – BESS with maximum import export power of 25MW and capacity 50 MWh</li> </ul>
Consolidated Consent SSD8392	Sch. Transport Clauses 1 – 7	3	Refer to Traffic Management Plan – TMP-11291
Consolidated Consent SSD8392	Sch. Clause 8	3 Following any construction or upgrading on the site, the Applicant must: (a) restore the ground cover of the site as soon as practicable; (b) maintain the ground cover with appropriate perennial species; and (c) manage weeds within this ground cover	Refer to section 6.12
Consolidated Consent SSD8392	Sch. Biodiversity Clauses 9 – 12, including 10A and 12A	3 Within two years of commencing construction under this consent, unless the Planning Secretary agrees otherwise, the Applicant must retire biodiversity credits of a number and class specified in Column (a) in Table 1 below [refer to Consolidated Consent], to the satisfaction of BCS.	Refer to Biodiversity Management Plan – BMP-11291  Refer to section 6.3  Note, biodiversity offsets are the responsibility of the Darlington Point Solar Farm stage of the Development and Edify for the BESS Stage of the Development.  <b>Prior to carrying out works associated with Modification 2 that could directly or indirectly impact the biodiversity values requiring offset, the Applicant must update the Biodiversity Management Plan referred to in condition 12 for works</b>



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			<p><b>associated with Modification 2, in accordance with the Biodiversity Development Assessment Report (Revision 3.1, dated 20 September 2022).</b></p> <p><b>Prior to carrying out works associated with Modification 2 that could directly or indirectly impact the biodiversity values requiring offset, the Applicant must retire biodiversity credits of a number and class.</b></p> <p><b>Note, CPP are not to commence any associated phase of the works without formal evidence provided by Edify that the biodiversity credits for that particular phase have been retired.</b></p>
Consolidated Consent SSD8392	Sch. 3 Clause 13	<p>Unless the Planning Secretary agrees otherwise, the Applicant may only undertake construction, upgrading or decommissioning activities on site between:</p> <p>(a) 7 am to 6 pm Monday to Friday;            (b) 8 am to 1 pm Saturdays; and            (c) at no time on Sundays and NSW public holidays.</p> <p>The following construction, upgrading or decommissioning activities may be undertaken outside these hours without the approval of the Secretary:</p> <ul style="list-style-type: none"> <li>• the delivery of materials as requested by the NSW Police Force or other authorities for safety reasons; or</li> <li>• emergency work to avoid the loss of life, property and/or material harm to the environment.</li> </ul>	Refer to Section 6.10.3
Consolidated Consent SSD8392	Sch. 3 Clause 14 and 14A	<p>The Applicant must minimise the noise generated by any construction, upgrading or decommissioning activities on site in accordance with the best practice requirements outlined in the Interim Construction Noise Guideline (DECC, 2009), or its latest version.</p>	<p>Refer to Section 6.10.</p> <p>Note, Clause 14A is only applicable for the operational portion of this stage of the Development and will be covered under a separate Operational Environmental Management Plan</p>
Consolidated Consent SSD8392	Sch. 3 Clause 15	<p>The Applicant must minimise the dust generated by the development.</p>	Refer to Section 6.6
Consolidated Consent SSD8392	Sch. 3 Clause 16	<p>The Applicant must:</p> <p>(a) minimise the off-site visual impacts of the development, including the potential for any glare or reflection from the solar panels;</p>	Refer to Section 6.13

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			<p>(b) ensure the visual appearance of all ancillary infrastructure (including paint colours) blends in as far as possible with the surrounding landscape; and</p> <p>(c) not mount any advertising signs or logos on site, except where this is required for identification or safety purposes.</p>	
Consolidated Consent SSD8392	Sch. Clause 17	3	<p>The Applicant must:</p> <p>(a) minimise the off-site lighting impacts of the development; and</p> <p>(b) ensure that any external lighting associated with the development:</p> <ul style="list-style-type: none"> <li>• is installed as low intensity lighting (except where required for safety or emergency purposes);</li> <li>• does not shine above the horizontal; and</li> <li>• complies with Australian Standard AS4282 (INT) 1997 – Control of Obtrusive Effects of Outdoor Lighting, or its latest version</li> </ul>	Refer to Section 6.13
Consolidated Consent SSD8392	Sch. Clause 18	3	<p>Prior to the commencement of construction, the Applicant must salvage Aboriginal heritage item number AFT01 and transfer to the Griffith Local Aboriginal Land Council, in accordance with the Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales (DECCW, 2010), or its latest version.</p>	This condition has been satisfied as part of the previous stage of development associated with the construction of the DPSF.
Consolidated Consent SSD8392	Sch. Clause 19	3	<p>If human remains are discovered on site, then all work surrounding the area must cease, and the area must be secured. The Applicant must notify the NSW Police and Heritage NSW as soon as possible following the discovery, and work must not recommence in the area until this is authorised by Heritage NSW.</p>	<p>CPP are to comply with the requirements of the Signal Energy – Darlington Point Solar Farm – Chance Finds Protocol – March 2019.</p> <p>Refer to section 6.11.2 and Appendix C.</p>
Consolidated Consent SSD8392	Sch. Clause 20	3	<p>Prior to the commencement of construction, the Applicant must prepare a Chance Finds Protocol for the development in consultation with the Aboriginal stakeholders, and to the satisfaction of Heritage NSW.</p> <p>Following Heritage NSW's approval, the Applicant must implement the Chance Finds Protocol.</p>	<p>CPP are to comply with the requirements of the Signal Energy – Darlington Point Solar Farm – Chance Finds Protocol – March 2019.</p> <p>Refer to section 6.11.2 and Appendix C.</p>
Consolidated Consent SSD8392	Sch. Clause 21	3	<p>The Applicant must ensure that the development does not cause any water pollution, as defined under Section 120 of the POEO Act</p>	Refer to section 6.7

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Consolidated Consent SSD8392	Sch. 3 Clause 22	<p>The Applicant must:</p> <p>(a) minimise any soil erosion associated with the construction, upgrading or decommissioning of the development in accordance with the relevant requirements in the Managing Urban Stormwater: Soils and Construction (Landcom, 2004) manual, or its latest version;</p> <p>(b) ensure the solar panels and ancillary infrastructure are designed, constructed and maintained to avoid causing any erosion on site; and</p> <p>(c) implement appropriate flood management practices to ensure post-development flows from the site are limited to pre-development flows for all storms up to and including the 90-year Average Recurrence Interval event.</p>	<p>Refer to section 6.2.5</p> <p>Refer to Erosion and Sediment Control Plan (ESCP) in Appendix F</p>
Consolidated Consent SSD8392	Sch. 3 Clause 23	<p>The Applicant must:</p> <p>(a) minimise the fire risks of the development;</p> <p>(b) ensure that the development:</p> <ul style="list-style-type: none"> <li>• includes defensible space as outlined in the EIS, that permits unobstructed vehicle access to the site;</li> <li>• manages the defensible space as an Asset Protection Zone;</li> <li>• complies with the relevant asset protection requirements in the RFS's Planning for Bushfire Protection 2019 (or equivalent) and Standards for Asset Protection Zones;</li> <li>• is suitably equipped to respond to any fires on site including provision of a 20,000-litre water supply tank fitted with a 65mm Storz fitting located adjacent to the internal access road;</li> </ul> <p>(c) assist the RFS and emergency services as much as practicable if there is a fire in the vicinity of the site; and</p> <p>(d) notify the relevant local emergency management committee following construction of the development, and prior to the commencement of operations.</p>	<p>Refer to Emergency Management Plan – EMP-11291</p> <p>Refer to Fire Safety Study</p> <p>Refer to Primary Design – Basis of Design Report</p> <p>Refer to Section 14 and Section 6.15</p>
Consolidated Consent SSD8392	Sch. 3 Clause 24	<p>At least one month prior to the construction of the battery storage facility (excluding pre-construction minor works), unless otherwise agreed by the Planning Secretary, the Applicant must prepare a Fire Safety Study of the development, in consultation with RFS, and to the satisfaction of FRNSW and the Planning Secretary. The study must:</p> <p>(a) be consistent with the:</p>	<p>Refer to Fire Safety Study</p>



		<ul style="list-style-type: none"> <li>• Department's Hazardous Industry Planning Advisory Paper No. 2, 'Fire Safety Study' guideline;</li> <li>and</li> <li>• New South Wales Government's Best Practice Guidelines for Contaminated Water Retention and Treatment Systems; and</li> </ul> <p>(b) describe the final design of the battery storage facility. Construction of the battery storage facility, other than pre-construction minor works, must not commence until the Planning Secretary has approved the Fire Safety Study. Following the Planning Secretary's approval, the Applicant must implement the measures described in the Fire Safety Study.</p>	
Consolidated Consent SSD8392	Sch. 3 Clause 25	<p>The Applicant must store and handle all chemicals, fuels and oils used on-site in accordance with:</p> <ul style="list-style-type: none"> <li>(a) the requirements of all relevant Australian Standards; and</li> <li>(b) the NSW EPA's Storing and Handling of Liquids: Environmental Protection – Participants Handbook if the chemicals are liquids.</li> </ul> <p>In the event of an inconsistency between the requirements listed from (a) to (b) above, the most stringent requirement must prevail to the extent of the inconsistency.</p>	Refer to Section 6.8 and 6.9
Consolidated Consent SSD8392	Sch. 3 Clause 26	<p>Prior to the commissioning of development, the Applicant must develop and implement a comprehensive Emergency Plan and detailed emergency procedures for the development, in consultation with FRNSW and the RFS. The Applicant must keep two copies of the plan on-site in a prominent position adjacent to the site entry points at all times. The plan must:</p> <ul style="list-style-type: none"> <li>(a) be consistent with the Department of Planning's Hazardous Industry Planning Advisory Paper No. 1, 'Emergency Planning' and RFS's Planning for Bushfire Protection 2019 (or equivalent);</li> <li>(b) identify the risks and hazards and detailed measures for the development to prevent or mitigate fires igniting;</li> <li>(c) include procedures that would be implemented if there is a fire on-site or in the vicinity of the site;</li> <li>(d) list works that should not be carried out during a total fire ban;</li> </ul>	<p>Refer to Emergency Management Plan – 11291-EMP</p> <p>Refer to Fire Safety Study</p> <p>Refer to Primary Design – Basis of Design Report</p> <p>A separate operational EMP will be developed prior to commissioning of the Project</p>

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		<p>(e) include availability of fire suppression equipment, access and water;</p> <p>(f) include procedures for the storage and maintenance of any flammable materials;</p> <p>(g) detail access provisions for emergency vehicles and contact details for both a primary and alternative site contact who may be reached 24/7 in the event of an emergency;</p> <p>(h) include a figure showing site infrastructure, Asset Protection Zone and the fire fighting water supply;</p> <p>(i) include location of hazards (physical, chemical and electrical) that may impact on fire fighting operations and procedures to manage identified hazards during fire fighting operations;</p> <p>(j) include details of the location, management and maintenance of the Asset Protection Zone and who is responsible for the maintenance and management of the Asset Protection Zone;</p> <p>(k) include bushfire emergency management planning;</p> <p>(l) include details of how RFS would be notified, and procedures that would be implemented in the event that:</p> <ul style="list-style-type: none"> <li>• there is a fire on-site or in the vicinity of the site;</li> <li>• there are any activities on site that would have the potential to ignite surrounding vegetation; or</li> <li>• there are proposed activities to be carried out during a bushfire danger period; and</li> </ul> <p>(m) include details on how the battery storage facility and sub-systems can be safely isolated in an emergency.</p> <p>The Applicant must implement the Emergency Plan for the duration of the development</p>	
Consolidated Consent SSD8392	Sch. 3 Clause 27	<p>The Applicant must:</p> <p>(a) minimise the waste generated by the development;</p> <p>(b) classify all waste generated on site in accordance with the EPA's Waste Classification Guidelines 2014 (or its latest version);</p> <p>(c) store and handle all waste on site in accordance with its classification;</p> <p>(d) not receive or dispose of any waste on site; and</p> <p>(e) remove all waste from the site as soon as practicable, and ensure it is sent to an appropriately licensed waste facility for disposal.</p>	Refer to Section 6.4





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<p>Consolidated Consent SSD8392</p>	<p>Sch. 3 Clause 28</p>	<p>Prior to the commencement of construction, the Applicant must prepare an Accommodation and Employment Strategy for the development in consultation with Council, and to the satisfaction of the Planning Secretary. This strategy must:</p> <ul style="list-style-type: none"> <li>(a) propose a strategy to facilitate the accommodation of the workforce associated with the development;</li> <li>(b) investigate options for prioritising the employment of local workers for the construction and operation of the development where feasible; and</li> <li>(c) include a program to monitor and review the effectiveness of the strategy over the life of the development.</li> </ul> <p>Following the Planning Secretary's approval, the Applicant must implement the strategy.</p>	<p>Refer to Accommodation and Employment Strategy – AES-11291</p>
<p>Consolidated Consent SSD8392</p>	<p>Sch. 4 Clause 1</p>	<p>Prior to the commencement of construction, the Applicant must prepare an Environmental Management Strategy for the development to the satisfaction of the Planning Secretary. This strategy must:</p> <ul style="list-style-type: none"> <li>(a) provide the strategic framework for environmental management of the development;</li> <li>(b) identify the statutory approvals that apply to the development;</li> <li>(c) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the development;</li> <li>(d) describe the procedures that would be implemented to: <ul style="list-style-type: none"> <li>• keep the local community and relevant agencies informed about the operation and environmental performance of the development;</li> <li>• receive, handle, respond to, and record complaints;</li> <li>• resolve any disputes that may arise;</li> <li>• respond to any non-compliance;</li> <li>• respond to emergencies; and</li> </ul> </li> <li>(e) include: <ul style="list-style-type: none"> <li>• references to any plans approved under the conditions of this consent; and</li> <li>• a clear plan depicting all the monitoring to be carried out in relation to the development.</li> </ul> </li> </ul> <p>Following the Planning Secretary's approval, the Applicant must implement the Environmental Management Strategy.</p>	<p>This CEMP:</p> <ul style="list-style-type: none"> <li>(a) Section 2</li> <li>(b) Section 6 and Section 7</li> <li>(c) Section 10</li> <li>(d) Section 11.3.2, Section 11.3.3, Section 11.3.4, Section 11.17 Edify Community Consultation and Engagement Plan</li> <li>(e) Section 2, Section 15.1</li> </ul>

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Consolidated Consent SSD8392	Sch. Clause 2 4	<p>The Applicant must:</p> <p>(a) update the strategies, plans or programs required under this consent to the satisfaction of the Planning Secretary prior to carrying out any upgrading or decommissioning activities on site; and</p> <p>(b) review and, if necessary, revise the strategies, plans or programs required under this consent to the satisfaction of the Planning Secretary within 1 month of the:</p> <ul style="list-style-type: none"> <li>• submission of an incident report under condition 4 of Schedule 4;</li> <li>• submission of an audit report under condition 6 or 7 of Schedule 4; or</li> <li>• any modification to the conditions of this consent.</li> </ul>	Refer to section 3.2
Consolidated Consent SSD8392	Sch. Clause 3 4	<p>With the approval of the Planning Secretary, the Applicant may submit any strategy, plan or program required by this consent on a progressive basis. To ensure the strategies, plans or programs under the conditions of this consent are updated on a regular basis, the Applicant may at any time submit revised strategies, plans or programs to the Planning Secretary for approval.</p> <p>With the agreement of the Planning Secretary, the Applicant may prepare any revised strategy, plan or program without undertaking consultation with all parties referred to under the relevant condition of this consent.</p>	Refer to Section 2 and Section 3.2
Consolidated Consent SSD8392	Sch. Clause 4 4	<p>The Planning Secretary must be notified in writing via the Major Projects website immediately after the Applicant becomes aware of an incident. The notification must identify the development (including the development application number and the name of the development if it has one) and set out the location and nature of the incident. Subsequent notification requirements must be given, and reports submitted in accordance with the requirements set out in Appendix 3.</p>	Refer to section 11.6 and Section 16.1 for incident notification. Notification from CPP will be made to Tesla (for the BESS)/Transgrid for the (substation and connections) promptly and Tesla (for the BESS) and Transgrid (for the substation and connections) will forward onto the required parties.
Consolidated Consent SSD8392	Sch. Clause 5 4	<p>The Planning Secretary must be notified in writing via the Major Projects website within seven days after the Applicant becomes aware of any non-compliance.</p> <p>5A. A non-compliance notification must identify the development and the application number for it, set out the condition of consent that the development is non-compliant with, the way in which it</p>	Refer to section 11.6 and Section 16.1 for incident notification. Notification from CPP will be made to Tesla (for the BESS)/Transgrid for the (substation and connections) promptly and Tesla (for the BESS) and Transgrid (for the substation and connections) will forward onto the required parties.

		<p>does not comply and the reasons for the non-compliance (if known) and what actions have been, or will be, undertaken to address the non-compliance.</p> <p>5B. A non-compliance which has been notified as an incident does not need to also be notified as a noncompliance.</p>	
Consolidated Consent SSD8392	Sch. 4 Clause 7A to 7E	<p>Independent Audits of the development of the battery storage facility must be conducted and carried out in accordance with the Independent Audit Post Approval Requirements (2020) to the following frequency:</p> <p>(a) within 3 months of commencing construction; and</p> <p>(b) within 3 months of commencement of operations.</p> <p>7A. Proposed independent auditors must be agreed to in writing by the Planning Secretary prior to the commencement of an Independent Audit.</p> <p>7B. The Planning Secretary may require the initial and subsequent Independent Audits to be undertaken at different times to those specified in condition 7 of Schedule 4 upon giving at least 4 weeks' notice to the Applicant of the date upon which the audit must be commenced.</p> <p>7C. In accordance with the specific requirements in the Independent Audit Post Approval Requirements (2020), the Applicant must:</p> <p>(a) review and respond to each Independent Audit Report prepared under condition 7 of Schedule 4 of this consent, or condition 7B of Schedule 4 where notice is given by the Planning Secretary</p> <p>(b) submit the response to the Planning Secretary; and</p> <p>(c) make each Independent Audit Report, and response to it, publicly available within 60 days of submission to the Planning Secretary, unless otherwise agreed by the Planning Secretary.</p> <p>7D. Independent Audit Reports and the Applicant's response to audit findings must be submitted to the Planning Secretary within 2 months of undertaking the independent audit site inspection as outlined in the Independent Audit Post Approvals Requirements (2020) unless otherwise agreed by the Planning Secretary.</p>	Refer to section 15.4

		7E. Notwithstanding the requirements of the Independent Audit Post Approvals Requirements (2020), the Planning Secretary may approve a request for ongoing independent operational audits to be ceased, where it has been demonstrated to the Planning Secretary's satisfaction that independent operational audits have demonstrated operational compliance.	
Consolidated Consent SSD8392	Sch. 4 Clause 8	<p>The Applicant must:</p> <p>(a) make the following information publicly available on its website as relevant to the stage of the development:</p> <ul style="list-style-type: none"> <li>• the EIS;</li> <li>• the final layout plans for the development;</li> <li>• current statutory approvals for the development;</li> <li>• approved strategies, plans or programs required under the conditions of this consent;</li> <li>• the proposed staging plans for the development if the construction, operation or decommissioning of the development is to be staged;</li> <li>• how complaints about the development can be made;</li> <li>• a complaints register;</li> <li>• compliance reports;</li> <li>• any independent environmental audit, and the Applicant's response to the recommendations in any audit; and</li> <li>• any other matter required by the Secretary; and</li> </ul> <p>(b) keep this information up to date.</p>	<p>Refer to Section 11.3.</p> <p>CPP to provide information to Tesla and Transgrid as required and this information will be uploaded to the project website by Edify.</p>
Consolidated Consent SSD8392	Appendix 3	<p>1. A written incident notification addressing the requirements set out below must be submitted to the Planning Secretary via the Major Projects website within seven days after the Applicant becomes aware of an incident. Notification is required to be given under this condition even if the Applicant fails to give the notification required under condition 4 of Schedule 4 or, having given such notification, subsequently forms the view that an incident has not occurred.</p> <p>2. Written notification of an incident must:</p> <p>a. identify the development and application number;</p>	<p>Refer to section 11.6 and Section 16.1 for incident notification. Notification from CPP will be made to Tesla (for the BESS)/Transgrid for the (substation and connections) promptly and Tesla (for the BESS) and Transgrid (for the substation and connections) will forward onto the required parties.</p>

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		<p>b. provide details of the incident (date, time, location, a brief description of what occurred and why it is classified as an incident);</p> <p>c. identify how the incident was detected;</p> <p>d. identify when the applicant became aware of the incident;</p> <p>e. identify any actual or potential non-compliance with conditions of consent;</p> <p>f. describe what immediate steps were taken in relation to the incident;</p> <p>g. identify further action(s) that will be taken in relation to the incident; and</p> <p>h. identify a project contact for further communication regarding the incident.</p> <p>3. Within 30 days of the date on which the incident occurred or as otherwise agreed to by the Planning Secretary, the Applicant must provide the Planning Secretary and any relevant public authorities (as determined by the Planning Secretary) with a detailed report on the incident addressing all requirements below, and such further reports as may be requested.</p> <p>4. The Incident Report must include:</p> <p>a. summary of the incident;</p> <p>b. outcomes of an incident investigation, including identification of the cause of the incident;</p> <p>c. details of the corrective and preventative actions that have been, or will be, implemented to address the incident and prevent recurrence; and</p> <p>d. details of any communication with other stakeholders regarding the incident.</p>	
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## 6.2 Soil Management

CPP engaged Douglas Partners to identify potential sources of contamination (if any) and determine the potential contaminants of concern, identify areas of potential contamination, identify human and ecological receptors associated with the proposed development and identify potentially affected media (soil, groundwater, ground gas etc.).

Analytical results of soil samples were all within the adopted health-based (i.e. HIL-D / HSL-D) and management limits for commercial/industrial land use. The analytical results were all within the adopted ecological based limits for commercial / industrial land use.

Refer to Report on Preliminary Site Investigation (Contamination) Proposed Substation, Underground Cable and Battery Energy Storage Yard 94058.02.R.002.Rev0.

Douglas Partners considers that the site is suitable for the proposed substation and battery energy storage yard use and for permitted uses under the current site zoning, from a site contamination perspective, subject to the following measures during any future development works:

- A Construction Environment Management Plan should be prepared prior to construction including an 'unexpected finds protocol' (i.e. asbestos in fill, buried waste or hydrocarbon affected soils including staining and odours and evidence of heavy pesticide use) and implemented during potential future site works.

## 6.2.1 Soil Identification and Reuse

- The Project and Site Manager will conduct a soil identification and reuse assessment at the commencement of the project.
- This assessment will be documented in the Waste Management and Minimisation Assessment.

### 6.2.1.1 Unexpected Finds Protocol

In the event material excavated contains unexpected contaminants works shall cease immediately and the Site Manager shall be notified immediately.

Signs of potential contamination include:

- Presence of buried drums, chemical containers or dumped materials in the area (including asbestos, rubble and construction waste)
- Visible appearance of contaminated soil, discolouration or staining of soil and bare soil patches
- Unhealthy vegetation
- Unusual odours originating from soil (fuels, solvents, rotten egg gas)
- Oil / chemical sheen on water

If any of these are detected during excavation works, stop and follow the process set out in Figure 11.

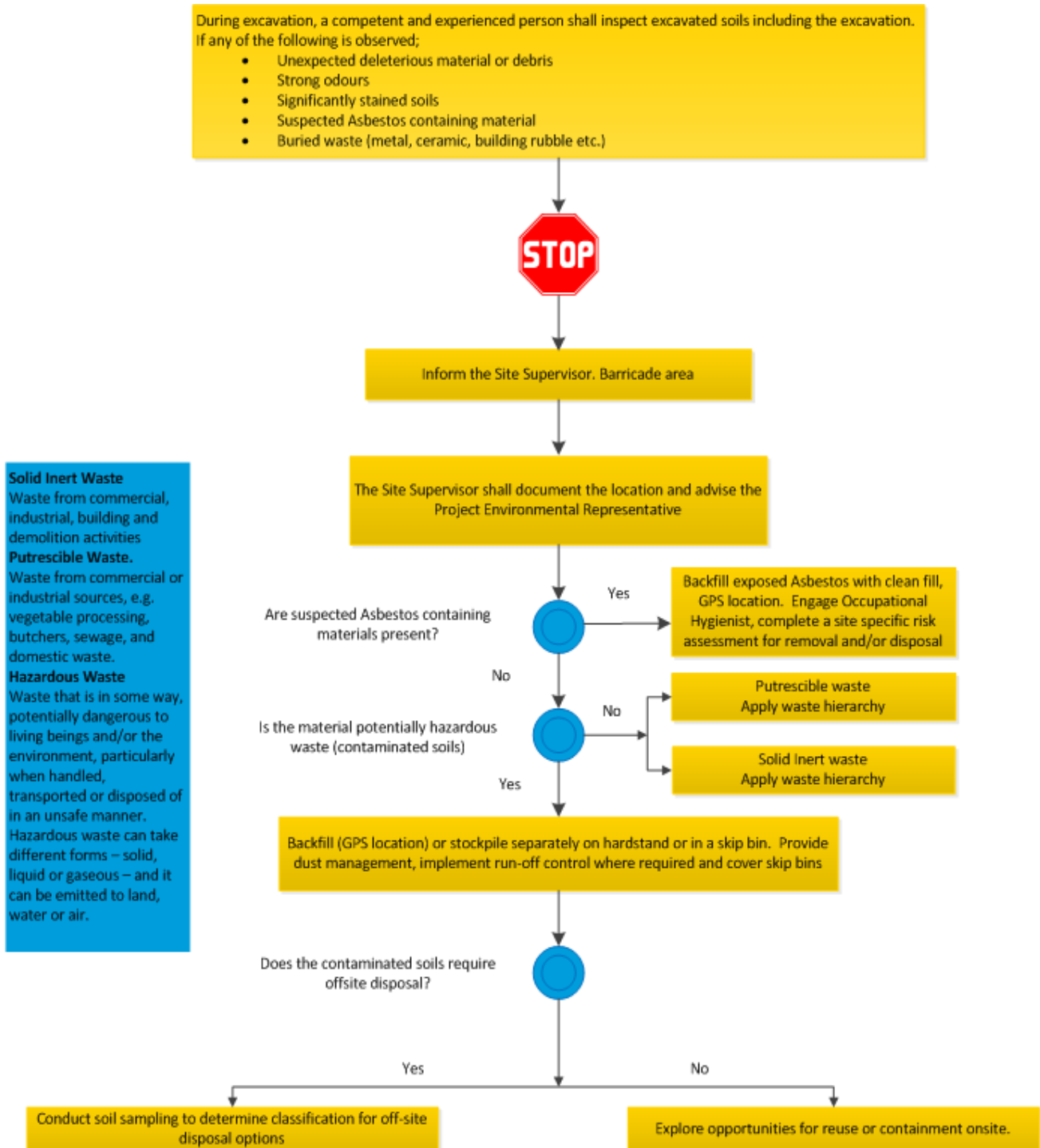


Figure 11 Soil Unexpected Finds Protocol

Where contaminated soil is suspected, a soil investigation must be carried out to classify the soils and determine management of the material.

This may involve the following;

- An intrusive investigation (soil sampling and analysis to determine the Waste Classification.
- Contamination validation report
- Geotechnical report

Where soil testing is required, sampling will be undertaken in accordance with AS4482.1 2005 & AS4482.2: 1999

Soil sampling must only be carried out by an appropriately qualified consultant.

The laboratory analysis is determined by assessing the past use of the site and any known contaminants present in the soil.

## 6.2.2 Soil Reuse

The Site Manager will ensure that:

- Surface vegetation is removed by blading off, by scarification and raking;
- Stripping will be undertaken by the excavator standing on the surface of the topsoil, digging the topsoil to its maximum depth and loading into site or off-site transport vehicles;
- Topsoil is stripped to a thickness defined by depth below the surface and/or a distinct colour change;
- At the planning stage of this project, soil stockpile requirements are identified using the *Erosion and Sediment Control Plan*.
- Topsoil recovered from the surface strip will be utilised for dressing of batters and drains, and also rehabilitation of disturbed areas.
- Subsoil cut material will be utilised in filling works where technically feasible and suitable.

## 6.2.3 Soil and Stockpile Management

Stockpiles shall be managed in accordance to the risks arising from:

- dust (refer section 6.6.3 of this Plan);
- soil erosion (refer section 6.2.5 of this Plan);
- weed management (refer section 6.5 of this Plan);
- visual amenity.

CPP conducts regular inspections of all stockpiles and manages them in accordance with the risk factors above.

The Site manager will ensure that:

- At the commencement of the project assess if spoil is to be stockpiled and reused or removed from site;
- Strip and stockpile vegetation separately;
- Strip and stockpile topsoil separately from subsoil or overburden for later rehabilitation of the site;
- Stockpiles will have sediment fencing established downslope and will be identified in *Erosion and Sediment Control Plan*;



- Ensure stockpiles are not within five metres of significant vegetation, concentrated water flows, roads or other water flow areas.

## 6.2.4 Spoil Transport

If excavated and/or stockpiled spoil is to be removed from site:

- It should be assessed in accordance with NSW EPA (2014) Waste Classification Guidelines – Part 1: Classifying Waste;
- It will be placed in trucks and removed to a licenced disposal depot;
- All loads will be covered prior to leaving site;
- Prior to leaving site all trucks will report the Site Office.;
- The truck and its load will be inspected by the Site Manager or delegate.;
- Records of this inspection will be recorded in *Waste Disposal Register*.

## 6.2.5 Developing Erosion and Sediment Control Plans

The Site Manager will ensure that:

- At the planning stage of this project, erosion and sediment control requirements will be identified and planned for using the *Erosion and Sediment Control Plan* in Appendix F;
- When developing erosion and sediment control plans the project is subdivided into sections based upon the size and separate catchment areas that will be affected by land disturbance;
- An *Erosion and Sediment Control Plan* is completed for each section and must be completed and implemented prior to initiating works pertinent to the plan.

### NOTE:

Erosion control measures either protect or reinforce the soil surface/subsurface from erosion forces or convey run off in a non-erosive way.

Sediment control measures capture eroded soil particles by either slowing the velocity of the water so that the sediment can settle out by gravity.

Sediment is only generated when soil erosion occurs, therefore design, installation and construction of effective erosion control measures should be the first priority followed by good housekeeping once land disturbance work commences.

- *Erosion and Sediment Control Plan* should identify the following as a minimum:
  - access routes to and from the project;
  - crossings such as public and private roads and creeks;
  - land disturbance areas;
  - compound areas including facilities;
  - stockpile and storage areas;
  - dewatering mechanisms;
  - location of spill kits;

- no go areas/zones.

The following information will be utilised to determine installation requirements for erosion and sediment control measures:

- International Erosion and Sediment Control Association of Australia (IECA) – Erosion and Sediment Control – A Field Guide for Construction Site Managers;
- International Erosion and Sediment Control Association of Australia (IECA) – Drainage Control Techniques (Standard Drawings);
- Landcom – The Blue Book – Managing Urban Stormwater (MUS): Soils and Construction (See CPP Intranet for a copy).
- *Erosion and Sediment Control Plan* should be revised in the following situations:
  - construction program, scope of work or work methods change;
  - whenever the work methods and control structures are found to be ineffective;
  - following internal and external audits;
  - if directed to do so by the client or a regulatory authority.

## 6.2.6 Erosion and Sediment Control

The Site manager will ensure that:

- Sediment control devices will be identified in *Erosion and Sediment Control Plan* and installed parallel with the ground contours, immediately down slope of any areas where the natural ground surface will be disturbed;
- Where possible soil and material collected in erosion control or sediment collection structures will be reused to fill excavations or site restoration (unless contaminated);
- Machinery and vehicles are to remain on existing roads and access roads whenever possible;
- Movements will be further restricted during and immediately following wet weather to minimise disturbance to ground cover;
- Works will not be undertaken immediately prior to or during periods of high rainfall;
- Erosion and sediment collection structures will be inspected on a weekly basis and post storm and rainfall events;
- This inspection will be documented in *Weekly WHSE Inspection Form*.

### **Referenced Documents:**

FRM-G002 Waste Management and Minimisation Assessment

TMP-G001 Erosion and Sediment Control Plan

REG-S009 WHS Register/HSE Portal

FRM-S063 WHSE Inspection Form/HSE Portal

## 6.3 Flora and Fauna Management

### 6.3.1 Responsibilities

The Site / Project Manager will ensure that:

- Requirements to prevent impact to flora and fauna are identified and planned for at the planning stage of this project.
- As part of the assessment process client's documentation such as the EIS and other similar documentation will be reviewed by the Project and Site Manager.
- Pre-Clearance Survey Assessment will be utilised to identify areas of significance in relation to flora and fauna.
- Controls required to maintain these areas will also be identified.
- Native fauna will not be disturbed unless unavoidable for the purposes of the project.
- Where this is necessary, a specialist assessment of flora and fauna will be undertaken and appropriate controls to mitigate any impacts will be implemented.

### 6.3.2 Flora & Fauna Management

The DP BESS Site (as shown in Figures below) was assessed as part of the Development Application as having plant community type (PCT) of PCT 45 (Plains Grassland on Alluvial mainly clay soils in the Riverina Bioregion and NSW South Western Slopes) in moderate to good-moderate condition (Figure below). PCT 45 is not listed as an Endangered Ecological Community under the NSW BC Act or the Commonwealth EPBC Act.

During construction of the DPSF, the area that makes up Lot 1 DP 1249830 was used as a construction site office and laydown area to store construction materials and equipment before installation or use in the solar farm construction. As such, the area was cleared as planned and therefore there is minimal chance of interaction with flora and fauna. It shall be noted that this land has already been directly impacted with native vegetation permanently removed (complete loss of habitat) during the construction phase of the Darlington Point Solar Farm.

One record of a Grey-crowned Babbler (listed as Vulnerable under the NSW TSC Act) was mapped in the vicinity of Lot 1 DP 1249830 as part of the EIS's Biodiversity Assessment. This threatened fauna species was found in the vegetation patch immediately to the west of the DP BESS site, in PCT 16, described as Black Box grassy open woodland wetland of rarely flooded depressions in South-Western NSW, in moderate to good – moderate condition. PCT 16 is not listed as an Endangered Ecological Community under the NSW BC Act or the Commonwealth EPBC Act. This PCT and any associated fauna species will be avoided, with the development area for the location of the DP BESS not encroaching on the vegetation.

One record of a Superb Parrot (listed as vulnerable under both the BC Act and EPBC Act) was mapped in the vicinity of Lot 1 DP 1249830 as part of the EIS's Biodiversity Assessment. This threatened fauna species was found in the vegetation patch immediately to the west of the DP BESS site. This PCT and any associated fauna species will be avoided, with the development area for the location of the DP BESS not encroaching on the vegetation.

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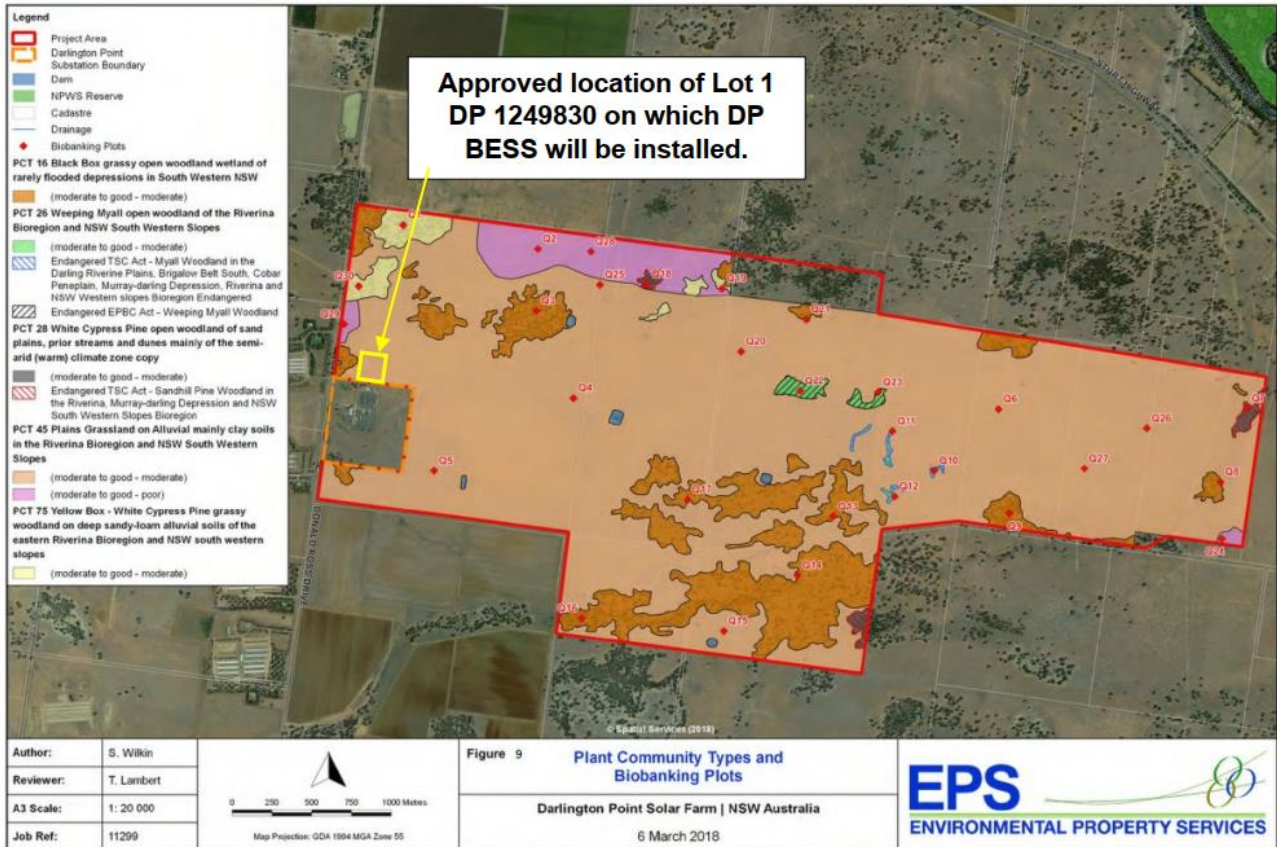


Figure 12 Development Plant Community Types



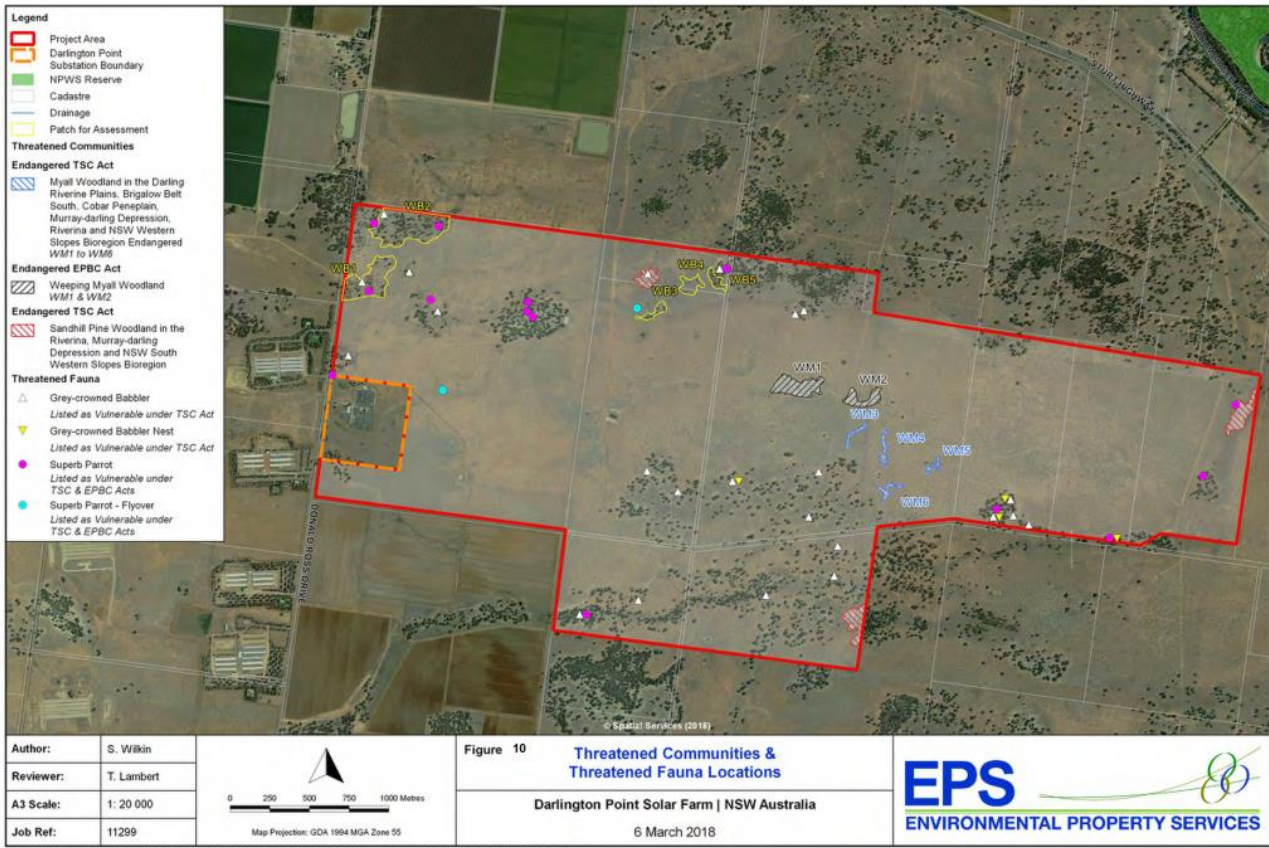


Figure 13 Development Threatened Flora and Fauna Locations

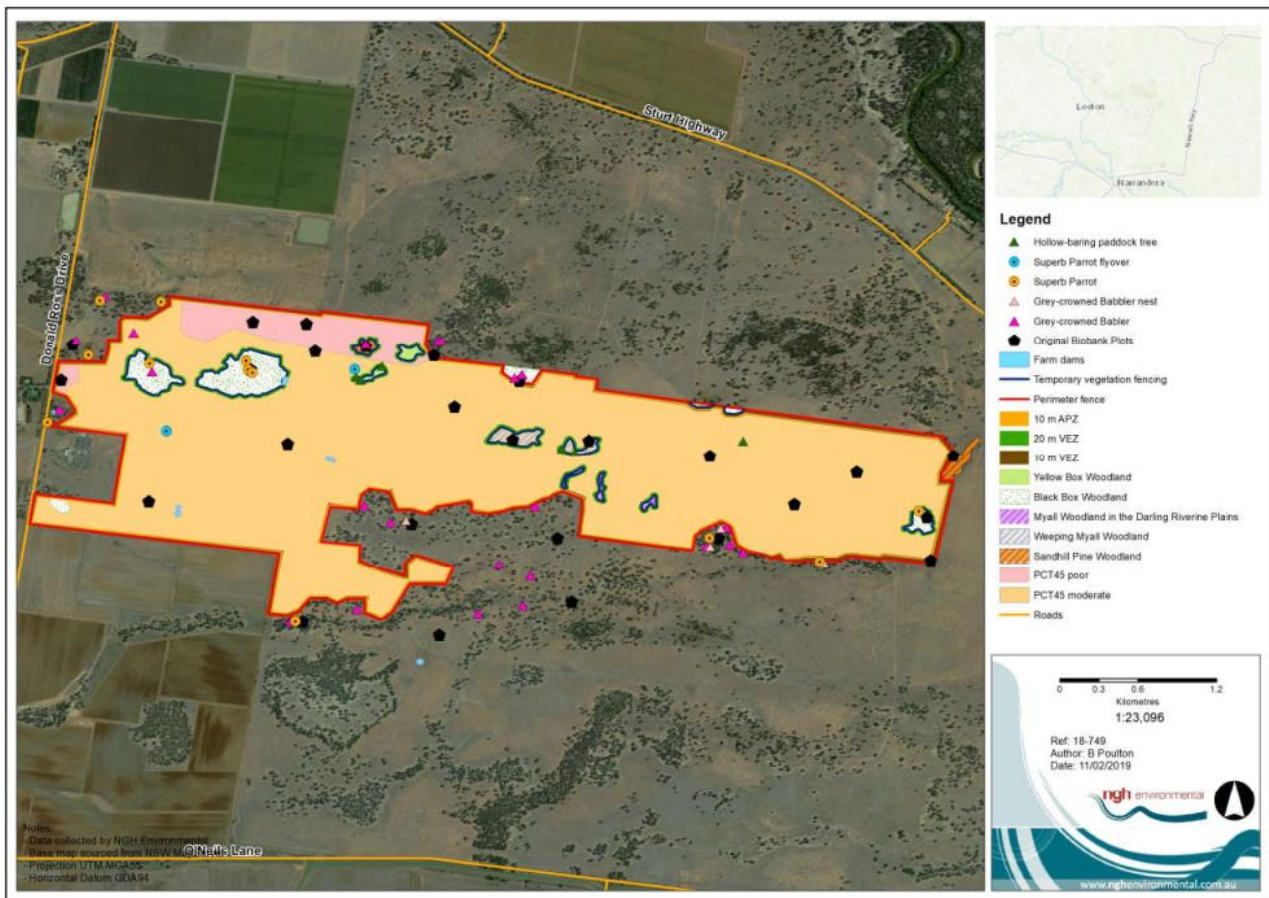


Figure 14 Development Threatened Flora and Fauna Mapping

The Site Manager will ensure that:

- Appropriate exclusion zones are established by means of fencing/flagging and signage of these areas and the communication of these area during the site induction;
- Machinery and vehicles remain on existing access tracks to minimize disturbance to any existing ground cover;
- Any ground cover disturbed as a result of the works is to be restored as soon as practicable with appropriate perennial species.
- Native fauna will not be intentionally disturbed as part of the works, and if the likelihood of such disturbance arises the advice of the client's Environmental Representative will be sought prior to works commencing;
- All personnel entering the site will be made aware during site induction training about the presence of potential threatened species and endangered ecological communities;
- If during the course of the project CPP personnel become aware of the presence of threatened species, populations or endangered ecological communities or their habitats, that were not identified and which are likely to be affected by the activity the following will steps will be followed:
  - immediately cease work likely to affect the threatened species, populations or endangered ecological communities or their habitats;



- inform the relevant statutory authority as soon as practicable by phone, electronically or in writing;
- do not recommence work likely to affect the threatened species, populations or endangered ecological communities or their habitats until receiving written advice from the relevant authority;

**Referenced Documents:**

FRM-G008 Pre-Clearance Assessment Survey

### 6.3.2.1 'No go zones'

Sensitive vegetation will be protected by exclusion fencing and signage. A 'No go zone' has been established around the drip line any external and internal woodland vegetation to ensure that sensitive vegetation is not impacted accidentally. Exclusion fencing defines vegetation to be retained and beyond that a 'No go zone' has been established to mitigate impacts from construction activities.

For the DP BESS site woodland vegetation is limited to the western perimeter of the site. Note, there are a small number of juvenile trees located within the Lot boundary immediately adjacent to the western perimeter fence. A 'No go zone' has been established around these trees to ensure inadvertent disturbance is avoided shown in Figure 15.



Figure 15 BESS site 'No go zone'

## 6.4 Waste Management and Minimisation

The Project has the potential to utilise a range of different resources and generate a number of different waste types throughout the construction phase.

Anticipated waste streams include:

- green waste generated during vegetation trimming and removal on site. Topsoil from disturbed areas will be stored for use in future rehabilitation activities onsite.
- excess spoil from excavation works



- general construction waste such as off-cuts, packaging and excess construction material (such as concrete, timber, plastic and metal)
- empty cable drums
- waste oils, greases and lubricants from maintenance of construction plant and equipment
- domestic waste from site personnel including food scraps, glass and plastic bottles, paper and plastic containers.

All sewage waste generated during construction will be contained within sewage holding tanks and will be removed from site on a regular fortnightly pump out and disposed of at a licensed waste facility.

Operational sewage will be contained within a sewage holding tanks and will be removed from site on a regular pump out as scheduled by the O&M provider and disposed of at a licensed waste facility. These tanks will be fitted with high level alarms.

- This waste management and minimisation of the Project will adopt the following principles shown in Table 3:

Table 3 Waste Management Principles

Priority	Strategy	Action
1	Avoidance as top priority	Action to reduce waste generated by industry and government
2	Resource Recovery	Reuse, reprocessing, recycling and energy recovery
3	Disposal as last resort	Environmentally responsible management of disposal

## 6.4.1 Responsibilities

- The Site Manager will ensure that:
  - methods for waste management and minimisation are identified and planned for at the planning stage of the project using the *Waste Management and Minimisation Assessment* in Appendix G.
  - waste is classified, stored and handled in accordance with the EPA's Waste Classification Guidelines 2014 (or its latest version).
  - There is no receiving or disposing of waste on site.
  - Waste will be removed from the site as soon as practicable, and ensure it is sent to an appropriately licensed waste facility for disposal.
  - The mitigation measures detailed below are implemented and monitored.
  - Records of all waste disposed from site are maintained.
  - Conduct routine checks for litter and rubbish on site including along access tracks and roads and remove to appropriate disposal facilities as part of the Environmental Inspection Checklist.

## 6.4.2 Waste Tracking

All wastes from this project will be tracked using *Waste Disposal Register* shown in Figure 16.

This register will identify the following as a minimum:



- Appropriately designated/designed facilities to handle all identified waste streams will be implemented including all necessary segregation, storage and spill response requirements.
- Waste will be segregated into different waste streams at all sites, offices and depots to minimise the amount of waste going to landfill.
- Waste management/segregation requirements will be communicated to all personnel through inductions, pre-starts, toolbox and training.
- Putrescible wastes will be sufficiently enclosed (baled/wrapped, composted etc.) for odour control
- No controlled waste will be comingled with uncontrolled waste. No mixing of recyclables and non-recyclables shall occur where practicable.
- To minimise packaging wastes and storage containers, supply materials will be purchased in bulk wherever practicable. Packaging and storage containers shall be re-used or recycled wherever practicable.
- Unused products, materials and empty containers will be returned to suppliers wherever practicable or through an industry disposal programs.
- Materials such as wooden pallets and packing materials that can be recycled will wherever practical be returned to the supplier or removed by a commercial waste management subcontractor for recycling or reuse.
- Off-site non-recyclables and recyclables will be removed by a commercial waste management subcontractor to an approved facility.
- A waste recycling program for office waste will be implemented at Project site. Recycling bins for recyclable wastes will be also maintained at all site yards.
- All wastes will be removed by a licensed waste contractor. Waste will be collected and segregated onsite and either reused, recycled or disposed of in an appropriate manner at licensed facilities as per State/Territory Regulatory Requirements
- No waste will be burnt or buried on-site
- An appropriately designed and designated wash area for concrete wash out will be installed to prevent discharge of pollutants to ground and/or water. Once the pit is full the hardened waste concrete will be recycled or disposed.
  - The concrete washout area must be constructed to avoid ingress by water runoff from site i.e. use of diversion berms.
  - Prior to forecasted rainfall the concrete washout area must be protected from rainwater ingress to avoid overflowing by means of covering with tarp or similar.
- Site-specific authorisation may be required for the installation and operation of any onsite sewage facility. Sewage facilities must be designed and operated in accordance with the applicable State/Territory regulations.
- Sewage or grey-water wastes will not be discharged into watercourses or to ground unless there is regulatory approval(s) to do so. Sewage and grey-water waste from flushable toilets and potable water facilities will be contained in an approved holding tanks or ablution tanks. Portable toilets will be located at strategic locations away from any watercourse or drainage channels. All toilet and sewage holding tanks will be regularly serviced and pumped out by a waste management contractor.
- Wastes will be inspected on a daily basis to ensure that any materials which may cause land and/or water contamination or create odour problems are dealt with in a timely manner.

- Where required Soil sampling will only be carried out by a suitably qualified person.
- All records of waste tracking, transport, analysis, disposal and destruction must be kept to comply with the relevant State/Territory regulations.

## 6.5 Weed Management

The existing topsoil will be stripped from the Project area as part of the earthworks phase and imported select fill will be used to create suitable surfaces for traversing vehicles and plant. Vehicles and plant will only traverse through formed access roads and surfaces on site.

### 6.5.1 Responsibilities

The Project / Site Manager will ensure that:

- Areas of significance in relation to weed management are identified prior to the commencement of the project;
- *Pre-Clearance Assessment Survey* will be utilised to document this assessment;
- As part of the assessment process client's documentation and other similar documentation will be reviewed;
- All plant, equipment and vehicles are to be cleaned down prior to arrival at site.

### 6.5.2 Mobile Plant

- All mobile plant required during the course of this project will arrive on site clean and free from mud, weeds etc.
- All mobile plant required will be inspected prior to entering using this project using *Mobile Plant Inspection Form*.

### 6.5.3 Wash Down

A wash down bay will not be available on site. All plant, equipment and vehicles are to be cleaned down prior to arrival at site.

If during the course of an inspection weed / seed contaminants are identified the equipment or plant will be prohibited from entering site.

### 6.5.4 Equipment

- A shovel to remove large clods of soil before washing down.
- A yard broom to remove loose sediment before washing down.
- A high-pressure water tanker or spray unit.
- Broom/dust pan for cleaning cabins.

**Note-**A Garden hose may be adequate for small wash downs.

## 6.5.5 Cleaning of Vehicles

- Place vehicle/machine in a safe position – stable and immobile.
- Stop engine, apply park brake, chock wheels and lower all implements or secure/chock them if they are required up for cleaning.
- Ensure the area is free of obstructions/objects that may cause injury (power lines etc.).
- Identify any points that require specific attention, e.g. behind guards and protective plates, radiators, spare tyres etc.
- Remove necessary guards/belly plates to access areas for cleaning.
- Identify areas that may require cleaning with compressed air shovel and / or broom rather than water in every instance.
- Clean under guards and underneath machinery/vehicle and then do the cabin, upper body and implements.
- Tool boxes and storage compartments may also require cleaning.
- Move vehicle/machine with caution.
- Avoid re-contamination, wash remaining mud etc off tyres/tracks.
- Carry out final inspection to ensure all areas have been cleaned.
- Replace guards.

## 6.5.6 General

There may be some potential for activities during the BESS Stage of the Development to spread weeds through the movements of heavy machinery and light vehicles, though movements are heavily restricted to a small and defined area of the overall Development land. And, as noted above, the BESS facility involves direct impact to vegetation cover creating a long-term ‘hardstand’ pad that is designed to prohibit incurrence of vegetation cover. However, should weeds be detected during construction and operation of the BESS facility the Weed Management Procedure will be implemented.

A detailed weed management procedure is provided in the Biodiversity Management Plan.

The Site Manager will ensure that:

- If mobile plant is particularly muddy (e.g. during periods of high rainfall) then the mud will also be scraped from the machinery, to ensure all soil and vegetable matter is removed;
- Excavated topsoil material that is likely to be infested with weeds/seeds is to be removed from the site and disposed of at an appropriately licensed waste disposal facility;
- All imported fill will be certified Virgin Excavated Natural Material;
- Imported blue gravel will be free from weeds and other organic matter that may be a source of weed propagation.

### **Referenced Documents:**

*FRM-G008 Pre-Clearance Assessment Survey*

*FRM-S123 Mobile Plant Inspection Form/HSE Portal*

## 6.6 Air Quality Management

### 6.6.1 Responsibilities

The Project / Site Manager will ensure that:

- Air quality requirements are determined at the commencement of this project using the WHSE Emergency Requirements Assessment Form.
- All reasonable and practicable measures to prevent or minimise the generation of dust from all construction activities.
- The site shall be continually visually monitored for excessive dust generation.
- All complaints / incidents regarding air quality are recorded and investigated.

### 6.6.2 Air Quality and Mobile Plant

The Site Manager will ensure that:

- Once mobile plant arrives on site mobile plant is inspected using Mobile Plant Inspection Form and if a risk assessment is required Plant Risk Assessment Checklist will be completed.
- Mobile plant movements shall be restricted to designated routes. Plant / machinery shall be turned off when not in use.
- The mobile plant will be registered and determined if the mobile plant is fit for purpose.
- Maintenance records (last service record as a minimum) are provided with plant.
- All vehicles and plant in operation shall be fitted with emission control devices and not left idling unnecessarily.
- Vehicles and equipment shall be regularly inspected for faults and excessive emissions.
- All plant and equipment not functioning normally (with respect to emissions – e.g. excessive smoke) shall be taken out of service immediately and/or repaired.
- All machinery shall be maintained as per the manufacturer's guidelines. Particular care shall be taken to ensure that all filters/emission control devices are replaced within the specified time.
- Vehicle journeys shall be optimised to reduce fuel consumption and emissions where possible or practicable.

### 6.6.3 Dust Suppression

- The work being carried out by CPP has a high element of both civil and bulk earthwork activities; therefore, there is a high potential for the generation of fugitive dust.
- This has been recognised and the dust suppression will be an important element of many earthwork activities.

## 6.6.4 Dust Mitigation Measures

- CPP will take all reasonable and practicable measures to prevent or minimise the generation of dust from all construction including:
  - Loose, uncovered areas of soil shall be stabilised as soon as possible following clearing.
  - Soils shall be stockpiled only when necessary and for short durations. Stockpile heights shall be kept to a minimum. Stockpiles which have potential to give rise to windblown dust shall be wetted.
  - Ensure all construction related stockpiles are regularly watered to prevent dust emissions during high wind conditions. If stockpiles are to be maintained for longer than 28 days, other management options including hydroseeding may be investigated to prevent dust erosion from these long term stockpiles. Stockpiled materials e.g. sand, aggregate, cut material, shall be stabilised to reduce dust generation
  - Topsoil shall be stockpiled separately and in stockpiles no higher than 2 metres.
  - Design stockpiles with slopes preferably no greater than 2:1 (horizontal: vertical).
  - Minimise the handling of stockpiles, number of stockpiles and the time of exposure.
  - Minimise or avoid dust-generating activities in dry and windy conditions.
  - Period of time between excavating and backfilling minimised where possible.
  - Any disturbed areas no longer required shall be rehabilitated, as soon as practicable, to promote soil stability and prevent dust generation.
  - Weather forecasts shall be examined to identify when conditions may contribute to dust emissions.
  - Vehicle speeds shall be restricted to minimise dust generation.
  - Dust suppression techniques shall be employed where material cannot be stabilised e.g. water carts, sprays, dust guards, wind breaks, binding chemicals or covers.
  - Trucks shall be kept clean to ensure that loose material being dislodged during road transport is minimised. If necessary, a “cattle grid” may be installed prior to the truck exiting a work or construction site to assist the removal of loose material.
  - Loads shall be covered wherever possible to ensure that materials do not generate dust whilst being transported.

## 6.6.5 Monitoring

- The site shall be continually visually monitored for excessive dust generation. This monitoring will be performed by the CPP Site Manager/HSE Advisor. The CPP Site Manager/HSE Advisor has the authority to cease works where sufficient controls are not implemented and excessive dust creation is present. In dry and windy conditions specific attention shall be taken to the monitoring of excessive dust generation.
- It shall be formally documented weekly on the Weekly HSE Inspection whether dust and air quality control measures being maintained.
- Following any nuisance dust complaint, a visual inspection of the area shall be undertaken and investigated.
- Any air quality issues shall be recorded on the Environmental Inspection Checklist.



- As required, air quality monitoring may be undertaken to investigate any ongoing complaints relating to environmental nuisance caused by construction dust and/or particulate matter. Monitoring may be carried out at a place(s) relevant to the potentially affected dust sensitive receptor.

## 6.6.6 Reporting

- All complaints / incidents regarding dust shall be reported and investigated in accordance with the Incident Management Procedure.
- All concerns/complaints shall be resolved in a timely manner, by considering all practicable means to mitigate air quality impacts.

### Referenced Documents:

FRM-S142 WHSE Emergency Requirements Assessment Form  
 FRM-S123 Mobile Plant Inspection Form/HSE Portal  
 FRM-S039 Plant Risk Assessment Checklist Template  
 REG-S009 WHSE Master Registers/HSE Portal

## 6.7 Water Management

Water management for the Project will be via onsite containment and management via an evaporation pond to manage the earthworks foot print runoff, and water pumped and filtered through sediment fencing, silt traps, grassed areas or similar to manage post rainfall dewatering of excavations and trenches. The Project will re-use this water on site for dust control and watering of re-vegetated areas or discharge on site.

As per the opportunity for improvement identified in Project Independent Environmental Audit, CPP were to develop procedures for the monitoring, testing, treatment and controlled discharge of water from the evaporation pond onsite.

The site sits on a very flat portion of land, with a gentle slope < 0.5% to the west. Therefore, minimal upstream drainage diversion requirements are anticipated, however, discharge to the east is proposed to be directed around to the west, into an evaporation style pond shown in Figure 17. The sizing of the pond is a nominal footprint, maximising available area to suit the available land.

The works are proposed to maintain existing catchment compositions. That is, the pre-developed breakup of catchments and their respective discharge locations will be comparable to post-development discharge patterns. In addition, the introduction of the evaporation pond is anticipated to manage the potential increase in the Project runoff volume. A review of the initial clearing works through to final earthworks profiles was reviewed. The worst scenario was considered to be final earthworks formation i.e. largest LS factor. These results are shown below:

REVISED UNIVERSAL SOIL LOSS EQUATION (RUSLE)  
 $A = R K LS P C$   
 $R = 164.74 (1.1177)^S / 50.6444$   
 WHERE  $S = 4.88 \text{ mm/hr (2YR, 6HR)}$   
 $R = 790$   
 $K = 0.05$   
 $LS = 0.31 \text{ (BASED ON 2\% SLOPE FOR 40m)}$   
 $P = 1.3$   
 $C = 1$   
 $A = 16 \text{ T/HA/YR}$   
 $LOSS = 12 \text{ m}^3/\text{HA/YR}$   
 $SITE = 1.87 \text{ HA}$   
 $SOIL LOSS = 23\text{m}^3/\text{YR} < 150\text{m}^3/\text{YR}$

Based on the above review and in accordance with the Blue Book Guidance, a sediment basin is not required as soil loss is less than 150 m<sup>3</sup>/yr. Therefore, no onsite detention beyond the evaporation pond is proposed.

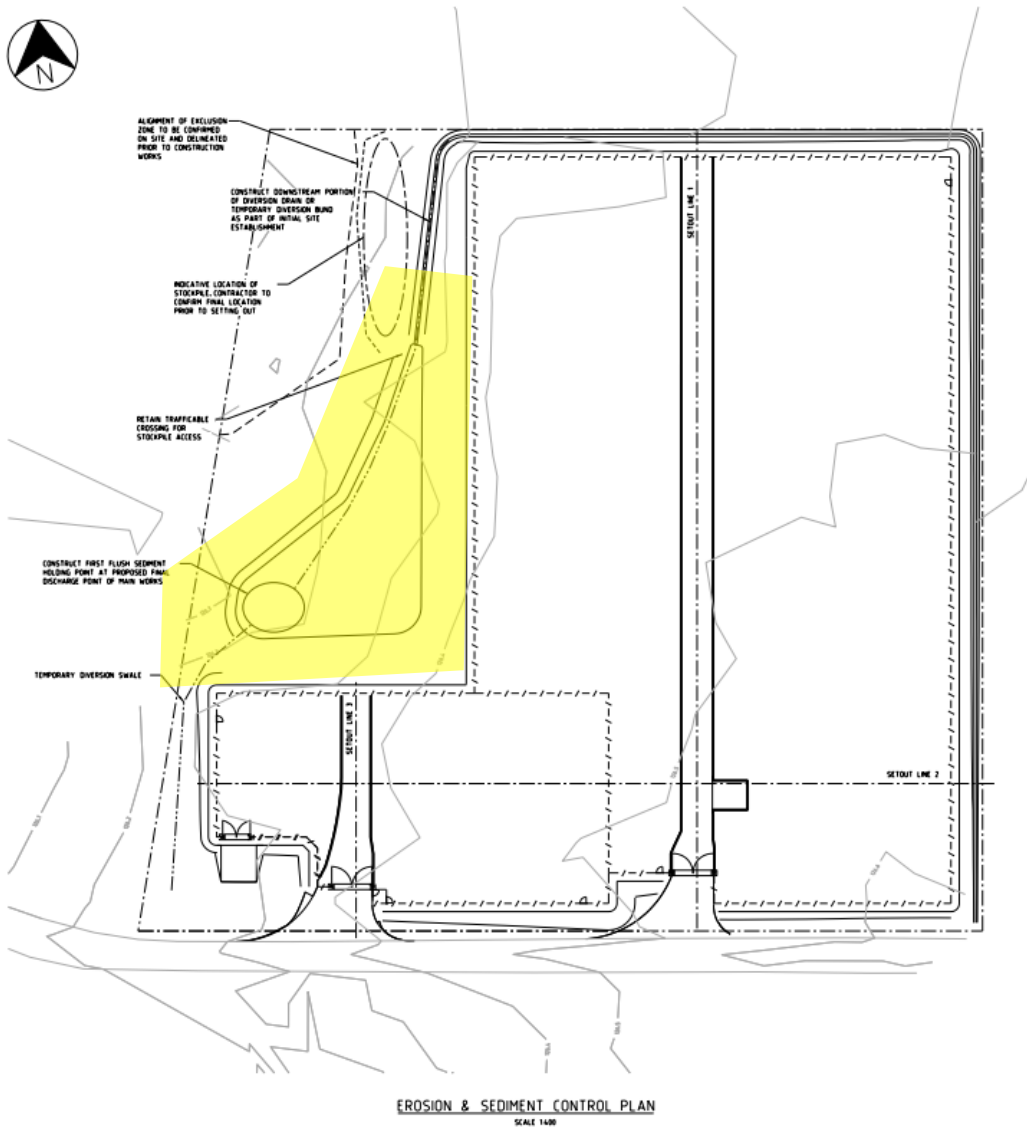


Figure 17 Evaporation Pond (highlighted in YELLOW)

## 6.7.1 Responsibilities

The Site Manager will ensure that:

- The Project does not cause any water pollution, as defined under Section 120 of the Protection of the Environment Operations Act 1997.
- Dewatering requirements are determined for stormwater and infiltrated groundwater from excavations and / or low-lying areas using the *Dewatering Assessment* at the commencement of the project;
- This assessment will identify dewatering methods to ensure the environment is not harmed;
- Dewatering areas will be identified in *Erosion and Sediment Control Plan* in Appendix F;

- All dewatering is to occur on site.

Note, a sediment dam is not required for the DP BESS project due to the characteristics of the site.

## 6.7.2 Dewatering Requirements

- All dewatering areas will be assessed using *Dewatering Assessment*.
- If additional dewatering areas are identified during construction, the Dewatering Assessment will be revisited.
- Identified dewatering areas will be recorded in *Erosion and Sediment Control Plan*.

Discharge of water to the environment should not cause any of the following environmental impacts:

- Erosion at the discharge location or in receiving environments;
- Erosion of structures or services;
- Harm to native vegetation;
- Sediment build-up in drains, waterways or wetlands.

The following should also be considered:

- Energy dissipation must be provided at the surface of all dewatering discharge outlets e.g. concrete aprons, geofabric, shade cloth, gabions, turkey nests;
- The preference discharge location should be given to locations with established stable drainage.

## 6.7.3 Discharging Captured Water

The Project / Site Manager will ensure that:

- The Project does not cause any water pollution, as defined under Section 120 of the Protection of the Environment Operations Act 1997.
- Approval to discharge captured and treated water is issued after the criteria in *Water Release Assessment* is achieved;

Prior to the discharge of captured water shall be tested and treated as detailed in Section 6.7.3.1-3 by the Project / Site Manager. Testing must be performed using calibrated instruments for the specific test parameter, i.e., pH, TSS, etc.

In the case of an event involving a chemical or hazardous material, additional testing shall be performed to classify any liquid waste and this shall be disposed of at an appropriate waste facility based on its classification.

The Project/Site Manager will sign off on Water Release Assessment prior to discharge. Only once this is completed water shall be discharged.

During the discharge of captured and treated water;

- Visually monitoring of water quality shall be performed at the discharge point/body of treated water and at a downstream inspection point to ensure no plume is evident;
- If plumes are identified cease work immediately, treat accordingly;
- Re-approval will again be granted after the criteria in *Water Release Assessment* is achieved;

- The water containment area will be inspected on a regular basis (suggest 15 minutes) or a flotation device is to be installed to ensure the pump does not drawdown water beyond a certain level (and risk discharging flocculated and/or sludgy material);
- No additional water is to be pumped into the storage area until all stored captured water has been discharged.

**Referenced Documents:**

*FRM-G012 Dewatering Assessment*

*TMP-G001 ESCP (Erosion and Sediment Control Plan)*

*FRM-G013 Water Release Assessment*

### 6.7.3.1 Water Treatment – pH Levels

Prior to discharge off site:

- If the pH of captured water is outside the range of 6.5-9.0, it will need to be treated.
- If the pH is above 8.5, hydrochloric acid will be used to lower the pH. A 500ml dose of acid lowers 7000 litres of water by a pH of approximately 1.5.
- To treat water with acid, a specific Safe Work Method Statement will be prepared following consultation with the relevant Material Safety Data Sheet and its risk assessment.
- If the pH of water is below 6.5, a base such as agricultural lime, with a pH of 8.2, will be used to raise the pH.
- The pH shall be re-tested and documented on the Water Release Assessment form prior to discharge.

### 6.7.3.2 Water Treatment – Suspended Solids

Prior to discharge off site:

- If the Total Suspended Solids (TSS) of captured water is greater than 50 mg/L a flocculent should be used e.g. gypsum, liquid alum or flocculent blocks.
- Treating water with a flocculent will make the sediments drop to the bottom.
- Dosing rates of 30kg per 100m<sup>3</sup> will be used and application methods will be applied as per methods recommended in the Landcom publication Managing Urban Stormwater, Soils and Construction.
- The TSS shall be re-tested and documented on the Water Release Assessment form prior to discharge.

**Note - an even application over the captured water is essential for effective flocculation. Apply evenly in water and wait for the sediment to settle out.**

### 6.7.3.3 Water Treatment – Hydrocarbons

Prior to discharge on or off site:

- If an oily sheen is found on the surface of captured water absorbent material from a spill kit will be used to absorb and skim off the sheen prior to discharge.
- The water shall be re-inspected and documented on the Water Release Assessment form prior to discharge.

## 6.8 Chemicals and Hazardous Materials

During construction various hazardous materials and chemicals will be required to be used and/or stored on site. Typically, hazardous materials and chemicals utilised during construction include (but not limited to):

- acetylene
- adhesives, glues, epoxies, etc
- concrete and other mortar products
- contact cleaners
- cold-galvanising spray
- fuels, oils and lubricants (such as diesel, unleaded petrol, thinners, etc.)
- Batteries; and
- paints and other paint markers.

The Project has several hazardous chemicals that are contained within the equipment onsite. Figure 18 outlines each product, it's location and the quantity:

Chemical	Class	UN No.	HAZCHEM Code	Inventory	Storage
Lithium-ion batteries	9	3480	4W	RESS1: 864 tonnes (18 t x 1: 48 packs) RESS2: 936 tonnes (18 t x 52 packs) DPESS: 380.8 tonnes (23.8 t x 16 packs)	RESS1 - Process – BESS 60 MW / 122.7 MWh RESS2 – Process – BESS 65 MW / 130 MWh DPESS – Process – BESS 25 MW / 50 MWh
Transformer Ester FR3 fluid	-	-	-	148.5 kL (4.5 kL average x 33 transformers)	Process – Transformers
50/50 Ethylene glycol-water coolant mix	-	-	-	RESS1: 25,920 L (540 L x 48 packs) RESS2: 28,080 L (540 L x 52 packs) DPESS: 8,640 L (540 L x 16 packs)	Process – Tesla Megapacks coolant (in closed circuit thermal system)
Refrigerant R134A (1,1,1,2 – Tetrafluoroethane)	2.2	1956	2TE	RESS1: 364.8 kg (7.6 kg x 48 packs) RESS2: 395.2 kg (7.6 kg x 52 packs) DPESS: 121.6 kg (7.6 kg x 16 packs)	Process – Tesla Megapacks refrigerant (in closed circuit thermal system)
Sulfur Hexafluoride (SF6)	2.2	1080	2TE	84 kg (12 kg x 7 RMUs)	Process – RMU switchgear dielectric gas
R410A	2.2	3163	2TE	Approx. 1.5 kg per air conditioning unit	Process – Air conditioning refrigerant

Figure 18: Hazardous Chemicals contained within Equipment On site (extract from MWS00142-000-FR-RPT-0001 Riverina Battery Energy Storage System Fire Safety Study)

The storage and handling of all chemical, fuels and oils on the BESS yard will comply with the relevant Australian Standards. Additional consideration in accordance with NSW EPA's Storing and

Handling of Liquids: Environmental Protection – Participants Handbook were taken for hazardous liquids.

## 6.8.1 Hazardous substances (chemicals)

- Employees using hazardous substances shall be given information, instruction, supervision, or training in:
  - identification, properties and potential hazards of dangerous substances including access to Safety Data Sheets (SDS);
  - correct procedures for safe storage and handling of hazardous substances;
  - emergency procedures in case of a spill, leak, fire or explosion;
  - appropriate spill kit will be on-site in case of spillage emergency;
  - a register is kept up to date and is accessible for all substances related to the project;
  - hazardous and dangerous goods will be identified, and a risk assessment conducted to ensure the safety of personnel who may use the substance and controls will be listed within the applicable SWMS.

## 6.8.2 Safety Data Sheets (SDS)

- A file of SDS's pertaining to chemicals used on the project shall be available within the site office.
- Any new chemicals brought on to the site shall be identified to the site SQE Advisor / Site Manager and a copy of the corresponding SDS shall be provided and filed.
- All Chemicals on site must be recorded on the Master Register of Substances.

## 6.8.3 Labelling

- All containers used to store substances will be clearly marked with the product name.
- All storage areas will be clearly marked with the following information:
  - product name;
  - risk and safety phrases;
  - hazard warning word/dangerous goods class and symbol (e.g. flammable).

## 6.8.4 Transport

- For storage and transport, large quantities will be defined as greater than 200 litres.
- Large quantities of hazardous substances and dangerous goods will be transported to site by the supplier of the substance.
- In circumstances where the supplier is unable to transport/deliver the hazardous substances and dangerous goods, a subcontractor or CPP will be engaged.
- In this circumstance, the subcontractor and/or CPP will prepare a SWMS for this activity.

## 6.8.5 Storage

## 6.8.6 Responsibilities

The Site Manager will ensure that:

- The site and in particular storage areas are frequently checked for leaks.
- The integrity of containers and secondary containment infrastructure are frequently checked.
- Containment and secondary containment infrastructure are regularly maintained.
- All personnel are trained in incident response and spill management.
- Environmental inspections are conducted weekly as part of the Environmental Inspection Checklist.
- Review whether any changes to activities (for example, increased production, new products) have increased the risk of pollution.
- Locations with a high risk of water pollution or soil contamination are avoided.

### 6.8.6.1 Fuel

In order to minimize the potential risk of spills from the storage of fuel or transfer of fuel from one vessel to another, CPP requires all fuel trailers/trucks to be either self-bunded with double skin or to be stored / transferred within a bunded area.

- The bunded area must be adequate to hold 110% of the holdings of the largest vessel and must be lined with appropriate impervious material to contain the leak.
- Bunds must be regularly inspected particularly after heavy rainfall.
- The bund must be able to prevent the migration of any spillage into the environment and must be constructed from toxic resistant materials.

### 6.8.6.2 General

- Storage and handling shall comply with the NSW EPA's Storing and Handling of Liquids: Environmental Protection – Participants Handbook.
- Storage quantities should be kept to a minimum to cater for demand but avoid excessive storage for long periods.
- Adequate storage facilities must be provided for all chemicals and will meet the following requirements:
  - don't store incompatible chemicals together;
  - clearly label chemicals that may be suitable for reuse or recovery or that are being stored for collection by a particular service to ensure chemicals are correctly sorted;
  - will not be located within 5m of No Go Zones;
  - be bunded in accordance with Australian Standard AS1940 (packaged and larger quantities) and/or stored in an Australian Standard compliant chemical cabinet;



- prevent stormwater/rainwater ingress via strategic location of substance storage areas, covered or enclosed secondary containment;
- Place fuel and chemical tanks/containers in locations at least 50 m away from drainage lines and any farm dams that are retained on site.
- have a fit-for-purpose spill kit available in case of spills and emergency response plan (Emergency Response Plan);
- place lids or covers on waste containers or store under roofing;
- will be inspected weekly.
- For dangerous goods, this includes requirements for separation and segregation for all incompatible substances as identified in the Dangerous Goods Storage Segregation Guide.

## 6.8.7 Handling

- All substances to be used and handled in accordance with the manufacturers recommendations.
- Decanting of materials or substances from their original container to another container is not permitted unless the other container is clearly labelled and fit for purpose - identifying the material or substance - with adequate emergency information affixed.
- Drip trays are to be placed under all stationary equipment that uses fuel, oil or lubricants that are not self-contained (e.g. generators, mobile lighting towers, pumps etc.).
- Refuelling activities will be undertaken in impervious bunded areas and will not be undertaken within 50 m of drainage lines and farm dams.

## 6.8.8 Disposal

- The following must be considered when disposing of all chemicals (dangerous, hazardous, non-dangerous and non-hazardous):
  - less than 20 Litres—disposed of at a licensed/registered landfill depot;
  - greater than 20 litres—a licensed waste contractor will be engaged to remove the substance.
- Auditable records of waste company licences, disposal sites and waste consignment notes must be held on file for each removal activity.

### **Reference document(s):**

*MWS00142-000-FR-RPT-0001 Riverina Battery Energy Storage System Fire Safety Study*

*FRM-S020 Hazardous Chemical and Dangerous Goods Risk Assessment*

*FRM-S063 WHSE Inspection Form/HSE Portal*

*GUI-S019 Dangerous Goods Storage Segregation Guide*

*REG-S002 Master Register of Substances/HSE Portal*

## 6.9 Spill Management

### 6.9.1 Responsibilities

The Site Manager will ensure that:

- A spill assessment is conducted using *Spill Response Equipment Selection Assessment* prior to works commencing;
- The number and type of spill kits will be determined during this assessment;
- Spill Kits will be formally examined at the commencement of a project and on a 6-monthly basis thereafter using *Spill Response Kit Checklist*;
- The location of spill kits on this project will be identified in *Erosion and Sediment Control Plan*;
- Following the assessment outlined above spill response procedures will be prepared and documented in *Emergency Response Plan – Spills*;
- See emergency response procedure for further details on trials and effectiveness of response plans.

**Referenced Documents:**

*FRM-G006 Spill Response Equipment Selection Assessment*

*CHK-G003 Spill Response Kit Checklist*

*TMP-G001 ESCP (Erosion and Sediment Control Plan)*

*FRM-G004 Emergency Response Plan – Spills*

## 6.9.2 Spill Response

The following response should be undertaken for all spill events:

- Identify the nature of spill;
- Assess the risks to personnel;
- Stop, contain and control the spill if safe to do so;
- Report the spill, once site has been made safe and secure.
- If unsafe, call emergency services;
  - Notify your Supervisor immediately;
  - Notify personnel in the vicinity of the spill if evacuation is required;

The spill response flow chart shown in Figure 19 shall be used for the management of all spills on site.

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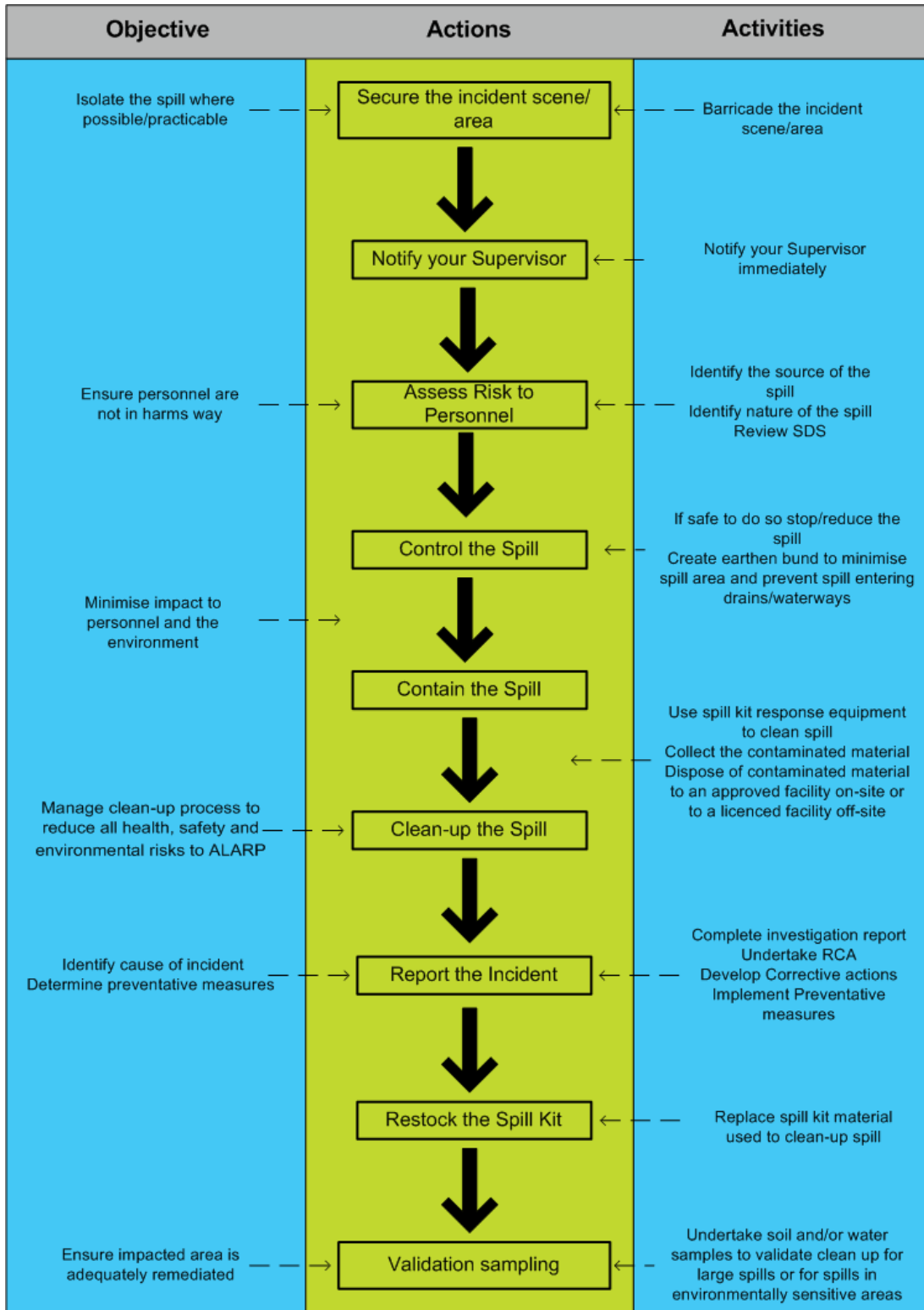


Figure 19 Spill Response Flow Chart

## 6.10 Noise and Vibration Management

Equipment used for the construction of the BESS facility would not be used at the same intensities and duration as that required for construction of the solar farm. Hence, it is expected that noise levels generated from equipment use would not reach the same levels at sensitive receivers as are expected for the construction of the solar farm. Standard noise mitigation measures would be applied to manage any noise concerns during construction of the BESS facility as detailed in Section 6.10.2.

Construction of the BESS facility is proposed once the solar farm is in operation. The construction traffic noise generated by the BESS facility is of a shorter duration and lesser intensity than the expected solar farm construction traffic noise. The consequent construction traffic noise levels for the BESS facility are not expected to exceed those levels identified for the solar farm construction. On this basis, it is anticipated that the construction of the BESS facility would not result in significant additional traffic noise than compared to the solar farm construction (e.g. no worsening of impact).

Construction noise management levels are stated in the NSW Interim Construction Noise Guideline (ICNG; DECCW, 2009). As detailed in the guideline, a quantitative assessment of noise impacts is expected when works are likely to impact an individual or sensitive land use for a period of greater than three weeks and focuses on minimising noise disturbance through the implementation of feasible and reasonable work practices and community notification.

Nearby noise sensitive receivers have been identified within the vicinity of the Project area and are summarised in Table 4.

Table 4 Noise Sensitive Receivers

Receiver	Address / Location	Approximate distance from site boundary, m
1	14713 Sturt Highway	1750
2	122 Donald Ross Drive	790
3	336 Donald Ross Drive	100
4	382 Donald Ross Drive	100
5	456 Donald Ross Drive	700
6	510 Donald Ross Drive	1250
7	537 Donald Ross Drive	1500
8	Tubbo	1650

It shall be noted that the approximate distances listed above are from the Development boundary. Distances to the BESS Project boundary will be more than those specified above.

The site bounds, nearby noise sensitive receivers and monitoring locations are depicted in Figure 20.

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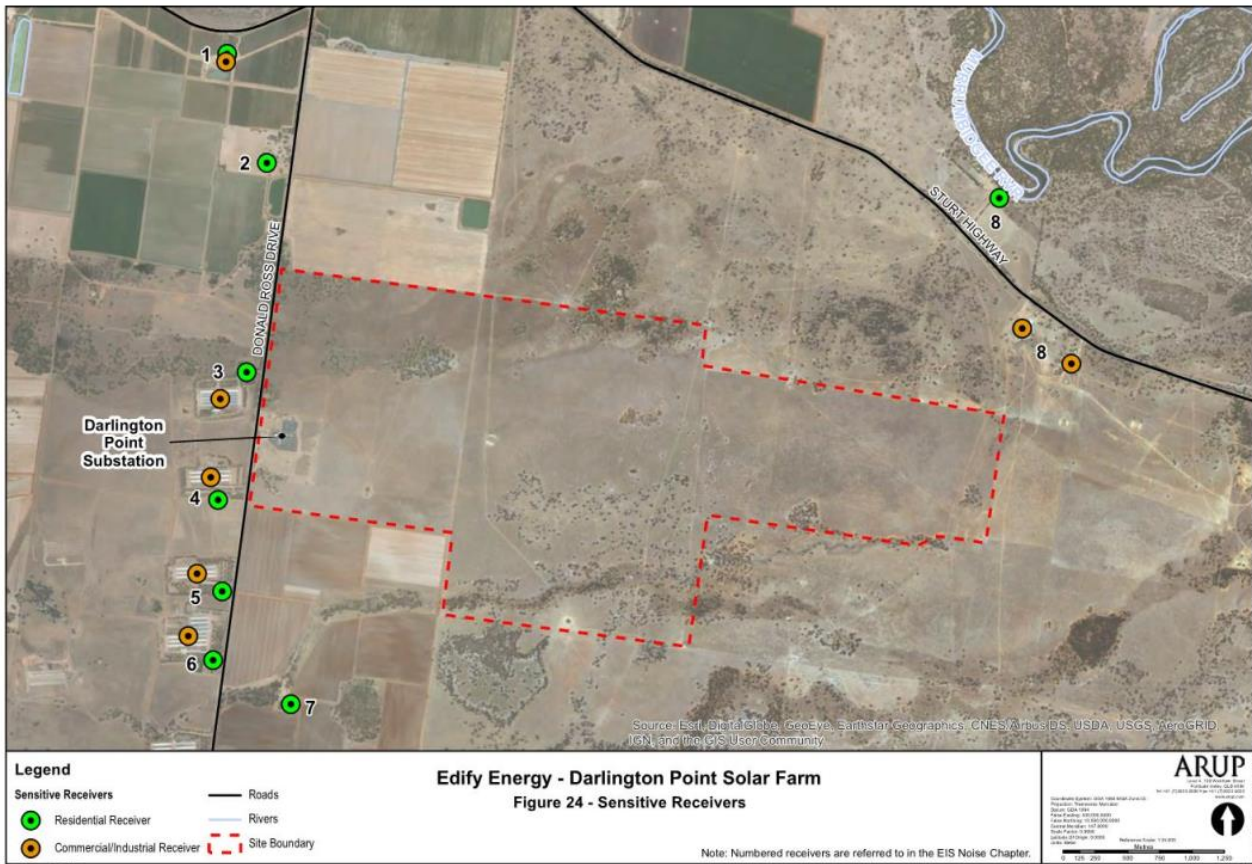


Figure 20 Development Sensitive Receivers

Construction noise criteria are typically set relative to the background noise levels of the project area, and therefore may differ across a construction site if variable background levels exist. Given the consistency of the measured background noise levels at the Project site and surrounds, a single Noise Management Level has been determined for receivers within the site vicinity. Additionally, as works are only proposed to be conducted during daytime hours, only a daytime criteria has been set in Table 5.

Table 5 Daytime Noise Criteria

Time Period	Daytime (7:00 to 18:00 weekdays / 8:00 to 13:00 Saturday)	
Receiver	Background Noise Level (RBL), LA90	Noise Management level (NML), LAeq(15-minute)
Residential	30 <sup>1</sup>	40
Commercial	70	
Industrial	75	
<b>Note: 1 – Section 3.1.2 of the NSW INP states that where measured background noise levels are below 30 dB(A), background noise levels should be set to 30 dB(A)</b>		

Minimum working distances for typical mechanical and plant items have been published in documentation such as The Transport for NSW (TfNSW) Construction Noise Strategy. A review of the minimum working distances for vibration intensive plant for cosmetic damage and human response against the proposed plant

for use shows that use of vibration intensive plant within the project area is unlikely to affect nearby residential receivers given the locations and distances of these receivers.

## 6.10.1 Responsibilities

The Project / Site Manager will ensure that:

- The mitigation measures for environmental noise and vibration detailed below are implemented and monitored.

## 6.10.2 Noise and Vibration Mitigation Measures

- CPP will take all reasonable and practicable measures to minimise the generation of noise and vibration from all construction including:
  - Adherence to the standard approved working hours for construction projects.
  - Schedule noisy activities at less noise-sensitive times of day.
  - Locate noisy equipment as far away as possible from sensitive receivers wherever possible
  - Regularly train workers and contractors (such as at toolbox talks) to use equipment in ways to minimise noise.
  - Site managers to periodically check the site and nearby residences for noise problems so that solutions can be quickly applied.
  - All personnel shall be inducted on the CEMP, site environmental conditions and sensitivities identified in the EIS via Project induction, daily prestart, toolboxes and SECP. Records shall be kept of this induction and training.
  - Limits shall be applied to the load rating of roller when used near any buildings / receivers (within 30 metres).
  - Maintain minimum working distances for vibration intensive plant where possible.
  - Select equipment that is likely to result in the lowest noise impact whilst still completing the task (i.e. electric rather than diesel/air-powered)
  - All plant and equipment shall be regularly maintained to ensure noise control equipment is correctly fitted and operating as per design performance requirements.
  - Repair, modify or replace any unduly noisy item with a quieter item.
  - Turn off all plant and equipment when not in use.
  - Where applicable, ensure vibration transmission to ground from fixed plant is minimised.
  - Where practical, shut down heavy equipment when not in active use, rather than letting it idle for long periods.
  - Monitor sources of noise and vibration as required. The site Environment Advisor would be responsible for undertaking construction noise monitoring.
    - Formal documented site environmental noise monitoring must take place on a monthly basis at the nearest sensitive receivers.
  - Community engagement notification and noise monitoring at sensitive receivers.
  - Schedule vehicle routing and movements in order to minimise the impact of road traffic noise.



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- Limit speeds on site during construction and the use of compression brakes when accessing the main site entrance via a speed reduction on Donald Ross Drive in the vicinity of the entrance.
- All concerns/complaints shall be resolved in a timely manner, by considering all practicable means to mitigate noise/vibration impacts, either through changes of work schedule, use of alternative construction techniques, quieting and/or relocation of key equipment or the construction of effective temporary noise barriers.
  - Where a complaint is received, noise monitoring will be conducted at this receiver to establish whether noise is above the proposed daytime noise criteria and to establish suitable mitigation measures and confirm the effectiveness of these measures.

## 6.10.3 Construction Hours

- Normal working hours for construction activities shall be nominally between:
  - 7:00am and 6:00pm Monday to Friday.
  - 8:00am and 1:00pm Saturday
  - No construction work on Sunday and public holiday unless approved by the Planning Secretary
- The following construction, upgrading or decommissioning activities may be undertaken outside these hours without the approval of the Planning Secretary:
  - the delivery of materials as requested by the NSW Police Force or other authorities for safety reasons; or
  - emergency work to avoid the loss of life, property and/or material harm to the environment.

The Site Manager must ensure that at the noise generated during the evening and night by these out of hours activities does not exceed 35 dB(A) L Aeq15 min to be determined in accordance with the procedures in the NSW Noise Policy for Industry (EPA, 2017) at any non-associated residence.

## 6.10.4 Notification of Commencement

- Prior to the commencement of the construction and operations Tesla (for the BESS) and Transgird/Edify (for the substation and connections) shall notify the Department in writing of the date of commencement

## 6.11 Cultural Heritage Management

The Aboriginal Cultural Heritage Assessment report (CHAR) identified ten Aboriginal archaeological sites within the study area, however none are located in or near Lot 1 DP1249830, where the DP BESS is to be sited, as shown in Figure 21. Therefore, the Modification will not result in any Aboriginal heritage impact.



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Figure 21 Development Heritage Mapping

During construction, project design alterations or other changes to the Approved Project may be required (such as an alteration of the current design, the location of ancillary facilities) within the project corridor may result in a reduced or increased impact to Aboriginal cultural heritage. Any change in the overall impact on Aboriginal cultural heritage would need to be assessed to determine consistency in consultation with an archaeologist, with continued involvement of the Aboriginal stakeholders. The extent to which Edify will continue to consult with Aboriginal stakeholders is dependent on the level of impact.

The CPP Project Manager will notify Edify of any changes to the approved project and ensure that all required approvals and consultation has been undertaken prior to the implementation of any change.

## 6.11.1 Responsibilities

- The Project / Site Manager will ensure that:
  - a cultural heritage assessment using the *Pre-Clearing Assessment Survey* prior to the commencement of the project;
  - as part of the assessment process client's documentation such as the EIS and other similar documentation will be reviewed and addressed;
  - areas of significance in relation to cultural heritage will be identified;
  - controls required to maintain these areas will be identified.

## 6.11.2 Discovery of Humans Remains or Cultural Heritage Items

- If during the course of the activity any humans remains or cultural heritage items, are uncovered or discovered and /or any relics are uncovered or discovered then work must cease immediately and notify the Site Manager, Project Manager and SQE Manager.
- The Site Manager, Project Manager and SQE Manager will follow the procedures detailed in the Chance Finds Protocol in Appendix C.
- Work can only recommence once the appropriate clearances have been by the police (if involved) or Heritage NSW.

*Cultural Heritage Find Record* will be used as a record of their discovery.

### 6.11.2.1 Unexpected Skeletal Finds Protocol

In accordance with the Skeletal Remains – Guidelines for the Management of Human Skeletal Remains under the Heritage Act 1977 (NSW Heritage Office, 1998) and the Aboriginal Cultural Heritage Standards and Guidelines Kit (NPWS, 1997), should the construction activities reveal possible human skeletal material (remains), the following procedure is to be followed:

- As soon as remains are exposed, all work is to halt at that location (e.g. within 100m of the find) immediately and the Site Manager on site is to be immediately notified to allow assessment and management:
  - i. Stop all activities within 100m of the find; and
  - ii. Secure the find site.
- Contact police, the discovery of human remains triggers a process which assumes that they are associated with a crime. The NSW Police retain carriage of the process until such time as the remains are confirmed to be Aboriginal or historic.
- DPIE, as the approval authority, will be notified when human remains are found
- Once the police process is complete and if remains are not associated with a contemporary crime, contact DPIE. DPIE will determine the process, in consultation with OEH and/or the Heritage Office as appropriate:
  - i. If the remains are identified as Aboriginal, the site is to be secured and DPIE and all Aboriginal stakeholders are to be notified in writing according to DPIE instructions; or

- ii. If the remains are identified as non-Aboriginal (historical) remains, the site is to be secured and the DPIE is to be contacted. DPIE will act in consultation with the Heritage Division as appropriate. The Heritage Division will be notified in writing according to DPIE instructions.
- Once the NSW Police process is complete and if the remains are identified as not being human, work can recommence once the appropriate clearances have been given.

### 6.11.2.2 Unexpected Archaeological or Aboriginal Finds Protocol

Should an unexpected archaeological or Aboriginal find be made during construction, the following procedures will be adopted:

- As soon as found, all work is to halt at that location (e.g. within 100m of the find) immediately and the Site Manager on site is to be immediately notified to allow assessment and management:
  - i. Stop all activities within 100m of the find; and
  - ii. Secure the find site.
- Consult with project archaeologist and DPIE on proposed actions, to determine if the find is consistent with the Project Approval:
  - If the find is consistent, the archaeologist will allow work to continue
  - If the find is inconsistent, OEHL will be notified as soon as practical on 131 555 providing any details of the Aboriginal object and its location
- Not recommence any work in the particular location unless authorised in writing by the OEHL,
- If skeletal human remains are unexpectedly encountered during the activity, work must stop immediately within the immediate vicinity of the find (within 100m of the find), the area secured to prevent unauthorised access and NSW Police and OEHL contacted.

The Chance Finds Protocol should be referred to for additional information.

### 6.11.3 Cultural Heritage Monitoring

Where Cultural Heritage Monitors are required their inspection points can be recorded on the Cultural and Heritage Monitoring Record with any findings recorded on the Cultural and Heritage Find Record.

#### **Referenced Documents:**

*FRM-G008 Pre-Clearance Assessment Survey*

*FRM-G010 Cultural Heritage Find Record*

*FRM-G005 Cultural and Heritage Monitoring Record*

## 6.12 Site Rehabilitation Management

### 6.12.1 Responsibilities

The Project / Site Manager will ensure that:

- As the work proceeds excess debris, materials, waste and used packing will be removed from site.
- At the completion of the project CPP will;

- remove all site generated rubbish from the site and immediate surrounds;
- clean up all disturbed areas of site and remove spoil, all excess excavated material or unsuitable fill to a suitable tip;
- grade, trim, level and compact all areas to specified levels and so as to shed water;
- clean and remove all foreign material from drains, conduits, pits and cable trenches;
- remove all temporary portable buildings and surplus materials;
- disconnect and remove construction power supply;
- remove any imported rubble from any hardstands or walkways;
- scarify soil to relieve compaction with tines of grader or similar;
- re-spread topsoil in an even lay across the area to be rehabilitated;
- apply shallow scarification of the topsoil to promote water point for better revegetation; and
- re-spread vegetation evenly over the rehabilitated area.

**Referenced Documents:**

*FRM-G007 Rehabilitation Assessment*

## 6.12.2 Rehabilitation and Revegetation Protocol

Areas temporarily disturbed for the BESS project will need to be rehabilitated and revegetated as soon as practicable. These areas will primarily be sloped batters and table drains through to the edge of BESS construction site. Temporarily disturbed areas include grassland mowed for construction and decommissioning laydown areas. The aim of the rehabilitation and revegetation is to stabilise the disturbed area and to restore the area as soon as practicable with appropriate perennial species.

### 6.12.2.1 Topsoiling

Topsoil will be replaced on all areas from where it has been removed. Prior to the application of topsoil, compacted areas will be tined or ripped to a depth of 150 mm to loosen the surface. Over the tined surfaces will be placed at least 100mm of topsoil. Ensure the topsoil is free of large rocks and sticks. Harrow the topsoil prior to sowing seed if the surface has set hard following rain.

Due to the climatic conditions (evaporation rates) native grassland establishment is best attempted over late autumn, winter or early spring. Wet summers are also able to maintain established perennial pasture growth in summer active species. Summer rainfall is less reliable than summer evaporation and as such revegetation is also less reliable. As such rehabilitation and revegetation should commence in late summer/early autumn as temperatures decrease and evaporation rates fall.

### 6.12.2.2 Hydromulching and hydroseeding

Carry out hydromulching / hydroseeding within 5-10 days of completed soil preparation or, if delayed by the weather conditions as soon as conditions permit.

Agitate continuously the slurry of seed, fertiliser, binder (60 kg/ha Guar gum) (and mulch) and water (35 kl/ha) to maintain a uniform consistency during application. Apply it the sprayed slurry uniformly over the whole

surface ensuring that all surfaces are sprayed from two directions to ensure complete coverage. The sprayed hydromulch layer within 48 hours of application must have a minimum thickness at any location of 5 mm when using sugar cane mulch, or 2 mm when using wood fibre or shredded paper.

Where straw (5t/ha) is used for mulch apply the straw mulch uniformly using a purpose-made blower unit. Incorporate the emulsion (bitumen) as a spray into the air stream of the mulch blower or apply it in a separate operation within 12 hours from the application of straw mulch. The straw mulch layer within 48 hours of application must have a minimum thickness at any location of 25 mm.

Do not apply hydroseeding / hydromulching and straw mulching if winds exceed 15 km/hr, temperatures exceed 37°C, the surface is water logged; or during rain periods or when rain appears imminent.

### 6.12.2.3 Grass sowing rate

This land has already been directly impacted with native vegetation permanently removed (complete loss of habitat) during the construction phase of the DPSF. The recommended seeding rate and mix will be proposed by a suitably trained contractor. Care should be taken to ensure sufficient plant densities.

### 6.12.2.4 Revegetation maintenance

Maintain all revegetated areas for 6 months after all sowing is complete or until Contract Completion, whichever occurs first. Water areas where and when directed by the HSE Advisor. Water by means of a fine spray which causes minimal disturbance to seeded areas.

Clear dead vegetation from areas showing poor growth or damage and replace all lost topsoil. Then recultivate and reseed the area. Control exotic plant cover where required with herbicide or hand removal.

## 6.13 Visual Impact Management

The Visual Impact Assessment (VIA) in the EIS prepared for the SSD-8392 development application considered the solar array infrastructure, the proposed BESS facility, the existing overhead transmission lines present throughout the site and the existing industrial infrastructure and concluded the proposed infrastructure would not be dominant or present unacceptable contrast to the surrounding landscape.

The nearby residences have vegetation and/or other structures around the dwellings, on fence lines, and/or between the DP BESS Site and the residence, creating a visual screen or obscuring the view of the DP BESS.

### 6.13.1 Responsibilities

The Project / Site Manager will ensure that:

- minimise the off-site visual and lighting impacts of the development;
- ensure the visual appearance of all ancillary infrastructure (including paint colours) blends in as far as possible with the surrounding landscape;
- not mount any advertising signs or logos on site, except where this is required for identification or safety purposes.
- Dust will be controlled in response to visual cues.



- Night lighting would be minimised to the maximum extent possible (i.e. manually operated safety lighting at the main component locations). It would be directed away from Donald Ross Drive, so as not to cause light spill that may be hazardous to drivers
- Areas of soils disturbed by the project would be rehabilitated progressively or immediately post construction and decommissioning, reducing views of bare soil

The Project /Site Manager shall ensure that during construction:

- Minimises the off-site lighting impacts of the development;
- Any external lighting associated with the development
  - is installed as low intensity lighting (except where required for safety or emergency purposes);
  - does not shine above the horizontal; and
  - complies with Australian Standard AS4282 (INT) 1997 – Control of Obtrusive Effects of Outdoor Lighting, or its latest version.

As part of the Lighting Study the Lead Primary Designer shall ensure that the design of the permanent facility lighting for operational purposes considers the above.

## 6.14 Plant and Equipment Management

The CPP Site Manager shall ensure all plant and equipment are fit for purpose and maintained in good working condition in addition to being:

- Inspected prior to mobilisation including verification of maintenance records
- Serviced at regular maintenance intervals as detailed in the operations manual for the specific item of plant
- Daily checks facilitated when in use
- Any damaged plant or equipment shall be tagged out of service and quarantined
- Operator training and competency is verified prior to use

High pressured hydraulic equipment shall be:

- Operated in accordance with the manufacturer's instructions
- Inspected prior to use including:
  - condition of pressure plugs
  - dates where applicable
  - pressure hoses and connections

## 6.15 Bushfire Management

In consultation with the NSW Rural Fire Service (RFS) during preparation of the EIS, the proposed site was identified as not being within bushfire prone land. This is confirmed by the NSW RFS mapping indicating the site is not mapped as bushfire prone land (NSW RFS, 2017). According to the Bushfire Risk Management Plan for the Murrumbidgee Irrigation Area (MIA) (MIABFMC, 2008), the MIA Bushfire Management



Committee designates the MIA Zone's Bushfire Danger Period between 1 November and 31 March, but adjusts this according to seasonal conditions in consultation with stakeholders.

Spring rainfall is the primary determinant in regard to the quantity of grass fire fuel available during the fire season. This generates green fuel in spring which cures by early summer, resulting in an increased fire danger in December. Extreme fire danger days occur in periods with dry north-westerly winds and maximum temperatures in the order of 43 degrees (usually in January and February) (MIABFMC, 2008).

## 6.15.1 Responsibilities

The Project / Site Manager will ensure that:

- A health and surveillance assessment is conducted using the *WHSE Emergency Requirements Assessment Form* at the commencement of the project to determine noise and vibration requirements Including:
  - Suitable noise suppression or abatement measures; or
  - Noise and vibration monitoring.
- A Bushfire Management Plan will be prepared and implemented for the Project prior to the NSW Bush Fire Danger period commencing covering construction with input from RFS MIA Fire Control Centre
- The mitigation measures detailed below are implemented and monitored.

## 6.15.2 Bushfire Mitigation Measures

- CPP will take all reasonable and practicable measures to minimise the chance of a bush fire the potential and impact of an internal or external bushfire from all construction including:
  - Ensure the mitigation and control measures within the Bushfire Management Plan are implemented and monitored.
  - 24-hour emergency contact details including alternative telephone contact will be signposted at the site entrance.
  - Management of site activities with a risk of fire ignition, including all vehicle and plant movements beyond formed roads and trafficable hard stand areas.
  - Storage and maintenance of firefighting equipment, including ensuring fire extinguishers are available in all site vehicles.
  - Daily monitoring of the bushfire status through the RFS website (<http://www.rfs.nsw.gov.au>) during the bushfire season and communicate to site personnel.
  - Should any fuel or flammable liquids be stored on-site, this material would be stored in a designated area and will be signposted 'Fuel Storage Area'. A register will be maintained that confirms the quantities and location of any flammable material stored on-site along with the applicable Safety Data Sheet (SDS).
  - No burning of vegetation or any waste materials will be undertaken on site.
  - Bushfire management regime for grass land management within the Asset Protection Zone (APZ). Refer to Figure 22 for the substation APZ.
  - A 20,000 litre water supply tank fitted with a 65mm storz fitting has been installed and is located adjacent to the internal access road within the required APZ.

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- A defensible space that is a 10m corridor around the BESS yard plant and equipment is provided for maintenance and fire truck access. Refer to Figure 23 for the BESS defensible space.

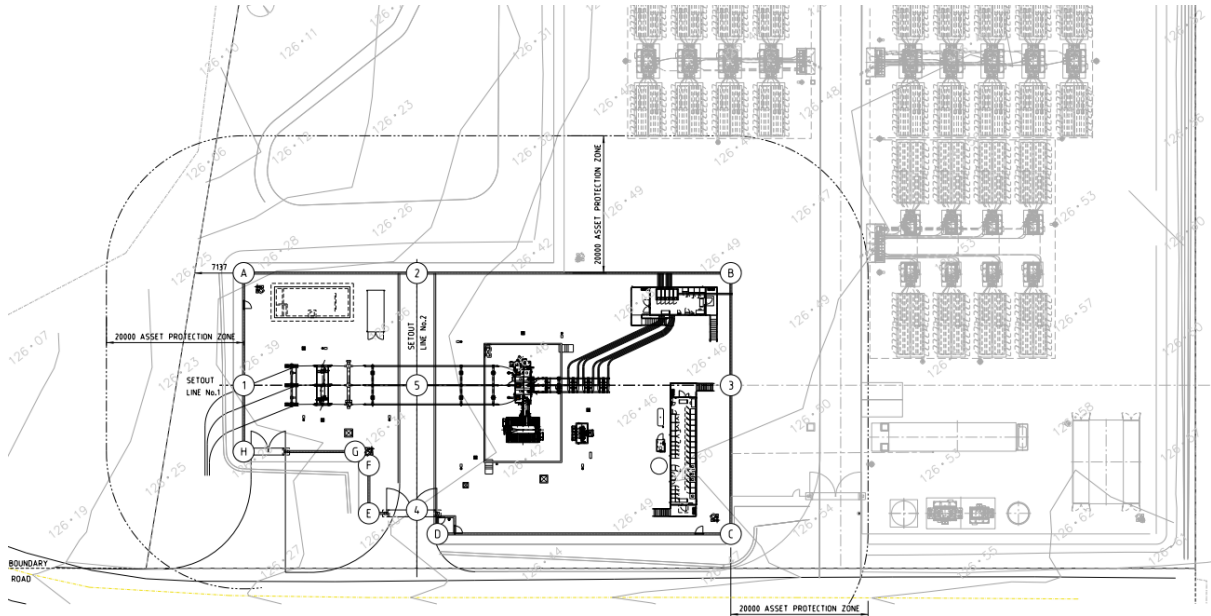


Figure 22: Substation Asset Protection Zone (APZ)

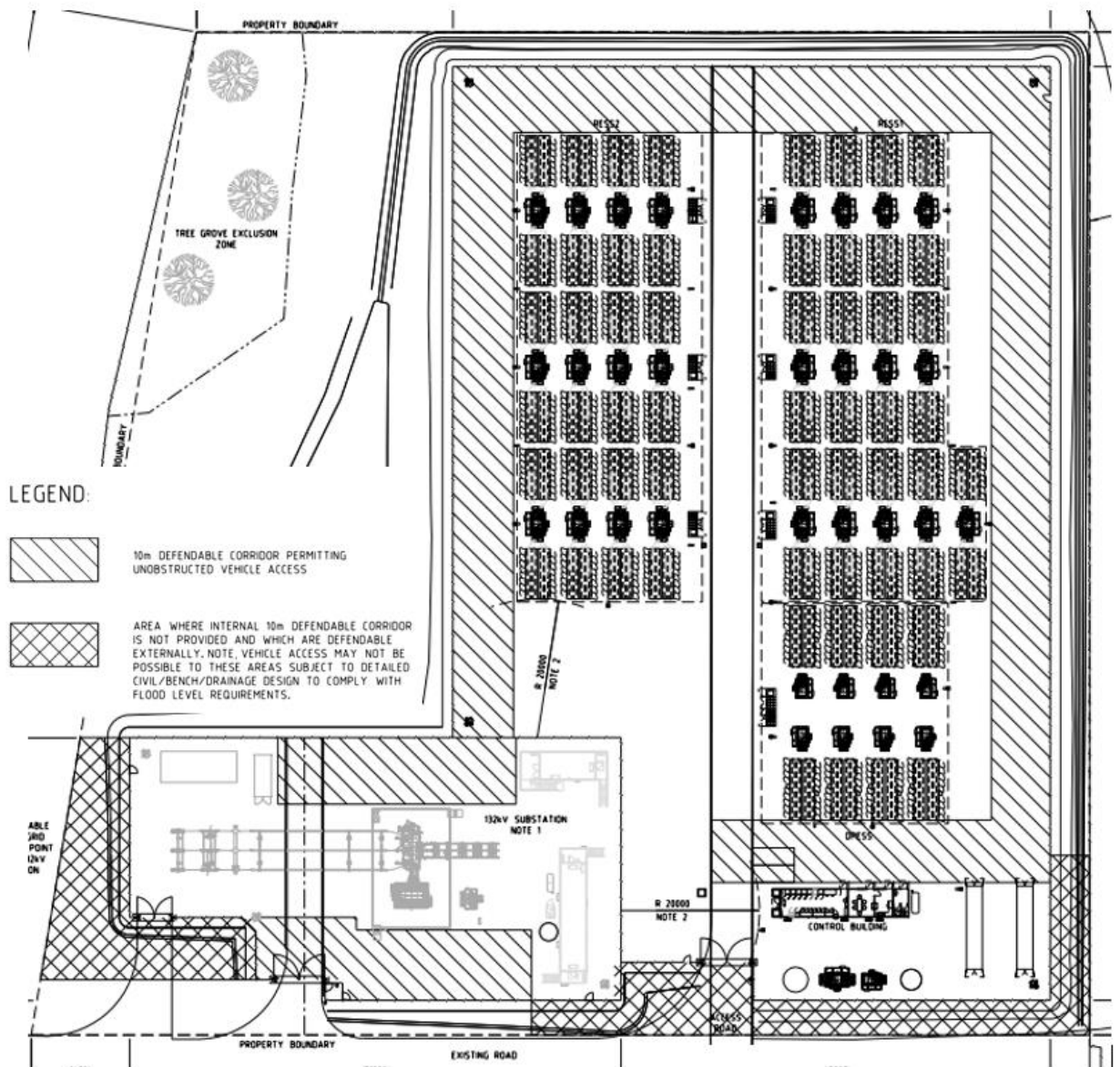


Figure 23: BESS Yard Defendable Space

## 7 LEGAL AND OTHER REQUIREMENTS

- CPP conforms with relevant state legislation.
- CPP's legal requirements and obligations are identified and communicated through SWMS, EMP, the *Legal Register*.
- The SQE Manager monitors changes to legislation and advises Project Managers via emails or bulletins and the update of CPP System requirements.

All work will comply with applicable legislation, Codes of Practice and Australian Standards. The applicable significant legislation, where CPP has a direct duty, or indirect compliance requirements are detailed in Table 6 and Table 7.

Table 6 Project Environmental Legislation, Regulatory and Other Requirement

Environment Legislation, Regulatory and Other Requirements	
<p><i>Environmental Planning and Assessment Act 1979 (NSW)</i></p>	<p>The NSW <i>Environmental Planning and Assessment Act 1979</i> (EP&amp;A Act) is the core legislation relating to planning and development activities in NSW. It is the principal law overseeing the assessment and determination of development proposals, and all development in NSW is assessed in accordance with the provisions of the EP&amp;A Act.</p> <p><u>The Development is State Significant Development (SSD 8392) and subject to approval under Part 5.1 of the EP&amp;A Act.</u></p> <p><u>Under Part 6 of the EP&amp;A Act, construction and occupation certificates are required to be obtained for the proposed building works.</u></p> <p><u>CPP will nominate a Principal Certifier for the Project. Where necessary based on the delivery of the for construction drawings and staging of the Project, a staged Construction Certificate (CC) and Occupation Certificate (OC) process will be completed for the Project.</u></p> <p><u>In New South Wales the Environmental Planning &amp; Assessment Act / Regulation requires that a CC is obtained before building work commences. A CC confirms building plans comply with the National Construction Code (NCC), are 'not inconsistent' with the Project Approval and comply with relevant conditions of the Project Approval. It should be noted that a Registered Building Surveyor (RBS) has to issue the CC and without one, an OC cannot be obtained at the completion of building work for those works undertake without the issue of a CC.</u></p> <p><u>The Principal Certifier (PC) must be appointed before building work commences and the PC is the only person who can issue a Part or Final OC. The PC inspects work during construction to ensure that it is generally consistent with the approved plans and ensures that the building is fit to occupy having regard to the required building standards.</u></p> <p><u>In order to issue the CC, carry out mandatory critical stage inspections and issue the OC, the RBS and PC must hold the appropriate accreditation with the NSW Fair Trading who administers the accreditation scheme for RBS's and PC's in NSW.</u></p> <p><u>In accordance with the EP&amp;A Act the CC &amp; OC application is required to lodged via the NSW Planning Portal. This will be the responsibility of CPP.</u></p>
<p><i>State Environmental Planning Policy (State and Regional Development) 2011</i></p>	<p>The Project triggers SSD in accordance with Division 4.1 of Part 4 of the EP&amp;A Act, as it is a type of development listed in Schedule 1 of the State Environmental Planning Policy (State and Regional Development) 2011. Pursuant to Clause 8 of the SEPP.</p> <p><u>As the overall DPSF development, inclusive of the DP BESS, will have a capital investment cost estimate of more than \$30 million, the proposal classifies as "State Significant Development" and is subject to assessment under Part 4 of the EP&amp;A Act.</u></p> <p><u>SSD projects are major projects that require preparation of an EIS in accordance with the bespoke project SEARs, and approval from the Minister for Planning and Environment.</u></p>
<p><i>Protection of the Environment Operations Act 1997 (NSW)</i></p>	<p><i>The Protection of the Environment Operations Act 1997</i> (POEO Act) establishes the State's environmental regulatory framework and includes licensing requirements for certain Operations and is administered by the EPA.</p>



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	<p>The Project will ensure it does not cause any water pollution, as defined under Section 120 of the Protection of the Environment Operations Act 1997 and detailed in Section 6.7.</p>
<p><i>Crown Lands Act 1989 (NSW)</i></p>	<p>The <i>Crown Lands Act 1989</i>, administered by the Minister for Crown Lands, regulates the management of Crown land for the benefit of the people of New South Wales</p> <p>This stage of the Project will not impact on Crown Land.</p>
<p><i>Local Land Service Amendment Act 2016 (NSW)</i></p>	<p>The <i>Local Land Service Amendment Act</i> provides a framework for the management and conservation of native vegetation in NSW, in accordance with Ecologically Sustainable Design principles, with an aim of preventing broad scale clearing unless it improves the condition of high conservation value native vegetation and encourage rehabilitation of the land.</p> <p><u>Refer to the Biodiversity Management Plan. During construction of the DPSF, the area that makes up Lot 1 DP 1249830 was used as a construction site office and laydown area to store construction materials and equipment before installation or use in the solar farm construction. As such, the area was cleared as planned and therefore there is minimal chance of interaction with flora and fauna. It shall be noted that this land has already been directly impacted with native vegetation permanently removed (complete loss of habitat) during the construction phase of the Darlington Point Solar Farm.</u></p>
<p><i>Biodiversity Conservation Act 2016 (NSW)</i></p>	<p>The <i>Biodiversity Conservation Act 2016</i> (BC Act) governs the management and conservation of biodiversity in NSW, which includes all flora, fauna and ecological communities, consistent with principles of ecologically sustainable development of the <i>Protection of the Environment Administration Act 1991</i> (NSW).</p> <p><u>Refer to the Biodiversity Management Plan. During construction of the DPSF, the area that makes up Lot 1 DP 1249830 was used as a construction site office and laydown area to store construction materials and equipment before installation or use in the solar farm construction. As such, the area was cleared as planned and therefore there is minimal chance of interaction with flora and fauna. It shall be noted that this land has already been directly impacted with native vegetation permanently removed (complete loss of habitat) during the construction phase of the Darlington Point Solar Farm.</u></p>
<p><i>Biodiversity Conservation Regulation 2017 (NSW)</i></p>	<p>Section 6.8 of the <i>Biodiversity Conservation Regulation 2017</i> (the BC Regulation) requires that a Biodiversity Development Assessment Report (BDAR) for a development application must include details of offsets for impacts, including the number and classes of biodiversity credits required to be retired in accordance with the like-for-like requirements of the offset rules. The credentials of the assessors that established these offsets and the date of the assessment is also required under the BC Regulation.</p> <p><u>Biodiversity offsets associated with the project are considered the responsibility of others and CPP are not responsible for these requirements under the Consolidated Consent.</u></p>
<p><i>Fisheries Management Act 1994 (NSW)</i></p>	<p>The broad objective of the <i>Fisheries Management Act 1994</i> (FM Act) is to conserve, develop and share the fishery resources of the State for the benefit of present and future generations.</p>
<p><i>Environment Protection and Biodiversity Conservation Act 1999 (Commonwealth)</i></p>	<p>The <i>Environment Protection and Biodiversity Conservation Act 1999</i> (EPBC Act) provides a legal framework to protect and manage nationally and internationally important flora, fauna, ecological communities and heritage places — defined in the EPBC Act as Matters of National Environmental Significance (MNES). The purpose of the EPBC Act is to ensure that actions likely to cause a significant impact on MNES undergo an assessment and approval process.</p>

	<p>Under the EPBC Act, an 'action' includes a project, undertaking, or activity. An action that 'has, will have or is likely to have a significant impact on a matter of national environmental significance' is deemed to be a 'controlled action' and may not be undertaken without prior approval from the Commonwealth Minister for the Environment (the Minister).</p> <p><u>A referral has been submitted by others to the Commonwealth Department of the Environment and Energy, and DPSF is deemed to be 'not a controlled action'.</u></p>
<i>National Parks &amp; Wildlife Act 1974 (NSW)</i>	<p>The National Parks &amp; Wildlife Act 1974 (NPW Act) protects Aboriginal heritage (places, sites and objects) within NSW. Protection of Aboriginal heritage is outlined in s86 of the Act, as follows:</p> <ul style="list-style-type: none"> <li>• "A person must not harm or desecrate an object that the person knows is an Aboriginal object" s86(1),</li> <li>• "A person must not harm an Aboriginal object" s86(2)</li> <li>• "A person must not harm or desecrate an Aboriginal place" s86(4).</li> </ul>
<i>National Parks &amp; Wildlife Regulation 2009 (NSW)</i>	<p>The National Parks and Wildlife Regulation 2009 ("NPW Regulation") provides a framework for undertaking activities and exercising due diligence in respect to Aboriginal heritage. The NPW Regulation 2009 outlines the recognised due diligence codes of practice which are relevant to this report, but it also outlines procedures for Aboriginal Heritage Impact Permit (AHIP) applications and Aboriginal Cultural Heritage Consultation Requirements (ACHCRs); amongst other regulatory processes.</p>
<i>Heritage Act 1977 (NSW)</i>	<p>The NSW Heritage Act 1977 makes provisions to conserve the State's historic heritage. It provides for;</p> <ul style="list-style-type: none"> <li>• The identification and registration of items of State heritage significance;</li> <li>• The interim protection of items of State heritage significance; and</li> <li>• Constitutes the Heritage Council of New South Wales.</li> </ul> <p><u>Heritage items are present on the Development site. The BESS stage is not anticipated to impact on these heritage items. Section 6.11 details general heritage principles and Chance Finds Protocol.</u></p>
<i>Native Title Act 1993 (Commonwealth)</i>	<p>The Native Title Act provides a national framework for the recognition and protection of native title i.e. the rights and interests, recognised by common law, possessed under traditional laws and customs of Aboriginal and Torres Strait Islander people.</p> <p>The Act recognises the ownership of land or waters by Aboriginal and Torres Strait Islander groups prior to European settlement and provides a mechanism for determining where native title exists, who holds it, and identifies compensation for actions affecting it. The Act establishes ways in which future dealings affecting native title may proceed and sets standards for those dealings.</p> <p><u>A Native Title search has been undertaken for the development and it has been determined that there are no registered claims over the Project area.</u></p>
<i>Aboriginal and Torres Strait Islander Heritage Protection Act 1984 (Commonwealth)</i>	<p>The Aboriginal and Torres Strait Islander Heritage Protection Act 1984 enables the Australian Government to respond to requests to protect areas and objects of particular significance to Aboriginal people, if it appears that state or territory laws have not provided effective protection.</p> <p><u>Review of background information, Aboriginal community consultation and an archaeological survey has resulted in the identification of ten (10) Aboriginal archaeological sites within the DPSF project boundary. One surface artefact scatter will be directly affected by the DPSF project area, however, mitigation measures to remove the scatter prior to the commencement of construction have been developed in consultation and agreement with the Griffith Local Aboriginal</u></p>



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	Land Council.
<i>Aboriginal Cultural Heritage Consultation Requirements for Proponents (2010)</i>	The purpose of the guidelines is to establish the requirements for consultation with the registered Aboriginal parties as part of the heritage assessment process to determine potential impacts of proposed activities on Aboriginal objects and places and to inform decision making for any application for an Australian Heritage Impact Permit (AHIP).
<i>Code of Practice for Archaeological Investigations of Objects in NSW (2010)</i>	The purpose of this Code of Practice is to: <ul style="list-style-type: none"> <li>establish the requirements for undertaking test excavation as a part of archaeological investigation without an AHIP; and</li> <li>establish the requirements that must be followed when carrying out archaeological investigation in NSW where an application for an AHIP is likely to be made.</li> </ul>
<i>Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW (2011)</i>	The purpose of this document is to provide: <ul style="list-style-type: none"> <li>Guidance on the process for investigating and assessing Aboriginal cultural heritage in NSW and</li> <li>□ OEH's requirements for an Aboriginal cultural heritage assessment report.</li> </ul>
<i>Biosecurity Act 2015 (NSW)</i>	The <i>Biosecurity Act 2015</i> establishes a system for the identification and control of noxious weeds in NSW. The Biosecurity Act divides noxious weeds into five categories which determine the level of control required. Responsibility for the control of noxious weeds lies with the owner and/ or occupier of private land and crown land, local councils and other public authorities.  <u>Refer to the Biodiversity Management Plan. CPP will manage project activities to comply with the Biodiversity Act and prevent the introduction and spread of noxious weeds.</u>
<i>Water Management Act 2000 (NSW)</i>	The objectives of the <i>Water Management Act 2000</i> are to provide for the sustainable and integrated management of the water sources of NSW for the benefit of both present and future generations.  <u>CPP will manage the objectives of the Act as detailed in Section 6.7 of the CEMP.</u>
<i>Roads Act 1993 (NSW)</i>	The <i>Roads Act 1993</i> (Roads Act) provides a framework for the management of roads in NSW. It provides for the classification of roads and the declaration of the Roads and Maritime Services (RMS) and other public authorities for both classified and unclassified roads. The Roads Act confers functions on RMS and other roads authorities and allows distribution of such functions between RMS and other roads authorities.
<i>State Environmental Planning Policy (Infrastructure) 2007</i>	The DPSF site and surrounding lands are zoned as RU1 – Primary Production under the Murrumbidgee Local Environmental Plan 2013 (Murrumbidgee LEP). Under RU1 zoning electricity generating works or solar energy systems are prohibited, however under the State Environmental Planning Policy (Infrastructure) 2007 (ISEPP) development of electricity generation works or solar energy systems is permissible on any land with consent within a 'prescribed rural zone'.  <u>Accordingly, the proposed development satisfies Clause 34 of the ISEPP and is permitted within zone RU1 Primary Production.</u>
<i>State Environmental Planning Policy No:33 – Hazardous and</i>	Provides definitions for hazardous and offensive industry based on the likely impacts of the proposal. A potentially hazardous industry is defined within SEPP 33 as "a development for the purpose of any industry which, if the development were to operate without employing any measures to reduce or minimise its impact, would pose a significant risk to human health, life or property, or to the

<p><i>Offensive Development</i></p>	<p>biophysical environment”.</p> <p><u>The development has been designed such as to avoid significant risk to human health, life, property or the biophysical environment through either avoidance of sensitive areas or the employment of mitigation measures. It is considered that SEPP 33 is not relevant to the DPSF and the DP BESS due to its non-hazardous and non-offensive nature.</u></p>
<p><i>State Environmental Planning Policy (Rural Lands) 2008</i></p>	<p>The aims of State Environmental Planning Policy (Rural Lands) 2008 are to:</p> <ul style="list-style-type: none"> <li>Facilitate the orderly and economic use and development of rural lands for rural and related purposes;</li> <li>Identify Rural Planning Principles and the Rural Subdivision Principles so as to assist in the proper management, development and protection of rural lands for the purpose of promoting the social, economic and environmental welfare of the State;</li> <li>Implement measures designed to reduce land use conflicts;</li> <li>Identify State significant agricultural land for the purpose of ensuring the ongoing viability of agriculture on that land, having regard to social, economic and environmental considerations; and</li> <li>Amend provisions of other environmental planning instruments relating to concessional lots in rural subdivisions.</li> </ul> <p><u>It is considered that the development is consistent with the aims of the SEPP, and is also not identified as state significant agricultural land</u></p>
<p><i>Murrumbidgee Local Environment Plan 2013</i></p>	<p>The Murrumbidgee LEP 2013 governs land use within the Murrumbidgee Shire LGA. The Murrumbidgee LEP provides local environmental planning provisions for land in Murrumbidgee in accordance with the relevant standard environmental planning instrument under section 33A of the EP&amp;A Act.</p>

Table 7 Project Relevant Codes of Practice

WHS Codes of Practice	
First Aid in the Workplace	Managing the risks of plant in the workplace
Excavation Work	Managing the Work Environment and Facilities
How to Manage and Control Asbestos in the Workplace	Work Health and Safety Consultation, Co-operation and Co-ordination
How to Safely Remove Asbestos	Managing Noise and Preventing Hearing Loss at Work
Labelling of Workplace Hazardous Chemicals	Managing Risks of Hazardous Chemicals in the Workplace

**Reference document(s):**

SOP-Q015 Legislative Review

## 8 OBJECTIVES AND TARGETS

### 8.1 Key Performance Indicators (KPIs) and Performance Reporting

- CPP is committed to setting a standard of environmental excellence for this project and a methodology for achieving it.
- To measure the implementation of this standard, CPP will utilise both Lead (inputs and actions) and Lag data (events) as detailed below.

- The Site Manager shall address progress of lead and lag indicator targets during the Site Managers monthly report which in turn will be a key item discussed at the project monthly meetings.
- The Project Manager will develop strategies at these meetings to achieve these targets if targets are not being achieved.

## 8.2 Lead Indicators

The Project leading indicators are detailed in Table 8.

Table 8 Project Leading Indicators

Lead Indicator	Target	KPI	Responsibility
Mobilisation Audit	Once within 2 weeks of project commencing on site	90% Compliance	SQE Advisor
Environmental Management Plan Audit	Once within 30 days of the project commencing	90% Compliance	SQE Advisor
External Independent Audit	Once within 3 months of project commencing on site	Satisfaction of the Secretary	Project Manager
Environmental Management Plan Audit	Risk based commencing after Initial Audit as determined by the QA Coordinator and Project Manager	90% Compliance	SQE Advisor
Sub-Contractor Compliance Audits	Aligned with CPP WHSEQ Audits	90% Compliance	SQE Advisor
Pre-Start Meetings	1 per day worked	100% Compliance	Site Manager
Toolbox Meetings	1 per week	100% Compliance	Site Manager
Visits by Project Manager	1 per month	100% Compliance	Project Manager
WHSE Observation's	1 per leader, per week	100% Compliance	Site Manager
Hazards Reported	5 per month	100% Compliance	Site Manager
Project Risk Register Reviewed	At least once per month		Site Manager
Maintain Legislative Compliance	No prosecutions, breaches, fines or notices		Site Manager

## 8.3 Lag Indicators

The Project lagging indicators are detailed in Table 9.

Table 9 Project Lagging Indicators

Lag Indicator	Target	KPI	Responsibility
Number of Near Miss Events (NM)	<b>Zero Harm</b>	100% Reported	Site Manager
Number of Report Only Events (RO)		<= 1 per project	Site Manager
Number of Environmental Events (ENV)		0	Site Manager
Number of OFIs for non-conformance & issues (OFI)		<= 2 per month	SQE Manager/Site Manager

# 9 IMPLEMENTATION & OPERATION

## 9.1 Organisation Structure

The organisational structure will be reviewed on a regular basis to ensure a capacity for meeting Environmental Policy, EMP and any regulatory requirements.



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## 10 RESOURCES, ROLES, RESPONSIBILITIES AND AUTHORITY - SPECIFIC ENVIRONMENTAL DUTIES

- Roles and responsibilities for achieving Environmental outcomes for this project are listed in the following sections.
- Support roles and responsibilities specified within the procedures are explained in this Management Plan.
- An organisation chart for the project is included in Figure 24.



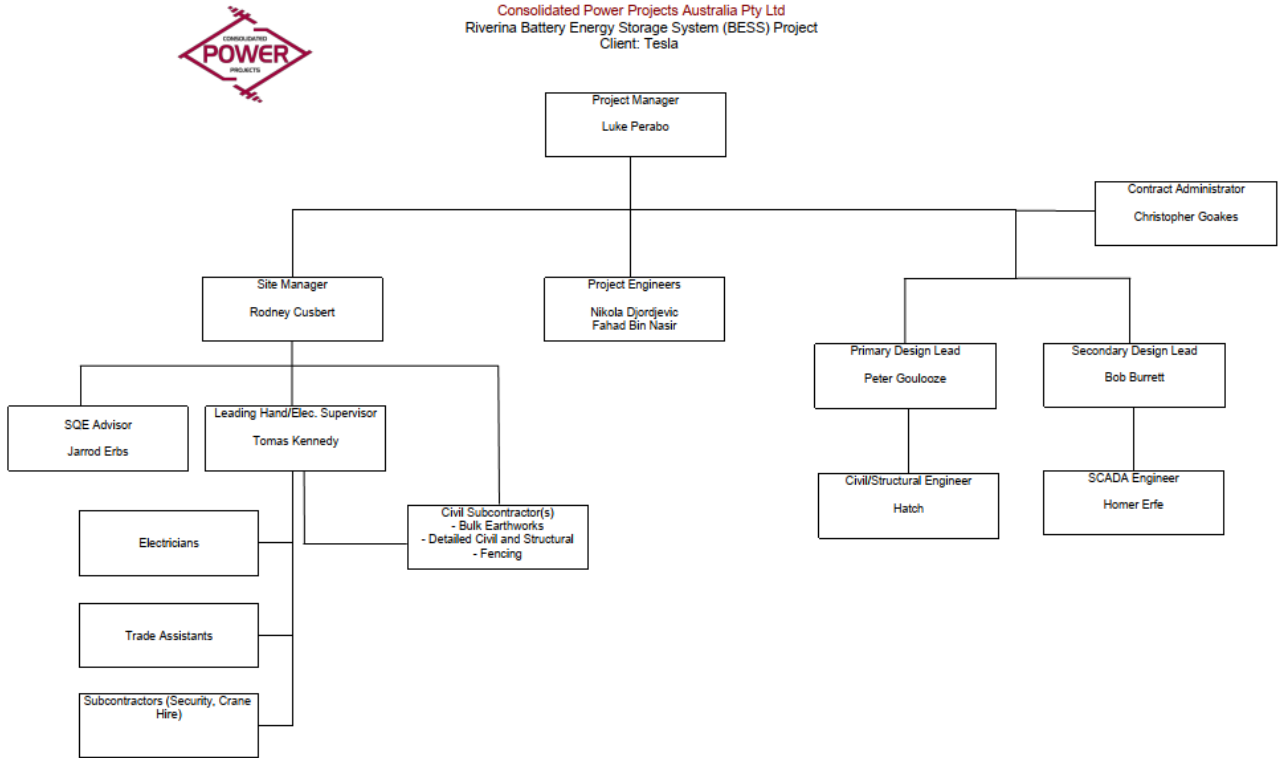
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# Construction Environmental Management Plan

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Organisational Chart



Organisational Chart

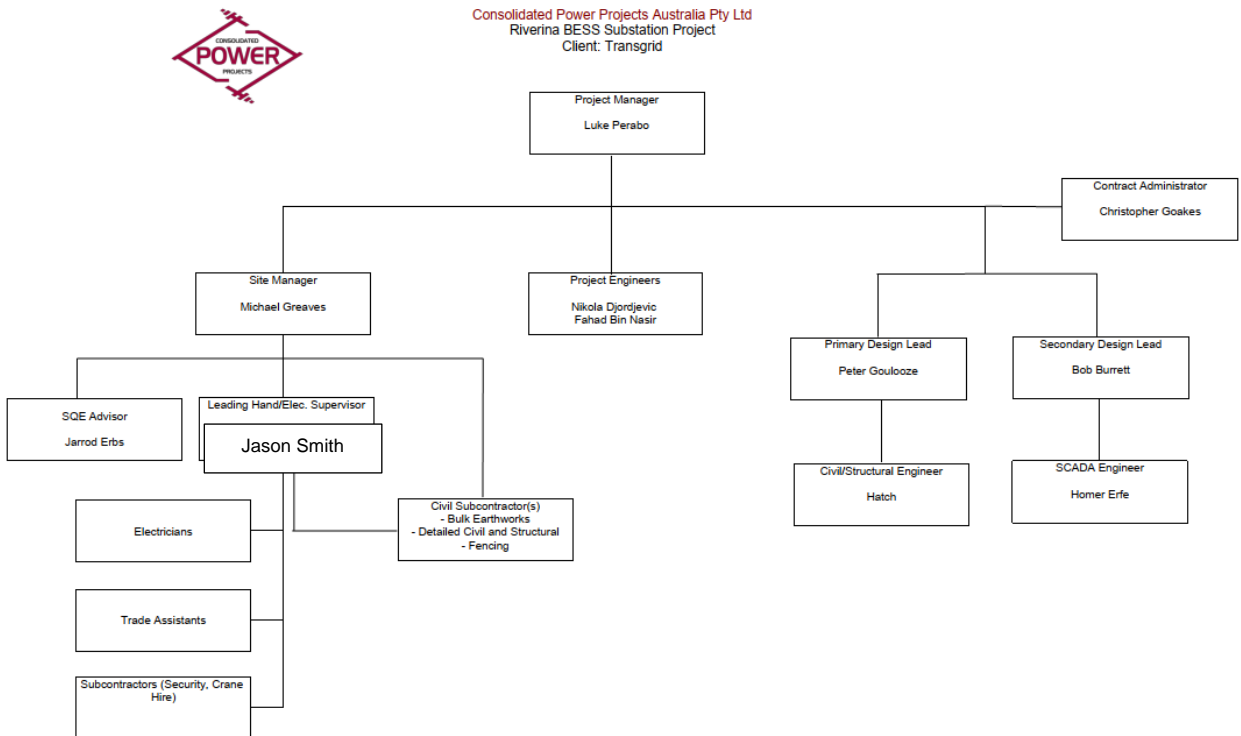


Figure 24 Project Organisational Chart

The relationship and contracting structure between Edify, Tesla, Transgrid and CPP is shown in Figure 25.

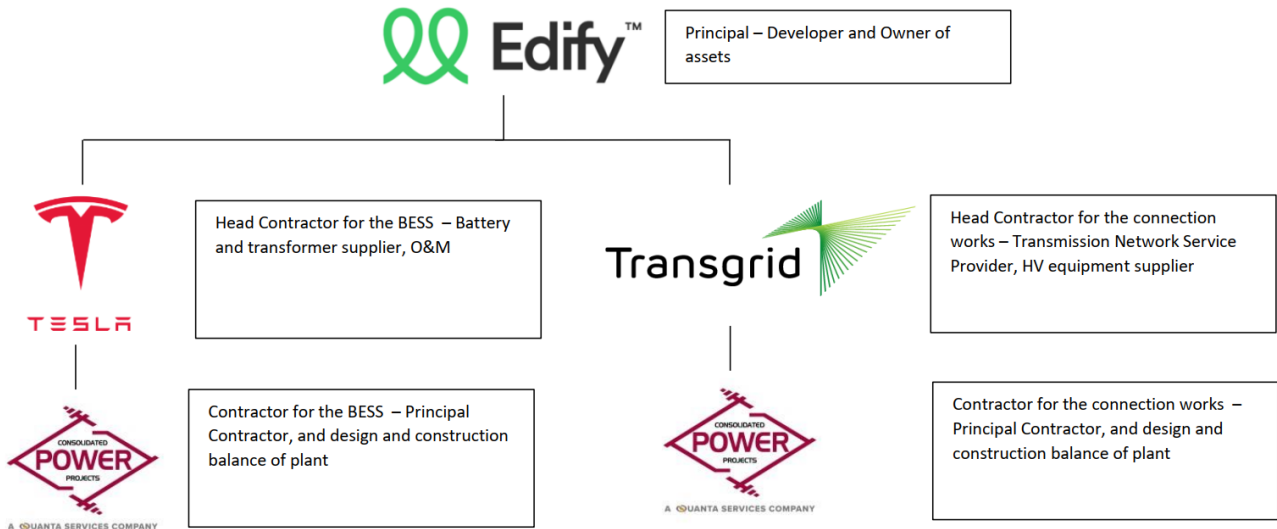


Figure 25 Project Contracting Structure

## 10.1 Project Manager

***The Project Manager is responsible for ensuring that this Management Plan is fully implemented.***

Without limiting the role of the Project Manager, he/she has responsibility for:

- The overall management of the project;
- The first point of contact for any issues or discrepancies arising during the project;
- Maintaining the progress and mutual interaction of the associated and interested parties in such a way that reduces the risk of overall failure.
- Notifying the appropriate Tesla/Transgrid representative of any non-compliance and incidents.

## 10.2 Site Manager

***The Site Manager is responsible for ensuring that the requirements within this Management Plan are fulfilled.***

Without limiting the role of the Site Manager, he/she is responsible for:

- The day-to-day management of the project;
- Managing any problems encountered on-site;
- Managing the quality, health and safety checks and environmental aspects of the project;
- Being responsible for pre-site items; and
- Managing the communications between all parties involved in the on-site development of the project.
- Notifying the Project Manager immediately of any non-compliance and incidents.



### 10.3 Safety Quality Environmental (SQE) Manager

The SQE Manager reports for the board and stakeholders and is responsible for:

- Ensuring that the WHSEQ System is implemented according to organisational requirements;
- Maintaining a high level of WHSEQ compliance and awareness amongst all personnel;
- Ensuring all staff are familiar with the requirements of the management system;
- Ensuring that an effective system of regular review of environmental documentation and procedures is conducted to ensure legislative compliance and duty of care obligation is upheld.

### 10.4 Safety Quality Environmental (SQE) Advisor

Responsible to the SQE Manager the SQE Advisor is responsible for:

- Ensuring that the WHSEQ Management System is implemented on CPP sites according to organisational requirements;
- Maintaining a high level of WHSEQ compliance and awareness amongst all personnel;
- Managing all aspects of WHS, non-conformances, events, hazard identification and event reporting;
- Ensuring site compliance with CPP WHS System.

### 10.5 Employees

Without limiting the role of employees, they are responsible for:

- Ensuring that their actions do not negatively impact the environment;
- Attending all required WHSE meetings, toolboxes and SWMS reviews as required;
- Reporting any hazards or risks;
- Undertaking machinery checks to prevent contamination from machinery being used onsite; and
- Participating where necessary in event investigations.

### 10.6 Subcontractors

Contractor or subcontractors are responsible for:

- Ensuring that Contractors Management system meet or exceed CPP standards;
- Providing evidence to CPP to show that they have adequate supervision and control of employees and their intended activities on the project site;
- Providing records, licenses, tickets and verification of competencies to CPP on request and prior to commencement of work onsite;
- Implement control measures for the risks associated with their tasks as shown in the Project Risk Register;
- Report any changes or improvements that may affect hazard and risk control measures for activities that could be added to the Risk Register for consideration;
- Comply with all project requirements.

## 10.6.1 Reporting Requirements

The time frames for reporting and corrective actions are detailed in Table 10 and Table 11.

Table 10 Event Reporting Time Frames

• Event reporting Time frames:	
Head's Up Notification	Within 2 Hours of being informed of the Event
Written (Preliminary) Event Report	Within 24 Hours of the event occurring
Completed Event Investigation Report Cat 3 <	Within 72 Hours of the event occurring
Initial ICAM Investigation Report Cat 4 >	Within 5 days of the event occurring
Completed ICAM Investigation Report Cat 4 >	Within 20 days of the event occurring - Follow directions from CPP

Table 11 Corrective Action Time Frames

Corrective Action Time Frames:	
CAT 1	Within 1 month
CAT 2	Within 2 Weeks
CAT 3	Within 72 Hours
CAT 4	Before End of Shift
CAT 5	Immediately

### Reference Document(s):

SOP-0001 Event Reporting and Investigation Process  
 GEN-C010 Subcontractor Project Pack  
 SOP-S118 Development of SWMS  
 TMP-S025 SWMS Template  
 FRM-S131 SWMS Review Form

## 11 COMMUNICATION

CPP has systems and processes in place to ensure clear communication and consultation with workers and clients to facilitate positive input and participation in quality matters relating to the Project.

### 11.1 Consultation

Consultation between all workers will be;

- Facilitated during the development, implementation and regular review of:
  - plans;
  - policies;
  - procedures;
  - SWMS;
  - pre-starts; and
  - toolboxes.

## 11.2 Internal Communication

- Internal meetings will be held for the project and will involve Designers, Clients Representatives, CPP Project Manager, Site Manager, Subcontractors Site Manager/s and where possible SQE Advisor.
- CPP have the following regular internal communication sessions:
  - daily pre-starts;
  - weekly toolbox meetings;
  - other meeting/ communication sessions as required.

### Reference Document(s):

*FRM-S027 Daily Pre-Start*

*FRM-S028 Toolbox Meeting Agenda*

*FRM-Q004 Meeting Agenda and Minutes*

## 11.3 External Communication

The Edify Community Consultation and Engagement Plan, which forms part of the EMS, has been prepared to guide community consultation activities during the construction and operation phases of the Project. This plan shall be referred to for all external communication.

External communication will be:

- In accordance with the contractual requirements or as agreed between CPP and the client;
- Where queries are raised, advice will be sort first;
- CPP will not instigate discussions with external interested parties except where legislation requires it.

Parties that may have an interest in issues relating to the quality aspects of the project are:

- Safe Work / Work Safe
- Utility Network Owners (e.g. Electricity, Water Gas, Telecom etc.);
- Local Councils;
- Road Authorities;
- Local community and community groups;
- Interest groups;
- Other stakeholders.

### Indicative concerns of these groups with respect to the Project could include:

- Movement of plant and equipment—noise/traffic;
- Bulk earthworks—noise, dust, damage to properties;
- Noise treatments—type, size, location;
- Day time/night time construction activities—vibration, noise, dust, lighting;
- Emergency event.

## 11.3.2 Access to Information

CPP will make the following information publicly available via the Edify website (<https://edifyenergy.com/project/riverina-darlington-point>) as relevant to the stage of the Project:

- the EIS;
- the final layout plans for the development;
- current statutory approvals for the development;
- approved strategies, plans or programs required under the conditions of consent;
- the proposed staging plans for the development if the construction, operation or decommissioning of the development is to be staged;
- how complaints about the development can be made;
- a complaints register;
- compliance reports - complaints in relation to construction activities can be sent to Email: [feedback@edifyenergy.com](mailto:feedback@edifyenergy.com)
- any independent environmental audit, and the Applicant's response to the recommendations in any audit; and
- any other matter required by the Planning Secretary.

CPP will provide the relevant information above directly to the relevant parties within Tesla (for the BESS), Transgrid (for the substation and connections) and Edify and request Edify to make this information publicly available via their website. Edify will be responsible for making this information publicly available.

CPP will ensure that this information is kept up to date by monitoring the website.

## 11.3.3 Community Engagement

Edify hosted the community of Darlington Point and the Riverina to an information night to learn more about the Energy Storage System on Tuesday, 22nd March 2022. Representative from Tesla and CPP were present at this event.

Ongoing community engagement and liaison is the responsibility of Edify.

## 11.3.4 Feedback and Contacts

Community feedback and complaints can be made to the following email address:

Email: [feedback@edifyenergy.com](mailto:feedback@edifyenergy.com)

A copy of the current feedback and complaints register can be found here: [Microsoft Word - Feedback and Complaints Register \(edifyenergy.com\)](#)

CPP, Transgrid and Tesla will work collaboratively with Edify to handle, respond to and resolve any disputes that may arise.

#### 11.3.4.1 Complaint Response Procedure

Complaints shall be registered, tracked and responded to in accordance with the following timeframes:

- Edify formally notified of complaint.
- Complaint logged on the Edify Complaint Register.
- Initial response provided to the complainant and Client within 24 hours indicating the matter is being addressed; and
- Detailed response including details of the complaint and the action taken / further action planned to alleviate the problem provided to the client within ten working days.

#### 11.4 External Interactions

- Some projects may have CPP workers interacting with personnel NOT under our control.
- This may occur on projects where we are operating on a site with ongoing operations.
- On projects with external interactions, CPP will consult / liaise with the client or person with control of the external work that may affect/interact with our own operations to ensure the risks are identified and controls implemented to ensure the safety of external workers and our own.
- Identified risks will be included in the risk register, discussed at pre-start meetings and when relevant included in SWMS.

#### 11.5 Landowner Communication

When CPP is in possession of site and a Landowner wants access to their land, they should contact the Site Manager in advance to ensure they will not be adversely impacted by planned works or vice versa. A landholder may be required to undertake an induction or be escorted to ensure their safety when accessing an area of their land that CPP is operating in

Where landowners are conducting works on the site, they will be fully inducted otherwise a visitor's induction will suffice will full time escort whilst onsite.

- All arrangements for CPP to gain access to public, or privately-owned land and any landholder specific arrangements will be established between the landholder and the client.
- CPP will record any special landholder arrangements in the WHSE Register and review the register prior to entering a landholder's property to ensure any specific arrangements are identified and implemented.
- Landowners will be notified 3 days prior to the commencement of any works that are on their land, and any works adjacent their land that may impact on the use of their land or property;
- CPP Staff will maintain good relationships with landholders, be courteous, polite and respectful;
- Leave all gates as you find them;
- Report any damage to stock fences immediately to your Site Manager;
- Refer any landholder issues to your Supervisor or Site Manager.
- CPP will not enter into any landholder arrangements that differ from the client arrangement unless they are in writing and approved by the Project Manager and / or Client.

**Reference Document(s):**  
*TMP-Q007 Letter Template*

## 11.6 Incident Investigation

An incident is defined under the COC as a set of circumstances that causes or threatens to cause material harm to the environment.

Material harm is defined under the COC as harm that:

- involves actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial; or
- results in actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding \$10,000 (such loss includes the reasonable costs and expenses that would be incurred in taking all reasonable and practicable measures to prevent, mitigate or make good harm to the environment).

A non-compliance is an occurrence, set of circumstances or development that is a breach of the COC's but is not an incident.

Once it has been determined that an incident or non-compliance has occurred and classified accordingly as per SOP-001 Event Reporting and Investigation Process, Section 16.1 and Section 16.2 details the reporting requirements for the incident or non-compliance.

CPP's incident investigation process is to be followed as shown in Figure 26 with findings to be provided to Tesla and/or Transgrid.

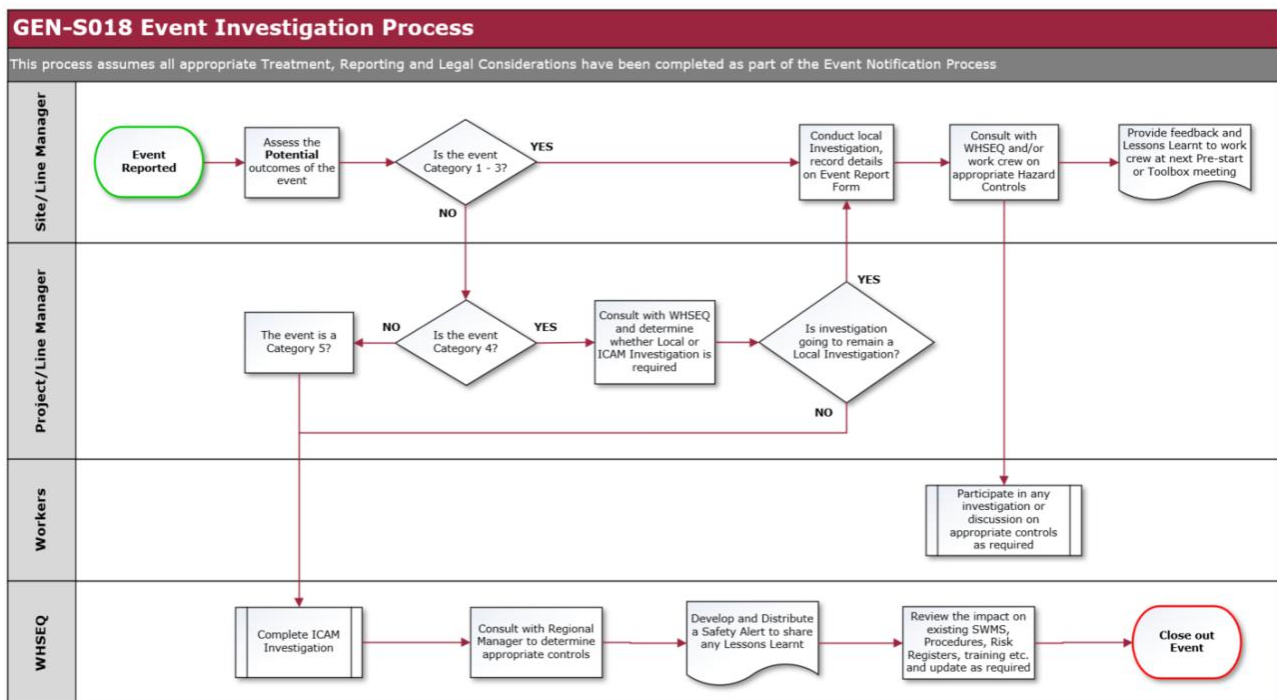


Figure 26 CPP Event Investigation Process

## 11.7 Inductions

- The Project Manager shall:



- ensure that a site-specific induction including all relevant safety aspects identified in the project risk register is developed;
- ensure that all employees, contractor employees and visitors to the site attend an induction prior to commencing works.
- Records of all inductions (signed form and copies of licenses) shall be retained for the life of the project and recorded on the site induction register.
- All employees, contractors and sub-contractors will have completed the generic WHS General Induction for Construction Work.

## 11.8 Site Attendance

- All personnel are required to attend the Principal Contractor's induction.
- All employees, subcontractors and visitors will be required to sign in and out of attendance registers.

## 11.9 Management of Visitors

- A Visitor to the site is someone that will:
  - not be a frequent visitor;
  - not be performing work.
- Visitors will be given a visitor's induction and must be accompanied at all times by a fully inducted person.
- Visitors are required to provide their own safety boots and all other minimum PPE requirements may be loaned if the visitor does not have safety vest, safety glasses and hard hat.

## 11.10 Management of Delivery Drivers

- A delivery driver is someone that is:
  - delivering or receiving items during the project construction;
  - not performing any other work other than delivering or picking up materials; and
  - not a frequent delivery driver to site;
  - delivery drivers to the site will be required to sign a site attendance register on arrival to site and sign out on departure;
  - provision will be made for deliveries to be made in a number of ways.

Delivery Driver requirements are detailed in Table 12.

Table 12 Delivery Driver Requirements

Delivery	Conditions
To Main Compound Area	Delivery Driver Induction
	Risk Assessment - SWMS
	PPE
Escorted to Unloading Area	Delivery Driver Induction
	Escort is inducted

Delivery	Conditions
	Communication
	Risk Assessment - SWMS
	PPE
Regular Delivery	Site induction
	Risk Assessment - SWMS
	Report to office
	Receive instructions / permissions
	PPE

## 11.11 Working in Sub-Stations and Switchyards

- All work inside or on sub-stations and switchyards must be undertaken in accordance with the relevant asset owner's requirements.
- Metal ladders and measuring tapes will not be used in switchyards and substations.
- In addition:
  - Do not carry any object above shoulder height;
  - A minimum of two people will carry long objects (below shoulder height).

### Reference document(s):

FRM-S136 Project Induction Declaration  
 REG-S009 WHS Registers/HSE Portal  
 FRM-S139 Project Induction – Visitor/HSE Portal  
 TMP-S135 Site Specific Induction Template  
 FRM-S161 Delivery Driver Induction/HSE Portal

## 11.12 Project Kick-Off Meetings

- Prior to works commencing on the Project, CPP will hold a Kick-Off Meeting with subcontractors and where required clients and client representatives.
- The Kick-Off Meeting is to convey all relevant project requirements, procedures and related work instructions to all relevant personnel.
- The Kick-Off Meeting will also be used as a forum to discuss the Project Risk Register to ensure all parties understand the identified risks and mitigation strategies which will be implemented.
- The Project Kick-Off Meeting must cover as a minimum;
  - site inductions;
  - project specific hazards;
  - high risk construction activities;
  - site coordination;
  - permits to work;
  - vehicle management;
  - event management;

- emergency management.

## 11.13 Daily Pre-Start Meetings

Pre-Start Meetings will be held daily, they are led by a Site Manager, Supervisor, and/or SQE Advisor.

Daily pre-starts will cover as a minimum:

- Environment (e.g., erosion sediment, any flora fauna, weed management etc.) and Safety issues (hazards, permits, equipment, interactions, deliveries) that are anticipated or identified for the day's work;
- Advising and discussing with personnel the work planned for the day;
- Advising personnel which Supervisor is responsible for each part of the work;
- Providing a forum at which personnel can discuss work related issues that have not been resolved elsewhere;
- Reviewing issues from the previous day.

**Reference document(s):**

*FRM-S027 Daily Pre-Start*

## 11.14 Toolbox Meetings

Toolbox Meetings will be held weekly, led by a Site Manager, Supervisor, and/or SQE Advisor and shall include the following items:

- Work related issues that have not been resolved elsewhere;
- Action items to be recorded and followed up at the subsequent meeting;
- Safety first, alerts, environment (e.g., erosion sediment, any flora fauna, weed management etc.) and other information is discussed;
- To periodically revise and reinforce emergency procedures; and
- Provide a short information/training session.

**Reference document(s):**

*FRM-S028 Toolbox Meeting Agenda*

## 11.15 Dispute Resolution

This process will be explained in the project site induction.

Where a workplace WHSE problem arises:

- The matter will be brought to the attention of the CPP Site Manager;
- The Site Manager will organise to have the matter rectified immediately;
- If this is not possible, the Site Manager will arrange for all employees affected by the issue to be relocated until the necessary corrective actions are complete.
- Should a dispute arise over an environmental issue:
  - An immediate inspection of the disputed area will be conducted by the Project Manager, Site Manager, SQE Advisor and/or the SQE Manager;

- Where the dispute involves a subcontractor, their Project and/or Site Manager will also be present.
- The resolution of environmental issues should:
  - First be raised and discussed with the relevant supervisor;
  - If agreement cannot be reached on the level of risk and required actions the issues should be referred in the first instance to the SQE Advisor;
  - The issue will continue to be escalated until an outcome satisfactory to all parties can be reached;
  - If no agreement can be reached an independent assessment of the issue will be undertaken.
- Where there remains any disagreement in relation to resolving the dispute, the Project Manager may refer the matter to the local statutory authority.

## 11.16 Work Health Safety and Environmental Representatives

- A worker may ask CPP or their subcontractors for the election of a WHSE representative to represent them on WHSE matters.
- If a worker makes this request, work groups must be established to facilitate this election. This process requires CPP and their workers to negotiate and agree on the formation of work groups.
- A work group may operate across multiple businesses if all parties agree to such an arrangement.

### Reference Documents:

*FRM-S103 Consultation and Communication Election*

## 11.17 Internal Complaints

Any internal complaints received shall be:

- Treated with respect and reported to the Site Manager immediately;
- The Site Manager will immediately notify the client's representative verbally;
- It will be recorded on an *Opportunity for Improvement form (OFI)*;
- Logged on the *Opportunity for Improvement Register*.

Note, any external complaints shall be referred to Tesla/Transgrid/Edify immediately. Refer to Section 11.3.4.

CPP's Project Manager shall:

- Provide an initial response to the complainant within **three (3) days** of receipt of the complaint; and
- Undertake all practical measures to modify the activity causing the impacts.

For complaints regarding significant matters, a detailed response shall be provided to the complainant within **fourteen (14) working days** following receipt of the complaint

### Reference document(s):

*SOP-S001 Event Reporting and Investigation Procedure*  
*FRM-S001 Event Notification Report Form/HSE Portal*  
*FRM-S002 Event ICAM Investigation Form*  
*FRM-S003 Event Witness Form*

REG-S001 WHSE Incident Reporting Register/HSE Portal  
FRM-Q012 Opportunity for Improvement Form/HSE Portal  
REG-Q005 Opportunity for Improvement Register/HSE Portal

## 12 DOCUMENT AND DATA CONTROL

- CPP maintains a Company Management System that identifies the procedures used by the Company and their application throughout the organisation.
- This system incorporates policies, procedures and associated documentation that is implemented on all projects and used throughout the organisation and complies with AS/NZS 4801.
- CPP maintains certification for the following systems, which are externally audited by a JAS/ANZ accredited company:
  - Quality ISO 9001;
  - Safety AS/NZS 4801;
  - Environment AS/NZS 14001.
- Overview of the CPP Management System Framework is shown in Figure 27.

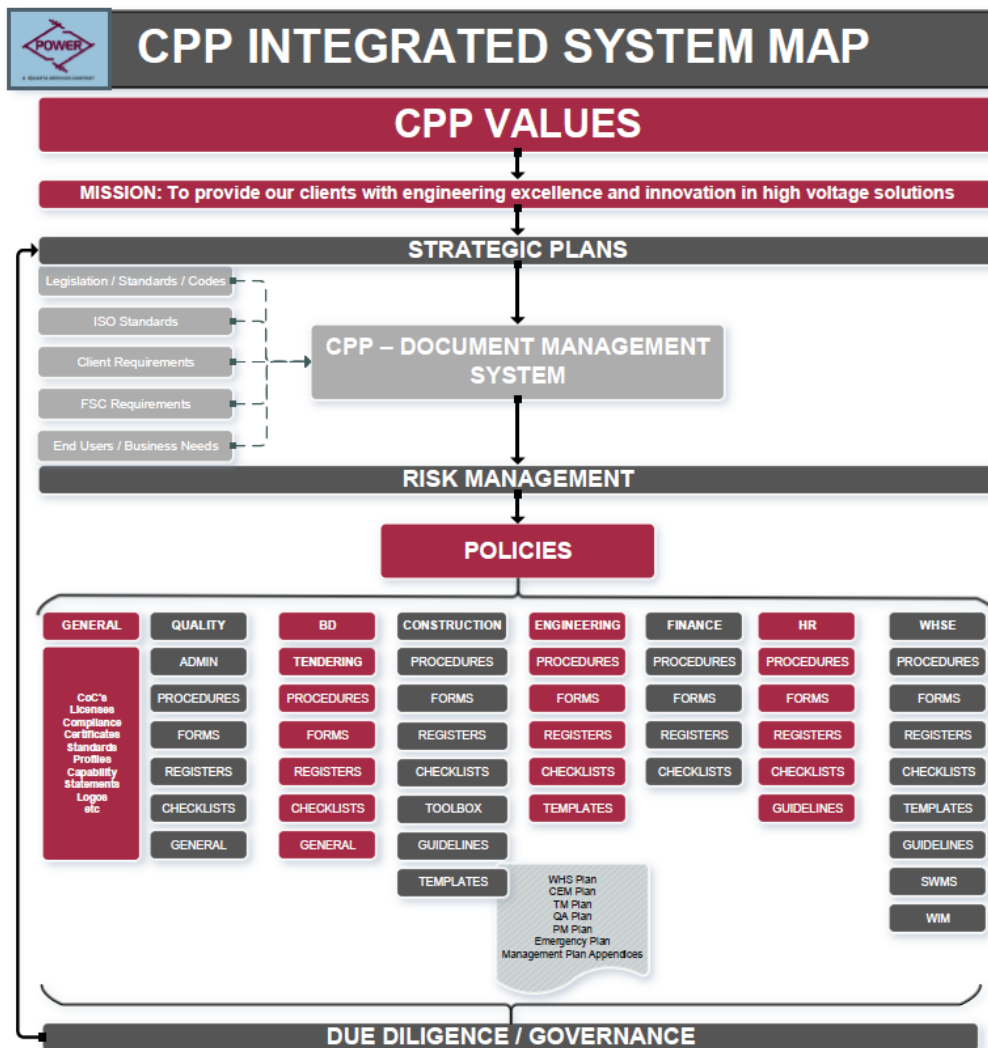


Figure 27 CPP Management System Framework

## 12.1 Project-Specific Documentation

The project will require the development of and implementation of several site-specific plans/ procedures to cater for and control construction issues.

The following plans shall be produced for the project:

- Project Management Plan;
- Quality Management Plan;
- WHS Management Plan;
- Biodiversity Management Plan
- Accommodation and Employment Strategy
- Traffic Management Plan
- Chance Find Protocol (Signal Energy)
- Emergency Management Plan
- Community Consultation and Engagement Plan (Edify)
- All plans, procedures, safe work method statements and hazard and risk assessments shall be prepared and reviewed as required by senior personnel.

The Consolidated Power Project Manager or Principal Contractor will arrange for the workshops to be held; the Principal / Client will be invited to attend.

The Risk Workshop must cover as a minimum:

- Environmental aspects and impacts;
- Site inductions;
- Project specific hazards;
- High risk construction activities;
- Site coordination;
- Permits to work;
- Vehicle management;
- Event management;
- Emergency management.

The outcomes from the Workshops will be included in the Project Risk Register and distributed to all workshop attendees and the project team prior to mobilisation.

- The Project Risk Register:
  - will be accessible to all personnel, preferably by being displayed in the site office;
  - will also be made available to Subcontractors who may have to prepare safe work method statements, assessments and control measures for their activities;
  - is a live document and is to be maintained throughout the life of the project;
  - will be used to identify a review for each specific stage of construction (e.g. Civil construction, electrical, trenching);



- will be used to record the identified hazards, risk assessment and risk control methods, risk owners and due dates.
- The Project Risk Register will contain the following:
  - a description of the tasks and hazards;
  - provide an unmitigated risk score that categorises those risks in relation to likelihood of occurrence and potential consequence (including regulatory and legal consequences);
  - contain control measures to eliminate or minimize likelihood and consequence of each risk;
  - identify the person responsible for monitoring and implementing mitigation plans; and
  - include a mitigated risk score.

## 12.2 Works As Executed Plans

Prior to the commencement of operations for each facility Tesla (for the BESS), Transgrid/Edify (for the substation and connections) must submit work as executed plans of the development to the Department.

## 13 EMERGENCY PREPAREDNESS

- A risk assessment of the types of emergencies for this project must be conducted and managed as part of the project risk register.
- Emergency Management Plan must be developed to capture the types of emergencies identified in the Project Risk Register.
- Consideration **MUST** be given to how the emergency plan interacts with 3<sup>rd</sup> parties or asset owners, if working on an operational or otherwise occupied site. (e.g. conducting work within a live sub-station).
- Plans will highlight the types and nature of emergencies, emergency contacts, procedures;
- Frequency of project emergency drills is **3** months, but the intervals between tests may be reduced depending on type of emergency and duties for people specified in the plan;
- The emergency plan of a project **MUST** be tested within the first **4** weeks from when a project commences and then re-tested at least every three months.
- Emergency Management Plans **MUST** be communicated to all project personnel during the induction and placed on notice boards.

### Reference Document(s)

*TMP-C066 Emergency Management Plan*  
*FRM-S115 Emergency Response Review*  
*REG-S031 Master Risk Register*  
*SOP-S001 Event Reporting and Investigation*

## 14 FIRE PROTECTION

- 11291 Emergency Management Plan shall be referred to for standard emergency response to the following scenarios:
  - Fire
  - Bush/Grass Fire Response – Fire initiated off site
  - Bush/Grass Fire Response – Fire initiated at site

- Fire – Thermal Runaway of Equipment (Lithium Ion)
  - If fire or smoke is observed coming from a battery storage system at any time:
    - Evacuate the area to the nearest Assembly Point. Deny access to site until it has been confirmed isolated/safe.
    - Notify the appropriate emergency response services and Tesla as per the Emergency Management Plan.
    - **Do Not attempt to fight the fire or open the doors of the affected unit.**
- A Fire Safety Study for the Project must be completed and construction of the battery storage facility, other than pre-construction minor works, must not commence until the Planning Secretary has approved the Fire Safety Study, unless otherwise agreed by the Planning Secretary. It shall be noted that approval for the commencement of construction works for the Development Stages up to and including Stage 2b(ii) has been received from the Planning Secretary without the requirement for the approval of the Fire Safety Study (refer to letter from DPIE to Edify, *Subject: Darlington Point Solar Farm - Revised Staging Request (SSD-8392), Date: 14 October 2022, DPIE reference: SSD-8392-PA-43*). Works associated with Stage 2b(iii) of the Development must not commence without approval of the Fire Safety Study.
- Risk of fire starting from within the DP BESS site is addressed in the Preliminary Hazard Assessment (PHA) and further mitigated through recommended boundary setback and internal battery module/container separation distances.
- The development is not located within a bushfire prone land mapped area, however there is still a risk of possible grass fires/bushfire risk over surrounding lands.
- Ignition sources for the site could include machinery movement in long grass (e.g. slashing, mowing and petrol-powered tool use), lightning strikes, storage of fuels/chemicals, hot welding activities, and cigarette butts thrown from cars travelling along surrounding roads.
- Site access for each of the construction stages has been selected to improve the ability to access and suppress any fire onsite.
- Site Manager will:
  - supply, install, and maintain portable fire extinguishers in tool containers, site offices, plant, equipment, vehicles, construction areas and flammable storage area and other areas as required. This information will be documented in the *WHSE Emergency Requirements Assessment*;
  - ensure that all workers are instructed in the basic inspection, safe use and operation of all relevant fire extinguishers types;
  - maintain an onsite register of inspection and maintenance of all fire extinguishers for audit purposes;
  - ensure sufficient supply and regular maintenance of fire extinguishers is carried out in accordance with the Australian Standards;
  - advise the local council fire station when works are commenced on site and shall ensure that on days of total fire bans that either no naked flames or devices that could create a spark shall be used or if required to ensure that local council approval has been obtained and that the requirements of the permit are abided by;
  - Ensure emergency drills are completed in accordance with the requirements of the 11291 Emergency Management Plan



# Construction Environmental Management Plan

Riverina Battery Energy Storage System (BESS) & Riverina BESS Connection

CPP Project No: 11291 & 12005

- To assess your level of risk on total fire ban and fire danger period days, actions to take, and what activities are and are not permitted, it is important to understand the Fire Danger Rating.
- The rating is forecast by the Bureau of Meteorology each day and is an early indicator of the potential danger, should a bushfire start.
- The matrix in Table 13 shall be used to assess Fire Danger Rating vs Allowed Site Works.

Table 13 Fire Danger Rating vs Allowed Site Works Matrix

<b>FIRE DANGER RATING vs ALLOWED SITE WORKS MATRIX</b>			
<b>FIRE RATING</b>	<b>WHAT DOES IT MEAN?</b>	<b>WHAT SHOULD I DO?</b>	<b>SITE REQUIREMENTS</b>
<b>CATASTROPHIC</b> TOTAL FIRE BAN DAY	<ul style="list-style-type: none"> <li>• These are the most dangerous conditions for a fire</li> <li>• Your life may depend on the decisions you make, even before there is a fire</li> <li>• Stay safe by going to a safer location early in the morning or the night before</li> <li>• Structures may not be able to withstand fires in these conditions – you may not be able to leave, and help may not be available</li> </ul>	<p><b>YOU NEED TO ACT NOW</b></p> <ul style="list-style-type: none"> <li>• For your survival, leaving early is the only option.</li> <li>• Put your survival first and leave bushfire prone areas the night before or early in the day - this is your safest option.</li> <li>• Act immediately - do not wait and see. Decide when you will leave, where you will go, how you will get there and when you will return.</li> <li>• Avoid forested areas, thick bush or long, dry grass;</li> <li>• Prepare, know, and practice a survival plan</li> </ul>	<b>YOU WILL BE ADVISED NOT TO ATTEND SITE FOR THE DAY</b>
<b>EXTREME</b> TOTAL FIRE BAN DAY	<ul style="list-style-type: none"> <li>• These are dangerous fire conditions</li> <li>• Check your bushfire plan and ensure that the site is fire ready</li> <li>• If a fire starts, take immediate action</li> <li>• If you are not prepared to the highest level, go to a safer location well before the fire impacts the site</li> <li>• Reconsider travel through bushfire risk areas</li> </ul>	<p><b>YOU NEED TO GET READY TO ACT</b></p> <ul style="list-style-type: none"> <li>• Leaving early is the safest option for your survival.</li> <li>• Only stay if you are prepared to the highest level. This means your building needs to have been constructed to bushfire protection levels e.g.; enclosed eaves, covers over external air conditioners, metal flyscreens etc.</li> <li>• You must be well prepared and able to actively defend your building if a fire starts. This means you have the right training, equipment, and resources to put out fires around the building e.g. enough water supply, petrol / diesel portable pump, generator, protective clothing etc.</li> <li>• If you are not prepared to the highest level, leaving bushfire risk areas early is your safest option.</li> </ul>	<p><b>HOT WORKS PERMITS SUSPENDED</b></p> <ul style="list-style-type: none"> <li>• Trenching only on stripped ground</li> <li>• No steel tracks in cropped areas beside trenches and around tower hardstands.</li> <li>• Water cart / Water trailer and dedicated fire spotter must be in place at all times.</li> <li>• Fire spotter to have contact with workgroup at all times, mobile or handheld.</li> <li>• No stripping of ground unless a fire has started and needs to be controlled.</li> <li>• No hot works or hot works type maintenance on machines in fields, on hardstands or within substation.</li> </ul>
<b>HIGH</b>	<ul style="list-style-type: none"> <li>• There is a heightened risk – be alert for fires in your area</li> <li>• Decide what you will do if a fire starts</li> <li>• If a fire starts, your life may be at risk</li> <li>• The safest option is to avoid bushfire risk areas</li> </ul>	<p><b>YOU NEED TO BE AWARE</b></p> <ul style="list-style-type: none"> <li>• Well prepared buildings that are actively defended can provide safety. This means you have the right training, equipment, and resources to put out fires around your building e.g. enough water supply, petrol / diesel portable pump, generator, protective clothing etc. – but only stay if you are physically and mentally prepared to defend in these conditions.</li> </ul>	<ul style="list-style-type: none"> <li>• Trenching only on stripped ground</li> <li>• No steel tracks in cropped areas beside trenches and around tower hardstands.</li> <li>• Water cart / Water Trailer and dedicated fire spotter must be in place at all times.</li> <li>• Fire spotter to have contact with workgroup at</li> </ul>

FIRE DANGER RATING vs ALLOWED SITE WORKS MATRIX			
FIRE RATING	WHAT DOES IT MEAN?	WHAT SHOULD I DO?	SITE REQUIREMENTS
		<ul style="list-style-type: none"> <li>If you are not prepared, leaving bushfire prone areas early in the day is your safest option.</li> </ul>	<ul style="list-style-type: none"> <li>all times, mobile or handheld.</li> <li>No stripping of ground unless a fire has started and needs to be controlled.</li> <li>No hot works or hot works type maintenance on machines in fields, on hardstands or within substation, without prior council/shire/local fire authority approval.</li> <li>Check Shire / Council / Fire Authorities for exemptions: Schedule 10 in SA, Section 40 Permit in Vic, Total fire ban exemption application in NSW, consult QRFS Chief Fire Warden for your area.</li> </ul>
<b>MODERATE</b>	<ul style="list-style-type: none"> <li>Stay up to date and be ready to act if there is a fire</li> </ul>	<ul style="list-style-type: none"> <li>Check your Bushfire Survival Plan</li> <li>Monitor conditions</li> <li>Action may be needed</li> <li>Leave if necessary</li> </ul>	<ul style="list-style-type: none"> <li>Work can proceed as normal with caution.</li> <li>Plant should avoid operating on crops or stubble.</li> <li>Hot works and machine maintenance work including hot works can be completed under permit on hard stands, roads and within substation.</li> </ul>

**Reference document(s):**

11291 Emergency Management Plan  
 FRM-S117 Emergency Contact Details  
 FRM-S142 WHSE Emergency Requirements Assessment Form  
 REG-S009 WHS Register/HSE Portal  
 MWS00142-000-FR-RPT-0001 Riverina Battery Energy Storage System Fire Safety Study

## 15 MONITORING & MEASUREMENT

### 15.1 Workplace Inspections

- The Site Manager shall:
  - conduct Weekly WHSE Inspections to assess the site for unsafe or environmentally unacceptable work conditions;
  - any identified concerns or issues shall be raised at the daily pre-start meeting;



# Construction Environmental Management Plan

Riverina Battery Energy Storage System (BESS) & Riverina BESS Connection

CPP Project No: 11291 & 12005

- ensure any actions identified during an inspection are assigned to a person for completion and monitored for close out using the Project Issues Tracking Register;
- ensure any relevant identified issues are discussed at daily pre-starts;
- wherever possible the Site Manager shall utilise a subcontractor to participate in the inspection as a “second person”.
- Senior Management personnel will visit the project quarterly and record a WHSEQ Observation.

The anticipated project inspection schedule is detailed in Table 14.



# Construction Environmental Management Plan

Riverina Battery Energy Storage System (BESS) & Riverina BESS Connection

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Table 14 Project Inspection schedule

Inspection Type	Frequency											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Weekly Site Inspection by CPP	2	4	4	4	4	4	4	4	4	4	4	3
Pre Start Meetings	23	20	22	21	23	21	22	23	20	23	22	21
Toolbox	2	2	2	2	2	2	2	2	2	2	2	2
Chemical Management	1						1					
Fire extinguishers	1						1					
Spill Kits	1						1					

The project monitoring requirements are detailed in Table 15.

Table 15 Project Monitoring Requirements

Item	Monitoring Type	Frequency	Reporting Type	Responsibility
<b>Soil</b>	Visual and Quantitative	Prior to commencement	Geotechnical Report	Site Manager/HSE Advisor
<b>Noise</b>	Visual and Quantitative	Qualitative (monthly or as required)	Noted on Pre-start Weekly Site Inspection Form Quantitative Monthly monitoring report Quantitative monitoring report (required if complaint received)	Site Manager/HSE Advisor
<b>Vibration</b>	Quantitative	Qualitative (as required)	Noted on Pre-start Weekly Site Inspection Form Quantitative monitoring report (required if complaint received)	Site Manager/HSE Advisor
<b>Air quality</b>	Visual and Quantitative	Daily (visual) Quantitative (as required)	Noted on Pre-start Weekly Site Inspection Form Quantitative monitoring report (required if complaint received)	Site Manager/HSE Advisor
<b>Traffic</b>	Visual and Quantitative	Daily	Vehicle Tracking Register	Site Manager/HSE Advisor
<b>Heritage</b>	Visual	Weekly	Weekly Site Inspection Form	Site Manager/HSE Advisor

<b>Biodiversity</b>	Visual	Weekly	Weekly Site Inspection Form	Site Manager/HSE Advisor
<b>Weeds</b>	Visual	Weekly	Weekly Site Inspection Form	Site Manager/HSE Advisor
<b>Rehabilitation</b>	Visual	Weekly	Weekly Site Inspection Form	Site Manager/HSE Advisor
<b>Hazardous Substances and Storage</b>	Visual	Weekly	Weekly Site Inspection Form	Site Manager/HSE Advisor
<b>Waste</b>	Visual	Weekly	Weekly Site Inspection Form	Site Manager/HSE Advisor

**Reference document(s):**

FRM-S063 WHSE Inspection Form/HSE Portal  
 FRM-S126 WHSEQ Observation Form/HSE Portal  
 REG-S002 Master Register of Substances (SDS)/HSE Portal  
 FRM-G003 Spill Response Kit Checklist  
 REG-S009 WHS Registers/HSE Portal

## 15.2 Documentation

- CPP has implemented and maintains Company Management Systems that identify the documents used by the Company and their application throughout the organisation.
- This includes details on the implementation of the quality policy, procedures and forms.

## 15.3 Records

- Some documents used in this project may have references that are connected to the client's system or that may be outside of the latest QMS requirements.
- The existing references shall be maintained and in all other respects the QMS applies.

## 15.4 Independent Environmental Audit

- CPP will undertake internal and external audits to verify implementation and compliance with the CPP certified system.
- Independent Audits of the development of the battery storage facility must be conducted and carried out in accordance with the Independent Audit Post Approval Requirements (2020) to the following frequency:
  - (a) within 3 months of commencing construction; and
  - (b) within 3 months of commencement of operations (to be completed by Tesla/Transgrid/Edify)
- Proposed independent auditors must be agreed to in writing by the Planning Secretary prior to the commencement of an Independent Audit.
- The Planning Secretary may require the initial and subsequent Independent Audits to be undertaken at different times to those specified in condition 7 of Schedule 4 of the COC upon giving at least 4 weeks' notice to the Applicant of the date upon which the audit must be commenced.

- In accordance with the specific requirements in the Independent Audit Post Approval Requirements (2020), the Applicant must:
  - (a) review and respond to each Independent Audit Report prepared under condition 7 of Schedule 4 of the COC, or condition 7B of Schedule 4 of the COC where notice is given by the Planning Secretary
  - (b) submit the response to the Planning Secretary; and
  - (c) make each Independent Audit Report, and response to it, publicly available within 60 days of submission to the Planning Secretary, unless otherwise agreed by the Planning Secretary.
- Unless otherwise required by the Planning Secretary audits will be undertaken annually or risk based after initial audit.
- Audit reports will be completed and issued in a timely manner.
  - Note, Independent Audit Reports and the Applicant's response to audit findings must be submitted to the Planning Secretary within 2 months of undertaking the independent audit site inspection as outlined in the Independent Audit Post Approvals Requirements (2020) unless otherwise agreed by the Planning Secretary.
- All findings will be recorded for tracking and trending purposes.
- Corrective actions will be closed within the stipulated timeframe.
- Once the Internal Audit Report is completed, reviewed and agreed with the Responsible Manager, the Responsible Manager or their delegate shall track and record the close out and follow up of all OFI's
- **Closeout time frames for actions arising from audits are listed in the table below and are used as a guide only. Each identified action will be closed out in accordance with the criticality of the finding and site priorities and are detailed in Table 16.**

Table 16 Action Item Close Out Timeframes

CATEGORY	TIMEFRAME
CAT 0	Immediately/1 day
CAT 1	Within 7 days
CAT 2	Within 15 days
CAT 3	Within 30 days
CAT 4	Within 45 days

- Copies of project audits should be retained in the relevant audit and OFI project folders by the Responsible Manager.

**Note** - For Project sites non-conformances identified by site inspections and all 2nd and 3rd party audits etc., will be registered and tracked by the Responsible Manager using Project Issue Tracking List. Where the responsibility of closing out such an action is placed onto the SQE department then the action is registered as an OFI on the OFI register.

**Reference Document(s):**

REG-Q002 Audit Register Sharepoint  
 REG-Q005 Opportunity for Improvement Register /ATS HSE Portal  
 SOP-Q002 Auditing  
 FRM-Q012 Opportunity for Improvement/HSE Portal  
 CHK-Q001 Internal SQE Pre Audit Check Tool  
 CHK-Q002 Mobilisation Pre Audit Check Tool  
 CHK-Q003 Subcontractor SQE Pre Audit Tool  
 REG-S009 WHS Registers/HSE Portal

## 16 EVENT REPORTING AND RECORDING

### 16.1 Incident Notification

Event Reporting and Investigation shall be managed in accordance with the CPP SOP-0001 Event Reporting and Investigation Process, as well as the requirements detailed below under the COC's and those required under legislation in accordance with part 5.7 of the Protection of the Environment Operations Act 1997, there is a duty to notify the EPA of pollution incidents in NSW.

The Planning Secretary must be notified in writing via the Major Projects website immediately after the Applicant becomes aware of an incident. This notification shall be completed by Tesla (for the BESS), Transgrid/Edify (for the substation and connections) . CPP shall ensure prompt formal notification to Tesla (for the BESS), Transgrid/Edify (for the substation and connections) to ensure Tesla (for the BESS), Transgrid/Edify (for the substation and connections) adheres to the notification requirements of the COC's. Tesla (for the BESS), Transgrid/Edify (for the substation and connections) shall provide CPP formal evidence of this notification to the Department so that CPP can verify this has been performed. The notification must identify the development (including the development application number and the name of the development if it has one) and set out the location and nature of the incident. Subsequent notification requirements must be given, and reports submitted in accordance with the requirements set out in Appendix 3 of the Consolidated Consent and below.

Key details of the CPP SOP-0001 Event Reporting and Investigation Process are listed below:

- Employees, visitors, subcontractors or other persons have a strict duty to immediately report any event, witnessed event, injury or minor ailment as a result of work to their Site / Line Manager **Immediately.**
- Failure to report an event is a breach of company procedure and may warrant formal warning action.

Events **MUST** be reported internally before notifying clients and regulators.

#### 16.1.1 Written Incident Notification Requirements to DPIE

A written incident notification addressing the requirements set out below must be submitted to the Planning Secretary via the Major Projects website within seven days after becoming aware of an incident. This notification shall be completed by Tesla (for the BESS), Transgrid/Edify (for the substation and connections). CPP shall ensure prompt formal notification to Tesla (for the BESS), Transgrid/Edify (for the substation and connections) to ensure Tesla (for the BESS), Transgrid/Edify (for the substation and connections) adheres to the notification requirements of the COC's. Tesla (for the BESS), Transgrid/Edify (for the substation and connections) shall provide CPP formal evidence of this notification to the Department so that CPP can verify this has been performed. Notification is required to be given even if Tesla (for the BESS), Transgrid/Edify (for the substation and connections) fails to give the notification required under condition 4 of Schedule 4 of the COC or, having given such notification, subsequently forms the view that an incident has not occurred.

Written notification of an incident must:

- a) identify the development and application number;
- b) provide details of the incident (date, time, location, a brief description of what occurred and why it is classified as an incident);
- c) identify how the incident was detected;
- d) identify when the applicant became aware of the incident;
- e) identify any actual or potential non-compliance with conditions of consent;

- f) describe what immediate steps were taken in relation to the incident;
- g) identify further action(s) that will be taken in relation to the incident; and
- h) identify a project contact for further communication regarding the incident.

Within 30 days of the date on which the incident occurred or as otherwise agreed to by the Planning Secretary, Tesla (for the BESS), Transgrid/Edify (for the substation and connections) must provide the Planning Secretary and any relevant public authorities (as determined by the Planning Secretary) with a detailed report on the incident addressing all requirements below, and such further reports as may be requested.

The Incident Report must include:

- a) summary of the incident;
- b) outcomes of an incident investigation, including identification of the cause of the incident;
- c) details of the corrective and preventative actions that have been, or will be, implemented to address the incident and prevent recurrence; and
- d) details of any communication with other stakeholders regarding the incident.

## 16.2 Non-compliance Notification

The Planning Secretary must be notified in writing via the Major Projects website within seven days after the Applicant becomes aware of any non-compliance. This notification shall be completed by Tesla (for the BESS), Transgrid/Edify (for the substation and connections). CPP shall ensure prompt formal notification to Tesla (for the BESS), Transgrid/Edify (for the substation and connections) to ensure Tesla (for the BESS), Transgrid/Edify (for the substation and connections) adheres to the notification requirements of the COC's. Tesla (for the BESS), Transgrid/Edify (for the substation and connections) shall provide CPP formal evidence of this notification to the Department so that CPP can verify this has been performed.

- A non-compliance notification must identify the development and the application number for it, set out the condition of consent that the development is non-compliant with, the way in which it does not comply and the reasons for the non-compliance (if known) and what actions have been, or will be, undertaken to address the non-compliance.
- A non-compliance which has been notified as an incident does not need to also be notified as a non-compliance.

## 16.3 Regulator Notifiable Event Reporting

A person conducting a business or undertaking must notify the principal contractor immediately of a notifiable incident as defined by legislation.

Notifying the regulator of a pollution incident can be done via phone, fax or email using the contact information in Table 17. The EPA must be notified for incidents that cause material harm to the environment (as per s147-153 of the Protection of the Environment Operations Act 1997).

It shall be noted that a regulatory notifiable event would also constitute as a notifiable incident under the COC's and notification must also be made to DPIE as detailed in Section 16.1.

When reporting a pollution incident to the NSW Environment Protection Authority (EPA), the following information must be provided.

- Name, address and daytime telephone number of the person making the report;
- Incident details (indicate if the incident is still occurring at the time this notification is lodged);

- Date and time of incident;
- Details of source of pollution—business name, address, etc.
- Location of incident (not always the same as address).

Table 17 Regulator Contact Details

Regulator	Telephone No.	Website
Environment Protection Authority (EPA) NSW	131 555	www.epa.nsw.gov.au

## 16.4 Event Notification Process

The CPP event notification process is detailed in Figure 28.

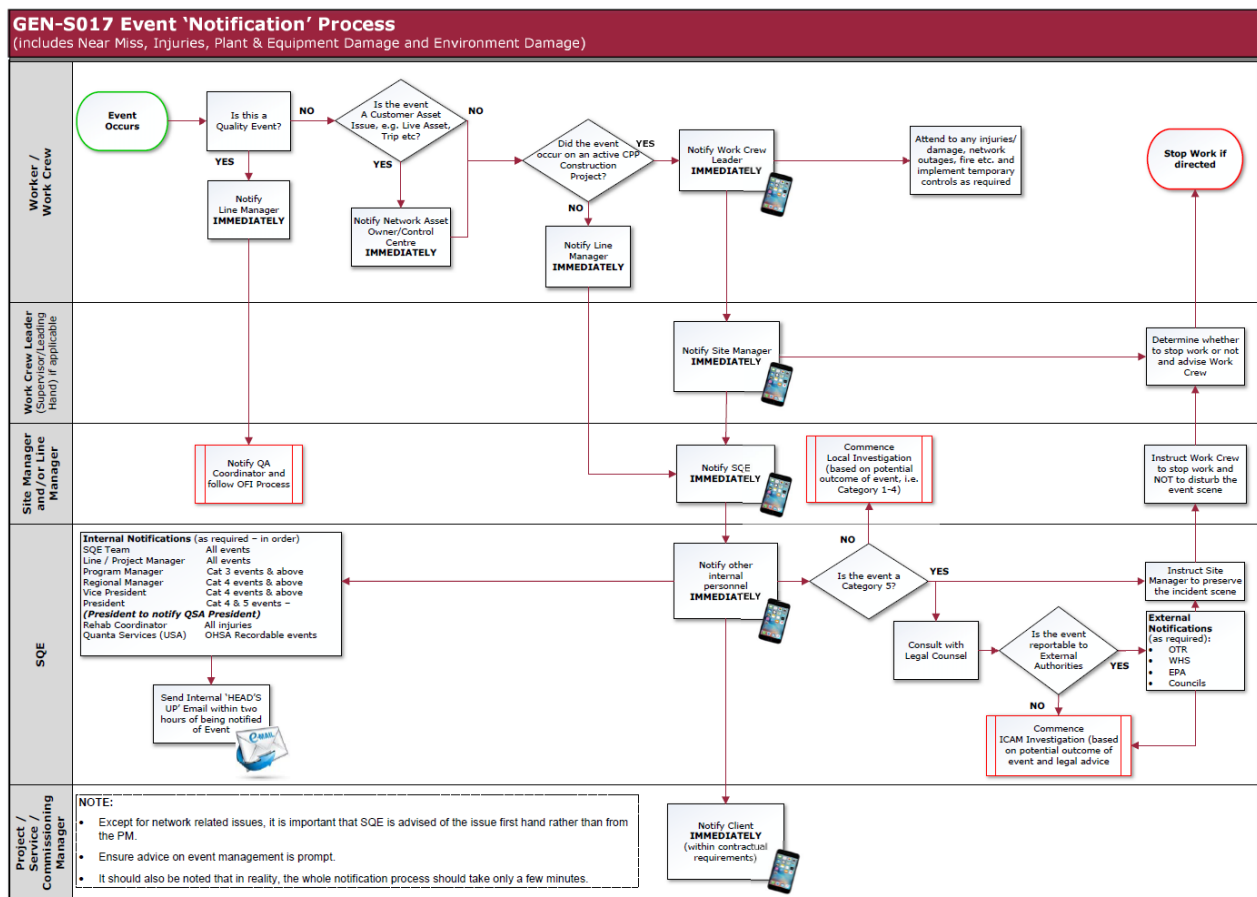


Figure 28 CPP Event Notification Process



## 16.5 Event Investigation Process

The CPP event investigation process is detailed in Figure 29.

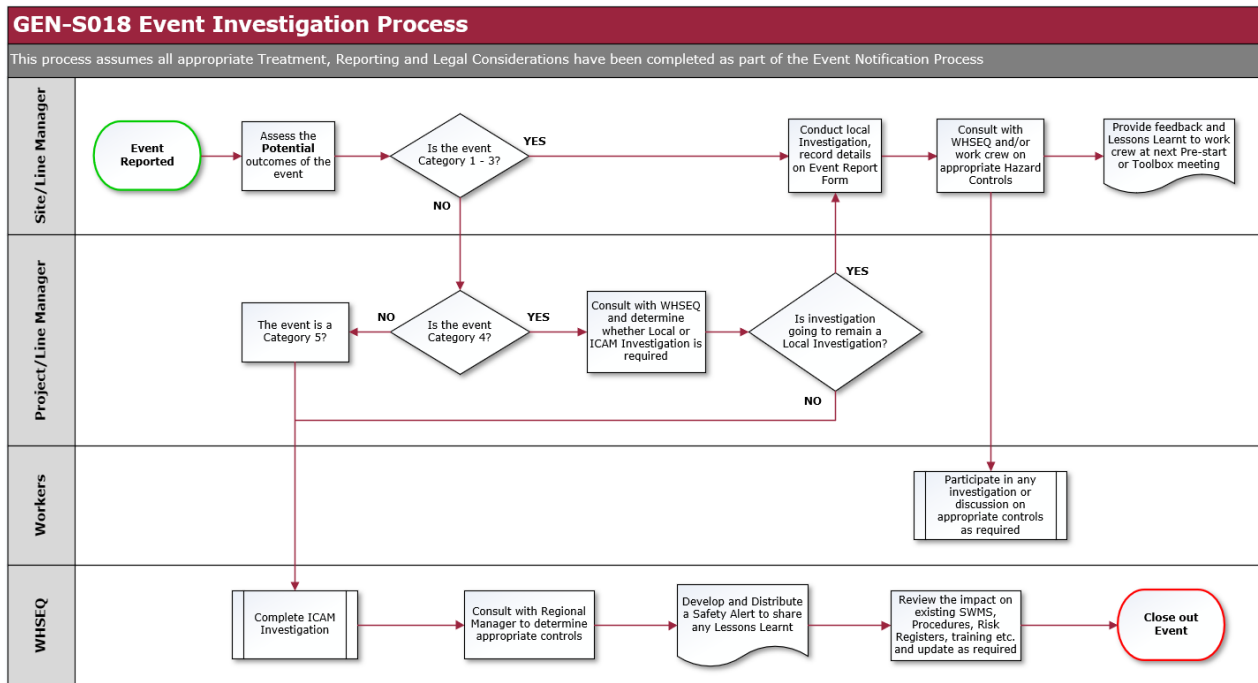


Figure 29 CPP Event Investigation Process

### Reference document(s):

SOP-S001 Event Reporting and Investigation Procedure

FRM-S001 Event Notification & Report Form/HSE Portal

FRM-S002 Event ICAM Investigation Form

FRM-S003 Event Witness Form

FRM-S004 Hazard Report Form/HSE Portal

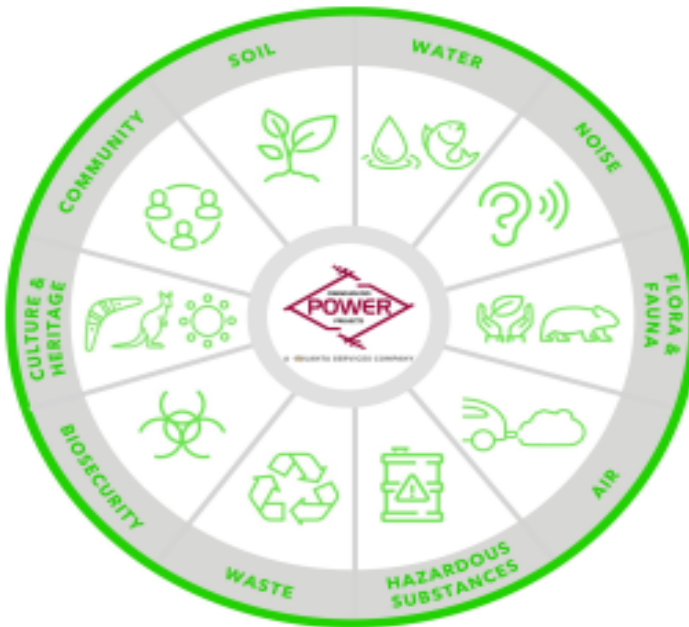
FRM-S005 ICAM Investigation Report

REG-S009 WHS Registers/HSE Portal

REG-S001 WHSE Incident Reporting Register/HSE Portal

## APPENDIX A ENVIRONMENTAL ESSENTIALS

# ENVIRONMENT ESSENTIALS



### HAZARD IDENTIFICATION

Identify environmental aspects (hazards) both before work begins and during changing work conditions. Together with your crew at pre-starts or toolbox meetings:

- Refer to the wheel and identify what environmental aspects are nearby that can be impacted by operations
- Decide how to control, build capacity, and absorb any environmental impacts
- Undertake Take 5 and SWMS review

### IMPLEMENT ABSOLUTE CONTROLS THAT:

1. Specifically target the source
2. Effectively mitigate exposure to the source
3. Fail safely, even if there is human error during the work period (unrelated to the installation of the control)
4. Are inclusive of the hierarchy of controls



#### SOIL

Segregate and manage contaminated soil. Implement and maintain erosion, sediment and dust control



#### WATER

Protect streams, rivers, groundwater and stormwater from contamination



#### FLORA & FAUNA

Fulfil our responsibilities to protect native flora and fauna, threatened and endangered species, ecology and habitats



#### NOISE

Protect the community from construction noise and vibration within agreed constraints



#### AIR

Minimise air pollutants and invest to offset our greenhouse emissions



#### HAZARDOUS SUBSTANCES

Manage the use and disposal of hazardous and listed substances. Store / secure chemicals in bunded areas. Protect the environment from spills



#### WASTE

Manage waste in accordance with the waste hierarchy. Ensure the disposal of waste is carried out by authorised service providers



#### BIOSECURITY

Inspect and make sure all plant, equipment, machinery and soils brought on to site are free of any weeds, fungus and biological threats



#### CULTURE & HERITAGE

Preserve and protect areas and objects that are significant to Aboriginal, Cultural and Historical Heritage



#### COMMUNITY

Proactively work with community, business, industry and government to manage and reduce pollution, waste and adverse impacts on the environment

## APPENDIX B

## COMMUNITY & ENVIRONMENTAL POLICY

### COMMUNITY & ENVIRONMENT POLICY

*Consolidated Power Projects (CPP) is environmentally responsible and we value sustainable development. We are committed to managing our environmental and community impact in the delivery of our investment outcomes.*

#### Core Principles

- ❖ We are dedicated to environmental conservation in all aspects of our operations
- ❖ We believe that the environment is important to everyone's future
- ❖ Actively engage the community to build mutual understanding, respect and trust
- ❖ Value community relationships as integral to our business
- ❖ We are committed to continually improving the efficiency with which we use our resources
- ❖ To not compromise the environments in which we operate
- ❖ To maintain industry best practice

#### To achieve these principles, we...

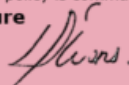
- ❖ Promote the need for ecological and resource sustainability
- ❖ Embrace responsibility and accountability
- ❖ Utilise local communities and services where practicable
- ❖ Maintain an Environmental Management System to ISO 14001 certification
- ❖ Consult with employees, stakeholders, and local communities on issues that will impact on the environment
- ❖ Will proactively pursue the identification of all environmental aspects and manage the impacts
- ❖ Assess our suppliers and sub-contractor's abilities to operate within the same framework

#### COMMITMENT

I am committed to ensuring that this policy is communicated, understood, accepted and successfully implemented.

**President**  
Dave Evans

**Signature**



**Date**  
September 2021



**"Strive for Environmental Excellence"**



# Construction Environmental Management Plan

Riverina Battery Energy Storage System (BESS) & Riverina BESS Connection

CPP Project No: 11291 & 12005

## APPENDIX C

## CHANCE FINDS PROTOCOL

# CHANCE FINDS PROTOCOL

## Darlington Point Solar Farm

### Amendment Record

Date	Description	Prepared by	Reviewed by	Approved by
10/12/2018	Developed for Darlington Point Solar Farm	Chris Stewart (Signal Energy)	Andy Winter (Edify Energy)	Robbin Russell (Signal Energy)
07/02/2019	Updated to reflect OEH Comments received on 04/02/2019	Chris Stewart (Signal Energy)	Andy Winter (Edify Energy)	Robbin Russell (Signal Energy)
21/03/2019	Minor amendments from OEH Endorsement email	Chris Stewart (Signal Energy)	Robbin Russell (Signal Energy)	Robbin Russell (Signal Energy)

# Construction Environmental Management Plan

Riverina Battery Energy Storage System (BESS) & Riverina BESS Connection

CPP Project No: 11291 & 12005



Name: Chance Finds  
Document #: 2.3.2  
Version #: Version 3  
Date of Issue: March 2019

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## 1 Acronyms and Abbreviations

Acronym or Abbreviation	Meaning
EPC	Engineering, Procurement and Construction
CEMP	Construction Environmental Management Plan
COA	Conditions of Approval
DPE	NSW Department of Planning and Environment
DPSF	Darlington Point Solar Farm
EMS	Environmental Management Strategy
LALC	Local Aboriginal Land Councils
LGA	Local Government Area
OEH	Office of Environment and Heritage

## 2 Introduction

The Chance Finds Protocol is a Subplan to the Environmental Management Strategy (EMS) for the Darlington Point Solar Farm (the project).

This protocol has been prepared by Signal Energy Australia (Signal Energy) for the applicant (Edify Energy Pty Ltd) to meet the requirements set out in Item 20 (Schedule 3 - Environmental Conditions – General) of the Development Consent (Application # SSD 8392). Item 20 of the Development Consent states: -

*Prior to the commencement of construction, the Applicant must prepare a Chance Finds Protocol for the development in consultation with the Aboriginal stakeholders, and to the satisfaction of OEH.*

*Following OEH's approval, the Applicant must implement the Chance Finds Protocol.*

**Please Note: - This Protocol has been developed with information from Section 12 of the Aboriginal Cultural Heritage Report dated 18 July 2018 that was undertaken by Kelleher Nightingale Consulting Pty Ltd. This Protocol is replicated from section 12 which has been developed in consultation with Griffith LALC as identified in the "Record of Consultation and Consultation Log included in the Aboriginal Cultural Heritage Agreement, that shall be read in conjunction with this Protocol. The Protocol was reviewed by both OEH and the Heritage Council during Exhibition and comments were provided only by OEH on 8 February 2019.**

**Griffith LALC have reviewed this Chance Find Protocol and have no issues or comments regarding the protocol. The ACH Chance Find Protocol was issued to Griffith LALC on 8/02/19.**

**Dr Mathew Kelleher spoke with the CEO, Robert Carroll (26/02/19) who had no issues or comments.**

## 3 Signal Energy Overview

Signal Energy is an Australian Engineering, Procurement and Construction (EPC) Company specialising in the construction of renewable energy projects.

Headquartered in Sydney, Signal Energy has a highly experienced management team of energy infrastructure, engineering, procurement and construction professionals with specific experience in the construction of utility-scale renewable energy projects in Australia and internationally.

Signal Energy recognises the importance of conducting business operations in an environmentally responsible, sustainable and safe manner. Signal Energy are committed to health and safety, innovation  
Signal Energy Australia Pty. Ltd.

and service excellence, being a responsible business and supporting the communities in which we work.

## 4 Project Overview

Signal Energy have been engaged by Edify Energy to construct 275 megawatts of solar PV on land to the east of Donald Ross Drive, approximately 10 km south of the town of Darlington Point. The Darlington Point Solar Farm (DPSF) project area comprises the existing TransGrid Darlington Point Substation and the proposed DPSF site, which includes:

- Lot 160 of DP 821551 (referred to as 'Anderson property').
- Lots 41, 42 and 64 of DP 750903, Lot 2 of DP 542215, Lots 18, 35 and 36 of DP 750903 and Lot 3 of DP 1148975 (referred to as 'Tubbo Station').
- Lot 2 of DP 628785 (being the TransGrid substation site to which DPSF will connect, which is included within the DA in accordance with TransGrid's connection policy to facilitate any substation augmentation works that may be necessary as part of the development).

The DPSF site and surrounding lands are zoned as RU1 – Primary Production under the Murrumbidgee Local Environmental Plan 2013 (Murrumbidgee LEP), with adjacent properties accommodating farming, agribusiness, poultry farms and a small number of private residences. The DPSF site is used for livestock grazing. A 330 kV and two 132 kV TransGrid overhead transmission lines cross the site from west to east, and a 33 kV Essential Energy overhead transmission line runs north-south near the eastern boundary of the site. Key development and infrastructure components of the DPSF is proposed to include:

- Photovoltaic (PV) solar panels
- Steel mounting frames with piled foundations
- A single-axis tracking system
- Direct current (DC) / alternating current (AC) inverter stations
- Medium voltage (33kV) electrical reticulation network
- A 33/132kV switchyard, including an internal 33kV switch-room
- Internal access tracks for operational maintenance and housekeeping, to be largely located in bushfire set-back zones
- Security perimeter fencing
- Staff car park and small amenities building
- Battery energy storage system facility.

## 5 Aboriginal Cultural Heritage Assessment Report (CHAR)

Kelleher Nightingale Consulting Pty Ltd was engaged by Arup on behalf of Edify Energy to prepare an Aboriginal cultural heritage assessment report (CHAR) for the proposed development area. The CHAR was prepared in accordance with the Secretary's Environmental Assessment Requirements (SEARs), Office of Environment and Heritage (OEH) Code of Practice for the Archaeological Investigation of Aboriginal Objects in New South Wales and OEH Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010.

The Development of the CHAR included the consultation of the "Management Procedures" which are included in section 12 and are outlined below

Early identification of Aboriginal heritage and archaeological sensitive areas (remnant vegetation) during the archaeological assessment process resulted in the avoidance of impact to eight Aboriginal archaeological sites and one potential culturally modified tree. One Aboriginal archaeological site remains located within proposed impact area: Tubbo AFT 01/AHIMS 49-5-0152. Impact to this site is unavoidable due to the scale of the project and requirements for the proposal.

Archaeological significance of the identified Aboriginal sites was defined by the information exhibited by each site. The archaeological significance of Tubbo AFT 01/AHIMS 49-5-0152 was determined to be moderate due to the site's location. Due to the absence of subsurface archaeological deposit at Tubbo AFT 01/AHIMS 49-5-0152, a mitigation program comprising the collection of surface artefacts will be undertaken prior to any activities which may harm Aboriginal objects at the site location.

## 6 Roles and Responsibilities

Detailed below are specific roles and responsibilities of the Darlington Point Solar Farm (DPSF) and its Contractors as these pertain to environmental controls during project implementation.

All site staff have responsibilities and authorities in relation to environmental management including:

- The right to stop work or refuse to work in a situation that may cause environmental harm;
- Duties and responsibilities to prevent pollution and environmental harm;
- Obligations to respond to environmental incidents, including their prevention, clean up and reporting.

These, and other general obligations, are included in the site induction. Persons with specific environmental responsibility are detailed below.

### 6.1 Project Manager

The Project manager will be responsible for:

- Ensuring all relevant Management Plans are in place,
- Reviewing of this Protocol,
- Establishing a rigid management structure to implement and monitor this protocol,
- Ensuring compliance with this Protocol.

### 6.2 Construction Manager

The Site Manager will be responsible for:

- Ensuring this Protocol is implemented and adhered to throughout the construction duration,
- Establishing measures to ensure that all conditions within this Protocol are met,
- Ensuring all areas of the construction site have been given clearance prior to works commencement.

### 6.3 Environmental Management representative/SHEQ Manager

The Environmental Management representative/SHEQ Manager will be responsible for:

- Aiding and giving advice to the Construction Manager and All Workers in order for this Protocol to be implemented properly,
- Carrying out inspections, monitoring each condition and reporting any findings,



- Providing project-wide advice to ensure consistent approach and outcomes are achieved,
- Contacting the relevant Agencies prior to works commencing,
- Reviewing and updating this Protocol during construction as required.

## 6.4 All Employees/Contractors

All workers on the construction site are responsible for:

- Implementing and maintaining all applicable control measures,
- Reporting any potential and/or actual impact on Heritage Items

## 7 Environmental Requirements

### 7.1 Relevant Legislation and Guidelines

Legislation and Guidelines relevant to Heritage for this project includes:

Regulatory and Other Requirements	Description and Relevance
<i>National Parks &amp; Wildlife Act 1974 (NSW)</i>	The National Parks & Wildlife Act 1974 (NPW Act) protects Aboriginal heritage (places, sites and objects) within NSW. Protection of Aboriginal heritage is outlined in s86 of the Act, as follows: <ul style="list-style-type: none"> <li>• "A person must not harm or desecrate an object that the person knows is an Aboriginal object" s86(1),</li> <li>• "A person must not harm an Aboriginal object" s86(2)</li> <li>• "A person must not harm or desecrate an Aboriginal place" s86(4).</li> </ul>
<i>National Parks &amp; Wildlife Regulation 2009 (NSW)</i>	The National Parks and Wildlife Regulation 2009 ("NPW Regulation") provides a framework for undertaking activities and exercising due diligence in respect to Aboriginal heritage. The NPW Regulation 2009 outlines the recognised due diligence codes of practice which are relevant to this report, but it also outlines procedures for Aboriginal Heritage Impact Permit (AHIP) applications and Aboriginal Cultural Heritage Consultation Requirements (ACHCRs); amongst other regulatory processes.
<i>Heritage Act 1977 (NSW)</i>	The NSW Heritage Act 1977 makes provisions to conserve the State's historic heritage. It provides for; <ul style="list-style-type: none"> <li>• The identification and registration of items of State heritage significance;</li> <li>• The interim protection of items of State heritage significance; and</li> <li>• Constitutes the Heritage Council of New South Wales.</li> </ul>
Aboriginal Cultural Heritage Consultation Requirements for Proponents (2010)	The purpose of the guidelines is to establish the requirements for consultation with the registered Aboriginal parties as part of the heritage assessment process to determine potential impacts of proposed activities on Aboriginal objects and places and to inform decision making for any application for an Aboriginal Heritage Impact Permit (AHIP).
Code of Practice for Archaeological Investigations of Objects in NSW (2010)	The purpose of this Code of Practice is to: <ul style="list-style-type: none"> <li>• establish the requirements for undertaking test excavation as a part of archaeological investigation without an AHIP; and</li> <li>• establish the requirements that must be followed when carrying out archaeological investigation in NSW where an application for an AHIP is likely to be made.</li> </ul>

<p>Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW (2011)</p>	<p>The purpose of this document is to provide:</p> <ul style="list-style-type: none"> <li>• guidance on the process for investigating and assessing Aboriginal cultural heritage in NSW and</li> <li>• OEH's requirements for an Aboriginal cultural heritage assessment report.</li> </ul>
--	---

## 8 Management Procedures

### 8.1 Management Policy for Aboriginal Heritage

The policy for the management and conservation of Aboriginal heritage in relation to salvage activities and construction activities (or fencing, geotechnical investigations, minor clearing, establishing site compounds, adjustment to services/utilities etc.) is described below:

#### Responsibility for compliance with Management Policy

1. Signal Energy must ensure all of its employees, contractors and subcontractors and agents are made aware of and comply with this management policy.
2. Signal Energy must appoint a suitably qualified and experienced environmental manager who is responsible for overseeing the activities related to this management policy.
3. Edify Energy must appoint a suitably qualified and experienced Archaeologist who is responsible for overseeing, for and on behalf of the Proponent, the collection of archaeological artefacts relating to the project.

#### Operational Constraints

4. Where the surface collection of artefacts has been nominated for the impacted site, no construction activities (or fencing, geotechnical investigations, minor clearing, establishing site compounds, adjustment to services/utilities etc.) can occur on the lands to be investigated until the relevant surface collection at the nominated site has been completed.
5. Prior to the commencement of early works activity (e.g. fencing, minor clearing, establishing site compounds etc.) a construction heritage site map identifying the Aboriginal site requiring the collection of surface artefacts and the Aboriginal sites to be avoided (for all sites in proximity to the project boundary) must be prepared. The construction heritage site map should be prepared to the satisfaction of Edify Energy. (Please refer to Appendix 1)
6. All employees, contractors, subcontractors and agents carrying out early works activities (e.g. fencing, minor clearing, geotechnical investigations, establishing site compounds etc) must undertake a Project induction (including the distribution of a construction heritage site map) to ensure that they have an understanding and are aware of the Aboriginal heritage issues affecting the activity.

#### Areas of Aboriginal archaeological sites and objects to be impacted

7. The areas of archaeological sites and objects identified as being impacted by construction activities are listed in Table 1 of this report and are in accordance with the Project Approval.

Table 1. Aboriginal site requiring mitigation (collection)

Archaeological sites requiring mitigation (collection)	
Archaeological Sites (requiring the collection of surface artefacts)	Tubbo AFT 01/AHIMS 49-5-0152

#### Human Remains

8. This management policy does not authorise any damage of human remains.

9. If potential human remains are disturbed the Contractor must follow the procedures outlined in section 8.2 below.

**Involvement of Aboriginal groups and/or individuals**

10. Opportunity must be provided to the Griffith Local Aboriginal Land Council to be involved in the following activities:
  - o Assist with the surface collection.

**Conservation of salvaged Aboriginal objects**

11. Department of Planning and Environment (DP&E), as the approval authority, will be consulted;
12. Recovered Aboriginal objects will be transferred in accordance with a Care Agreement or similar agreement to the Griffith Local Aboriginal Land Council.

Please Note: - Kelleher Nightingale has been appointed to oversee the salvage, which is scheduled for w/c 17 December 2018. Kelleher Nightingale will also ensure compliance with the reporting requirements outlined below.

**Reporting requirements**

13. A written archaeological report documenting the salvage collection must be provided to Edify Energy within a reasonable time in accordance with the Project Approval following the completion of the archaeological program.
14. An Aboriginal Site Impact Recording Form (ASIRF) must be completed and lodged with OEH for the archaeological sites listed in Table 1 within a reasonable time after the approved activities have been complete.

**Notification and reporting about incidents that breach this management policy**

15. Incident reporting requirements in accordance with the Project Approval is to include Aboriginal heritage.

## 8.2 Procedures for Handling Human Remains

Please Note that Project Approvals do not include the destruction of Aboriginal remains

This section outlines the procedure for handling human remains in accordance with the Skeletal Remains – Guidelines for the Management of Human Skeletal Remains under the Heritage Act 1977 (NSW Heritage Office 1998) and the Aboriginal Cultural Heritage Standards and Guidelines Kit (NPWS 1997). In the event that construction activity reveals possible human skeletal material (remains), the following procedure is to be followed:

1. as soon as remains are exposed, all work is to halt at that location immediately and the Project SHEQ Manager on site is to be immediately notified to allow assessment and management;
  - o stop all activities immediately in the vicinity of the find (e.g. within 100m of the find); and
  - o secure the site immediately in the vicinity of the find.
2. contact police, the discovery of human remains triggers a process which assumes that they are associated with a crime. The NSW Police retain carriage of the process until such time as the remains are confirmed to be Aboriginal or historic;
3. DP&E, as the approval authority, will be notified when human remains are found;
4. Once the police process is complete and if remains are not associated with a contemporary crime contact DP&E. DP&E will determine the process, in consultation with OEH and/or the Heritage Office as appropriate;



- o If the remains are identified as Aboriginal, the site immediately in the vicinity of the find is to be secured and DP&E and all Aboriginal stakeholders are to be notified in writing. DP&E will act in consultation with OEH as appropriate. OEH will be notified in writing according to DP&E instructions; or
  - o If the remains are identified as non-Aboriginal (historical) remains, the site is to be secured and the DP&E is to be contacted. DP&E will act in consultation with the Heritage Division as appropriate. The Heritage Division will be notified in writing according to DP&E instructions;
5. Once the police process is complete and if the remains are identified as not being human, work can recommence once the appropriate clearances have been given.

### 8.3 Procedures for Handling Unexpected Aboriginal Objects

This section outlines the procedure for handling unexpected archaeological sites and objects. In the event that construction activity reveals possible Aboriginal objects other than those identified in Table 2 below, the following procedure is to be followed:

1. All work is to halt at that location immediately and the Project SHEQ Manager on site is to be immediately notified to allow assessment and management;
  - o stop all activities local to the find; and
  - o secure the site in the immediate vicinity of the find.
2. Contact the project archaeologist to assess the find and determine if it is consistent with the Project Approval;
  - o if the find is consistent, the archaeologist will allow work to continue
  - o if the find is inconsistent, OEH will be notified as soon as practical on 131555 providing any details of the Aboriginal object and its location. Work cannot recommence unless authorised in writing by OEH.

**Table 2: Aboriginal Sites in the Project Area which cannot be harmed**

Site name	AHIMS ID	Site Feature	Type/ Degree of harm
Tubbo; Darlington Point	49-5-0027	Modified tree	None
Tubbo	49-5-0028	Earth mound/hearth and modified tree	None
Tubbo	49-5-0029	Earth mound/hearth	None
Tubbo	49-5-0030	Hearth and modified tree	None
Tubbo TRE 01	49-5-0148	Modified tree	None
Tubbo TRE 02	49-5-0149	Modified tree	None
Tubbo TRE 03	49-5-0150	Modified tree	None
Tubbo TRE 04	49-5-0151	Modified tree	None
Tubbo TRE 05	tbc	Modified tree	None

## 8.4 Procedure for proposed changes to Approved Projects

Signal Energy and Edify Energy recognises that during the construction of the project design alterations or other changes to the Approved Project may be required.

A proposed change to the Approved Project (such as an alteration of the current design, the location of ancillary facilities) within the project corridor may result in a:

- o Reduced impact to Aboriginal cultural heritage; or an
- o Increased impact to Aboriginal cultural heritage.

Please Note: the use of the word impact in this section is defined as an impact on the significance of Aboriginal cultural heritage rather than simply an increased physical impact.

To ensure consistency with the Approved Project and this document any change in the overall impact on Aboriginal cultural heritage will need to be considered. The process to determine consistency is outlined in section below.

Where a proposed change to the Approved Project occurs outside of the project boundary considered for the EIS further heritage assessment will be required to determine if there would be an impact on Aboriginal cultural heritage and whether this represents a modification to the Approved Project

## 8.5 Changes in heritage impact

Where Signal Energy or Edify Energy seeks to make a change to the design and construction of the Approved Project which changes the assessed impact on Aboriginal cultural heritage Signal Energy will need to prepare an assessment of the new impacts of this work in consultation with the appointed Archaeologist. The continued involvement of the Aboriginal stakeholders in this process is outlined in section 8.6

### New impacts consistent with previously identified impacts

If a proposed change to the Approved Project is considered to have a neutral or lesser significant impact on Aboriginal cultural heritage than that identified in Aboriginal CHAR, it would be considered a consistent impact.

If the proposed change is considered to be consistent with the Approved Project Edify Energy may approve the change with no requirements to seek further approval. However, in certain circumstances, further consultation with Aboriginal stakeholders may still be required (see section 8.6 below).

### New impacts inconsistent with previously identified impacts

If a proposed change to the Approved Project is considered to have a more significant impact on Aboriginal cultural heritage than that identified in the EIS it would be considered an inconsistent impact.

If the proposed change is considered inconsistent with the assessed impact on Aboriginal cultural heritage, as detailed in the Project Approval, Signal Energy/Edify Energy would require an amendment to the mitigation measures agreed in this report. If this proposed change is considered inconsistent with the Approved Project Signal Energy/Edify Energy would require a modification of the Approved Project. Further consultation with Aboriginal stakeholders will be undertaken (see 8.6 below).

## 8.6 Process for continued consultation with Aboriginal stakeholders

The extent to which Signal Energy will continue to consult with Aboriginal stakeholders is dependent upon the level of impact and whether the area was assessed as part of the EIS. The types of potential impacts are identified as reduced impacts, increased impacts or unknown impacts.

### Reduced or neutral impact

If as a result of alterations to the project design a previously identified impact to an Aboriginal heritage item is reduced or neutral, then no further consultation is required.

If as a result of alterations to the project design an impact to an Aboriginal heritage item is proposed that results in a reduced impact on the overall heritage significance of the project area (i.e. the cumulative impact is reduced), then further consultation with Aboriginal stakeholders will be undertaken. This consultation may entail a phone call and phone log of comments received or the provision of a report for comment (10 working days).

### Increased Impact

Where as a result of alterations to the project design an impact on Aboriginal heritage is considered to be greater than identified by the Approved Project further consultation will be undertaken. This consultation will either entail a phone call and phone log of comments received or the provision of a report for comment (10 working days).

### Unknown impacts: Assessment process

Where a proposed change is an area located outside of the project boundary assessed as part of the Approved Project the impact on Aboriginal cultural heritage is considered to be unknown. This area would require preliminary assessment to determine any impacts upon Aboriginal heritage. Should no impacts be identified then no consultation with Aboriginal stakeholders is required. Should potential impacts be identified consultation with Aboriginal stakeholders will be undertaken. This consultation will entail the provision of a report for stakeholder comment (10 working days) detailing the impacts and mitigation strategies proposed

## 9 Compliance Management

### 9.1 Monitoring and Inspection

Monitoring of the "Chance Finds Protocol" requirements will be performed by the SHEQ Adviser or another delegated person on a regular basis. Particular attention will be given to the implementation of the Management Procedures outlined in Section 8. Any non-compliances will constitute an incident and will be reported as per the Environmental Management Strategy (EMS) in accordance with Item 4 (Schedule 4 - Environmental Management and Reporting) of the Development Consent.



# Construction Environmental Management Plan

Riverina Battery Energy Storage System (BESS) & Riverina BESS Connection

CPP Project No: 11291 & 12005

Name: Chance Finds

Document #: 2.3.2

Version #: Version 3

Date of Issue: March 2019

## 10 Appendix 1 – DPSF Cultural Heritage Map



## APPENDIX D                      DEWATERING ASSESSMENT

### Dewatering Assessment

<b>Project Name</b>		<b>Project No.</b>	
<b>Project Manager</b>		<b>Site Manager</b>	
<b>Person Completing</b>		<b>Date</b>	
<b>Area of Project</b>			

What is anticipated to be the source of water?		<input type="checkbox"/> Infiltrated Groundwater		<input type="checkbox"/> Stormwater/Rainwater	
Is there a requirement to assess existing groundwater quality?			<input type="checkbox"/> Yes		<input type="checkbox"/> No
What mechanisms will be used to dewater?	<input type="checkbox"/> Flexi Drive	<input type="checkbox"/> Submersible (Electric)	<input type="checkbox"/> Submersible (Hydraulic)		<input type="checkbox"/>
What dewatering controls are required (Identify the location of the controls on FRM-G001 ESCP)	<input type="checkbox"/> Sediment Basin	<input type="checkbox"/> Sediment Tank	<input type="checkbox"/> Turkey Nests	<input type="checkbox"/> Pumped and filtered through sediment fencing, silt traps or similar	<input type="checkbox"/> Pumped onto grassed area
Identify dewatering mechanisms for extreme/high rainfall situations?	<input type="checkbox"/> Sediment tanks		<input type="checkbox"/> Sediment Basins	<input type="checkbox"/> Vacuum Trucks	<input type="checkbox"/>
How will concrete washout be handled on this project? Identify the location of washout areas on the on FRM-G001 ESCP.	<input type="checkbox"/> Washed into sealed bin		<input type="checkbox"/> Washed into established wash down area		<input type="checkbox"/> No wash down will occur on site
<b>If sediment basins and tanks are generally utilised to capture water, please complete the following section – (revisit this section during extreme/high rainfall situations if using sediment tanks and basins to dewater)</b>					
Prior to dewatering determine monitoring and measuring requirements? (pH will be tested frequently and the pH range will be between 6.5-8.5)	<input type="checkbox"/> pH Strips		<input type="checkbox"/> pH Meter	<input type="checkbox"/> Turbidity Tube	<input type="checkbox"/> Hydrocarbons
If the pH range is not between 6.5-8.5 the following is required.	<input type="checkbox"/> If the pH is above 8.5, hydrochloric acid is required to lower the pH:		<input type="checkbox"/> If the water pH is below 6.5, a base such as agricultural lime, with a pH of about 8.2, is required to raise the pH.		
If the TSS of stored water is above 50mg/L, flocculent should be used to make the sediment drop to the base of treatment tank/area. Identify this project's flocculent requirement from the following table. (Apply the flocculent as per the manufacturers recommendations)					
<input type="checkbox"/> Gypsum	<input type="checkbox"/> Liquid Alum		<input type="checkbox"/> Flocculent Blocks		<input type="checkbox"/> Not Applicable



# Construction Environmental Management Plan

Riverina Battery Energy Storage System (BESS) & Riverina BESS Connection

CPP Project No: 11291 & 12005

Consolidated Power Projects

Dewatering Assessment (continued)

Considering the requirements outlined above, is it possible to reuse stormwater and groundwater for dust suppression?	<input type="checkbox"/> Yes	<input type="checkbox"/> No





# Construction Environmental Management Plan

Riverina Battery Energy Storage System (BESS) & Riverina BESS Connection  
 CPP Project No: 11291 & 12005

## APPENDIX E WATER RELEASE ASSESSMENT

### Water Release Assessment



<b>Project Name</b>	<b>Project No.</b>
<b>Project Manager</b>	<b>Site Manager</b>
<b>Person Completing Form</b>	<b>Date</b>
<b>Proposed Release Location</b>	<b>Approx. Volume</b>

Test By	Time	pH 6.5 to 8.5 (Field Test)	Turbidity (Field Test) Generally Less Than 75 NTU	Total Suspended (Field Test) Solids <50mg/L	Hydrocarbons (Oily Sheen) Visual inspection	Debris – Visual Inspection	Comments



# Construction Environmental Management Plan

Riverina Battery Energy Storage System (BESS) & Riverina BESS Connection

CPP Project No: 11291 & 12005

## APPENDIX F

## EROSION AND SEDIMENT CONTROL PLAN (ESCP)



A QUANTA SERVICES COMPANY

# Construction Environmental Management Plan

Riverina Battery Energy Storage System (BESS) & Riverina BESS Connection

CPP Project No: 11291 & 12005

## Erosion & Sediment Control Plan



<b>Project Name</b>		<b>Project No.</b>	
<b>Project Manager</b>		<b>Site Manager</b>	
<b>Person Completing</b>		<b>Date</b>	
<b>Area of Project</b>			

Identify types of land disturbance	<input type="checkbox"/> Temporary road construction	<input type="checkbox"/> Establishment of site offices	<input type="checkbox"/> Clearing of vegetation	<input type="checkbox"/> Trenching
	<input type="checkbox"/> Stockpiling of soil & materials	<input type="checkbox"/> Demolition of buildings	<input type="checkbox"/> Post holes (auguring)	<input type="checkbox"/> Concrete footings removal
	<input type="checkbox"/> Pile driving	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Soil Exposure	<input type="checkbox"/> No subsoil exposure (except for excavations, post holes etc)		<input type="checkbox"/> Subsoils are likely to be extensively exposed	
Area of Disturbance	<input type="checkbox"/> <250m <sup>2</sup>	<input type="checkbox"/> 250m <sup>2</sup> -2500m <sup>2</sup>	<input type="checkbox"/> >2500m <sup>2</sup>	<input type="checkbox"/>
Duration of soil disturbance including rehabilitation period	<input type="checkbox"/> Less than 1 month	<input type="checkbox"/> More than 1 month but less than 4 months	<input type="checkbox"/> More than 4 months but less than 6 months	<input type="checkbox"/> More than 6 months
Is the work site in a high rainfall area?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Is there drainage of surface water onto the work area?	Yes <input type="checkbox"/> No <input type="checkbox"/>
Is there evidence of existing erosion and sedimentation?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	If yes, identify these areas and associated controls in the following map	
Will topsoil and/or excavated materials be stockpiled?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Will excavated material be removed from site immediately?	Yes <input type="checkbox"/> No <input type="checkbox"/>
If topsoil and/or excavated materials will be stockpiled on this project, please identify location of stockpiles and types of sediment controls on the following map.				
Approx. what quantity of material will be stockpiled on site?	M <sup>3</sup>		Max height of stockpile?	
What controls will be utilised to prevent dust generating from stockpiles?	<input type="checkbox"/> Sprinkler System	<input type="checkbox"/> Water Cart	<input type="checkbox"/> Ground crop	<input type="checkbox"/> Cover with plastic or shade cloth
What controls will be utilised to prevent dust generating from work areas?	<input type="checkbox"/> Water Cart	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



# Construction Environmental Management Plan

Riverina Battery Energy Storage System (BESS) & Riverina BESS Connection  
 CPP Project No: 11291 & 12005

A QUANTA SERVICES COMPANY



## Erosion & Sediment Control Plan

Location and Management of Concrete Wash Washout Areas			
The following should be considered prior to establishing a concrete washout area	<input type="checkbox"/> Located away from drainage lines, stormwater drains and water bodies	<input type="checkbox"/> Conveniently located	<input type="checkbox"/>
Erosion and Sediment Control Plan (The following items are recommended)			
<input type="checkbox"/> North point	<input type="checkbox"/> Fall direction of site	<input type="checkbox"/> Existing erosion and sedimentation	<input type="checkbox"/> Retained vegetation & protected areas
<input type="checkbox"/> Existing Access Roads	<input type="checkbox"/> New temporary access roads	<input type="checkbox"/> Laydown areas	<input type="checkbox"/> Watercourses, open drains, stormwater
<input type="checkbox"/> Flow path	<input type="checkbox"/> Existing drainage systems	<input type="checkbox"/> Drainage systems to be constructed (if applicable)	<input type="checkbox"/> Soil stockpile area
<input type="checkbox"/> Sediment fencing/tanks/basins	<input type="checkbox"/> Concrete wash down area	<input type="checkbox"/> Construction Activity Zone	<input type="checkbox"/> First Aid Station/Kits
<input type="checkbox"/> Emergency Assembly Point	<input type="checkbox"/> Directional Signage (access paths from site entry to offices, work areas etc. )	<input type="checkbox"/> Site Offices, facilities and car parks	<input type="checkbox"/> Waste bins
<input type="checkbox"/> Principal Contractor/CPP Signage	<input type="checkbox"/> Speed limit signage	<input type="checkbox"/> Spill kit	<input type="checkbox"/> Dewatering locations
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The following procedures should be used as a guide by the Site Manager: <ul style="list-style-type: none"> <li>Ensure that a minimum of land is exposed to the risk of erosion for the shortest period of time;</li> <li>Install temporary erosion control measures when undertaking small pits and trenches excavations;</li> <li>Sediment control devices must be installed parallel with the ground contours, immediately down slope of any areas where the natural ground surface will be disturbed;</li> </ul>		<ul style="list-style-type: none"> <li>Where possible soil and material collected in erosion control or sediment collection structures will be reused to fill excavations or site restoration (unless contaminated);</li> <li>Machinery and vehicles are to remain on existing roads and access roads whenever possible. Movements will be further restricted during and immediately following wet weather to minimise disturbance to ground cover;</li> <li>Works will not be undertaken immediately prior to or during periods of high rainfall;</li> <li>Erosion and sediment collection structures will be inspected on a weekly basis. This inspection will be documented in <i>FRM-S063 Weekly WHSE Inspection Form</i>.</li> </ul>	

INSTRUCTIONS:

(Delete this text box prior to issuing this document)

As these items are added to the site map, please check them off this list.



# Construction Environmental Management Plan

Riverina Battery Energy Storage System (BESS) & Riverina BESS Connection

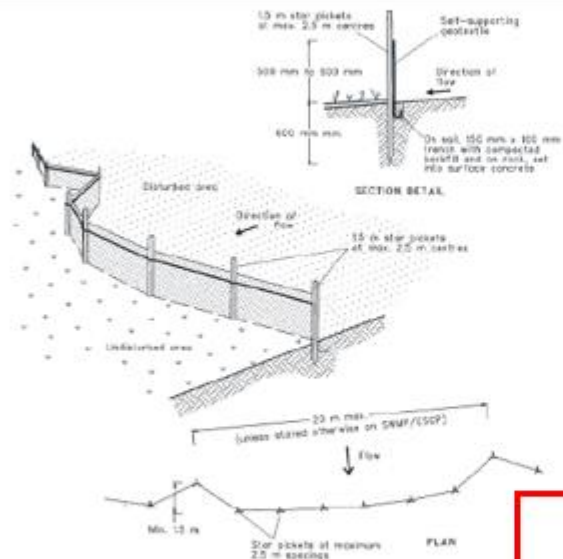
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## Erosion & Sediment Control Plan



The following are examples of Sediment Fencing and Filter Socks

### Sediment Fencing – Standard Drawings



### Gravel Filled Filter Sock Around Drainage Pits



## INSTRUCTIONS:

~~Delete this text box prior to issuing this document!~~

Insert drawings of:

1. How to install erosion and sediment controls;
2. Preferred erosion and sediment control options.



## Erosion & Sediment Control Plan



### The following are examples of Concrete Washouts

#### Berm Trap

A berm trap system may consist of raised walls constructed from soil, straw bales or sand bags and lined with a double layer of impervious sheeting. The intent of this system is to contain concrete washout liquids and solids until evaporation, curing, or extraction and final removal.



#### Sealed Skip Container

A skip washout system offers the same benefits as the Berm Trap.



## Erosion & Sediment Control Plan



### INSTRUCTIONS:

**Delete the following text prior to issuing this document**

- Utilise the following information for selecting erosion and sediment control measures - Extract from Department of Environment and Climate change NSW – "Managing urban stormwater: soils and construction vol.1" - <http://www.environment.nsw.gov.au/resources/stormwater/0801soilsconststorm2a.pdf> The flowchart in Figure 1 asks whether the problem is:
  - Erosions or sedimentation;
  - Rain drop impact or flowing water;
  - Sheet flow or concentrated flow.

The flow chart then guides the user to use Figure 2 outlining groups of treatment options which are described in detail in "Managing urban stormwater: soils and construction vol.1".

Utilise the following information to determine installation requirements for erosion and sediment control measures;

- Landcom – The Blue Book – Managing Urban Stormwater (MUS): Soils and Construction (Contact CPP WHSE Team for a copy)
- International Erosion and Sediment Control Association of Australia (IECA) – Erosion and Sediment Control – A Field Guide for Construction Site Managers
- [http://www.austieca.com.au/Portals/0/ESC%20Field%20Guide%20for%20Site%20Managers\\_V2.pdf](http://www.austieca.com.au/Portals/0/ESC%20Field%20Guide%20for%20Site%20Managers_V2.pdf)
- <http://www.austieca.com.au/BestPracticeESCDocumentInfo/BestPracticeESCBook8StandardDrawings.aspx>

See Figure 2 below for soil classification information.

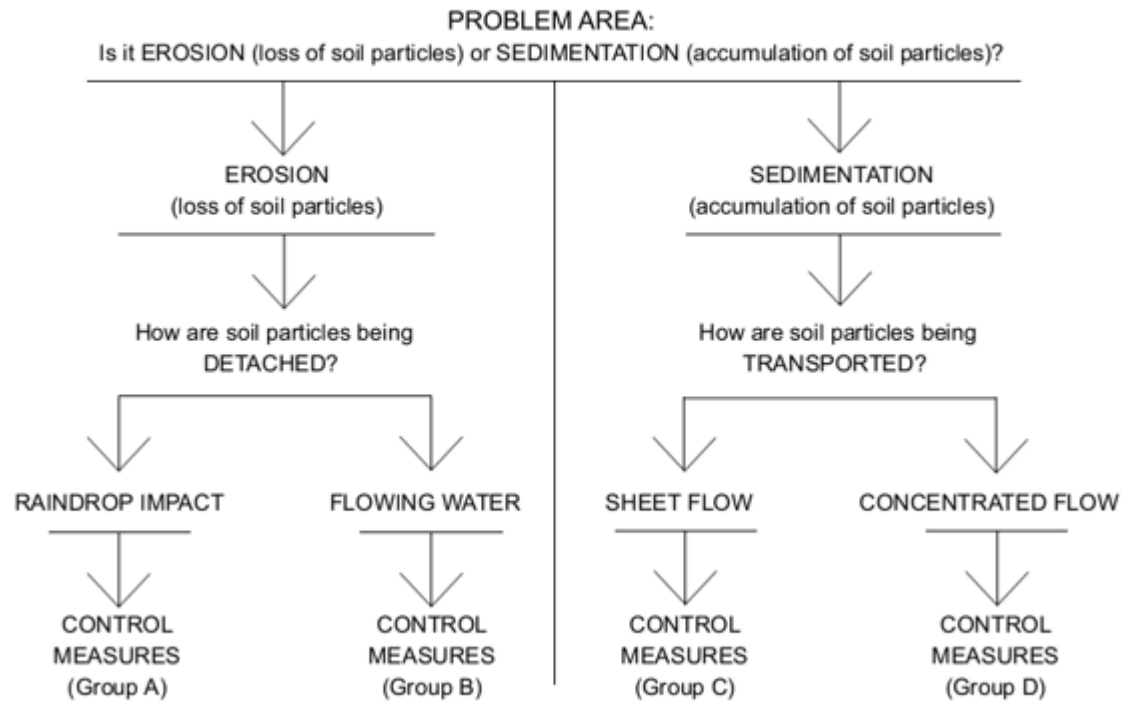
#### Note

- Erosion Control Measures either protect or reinforce the soil surface/subsurface from erosion forces or convey run off in a non-erosive way.
- Sediment control measures, on the other hand capture eroded soil particles by either slowing the velocity of the water so that the sediment can settle out by gravity
- Therefore as sediment is only generated when soil erosion occurs, design, installation and construction of effective erosion control measures should be the first priority followed by good housekeeping once excavation work commences.
- As a "rule of thumb" the steeper the land the greater the need for adequate drainage controls to minimise erosion and prevent mulch from being washed from the site.

## Erosion & Sediment Control Plan



Figure 1



# Construction Environmental Management Plan

## Riverina Battery Energy Storage System (BESS) & Riverina BESS Connection







CPP Project No: 11291 & 12005

### Erosion & Sediment Control Plan









Figure 2



Group A: Erosion control – raindrop impact	Group B: Erosion control – flowing water
<p><b>Vegetation</b></p> <ul style="list-style-type: none"> <li>temporary vegetation – cover crop only</li> <li>permanent vegetation – introduced (exotic) pasture species or native (endemic) species</li> <li>see 1: sections 4.3.2, 7.1, 7.2, appendix A6 and appendix G</li> </ul> 	<p><b>Up-slope diversions</b></p> <ul style="list-style-type: none"> <li>excavated channel-type bank</li> <li>backpush-type bank or window</li> <li>catch drains</li> <li>shoulder dyke</li> <li>see 1: section 5.4.4, SD 5-5 and SD 5-6</li> </ul> 
<p><b>Batter blankets</b></p> <ul style="list-style-type: none"> <li>vegetation promotion blankets</li> <li>vegetation suppression blankets</li> <li>needle-punched geotextile membrane</li> <li>builder's plastic membrane</li> <li>see 1: section 5.4.2, SD 5-2, appendix A6 and appendix D</li> </ul> 	<p><b>Mid-slope diversions</b></p> <ul style="list-style-type: none"> <li>berms and benches</li> <li>temporary diversions (at outfall line)</li> <li>cross banks</li> <li>see 1: section 4.3.1, figure 4.2 and appendix A4</li> </ul> 
<p><b>Soil surface mulching</b></p> <ul style="list-style-type: none"> <li>hydromulch or hydraulic bonded fibre matrix</li> <li>blown straw, hay, crop residue, with bitumen tack</li> <li>tub-ground or chipped organic mulch</li> <li>brush-matting</li> <li>rock or gravel mulch</li> <li>see 1: section 7.4, figure 7.3, appendix A6 and appendix D</li> </ul> 	<p><b>Soft armour channels</b></p> <ul style="list-style-type: none"> <li>trapezoidal or parabolic shape</li> <li>consider channel grade and maximum permissible velocity</li> <li>establish vegetative ground cover</li> <li>standard (non-reinforced) or reinforced turf</li> <li>biodegradable erosion control mat (temporary) or synthetic erosion control mat (permanent)</li> <li>see 1: sections 5.4.3, 7.3, SD 5-7 and appendix D</li> </ul> 




## Erosion & Sediment Control Plan



<p><b>Geocellular containment systems</b></p> <ul style="list-style-type: none"> <li>• non-woven geotextile type material</li> <li>• polypropylene material (perforated and non-perforated)</li> <li>• see 1: section 5.4.2, SD 5-3 and appendix D</li> </ul>		<p><b>Hard armour channels</b></p> <ul style="list-style-type: none"> <li>• loose rock</li> <li>• rock-filled wire mattresses</li> <li>• articulating concrete block systems</li> <li>• grouted rock</li> <li>• cast in situ concrete</li> <li>• builder's plastic lining or geotextile lining</li> <li>• see 1: section 5.4.4, table 5.2, figure 5.4 and appendix D</li> </ul>	
<p><b>Surface roughening</b></p> <ul style="list-style-type: none"> <li>• roughening parallel to contour</li> <li>• contour ripping or scarifying</li> <li>• trackwalking</li> <li>• see 1: section 4.3.2, figures 4.3(a) and (b)</li> </ul>		<p><b>In-stream diversions</b></p> <ul style="list-style-type: none"> <li>• temporary coffer dams</li> <li>• water-filled structures</li> <li>• temporary lined channel (stream diversion)</li> <li>• see 1: section 5.3.5 and appendix I</li> </ul>	
<p><b>Geobinders</b></p> <ul style="list-style-type: none"> <li>• organic tackifiers</li> <li>• co-polymer emulsions</li> <li>• bitumen emulsion</li> <li>• cementitious products</li> <li>• see 1: section 7.1.2, appendices A6 and D</li> </ul>		<p><b>Check dams</b></p> <ul style="list-style-type: none"> <li>• stacked rock</li> <li>• sandbags and geotextile sausages</li> <li>• straw bales</li> <li>• logs</li> <li>• proprietary products</li> <li>• see 1: section 5.4.3, SD 5-4, and figures 5.3(a) and (b)</li> </ul>	

## Erosion & Sediment Control Plan








	<p><b>Batter drains</b></p> <ul style="list-style-type: none"> <li>• concrete (pre-cast or in-situ)</li> <li>• half 'armco' pipe</li> <li>• sandbags</li> <li>• rock-filled wire mattresses</li> <li>• loose rock rip-rap</li> <li>• builder's plastic or geotextile lined chutes</li> <li>• see 1: section 5.4.4 and appendix D</li> </ul>	
	<p><b>Grade control structures and flumes</b></p> <ul style="list-style-type: none"> <li>• gully pits and field inlets</li> <li>• sandbag drop structures</li> <li>• rock-filled wire gabions and mattress structures</li> <li>• driven sheet piling</li> <li>• concrete chutes</li> <li>• inclined pipe spillways</li> <li>• builder's plastic-lined chutes</li> </ul>	
	<p><b>Outlet dissipation structures</b></p> <ul style="list-style-type: none"> <li>• loose rock riprap aprons</li> <li>• rock-filled wire mattresses</li> <li>• roughness elements</li> <li>• hydraulic jump-type structures</li> <li>• impact type structures</li> <li>• see 1: sections 5.4.5, figures 5.8, 5.9, 5.10, 5.11 and SC 5-8</li> </ul>	



## Erosion & Sediment Control Plan



	<b>Revetments and retaining walls</b> <ul style="list-style-type: none"> <li>• sprap</li> <li>• rock-filled wire gabions and mattresses</li> </ul>	
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Group C: Sediment Control – sheet flows		Group D: Sediment control – concentrated flows	
<b>Vegetative buffers</b> <ul style="list-style-type: none"> <li>• well established sward with good groundcover</li> <li>• see 1: section 6.3.8, table 6.4, SD 6-13 and appendix G</li> </ul>		<b>Sediment curtains/turbidity barriers</b> <ul style="list-style-type: none"> <li>• floating geotextile</li> <li>• proprietary polypropylene products</li> <li>• temporary coffer dams</li> <li>• water-filled structures</li> <li>• see 1: section 6.3.7, SD 6-10 and appendix D</li> </ul>	
<b>Sediment barriers/filters</b> <ul style="list-style-type: none"> <li>• sediment fences</li> <li>• vegetation, brush, rock or gravel windrows</li> <li>• earthen down-slope diversion directing sheet flows to sediment traps or sumps</li> <li>• straw bale barriers</li> <li>• see 1: section 6.3.7, SD 6-7, SD 6-8, figure 6.10 and appendix D</li> </ul>		<b>Sediment traps</b> <ul style="list-style-type: none"> <li>• stacked rock/timber with geotextile</li> <li>• excavated sumps</li> <li>• straw bale or sand bag structures</li> <li>• gully pit, field inlet and kerb inlets</li> <li>• see 1: section 6.3.6, figure 6.11, SD 6-11, SD 6-12</li> </ul>	



# Construction Environmental Management Plan

Riverina Battery Energy Storage System (BESS) & Riverina BESS Connection  
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## Erosion & Sediment Control Plan



### Site exit points

- shaker ramps
- rock aprons
- wheel wash systems
- see 1: section 6.3.9 and SD 6-14



### Sediment retention basins

- type C (riiser type) basin
- type F (extended settling) basins
- type D (flocculation) basins
- see 1: sections 6.3.3, 6.3.4 and 6.3.5, SD 6-3, SD 6-4, appendices E and J



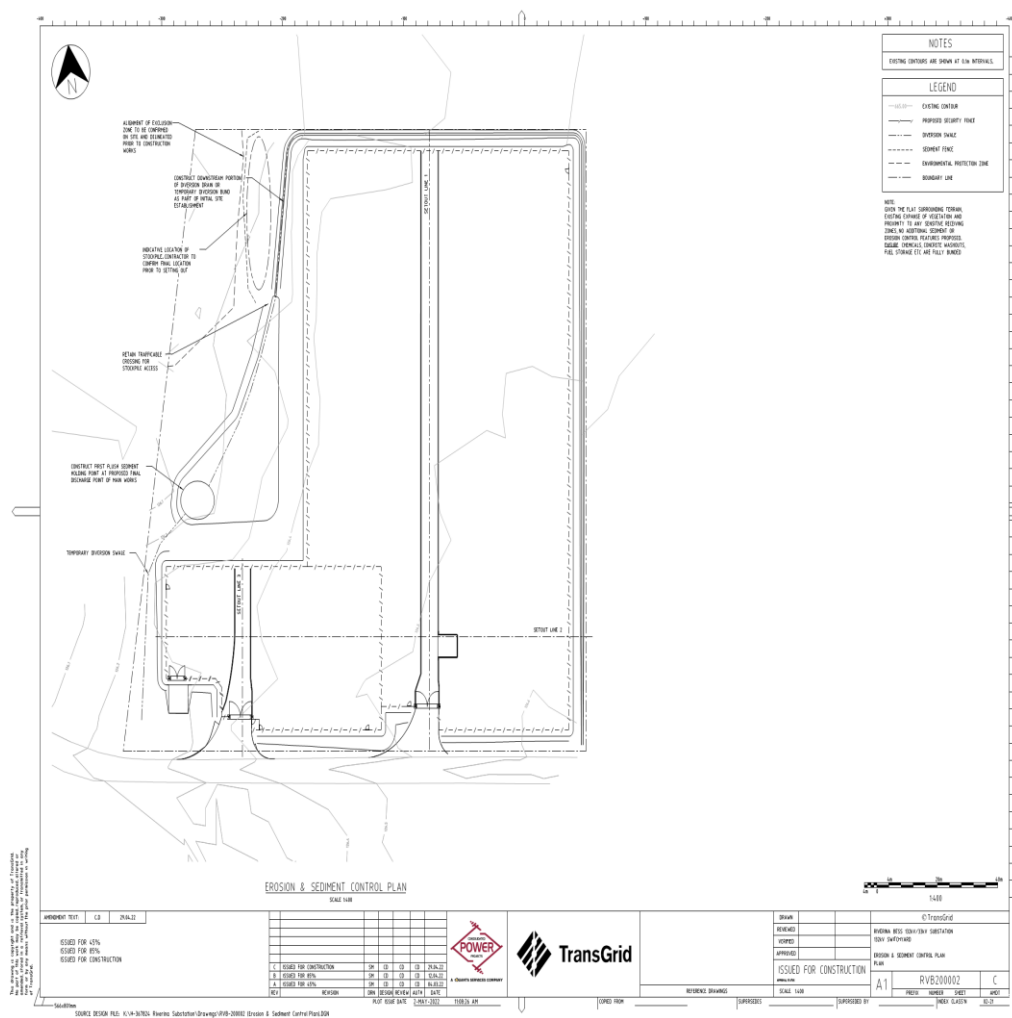


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# Construction Environmental Management Plan

Riverina Battery Energy Storage System (BESS) & Riverina BESS Connection

CPP Project No: 11291 & 12005







# Construction Environmental Management Plan

Riverina Battery Energy Storage System (BESS) & Riverina BESS Connection

CPP Project No: 11291 & 12005

## APPENDIX G

## WASTE MANAGEMENT AND MINIMISATION ASSESSMENT



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# Construction Environmental Management Plan

Riverina Battery Energy Storage System (BESS) & Riverina BESS Connection

CPP Project No: 11291 & 12005

## Waste Management and Minimisation Assessment



<b>Project Name:</b>		<b>Project No.:</b>	
<b>Project Manager:</b>		<b>Site Manager:</b>	
<b>Person Completing Form:</b>		<b>Date:</b>	

Step 1. Waste stream assessment			Step 2. Classify	Step 3. Determine On-Site Segregation and Storage	Step 4. Determine Transport and Disposal Methods		Step 5. Establish Record requirements
Waste Type	Medium	Description / Source			Collection and Transport	Off-site Destination	
Putrescible and Other Waste	Solid	Putrescible food waste and other waste that is not described below.	General	Lidded and sealed skip bins.	Front lift truck or Skip loader Secured and covered loads for transport	Transport to a receiving facility holding an Environmental Authority (EA) for waste type disposal	Document on the waste disposal register
Construction and Demolition Waste	Solid	Excess construction waste that is not regulated, soil, gravel, recyclable or clean concrete	General	Open top skip bins. NB: Waste should be covered with a secured tarpaulin if loose material is being disposed of.	Hook lift truck Secured and covered loads for transport	Transport to a receiving facility holding an EA for waste type consignment	Document on the waste disposal register
Commingled Recycling	Solid	Cardboard, plastic, paper, glass, aluminium	General	Designated skip bin labelled for recycling	Skip loader truck Secured and covered loads for transport	Transport to a receiving facility holding an EA for waste type consignment	Document on the waste disposal register
Scrap Metal	Solid	Excess steel that is not contaminated with PCBs	General	Designated skip bin labelled for scrap metal	Hook lift truck Secured and covered loads for transport	Transport to a receiving facility holding an EA to accept and process metal products or a facility holding an EA for waste type consignment.	Document on the waste disposal register



# Construction Environmental Management Plan

## Riverina Battery Energy Storage System (BESS) & Riverina BESS Connection

CPP Project No: 11291 & 12005

### Waste Management and Minimisation Assessment



Step 1. Waste stream assessment			Step 2. Classify	Step 3. Determine On-Site Segregation and Storage	Step 4. Determine Transport and Disposal Methods		Step 5. Establish Record requirements
Waste Type	Medium	Description / Source			Collection and Transport	Off-site Destination	
Waste Timber	Solid	Timber will be used as the packaging material for equipment received on-site and can include pallets	General	Skip bins	Hook lift truck Secured and covered loads for transport	Transport to a receiving facility holding an EA for waste type consignment.	Document on the waste disposal register
Redundant Material (not containing oil or SF6)	Solid	Surge arresters, isolator etc.	General	Open top skip bins used for construction and demolition waste	Hook lift truck Secured and covered loads for transport	Transport to a receiving facility holding an EA for waste type consignment.	Document on the waste disposal register
Copper	Solid	Cabling	General	Lockable skip bin	Skip loader	Transport to a copper recycling facility	Document on the waste disposal register
SF6 containing equipment, gas & gas cylinders	Solid & Gaseous	Circuit breakers.  Recovery of SF6 to be undertaken by personnel trained in SF6 safety precautions	General	SF6 Gas to be stored in 100 L plastic containers with cover, dedicated to store SF6 gas. Equipment or containers storing SF6 gas need to be secured to prevent falling. Equipment that has SF6 gas removed to be disposed of as "Redundant Material"	SF6 containers to be secured appropriately during transport. Transport contractor should be licensed to transport dangerous goods in accordance with the Australian Dangerous Goods Code Edition 7.4	Appropriate gas recycling facility (no EA required)	Document on the waste disposal register.
Excess project materials	Solid & Liquid	Additional materials not utilised during the Project	General	Stockpile on-site	Secured on trucks as appropriate	Returned to the Client or CPP depot for reuse on another project if possible	Document on the waste disposal register
Clean Concrete <sup>1</sup>	Solid	Waste concrete which is considered clean <sup>1</sup>	General	Stockpile on-site	Loaded into tippers and transported to a facility for recycling	Transport to a receiving facility holding an EA for waste type consignment or a site where an EA exists for crushing, milling or grinding (ERA 33)	Document on the waste disposal register

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## Waste Management and Minimisation Assessment



Step 1. Waste stream assessment			Step 2. Classify	Step 3. Determine On-Site Segregation and Storage	Step 4. Determine Transport and Disposal Methods		Step 5. Establish Record requirements
Waste Type	Medium	Description / Source			Collection and Transport	Off-site Destination	
Clean gravel <sup>2</sup>	Solid	Excess or removed gravel which is considered clean <sup>2</sup>	General	Stockpile on-site	Loaded into tippers and transported off-site for reuse	Any site able to reuse the material	Document on the waste disposal register
Clean Spoil / Soil (i.e. Clean Fill) <sup>2</sup>	Solid	Excess or removed spoil / soil which is considered clean <sup>2</sup>	General	Stockpile on-site with appropriate erosion and sediment controls in place	Loaded into tippers and transported off-site for reuse	Any site able to reuse the material	Document on the waste disposal register
Used Oil	Liquid	Oil removed from equipment on-site, such as transformer oil. All oil must be tested for PCBs prior to removal from the site	Regulated	If oil is drained it must be stored in a sealed container within a fully bunded area.	Collected by a liquid waste collection contractor for off-site recycling. The collection company must hold an EA licence for the transport of regulated waste type	Disposed of at a facility holding an EA for regulated waste recycling or reprocessing NB: If the oil contains PCB, CPP must obtain written acceptance the oil can be accepted at the facility in line with the facility's acceptance criteria	Document on the waste disposal register Waste tracking certificates with the generator and transporter portions completed. Written confirmation from the facility of acceptance of the contaminated material.
Residual wastes	Liquid (residue)	Spent paint and chemical tins and containers	Regulated				

# Construction Environmental Management Plan

## Riverina Battery Energy Storage System (BESS) & Riverina BESS Connection

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### Waste Management and Minimisation Assessment



Step 1. Waste stream assessment			Step 2. Classify	Step 3. Determine On-Site Segregation and Storage	Step 4. Determine Transport and Disposal Methods		Step 5. Establish Record requirements
Waste Type	Medium	Description / Source			Collection and Transport	Off-site Destination	
Equipment used for the storage of oil (non-PCB oil)	Solid	Transformers and piping earmarked for removal as part of the scope of work	Regulated	Equipment which has been drained must be securely placed to prevent object falling. Equipment containing oil must be stored in a fully bunded area and securely placed to prevent object falling.	Loaded and secured on to trucks. The collection company must hold an EA licence for the transport of regulated waste type.	Disposed of at a facility holding an EA for regulated waste recycling or reprocessing	Document on the waste disposal register Waste tracking certificates with the generator and transporter portions completed.
PCB Contaminated Equipment	Solid	Equipment which contains or previously contained PCB material. CPP must obtain written confirmation from its Client on whether equipment the equipment is PCB free.	Regulated	Equipment which has been drained must be securely placed to prevent object falling. Equipment containing oil must be stored in a fully bunded area and securely placed to prevent object falling.	Loaded and secured on to trucks. The collection company must hold an EA licence for the transport of regulated waste type	Disposed of at a facility holding an EA for regulated waste recycling or reprocessing CPP must obtain written acceptance the equipment can be accepted at the facility in line with the facility's acceptance criteria	Document on the waste disposal register Waste tracking certificates with the generator and transporter portions completed. Written confirmation from the facility of acceptance of the PCB equipment.
Septic Waste	Liquid	Sewage sludge and residue	Regulated	Contained within the waste tanks of ablution facilities	Collected by a liquid waste collection contractor The collection company must hold an EA licence for the transport of regulated waste type	Disposed of at a facility holding an EA for sewage waste treatment	Document on the waste disposal register Waste tracking certificates with the generator and transporter portions completed.



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# Construction Environmental Management Plan

## Riverina Battery Energy Storage System (BESS) & Riverina BESS Connection

CPP Project No: 11291 & 12005

### Waste Management and Minimisation Assessment



Step 1. Waste stream assessment			Step 2. Classify	Step 3. Determine On-Site Segregation and Storage	Step 4. Determine Transport and Disposal Methods		Step 5. Establish Record requirements
Waste Type	Medium	Description / Source			Collection and Transport	Off-site Destination	
Contaminated Concrete / Gravel	Solid	Excess or removed gravel / concrete material which is considered contaminated with hydrocarbons.	Regulated	Stored in a bunded and lined area.	Loaded into tippers. The collection company must hold an EA licence for the transport of regulated waste type	Transport to a facility holding an EA for waste type disposal. CPP must obtain written acceptance the equipment can be accepted at the facility in line with the facility's acceptance criteria	Document on the waste disposal register Waste tracking certificates with the generator and transporter portions completed. Laboratory analysis records as requested by the accepting facility. Written confirmation from the facility of acceptance of the contaminated material.
Asbestos containing material	Solid	Switchboards, meters, insulation	Regulated	None – direct removal	A licensed asbestos removal contractor must be engaged to undertake removal of any asbestos containing material The collection company must hold an EA licence for the transport of regulated waste type	Transport to a facility holding an EA for waste type disposal. CPP must obtain written acceptance the material can be accepted at the facility in line with the facility's acceptance criteria	Document on the waste disposal register Waste tracking certificates with the generator and transporter portions completed. Written confirmation from the facility of acceptance of the contaminated material.

## Waste Management and Minimisation Assessment



Step 1. Waste stream assessment			Step 2. Classify	Step 3. Determine On-Site Segregation and Storage	Step 4. Determine Transport and Disposal Methods		Step 5. Establish Record requirements
Waste Type	Medium	Description / Source			Collection and Transport	Off-site Destination	
Any Soil / Spoil – site listed on EMR / CLR	Solid	Excess or removed spoil / soil which is considered contaminated <sup>1</sup>	Contaminated Soil	Loaded into sealed skip bins	Hook lift truck Secured and covered loads for transport	Transport to a facility holding an EA for waste type disposal. CPP must obtain written acceptance the equipment can be accepted at the facility in line with the facility's acceptance criteria	Document on the waste disposal register Laboratory analysis records as requested by the accepting facility. Disposal Permit issued under the <i>Environmental Protection Act 1994</i> Written confirmation from the facility of acceptance of the contaminated material.

<sup>1</sup> Concrete is defined as clean if:

- Less than 20% of the total surface area of the concrete is stained with a hydrocarbon material;
- Any stained hydrocarbon is confirmed to not be PCB material; and
- The total volume of hydrocarbon stained material from a single demolition activity is estimated to be less than 250 kg.

<sup>2</sup> Gravel is defined as clean if visual and olfactory observations indicate the gravel does not contain hydrocarbon material.

<sup>3</sup> Spoil / soil is defined as clean if:

- It is not stained with hydrocarbon material;
- Independent laboratory analysis confirms soil is not contaminated with contaminants of concern; and
- The site is not listed on the Queensland Government's CLR/EMR.

Note – Double sided printing will be engaged as a method of reducing paper usage.