





The Australian Government is delivering Inland Rail through the Australian Rail Track Corporation (ARTC), in partnership with the private sector.



Document Control

DOCUMENT TITLE	ENVIRONMENTAL MANAGEMENT FRAMEWORK
DOCUMENT OWNER	Inland Rail Environment Team - Victoria
PREPARED BY	Environment Advisor – Inland Rail
REVIEWED BY	Environment Manager – Victoria – Inland Rail Senior Environment Advisor – Compliance – Inland Rail , Senior Environment Advisor – Assurance – Inland Rail , Environmental Planner – Inland Rail , Senior Environment Advisor – Inland Rail TA Environmental Advisor – Inland Rail Environment Planning Manager – Senior Environment Advisor - Principal

13Approved by

SIGNATURE	NAME	TITLE	DATE
		General Manager – Vic-SA Projects	13 September 2022

Revision History

REVISION	REVISION DATE	DESCRIPTION
А	01/06/2021	Draft
В	02/07/2021	Draft
С	28/07/2021	Draft
D	11/08/2021	Draft
Е	22/12/2021	Draft
F	27/01/2022	Draft
G	24/03/2022	Draft
Н	17/06/2022	Draft – Updates to wording and references
I	5/08/2022	Draft – Update to EPRs
J	9/09/2022	Final – Incorporating consultation comments, correction to minor errors and additional consultation requirements
К	13/09/2022	Final - Incorporating consultation comments from DELWP and DoT

Disclaimer: This document has been prepared by ARTC for internal use and may not be relied on by any other party without ARTC's prior written consent. Use of this document shall be subject to the terms of the relevant contract with ARTC.

ARTC and its employees shall have no liability to unauthorised users of the information for any loss, damage, cost or expense incurred or arising by reason of an unauthorised user using or relying upon the information in this document, whether caused by error, negligence, omission or misrepresentation in this document.

This document is uncontrolled when printed.

© Australian Rail Track Corporation Limited 2021



Table of Contents

Gle	ossary	y	4
1	Intro	duction	8
	1.1	Purpose	10
	1.2	Regulatory Context	10
		1.2.1 Incorporated Document	10
		1.2.2 Minister's No-EES Decision	11
	1.3	Roles and Responsibilities	11
2	Statu	itory Approvals and Consents	13
		Primary Approvals	
		2.1.1 Environment Effects Act 1978	
		2.1.2 Environment Protection and Biodiversity Conservation Act 1999	
		2.1.3 Planning and Environment Act 1987	
		2.1.4 Approvals Process	
		2.1.5 National Greenhouse and Energy Reporting Act 2007	15
		2.1.6 National Environment Protection Measures (Implementation) Act 1998	16
		2.1.7 Aboriginal Heritage Act 2006	
		2.1.8 Heritage Act 2017	16
	2.2	Other Approvals and Consents	16
3	Envir	ronmental Management Framework	18
4		ronmental Management Documentation	
7		Overview	
		Process for developing key plans and approvals requirements	
_			
5		uating Environmental Performance	
		ARTC Environmental Management Information System (SAI360)	
		Environmental Compliance Monitoring	
		Environmental Audits and Inspections	
		Routine Site Inspections.	
		Environmental audits	
		Independent Environmental Auditor	
		Social Performance	
		5.8.1 Communications and Stakeholder Engagement	
		Training and Awareness	
		Environmental Reporting	
		5.10.1 Environment Event Management and Notification	
		5.10.2 ARTC Monthly Environment Reports	
		5.10.3 Environmental Data – GIS	
		Monitoring and Adaptive Management	
6	Reco	ord Keeping and Provision of Information	27
7		ronmental Performance Requirements	
'		Context	
		Rationale	
		Development of the EPRs	
		Statement of Environmental Commitments	
8		sultation Summary	
			41
Аp	pendi	ix 1 Environmental Event Management Process	

Appendix 2 ARTC Event Severity Matrix

ENVIRONMENTAL MANAGEMENT FRAMEWORK

Appendix 3 Environment Report Second Addendum: Inland Rail B2A native vegetation update 19 July

Appendix 4 Summary of Consultation (August 2022)

List of tables

Table 1	Glossary of terms	4
Table 2	Roles and responsibilities	
Table 3	Summary of CHMPs	16
Table 4	Summary of secondary approvals	17
Table 5	EMF key components	18
Table 6	Environmental Management Documents	20
Table 7	Environmental Performance Requirements	30
Table 8	Consultation Summary	47
Table 9	Environmental Event Management Process Steps	49
List of t	figures	
Figure 1	Schematic of Inland Rail Beveridge to Albury works and enhancement site	g
Figure 2	Sequencing of Approvals for works within the PSA area	
Figure 3	ARTC and Inland Rail environmental documentation hierarchy	19
Figure 4	Environmental Event Management Process Map	52
Figure 5	ARTC Event Severity Matrix	53



Glossary

Specific terms and acronyms used throughout this document are listed and described in Table 1.

Table 1 Glossary of terms

TERM	ACRONYM	DESCRIPTION
Air Quality Management Plan	AQMP	Plan prepared by Contractor to outline measures to avoid, minimise and mitigate potential impacts to air quality.
Archaeological Management Plan	ArchMP	Plan prepared by Contractor to manage disturbance of archaeological sites and values affected by the Project.
ARTC Approval		Means: each ARTC Approval; and any other licence, permit, authorisation, consent, assessment, approval, determination, certificate, accreditation, registration, clearance, permission; or the like of any Authority or any other person which must be obtained or satisfied (as the case may be) in connection with the Project or as a requirement of any Law.
AS/NZ ISO 14001:2015		Australian and New Zealand International Standard providing requirements for an Environmental Management System (EMS)
Beveridge to Albury	B2A	The Project
Biosecurity Management Plan	ВМР	Plan prepared by Contractor to outline measures to manage and control impacts on indigenous fauna and flora values from biosecurity threats (weeds, pathogens, and pest animals) during construction.
Construction Environmental Management Plan	CEMP	Plan (including Sub-plans) prepared by the relevant contractor for each project to implement the environmental management measures during the construction phase and establish the compliance reporting processes to demonstrate compliance with the project commitments and conditions of approval.
Contaminated Land and Spoil Management Plan	CLSMP	Sub-plan prepared by Contractor to outline measures to ensure appropriate management of contaminated soil to prevent potential impacts to the environment.
Construction Noise and Vibration Management Plan	CNVMP	Sub-plan prepared by Contractor to outline measures to avoid, minimise and mitigate impacts from noise and vibration.
Community and Stakeholder Management Plan	CSMP	Sub-plan prepared by Contractor to outline measures to address any and all impacts on the community as a result of Project works.
Cultural Heritage Management Plan	CHMP	A written report prepared by a Heritage Advisor. It includes results of assessments and measures to be taken before, during and after an activity in order to manage and protect Aboriginal cultural heritage.
Close out report		Report provided to ARTC detailing the handover and closure of environmental approvals, assets and documentation.
Conditions of Approval	CoA	Conditions associated with approval of the Planning Scheme Amendment, No-EES decision, EPBC controlled action and all associated documentation.
Contractor		A generic term used to describe a contracted party. This includes civil works contractors, professional services providers, consultants, material suppliers, etc.
D&C Contractor's activities		All things and tasks that the Contractor is required to do pursuant to the requirements of the Design and Construct (D&C) Contract including but not limited to the Project Scope



TERM	ACRONYM	DESCRIPTION
		Requirements (PSR) and compliance to all statutory and legislative approval requirements for the delivery of the B2A section of the T2A Works.
Department of Climate Change, Energy, the Environment and Water	DCCEEW	-
Department Environment, Land, Water and Planning	DELWP	-
Ecological Vegetation Class	EVC	Native vegetation in Victoria is classified into EVCs based on floristic, structural, and ecological features. Each EVC has been assigned a 'benchmark' condition for each of Victoria's bioregions. The EVC benchmark is used for comparison when assessing vegetation quality through a Vegetation Quality Assessment (VQA). The benchmark is also used for determining the size category of Scattered Trees
Enhancement Site		Discrete sites where road and rail interfaces do not provide the required horizontal and vertical clearance for double-stacked freight trains. Key works required at enhancement sites include (but are not limited to): Road bridge replacements; New road underpasses; and Track lowering.
Environment Report		A requirement of the Project under the Environment Protection and Biodiversity Conservation Act 1999 (Cth) (EPBC Act) Bilateral (Assessment Agreement) 2014 and the Environment Effects Act 1978 (Vic) (EE Act). The Environment Report describes the Project and assess the likely and relevant environmental effects. Assessment of the Project and the Environment Report is being undertaken by the Victorian State Government to avoid process duplication and enable integrated and efficient consideration of relevant Commonwealth and Victorian government matters.
Environmental Commitments		List of Inland Rail's overarching commitments to effectively manage and reduce impacts to the environment.
Environmental Management Framework	EMF	A transparent and integrated governance framework to manage environmental aspects associated with the B2A Project.
Environmental Management System	EMS	A set of processes, practices and plans that ensures the identification, monitoring and mitigation of environmental impacts across the Project.
Enabling Works		Enabling works are those undertaken separately by, or for, third parties, primarily for the relocation or provision of public utilities, or existing rail assets. These works may be undertaken under a separate Ancillary Agreement, or by the relevant asset owner, and are required to comply with the relevant environmental or regulatory framework applicable to the works or public utility.
Environmental Event		An environmental event includes: ARTC Approval Event as defined in the Deed. An incident which results in unauthorised environmental impact/ harm through damage, disturbance, contamination/ pollution or disruption/ nuisance; or



TERM	ACRONYM	DESCRIPTION
		 A breach or potential breach of an environmental obligation resulting in either an environmental noncompliance or environmental non-conformance; or A near miss.
Environmental management requirements		 Environmental management requirements are: the Conditions of Approval (CoA) the Environmental Management Plans (i.e. CEMP and sub-plans) obligations under any Law relating to the Environment.
Environmental Performance Requirement	EPR	A project specific environmental requirement that sets the minimum standard to be met during design, construction and operation of the Project.
Environmental Effects Statement	EES	An EES is a document that examines the possible impacts a proposed development may have on the environment.
Flora and Fauna Management Plan	FFMP	Sub-plan prepared by Contractor to protect flora and fauna from unauthorised impacts.
General Environmental Duty (GED)	GED	Under the <i>Environment Protection Act 2017 (EP Act</i>) a business must understand it's impacts on human health and the environment and has a duty to reduce the risk of harm because of its activities.
Groundwater Management Procedures	GMP	Procedures prepared by the Contractor to prevent impacts to groundwater.
Incorporated Document		Inland Rail – Beveridge to Albury December 2021'
Independent Environmental Auditor	IEA	Undertakes environmental reviews and audits of project activities including assessing compliance with the Environmental Management Systems (EMS), Environmental Management Framework (EMF) and Environmental Performance Requirements (EPR's) Construction Environment Management Plan (CEMP) and other sub-plans.
Kilometres	KM	Unit of length in the metric system
Landscape Management Plan	LMP	Sub-plan prepared by the Contractor to outline measures on how works will be undertaken to manage landscape impacts and how to effectively rehabilitate and reinstate disturbed areas in the delivery of the Works.
Matters of National Environmental Significance	MNES	The EPBC Act defines and protects Matters of National Environmental Significance (MNES): World Heritage properties National Heritage places Wetlands of international importance (RAMSAR sites) Listed threatened species and ecological communities Migratory species protected under international agreements Commonwealth marine areas Great Barrier Reef Marine Park Nuclear actions (including uranium mines), Water resource, in relation to coal seam gas development and large coal mining development.
National Pollutant Inventory	NPI	Australia-wide pollution tracking data base to improve air and water quality, minimise environmental impacts and improve sustainable use of resources.
Native Vegetation		Native vegetation (as defined in Victorian planning schemes) are plants that are indigenous to Victoria, including trees, shrubs, herbs and grasses.



TERM	ACRONYM	DESCRIPTION
IERIVI	ACRONYM	DESCRIPTION
Native Vegetation Offset		Any works of other actions to make reparation for the loss of native vegetation arising from the removal of native vegetation. This may include an area of existing remnant vegetation that is protected and managed, an area that is revegetated and protected, an area that is set aside for regeneration or restoration, or any combination of these. The relative size of an offset is graded according to its conservation significance.
Obligation		A regulatory instrument which may be a sub-set of an approval or a series of commitments.
ARTC Environmental Management Information System	SAI360	Management system to allow for monitoring, recording and managing inspections, regulatory obligations and data.
Planning Scheme Amendment	PSA	Amendment to a Planning Scheme to introduce the Incorporated Document 'Inland Rail – Beveridge to Albury December 2021'
Reinstatement and Rehabilitation Plan	RRP	Sub-plan prepared by the Contractor to reinstate vegetation over disturbed areas as soon as practicable.
Social Delivery Plan	SDP	Sub-plan prepared by the Contractor to manage social impacts.
Sustainability Management Plan	SuMP	Sub-plan prepared by Contractor which contains measures to meet, as a minimum, the sustainability targets and specified ratings as set out in the B2A PSR and the Specification Inland Rail Sustainability Requirements.
Traffic Management Plan	TMP	Sub-plan prepared by Contractor to manage traffic impacts.
Project		Beveridge to Albury section of the Inland Rail Project (Stage 1).
Tree Management Plan	TrMP	Sub-plan developed by the Contractor to outline measures that will be undertaken to prevent unauthorised impacts to trees.
T2A	T2A	Tottenham to Albury



1 Introduction

Inland Rail is a once-in-a-generation project that will enhance supply chains and complete the backbone of the national freight network between Melbourne and Brisbane via regional Victoria, New South Wales and Queensland.

Inland Rail will transform the way we move freight around the country, connect regional Australia to markets more efficiently, drive substantial cost savings for producers and consumers, and deliver significant economic benefits.

Comprising 13 individual projects and spanning more than 1,700km, Inland Rail is the largest freight rail infrastructure project in Australia and one of the most significant infrastructure projects in the world.

The Australian Government selected the Australian Rail Track Corporation (ARTC) to deliver Inland Rail, in partnership with the private sector, and has committed \$14.5 billion to the delivery of Inland Rail

Construction of Inland Rail commenced in early 2019 and it is expected to be fully operational in 2026.

Inland Rail will provide greater freight carrying capacity, as it is designed for double-stacked trains up to 1,800m long, each of which will be able to carry the same volume of freight as 110 B-double trucks.

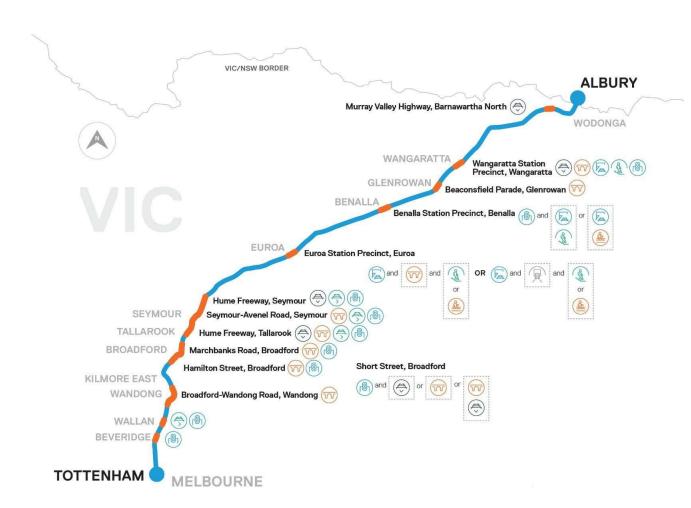
Better infrastructure and an effective national freight operation are key to delivering efficient supply chains, improving Australia's global competitiveness and lifting our nation's wealth and prosperity.

The Victorian portion of the Inland Rail project is being delivered in two phases. The first phase from Beveridge to Albury (the Project), includes 12 discrete Project Areas (also referred to as 'enhancement sites') where road and rail interfaces do not provide the required horizontal and vertical clearance for double-stacked freight trains.

In addition to the enhancement sites, the Project includes works to signal gantries, track slews and overhead powerline works from Beveridge to Albury to ensure that appropriate horizontal and vertical clearances are achieved for double-stacked freight trains.



Figure 1 Schematic of Inland Rail Beveridge to Albury works and enhancement site





LEGEND

- Existing track
- Project sites
- Bridge replacement
- Oversized vehicle underpass
- Pedestrian underpass
- Pedestrian overpass
- New platform and track realignment
- Track lowering
- Track slew
- Signal gantry (21 sites in total)
- Design options
- Project boundary
- Town
- Port

Maps not to scale



1.1 Purpose

The purpose of this Environmental Management Framework (EMF) is to provide a transparent and integrated governance framework to manage the planning, environment and heritage aspects of the Project.

The EMF outlines clear accountabilities for the delivery and monitoring of the implementation of the Project Environmental Performance Requirements (EPRs). The EPRs are a suite of performance-based standards/ outcomes that apply to the design and construction of the Project and are set out in Section 7.

The key objectives of the EMF and EPRs are to:

- Minimise Project delivery, approvals, environmental, and reputational risks
- Increase certainty that key environmental risks are identified and meaningfully considered early in Project planning and throughout Project delivery
- Set out the expected performance-based outcomes during design and construction and encourage innovation by the appointed Design and Construction (D&C) Contractor to achieve them
- Ensure environmental effects and hazards are appropriately managed in a consistent manner across the Project and good environmental outcomes are achieved
- Identify requirements that D&C Contractor will address within management sub-plans including the Construction Environment Management Plan (CEMP).

This EMF addresses the planning, environmental, and heritage aspects of the Project during design, construction and operation (in accordance with the Incorporated Document). The EMF and embedded EPRs apply primarily to the design and construction phase. Operational EPRs apply to the effective handover to ARTC to manage the maintenance of the infrastructure as these matters are subject to separate existing contractual arrangements.

1.2 Regulatory Context

1.2.1 Incorporated Document

The delivery of the Project is facilitated by the Beveridge to Albury Incorporated Document into the Whittlesea, Mitchell, Strathbogie, Benalla, Wangaratta and Wodonga Planning Schemes (the Planning Schemes).

This EMF responds to the conditions contained within the Incorporated Document as follows:

- Condition 4.2.1
 - Prior to the commencement of works, excluding preparatory works listed in Clause 4.3.1, an Environmental Management Framework (EMF) must be prepared to the satisfaction of the Minister for Planning. The EMF must be informed by the findings and conclusions of the Project's Environment Report, submissions on the Environment Report and the proponent's responses and the recommendations of the Minister's assessment. It must be prepared in consultation with Head, Transport for Victoria, Environment Protection Authority Victoria, City of Whittlesea, Mitchell Shire Council, Strathbogie Shire Council, Benalla Rural City Council, Rural City of Wangaratta, Wodonga City Council and the Department of Environment, Land Water and Planning (Section 8 Consultation).
- Condition 4.2.2 states that the EMF must contain the following:
 - ▶ Environmental Performance Requirements (EPRs) which set the environmental outcomes that must be achieved during the design, construction and operation of the Project, informed by the findings and conclusions of the environment report and the environmental risk assessment (see Table 7 Environmental Performance Requirements)



- ▶ The process and timing for the preparation of a Construction Environment Management Plan and any sub-plan that is required by the EPRs (Section 4.2 Process for preparing key plans and approval requirements and Table 7 Environmental Performance Requirements which includes responsibilities and the phase in which the management plans are prepared)
- Performance monitoring and reporting processes, including auditing to ensure environmental and amenity effects are managed in accordance with the EPRs during construction of the Project (Section 5 Evaluating Environmental Performance)
- A statement of all environmental commitments for the Project (Section 7.4 Statement of Environmental Commitments)

1.2.2 Minister's No-EES Decision

The Minister determined on 23 August 2020 that an EES was not required for Inland Rail – Beveridge to Albury, subject to two conditions including the requirement for preparation of an Environment Report and an EMF in consultation with Department Environment, Land, Water and Planning (DELWP) (EES referral number 2020-07).

Condition b of the No-EES with conditions states:

An environmental management framework (EMF), informed by the findings and conclusions of the Environmental Report, must be completed by the proponent to the satisfaction of the Minister for Planning prior to the commencement of works. The EMF needs to be prepared in consultation with DELWP and include a statement of all environmental commitments for the Project.

1.3 Roles and Responsibilities

This section outlines the roles, responsibilities, accountabilities and governance arrangements for implementing the EMF and the EPRs during delivery of the Project.

Fulfilling the responsibilities and accountabilities across all elements of the EMF involves ARTC, the D&C Contractor and regulators. The D&C Contractor responsibilities will be included as contractual requirements in the Project contract. The D&C Contractor will also be responsible for activities conducted by their subcontractors and the development of the CEMP.

The key roles and responsibilities for the environmental management under this EMF are show in Table 2.

Table 2 Roles and responsibilities

ROLE	RESPONSIBILITIES
ARTC	 Obtain applicable statutory approvals, as required, generally including Planning Scheme Amendment, Cultural Heritage Management Plans (CHMPs), Heritage Permits, Environment Report and EMF Mandate compliance with the EMF and EPRs in Project contracts Establish and implement its responsibility under the EMF Monitor compliance with the EPRs and comply with the EPRs applicable to ARTC. Review and approve documents as per the EMF, including the CEMP, management plans and associated sub-plans Prior to the commencement of work, verify that the D&C Contractor has complied with the relevant EPRs Review the D&C Contractors performance against the EPRs and CEMP and take corrective actions as necessary ARTC will publish environmental compliance reports to the Project's website, within 60 days of receipt (Note: any Sensitive Ecological information is to be redacted prior to publication).



ROLE	RESPONSIBILITIES
	 At the completion of works, ARTC will complete a detailed audit of all rehabilitated areas to ensure the contractor has met all rehabilitation requirements as stated in the Reinstatement and Rehabilitation Management Plan (RRP) Comply with Environmental Protection Act 2017 (EP Act) General Environmental Duty (GED) for all activities within ARTC control.
Minister for Planning	 Approve the Planning Scheme Amendment (GC157) as required to introduce an Incorporated Document to facilitate the Project under the Planning and Environment Act 1987 (Vic) (P&E Act) (completed March 2022) Approval of applications to discharge conditions of the Incorporated Document for the Project, including but not limited to the Environment Report and the EMF Assess the EMF to determine that it satisfies the Ministers' Conditions as required by the 'No EES' conditions' decision 2020-07 (dated 23 August 2020) Approve amendments to the EMF.
Regulators and agencies	 Administer and determine compliance, where appropriate, with the Incorporated Document and relevant Project approvals Grant relevant secondary permits or planning, heritage or environmental approvals.
D&C Contractor	 Comply with its responsibilities under the EMF, legislative and approval requirements Comply with EP Act 2017 for all activities within D&C Contractor control Obtain any additional secondary permits and approvals required to design and construct the Project from regulatory authorities (other than the approvals obtained by ARTC) Develop and implement a project-specific Environmental Management System (EMS) certified to AS/NZS 14001:2016 Prepare a CEMP and other plans as required by EPRs in the EMF Provide adequate resources to establish, implement, maintain and improve the EMS, CEMP and other sub-plans as required by the Incorporated Document, EPRs or Project contract Engage an Environmental Manager with authority and responsibility for environmental management for the duration of the design, construction and rehabilitation phases of the Project Implement and maintain compliance with the EPRs applicable to the D&C Contractor Undertake environmental audits to confirm compliance with the EMF, EPRs and approvals as required Prior to the commencement of work, ensure subcontractors have complied with the relevant EPRs, CEMP and other plans as required by the Incorporated Document, EPRs or Project contract Review of sub-contractors' performance against the EPRs and CEMP and take corrective actions as necessary Appoint a qualified and experienced Independent Environmental Auditor (IEA) to confirm compliance with the Project's EMS, the EMF, EPRs, CEMP, and other sub-plans as and D&C Contract. The IEA will prepare environmental compliance reports (frequency to confirmed with Department of Climate Change, Energy, the Environment and Water (DCCEEW) and DELWP). These reports will be published on the ARTC website.
D&C Project Manager	 The Project Manager will be responsible for the overall management, performance and delivery of all aspects of the Project, as well as the day-to-day planning and administration of the CEMP The Project Manager will ultimately be responsible for the implementation of the requirements contained within the CEMP and associated sub-plans.
D&C Environment Manager	The Environment Manager will have the responsibility of ensuring all environment protection measures are in place, relevant approvals are sought and environmental reporting requirements as stipulated by the EMF are complied with.
D&C Construction Manager	The Construction Manager will have the responsibility for planning and undertaking work activities following the CEMP and sub-plans, managing subcontractors and construction activities daily to ensure appropriate



ROLE	RESPONSIBILITIES		
	environmental controls are implemented and maintained, reporting environmental incidents, and immediately addressing any non-compliance through to resolution.		
D&C Construction personnel and subcontractors	All construction personnel will have a responsibility for implementing the CEMP and sub-plans and other environmental management procedures relevant to their work activities.		
Independent Environmental Auditor	 Prior to commencement of enhancement site and powerline works, review the Contractor's systems and plans to ensure they are adequate for compliance with this EMF, relevant EPRs, CEMP, and any other plans required by the EPRs, and conditions of Project approvals Conduct regular audits (every six months) of Contractors' compliance with this EMF, relevant EPRs, CEMP, and any other plans required by the EPRs, conditions of Project approvals, and as required by ARTC Prepare a six-monthly audit report summarising the Contractor's compliance and results of audits and provide to ARTC and the Contractor(s) Review complaints referred by ARTC relevant to the EPRs. 		

2 Statutory Approvals and Consents

The following section provides an overview of the key legislative requirements applicable to permits, approvals, environmental management and reporting.

2.1 Primary Approvals

2.1.1 Environment Effects Act 1978

The Environment Effects Act 1978 (Vic) (EE Act) provides for assessment of proposed projects (works) with the potential to have a significant effect on the environment. This Act does this by enabling the Minister administering the EE Act to decide whether an EES should be prepared.

A number of preliminary and detailed studies were undertaken by ARTC which resulted in a decision to refer the Project under the *EE Act*.

As discussed in Section 1.2.2, the Minister determined that an EES was not required under the *EE Act*, subject to conditions. These conditions require that the EMF, informed by the findings and conclusions of the Environment Report, must be completed by the proponent to the satisfaction of the Minister for Planning prior to the commencement of works and include a statement of all environmental commitments for the project. (EES referral number 2020-07) (dated 23 August 2020).

2.1.2 Environment Protection and Biodiversity Conservation Act 1999

The Environment Protection and Biodiversity Conservation Act 1999 (Cth) (EPBC Act) is the Australian Government's key piece of environmental legislation which provides a national approach to environment and heritage protection and biodiversity conservation. The EPBC Act focuses on the protection of Matters of National Environmental Significance (MNES). The EPBC Act states that 'controlled' actions i.e., actions that are determined as likely to have a significant impact on MNES are subject to assessment and approval under the EPBC Act.

A number of preliminary and detailed studies were undertaken by ARTC which resulted in a decision to refer the Project under the *EPBC Act*.

The Project was determined to be a 'controlled action' (EPBC 2020/8721) due to the likelihood of the Project having a significant impact on one or more MNES:

- Grey Box (Eucalyptus microcarpa) Grassy Woodlands and Derived Native Grasslands of South-Eastern Australia
- Euroa guinea-flower (Hibbertia humifusa subsp. erigens).



It was determined that assessment of the Project under the *EPBC Act* is being undertaken via the accredited State assessment process (Environmental Report under the Bilateral (Assessment) Agreement between the Commonwealth and Victorian governments).

2.1.3 Planning and Environment Act 1987

The *P&E Act* sets out the framework for planning the use, development and protection of land in Victoria. This includes the process for amending planning schemes and matters that need to be considered when preparing and assessing a PSA.

An amendment to the Whittlesea, Mitchell, Strathbogie, Benalla, Wangaratta and Wodonga Planning Schemes (the Planning Schemes) has been prepared for the Project and was gazetted in March 2022. The Amendment introduced the 'Inland Rail – Beveridge to Albury April 2021' Incorporated Document (GC157) into the Planning Schemes to facilitate the use and development of the Project land for the purpose of the Project (excluding overhead powerline replacement works outside enhancement sites and native vegetation removal for preparatory works).

The Project's PSA is the key planning approval mechanism for the Project and allows works to proceed alongside the approval of the Environment Report and the EMF (see Figure 2 below). All three documents must be prepared to the satisfaction of the Victorian Minister for Planning.

Amendments to the EMF and EPRs are required to be submitted to the Minister for Planning for approval.



2.1.4 Approvals Process

Key approvals for the Project, their sequence and the works that are authorised by each approval are summarised in Figure 2.

Figure 2 Sequencing of Approvals for works within the PSA area



In accordance with the Incorporated Document, ARTC will consult with Department of Transport (DoT), EPA, Councils and DELWP on the EMF prior to submission. The comments provided during consultation will be incorporated into the EMF and a summary of the consultation undertaken will be provided to the Minister for Planning for their consideration.

2.1.5 National Greenhouse and Energy Reporting Act 2007

The D&C Contractor shall comply with any applicable responsibilities for reporting in respect of the D&C Contractor's Activities and the Works under the *National Greenhouse and Energy Reporting Act* 2007 (NGER Act).

The intention is that, if reporting is required in respect of the D&C Contractor's Activities and the Works, the D&C Contractor would comply with those reporting requirements.

However, irrespective of whether reporting is required:

- The D&C Contractor shall prepare, record and retain greenhouse gas and energy information related to the D&C Contractor's Activities and the Works in order to report under the *NGER Act* in respect of the D&C Contractor's Activities and the Works
- The D&C Contractor shall provide all documents and other information which are necessary to enable ARTC to comply with any obligations it may have under the NGER Act or which ARTC (acting reasonably) may request in connection with the NGER Act.



2.1.6 National Environment Protection Measures (Implementation) Act 1998

The Laws relating to the Environment responsible for the implementation of the National Pollutant Inventory (NPI) in Victoria may require reporting of emission of pollutants associated with the D&C Contractor's Activities and the Works. The D&C Contractor shall comply with any applicable responsibilities for reporting under the relevant Act in respect of the D&C Contractor's Activities and the Works.

The intention is that, if reporting is required in respect of the D&C Contractor's Activities and the Works, the D&C Contractor would comply with those reporting requirements.

However, irrespective of whether reporting is required:

- The D&C Contractor shall prepare, record and retain information related to the D&C Contractor's Activities and the Works in order to report under the relevant Act in respect of D&C Contractor's Activities and the Works
- The D&C Contractor shall provide all documents and other information which are necessary to enable ARTC to comply with any obligations it may have under the relevant Act in respect of the NPI, or which ARTC (acting reasonably) may request in connection with the NPI.

2.1.7 Aboriginal Heritage Act 2006

Sections of the Project are within areas of Aboriginal cultural heritage sensitivity due to the presence of registered cultural heritage places and named waterways as defined in the *Aboriginal Heritage Regulations 2007 (Vic)*. As such, the Project requires the preparation and approval of CHMP under the *Aboriginal Heritage Act 2006 (Vic)*.

Given the spatial extent of the Project, four CHMPs have been approved in consultation with the Yorta Yorta Nation Aboriginal Corporation and the Taungurung Land and Waters Council Aboriginal Corporations.

The CHMPs are summarised in Table 3 and, once approved, will provide management conditions for any Aboriginal heritage within the Project.

Table 3 Summary of CHMPs

CHMP NUMBER	REGISTERED ABORIGINAL PARTY	AREA
CHMP 17752	Yorta Yorta Nation Aboriginal Corporation	Glenrowan Enhancement site
CHMP 17402	Yorta Yorta Nation Aboriginal Corporation	Benalla and Wangaratta Enhancement sites
CHMP 17401	Taungurung Land and Waters Council Aboriginal Corporation	Tallarook, Seymour and Euroa Enhancement sites
CHMP 17862	Taungurung Land and Waters Council Aboriginal Corporation	Wandong and Broadford Enhancement sites

2.1.8 Heritage Act 2017

Sections of the Project are within the extent of Victorian Heritage Register places. As such permits to impact Glenrowan Heritage Precinct (H2000) and the Wangaratta Railway Station Complex (H1597) are required under the *Heritage Act 2017 (Vic)*.

2.2 Other Approvals and Consents

A number of other permits and approvals may be required for specific aspects of the Project. These are listed in Table 4.



Table 4 Summary of secondary approvals

LEGISLATION	RESPONSIBLE AUTHORITY	APPROVAL	PURPOSE
Heritage Act 2017(Vic)	Heritage Victoria	Heritage Consent, Heritage Permit and Heritage Permit Exemption for works in heritage places.	Required to facilitate works within the boundary of heritage places listed on the Victorian Heritage Register (VHR) and the Victorian Heritage Inventory (VHI).
Flora and Fauna Guarantee Act 1988 (Vic)	DELWP	Flora and Fauna Guarantee Permit	Permit to take protected flora from public land.
Wildlife Act 1975 (Vic)	DELWP	Management authorisation for the salvage and handling of fauna	Suitably qualified persons engaged to remove, salvage, hold or relocate fauna must hold a Management Authorisation under the Wildlife Act 1975.
Water Act 1989 (Vic)	Melbourne Water, Goulbourn Broken and North East Catchment Management Authorities	Permit for works on, over or under a designated waterway	Required to facilitate water crossing works.
Environment Protection Act 2017	Environment Protection Authority Victoria	Approval for any discharge into a waterway or groundwater during the construction of the Project. Movement, storage and reuse of contaminated soil/ materials. The waste generator, waste transporter and receiving facility all have responsibility under the General Environmental Duty, which may include permissions, declaration of use, determinations and deemed authorisations.	Required to facilitate construction.
Road Management Act 2004 (Vic)	DoT	Consent for works within a road reserve.	Required to facilitate works within the road reserve.
Planning and Environment Act 1987	Local Government	Planning permit to remove, destroy, or lop vegetation under Victoria Planning Provisions Clause 52.17, 42.01, 42.02, 42.03, 44.01 and 44.02 and/ or buildings and works for 'utility installation'.	Required to facilitate vegetation removal outside the PSA area, in accordance with the requirements of the Guidelines for the removal, destruction or lopping of native vegetation (DELWP, 2017) and overlays where applicable.
Planning and Environment Act 1987	As specified in the Incorporated Document	Incorporated Document Conditions (Clause 4.2) [4.2.1, 4.2.2, 4.2.3 and 4.2.4 of the Inland Rail Beveridge to Albury Incorporated Document, dated December 2021, relate to the preparation of the EMF and EPRs. Clause 4.2.5 through to 4.2.25 list out a number of	Required to discharge the conditions to facilitate the permitted use and development.



LEGISLATION	RESPONSIBLE AUTHORITY	APPROVAL	PURPOSE
		requirements that must be satisfied to enable preparatory and construction works to commence on the Project]	

The D&C Contractor shall develop an Environmental Approvals and Obligations Register that lists the following obligations, but not limited to:

- Conditions of Approval (CoA)
- Environmental Management Plans (i.e. CEMP and sub-plans)
- Other requirements that require tracking (e.g. CoA compliance reporting requirements, timeframes)
- All other Approvals and other legally binding obligations (e.g. any other agreements); and arrangements (e.g. Memoranda of Understanding) pertaining to the D&C Contractor's Activities and the Works.

For each of the approvals identified in the Environmental Approvals and Obligations Register, the D&C Contractor shall provide a reference to:

- ▶ The relevant D&C Contractor's Activities and the Works
- The relevant legislative requirement and/or Project Document requirement
- The approval trigger
- The type of approval
- The approving Authority
- The applicant (party responsible for the approval)
- The start and end/expiry dates for all other Approvals including anniversary dates
- The relevant location including any specific areas, chainage, boundaries or constraints that apply
- Any approvals and associated requirements required for acceptance, including those required for the Services.

3 Environmental Management Framework

This EMF is based on the approach set out in AS/NZS140001:2015 – *Environmental Management System* and, is comprised of several key components that are summarised in the Table 5 and shown in Figure 3.

The EMF will be implemented through appropriate management plans, inspections, monitoring and external audits that will be documented and prepared by ARTC and the D&C Contractor.

The specific management plans will be developed and implemented to achieve compliance with the EPRs set out in Section 7, relevant approval requirements under Commonwealth and State legislation, and ARTC contractual, environmental, sustainability, and urban design requirements.

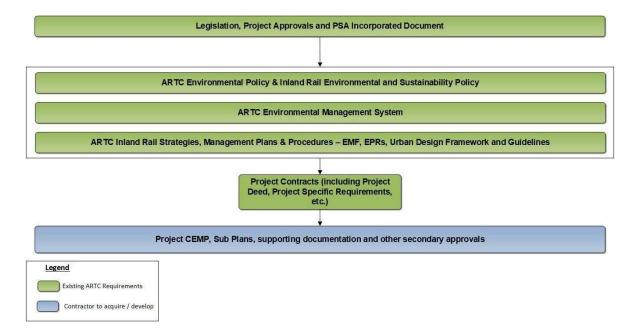
Table 5 EMF key components

KEY COMPONENTS	DESCRIPTION
Regulations	Includes the requirements under the relevant Commonwealth and State laws and guidelines that govern the planning, environment, and heritage aspects of the Project.
ARTC management frameworks	ARTC planning and environmental management plans/ environmental management procedures, and urban design and sustainability requirements. This includes the application of the plans in Section 5.2.



Project requirements	Includes the contractual requirements to prepare and implement a CEMP, and to comply with the EPRs.	
Environmental approvals and assessments	Includes the range of approvals and assessments required under State and Commonwealth legislation. Appropriately qualified specialist advice will inform the standards and environmental management actions that may be implemented through the EMF and EPRs to satisfy the requirements of these approvals and assessments.	
D&C Contractor's Environmental Management System	The systems, processes, and procedures the D&C Contractor implements to manage the environmental aspects of the Project.	
Construction Management	The CEMP and associated management plans that set out the environmental risks and the measures and processes required to appropriately manage those risks.	
Monitoring/learning/improving	The systems and procedures implemented by ARTC and the D&C Contractor to monitor, report, and audit non-conformances, non-compliances, and environmental incidents, implement corrective actions, and ensure continuous improvements.	

Figure 3 ARTC and Inland Rail environmental documentation hierarchy



4 Environmental Management Documentation

4.1 Overview

This section provides an overview of how the D&C Contractor's EMS, CEMP and environmental management sub-plans required under this EMF shall be documented. It describes the process for preparing the systems and plans and who is responsible for preparing, approving and implementing them.



The EMF will be implemented through the CEMP and a series of sub-plans under the D&C Contractor's EMS. They are designed to implement and achieve compliance with the relevant legislation and their respective contractual requirements and environmental and sustainability policies, and with requirements of the conditions of relevant planning, environmental and heritage approvals.

4.2 Process for developing key plans and approvals requirements

ARTC and the D&C Contractor will develop and implement CEMP and sub-plans generally in accordance with the process and approvals requirements.

Revisions to the CEMP and sub-plans and approval process in this document may from time-to-time be required as a result of changes in activities and work practices, results of monitoring, changes to legislation, identification of environmental risks, or as a result of findings from internal or external audits, incidents or complaints. The D&C Contractor's EMS, CEMP, and other sub-plans as required by the EPRs, will be controlled documents and shall be developed, approved, implemented and revised in accordance with Table 6.

In addition to EMS, environmental management documents must be prepared to describe the specific processes, procedures, management and mitigation measures that will be implemented to manage the environmental effects of the Project. These documents are described in detail in Section 7 – Environmental Performance Requirements

Table 6 Environmental Management Documents

DOCUMENTATION	PREPARE	REVIEW	APPROVE/ ACCEPT
Construction Environmental Management Plan (CEMP)	Contractor	ARTC Local Council, DoT Independent Environmental Auditor (IEA)	ARTC (accept)
Air Quality Management Plan (AQMP)	Contractor	ARTC EPA Victoria Local Council IEA	ARTC (accept)
Tree Management Plan (TrMP)	Contractor	ARTC Local Council Arborist IEA	ARTC (accept)
Biosecurity Management Plan (BMP)	Contractor	ARTC DELWP DoT Local Council IEA	ARTC (accept)
Community and Stakeholder Management Plan (CSMP)	Contractor	ARTC Local Council IEA	ARTC (accept)
Contaminated Land and Spoil Management Plan (CLSMP)	Contractor	ARTC EPA Victoria DoT Local Council IEA	ARTC (accept)
Flora and Fauna Management Plan (FFMP)	Contractor	ARTC DELWP DoT Local Council IEA	ARTC (accept)
Groundwater Management Procedures	Contractor	ARTC	ARTC (accept)



Archaeological Management Plans (ArchMPs)	Contractor	ARTC Heritage Victoria	ARTC (accept)
Landscape Management Plan (LMP)	Contractor	ARTC DoT Local Council IEA	ARTC (accept)
Construction Noise and Vibration Management Plan (CNVMP)	Contractor	ARTC Local Council IEA	ARTC (accept)
Reinstatement and Rehabilitation Plan (RRP)	Contractor	ARTC DELWP DoT Local Council IEA	ARTC (accept)
Surface Water Management Procedures (SWMPs)	Contractor	ARTC Local Council IEA	ARTC (accept)
Sustainability Management Plan (SUMP)	Contractor	ARTC Local Council	ARTC (accept)
Traffic Management Plan (TMP)	Contractor	ARTC Local Council Road Authorities	Road Manager (approve)
Waste Management Plan (WMP)	Contractor	ARTC Local Council IEA	ARTC (accept)



5 Evaluating Environmental Performance

This section identifies the requirements for monitoring, reporting and auditing of compliance with this EMF, which includes the relevant regulations, Project requirements (including contractual requirements and the EPRs), planning and environmental assessments and approvals under State and Commonwealth legislation, and the CEMP.

5.1 ARTC Environmental Management Information System (SAI360)

SAI360 has been configured to support ARTC to fulfil environmental management requirements associated with Inland Rail projects.

The D&C Contractor is required to provide environmental data using the SAI360 platform and directly enter all required information. ARTC will provide reasonable licences and training material for the D&C Contractor's environmental staff to efficiently and effectively use the SAI360 platform.

5.2 Environmental Compliance Monitoring

The Contractor shall undertake environmental monitoring in accordance with all Project plans, EMF, EPRs, and any other relevant standard or statutory requirement, where required.

Monitoring records must be retained in accordance with statutory and Project-specific timeframes.

ARTC will rely on the Environmental Approvals and Obligations Register provided by the D&C Contractor to inform the following within SAI360 for ARTC Approvals:

- Obligation and requirement owners (either ARTC or the D&C Contractor)
- Obligation requirements (i.e. conditions, commitments, controls)
- Dates and frequency of associated actions to meet requirements
- Details of any supporting evidence of action completion (all evidence shall be readily accessible so it can be supplied to ARTC or third-party Regulator on request).

The CEMP shall contain procedure(s) for undertaking the various types of monitoring including specific location(s), method, timing, frequency, duration, parameter/s to be monitored, and objective/criteria measured against.

The Contractor is required to implement monitoring programs in accordance with their environmental documentation and regularly review monitoring programs and their implementation to verify that:

- The monitoring frequency is sufficient to identify whether any significant non-compliance with the EPRs or contractual requirements, or non-compliance with the relevant legislation and regulations (including conditions of approvals), has occurred
- The range of parameters being monitored is adequate (this is particularly relevant if an activity has led to an incident or complaint)
- Changes to programmed construction activities are adequately covered by the monitoring programs.

Where monitoring identifies a non-conforming result with the legislative and/or EPRs, this non-conformance shall be managed and reported as part of the D&C Contractor monthly environmental reporting.

All environmental monitoring data, calibration records, written analysis/ reports and/or subject matter expert reviews shall be provided to ARTC upon request within the requested timeframe, in a format agreed with ARTC.

The D&C Contractor shall be required to undertake additional monitoring at the direction of ARTC in response to complaints, non-compliances or a change in D&C Contractor activities.



5.3 Environmental Audits and Inspections

ARTC and the D&C Contractor personnel are required to develop and implement a program of environmental audits and routine site inspections, detailed in the CEMP, EMF, EPRs and other key documents.

5.4 Routine Site Inspections

Routine inspections shall include site inspection of site environmental and sustainability risks, controls and conditions.

The D&C Contractor's environmental representatives shall undertake and document, using a field inspection sheet or checklist (or similar) covering the following:

- The site inspections for the purposes of verifying the adequacy of environmental and sustainability controls on site
- Change in site conditions or D&C Contractor activities
- Compliance with approvals, permits, regulatory and environmental requirements
- ldentify any actual or potential environmental risks or issues.

Routine site inspections will be conducted at the discretion of ARTC Environment personnel independently of D&C Contractor or as a joint inspection accompanying the D&C Contractor.

The D&C Contractor shall undertake appropriate immediate corrective actions to rectify issues identified during site inspections. An Environmental Action Register shall be maintained by the D&C Contractor, it shall contain internal actions and those assigned by ARTC. The action register shall be up-to-date and available for review by ARTC upon request. The required content of the Environmental Action Register will be documented within the CEMP.

The procedure for site inspections, and any inspection checklist to be used, shall be documented within the CEMP.

Site inspection records shall be made available to ARTC upon request, and details of completed inspections and environmental coordination meeting minutes provided to ARTC in the monthly environment report.

5.5 Environmental audits

The D&C Contractor shall undertake an environmental audit (utilising an IEA) within 6 months of Project commencement, then 6-monthly during construction thereafter for the duration of the D&C Contractor's activities. An audit will also be completed at the completion of works to confirm all rehabilitation requirements as stated in the Landscape Management Plan (LMP) and the Reinstatement and Rehabilitation Plan (RRP) have been met – this should be completed in collaboration with the ARTC Environment Team.

The D&C Contractor's environmental audit program shall be detailed in their respective CEMP, include any subcontractors engaged by the D&C Contractor, and confirm conformance with:

- D&C Contractor's environmental management requirements detailed in this EMF, the CEMP and EPRs
- Contractual requirements
- AS/NZS ISO 14001:2015.

The D&C Contractor shall be resourced appropriately with suitably qualified and experienced personnel to deliver audits in a timely and efficient manner and produce an audit report which shall be supplied to ARTC.

The audit report shall be delivered by the D&C Contractor to ARTC within two (2) weeks of audit completion, in a format agreed with ARTC.

The D&C Contractor shall document any non-conformances identified during audits, which shall also be reported accordingly in the monthly environment report.



The audits will assess compliance with requirements of the EPRs and CEMP, including sub-plans and approvals.

5.6 ARTC Environmental Audits

ARTC will undertake periodic audits of the D&C Contractor's CEMP, compliance, activities and environmental contractual requirements. ARTC will provide at least five (5) business days' notice (where appropriate) of a planned audit. The D&C Contractor shall ensure that the relevant people identified within the audit notification attend the audit as required.

ARTC may, at their discretion, undertake unplanned audits in response to non-conformances, Environmental Events, or upon receiving complaints regarding the Project.

ARTC will conduct (in collaboration with the D&C Contractor) a rehabilitation audit at the completion of works to ensure that the D&C Contractor has met all rehabilitation and reinstatement requirements as contained in the RRP. Relevant stakeholders will be invited to attend this inspection.

Where relevant, ARTC may engage a third party independent auditor to complete audits on a six-monthly basis, or as defined by the EPRs, during the construction period. The audits will assess compliance with requirements of the EPRs and CEMP, including sub-plans.

5.7 Independent Environmental Auditor

An IEA engaged by the D&C Contractor shall undertake an audit at within six months or Project commencement and six-monthly thereafter to audit the D&C Contractors' compliance with this EMF, relevant EPRs, CEMP, and any other plans required by the EPRs, conditions of Project approvals, and as required by ARTC.

The IEA will produce compliance reports to be provided to ARTC and D&C Contractor, these reports will be published on the ARTC website.

ARTC will publish environmental compliance reports to the Project's website, within 60 days of receipt (Note: any Sensitive Ecological information is to be redacted prior to publication).

5.8 Social Performance

The D&C Contractor is responsible for preparing a Social Delivery Plan (SDP) (to the satisfaction of ARTC) for the Project. The SDP will contain actions to be implemented by the D&C Contractor to mitigate social impacts and enhance social benefits.

The Contractor shall:

- Develop, comply with, review, maintain and update a SDP, based on the requirements of the PSRs
- Implement, monitor and report the commitments and actions identified in the SDP.

5.8.1 Communications and Stakeholder Engagement

The Contractor shall work with ARTC to uphold communications standards and engage with community and stakeholders in an inclusive, accessible and timely manner. The Contractor shall comply with the PSR, ARTC standards, policies and procedures, and all applicable laws.

5.9 Training and Awareness

The D&C Contractor shall be responsible for determining the training needs of their personnel. As a minimum, the CoA of relevant Approvals are to be met. In addition, the D&C Contractor shall include site inductions and regular toolbox talks with environmental, sustainability, social and cultural heritage content, topic-specific environmental training and any additional training outlined in the environmental management requirements.



The D&C Contractor shall identify, in their respective CEMPs, the competency, qualifications and accreditations required of staff that hold environmental roles and responsibilities.

Prior to commencing any works involving ground disturbing activities, the D&C Contractor shall ensure that all staff involved in or supervising these activities have attended an environmental induction covering high risk topics, such as, 'no go' zones vegetation clearance and biosecurity requirements.

The D&C Contractor shall prepare and deliver a site induction for all persons entering the Project Site, including short term visitors. The D&C Contractor shall maintain a register signed by those inducted. The register shall contain but not be limited to the name of the training being delivered, name of inductees, dates inducted, the name of the induction facilitator and content covered. The register shall be made available to ARTC upon request.

- ▶ The D&C Contractor shall identify the task or activity-specific training needs of personnel and document a training register in their respective CEMPs, to ensure the competency, qualifications or accreditations of staff that hold environmental roles and responsibilities are suitable
- A copy of the D&C Contractor's environmental inductions shall be made available to ARTC upon request.

5.10 Environmental Reporting

Environmental reporting is required to enable ARTC to manage its environmental compliance obligations. The reports described below are what is anticipated however ARTC may request environmental information in different formats to meet its reporting obligations. Environmental reporting requirements will be tracked in the Environmental Approvals and Obligations Register.

5.10.1 Environment Event Management and Notification

The D&C Contractor shall manage events in accordance with the Environment Event management process in Appendix 1.

Appendix 2 provides details regarding ARTC's Event Severity matrix.

The D&C Contractor shall immediately notify ARTC of any CoA non-compliance and the proposal to rectify the non-compliance to enable ARTC to make any statutory notification.

Where required, the D&C Contractor shall notify ARTC, in accordance with the Environment Event management process, where a non-compliance of Approval condition, reportable legislative breach, or actual or potential material or serious environmental harm has been identified.

All notifiable incidents shall be reported to the relevant authority within regulatory reporting timeframes. This includes, but may not be limited to:

- Notification to the Environment Protection Authority (EPA) in the event of a pollution event
- Notification to First Peoples Victoria and/or Registered Aboriginal Party (RAP) as relevant, if a potential Aboriginal site or artefact is identified
- Notification to Heritage Victoria (HV) if a historical heritage artefact is discovered
- Notification to DELWP of the injury or mortality to all native fauna species
- Notification to DCCEEW in line with EPBC approval conditions
- Notification to DoT of any incidents on, or impacts to, DoT land.

The D&C Contractor shall undertake immediate remedial actions to mitigate environmental harm or further impacts from Environmental Events which shall be documented in the D&C Contractor Emergency Response Plan; immediate response actions shall not be delayed by the need to notify ARTC.

Should works for the Inland Rail Program result in environmental nuisance or environmental harm, the D&C Contractor shall be responsible for remediation works to make good the environmental nuisance



and / or environmental harm to the satisfaction of ARTC, the Regulator, and any statutory requirement.

The D&C Contractor shall also notify ARTC of any correspondence, meetings with or visits from representatives of an administering authority or Regulator immediately but no later than 24 hours of becoming aware of the event. Where possible, the D&C Contractor are to notify ARTC once they are informed of proposed visits from an administering authority or Regulator and include ARTC in any conversations/communications, where appropriate.

ARTC may nominate a representative to attend any meetings or site visits.

ARTC shall be included in all regulatory correspondence including notifications, incident reports and other correspondence relevant to an Environmental Event. Incident reports and corrective actions are to be closed out in a suitable timeframe to the satisfaction of ARTC.

The D&C Contractor shall, on receiving a penalty infringement notice or other statutory notice and any correspondence issued by the Regulator immediately notify ARTC and forward a copy of any penalty infringement notice or other statutory notice and any information required to ARTC.

Complaints arising from environmental nuisance and amenity aspects, such as noise and vibration, shall be investigated and assessed. Where the investigation has concluded an Environmental Event has occurred this shall be managed through the Event Management process.

5.10.2 ARTC Monthly Environment Reports

The D&C Contractor shall complete and submit reporting to ARTC in the form of a monthly environmental report. The monthly environmental report shall be submitted to ARTC within five (5) business days of the end of each month.

The monthly environmental report shall include reporting and statements actively addressing, but not limited to, the following:

- ▶ The D&C Contractor's updates to their respective CEMP and sub-plans
- Compliance status of requirements of any obligations obtained for activities as part of the D&C Contractor's activities and the works
- Completed site inspections, including number of inspections completed and open and closed corrective actions raised and completed
- Results of monitoring as required by CoA
- Summary of positive environmental outcomes achieved
- Summary of environmental events for the month and open and closed corrective actions and lessons learned
- Summary of events where heritage has been encountered through the unexpected finds protocol
- Pre-clearance surveys completed including details of the monthly and cumulative totals of vegetation that has been cleared and fauna spotter/ catcher reports
- Waste classification, volumes and destinations (all recorded evidence and provided monthly). Environmental monitoring in accordance with CEMP and any other relevant standard or statutory requirement, where required
- Details of complaints and resolution
- Details of any inspections undertaken by regulators
- Details of any internal audits conducted, audit findings and corrective actions
- Details of any new approvals sought or required as part of construction
- Positive environmental outcomes achieved, opportunities for improvement and lessons learned identified and implemented by the D&C Contractor
- Next month's key areas of focus for upcoming works/ compliance requirements e.g. reports/audits etc.

The D&C Contractor may nominate to utilise their own reporting template if deemed suitable by ARTC.



Reports shall not be released or published without the written approval of ARTC. At the discretion of ARTC, any inadequacies or inaccuracies in the documentation will be addressed by the D&C Contractor to the satisfaction of ARTC.

5.10.3 Environmental Data - GIS

Environmental data shall be collected in formats suitable for use within a GIS to allow data users to collect data attributes against spatial features and to conduct spatial analysis.

The GIS Data Integration and Handover Specification (5-0000-900-PEN-00-SP-0001) provides a common understanding and language for the management of environmental data within the ARTC-Inland Rail Program GIS environment. The D&C Contractor shall provide environmental data in accordance with this specification.

The D&C Contractor shall provide pre and post clearance ecological assessments supported by technical assessment reports (including spatial data). This documentation will assist with reporting requirements associated with CoA, including all other approvals.

5.11 Monitoring and Adaptive Management

The evaluation of environmental performance will be based on an adaptive management approach, which will allow for collecting information, analysing its significance and implications, and responding to it, with the key purpose to learn from the information collected so that the Project can continuously improve its environmental performance.

This approach will allow ARTC and the Contractor to monitor and instigate change where required, acknowledging the need to continually improve, using evidence-based and a systems approach that will allow for best practice environmental management.

6 Record Keeping and Provision of Information

Records shall be maintained by the D&C Contractor in SAI360 format to demonstrate compliance with environmental management requirements and this EMF and shall be retained in accordance with the PSR and statutory timeframes, whichever timeframe is the greater after Final Completion of the Works. Records and registers shall be made available to ARTC upon request and stored within SAI360.

Where CoA contain a reporting requirement or supply of data or other documentation, the D&C Contractor shall supply the necessary information to ARTC no later than 20 business days prior to the dates specified in the Approvals.

Environmental records shall include, but not be limited to:

- Site inspection checklists
- Pre-clearance surveys
- Environmental audit reports
- Corrective actions
- Training records
- Monitoring data
- Environmental Approval documentation and associated compliance reporting
- Complaints and associated records of communication
- Environmental procedures and plans
- Meeting minutes
- ▶ Regulator correspondence (formal and informal e.g. emails/verbal and diary notes etc).



7 Environmental Performance Requirements

7.1 Context

The EPRs define the minimum environmental outcomes that shall be achieved for design and construction of the Project. The EPRs are intended to provide a strong foundation for efficient environmental management that is informed by fit for purpose risk assessment and site-specific investigations. The EPRs are not intended to be prescriptive in how the outcome are to be achieved, but rather sets out an approach to Project delivery that is flexible and encourages innovation by the D&C Contractor to develop strategies and use best practice methodologies and technologies in order to implement and achieve the EPRs.

7.2 Rationale

The purpose of the EPRs is to minimise adverse impact and define the planning, environmental and heritage outcomes that shall be achieved for the design, construction and operation of the Project. The EPRs provide guidance for Project design and construction activities across a range of environmental risk areas. In some cases, the EPRs set obligations that are not covered by legislative requirements, policies or guidelines, or specifically addressed in contracts.

The D&C Contractor shall manage and minimise environmental risks at all stages of the Project, these risks shall be addressed through a formal risk assessment, undertaken by a suitably qualified and experienced person, and included in the D&C Contractors CEMP. Prior to the commencement of construction, a collaborative Environmental Risk Assessment Workshop (ERA) shall be undertaken with ARTC representatives to gain a shared understanding of the construction risks associated with the delivery of the Project and identify effective controls and included in the D&C Contractor's Project risk register.

The risk registers are to be updated periodically, following workshops, environmental events, lessons learned or any new information that may be identified or formally provided.

7.3 Development of the EPRs

The Project is required to undertake and maintain an environmental risk assessment (ERA) in accordance with ISO/AS/NZS 31000:2009 Risk Management – principles and guidelines. The objective of the ERA is to identify social, environmental, and business risks associated with the design and construction of the Project and to develop management and mitigation measures to reduce these risks. The ERA was utilised in the development of the EMF and EPRs.

The ERA shall be developed at the planning and design phase and maintained throughout the construction phase. The ERA is to be considered a 'live' document, adopting regular reviews and updating the register in response to changes to design, construction or operational activities, work methods, new technology, legislation and policy, or the occurrence of incidents or complaints.

All assessments and plans required under these EPRs shall be undertaken by a suitably qualified professional with adequate experience in the respective fields. Where appropriate, the management plans require by these EPRs may be included as part of the CEMP.

The outcomes of the ERA are fundamental for the achievement of the EPRs as follows:

- The ERA provides a systematic process for identifying the key environmental risks that may arise from the construction and operation of the Project and the EPRs that may apply to manage these risks
- A strong understanding of the environmental risks will also inform the approach, scope and monitoring of applicable management plans or actions that may be required by the EPRs
- By undertaking an ERA process during the planning and design of the Project there is the opportunity to avoid environmental impacts through 'design out' of environmental risks.



The EPRs have been developed in consultation with the relevant Councils, DELWP and DCCEEW (previously DAWE), to the satisfaction of the Minister for Planning in accordance with the Incorporated Document and the Minister's no-EES with conditions decision.

7.4 Statement of Environmental Commitments

ARTC Inland Rail is committed to continue to avoid and minimise impacts during Project design and to seek further opportunities to avoid and minimise impacts during the construction phases

The EPRs, as presented in Table 7, form a comprehensive set of environmental commitments, developed in consultation with relevant stakeholders and informed by specialist technical reports and recommendations. Together with the EMF, implementation of these EPRs will ensure that key environmental risks can be minimised and appropriately managed.

.



Table 7 Environmental Performance Requirements

EPR Code	Environmental Performance Requirement	Management Plan/Procedure	Phase	Responsibility
Environmen	tal Management Framework			
EMF1	Environmental Management System (EMS) The Contractor must prepare and implement an Environmental Management System (EMS). The EMS must be prepared in accordance with AS/NZS ISO 14001:2015 Environmental Management Systems - requirements with guidance for use. The EMS must include: • Environment Approvals and Obligations Register • Environment Management Documentation • Evaluating Environmental Performance – Monitoring and Measurement • Evaluating Environmental Performance – Audits and Inspections • Evaluating Environmental Performance – Independent Environmental Auditor (IEA) • Environmental Event Management, Notification, Incident Close-out and Lessons Learnt • Environmental Reporting.	EMS	Design Construction Operation	ARTC Contractor
EMF2	Construction Environmental Management Plan (CEMP) The Contractor must prepare and implement a Construction Environmental Management Plan (CEMP) to outline how the Project will avoid, minimise and mitigate environmental impacts. The CEMP must be prepared in consultation with local Council, DoT, DELWP, the Independent Environmental Auditor and to the satisfaction of ARTC. It must be in accordance with the Inland Rail Construction Environmental Management Plan Template any relevant conditions of approval, Environmental Risk Assessment, Environmental Management Framework the Project Scope Requirements (PSR) and having regard to Environmental Protection Authority Victoria (EPA Victoria) Publication 1834 Civil construction, building and demolition guide. Construction must not commence until the CEMP has been reviewed and accepted by ARTC. The CEMP must include (without limitation): • Roles and Responsibilities • Objectives • Detailed list of all required management plans, sub-plans and procedures, must include those identified in these EPRs, the Environmental Risk Assessment and conditions of approval • Identifying, managing and monitoring all environmental risks and issues during construction • A monitoring plan must be prepared for each sub plan to evaluate the effectiveness of controls put in place. • Site Environmental Plans (SEP) to be produced for each work area showing No Go Zones, Priority Avoidance Zones (PAZ) and all environmental sensitivities within and directly adjacent to the Project work area • Environmental reporting requirements including incident reporting • Site inductions, training, competency and awareness • Procedure(s) for undertaking the various types of environmental monitoring and auditing required during construction including specific location(s), method, timing, frequency, duration, parameter/s to be monitored, and objective/ criteria to be measured against • The competency, qualifications and accreditations required • Environmental emergency response procedures including stop	CEMP	Design Construction	Contractor
EMF3	Environmental Risk Assessment The Contractor, in collaboration with ARTC, must undertake and maintain a current Environmental Risk Assessment (ERA) which will be updated in response to changes to design or construction activities. The ERA must be undertaken in accordance with AS/NZS ISO 31000:2009 Risk management - Principles and guidelines and the EPA Victoria Publication 1695.1: Assessing and controlling risk: A guide for business.	ERA	Design Construction	ARTC Contractor



EPR Code	Environmental Performance Requirement	Management Plan/ Procedure	Phase	Responsibility
EMF4	No Go Zones (NGZs) The Contractor must define No Go Zones (NGZs) in the CEMP where Project construction activities and works are not permitted. The NGZs must be established prior to commencement of relevant construction activities or works to protect retained areas of native vegetation, areas of significant ecological or heritage values, and where appropriate ensure construction activities and works avoid areas of contaminated soil. The NGZs must identify all threatened species and threatened ecological communities close to works to prevent unintentional impacts and be provided with suitable buffers, as informed by a qualified ecologist. The NGZ must be established utilising fencing that is; clearly visible, wildlife friendly and provides appropriate protection and signage identifying the area as a 'No Go Zone'. The location and the NGZs will be based on the final Project design and will be detailed in the FFMP prepared in consultation with, and to the satisfaction of DELWP. NGZs will be clearly marked on all maps and construction drawings prior to works commencing in proximity to the NGZ NGZs will be maintained until the completion of works that may impact (including indirectly or accidentally) on the significant ecological or heritage values protected by the NGZ.	FFMP TrMP (CEMP)	Design Construction	Contractor
EMF5	Priority Avoidance Zones (PAZs) The Contractor, in consultation with ARTC and the Department of Environment, Land, Water and Planning (DELWP), must define Priority Avoidance Zones (PAZs) which identify areas of significant ecological value to be avoided during detailed design. Specifically, PAZs must avoid and minimise loss of the following (variously defined under the FFG Act, EPBC Act, Guidelines for the removal, destruction or lopping of native vegetation and P&E Act): • Threatened Ecological Communities • Large Trees (Scattered Trees and Large Trees in Patches) • Patches of native vegetation that contain Large Trees in Patches • Sensitive wetlands including Mapped Wetlands • Patches of native vegetation with a Vegetation Quality Assessment score of ≥ 0.60 • Patches of native vegetation with a Vegetation Quality Assessment score of ≥ 0.80 • Patches of native vegetation that have a Strategic Biodiversity Value of ≥ 0.80 • Vegetation protected under an environmental overlay • Hollow-bearing trees including large trees (large Scattered Trees and Large Trees in Patches) which are assumed to contain hollows. • Habitat for rare or threatened species • Habitat linkages providing connectivity for threatened and protected fauna. Habitat mapping for threatened species and ecological communities must be used to inform PAZs and where not currently available (i.e. the Brown Toadlet) field surveys be undertaken to inform detailed design. Priority avoidance zones must be informed by a hierarchy of significant and important ecological values, to be developed in consultation with DELWP and DCCEEW; and	EMF (Environment Approvals and Obligations Register)	Design	Contractor
EMF6	 Training The Contractor must prepare and deliver an environmental and cultural awareness induction for contractors and all persons entering a Project construction site The Contractor must maintain a register signed by those inducted The Contractor must carry out regular Toolbox Talks covering identified medium and high environmental risks The Contractor must prepare and deliver environmental management task or activity-specific training to all relevant personnel The Contractor must maintain a register signed by those trained The Contractor must maintain a register that lists the competency, qualifications or accreditations of all personnel that hold environmental management roles and responsibilities. 	Induction Register CEMP	Construction	Contractor



EPR Code	Environmental Performance Requirement	Management Plan/ Procedure	Phase	Responsibility
EMF7	Independent Environmental Auditor (IEA) The Contractor must engage a suitably qualified and experienced IEA with expertise appropriate to allow them to fulfil their roles as specified in the EMF. The IEA will conduct six-monthly audits and prepare six-monthly summary audit reports to be provided to ARTC and the Contractor. Audits must occur during construction and for five years after construction (responsibility will be handed over to ARTC following construction phase) of the Inland Rail Beveridge to Albury Project, or as otherwise agreed with the Minister of Planning. A six-monthly summary report must be provided to the Minister for Planning that summarises the findings of the audits carried out during the reporting period. The summary reports must be made publicly available on a Project website for the period of construction and a minimum of five years after construction is complete.	CEMP	Construction Operation	Contractor (Construction) ARTC (Operation)
EMF8	Operational Handover ARTC will be responsible for the ongoing auditing and monitoring of environmental compliance performance for 5 years following construction. Prior to demobilisation, the Contractor will provide all relevant Project documentation in accordance with ARTC handover documentation and in a format that supports ARTCs integration into SAI360 to allow effective compliance management.	EMS (SAI360)	Pre-Demobilisation Operation	Contractor (Pre-Demob) ARTC (Operation)
Aboriginal (Cultural Heritage			
AC1	Cultural Heritage Management Plan (CHMP) Implement and comply with CHMPs 17752, 17402, 17401 and 17862 approved under the Aboriginal Heritage Act 2006.	СНМР	Construction	Contractor
Air Quality				
AQ1	Air Quality Management Plan (AQMP) The Contractor, in consultation with the EPA Victoria and local Council, must prepare and implement an Air Quality Management Plan (AQMP) to outline measures to avoid, minimise and mitigate potential impacts to air quality, in particular, managing dust generation from construction vehicle movements on roads. The AQMP must be prepared in accordance with EPA Victoria Publication 1834 Civil construction, building and demolition guide and EPA Publication 1961 Guideline for assessing and minimising air pollution in Victoria.	AQMP (CEMP)	Construction	Contractor
Arboricultu	re			
AR1	Tree Management Plan (TrMP) The Contractor, in consultation with ARTC, a qualified arborist and local Council, must prepare and implement a Tree Management Plan (TrMP) to outline measures that will be undertaken to prevent unauthorised impacts to trees. The TrMP must be in accordance with any relevant conditions of approval and must include (without limitation): • Roles and responsibilities • Maintain a Tree Register identifying which trees are to be retained or removed having regard to condition, arboricultural value, biodiversity value, heritage value, amenity value and landscape character of the place • Measures to confirm the condition, arboricultural value and biodiversity value of the trees to be removed • A requirement to consult an arborist to determine appropriate protection and/or management measures for potentially impacted trees • Pre- and post-construction inspections of retained Scattered Trees or trees not within a NGZ to ensure there have been no unauthorised impacts • Measures for the establishment of Tree Protection Zones (TPZs) (for Large Trees in Patches and Scattered Trees) and NGZs with protective fencing and signage • Measures to clearly mark TPZs and NGZs (including the 1m buffer) and the works area limit on all maps and construction drawings prior to commencement of relevant Project construction activities • Details of reporting requirements.	TrMP (CEMP)	Construction	Contractor
AR2	Tree Protection Zones (TPZs) The Contractor, in consultation with a suitably qualified and experienced arborist, must establish Tree Protection Zones (TPZs) for trees to be retained that are not within the NGZ. TPZs must be defined as per AS 4970-2009 Protection of trees on development sites. Where possible, the Contractor must fence an additional 1 metre buffer to all TPZs.	TrMP (CEMP)	Pre-construction Construction	Contractor



EPR Code	Environmental Performance Requirement	Management Plan/ Procedure	Phase	Responsibility
Biosecurity				
BI1	Biosecurity Management Plan (BMP) The Contractor, in consultation with DELWP, DoT and local council, must prepare and implement a Biosecurity Management Plan (BMP) to describe how the Project will manage and control impacts on indigenous fauna and flora values from biosecurity threats (weeds, pathogens, and pest animals) during construction. The BMP must be prepared in accordance with Inland Rail Program Biosecurity Strategy (0-0000-900-EEC-00-ST-1000) and any relevant conditions of approval. The BMP must include (without limitation): • Roles and responsibilities • Site hygiene and waste management procedures to deter pest animals and prevent the introduction and spread of weeds and pathogens including vehicle inspections and establishment of wash down facilities • Vehicle, machinery, and imported fill hygiene protocols and documentation • Assess suitability of cleared vegetation for mulching/erosion protection on a site-by-site basis • Treat high risk weeds from construction areas prior to Project construction activities or works commencing • Weed surveillance and treatment (taking into account weed seed dormancy) before and during construction (including laydowns and site compound areas) including measures to manage any outbreak of noxious weeds or weeds of National Environmental Significance that occurs within construction areas as a result of construction activity • Weed surveillance and treatment post-construction (includes laydowns and site compound areas) – monitoring of weeds should occur for a period of time until no further weed threat is evident • Rehabilitation activities • Direction on pesticide and herbicide use, limitations on use and documentation • Erosion and sediment control risk associated with broadscale weed removal or treatment Induction of all contract staff details the requirements for vehicles and equipment to be free of mud and plant material • Hygiene protocols to prevent the spread of chytrid fungus and phytophthera	ВМР	Prior to construction (prepare) During construction (implement)	Contractor
BI2	Cleared vegetation The Contractor must reuse cleared vegetation as mulch and/or habitat enhancement features only when measures have been implemented to ensure the spread or introduction of weeds and pathogens is avoided (e.g., do not use mulch from ground-layer vegetation in weed infested areas or reuse vegetation which has been identified as infected with phytophthora). Vegetation used for habitat may only be from native logs, as per the DELWP Vegetation Quality Assessment Manual. Logs are not to exceed the EVC benchmark for logs within each site and are to ensure access for emergency services is still provided. Mulch should not be spread across any existing remnant vegetation.	ВМР	Construction	Contractor
BI3	Clean fill The Contractor must use imported fill only when it is certified weed, seed, pathogen and contaminant free. Imported fill must be classified in accordance with the EPA Publication 1968.1: Guide to classifying industrial waste. Documentation of certified clean fill is to be included as part of the auditing process and available to the Councils, upon request, up to four (4) years after the works. This allows tracking of the germination of new and emerging weeds in the district.	ВМР	Construction	Contractor



EPR	Environmental Performance Requirement	Management	Phase	Responsibility
Code Community	and Stakeholder	Plan/ Procedure		
CS1	Community and Stakeholder Management Plan (CSMP) The Contractor must prepare and implement a Community and Stakeholder Management Plan (CSMP), in consultation with ARTC and local Council, that includes the following (without limitation): • Addresses all Project activities that potentially impact on community and business operations and provide for a well-coordinated communication and engagement process • Sets out processes and measures to provide advance notice to key stakeholders and other potentially affected stakeholders of construction activities (including any staged works, early works, main works, or out of hours works), significant milestones, changed traffic conditions, interruptions to utility services, changed access and parking conditions, periods of predicted high noise and vibration activities, any potential impacts to environmental values and including contact details for enquiries/complaints • Provides for any interested stakeholder to register their contact details to the Project webpage to ensure they are automatically advised of planned construction activities, Project progress, mitigation measures and intended reinstatement measures where applicable • Respite and Relocation Management Plan (where required) to manage those residents and businesses directly impacted by noise and vibration (day and night works).	CSMP	Design Construction	Contractor
CS2	Minimise Disturbance to Residences – Direct acquisition and temporary occupation The Contractor must design the Project to reduce as far as practicable the disruption to residences from direct acquisition or temporary occupation of residential land.	CSMP	Design	Contractor
CS3	Complaints Management Process The Contractor must prepare and implement a complaints management process. The complaints management process must be prepared in accordance with AS/NZS 10002:2014 Guidelines for Complaint Management in Organisations, Inland Rail Specification – Complaints Management Requirements (0-0000-900-PCS-00-SP-0001) and Inland Rail Complaints Management Handling Procedure (0-0000-900-PCS-00-PR-0002). Any complaints relevant to these EPRs will be referred to the Independent Environmental Auditor.	Complaints Management System CSMP	Design Construction	Contractor
CS4	Property Acquisition - Support to Residents Where acquisition or temporary occupation of residential land is unavoidable, ARTC must provide appropriate support to residents to manage the transition and ensure early purchase of properties where it is supported by the landowner.	CSMP	Design Construction	ARTC
CS5	Notification and Community Engagement - Noise and Vibration Local residents, local Council and relevant stakeholders in the vicinity of the construction works identified in the Construction Noise and Vibration Management Plan (CNVMP) are to be provided with sufficient information to enable them to understand the likely nature, extent and duration of noise and vibration impacts during construction. During construction, Council, local residents and relevant stakeholders must be notified of construction progress and upcoming activities, particularly when noisy or vibration generating activities are scheduled. Where sensitive receivers have been predicted to exceed the construction management levels and potentially experience noise or vibration impacts, the sensitive receivers must be notified prior to the commencement of relevant works.	CNVMP	Construction	Contractor



EPR Code	Environmental Performance Requirement	Management Plan/ Procedure	Phase	Responsibility	
Contamina	Contaminated Land and Spoil				
CL1	Contaminated Land and Spoil Management Plan (CLSMP) The Contractor must prepare and implement a Contaminated Land and Spoil Management Plan (CLSMP) to outline measures to ensure appropriate management of contaminated soil to prevent potential impacts to the environment. The CLSMP must be prepared, in consultation with ARTC, the EPA Victoria, DoT, local Council, any relevant public land managers and, in respect of transport of spoil, the relevant road authorities. The CLSMP must include (without limitation): • Roles and responsibilities • Methods and procedures to manage temporary and permanent spoil stockpiles and comply with applicable regulatory requirements • Results of detailed site assessments identifying location, types and extent of any contamination, prescribed industrial waste (PIW) and other waste • Utilise results of the site assessments to identify the nature and extent of spoil (clean fill and contaminated spoil) • Identify the capacity for contaminated spoil material to be treated and/or disposed • Storage, handling, transport and disposal of spoil in a manner that protects human health and the environment and is compliant with all regulations This includes requirements and methods for the appropriate treatment/remediation of any contaminated excavated spoil and contaminated residual material • Design and management of temporary stockpile areas • Reporting requirements.	CLSMP	Design Construction	Contractor	
CL2	Wangaratta Station Precinct The Contractor, in consultation with ARTC, the EPA Victoria, any relevant public land managers and, in respect of transport of spoil, the relevant road authorities, must prepare and implement a strategy for reuse of spoil generated during Project construction activities to fill the dive structure	CLSMP	Design Construction	Contractor	
Flora and F	auna				
FF1	Flora and Fauna Management Plan (FFMP) The Contractor must prepare and implement a Flora and Fauna Management Plan (FFMP) to protect flora and fauna from unauthorised impacts. The FFMP must be prepared in consultation with DELWP, DoT, and local Council and to the satisfaction of DELWP. The FFMP must include (without limitation): • Roles and responsibilities • Define objectives • Development of a register and establishment of No Go Zones (NGZ), Tree Protections Zones (TPZ) and Priority Avoidance Zones (PAZ) • Identification of which threatened species habitat and threatened ecological communities are to be retained or removed and their extents • Measures to minimise injury, death, or disturbance to wildlife during Project construction activities including vegetation clearance, excavation, and trenching • Measures to manage any open pits and trenches to reduce potential fauna entrapment • Where practicable, assess suitability of cleared vegetation for reuse such as mulch and/or habitat enhancement features (e.g. ground habitat value of fallen logs) on a site-by-site basis • Installation of temporary fencing • Where large hollow bearing trees are to be removed, supplementary nesting sites/hollows will be placed at tree height and must be installed in adjacent areas prior to the removal of these trees, to provide immediate habitat for displaced fauna. The number and type of artificial hollows must be commensurate with the number and type to be removed as determined by a qualified zoolgist based on available scientific knowledge. The agreed location and specification of artificial hollows are to be in place three (3) months prior to the removal of hollow bearing trees • Pre Clearance surveys must be undertaken to identify and manage fauna in hollows • Consideration of temporary hollow blocking or salvage, and relocation must be undertaken in consultation with an appropriately qualified arborist in collaboration with an on-site qualified and experienced zoologist/wildlife handler • Where habital gaps gre	FFMP (CEMP)	Design Construction	Contractor	



EPR Code	Environmental Performance Requirement	Management Plan/ Procedure	Phase	Responsibility
	 Species-specific mitigation measures to reduce likelihood of impacts on threatened species Maintenance and monitoring requirements Requirements for submission of data to the Victorian Biodiversity Atlas/ DELWP Development and maintenance of a Vegetation Clearing Register which will include (without limitation) date of clearing, location, quantity, area, EVC (where relevant), species and note any reuse of vegetation Development and maintenance of a Fauna Interaction Register which will include (without limitation) date, location, species, description of interaction, status and actions taken Regular inspection and maintenance of fencing for the TPZs, NGZ and fauna fencing Inductions of all contractors to identify significant ecological issues and inform them of all relevant protective measures and obligations while undertaking construction activities. Maps identifying NGZs will be provided as part of this induction Specific measures to manage erosion, sedimentation, hazardous chemicals, and dust impacts on retained vegetation, and habitat and aquatic environments (Note: this measure is to be included in other sub-plans as is relevant) Consultation with relevant local conservation groups as appropriate (i.e. the Regent Honey Eater Project team) Reporting requirements. 			
FF2	EPBC Listed – Powerline Project Area 1047 and Modelled Habitat The Contractor must avoid impacts to Euroa Guinea-flower (EGF) (Hibbertia humifusa subspecies erigens) identified at 'Powerline Investigation Area 1047' and cumulatively reduce impacts to the EGF modelled habitat data (across B2A) to less than 0.005% of modelled habitat.	FFMP (CEMP)	Design Construction	Contractor
FF3	Temporary occupation The Contractor must prioritise location of laydown areas, stockpiles, fuel storage, site compounds, etc. in areas that have already been cleared or disturbed and avoid TPZ encroachment.	FFMP (CEMP)	Design	Contractor
FF4	Earthworks – Powerlines Project Area The Contractor must avoid large-scale excavation at the margins of overhead powerline Project construction activities where trees occur within 15 metres of the Project Area to prevent impacts to tree root systems outside the Project Area.	FFMP (CEMP)	Design Construction	Contractor
FF5	Existing Tracks The Contractor must restrict movement of vehicles to existing or new access tracks that have been designed and maintained for the movement of heavy machinery.	FFMP (CEMP)	Construction	Contractor
FF6	Tree Removal The Contractor must, to the extent reasonably practicable time tree removal to avoid the breeding season of nesting birds and mammals or times when arboreal mammals are less active and more likely to be inhabiting hollows (winter and spring), in accordance with the FFMP.	FFMP (CEMP)	Planning Construction	Contractor
FF7	Lighting The Contractor must apply Best Practice Lighting Design as stipulated in the National Light Pollution Guidelines for Wildlife (2020) to avoid/minimise light spill into adjacent habitat at all work sites, with particular care taken at Tallarook due to the ecological sensitivity of the site.	FFMP (CEMP)	Construction	Contractor
FF8	Night-time works The Contractor should minimise night-time Project construction activities to reduce impacts of noise and light on nocturnal animals, where practical to do so.	FFMP (CEMP)	Construction	Contractor
FF9	Wildlife Handler and Pre-clearance Surveys The Contractor must engage a suitably qualified and experienced zoologist/wildlife handler ('wildlife spotter'), holding a relevant and current authorisation under the Wildlife Act 1975, to complete pre-clearance surveys and to be present on-site during clearing of identified habitat (particularly large/hollow-	FFMP (CEMP)	Construction	Contractor



EPR Code	Environmental Performance Requirement	Management Plan/Procedure	Phase	Responsibility
	bearing trees) to salvage and relocate fauna as necessary across all Project work sites.			
FF10	EPBC Listed – Striped Legless Lizard (<i>Delma impar</i>) The Contractor must engage a suitably qualified and experienced ecologist who can identify Striped Legless Lizards and other fossorial herpetofauna to undertake a targeted survey during the active period of the species (between August and May) before Project construction activities commence at those sites listed within the Inland Rail - Beveridge to Albury Environment Report . Survey tiles must be laid by August (can be before) to allow time for them to bed down into the soil before the active period of the species. The survey must be undertaken in accordance with the Commonwealth of Australia Survey guidelines for Australia's threatened species: Guidelines for detecting reptiles lists as threatened under the <i>EPBC Act</i> . Where Striped Legless Lizard are identified, works that may impact this species must cease, and a salvage and translocation/relocation plan for the species must be developed, to be approved by DELWP. This will include the requirement for an appropriately qualified and experienced ecologist is to be present during any trenching/earthwork activities to conduct salvage and relocation of animals.	FFMP (CEMP)	Construction	Contractor
FF11	EPBC Listed – Powerline Investigation Areas 1001 and 1002, and Track Slew Wallan The Contractor must engage a suitably qualified and experienced zoologist who can identify Growling Grass Frog (<i>Litoria raniformis</i>) to undertake preclearance surveys of relevant identified habitats within four days prior to works commencing and to be present during the removal of vegetation at Powerline Investigation Areas 1001 and 1002, and Track Slew Wallan. Where Growling Grass Frog (<i>Litoria raniformis</i>) are identified, works that may impact this species must cease and a salvage and translocation/relocation plan for the species must be developed, to be approved by DELWP. This will include the requirement for an appropriately qualified and experienced ecologist is to be present during any trenching/earthwork activities to conduct salvage and relocation of animals.	FFMP (CEMP)	Construction	Contractor
	Where newly identified habitat is identified, appropriate design responses must be incorporated (i.e. appropriate site management, culvert design) to minimise impacts. All works must be in accordance with the requirements of the <i>Wildlife Act 1975</i> and the Report for the Australian Government Department of Sustainability, Environment, Water, Population and Communities - Hygiene protocols for the control of diseases in Australian frogs June 2011.			
FF12	EPBC Listed – Powerline Investigation Area 1110 The Contractor must engage a suitably qualified and experienced zoologist who can identify Sloane's Froglet (<i>Crinia sloanei</i>) to undertake pre-clearance surveys of relevant identified habitats within four days prior to works commencing and to be present during removal of vegetation at Powerline Investigation Area 1110. Where Sloane's Froglet (<i>Crinia sloanei</i>) are identified, works that may impact this species must cease and a salvage and translocation/relocation plan for the species must be developed, to be approved by DELWP. This will include the requirement for an appropriately qualified and experienced ecologist is to be present during any trenching/earthwork activities to conduct salvage and relocation of animals.	FFMP (CEMP)	Construction	Contractor
FF13	Design Opportunities – Avoiding Native Vegetation Impacts ARTC and the Contractor must consider design opportunities for enhancement sites and overhead powerline sites to ensure clearing of native vegetation is kept to the minimum extent practical. Design considerations must incorporate and respond to the Priority Avoidance Zones (PAZs) and should avoid, wherever possible, the removal of native vegetation and impacts on habitat connectivity – this includes removal of any vegetation within an Environmental Significance Overlay and Vegetation Protection Overlay. Where the removal of native vegetation is unavoidable, ARTC must meet the assessment and offset requirements of the EPBC Act, Environmental Offsets Policy and the Victorian Guidelines for the removal, destruction or lopping of native vegetation prior to the commencement of main works. Replanting native vegetation shall be prioritised in areas within an Environmental Significance Overlay and Vegetation Protection Overlay.	FFMP (CEMP)	Design	ARTC Contractor



EPR		Management		KAIL	
Code	Environmental Performance Requirement	Plan/ Procedure	Phase	Responsibility	
FF14	Planning Permit Application(s) – Removal of Native Vegetation Any application for a planning permit for the removal of native vegetation must be accompanied by the EMF and a native vegetation removal schedule (the Schedule) documenting the proposed clearing by Ecological Vegetation Class and local government area, the subject of the planning permit application and native vegetation removal in totality. The Schedule shall list the proposed and previously approved clearing across the overall Project extent, in comparison to the total clearing documented in 'Environment Report Second Addendum: Inland Rail B2A native vegetation update' dated 19 July 2022 (Appendix 3 of the EMF) and the total area for which offsets have been secured. Prior to submitting an application for a planning permit to remove native vegetation a copy of the Schedule and EMF shall be provided to DELWP and the Schedule shall be made publicly available on the Project's website.	Planning Permit Applications	Design Construction	Contractor	
Groundwa	ter				
GW1	Groundwater Management Procedures (GMPs) The Contractor must prepare and implement site-specific Groundwater Management Procedures (GMPs) as part of the CEMP. The GMPs must include but are not limited to: Roles and responsibilities Define objectives Measures to minimise disturbance and Project construction activities outside of existing rail corridor Measures to enable progressive rehabilitation of areas of disturbance Baseline monitoring of groundwater levels at track lowering sites to confirm expected seasonal fluctuation Measures to assess, remove and dispose of contaminated groundwater (if present) and impacted soils associated with excavation and construction Measures to maintain water supply to any identified impacted groundwater users. Where relevant, the Contractor must develop and implement a pre-construction, and construction groundwater monitoring program to: Establish baseline water level and quality conditions throughout the study area, including the delineation (to the extent practicable) of those portions of existing contaminant plume(s) that may be impacted by the project Calibrate the predictive model prior to commencement of construction, manage construction activities, and verify the model predictions Assess the adequacy of proposed design and construction methods, and where required, identify and implement any additional measures required to mitigate impacts from changes in groundwater levels, flow and quality. Where relevant, the Contractor must engage a suitably qualified and experienced hydrogeologist to develop a post-construction groundwater monitoring program to: Implement pre and post-construction groundwater monitoring indicate the potential for regional groundwater to intersect underpass sites due to seasonal fluctuation. If the results of the pre-construction monitoring indicate the potential for regional groundwater to be intersected, the Contractor must engage a suitably qualified and experienced hydrogeologist to develop and implement dewatering management and monit	GMP (CEMP)	Design Construction Operation	Contractor	



EPR Code	Environmental Performance Requirement	Management Plan/Procedure	Phase	Responsibility
GW2	Groundwater Monitoring – Broadford, Seymour, Wangaratta and Barnawartha North The Contractor must engage a suitably qualified and experienced hydrogeologist to develop and implement pre-construction groundwater monitoring at Broadford, Seymour, Wangaratta and Barnawartha North to assess the potential for regional groundwater to intersect track lowering sites due to seasonal fluctuation. If the results of the pre-construction monitoring indicate the potential for regional groundwater to be intersected, the Contractor must engage a suitably qualified and experienced hydrogeologist to develop and implement dewatering management and monitoring.	GMP (CEMP)	Design Pre-construction	Contractor
GW3	Groundwater Monitoring – Benalla and Euroa The Contractor must engage a suitably qualified and experienced hydrogeologist to develop and implement pre-construction groundwater monitoring at Benalla and Euroa to assess the potential for regional groundwater to intersect underpass sites due to seasonal fluctuation. If the results of the pre-construction monitoring indicate the potential for regional groundwater to be intersected, the Contractor must engage a suitably qualified and experienced hydrogeologist to develop and implement dewatering management and monitoring	GMP (CEMP)	Construction	Contractor
Historic He	ritage			
HH1	Archaeological Management Plans (ArchMP) The Contractor must develop, in consultation with ARTC, and Heritage Victoria, archaeological management plans to manage disturbance of archaeological sites and values affected by the Project.	ArchMP	Design Construction	Contractor
HH2	Heritage Permits Comply with Heritage Permit requirements for works within the extent of the Victorian Heritage Register (VHR) places, Glenrowan Heritage Precinct (H2000) (National Heritage List and so consideration under the <i>EPBC Act</i> is required) and the Wangaratta Railway Station Complex (H1597).	CEMP	Construction	Contractor
НН3	Heritage Consents and Heritage Overlay Comply with consents and requirements relating to known places within the Victorian Heritage Inventory (VHI), and to places of local heritage value included in the Heritage Overlay.	CEMP	Construction	Contractor
HH4	Unidentified Finds Procedure The CEMP must include an archaeological discovery protocol that specifies measures to avoid and minimise impacts on any previously unidentified historical archaeological sites and values discovered during construction. The management protocol must be consistent with the requirements of the Heritage Act 2017 and include procedures for ceasing work if human remains or archaeological artefacts are discovered, notifying Heritage Victoria of the find, obtaining consent to deal with the find, and dealing with the find in accordance with the consent.	CEMP	Construction	Contractor
HH5	Training Prior to commencing works, all personnel must complete a historic heritage awareness induction covering places included in the VHR (which will include Glenrowan Heritage Precinct and Wangaratta Railway Station Complex), VHI and potential of unexpected finds.	CEMP	Construction	Contractor
HH6	Landscaping and Reestablishment of Trees Landscaping works associated with VHR places must consider and respond to cultural heritage values including re-establishment of trees to replace loss of canopy cover and impacts on the setting of heritage places.	LMP	Construction	Contractor



EPR Code	Environmental Performance Requirement	Management Plan/Procedure	Phase	Responsibility
HH7	Minimise Impacts Design permanent and temporary works to avoid or minimise impacts on the cultural heritage values of heritage places. Consult, as required, with Heritage Victoria and/or the relevant local council (as applicable).	ArchMP CEMP	Construction	Contractor
НН8	New Development Ensure new development is responsive to heritage places in terms of height, massing, form, façade articulation, materials and impacts on their setting and key views. In particular, the design of the replacement bridge proposed within the Glenrowan Heritage Precinct to be streamlined as much as possible to minimise the visual and physical harm to the cultural heritage significance of the Nationally recognised place.	ArchMP CEMP	Construction	Contractor
НН9	Heritage Interpretation Strategy The Contractor, in consultation with Heritage Victoria, the relevant local council and/or First Peoples: State Relations (as applicable), must develop and implement, a heritage interpretation strategy for places in the VHR and VHI which explores historical and Aboriginal cultural heritage themes.	ArchMP CEMP	Construction	Contractor
Landscape	and Visual			
LV1	Urban Design The Contractor must demonstrate compliance with the Inland Rail – Beveridge to Albury Urban Design Framework (UDF) and Urban Design Guidelines (UDG).	UDF UDG	Design	Contractor
LV2	Landscape Management Plan (LMP) The Contractor must prepare and implement a Landscape Management Plan (LMP), in consultation with local Council and DoT to minimise adverse impacts to landscape values and visual impacts. The landscaping plan will apply to all areas that have been temporarily impacted and or disturbed by the Project. The LMP must include (without limitation): • Roles and responsibilities • Objectives • How the public open space, recreation reserves and other valued places impacted by the temporary Project construction activities will be reinstated and/or rehabilitated and how those areas that have been impacted permanently will be enhanced • Specific timeframes for re-establishment of public open space, recreation reserves, and other valued places • Compliance with the Urban Design Framework, Urban Design Guidelines and VicRoads Tree Policy (2013). • Opportunities for renewal of public spaces for the benefit of communities beyond resident groups, including visitors, business owners and commuters.	LMP (RRMP)	Design Construction	Contractor
LV3	Temporary Occupation The Contractor must re-establish and enhance public open space, recreation reserves and other valued places disturbed by temporary Project construction activities in accordance with Inland Rail Landscape and Rehabilitation Strategy (0-0000-900-ELE-00-ST-0001).	LMP	Construction Post- construction	Contractor



EPR Code	Environmental Performance Requirement	Management Plan/ Procedure	Phase	Responsibility
Noise and \	/ibration			
NV1	Construction Noise and Vibration Management Plan (CNVMP) The Contractor, in consultation with ARTC and local Council, must prepare and implement a Construction Noise and Vibration Management Plan (CNVMP) to outline measures to avoid, minimise and mitigate impacts from noise and vibration. The CNVMP must be prepared in accordance with EPA Victoria Publication 1834 Civil construction, building and demolition guide (Chapter 4) and EPA Publication 1820 Construction - guide to preventing harm to people and the environment (Section 9). The CNVMP must include (without limitation): * Roles and responsibilities. * Roles and responsibilities. * Identification of sensitive receivers such as: * Identification of sensitive receivers such as: * Habitat for native fauna likely to be impacted by the Project. * Buildings used for shop, gallery, commercial, office or industrial purposes. * Buildings and school grounds. * Residential buildings. * Information about background noise levels representative of sensitive receivers. * Noise and vibration monitoring requirements. * Establish construction traffic noise requirements. * Requirements for pre-construction dilapidation surveys, building condition surveys and and/or vibration monitoring at vibration sensitive receivers during construction noise and vibration targets, including any details of conversions between alternative metrics. * Details of construction activities and an indicative schedule for Project works, including the identification of key noise and/or vibration generating activities that have the potential to generate airborne noise and/or surface vibration impacts on surrounding sensitive receivers. * Specific management measures and sub-plans to be implemented during construction, response to monitoring against targets and following complaints. * Measures to ensure effective monitoring of noise and vibration associated with construction with consideration to the construction noise and vibration targets.	CNVMP	Design Construction	Contractor
NV2	Dilapidation Survey Where the ERA identifies a Medium or High risk to heritage structures listed on the Victorian Heritage Register (VHR), Victorian Heritage Inventory (VHI) and/or within Heritage Overlays due to construction vibration, the Contractor must undertake a pre-construction Dilapidation Survey of those heritage structures. The Dilapidation Survey must set out vibration thresholds and management actions to be implemented to ensure the structural integrity of those heritage structures.	CNVMP	Construction	Contractor
NV3	Building Condition Surveys Where the ERA identifies a Medium or High risk to sensitive receivers due to construction vibration, the Contractor must undertake a pre-construction building condition survey of those receivers. The building condition survey must set out vibration thresholds and management actions to be implemented to ensure the structural integrity of those receivers.	CNVMP	Construction	Contractor



EPR Code	Environmental Performance Requirement	Management Plan/ Procedure	Phase	Responsibility
NV4	Noise Monitoring For construction scenarios which have been predicted to exceed the moderately intrusive noise management levels, noise monitoring shall be undertaken at a sample of these noise affected sensitive receivers to calibrate modelling predictions and verify on site noise levels.	CNVMP	Construction	Contractor
	Noise monitoring shall be carried out in response to valid noise complaints.			
	Construction Staging			
NV5	The Contractor must review construction staging methodology to identify opportunities to schedule noisy Project construction activities during the day and/or opportunities where simultaneous operation of noisy equipment can be separated out to operate individually.	CNVMP	Construction	Contractor
	Plant and Equipment Selection			
NV6	The Contractor must select plant and equipment that operates in accordance with the EPA Victoria's Environment Reference Standard (EP Act 2017) for ambient sound for Project construction activities in Broadford, Euroa, Benalla, Glenrowan and Wangaratta.	CNVMP	Construction	Contractor
	Plant and Equipment			
NV7	The Contractor must ensure that plant and equipment used intermittently or no longer in use is shut down and not left idling.	CNVMP	Construction	Contractor
NV8	Plant and Equipment - Modifications	CNVMP	Construction	Contractor
INVO	Contractor must modify plant and equipment near sensitive receivers to reduce noise impacts.			
NV9	Out of Hours Work (OOHW) Noise from construction works during weekend/evening work hours and the night period must be considered "unavoidable works" (refer to EPA Publication 1834) unless approved by ARTC. All reasonable measures must be implemented to mitigate the impacts of such unavoidable works. A clear framework for managing unavoidable work must be developed and include noise level thresholds and details of mitigation measures. This must include nominating an independent person(s) with skills in risk/safety assessment who can approve 'unavoidable works' (works that cannot practicably meet the schedule requirements because the work involves continuous work or would otherwise pose an unacceptable risk to life or property, or risk a major traffic hazard). They must have no prior involvement in either the planning or delivery of the Project and can make decisions free from any influence or pressure related to the delivery of the Project. The framework must be approved by the ARTC.	CNVMP	Construction	Contractor
NV10	 Construction Traffic Where reasonable and practicable: Unsealed haul roads shall be regularly graded. Sealed access roads and hardstand areas shall have potholes filled in a timely fashion Night-time construction traffic shall be redirected away from noise sensitive receivers, in accordance with the Construction Traffic Management Plan. Appropriate construction traffic speed limits shall be established and enforced near noise sensitive receivers.	CNVMP	Construction	Contractor
Reinstatem	ent and Rehabilitation			
	Reinstatement and Rehabilitation Plan (RRP) The Contractor must prepare and implement a RRP to reinstate vegetation over disturbed areas as soon as practicable. The RRP must be prepared in consultation with DELWP, DoT, ARTC and local Council and must include (without limitation): • Roles and responsibilities			
RR1	 Objectives Measures to progressively rehabilitate, regenerate, and/or revegetate areas Measures to replace and enhance habitat for wildlife Identification of flora species and plant and/or seed stock sources – using local suppliers where practicable 	RRPs (LMP)	All phases	Contractor



	TRONWENTAL MANAGEMENT FRAMEWORK				
EPR Code	Environmental Performance Requirement	Management Plan/ Procedure	Phase	Responsibility	
	 Procedures, timeframes, measurable performance objectives, and responsibilities for monitoring the success of rehabilitation and/or reinstatement/stabilisation areas Monitoring and corrective actions if the outcomes of rehabilitation and/or reinstatement/stabilisation do not achieve the objectives adopted Audits. Native plant survival targets with reference to relevant EVC benchmarks for density and diversity, for both understory and overstory plant species. Target revegetation in areas where vegetation was removed at a scale commensurate with removal. 				
RR2	Reinstatement and Rehabilitation Plan (RRP) The Contractor must progressively reinstate and rehabilitate the Project Area in accordance with the RRP as Project construction activities are completed.	RRP	During and post- construction	Contractor	
Social					
SO1	Social Delivery Plan (SDP) The Contractor must, in accordance with all relevant conditions of approval, and in consultation with ARTC and local Council, develop and implement a Social Delivery Plan (SDP) to manage social impacts associated with the Project. The SDP must include (without limitation) action plans addressing the following topics: • Workforce Management • Housing and Accommodation • Local Business and Industry Procurement • Health and Community Wellbeing • Community and Stakeholder Engagement. • Enhancing and exploring social, economic and environmental benefits	SDP	Design Construction	Contractor	
Surface Wa	iter				
	Water Sensitive Urban Design (WSUD)				
SW1	Where discharge to stormwater source from run off is anticipated (e.g. car parks) water sensitive urban design (WSUD) measures must be considered and prioritised in order to retain and treat water prior to its discharge.	WSUD	Design Construction	Contractor	
SW2	Water Discharge The Contractor must design and implement water discharge measures in accordance with the EPA Victoria Environmental Reference Standard – Surface Waters and EPA publications 1820.1 and 1834.	CEMP	Construction	Contractor	
SW3	Surface Water Management Procedures (SWMPs) The Contractor, in consultation with ARTC and, local Council, must prepare and implement Surface Water Management Procedures (SWMPs). The SWMPs must be in accordance with all relevant conditions of approval, EPA Victoria Publication 275 Construction techniques for sediment pollution control, EPA Victoria Publication 1834 Civil construction, building and demolition guide and EPA Victoria Industrial Waste Resource Guidelines 701 Sampling and analysis of waters, wastewaters, soils and wastes and EPA Victoria Environmental Reference Standard – Surface Waters. The SWMPs must include (without limitation): • Roles and responsibilities • Objectives • Monitoring requirements • Sediment and erosion control • Requirements and methods for minimising, handling, classifying, treating, disposing and otherwise managing wastewater • Measures to maintain the key hydrologic and hydraulic functionality and reliability of existing flow paths, drainage lines and floodplain storage • Measures to retain existing flow characteristics to maintain waterway stability downstream of construction • Measures to protect surface water habitats (e.g. dams, creeks, wetlands) • Location and bunding of any contaminated material (including tunnel spoil and stockpiled soil) to the 1% AEP flood level and to the requirements of	SWMPs (CEMP)	Construction	Contractor	



NVIRONMENTAL MANAGEMENT FRAMEWORK			KAIL	
EPR Code	Environmental Performance Requirement	Management Plan/ Procedure	Phase	Responsibility
	 the relevant drainage authority Details of Project scheduling to reduce flood related risks Measures to protect against and minimise the risk of contaminated discharge to waterways Documentation of the existing condition of all drainage assets potentially affected by the Project construction activities and works (including their immediate surrounds) to enable baseline conditions to be established and potential construction impacts on these assets to be assessed and managed. Requirements to consult with the relevant catchment management authority about potential flooding of Sunday Creek and Dry Creek. 			
SW4	Temporary occupation –Flooding The Contractor must locate all temporary occupation to be immune to a 1% annual exceedance probability (AEP) standard.	CEMP	Construction	Contractor
Sustainabil	ity			
SU1	Infrastructure Sustainability Rating - Excellent The Contractor must achieve an Infrastructure Sustainability (IS) program rating of 'Excellent' for design and as-built (using the IS Rating Tool Version 1.2. The contractor must adopt a consistent and high-quality approach to sustainability across the Project. The Contractor must meet all key sustainability outcomes and requirements contained within the Specification Inland Rail Sustainability Requirements (0-0000-900-ESS-00-SP-0001) to the satisfaction of ARTC.	SuMP	Design Construction	ARTC Contractor
SU2	Sustainability Management Plan (SuMP) The Contractor, in consultation with ARTC, must develop, update and implement a Sustainability Management Plan (SuMP) that contains measures to meet, as a minimum, the sustainability targets and specified ratings as set out in the B2A PSR and the Specification Inland Rail Sustainability Requirements.	SuMP	Design Construction	Contractor
SU3	Minimise greenhouse gas emissions Integrate sustainable design practices which are best practice for rail infrastructure projects into the design process and implement these to minimise, to the extent practicable, greenhouse gas emissions arising from the construction of the B2A Project. Requirements from the planning approvals will be extracted and communicated to the design teams. The Inland Rail Greenhouse Assessment Tool will be used to model the energy footprint of the base design and actual case. The Contractor is required to set greenhouse gas emissions reduction targets, in consultation with ARTC, DELWP and EPA Victoria.	SuMP	Design Construction	Contractor
SU4	Minimise and appropriately manage waste The Contractor must develop and implement management measures for waste (excluding soils) minimisation during construction. The measures must be in accordance with the Environment Protection Act 2017 waste management hierarchy.	SuMP	Construction	Contractor
SU5	Minimise potable water consumption Stormwater and recycled water and other water sources must be used in preference to potable water for construction activities, including concrete mixing and dust control, where this is available, practicable, of suitable quality, and meets health and safety requirements. The Contractor must track, record and report volumes and sources of water used for all activities to ARTC.	SuMP CEMP	Construction	Contractor
SU6	 National Greenhouse and Energy Reporting (NGER) The Contractor shall prepare, record, report on and retain greenhouse gas and energy information related to the Contractor's Activities and the Project construction activities in order to report under the NGER Act in respect of the D&C Contractor's Activities and the Works The Contractor shall provide all documents and other information which are necessary to enable ARTC to comply with any obligations it may have under the NGER Act or which ARTC (acting reasonably) may request in connection with the NGER Act. 	EMF	Construction	Contractor



EPR		Management		KAIL	
Code	Environmental Performance Requirement	Plan/ Procedure	Phase	Responsibility	
SU7	 National Pollutant Inventory (NPI) The Contractor shall prepare, record, report on and retain information related to the Contractor's Activities and the Works in order to report under the relevant Act in respect of D&C Contractor's Activities and the Works The Contractor shall provide all documents and other information which are necessary to enable ARTC to comply with any obligations it may have under the relevant Act in respect of the NPI, or which ARTC (acting reasonably) may request in connection with the NPI 	EMF	Construction	Contractor	
raffic					
T1	Traffic Management Plan (TMP) Prior to the commencement of works at any Project location, a Traffic Management Plan (TMP) must be prepared in consultation with relevant road authorities, local Council and to the satisfaction of the relevant Road Manager. The Contractor must implement a TMP during construction. The TMP must include (without limitation): • Roles and responsibilities • Objectives • Requirements for maintaining transport capacity for all travel modes in the peak demand periods • Requirements for limiting the amount of construction haulage during the peak demand periods • Requirements for limiting the amount of construction haulage during the peak demand periods • A monitoring program to assess the effectiveness of the TMPs on all modes of transport • Mitigation measures • Consideration of construction activities for other relevant major projects occurring concurrently • Potential routes for construction activities for other relevant major projects occurring concurrently • Potential routes for construction haulage and construction vehicles travelling to and from the Project Site, recognising sensitive receptors and avoiding the use of local streets where practicable • Suitable measures, developed in consultation with emergency services, to ensure emergency service access is not inhibited by Project construction activities • Provision of alternative parking where practicable to replace public, private and commuter parking lost as a result of Project construction activities • Provision of alternative parking where practicable to replace public, private and commuter parking lost as a result of Project construction activities • Requirements to minimise impacts on local streets, community and commercial facilities by providing parking for personnel • Measures to ensure connectivity and safety for all transport network users during Project construction activities • Measures to avoid or minimise any reduction in the level of property access or the amenity or function of any business or commercial facilit	TMP	Design Construction	Contractor	
T2	Disruption of Roads and Sharepaths The Project, where roads and sharepaths required to be disrupted during construction and or upgraded, must designed and constructed to provide suitable routes for pedestrians and cyclists to maintain connectivity during the construction period and post-construction. These measures must be developed in consultation with relevant road authorities, local councils and V/line, where appropriate.	ТМР	Design Construction	Contractor	
Utility Asso	ets				
U1	Utility Assets Through detailed design and construction, the impacts on utility assets must be minimised to the extent practicable. These assets include (without limitation): • Stormwater and sewer assets • Electricity transmission assets (overhead and underground lines) • Gas and fuel pipelines • Communications lines (e.g. fibre optic cables).	СЕМР	Design Construction	Contractor	



EPR Code	Environmental Performance Requirement	Management Plan/ Procedure	Phase	Responsibility
	If relocations are required to facilitate the Project, utility assets must be protected and, where required, modified to the satisfaction of the asset owner.			
Waste Mana	agement	,		
	Waste Management Plan (WMP)		Design	
W1	The Contractor must develop a Waste Management Plan (WMP), in consultation with ARTC, and local Council, which outlines how waste will be managed throughout the Project. Where there are opportunities for reuse of materials e.g. railway sleepers	WMP (CEMP)	Construction	Contractor



8 Consultation Summary

The Incorporated Document requires that the EMF be prepared in consultation with the Head, Transport for Victoria, Environment Protection Authority Victoria, Benalla Rural City Council, Indigo Shire Council (as works are also planned in this LGA), Mitchell Shire Council, Strathbogie Shire Council, Wangaratta Rural City Council, Whittlesea City Council and Wodonga City Council and the Department of Environment, Land Water and Planning.

The purpose of this consultation is to enable stakeholder views, requirements and relevant information to be considered and incorporated in to both the EMF and the EPRs and their implementation.

A comprehensive consultation process has been undertaken to ensure relevant stakeholders, as outlined above, were engaged and provided with an appropriate opportunity to comment both during the development of the EMF and EPRs and also prior to finalising the documents.

Key components of stakeholder engagement undertaken to inform the EMF and EPRs are summarised in Table 8. A further summary of the consultation undertaken and key issues raised is provided in Appendix 4.

ARTC will offer additional briefings to each stakeholder consulted prior to construction works commencing to provide feedback on how comments provided have been addressed.

Table 8 Consultation Summary

CONSULTATION PHASE	DESCRIPTION OF ACTIVITIES	CONSULTATION PERIOD
Public Exhibition of the Environment Report	A draft EMF was included as part of the Environment Report and was made available for review and comment both to the general public and the relevant Councils and State Agencies during the public exhibition period. The public exhibition included: Display of all documents on the Projects Website Exhibited copies at the State Library of Victoria and at ARTC shopfronts in Benalla, Euroa and Wangaratta In locations where ARTC does not have a shopfront, information sessions were held in Seymour, Wandong and Broadford on 19 November 2021 Council and key stakeholders were notified via email that the report was on exhibition and provided the opportunity for a briefing.	1 November 2021 through to 28 November 2021
EMF and EPR consultation during development	Draft versions of the EMF and the EPRs were provided directly to the relevant Councils and State Agencies for their review and comment to inform the development of the EMF and EPRs.	29 November 2021 with comments accepted until the 2 February 2022
EMF and EPR consultation prior to finalising.	Updated draft versions of both the EMF and EPRs were provided directly to the relevant Councils and State Agencies for final review and comment on the amendments to the documents. Briefings were provided to further inform and discuss the updates and to enable direct engagement with the relevant stakeholders.	Initial contact was made with stakeholders from the 25 July 2022, with the updated documents provided from the 8 August 2022 through to the 26 August 2022.



In addition to consultation during development and finalisation of the EMF and EPRs, further consultation is required with relevant stakeholders and Agencies by the EPRs during design development and during construction of the project.

Consultation may include meetings, workshops and exchange of documentation and correspondence between ARTC or its contractors but would not necessarily require the submission of written documentation or draft plans for formal comment to any particular stakeholder.

Where an EPR is expressed as requiring or being subject to the agreement, acceptance, satisfaction, no objection or requirements of a stakeholder, reasonable endeavours will be used with that stakeholder. If a stakeholder does not provide a response within a reasonable period of time, the requirement will be deemed to have been satisfied. The extent and method of consultation would be documented and communicated to relevant stakeholders for each EPR. Consultation outcomes would be shared with the relevant stakeholder and feedback provided on how matters raised during consultation have been considered and, where appropriate and reasonable, addressed by ARTC or the contractor.



Appendix 1 Environmental Event Management Process

As per Section 5.10.1, this process presents the approach to be used by the D&C Contractor when entering environmental data into ARTC Environmental Management Information System (SAI360). SAI360 Training Material will be provided to the D&C Contractor in the form of Help Guides to assist with this process and use of SAI360.

Table 9 Environmental Event Management Process Steps

PROCESS STEP	STEP TITLE	TASK DESCRIPTION	TIMEFRAME	RESPONSIBLE ROLE
Step 1	Conduct initial response for identified Event	 Whether identified by ARTC representative or the D&C Contractor representative, the individual is to contact the appropriate Site Supervisor to take reasonable and practicable steps to stop, reduce and / or prevent further impacts Whether identified by ARTC representative or the D&C Contractor representative, the individual is to advise the appropriate Environment Team member. Note: It is imperative that all ARTC representatives and D&C Contractor, subcontractors and any other associated persons working on the Inland Rail Program do not put their own personal welfare or the welfare of others at risk and emergency services should be called if required. The Environment Team shall be notified immediately to determine if there is a need for immediate regulatory notification. 	Immediately after identification of Event	ARTC representative or D&C Contractor representative
Step 2	Complete Initial Event Notification	 Notify any third-party as applicable and in accordance with environmental laws and / or Condition of Approval requirements Open SAI360 either via mobile (ROAM app.) or web link Complete the SAI360 Part A – Notification tab, including in as much detail as possible and all mandatory fields Complete SAI360 Part A – Event details, select Environmental Impact and / or Environmental Obligation Breach or Near Miss, select Actual and Potential Severity and People to Notify as per SAI360 Help Guides Attach supporting documentation to the SAI360 Event Record including but not limited to: Photographic evidence of impacted area Relevant map/s, diagram/s and GIS shape files (as per ARTC GIS specification) clearly showing impacted area and surrounding area, including identification of any nearby sensitive areas Records of communication between the D&C Contractor and any applicable regulatory representatives, this may include written record and / or record of verbal communication in the form of diary entry or similar 	Immediately and no later than 24 hours after becoming aware of any environmental event.	D&C Contractor Representative



PROCESS STEP	STEP TITLE	TASK DESCRIPTION	TIMEFRAME	RESPONSIBLE ROLE
		 Initial estimation of remediation calculations as per the glossary internal and external examples for threshold amount Save the SAI360 Event Record. Note: Where there is a potential for external regulatory notification, the D&C Contractor shall immediately notify ARTC verbally of the event. 		
Step 3	Review SAI360 Event Record	1. Review or clarify feedback on the D&C Contractors SAI360 Event Record 2. Determine if any additional notification to external environmental Regulator is required. If additional notification is required, they are to complete as per the internal process for Environmental Regulator Notification 3. If not already complete, determine if investigation is required and ARTC's involvement. If ARTC involvement is required, they are to complete investigation as per the internal process for Environmental Event Investigations. Note: During review of the SAI360 Event Record ARTC may request the initial severity level to be amended due to further information identified or additional factors present (i.e. reoccurrence of similar events, significant costs to the business, level of regulatory involvement, significant damage to ARTC reputation and / or significant public interest).	Within a mutually agreed timeframe.	ARTC representative
Decision	Is additional action required?	Yes: Provide any direction to the D&C Contractor on the review of their SAI360 Event Record via Aconex transmittal. No: If there is no additional action required proceed to Step 6 – Complete SAI360 Event Sign Off.		ARTC representative
Step 4	Update SAI360 Event Record	 Review ARTC feedback. If required, request clarification on ARTC feedback responding to Aconex transmittal (ARTC to clarify as per step 3) If satisfied with feedback, update SAI360 Event Record, including in as much detail as possible and all mandatory fields Add new Environmental Impact and/or Potential Environmental Obligation Breach as per Event Details. Include as much additional information within tabs as possible and selecting a Primary Category as per SAI360 Help Guide Attach any additional supporting documentation with the SAI360 Event Record, including but not limited to: Any updates to original supplied documentation Any additional findings or evidence Any proposed / implemented corrective actions Any lessons learned using ARTC Lesson Learned Template (available upon request) or in other ARTC agreed format. Save updated SAI360 Event Record). 	Within a mutually agreed timeframe.	D&C Contractor Representative



PROCESS STEP	STEP TITLE	TASK DESCRIPTION	TIMEFRAME	RESPONSIBLE ROLE
		Note: Lessons learned will be required for all potential severity level 1, 2 and 3 events. Level 4 event lessons learned will be optional. ARTC reserve the right to request the D&C contractor to complete a lesson learned template and/or to include ARTC representatives to either lead or participate in a lesson learned workshops at their discretion.		
Decision	Is Investigation required?	Yes: Proceed to Step 5 – Complete Investigation if required. No: Wait for ARTC feedback on Event Record to determine if close out can occur or additional action is required.		D&C Contractor Representative
Step 5	Complete Investigation if required	 Undertake investigation as per appropriate investigation methodology, including ARTC representatives as per ARTC direction. Attach investigation report with any supporting documentation to SAI360 Event Record for review within 1 week of investigation due date Save SAI360 Event Record. Note: It is an ARTC requirement for ICAM Investigations to be undertaken for all potential severity level 1, 2 and 3 events. The D&C Contractor will use an ICAM trained Lead Investigator and impartial investigation team for all ICAM investigations. The higher the event severity level the greater the independence must be. Level 4 event investigations will be optional and can be complete in the form of a formal root cause analysis. ARTC reserve the right to request the D&C Contractor to complete an investigation or to include ARTC representatives to either lead or participate in the investigation at ARTC discretion. Investigation Completion Timeframes from day event is identified: Severity Level 4: 2 weeks Severity Level 3: 4 weeks Severity Level 2: 8 weeks 	As per event severity.	D&C Contractor Representative
Step 6	Complete SAI360 Event Sign Off	1. If ARTC is satisfied that no additional action is required, the SAI360 Event Record will be signed off by ARTC 2. If ARTC are not satisfied that sufficient information has been provided, the D&C Contractor will be instructed to return to step 4 and action as required in agreement with ARTC. Note: ARTC may require additional verification of the close out of events either through Environmental Coordination meetings or during an ARTC lead audit of the CEMF event management process.		ARTC representative
Step 7	Close event	Close event as per agreement with ARTC.		D&C Contractor Representative



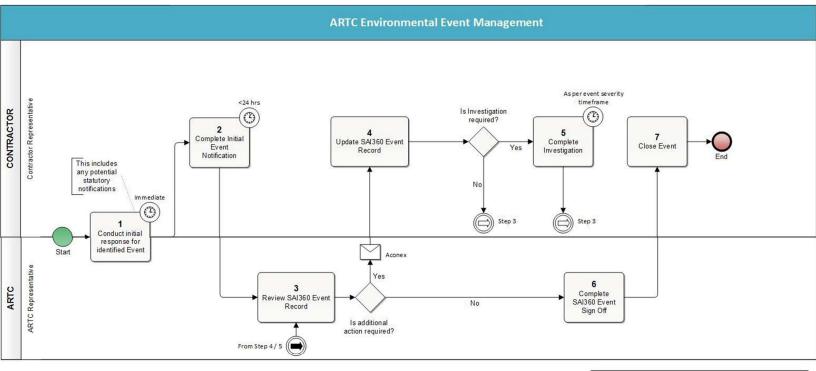




Figure 4 Environmental Event Management Process Map



Appendix 2 ARTC Event Severity Matrix



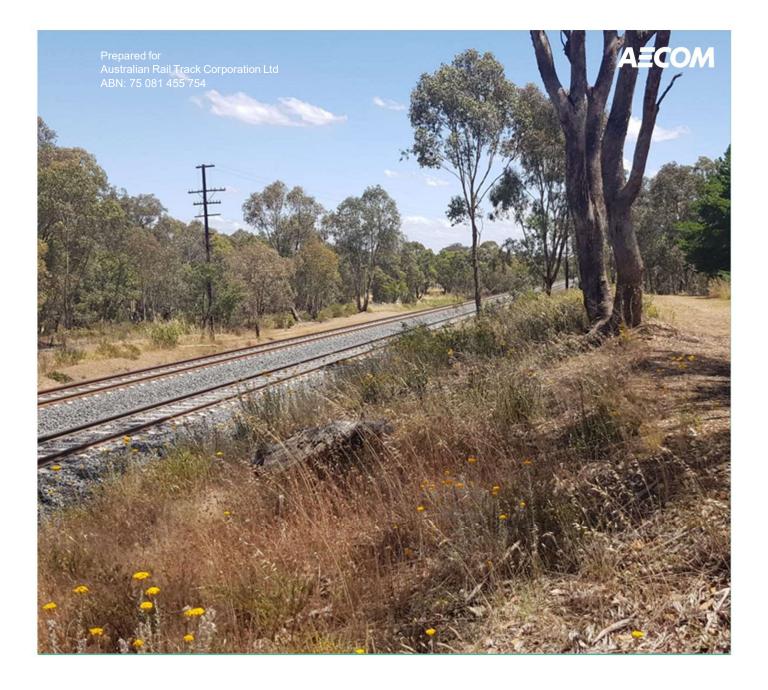
ARTC EVENT SEVERITY MATRIX

				Actual or Potential Impac		
Safety: Impact to people		Injury or illness with no impairment (may or may not require treatment)	Injury or illness with short-term impairment (less than 1 month) Injury or illness with moderate but recoverable impairment (more than 1 month but less than 6 months)		Injury or illness with long term (more than 6 months) to permanent impairment	One or more fatalities
Assets: Impact to network performance		Immaterial disruption to non-critical track section	Material disruption to non-critical track section or Immaterial disruption to critical track section	Material disruption to a critical track section recoverable in the short-term	Material disruption to critical track section not recoverable in the short term	Material disruption to critical track section not recoverable in the sho term with significant long-term impacts on customers
Assets: Impact to organisational capability		Manageable impact to internal operations, which may or may not require internal reallocation of existing resources	Missing short-term targets which may or may not require use of additional resources	Reduced ability to achieve business goals with some business impact	Material failure to achieve business goal(s) with significant business impact	Failure to achieve business goals with lasting impacts
Environment: Impact to environmental factors		Minimal environmental impact	Limited and recoverable environmental impact	Significant and recoverable environmental impact	Permanent impact to area of less than high environmental significance	Permanent impact to area of high environmental significance
Financial: Impact of this event in terms of a total cost estimation		<250k loss or damage	\$250K to \$2M loss or damage	\$2M to \$5M loss or damage	\$5M to \$10M loss or damage	>\$10M loss or damage
		Not Significant	Minor	Moderate	Major	Extreme
Status of Controls	EVENT HAS OCCURRED	Level 4 Negligible	Level 3 Minor	Level 2 Major	Level 1 Significant	Level 1 Significant
Not in place and will allow escalation to the potential outcome	Likely	4	3	2	1	1
Partially in place and may allow escalation to the potential outcome	Possible	4	3	3	2	-1
Mostly in place and unlikely to allow escalation to the potential outcome	Unlikely	4	4	3	2	2
Fully maintained and only under exceptional circumstances allow escalation to the potential outcome	Rare	4	4	4	3	2

Figure 5 ARTC Event Severity Matrix



Appendix 3 Environment Report Second Addendum: Inland Rail B2A native vegetation update 19 July 2022



Environment Report Second Addendum:

Inland Rail B2A native vegetation update July 2022

19-Jul-2022



Environment Report Second Addendum:

Inland Rail B2A native vegetation update July 2022

Client: Australian Rail Track Corporation Ltd

ABN: 75 081 455 754

Prepared by

AECOM Australia Pty LtdLevel 10, Tower Two, 727 Collins Street, Melbourne VIC 3008, Australia T +61 3 9653 1234 F +61 3 9654 7117 www.aecom.com
ABN 20 093 846 925

19-Jul-2022

Job No.: 60637387

AECOM in Australia and New Zealand is certified to ISO9001, ISO14001 and ISO45001.

© AECOM Australia Pty Ltd (AECOM). All rights reserved.

AECOM has prepared this document for the sole use of the Client and for a specific purpose, each as expressly stated in the document. No other party should rely on this document without the prior written consent of AECOM. AECOM undertakes no duty, nor accepts any responsibility, to any third party who may rely upon or use this document. This document has been prepared based on the Client's description of its requirements and AECOM's experience, having regard to assumptions that AECOM can reasonably be expected to make in accordance with sound professional principles. AECOM may also have relied upon information provided by the Client and other third parties to prepare this document, some of which may not have been verified. Subject to the above conditions, this document may be transmitted, reproduced or disseminated only in its entirety.

Quality Information

Document Environment Report Second Addendum:

Ref 2-0008-110-EAP-00-RP-0075

Date 19-Jul-2022

Prepared by Sally Koehler and Jasmine Bettiol

Reviewed by Jeff Smith

Revision History

Rev	Revision Date	Details	Authorised		
1107	Troviolori Bato	Botano	Name/Position	Signature	
A	04-Jul-2022	Draft	Jeff Smith Market Sector Leader - Environment, Power & Industrial, ANZ	Jun/ Jun/	
0	04-Jul-2022	Final	Jeff Smith Market Sector Leader - Environment, Power & Industrial, ANZ	JW/ JWW/	
1	19-Jul-2022	Final – updated in consultation with DELWP	Jeff Smith Market Sector Leader - Environment, Power & Industrial, ANZ	Jun Jun J	

Table of Contents

1.0	Introduct		1
2.0		of National Environmental Significance	2 2
	2.1	Threatened ecological communities	2
0.0	2.2	Threatened species	2 5
3.0	State sig	Inificant values	5 5
	3.1	Native vegetation loss	5 7
	3.2 3.3	Threatened ecological communities Threatened species	8
	3.3	3.3.1 Flora species	8
		3.3.2 Fauna species	9
	3.4	Hollow-bearing trees	11
	3.5	Habitat connectivity	12
	3.6	Environmental overlays	14
4.0	Offsets	Ziviioiiiioiiai ovoitajo	19
	4.1	State offsets	19
A 44 I	4.2	EPBC offsets	20
		pact area change document	
		ative Vegetation Removal Report Itive Vegetation Credit Register report	
List of T	ables		
Table 1	Comparis	on of EPBC Act-listed threatened community residual impacts	2
Table 2	Comparis	on of EPBC Act-listed threatened species residual impacts	2
Table 3 (Comparis	on of residual impacts on native vegetation	5
Table 4	Comparis	on of residual impacts on native vegetation patches by EVC and Bioregional	
		conservation status	5
		on of amount of vegetation to be removed in each LGA for the powerlines	7
		on of residual impacts on FFG Act-listed threatened ecological communities	7
		on of residual impacts on FFG Act-listed flora species	8
		on of residual impacts on FFG Act-listed fauna species	9
		on of residual impacts on known hollow-bearing trees by enhancement site wor	
		son of total residual impacts on hollow bearing trees by Project works	11
	•	son of potential connectivity impacts at Seymour-Avenel Road, Seymour.	13
		impacts to vegetation within environmental overlays	14
		quirements for Project	19
Table 14	· mira par	ty offset sites that meet Project requirements (based on June 2022 updated design).	19

1.0 Introduction

This technical note has been prepared by AECOM Australia Pty Ltd on behalf of the Australian Rail Track Corporation (ARTC) to document updates made to the impact areas of the enhancement sites and powerlines packages of works associated with the Inland Rail - Beveridge to Albury project.

The impacts and offset requirements outlined in this technical note supersede those presented in Chapter 8 of the Environment Report.

Background

Assessment of the Project by the Victorian and Australian governments is being undertaken via an Environment Report under the Bilateral Agreement made under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) between the Commonwealth of Australia and The State of Victoria in 2014 relating to environmental assessment.

Ecological assessments have been completed for existing conditions and impact assessment technical reports have been prepared for both packages of works to inform the preparation of the Environment Report. The assessments for both packages of works were undertaken based on the project area received in January 2021. The Environment Report went on public exhibition in August 2021.

Changes were subsequently made to the project areas for the enhancement site and powerline packages of works. Addendum reports were prepared for both packages of works to report on the changed existing conditions and impacts associated with the updated project areas. Those addendums identified an increase in impacts on native vegetation and Threatened Ecological Communities (TECs) and an associated increase in offset obligations, including a requirement to provide species-specific offsets for the EPBC Act-listed modelled Euroa Guinea-flower habitat.

In reviewing the impacts associated with the project, the Victorian Government Department of Environment, Land, Water and Planning (DELWP) recognised that impacts had increased from those which were nominated in the Environment Report that was publicly exhibited. DELWP therefore requested that the project seek to reduce impacts to levels consistent with or better than those stated in the Environment Report.

ARTC and the delivery partner for the Tranche 1 enhancement sites (McConnell Dowell) have revisited the design and AECOM has compared the updated GIS polygons for the impact areas with those which informed the exhibited Environment Report. At the request of ARTC, some adjustments were made to the updated polygons to further reduce impacts on native vegetation. The comparison and notes on the changes to impact areas are provided in Attachment 1. Some powerline sites were removed from the package of works by ARTC for the following reasons:

- Review of the need to alter a number of overhead line wires for signalling assets; and
- A change in ARTC standard as agreed by Ausnet, where the minimum height above rail for overheads was reduced.

A summary of the updated residual impacts is provided below for Matters of National Environmental Significance (MNES) listed under the *Environment Protection and Biodiversity Conservation Act 1999* and state significant values. An update on offsets required for the loss of native vegetation is also provided, along with an additional commitment by ARTC to maintain vegetation clearance levels at or below the total amount of clearance outlined in the publicly exhibited Environment Report.

2.0 Matters of National Environmental Significance

2.1 Threatened ecological communities

Table 1 outlines the extent of TECs listed under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) and replaces Table 33 of the Environment Report. The extent of impacts on the EPBC Act TECs have been reduced to below those stated in the Environment Report at the time of public exhibition.

Table 1 Comparison of EPBC Act-listed threatened community residual impacts

TEC	Environment Report on Exhibition (ha)	June 2022 update (ha)
Grey Box <i>Eucalyptus microcarpa</i> Grassy Woodlands and Derived Native Grasslands of South-eastern Australia (GBGW)	6.334	6.316
White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (WBYBBRGGW)	0.624	0.607

2.2 Threatened species

Table 2 compares residual impacts on EPBC Act listed threatened species between the Environment Report on exhibition and the June 2022 update. **Table 2** replaces Table 34 of the Environment Report.

Table 2 Comparison of EPBC Act-listed threatened species residual impacts

Common Name	Residual impact Environment Report on Exhibition	June 2022 update	Residual impact
Flora			
Crimson spider- orchid	Loss of 8.20 ha of potential woodland habitat. Not likely to constitute a significant impact as the species has not been detected despite targeted survey.	Loss of 8.69 ha of potential woodland habitat. Not likely to constitute a significant impact as the species has not been detected despite targeted survey.	The increase of 0.49 ha of woodland habitat lost in the June 2022 update is not considered to change the significant impact conclusions stated in the Environment Report at the time of public exhibition.
Euroa Guinea- flower	No residual impact. Impact area for overhead powerline investigation area 1047 was modified to avoid impacts to the population of this species.	No change	No impact likely as population avoided and no residual impacts.
Mountain Swainson- pea	No residual impact. Mountain Swainson-pea was recorded adjacent to investigation area 1078 and impacts to this will be avoided.	No change	No impact likely as population avoided and no residual impacts

Common Name	Residual impact Environment Report on Exhibition	June 2022 update	Residual impact	
Swamp Fireweed	No residual impact. Impacts to this species were avoided in an earlier design phase of the Project (KBR, 2020a).	No change	No impact likely as population avoided and no residual impacts.	
Swamp Everlasting	No residual impact. Impacts to this species were avoided in an earlier design phase of the Project (KBR, 2020a).	No change	No impact likely as population avoided and no residual impacts.	
Fauna				
Grey- headed Flying-fox	Loss of 11.339 ha of woodland habitat	Loss of 11.960 ha of woodland habitat	The increase of 0.621 ha of woodland habitat lost in the June 2022 update is not considered to change the significant impact conclusions stated in the Environment Report at the time of public exhibition.	
Swift Parrot			The increase of 0.621 ha of	
Regent Honeyeater Painted Honeyeater	Loss of 11.339 ha of VTWBC which may be used as an occasional foraging resource by these species.	Loss of 11.960 ha of VTWBC (refer to Section 3.2).	woodland habitat lost in the June 2022 update is not considered to change the significant impact conclusions stated in the Environment Report at the time of public exhibition.	
Growling Grass Frog	Impacts to aquatic habitat avoided or mitigated. A small extent (approximately 0.13 ha) of potential terrestrial foraging habitat may be impacted at overhead powerline project areas 1001, 1002, and 1003. This impact may affect individuals but will not threaten a population of the species.	No change	Approximately 0.13 ha of potential terrestrial foraging habitat impacted No change to the significant impact conclusions stated in the Environment Report at the time of public exhibition.	
Sloane's Froglet	No residual impact. Impacts to aquatic habitat has been avoided or mitigated.	No change	No residual impact. Impacts to aquatic habitat has been avoided or mitigated.	
Striped Legless Lizard	Impact to potential habitat at overhead powerline project area 1088.	No change	Loss of 0.3 ha of potential habitat. No change to the significant impact conclusions stated in the Environment Report at the time of public exhibition.	

Common Name	Residual impact Environment Report on Exhibition	June 2022 update	Residual impact
Golden Sun Moth	No residual impact. Impacts to potential habitat at Track Slew 1 – Wallan Loop and overhead powerline project area 1013 have been avoided.	No change	No residual impact, impacts to potential habitat have been avoided

3.0 State significant values

3.1 Native vegetation loss

Table 3 compares the residual impacts on native vegetation between those stated in the Environment Report at the time of public exhibition and the current June 2022 impact areas. **Table 3** replaces Table 35 of the Environment Report.

Table 3 Comparison of residual impacts on native vegetation

Native vegetation attribute	Environment Report on Exhibition	June 2022
Patches of native vegetation	24.289 ha	24.144 ha
Endangered EVC extent ¹	14.343 ha	14.581 ha
High quality patches of native vegetation ¹	5.621 ha	5.812 ha
Large Trees in a Patch	82	73
Large Scattered Trees	48	29
Small Scattered Trees	83	86
DELWP Mapped Wetlands ²	0 ha	0 ha

¹Subset of patches of native vegetation

Table 4 compares the residual impacts on native vegetation by EVC and bioregional conservation status. This table was not presented in the Environment Report that went on public exhibition but was prepared at the request of DELWP to assist with their assessment of impacts. **Table 4** replaces the version of the table provided to DELWP via email in May 2022.

Table 4 Comparison of residual impacts on native vegetation patches by EVC and Bioregional conservation status

		Bioregional	Conservation	Environment			
EVC Number	EVC Name	Victorian Volcanic Plain	Central Victorian Uplands	Northern Inland Slopes	Victorian Riverina	Report on	June 2022
40	Riparian	Vulnerable				0.027	0.026
18	Forest		Vulnerable			0.042	0.043
23	Herb-rich Foothill Forest		Depleted			0.010	0.010
	Valley		Vulnerable			1.345	0.688
47	Grassy Forest			Endangered		0.091	0.000
	Plains		Endangered			2.882	2.958
55	Grassy Woodland				Endangered	0.053	0.019
55_61	Plains Grassy Woodland				Endangered	1.020	0.770
56	Floodplain Riparian Woodland				Vulnerable	0.231	0.174

²Included within extent of patches of native vegetation

		Bioregional	Conservation	Environment			
EVC Number	EVC Name	Victorian Volcanic Plain	Central Victorian Uplands	Northern Inland Slopes	Victorian Riverina	Report on Exhibition	June 2022
	Box-		Vulnerable			7.335	7.867
61	Ironbark Forest				Vulnerable	0.191	0.191
	Alluvial			Endangered		0.185	0.155
67	Terraces Herb-rich Woodland				Vulnerable	0.013	0.012
	Creekline		Endangered			0.024	0.021
68	Grassy Woodland				Endangered	0.324	0.591
83	Swampy Riparian Woodland	Endangered				0.017	0.017
127	Valley Heathy Forest		Vulnerable			0.113	0.016
175_61	Grassy Woodland		Endangered			2.906	2.705
	Grassy			Endangered		1.386	1.097
175_61	Woodland (Low Rises)				Endangered	0.205	0.282
000	Plains			Endangered		1.532	1.890
803	Woodland				Endangered	3.718	4.077
815	Riverine Swampy Woodland				Vulnerable	0.090	0.090
819	Spike- sedge Wetland				Vulnerable	0.368	0.080
		Depleted				0.003	0.003
821	Tall Marsh		Depleted			0.049	0.048
	.7101.071				Victorian Riverina Vulnerable Vulnerable Endangered Endangered Endangered Vulnerable	0.129	0.314
Total						24.289	24.144

Table 5 compares the residual impacts on native vegetation by LGA for the powerlines. This table was not presented in the Environment Report that went on public exhibition but was prepared at the request of DELWP to assist with their assessment of impacts.

Table 5 Comparison of amount of vegetation to be removed in each LGA for the powerlines

LGA	Environment Report on Exhibition (ha)	June 2022 (ha)
Mitchell Shire	2.142	1.340
Strathbogie	1.002	1.063
Benalla	3.145	3.928
Wangaratta	2.578	1.905
Indigo	0.567	0.493
Wodonga	0.090	0.090
Total	9.524	8.819

3.2 Threatened ecological communities

Table 6 outlines the extent of TECs listed under the Victorian *Flora and Fauna Guarantee Act 1988* (FFG Act). It replaces Table 36 of the Environment Report.

The extent of impacts on the FFG Act TEC have been reduced from 15.04 ha in the addendum reports but remains higher than those stated in the Environment Report at the time of public exhibition by less than 1 hectare (0.621 ha). The difference is attributed to small changes in shape of the impact footprint for the enhancement sites and powerlines that were made to reduce overall impacts on native vegetation and EPBC Act TECs. The occurrence of VTWBC relates to the extent of native woodland vegetation and therefore forms part of the 24.144 ha of native vegetation impacted by the project overall. The project will compensate for the loss of VTWBC habitat through offsets under the native vegetation removal regulations.

Table 6 Comparison of residual impacts on FFG Act-listed threatened ecological communities

TEC	Environment Report on Exhibition (ha)	June 2022 (ha)
Victorian Temperate Woodland Bird Community (VTWBC)	11.339	11.960
Western (Basalt) Plains Grassland Community ¹	0	0
Lowland Riverine Fish Community of the Southern Murray Darling Basin ²	0	0

¹ WBPGC is synonymous with NTGVVP. ARTC have advised that impacts to WBPGC will be avoided during works

 $^{^2}$ LRFCSMDB was not mapped within the investigation area but may occur in the Goulburn River

3.3 Threatened species

3.3.1 Flora species

Table 7 compares impacts to FFG Act-listed flora species at the time of the Environment Report to the current updated impact areas. It replaces Table 37 of the Environment Report.

There have not been any additional impacts to threatened species from those stated in the Environment Report at the time of public exhibition. Due to a change in the powerline scope, impacts to Late-flower Flax-lily *Dianella tarda* have now been avoided.

Table 7 Comparison of residual impacts on FFG Act-listed flora species

	Cons	ervation	Status	Environment Report on	June 2022	
Common name	EPBC Act	FFG Act	VROT	Exhibition		
Buloke	-	L	en	Two immature individuals at Seymour-Avenel Road, Seymour and 14 individuals at overheard powerline 1042.	No change	
Cottony Cassinia	-	-	vu	Approximately 50 plants at overhead powerline 1041 were identified, loss some individuals may occur during works.	No change	
Glaucous Flax-lily	-	-	vu	Approximately 249 plants were identified at Seymour-Avenel Road, Seymour, Hume Highway, Seymour, and Tallarook enhancement sites, and Signal Gantry 14. Loss of some individuals may occur during works. Loss of one plant at overhead powerline 1042.	No change	
Late-flower Flax-lily	-	-	vu	Loss of up to 2 plants at overhead powerline 1012.	Powerline 1012 has been removed from the scope of works and therefore no impacts to Late- flower Falx-lily	
Purple Diuris	-	L	vu	No individuals identified during KBR (2020a) or current assessment; however, up to 3.824 ha of potential habitat may be impacted at the Seymour-Avenel Road, Seymour, and Signal Gantry 19, and Hume Highway, Seymour enhancement sites, and overhead powerline 1088.	No change	

	Cons	Conservation Status		Environment Report on		
Common name	EPBC Act	FFG Act	VROT	Exhibition	June 2022	
Golden Cowslips	-	-	vu	KBR (2020e) recorded Golden Cowslips at overhead powerline 1088; however, total number of individuals was not recorded. Works are likely to result in the loss of some individuals (0.124 ha of patches of native vegetation impacted).	No change	
Basalt Podolepis	-	-	en	KBR (2020e) recorded Basalt Podolepis at overhead powerline 1078; however, total number of individuals was not recorded. Works are likely to result in the loss of some individuals (0.532 ha of patches of native vegetation impacted).	No change	

3.3.2 Fauna species

Table 8 compares the impacts to FFG Act-listed fauna species at the time of the Environment Report and the current June 2022 impact areas. It replaces Table 38 of the Environment Report.

There has been a reduction in the number of hollow-bearing trees potentially impacted by the Project. The extent of woodland habitat lost has been reduced from 15.04 ha in the addendum reports but remains higher than those stated in the Environment Report at the time of public exhibition by less than 1 hectare (0.621 ha).

Table 8 Comparison of residual impacts on FFG Act-listed fauna species

	Conse	vation Sta	tus	Residual i	mpacts	
Common name	Common name EPBC Act VROT Environment Report on Exhibition		Environment Report on Exhibition	June 2022		
Apostlebird	-	L#		Loss of 11.339 ha	Loss of 11.960 ha	
Bush Stone-curlew	-	L#	en	woodland habitat. Loss of up to 103	woodland habitat. Loss of up to 83 known and estimated hollow- bearing trees. Injury, death, or displacement of fauna.	
Diamond Firetail	-	L#	nt	known and estimated		
Grey-crowned Babbler	-	L#	en	hollow-bearing trees. Injury, death, or		
Ground Cuckoo-shrike	-	L#		displacement of fauna.		
Hooded Robin	-	L#	nt	Increase in habitat fragmentation,		
Powerful Owl	-	L#	vu	primarily at Tallarook and Seymour-Avenel	Increase in habitat fragmentation,	
Speckled Warbler	-	L#	vu	Road, Seymour enhancement sites.	primarily at Tallarook and	
Turquoise Parrot	-	L#	nt	emancement sites.	Seymour-Avenel	

	Conser	vation Sta	tus	Residual i	ıal impacts	
Common name	EPBC Act	FFG Act	VROT	Environment Report on Exhibition	June 2022	
					Road, Seymour enhancement sites.	
Barking Owl	-	L#	en	Loss of 11.339 ha	Loss of 11.960 ha	
Brush-tailed Phascogale	-	L	vu	woodland habitat. Loss of up to 103	Loss of up to 83	
Squirrel Glider	-	L	en	known and estimated hollow-bearing trees.	known and estimated hollow-	
Sugar Glider##	-			Injury, death, or displacement of fauna. Increase in habitat fragmentation, primarily at Tallarook and Seymour-Avenel Road, Seymour enhancement sites.	bearing trees. Injury, death, or displacement of fauna. Increase in habitat fragmentation, primarily at Tallarook and Seymour-Avenel Road, Seymour enhancement sites.	
Brown Toadlet	-	L	en	Impacts potential habitat (terrestrial areas that become flooded by seasonal rains) will need to be determined following detailed design of overhead powerlines.	No change	

3.4 Hollow-bearing trees

Table 9 compares the impacts to known hollow-bearing trees at the time of the Environment Report and the current June 2022 impact areas for the enhancement sites. It replaces Table 39 of the Environment Report. Hollow-bearing trees at the enhancement sites were identified through targeted survey.

Table 10 compares the total known and estimated hollow-bearing trees at the time of the Environment Report and the current June 2022 impact areas. It replaces Table 40 of the Environment Report. Hollow-bearing trees were estimated based on the number of Large Trees in Patches and large Scattered Trees at Glenrowan and Wangaratta Precinct enhancement sites, and within the overhead powerline project area based on the ratio of 0.65 hollow-bearing trees for each large tree.

The June 2022 design updates have reduced the number of hollow bearing trees to be potentially impacted by the project from an estimated 103 hollow bearing trees to 83 hollow bearing trees.

Table 9 Comparison of residual impacts on known hollow-bearing trees by enhancement site works

Enhancement	Environme	ent Report on	Exhibition	June 2022		
site	Reference design	Buffer area	Total	Reference design	Buffer area	Total
Hume Highway, Seymour	0	7	7	0	7	7
Tallarook	1	18	19	1	17	18
Marchbanks Road, Broadford	2	1	3	2	1	3
Seymour- Avenel Road, Seymour	0	21	21	6	13	19
Short Street, Broadford	0	1	1	0	0	0
Total	3	48	51	9	38	47

Table 10 Comparison of total residual impacts on hollow bearing trees by Project works

Project component	Environment Report on Exhibition	June 2022
Enhancement Sites where hollow-bearing tree targeted survey was conducted	51	47
Glenrowan and Wangaratta Precinct	9	13
Overhead powerlines	43	23
Total	103	83

3.5 Habitat connectivity

Section 8.2.5 of the Environment Report that was on public exhibition discussed the potential increase in existing gaps in habitat linkages in the local landscape at Marchbanks Road, Broadford, Seymour-Avenel Road, Seymour, and Tallarook. The June 2022 updated impact areas have not resulted in any connectivity changes at the Marchbanks Road, Broadford or the Tallarook enhancement sites, compared to what was presented in the Environment Report at the time of exhibition.

Table 11 compares the potential connectivity impacts at Seymour-Avenel Road, Seymour at the time of the Environment Report and the current June 2022 impact areas. It replaces Figure 10 in the Environment Report.

Updates to the impact area at Seymour-Avenel Road, Seymour has changed the impacts as they relate to habitat connectivity. Project changes as of June 2022, when compared to that presented in the Environment Report at the time of exhibition, will:

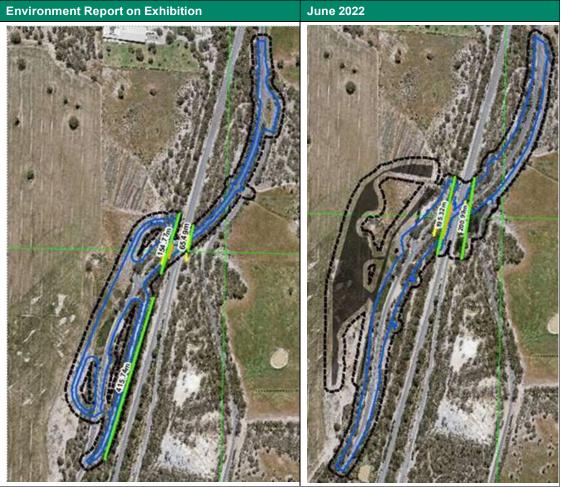
- Increase the gap in canopy across Seymour-Avenel Road on the west side of the rail corridor from 154.77 m to 195.32 m (increase of approximately 41 m).
- Increase the gap in canopy across Seymour-Avenel Road on the east side of the rail corridor from 65.49 m to 200.99 m (increase of approximately 135 m).
- Retain habitat connectivity on the west side of the rail corridor south of Seymour-Avenel Road. A gap of 415.74 m in the woodland vegetation on the west side of the rail that was presented in the Environment Report is now avoided.

The June 2022 update results in a net decrease in fragmentation by 239.67 m and a reduction in the number of locations where fragmentation will be exacerbated by one. The area now retained represents over 400 m of linear corridor of woodland that, combined with the second gap over Seymour-Avenel Road, may have otherwise resulted in a loss of functional connectivity on the west side of the rail corridor.

Although the gap across Seymour-Avenel Road has increased on the east side of the rail corridor by 135 m, the area is immediately adjacent to the intersection of the rail corridor and road overpass and is therefore subject to noise and light disturbance associated with both those assets. The area is also a vehicle pull over and turn around point from Avenel Road. Conversely, the area that is now retained is close but not directly adjacent to those sources of disturbance and is therefore likely to play a more important role in maintaining connectivity than the area on the east side of the rail corridor.

On this basis it is considered that the change in impact area as it pertains to Seymour-Avenel Road will not result in more exacerbated fragmentation but reduces project impacts as they relate to habitat connectivity. Functional connectivity may still be disrupted but not lost.

Table 11 Comparison of potential connectivity impacts at Seymour-Avenel Road, Seymour.



Legend: blue line = reference design; black dotted line = 15 m buffer on reference design; solid black = laydown areas

3.6 Environmental overlays

Table 12 compares the applicable overlays for each LGA, their specific requirements, and impacts to relevant ecological values. It replaces Table 41 of the Environment Report.

Table 12 Residual impacts to vegetation within environmental overlays

					Residu	al impacts	
LGA	Overlay	Permit requirement	Required biodiversity information	Native vegetation extent (ha)	Non native vegetation extent (ha)	Fauna habitat Watercourses	
					Environment Re	eport on Exhibition	
	Environmental Significance Overlay –	In accordance with the ESO3, a permit is required to:	Extent of vegetation to be removed / destroyed / lopped, including dead vegetation (all vegetation categorised by native and nonnative) Extent of impact to fauna habitat areas (if any) Extent of impact to watercourses (if any)	0.562 ha 13 trees	0.954 ha	All native vegetation to be impacted within the overlay is considered to be fauna habitat, and as such any impacts to native vegetation are also considered impacts to fauna habitat. Works extent does not extend into watercourses, and, with mitigation measures, indirect impacts to watercourses are not anticipated.	
Mitchell	Schedule 3 (Watercourse	Remove, destroy, or lop any		June 2022			
	Conservation)	vegetation, including dead vegetation.		Extent of impact to fauna habitat areas (if any) Extent of impact to	fauna habitat areas (if any) Extent of impact to	0.401 ha 9 trees	0.781 ha

					Residual	impacts	
LGA	Overlay	Permit requirement	Required biodiversity information	Native vegetation extent (ha)	Non-native vegetation extent (ha)	Fauna habitat	Watercourses
		In accordance with the	Extent of vegetation to	Environment Report on Exhibition			
	Salinity	SMO, a permit is required to:	be removed / destroyed / lopped, including dead	0.004 ha	0.099 ha	N/A	N/A
	Management Overlay	Remove, destroy, or lop any	vegetation (all vegetation categorised		June	2022	
		vegetation.	by native and non- native)	0.000 ha	0.103 ha	N/A	N/A
		In accordance with the VPO1, a permit is		Environment Report on Exhibition			
		required to: Remove, destroy, or lop native vegetation. A permit is not Extent over vegetation vegetation. Number	Extent of native vegetation to be removed / destroyed / lopped Number of trees impacted by the works	7.648 ha 25 trees	N/A	N/A	N/A
	Schedule 1 (Roadside and			June 2022			
	Corridor Protection)			7.853 ha 21 trees	N/A	N/A	N/A
		In accordance with the VPO2, a permit is	Extent of native vegetation to be removed / destroyed / lopped mit is not red for the val of exotic ad Extent of native vegetation to be removed / destroyed / lopped Number of trees impacted by the works	Environment Report on Exhibition			
		required to: Remove, destroy,		3.150 ha 13 trees	N/A	N/A	N/A
		vegetation.		June 2022			
	Environs Protection)	required for the removal of exotic or dead vegetation.		2.935 ha 10 trees	N/A	N/A	N/A

					Residual impacts		
LGA	Overlay		Required biodiversity information	Native vegetation extent (ha)	Non-native vegetation extent (ha)	Fauna habitat	Watercourses
					Environment Rep	oort on Exhibition	
Benalla	Schedule 3 –	In accordance with the VPO3, a permit is required to: • Remove, destroy,	Extent of vegetation to be removed / destroyed / lopped, including dead vegetation (all vegetation categorised by native and non- native)	0.636 ha No Mugga Ironbark, White Box or Blakely's Red Gum.	Of the tree species specified in VPO3, the project may impact on Yellow Box. The number of Yellow Box which may be impacted include an estimated 20 small trees within patches of native vegetation. 1.142 ha nonnative vegetation.	N/A	N/A
	Ironbark Vegetation Protection Area)	vegetation.	Ironbark, White Box, Yellow Box, Blakeley's Red Gum impacted by		June	June 2022	
			the works (if any)	Of the tree species specified in VPO3, the project may impact on Yellow Box. The number of Yellow Box which may be impacted include an estimated 20 small trees within	N/A	N/A	

				Residual impacts				
LGA	Overlay	Permit requirement	Required biodiversity information	Native vegetation extent (ha)	Non-native vegetation extent (ha)	Fauna habitat	Watercourses	
					patches of native vegetation. 0.928 ha non-native vegetation.			
		In accordance with the VPO1, a permit is	Extent of native vegetation to be removed / destroyed / lopped		Environment Rep	oort on Exhibition		
	Vegetation Protection Overlay – Schedule 1 (Glenrowan Township Vegetation Protection Area)	required to: Remove, destroy, or lop native vegetation with a height of more than 1 metre or a distance of more		0.312 ha 13 trees	N/A	N/A	N/A	
				June 2022				
Wangaratta				0.520 ha 16 trees	N/A	N/A	N/A	
	Vegetation Protection Overlay – Schedule 2 (Roadside vegetation of conservation significance)	In accordance with the VPO2, a permit is required to: Remove, destroy, or lop native vegetation.	Extent of native vegetation to be removed / destroyed / lopped	Environment Report on Exhibition				
				0.571 ha Two trees	N/A	N/A	N/A	
				June 2022				
				0.566 ha One tree	N/A	N/A	N/A	

					Residua	l impacts	
LGA	Overlay	Permit requirement	Required biodiversity information	Native vegetation extent (ha)	Non-native vegetation extent (ha)	Fauna habitat	Watercourses
				Environment Report on Exhibition			
	In accordance with the ESO3, a permit is required to: Environmental Significance Overlay – Schedule 3 (Watercourse Conservation) In accordance with the ESO3, a permit is required to: • Remove, destroy, or lop native vegetation including dead vegetation with the exception of	Extent of vegetation to be removed / destroyed / lopped, including dead vegetation (all	0.514 ha 14 trees	0.839 ha	N/A	Works extent does not extend into watercourses, and, with mitigation measures, indirect impacts to watercourses are not anticipated.	
Indigo		vegetation with	vegetation categorised by native and non- native)	June 2022			
	Conservation)	land zoned for 'RDZ2 on Map1 and PAO1 on Map 1 PAO'.	Extent of impact to watercourses (if any)	0.468 ha 1 tree 0.547 ha	N/A	Works extent does not extend into watercourses, and, with mitigation measures, indirect impacts to watercourses are not anticipated.	

4.0 Offsets

The Project is required to compensate for a residual impact to the GBGW community (EPBC Act offset) and for the loss of native vegetation (native vegetation offset under the Victorian Native Vegetation Removal Regulations).

4.1 State offsets

A Native Vegetation Removal (NVR) report has been generated by DELWP for the project losses based on the June 2022 update of 27.9 hectares and 102 large trees. A copy of the NVR report is provided as Attachment 2.

A total of 15.335 General Habitat Units (GHU) with a minimum strategic biodiversity score of 0.495 will need to be offset in the Goulburn Broken, North East, Port Phillip and Westernport CMA or Benalla Rural City, Indigo Shire, Mitchell Shire, Strathbogie Shire, Wangaratta Rural City, Wodonga City Council areas. No Species Habitat Units (SHU) are required to be offset based on the Reference Design assessment (**Table 13**). The threshold for species-specific offsets (Species Habitat Units) for modelled Euroa Guinea-flower habitat is not triggered.

Loss of 102 large trees must be compensated for as part of the general offset.

Table 13 Offset requirements for Project

Unit type	Amount	Minimum strategic biodiversity value score	Large trees	Credit location
General offset amount	15.335 GHU			Goulburn Broken, North East, Port Phillip and Westernport CMA or
Species offset amount	None	0.495	102	Benalla Rural City, Indigo Shire, Mitchell Shire, Strathbogie Shire, Wangaratta Rural City, Wodonga City Council.

Offset security and management

The biodiversity offset for the Project will be achieved via a third party offset on land owned by another party (a native vegetation credit owner). A search of the Native Vegetation Credit Register (NVCR) on 4 July 2022 confirms there are sites which meet the offset requirements for the Project

The sites, offset units, and location identified by the NVCR are listed **Table 14** and a copy of the NVCR report is provided in Attachment 3.

A combination of sites may be required to achieve the offset requirement for the Project.

Table 14 Third party offset sites that meet Project requirements (based on June 2022 updated design).

Site ID	GHU available	LT available	СМА	LGA
BBA-0670	17.868	149	Port Phillip and Western Port	Cardinia Shire
BBA-0677	17.807	1527	Port Phillip and Western Port	Whittlesea City
BBA-0678	46.625	2629	Port Phillip and Western Port	Nillumbik Shire
BBA-2871	16.068	1645	Port Phillip and Western Port	Yarra Ranges Shire
VC_CFL-3074_01	20.226	2928	North East	Towong Shire

4.2 EPBC offsets

The quantum of EPBC offsets required to compensate for the loss of GBGW has been reduced to below those stated in the Environment Report at the time of public exhibition. Initially, 6.334 ha of GBGW was required to be offset and this has been reduced to 6.316 ha after June 2022 design updates.

An EPBC Act Offset Strategy and EPBC Act Offset Management Plan have been prepared outlining the commitment of the Project to securing offsets for loss of GBGW community at an appropriate offset site that compensates for the loss of the TEC. The plans have been through several rounds of updates in response to comments from DELWP and the Australian Government Department of Climate Change, Energy, the Environment and Water (DCCEEW).

EPBC Act offsets will be achieved via a third party offset on land owned by another party (a native vegetation credit owner). The proposed offset site is a 415 hectare property on Heathcote-Redesdale Road at Mia Mia, approximately 10 km south-west of Heathcote and approximately 50 km west of the Inland Rail project. The proposed offset area is 21.4 hectares comprised of 15.58 hectares of patches supporting a Grey Box overstorey and 5.82 ha of derived native grassland adjacent to the patches.

The 21.4 ha offset proposed in the offset documents compensates for the removal of 6.316 ha of the GBGW community. The project intentionally sourced a larger offset to ensure flexibility should impacts change. The Offset Strategy and Offset Management Plan will be updated to reflect the June 2022 quantum of loss.

A memorandum of understanding has been signed by ARTC and the offset provider committing the offset provided to holding the offsets specifically for the Inland Rail Beveridge to Albury project.

The offsets will be ratified through a Section 69 agreement under the *Conservation, Forests and Lands Act 1987* with the Secretary of DELWP (security agreement) to protect and improve the extent and quality of native vegetation on the site. The agreement will be recorded on the title of the subject land.

1

Attachment 1 – Impact area change document

POWERLINES

Key: solid orange = original powerline design in the Environment Report; black dotted outline = the current design/impact area

•		
Powerli	Screenshot of the original powerline design in the Environment Report as	Changes in powerline areas
ne site ID	exhibited (solid orange) and the current design/impact area (black dotted outline)	(comparing the Environment Report as exhibited design and the June 2022 design from T2A_LandImpact_InputLayers_20220622_MGA9
		4Z55.gdb)
1001		No change since ER exhibition
1002		No change since ER exhibition
1003		No change since ER exhibition
1004		Impact removed through scope refinement*
1006	1005	Impact area altered to minimise impacts to native vegetation
1007		No change since ER exhibition

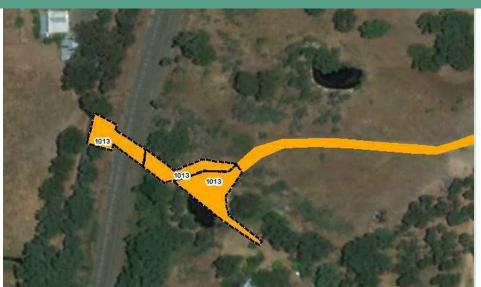
Powerli ne site ID	Screenshot of the original powerline design in the Environment Report as exhibited (solid orange) and the current design/impact area (black dotted outline)	Changes in powerline areas (comparing the Environment Report as exhibited design and the June 2022 design from T2A_LandImpact_InputLayers_20220622_MGA9 4Z55.gdb)
1008	1008	Impact area altered to minimise impacts to native vegetation
1009		Impact removed through scope refinement
1010		No change since ER exhibition
1011		No change since ER exhibition
1012		Impact removed through scope refinement

Powerli Screenshot of the original powerline design in the Environment Report as exhibited (solid orange) and the current design/impact area (black dotted outline)

Changes in powerline areas

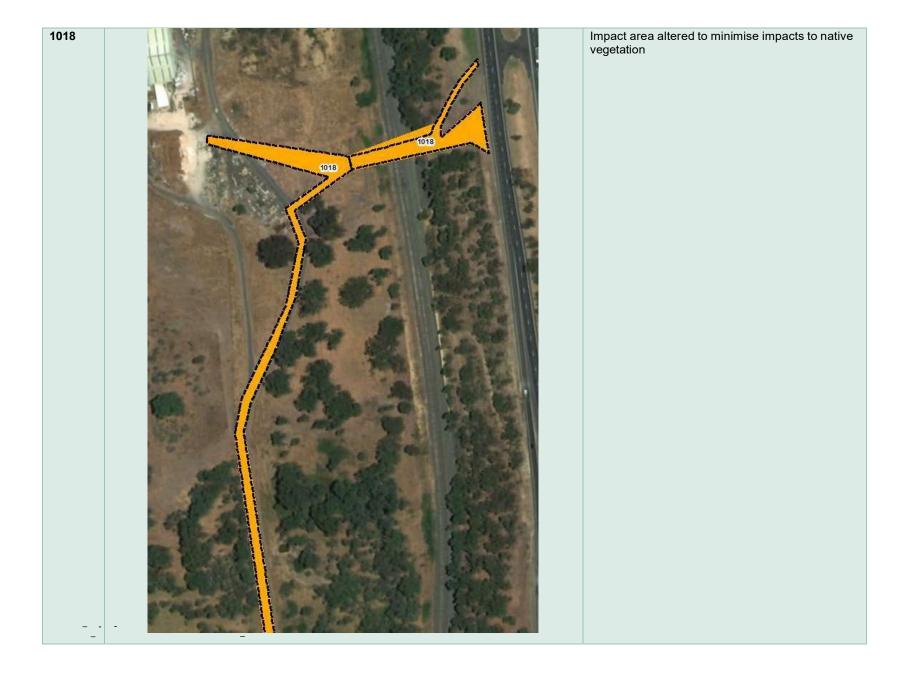
(comparing the Environment Report as exhibited design and the June 2022 design from T2A_LandImpact_InputLayers_20220622_MGA9 4Z55.gdb)

1013

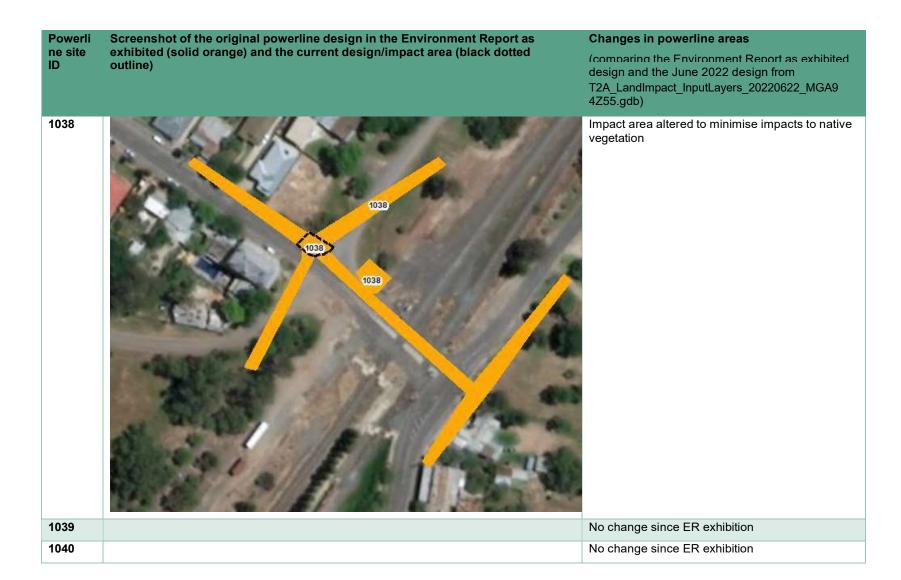


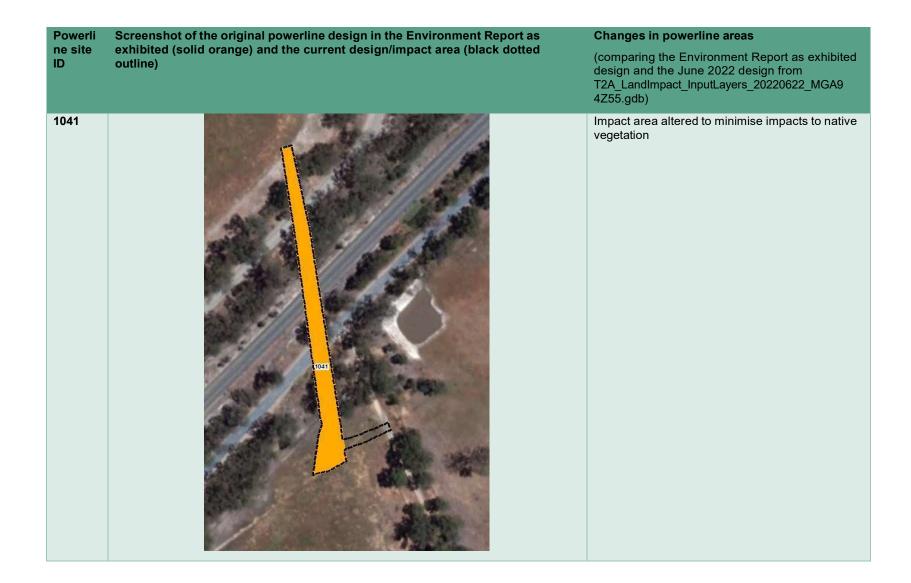
Impact area altered to minimise impacts to native vegetation

1014	No change since ER exhibition
1015	No change since ER exhibition
N10	No change since ER exhibition
1016	Impact removed through scope refinement
1017	Impact removed through scope refinement
N9	No change since ER exhibition



Powerli ne site ID	Screenshot of the original powerline design in the Environment Report as exhibited (solid orange) and the current design/impact area (black dotted outline)	Changes in powerline areas (comparing the Environment Report as exhibited design and the June 2022 design from T2A_LandImpact_InputLayers_20220622_MGA9 4Z55.gdb)
1019		No change since ER exhibition
1020		No change since ER exhibition
1021		No change since ER exhibition
1022		No change since ER exhibition
1023		Impact removed through scope refinement
1024		Impact removed through scope refinement
1025		Impact removed through scope refinement
1026		No change since ER exhibition
1027		No change since ER exhibition
1029		No change since ER exhibition
1030		No change since ER exhibition
1031		No change since ER exhibition
1033		No change since ER exhibition
1034		No change since ER exhibition
1035		Impact removed through scope refinement
1036		No change since ER exhibition
1037		Impact removed through scope refinement
1203		No change since ER exhibition

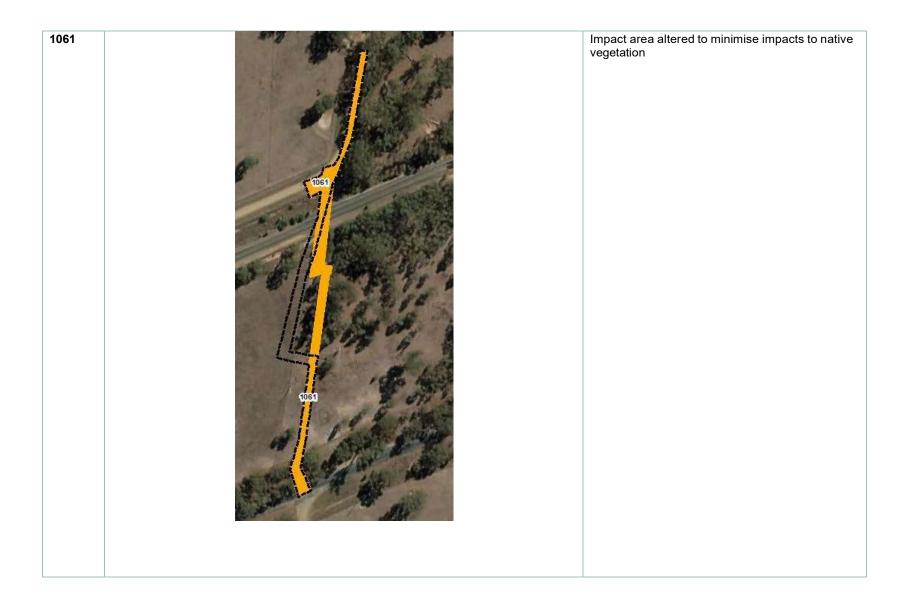




Powerli ne site ID	Screenshot of the original powerline design in the Environment Report as exhibited (solid orange) and the current design/impact area (black dotted outline)	Changes in powerline areas (comparing the Environment Report as exhibited design and the June 2022 design from T2A_LandImpact_InputLayers_20220622_MGA9 4Z55.gdb)
1042		No change since ER exhibition
1043		No change since ER exhibition
1045		No change since ER exhibition
1046		Impact removed through scope refinement
1047		No change since ER exhibition
1048		No change since ER exhibition
1049		No change since ER exhibition
1050		No change since ER exhibition
1051		No change since ER exhibition

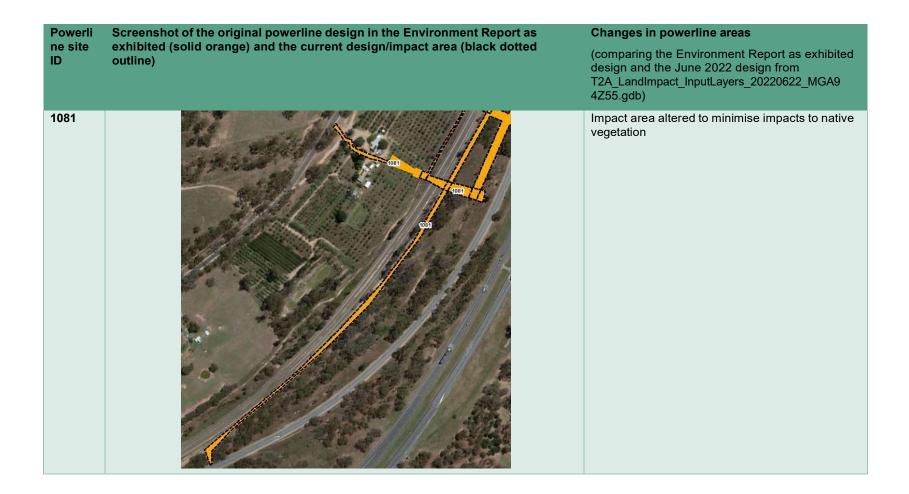
Powerli ne site ID	Screenshot of the original powerline design in the Environment Report as exhibited (solid orange) and the current design/impact area (black dotted outline)	Changes in powerline areas (comparing the Environment Report as exhibited design and the June 2022 design from T2A_LandImpact_InputLayers_20220622_MGA9 4Z55.gdb)
1052	(052)	Impact area altered to minimise impacts to native vegetation
1053		No change since ER exhibition
1054		No change since ER exhibition
1055		Impact removed through scope refinement
1056		No change since ER exhibition
1057		No change since ER exhibition
1058		No change since ER exhibition
1059		No change since ER exhibition

Powerli ne site ID	Screenshot of the original powerline design in the Environment Report as exhibited (solid orange) and the current design/impact area (black dotted outline)	Changes in powerline areas (comparing the Environment Report as exhibited design and the June 2022 design from T2A_LandImpact_InputLayers_20220622_MGA9 4Z55.gdb)
1060		No change since ER exhibition

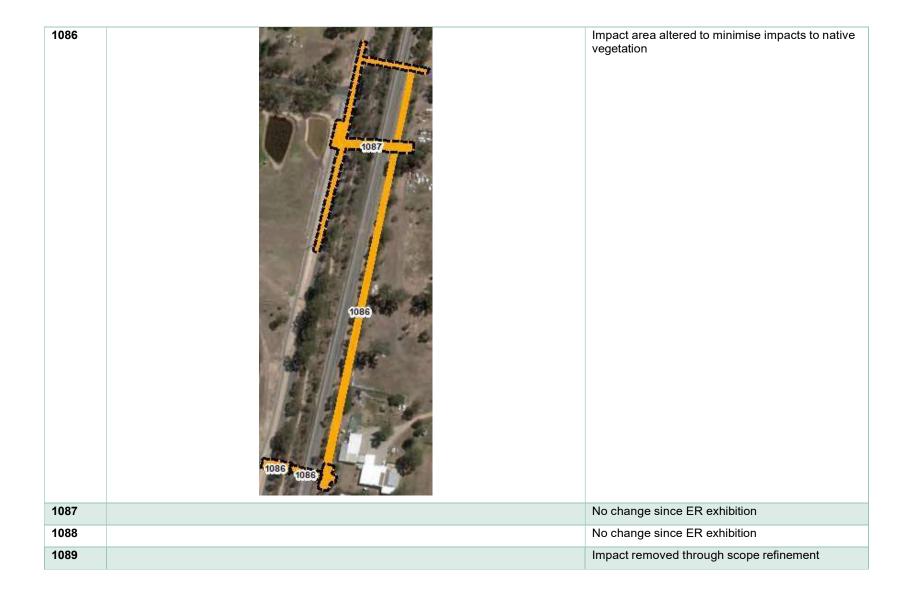


Powerli ne site ID	Screenshot of the original powerline design in the Environment Report as exhibited (solid orange) and the current design/impact area (black dotted outline)	Changes in powerline areas (comparing the Environment Report as exhibited design and the June 2022 design from T2A_LandImpact_InputLayers_20220622_MGA9 4Z55.gdb)
1062		No change since ER exhibition
1063		Impact removed through scope refinement
1064		No change since ER exhibition
1065		No change since ER exhibition
1204		Impact removed through scope refinement
1067		Impact removed through scope refinement
1068		No change since ER exhibition
1069		No change since ER exhibition
1070		No change since ER exhibition
1071		No change since ER exhibition
1072	1072	Impact area altered to minimise impacts to native vegetation
1075		No change since ER exhibition

Powerli ne site ID	Screenshot of the original powerline design in the Environment Report as exhibited (solid orange) and the current design/impact area (black dotted outline)	Changes in powerline areas (comparing the Environment Report as exhibited design and the June 2022 design from T2A_LandImpact_InputLayers_20220622_MGA9 4Z55.gdb)
1076	Q77 Q73	Impact area altered to minimise impacts to native vegetation
1077		Impact removed through scope refinement
1078		No change since ER exhibition
1080		No change since ER exhibition

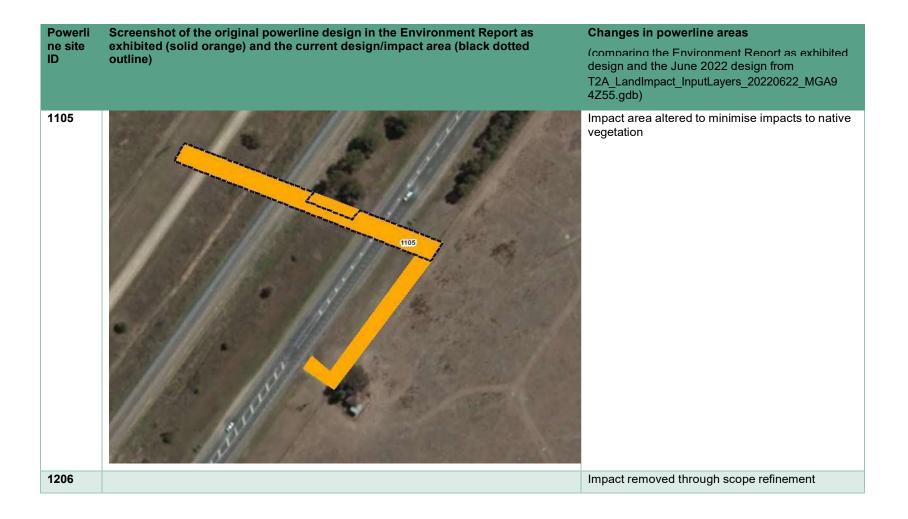


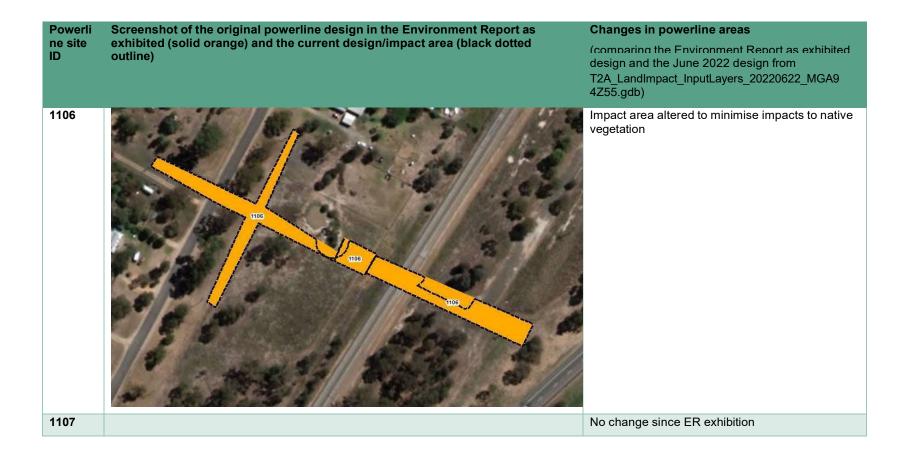
Powerli ne site ID	Screenshot of the original powerline design in the Environment Report as exhibited (solid orange) and the current design/impact area (black dotted outline)	Changes in powerline areas (comparing the Environment Report as exhibited design and the June 2022 design from T2A_LandImpact_InputLayers_20220622_MGA9 4Z55.gdb)
1082	1082	Impact area altered to minimise impacts to native vegetation
1083		No change since ER exhibition
1084		No change since ER exhibition
1085		Impact removed through scope refinement



Powerli ne site ID	Screenshot of the original powerline design in the Environment Report as exhibited (solid orange) and the current design/impact area (black dotted outline)	Changes in powerline areas (comparing the Environment Report as exhibited design and the June 2022 design from T2A_LandImpact_InputLayers_20220622_MGA9 4Z55.gdb)
1205		Impact removed through scope refinement
1090		No change since ER exhibition
1091		No change since ER exhibition
1092		Impact removed through scope refinement
1903		Impact removed through scope refinement
N2		No change since ER exhibition
1094		Impact removed through scope refinement
1095		Impact removed through scope refinement
1097		No change since ER exhibition
1098		Impact removed through scope refinement
1099		Impact removed through scope refinement
1100		Impact removed through scope refinement

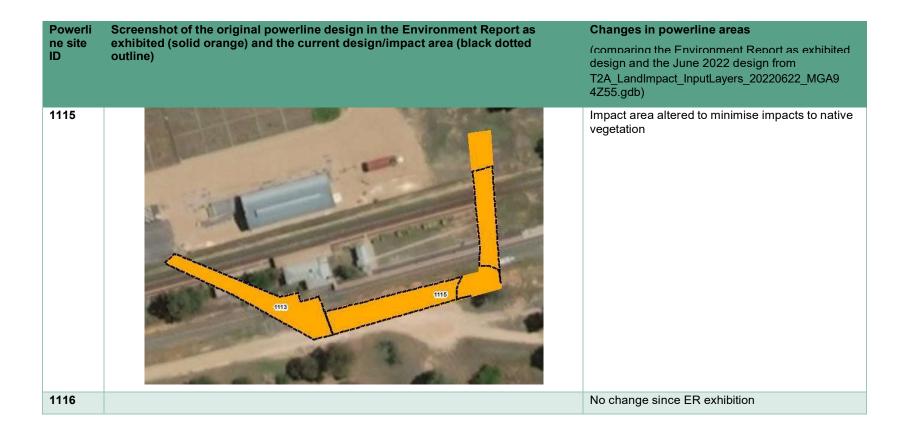
Screenshot of the original powerline design in the Environment Report as Changes in powerline areas Powerli exhibited (solid orange) and the current design/impact area (black dotted ne site (comparing the Environment Report as exhibited outline) ID design and the June 2022 design from T2A LandImpact InputLayers 20220622 MGA9 4Z55.gdb) 1101 Impact area altered to minimise impacts to native vegetation 1102 No change since ER exhibition 1103 No change since ER exhibition 1104 Impact removed through scope refinement



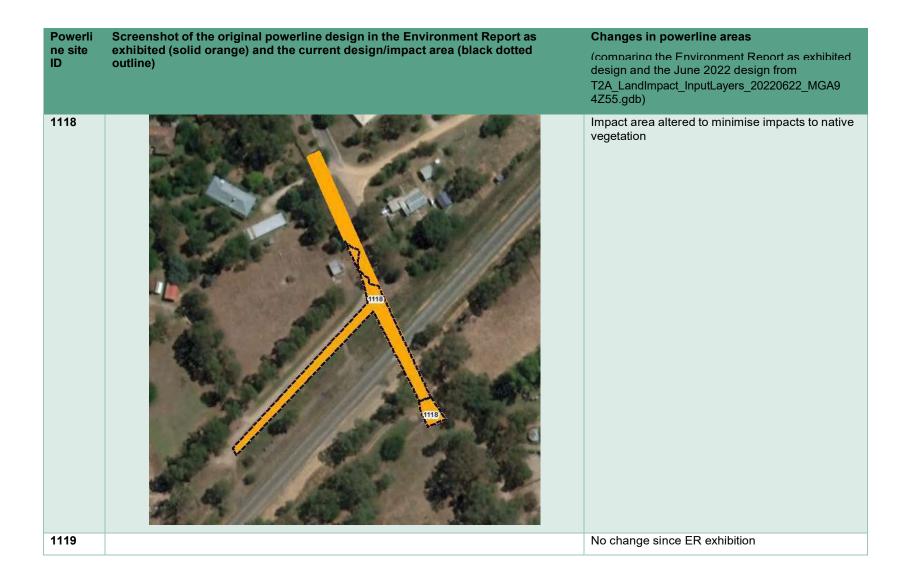


Powerli ne site ID	Screenshot of the original powerline design in the Environment Report as exhibited (solid orange) and the current design/impact area (black dotted outline)	Changes in powerline areas (comparing the Environment Report as exhibited design and the June 2022 design from T2A_LandImpact_InputLayers_20220622_MGA9 4Z55.gdb)
1108		Impact area altered to minimise impacts to native vegetation
1109		Impact removed through scope refinement

Screenshot of the original powerline design in the Environment Report as Changes in powerline areas Powerli exhibited (solid orange) and the current design/impact area (black dotted ne site (comparing the Environment Report as exhibited ID outline) design and the June 2022 design from T2A LandImpact InputLayers 20220622 MGA9 4Z55.gdb) 1110 Impact area altered to minimise impacts to native vegetation 1111 Impact removed through scope refinement No change since ER exhibition 1112 1113 No change since ER exhibition







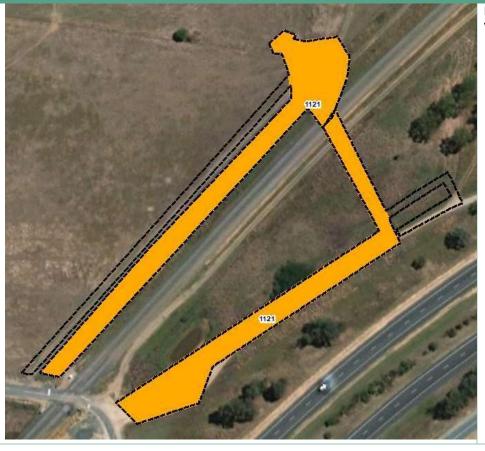
Powerline site ID Screenshot of the original powerline design in the Environment Report as exhibited (solid orange) and the current design/impact area (black dotted outline) Changes in powerline areas (comparing the Environment Report as exhibited design and the June 2022 design from T2A_LandImpact_inputLayers_20220622_MGA9 4Z55.gdb) Impact area altered to minimise impacts to native vegetation

Powerli ne site ID Screenshot of the original powerline design in the Environment Report as exhibited (solid orange) and the current design/impact area (black dotted outline)

Changes in powerline areas

(comparing the Environment Report as exhibited design and the June 2022 design from T2A_LandImpact_InputLayers_20220622_MGA9 4Z55.gdb)

1121



Impact area altered to minimise impacts to native vegetation

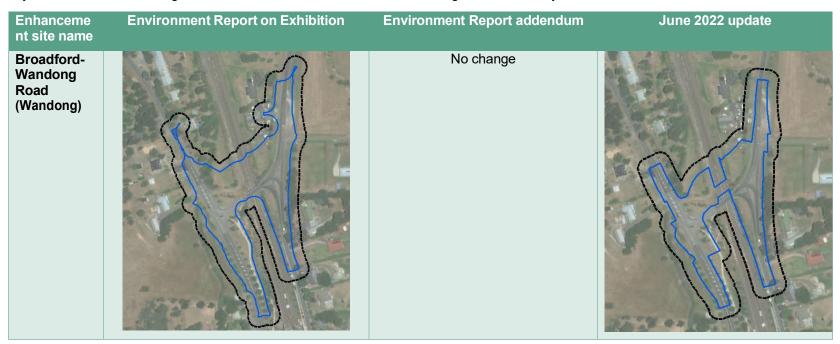
Powerli		Changes in powerline areas
ne site ID		(comparing the Environment Report as exhibited design and the June 2022 design from T2A_LandImpact_InputLayers_20220622_MGA9 4Z55.gdb)
1207		Impact removed through scope refinement
1122		No change since ER exhibition
1123		No change since ER exhibition
1124		No change since ER exhibition

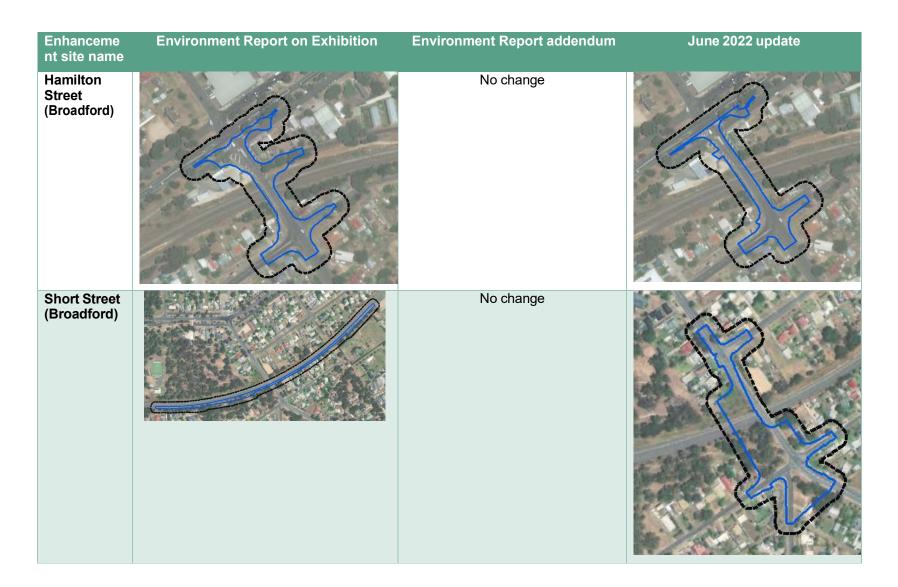
Screenshot of the original powerline design in the Environment Report as Changes in powerline areas Powerli exhibited (solid orange) and the current design/impact area (black dotted ne site (comparing the Environment Report as exhibited ID outline) design and the June 2022 design from T2A LandImpact InputLayers 20220622 MGA9 4Z55.gdb) 1125 Impact area altered to minimise impacts to native vegetation

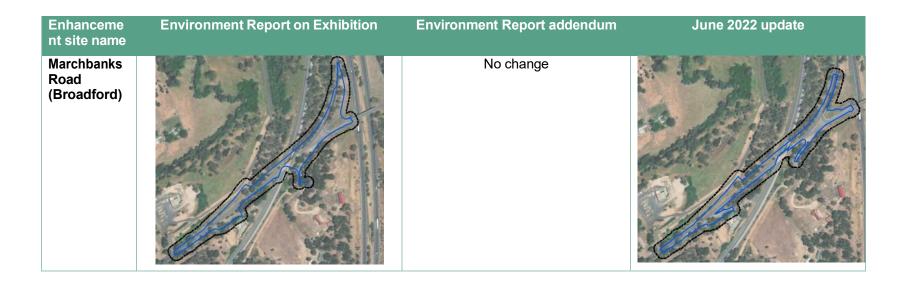
^{*}Powerline sites have been removed since the public exhibition of the Environment Report, due to a scope reduction.

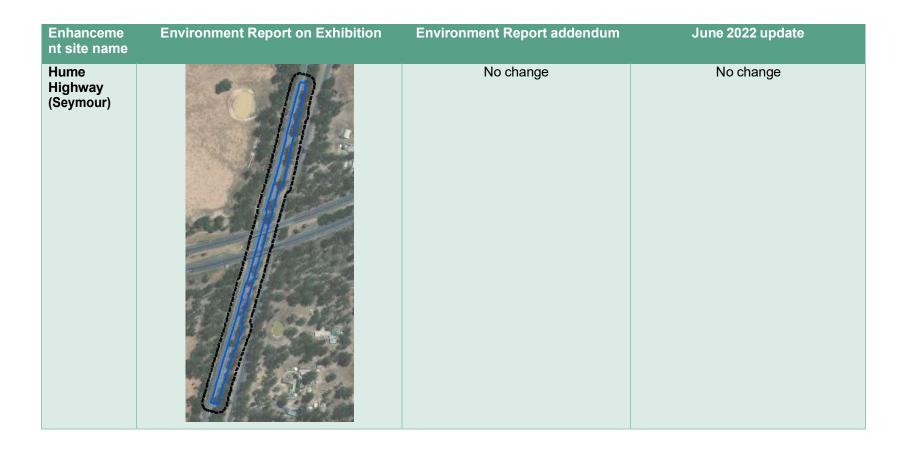
ENHANCEMENT SITES

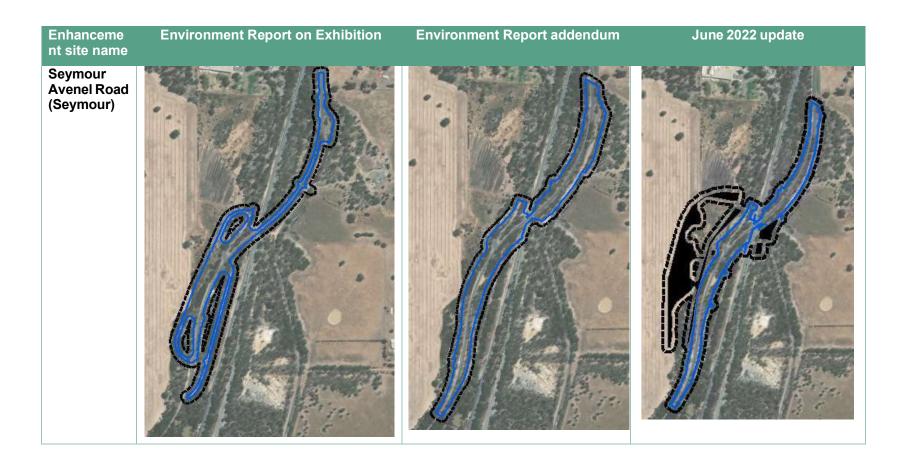
Key: blue line = reference design; black dotted line = 15 m buffer on reference design; solid black = laydown areas

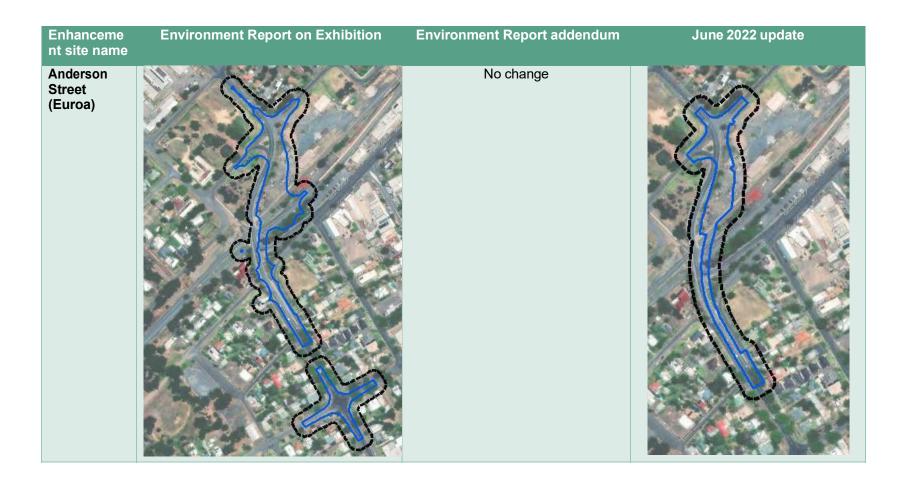


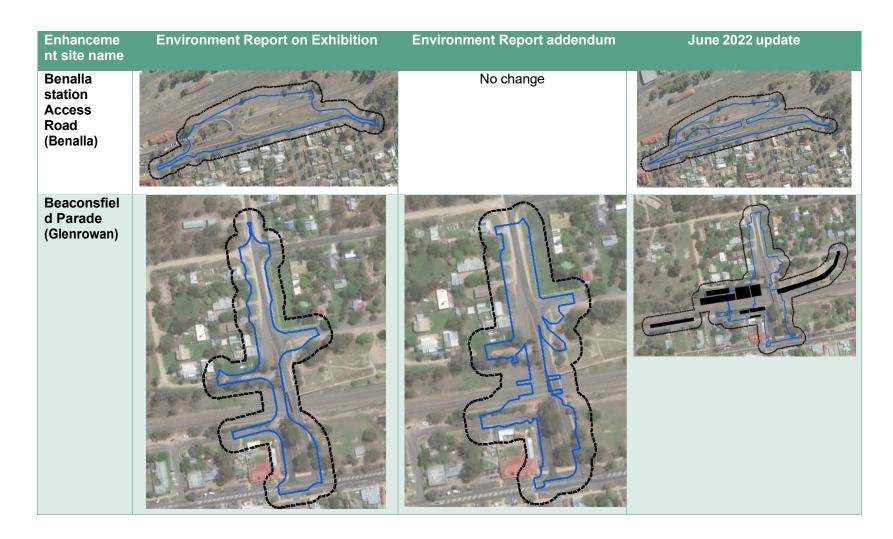


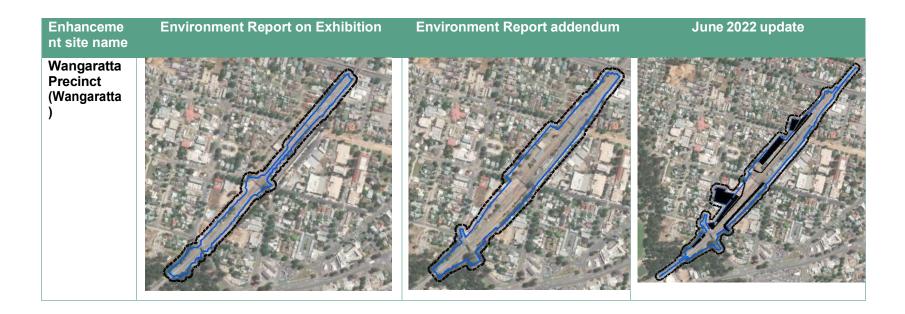


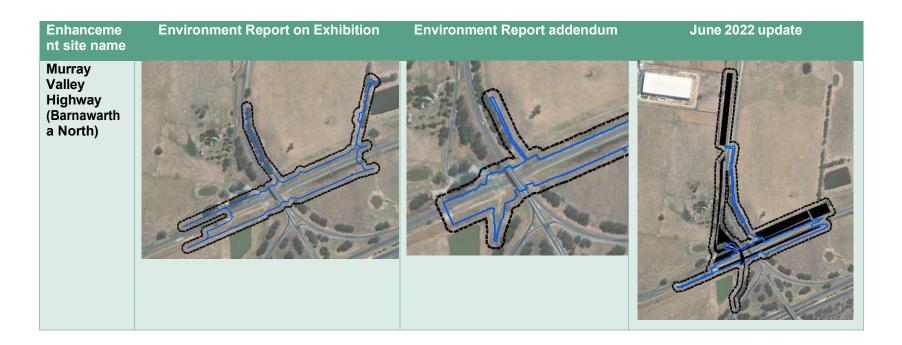












Attachment 2 - Native Vegetation Removal Report

Native vegetation removal report

This report provides information to support an application to remove, destroy or lop native vegetation in accordance with the *Guidelines for the removal, destruction or lopping of native vegetation*. The report **is not an assessment by DELWP** of the proposed native vegetation removal. Native vegetation information and offset requirements have been determined using spatial data provided by the applicant or their consultant.

Date of issue: 04/07/2022 Report ID: ACM_2022_008

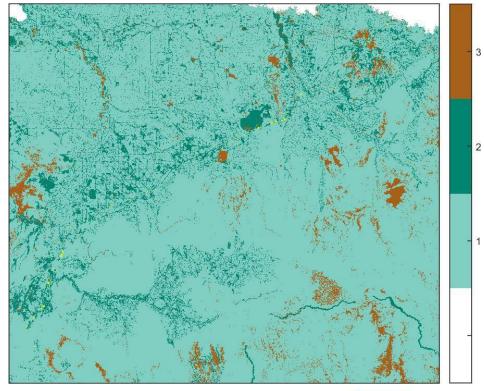
Time of issue: 4:00 pm

Project ID	ENSYM_Powerlines_Enhancement_sites_SC9_v4_23June2022
------------	--

Assessment pathway

Assessment pathway	Detailed Assessment Pathway
Extent including past and proposed	27.900 ha
Extent of past removal	0.000 ha
Extent of proposed removal	27.900 ha
No. Large trees proposed to be removed	102
Location category of proposed removal	Location 2 The native vegetation is in an area mapped as an endangered Ecological Vegetation Class (as per the statewide EVC map). Removal of less than 0.5 hectares of native vegetation in this location will not have a significant impact on any habitat for a rare or threatened species.

1. Location map





Native vegetation removal report

Offset requirements if a permit is granted

Any approval granted will include a condition to obtain an offset that meets the following requirements:

General offset amount ¹	15.335 general habitat units
Vicinity	Goulburn Broken, North East, Port Phillip and Westernport Catchment Management Authority (CMA) or Benalla Rural City, Indigo Shire, Mitchell Shire, Strathbogie Shire, Wangaratta Rural City, Wodonga City Council
Minimum strategic biodiversity value score ²	0.495
Large trees	102 large trees

NB: values within tables in this document may not add to the totals shown above due to rounding

Appendix 1 includes information about the native vegetation to be removed

Appendix 2 includes information about the rare or threatened species mapped at the site.

Appendix 3 includes maps showing native vegetation to be removed and extracts of relevant species habitat importance maps

¹ The general offset amount required is the sum of all general habitat units in Appendix 1.

² Minimum strategic biodiversity score is 80 per cent of the weighted average score across habitat zones where a general offset is required

Native vegetation removal report

Next steps

Any proposal to remove native vegetation must meet the application requirements of the Detailed Assessment Pathway and it will be assessed under the Detailed Assessment Pathway.

If you wish to remove the mapped native vegetation you are required to apply for a permit from your local council. Council will refer your application to DELWP for assessment, as required. **This report is not a referral assessment by DELWP.**

This *Native vegetation removal report* must be submitted with your application for a permit to remove, destroy or lop native vegetation.

Refer to the *Guidelines for the removal, destruction or lopping of native* vegetation (the Guidelines) for a full list of application requirements This report provides information that meets the following application requirements:

- The assessment pathway and reason for the assessment pathway
- A description of the native vegetation to be removed (partly met)
- Maps showing the native vegetation and property (partly met)
- Information about the impacts on rare or threatened species.
- The offset requirements determined in accordance with section 5 of the Guidelines that apply if approval is granted to remove native vegetation.

Additional application requirements must be met including:

- Topographical and land information
- Recent dated photographs
- Details of past native vegetation removal
- An avoid and minimise statement
- A copy of any Property Vegetation Plan that applies
- A defendable space statement as applicable
- A statement about the Native Vegetation Precinct Plan as applicable
- A site assessment report including a habitat hectare assessment of any patches of native vegetation and details of trees
- An offset statement that explains that an offset has been identified and how it will be secured.

© The State of Victoria Department of Environment, Land, Water and Planning Melbourne 2022

This work is licensed under a Creative Commons Attribution 4.0 International licence. You are free to re-use the work under that licence, on the condition that you credit the State of Victoria as author. The licence does not apply to any images, photographs or branding, including the Victorian Coat of Arms, the Victorian Government logo and the Department of Environment, Land, Water and Planning logo. To view a copy of this licence, visit http://creativecommons.org/licenses/by/34.0/au/deed.en

Authorised by the Victorian Government, 8 Nicholson Street, East Melbourne.

For more information contact the DELWP Customer Service Centre 136 186

www.delwp.vic.gov.au

Disclaimer

This publication may be of assistance to you but the State of Victoria and its employees do not guarantee that the publication is without flaw of any kind or is wholly appropriate for your particular purposes and therefore disclaims all liability for any error, loss or other consequence which may arise from you relying on any information in this publication.

Obtaining this publication does not guarantee that an application will meet the requirements of Clauses 52.16 or 52.17 of the Victoria Planning Provisions and Victorian planning schemes or that a permit to remove native vegetation will be granted.

Notwithstanding anything else contained in this publication, you must ensure that you comply with all relevant laws, legislation, awards or orders and that you obtain and comply with all permits, approvals and the like that affect, are applicable or are necessary to undertake any action to remove, lop or destroy or otherwise deal with any native vegetation or that apply to matters within the scope of Clauses 52.16 or 52.17 of the Victoria Planning Provisions and Victorian planning schemes.

Appendix 1: Description of native vegetation to be removed

The species-general offset test was applied to your proposal. This test determines if the proposed removal of native vegetation has a proportional impact on any rare or threatened species habitats above the species offset threshold. The threshold is set at 0.005 per cent of the mapped habitat value for a species. When the proportional impact is above the species offset threshold a species offset is required. This test is done for all species mapped at the site. Multiple species offsets will be required if the species offset threshold is exceeded for multiple species.

Where a zone requires species offset(s), the species habitat units for each species in that zone is calculated by the following equation in accordance with the Guidelines:

Species habitat units = extent x condition x species landscape factor x 2, where the species landscape factor = 0.5 + (habitat importance score/2)

The species offset amount(s) required is the sum of all species habitat units per zone

Where a zone does not require a species offset, the general habitat units in that zone is calculated by the following equation in accordance with the Guidelines:

General habitat units = extent x condition x general landscape factor x 1.5, where the general landscape factor = 0.5 + (strategic biodiversity value score/2)

The general offset amount required is the sum of all general habitat units per zone.

Native vegetation to be removed

	Informat	ion provided by	or on behalf of the	ne applica	nt in a GIS fi	le	Information calculated by EnSym						
Zone	Туре	BioEVC	BioEVC conservation status	Large tree(s)	Partial removal	Condition score	Polygon Extent	Extent without overlap	SBV score	HI score	Habitat units	Offset type	
1-HZ 11	Patch	vvp_0821	Depleted	0	no	0.150	0.002	0.002	0.370		0.000	General	
2-HZ 12	Patch	vvp_0821	Depleted	0	no	0.150	0.002	0.002	0.370		0.000	General	
3-HZ 22	Patch	cvu_0127	Vulnerable	0	no	0.340	0.016	0.016	0.200		0.005	General	
4-HZ 15	Patch	cvu_0018	Vulnerable	0	no	0.240	0.011	0.011	0.650		0.003	General	
5-HZ 462	Patch	cvu_0023	Depleted	0	no	0.800	0.010	0.010	0.480		0.009	General	
6-HZ 463	Patch	cvu_0018	Vulnerable	0	no	0.800	0.010	0.010	0.667		0.010	General	
7-HZ 14	Patch	cvu_0055	Endangered	0	no	0.370	0.017	0.017	0.630		0.008	General	

	Informa	tion provided by	or on behalf of ti	ne applica	nt in a GIS f	ile	Information calculated by EnSym							
Zone	Туре	BioEVC	BioEVC conservation status	Large tree(s)	Partial removal	Condition score	Polygon Extent	Extent without overlap	SBV score	HI score	Habitat units	Offset type		
8-HZ 36	Patch	cvu_0018	Vulnerable	0	no	0.600	0.021	0.021	0.630		0.016	General		
9-HZ 40	Patch	cvu_0047	Vulnerable	2	no	0.440	0.059	0.059	0.635		0.032	General		
10- HZ 41	Patch	cvu_0047	Vulnerable	0	no	0.290	0.006	0.006	0.620		0.002	General		
11- HZ 43	Patch	cvu_0047	Vulnerable	3	no	0.460	0.333	0.333	0.620		0.186	General		
12- HZ 431	Patch	cvu_0047	Vulnerable	0	no	0.550	0.138	0.138	0.733		0.099	General		
13- HZ 431	Patch	cvu_0047	Vulnerable	0	no	0.550	0.052	0.052	0.540		0.033	General		
14- HZ 431	Patch	cvu_0047	Vulnerable	0	no	0.550	0.013	0.013	0.540		0.008	General		
15- HZ 28	Patch	cvu_0055	Endangered	0	no	0.530	0.016	0.016	0.510		0.010	General		
16- HZ 209	Patch	cvu_0175_61	Endangered	0	no	0.580	0.129	0.129	0.597		0.090	General		
17- HZ 209	Patch	cvu_0175_61	Endangered	0	no	0.580	0.001	0.001	0.510		0.000	General		
18- HZ 268	Patch	cvu_0175_61	Endangered	0	no	0.290	0.022	0.022	0.100		0.005	General		

	Informa	ation provided by	or on behalf of the	ne applica	nt in a GIS f	ile	Information calculated by EnSym							
Zone	Туре	BioEVC	BioEVC conservation status	Large tree(s)	Partial removal	Condition score	Polygon Extent	Extent without overlap	SBV score	HI score	Habitat units	Offset type		
19- HZ 259	Patch	cvu_0055	Endangered	0	no	0.110	0.004	0.004	0.100		0.000	General		
20- HZ 7	Patch	cvu_0175_61	Endangered	0	no	0.590	0.017	0.017	0.640		0.013	General		
21- HZ 7	Patch	cvu_0175_61	Endangered	0	no	0.590	0.001	0.001	0.640		0.001	General		
22- HZ 7	Patch	cvu_0175_61	Endangered	0	no	0.590	0.000	0.000	0.640		0.000	General		
23- HZ 10	Patch	cvu_0175_61	Endangered	0	no	0.600	0.009	0.009	0.640		0.007	General		
24- HZ 300	Patch	cvu_0055	Endangered	0	no	0.330	0.000	0.000	0.640		0.000	General		
25- HZ 319	Patch	cvu_0175_61	Endangered	0	no	0.340	0.004	0.004	0.640		0.002	General		
26- HZ 341	Patch	cvu_0055	Endangered	0	no	0.310	0.025	0.025	0.770		0.010	General		
27- HZ 464	Patch	cvu_0055	Endangered	0	no	0.490	0.059	0.059	0.754		0.038	General		
28- HZ 464	Patch	cvu_0055	Endangered	0	no	0.490	0.002	0.002	0.770		0.001	General		
29- HZ 464	Patch	cvu_0055	Endangered	0	no	0.490	0.001	0.001	0.770		0.001	General		

	Informa	ntion provided by	or on behalf of ti	ne applica	nt in a GIS f	ile	Information calculated by EnSym							
Zone	Туре	BioEVC	BioEVC conservation status	Large tree(s)	Partial removal	Condition score	Polygon Extent	Extent without overlap	SBV score	HI score	Habitat units	Offset type		
30- HZ 24	Patch	cvu_0175_61	Endangered	0	no	0.370	0.006	0.006	0.740		0.003	General		
31- HZ 23	Patch	cvu_0055	Endangered	0	no	0.680	0.000	0.000	0.630		0.000	General		
32- HZ 23	Patch	cvu_0055	Endangered	0	no	0.680	0.055	0.055	0.620		0.046	General		
33- HZ 23	Patch	cvu_0055	Endangered	0	no	0.680	0.063	0.063	0.620		0.052	General		
34- HZ 196	Patch	cvu_0055	Endangered	0	no	0.400	0.002	0.002	0.510		0.001	General		
35- HZ 447	Patch	cvu_0055	Endangered	0	no	0.720	0.000	0.000	0.870		0.000	General		
36- HZ 204	Patch	vriv0056	Vulnerable	1	no	0.470	0.059	0.059	0.880		0.039	General		
37- HZ 205	Patch	vriv0056	Vulnerable	0	no	0.460	0.019	0.019	0.880		0.013	General		
38- HZ 206	Patch	vriv0056	Vulnerable	0	no	0.500	0.001	0.001	0.410		0.001	General		
39- HZ 206	Patch	vriv0056	Vulnerable	0	no	0.500	0.016	0.016	0.410		0.008	General		

	Informa	tion provided by	or on behalf of t	nt in a GIS f	ile	Information calculated by EnSym							
Zone	Туре	BioEVC	BioEVC conservation status	Large tree(s)	Partial removal	Condition score	Polygon Extent	Extent without overlap	SBV score	HI score	Habitat units	Offset type	
40- HZ 207	Patch	vriv0056	Vulnerable	0	no	0.370	0.017	0.017	0.630		0.008	General	
41- HZ 208	Patch	vriv0056	Vulnerable	0	no	0.460	0.005	0.005	0.880		0.003	General	
42- HZ 74	Patch	cvu_0068	Endangered	0	no	0.230	0.021	0.021	0.270		0.005	General	
43- HZ 92	Patch	vriv0803	Endangered	0	no	0.680	0.020	0.020	0.530		0.016	General	
44- HZ 94	Patch	vriv0803	Endangered	0	no	0.390	0.011	0.011	0.530		0.005	General	
45- HZ 470	Patch	vriv0803	Endangered	0	no	0.680	0.010	0.010	0.530		0.008	General	
46- HZ 470	Patch	vriv0803	Endangered	0	no	0.680	0.000	0.000	0.530		0.000	General	
47- HZ 33	Patch	vriv0175_61	Endangered	1	no	0.610	0.019	0.019	0.980		0.017	General	
48- HZ 33	Patch	vriv0175_61	Endangered	0	no	0.610	0.014	0.014	0.980		0.013	General	
49- HZ 34	Patch	vriv0175_61	Endangered	0	no	0.470	0.031	0.031	0.980		0.022	General	

	Informa	tion provided by	or on behalf of ti	nt in a GIS f	ile	Information calculated by EnSym						
Zone	Туре	BioEVC	BioEVC conservation status	Large tree(s)	Partial removal	Condition score	Polygon Extent	Extent without overlap	SBV score	HI score	Habitat units	Offset type
50- HZ 35	Patch	vriv0175_61	Endangered	0	no	0.610	0.030	0.030	0.980		0.027	General
51- HZ 39	Patch	vriv0175_61	Endangered	1	no	0.610	0.045	0.045	0.980		0.041	General
52- HZ 197	Patch	vriv0175_61	Endangered	0	no	0.600	0.000	0.000	0.980		0.000	General
53- HZ 197	Patch	vriv0175_61	Endangered	0	no	0.600	0.038	0.038	0.980		0.034	General
54- HZ 95	Patch	vriv0803	Endangered	1	no	0.690	0.058	0.058	0.580		0.047	General
55- HZ 96	Patch	vriv0803	Endangered	0	no	0.430	0.023	0.023	0.580		0.012	General
56- HZ 97	Patch	vriv0803	Endangered	2	no	0.660	0.047	0.047	0.580		0.037	General
57- HZ 98	Patch	vriv0803	Endangered	0	no	0.690	0.005	0.005	0.791		0.004	General
58- HZ 99	Patch	vriv0803	Endangered	0	no	0.680	0.007	0.007	0.760		0.006	General
59- HZ 100	Patch	vriv0803	Endangered	0	no	0.520	0.021	0.021	0.760		0.015	General

	Informa	tion provided by	or on behalf of t	nt in a GIS f	ile	Information calculated by EnSym							
Zone	Туре	BioEVC	BioEVC conservation status	Large tree(s)	Partial removal	Condition score	Polygon Extent	Extent without overlap	SBV score	HI score	Habitat units	Offset type	
60- HZ 473	Patch	vriv0803	Endangered	0	no	0.690	0.019	0.019	0.873		0.018	General	
61- HZ 37	Patch	vriv0175_61	Endangered	0	no	0.510	0.012	0.012	0.737		0.008	General	
62- HZ 38	Patch	vriv0175_61	Endangered	0	no	0.660	0.005	0.005	0.990		0.005	General	
63- HZ 476	Patch	vriv0175_61	Endangered	0	no	0.570	0.018	0.018	0.820		0.014	General	
64- HZ 510	Patch	vriv0175_61	Endangered	0	no	0.350	0.070	0.070	0.990		0.036	General	
65- HZ 105	Patch	vriv0056	Vulnerable	0	no	0.320	0.006	0.006	0.880		0.003	General	
66- HZ 107	Patch	vriv0803	Endangered	0	no	0.350	0.014	0.014	0.880		0.007	General	
67- HZ 42	Patch	vriv0803	Endangered	4	no	0.390	0.115	0.115	0.470		0.049	General	
68- HZ 44	Patch	vriv0803	Endangered	0	no	0.240	0.003	0.003	0.470		0.001	General	
69- HZ 47	Patch	vriv0819	Vulnerable	0	no	0.480	0.043	0.043	0.470		0.023	General	

	Informa	tion provided by	or on behalf of ti	ne applica	nt in a GIS f	ile	Information calculated by EnSym							
Zone	Туре	BioEVC	BioEVC conservation status	Large tree(s)	Partial removal	Condition score	Polygon Extent	Extent without overlap	SBV score	HI score	Habitat units	Offset type		
70- HZ 109	Patch	vriv0055_61	Endangered	0	no	0.200	0.012	0.012	0.250		0.002	General		
71- HZ 110	Patch	vriv0055_61	Endangered	0	no	0.210	0.023	0.023	0.250		0.004	General		
72- HZ 46	Patch	vriv0803	Endangered	0	no	0.600	0.031	0.031	0.930		0.027	General		
73- HZ 46	Patch	vriv0803	Endangered	0	no	0.600	0.000	0.000	0.930		0.000	General		
74- HZ 111	Patch	vriv0803	Endangered	0	no	0.340	0.009	0.009	0.830		0.004	General		
75- HZ 112	Patch	vriv0803	Endangered	0	no	0.310	0.023	0.023	0.610		0.009	General		
76- HZ 477	Patch	vriv0803	Endangered	0	no	0.600	0.038	0.038	0.610		0.028	General		
77- HZ 114	Patch	vriv0055_61	Endangered	0	no	0.480	0.023	0.023	0.460		0.012	General		
78- HZ 115	Patch	vriv0055_61	Endangered	0	no	0.430	0.062	0.062	0.729		0.034	General		
79- HZ 116	Patch	vriv0819	Vulnerable	0	no	0.610	0.005	0.005	0.460		0.003	General		

	Informa	tion provided by	or on behalf of the	nt in a GIS f	ile	Information calculated by EnSym						
Zone	Туре	BioEVC	BioEVC conservation status	Large tree(s)	Partial removal	Condition score	Polygon Extent	Extent without overlap	SBV score	HI score	Habitat units	Offset type
80- HZ 117	Patch	vriv0055_61	Endangered	0	no	0.430	0.004	0.004	0.460		0.002	General
81- HZ 216	Patch	vriv0803	Endangered	0	no	0.200	0.027	0.027	0.460		0.006	General
82- HZ 216	Patch	vriv0803	Endangered	0	no	0.200	0.001	0.001	0.460		0.000	General
83- HZ 216	Patch	vriv0803	Endangered	0	no	0.200	0.002	0.002	0.460		0.001	General
85- HZ 50	Patch	vriv0803	Endangered	1	no	0.540	0.030	0.030	0.950		0.023	General
86- HZ 51	Patch	vriv0803	Endangered	0	no	0.620	0.007	0.007	0.930		0.007	General
87- HZ 51	Patch	vriv0803	Endangered	0	no	0.620	0.005	0.005	0.960		0.004	General
88- HZ 480	Patch	vriv0055_61	Endangered	0	no	0.390	0.018	0.018	0.430		0.007	General
89- HZ 480	Patch	vriv0055_61	Endangered	0	no	0.390	0.003	0.003	0.430		0.001	General
90- HZ 480	Patch	vriv0055_61	Endangered	0	no	0.390	0.007	0.007	0.430		0.003	General

	Informa	tion provided by	or on behalf of the	he applica	nt in a GIS f	ile				Informa	ation calcu	ılated by EnSym
Zone	Туре	BioEVC	BioEVC conservation status	Large tree(s)	Partial removal	Condition score	Polygon Extent	Extent without overlap	SBV score	HI score	Habitat units	Offset type
91- HZ 480	Patch	vriv0055_61	Endangered	0	no	0.390	0.002	0.002	0.430		0.001	General
92- HZ 122	Patch	vriv0803	Endangered	0	no	0.270	0.002	0.002	0.240		0.001	General
93- HZ 122	Patch	vriv0803	Endangered	0	no	0.270	0.000	0.000	0.240		0.000	General
94- HZ 128	Patch	vriv0803	Endangered	0	no	0.250	0.032	0.032	0.790		0.011	General
95- HZ 513	Patch	vriv0821	Depleted	0	no	0.400	0.069	0.069	0.480		0.031	General
96- HZ 514	Patch	vriv0055_61	Endangered	0	no	0.530	0.101	0.101	0.783		0.071	General
97- HZ 515	Patch	vriv0821	Depleted	0	no	0.400	0.030	0.030	0.790		0.016	General
98- HZ 515	Patch	vriv0821	Depleted	0	no	0.400	0.086	0.086	0.770		0.046	General
99- HZ 516	Patch	vriv0055_61	Endangered	0	no	0.450	0.026	0.026	0.860		0.016	General
100- HZ 130	Patch	vriv0055_61	Endangered	0	no	0.360	0.060	0.060	0.803		0.029	General

	Informa	tion provided by	or on behalf of t	he applica	nt in a GIS f	ile				Informa	ation calcı	ılated by EnSym
Zone	Туре	BioEVC	BioEVC conservation status	Large tree(s)	Partial removal	Condition score	Polygon Extent	Extent without overlap	SBV score	HI score	Habitat units	Offset type
101- HZ 131	Patch	vriv0055_61	Endangered	0	no	0.330	0.049	0.049	0.572		0.019	General
102- HZ 134	Patch	vriv0055_61	Endangered	0	no	0.240	0.005	0.005	0.610		0.002	General
103- HZ 136	Patch	vriv0055_61	Endangered	0	no	0.240	0.007	0.007	0.610		0.002	General
104- HZ 139	Patch	vriv0055_61	Endangered	0	no	0.390	0.006	0.006	0.410		0.002	General
105- HZ 140	Patch	vriv0055_61	Endangered	0	no	0.410	0.029	0.029	0.645		0.015	General
106- HZ 481	Patch	vriv0055_61	Endangered	0	no	0.600	0.019	0.019	0.441		0.012	General
107- HZ 53	Patch	vriv0821	Depleted	0	no	0.580	0.097	0.097	0.650		0.069	General
109- HZ 55	Patch	vriv0821	Depleted	0	no	0.590	0.027	0.027	0.660		0.020	General
110- HZ 57	Patch	vriv0803	Endangered	0	no	0.340	2.394	2.394	0.702		1.039	General
111- HZ 192	Patch	vriv0803	Endangered	0	no	0.650	0.002	0.002	0.670		0.002	General

	Informat	ion provided by	y or on behalf of t	ne applica	nt in a GIS f	ile				Informa	ation calcı	ılated by EnSym
Zone	Туре	BioEVC	BioEVC conservation status	Large tree(s)	Partial removal	Condition score	Polygon Extent	Extent without overlap	SBV score	HI score	Habitat units	Offset type
112- HZ 192	Patch	vriv0803	Endangered	0	no	0.650	0.003	0.003	0.670		0.003	General
113- HZ 59	Patch	vriv0803	Endangered	0	no	0.510	0.165	0.165	0.571		0.099	General
114- HZ 59	Patch	vriv0803	Endangered	0	no	0.510	0.001	0.001	0.780		0.001	General
115- HZ 59	Patch	vriv0803	Endangered	0	no	0.510	0.015	0.015	0.210		0.007	General
116- HZ 59	Patch	vriv0803	Endangered	0	no	0.510	0.005	0.005	0.280		0.002	General
117- HZ 59	Patch	vriv0803	Endangered	0	no	0.510	0.002	0.002	0.890		0.001	General
118- HZ 59	Patch	vriv0803	Endangered	0	no	0.510	0.001	0.001	0.890		0.001	General
119- HZ 59	Patch	vriv0803	Endangered	0	no	0.510	0.078	0.078	0.870		0.056	General
120- HZ 59	Patch	vriv0803	Endangered	0	no	0.510	0.007	0.007	0.770		0.005	General
121- HZ 59	Patch	vriv0803	Endangered	0	no	0.510	0.001	0.001	0.770		0.001	General

	Informat	tion provided by	y or on behalf of ti	ne applica	nt in a GIS f	ile				Informa	ation calcı	ılated by EnSym
Zone	Туре	BioEVC	BioEVC conservation status	Large tree(s)	Partial removal	Condition score	Polygon Extent	Extent without overlap	SBV score	HI score	Habitat units	Offset type
122- HZ 59	Patch	vriv0803	Endangered	0	no	0.510	0.002	0.002	0.770		0.002	General
123- HZ 59	Patch	vriv0803	Endangered	0	no	0.510	0.002	0.002	0.770		0.001	General
124- HZ 60	Patch	vriv0803	Endangered	0	no	0.580	0.008	0.008	0.220		0.004	General
125- HZ 60	Patch	vriv0803	Endangered	0	no	0.580	0.007	0.007	0.220		0.004	General
126- HZ 60	Patch	vriv0803	Endangered	0	no	0.580	0.072	0.072	0.220		0.038	General
127- HZ 61	Patch	vriv0819	Vulnerable	0	no	0.590	0.030	0.030	0.220		0.016	General
128- HZ 63	Patch	vriv0803	Endangered	0	no	0.520	0.272	0.272	0.595		0.169	General
129- HZ 64	Patch	vriv0803	Endangered	0	no	0.570	0.003	0.003	0.220		0.001	General
130- HZ 65	Patch	vriv0821	Depleted	0	no	0.560	0.005	0.005	0.657		0.004	General
131- HZ 141	Patch	nis_0803	Endangered	0	no	0.370	0.130	0.130	0.714		0.062	General

	Informat	tion provided by	or on behalf of the	he applica	nt in a GIS f	ile				Informa	ation calcı	ılated by EnSym
Zone	Туре	BioEVC	BioEVC conservation status	Large tree(s)	Partial removal	Condition score	Polygon Extent	Extent without overlap	SBV score	HI score	Habitat units	Offset type
132- HZ 142	Patch	nis_0803	Endangered	0	no	0.370	0.214	0.214	0.766		0.105	General
133- HZ 142	Patch	nis_0803	Endangered	0	no	0.370	0.015	0.015	0.770		0.008	General
134- HZ 143	Patch	nis_0803	Endangered	0	no	0.670	0.003	0.003	0.530		0.002	General
135- HZ 143	Patch	nis_0803	Endangered	0	no	0.670	0.001	0.001	0.530		0.001	General
136- HZ 143	Patch	nis_0803	Endangered	0	no	0.670	0.003	0.003	0.760		0.003	General
137- HZ 143	Patch	nis_0803	Endangered	0	no	0.670	0.012	0.012	0.760		0.010	General
138- HZ 143	Patch	nis_0803	Endangered	0	no	0.670	0.002	0.002	0.770		0.002	General
139- HZ 143	Patch	nis_0803	Endangered	0	no	0.670	0.001	0.001	0.770		0.001	General
140- HZ 146	Patch	vriv0803	Endangered	0	no	0.360	0.016	0.016	0.630		0.007	General
141- HZ 193	Patch	vriv0803	Endangered	0	no	0.370	0.089	0.089	0.575		0.039	General

	Informa	tion provided by	or on behalf of the	he applica	nt in a GIS f	ile				Informa	ation calcu	lated by EnSym
Zone	Туре	BioEVC	BioEVC conservation status	Large tree(s)	Partial removal	Condition score	Polygon Extent	Extent without overlap	SBV score	HI score	Habitat units	Offset type
142- HZ 484	Patch	nis_0803	Endangered	0	no	0.670	0.060	0.060	0.770		0.053	General
143- HZ 148	Patch	vriv0061	Vulnerable	0	no	0.630	0.013	0.013	0.790		0.011	General
144- HZ 193	Patch	vriv0803	Endangered	0	no	0.370	0.000	0.000	0.630		0.000	General
145- HZ 193	Patch	vriv0803	Endangered	0	no	0.370	0.005	0.005	0.609		0.002	General
146- HZ 194	Patch	vriv0061	Vulnerable	0	no	0.620	0.013	0.013	0.790		0.011	General
147- HZ 194	Patch	vriv0061	Vulnerable	0	no	0.620	0.038	0.038	0.790		0.032	General
148- HZ 194	Patch	vriv0061	Vulnerable	0	no	0.620	0.123	0.123	0.676		0.096	General
149- HZ 485	Patch	vriv0061	Vulnerable	0	no	0.500	0.003	0.003	0.630		0.002	General
150- HZ 144	Patch	nis_0175_61	Endangered	0	no	0.540	0.008	0.008	0.870		0.006	General
151- HZ 144	Patch	nis_0175_61	Endangered	0	no	0.540	0.362	0.362	0.792		0.263	General

	Informa	ntion provided by	or on behalf of the	he applica	nt in a GIS f	ile				Informa	ation calcu	lated by EnSym
Zone	Туре	BioEVC	BioEVC conservation status	Large tree(s)	Partial removal	Condition score	Polygon Extent	Extent without overlap	SBV score	HI score	Habitat units	Offset type
152- HZ 144	Patch	nis_0175_61	Endangered	0	no	0.540	0.001	0.001	0.890		0.000	General
153- HZ 144	Patch	nis_0175_61	Endangered	0	no	0.540	0.001	0.001	0.890		0.001	General
154- HZ 144	Patch	nis_0175_61	Endangered	0	no	0.540	0.001	0.001	0.890		0.000	General
155- HZ 358	Patch	nis_0175_61	Endangered	0	no	0.570	0.000	0.000	0.450		0.000	General
156- HZ 358	Patch	nis_0175_61	Endangered	0	no	0.570	0.000	0.000	0.450		0.000	General
157- HZ 358	Patch	nis_0175_61	Endangered	0	no	0.570	0.001	0.001	0.667		0.000	General
158- HZ 358	Patch	nis_0175_61	Endangered	0	no	0.570	0.048	0.048	0.770		0.037	General
159- HZ 358	Patch	nis_0175_61	Endangered	0	no	0.570	0.046	0.046	0.784		0.035	General
160- HZ 358	Patch	nis_0175_61	Endangered	0	no	0.570	0.014	0.014	0.810		0.011	General
161- HZ 358	Patch	nis_0175_61	Endangered	0	no	0.570	0.000	0.000	0.810		0.000	General

	Informa	ntion provided by	or on behalf of the	he applica	nt in a GIS f	ile				Informa	ation calcu	lated by EnSym
Zone	Туре	BioEVC	BioEVC conservation status	Large tree(s)	Partial removal	Condition score	Polygon Extent	Extent without overlap	SBV score	HI score	Habitat units	Offset type
162- HZ 358	Patch	nis_0175_61	Endangered	0	no	0.570	0.002	0.002	0.810		0.001	General
163- HZ 358	Patch	nis_0175_61	Endangered	0	no	0.570	0.006	0.006	0.810		0.005	General
164- HZ 488	Patch	nis_0175_61	Endangered	0	no	0.530	0.000	0.000	0.870		0.000	General
165- HZ 490	Patch	nis_0175_61	Endangered	0	no	0.440	0.000	0.000	0.883		0.000	General
166- HZ 490	Patch	nis_0175_61	Endangered	0	no	0.440	0.001	0.001	0.890		0.001	General
167- HZ 158	Patch	nis_0175_61	Endangered	0	no	0.320	0.004	0.004	0.491		0.002	General
168- HZ 147	Patch	nis_0175_61	Endangered	0	no	0.440	0.003	0.003	0.770		0.002	General
169- HZ 147	Patch	nis_0175_61	Endangered	0	no	0.440	0.059	0.059	0.770		0.035	General
170- HZ 147	Patch	nis_0175_61	Endangered	0	no	0.440	0.024	0.024	0.770		0.014	General
171- HZ 518	Patch	nis_0175_61	Endangered	0	no	0.380	0.003	0.003	0.770		0.001	General

	Informa	ntion provided by	or on behalf of the	he applica	nt in a GIS f	ile				Informa	ation calcu	lated by EnSym
Zone	Туре	BioEVC	BioEVC conservation status	Large tree(s)	Partial removal	Condition score	Polygon Extent	Extent without overlap	SBV score	HI score	Habitat units	Offset type
172- HZ 151	Patch	nis_0175_61	Endangered	0	no	0.500	0.057	0.057	0.900		0.040	General
173- HZ 66	Patch	nis_0175_61	Endangered	0	no	0.370	0.005	0.005	0.450		0.002	General
174- HZ 149	Patch	nis_0175_61	Endangered	0	no	0.590	0.016	0.016	0.446		0.010	General
175- HZ 150	Patch	nis_0175_61	Endangered	0	no	0.600	0.010	0.010	0.900		0.008	General
176- HZ 150	Patch	nis_0175_61	Endangered	0	no	0.600	0.019	0.019	0.940		0.016	General
177- HZ 159	Patch	nis_0175_61	Endangered	0	no	0.580	0.004	0.004	0.900		0.003	General
178- HZ 159	Patch	nis_0175_61	Endangered	0	no	0.580	0.007	0.007	0.940		0.006	General
179- HZ 187	Patch	nis_0175_61	Endangered	0	no	0.540	0.054	0.054	0.470		0.032	General
180- HZ 188	Patch	nis_0175_61	Endangered	0	no	0.610	0.052	0.052	0.566		0.037	General
181- HZ 189	Patch	nis_0175_61	Endangered	0	no	0.540	0.018	0.018	0.890		0.014	General

	Informa	tion provided by	or on behalf of t	he applica	nt in a GIS f	ile				Informa	ation calcu	ılated by EnSym
Zone	Туре	BioEVC	BioEVC conservation status	Large tree(s)	Partial removal	Condition score	Polygon Extent	Extent without overlap	SBV score	HI score	Habitat units	Offset type
182- HZ 160	Patch	vriv0056	Vulnerable	0	no	0.530	0.012	0.012	0.780		0.008	General
183- HZ 160	Patch	vriv0056	Vulnerable	0	no	0.530	0.025	0.025	0.780		0.018	General
184- HZ 67	Patch	vriv0803	Endangered	0	no	0.220	0.007	0.007	0.340		0.002	General
185- HZ 166	Patch	vriv0803	Endangered	0	no	0.270	0.048	0.048	0.770		0.017	General
186- HZ 169	Patch	vriv0055_61	Endangered	0	no	0.270	0.001	0.001	0.670		0.000	General
187- HZ 170	Patch	vriv0055_61	Endangered	0	no	0.270	0.022	0.022	0.670		0.008	General
188- HZ 164	Patch	vriv0803	Endangered	0	no	0.310	0.022	0.022	0.680		0.009	General
189- HZ 68	Patch	vriv0803	Endangered	0	no	0.450	0.031	0.031	0.390		0.015	General
190- HZ 68	Patch	vriv0803	Endangered	0	no	0.450	0.004	0.004	0.390		0.002	General
191- HZ 167	Patch	vriv0803	Endangered	0	no	0.460	0.102	0.102	0.390		0.049	General

	Informa	ition provided by	or on behalf of the	he applica	nt in a GIS f	ile				Informa	ation calcu	lated by EnSym
Zone	Туре	BioEVC	BioEVC conservation status	Large tree(s)	Partial removal	Condition score	Polygon Extent	Extent without overlap	SBV score	HI score	Habitat units	Offset type
192- HZ 168	Patch	vriv0819	Vulnerable	0	no	0.500	0.003	0.003	0.390		0.002	General
193- HZ 172	Patch	vriv0068	Endangered	0	no	0.380	0.034	0.034	0.930		0.019	General
194- HZ 519	Patch	vriv0068	Endangered	0	no	0.280	0.083	0.083	0.801		0.031	General
195- HZ 176	Patch	nis_0067	Endangered	0	no	0.480	0.022	0.022	0.970		0.015	General
196- HZ 178	Patch	nis_0067	Endangered	0	no	0.410	0.006	0.006	0.967		0.004	General
197- HZ 178	Patch	nis_0067	Endangered	0	no	0.410	0.013	0.013	0.970		0.008	General
198- HZ 432	Patch	nis_0067	Endangered	0	no	0.800	0.009	0.009	0.940		0.010	General
199- HZ 508	Patch	nis_0067	Endangered	0	no	0.360	0.088	0.088	0.899		0.045	General
200- HZ 182	Patch	nis_0175_61	Endangered	0	no	0.630	0.042	0.042	0.835		0.037	General
201- HZ 186	Patch	nis_0175_61	Endangered	0	no	0.520	0.146	0.146	0.887		0.108	General

	Informa	tion provided by	or on behalf of t	he applica	nt in a GIS f	ile				Informa	ation calcı	ılated by EnSym
Zone	Туре	BioEVC	BioEVC conservation status	Large tree(s)	Partial removal	Condition score	Polygon Extent	Extent without overlap	SBV score	HI score	Habitat units	Offset type
202- HZ 496	Patch	nis_0175_61	Endangered	0	no	0.520	0.021	0.021	0.770		0.015	General
203- HZ 183	Patch	vriv0067	Vulnerable	1	no	0.320	0.012	0.012	0.450		0.004	General
204- HZ 69	Patch	vriv0815	Vulnerable	2	no	0.360	0.057	0.057	0.460		0.022	General
205- HZ 70	Patch	vriv0815	Vulnerable	1	no	0.410	0.033	0.033	0.460		0.015	General
206- HZ 32	Patch	vvp_0018	Vulnerable	0	no	0.130	0.026	0.026	0.700		0.004	General
207- HZ 425	Patch	vvp_0083	Endangered	0	no	0.150	0.017	0.017	0.700		0.003	General
208- HZ 18	Patch	cvu_0047	Vulnerable	0	no	0.380	0.034	0.034	0.630		0.016	General
210- HZ 29	Patch	cvu_0175_61	Endangered	0	no	0.300	0.004	0.004	0.230		0.001	General
211- HZ 30	Patch	cvu_0175_61	Endangered	0	no	0.520	0.013	0.013	0.230		0.006	General
212- HZ 453	Patch	cvu_0055	Endangered	0	no	0.600	0.078	0.078	0.740		0.061	General

Information provided by or on behalf of the applicant in a GIS file								Information calculated by EnSym					
Zone	Туре	BioEVC	BioEVC conservation status	Large tree(s)	Partial removal	Condition score	Polygon Extent	Extent without overlap	SBV score	HI score	Habitat units	Offset type	
213- HZ 453	Patch	cvu_0055	Endangered	0	no	0.600	0.000	0.000	0.740		0.000	General	
214- HZ 367	Patch	cvu_0055	Endangered	0	no	0.640	0.055	0.055	0.636		0.043	General	
215- HZ 503	Patch	cvu_0055	Endangered	0	no	0.640	0.005	0.005	0.480		0.004	General	
216- HZ 83	Patch	vriv0803	Endangered	0	no	0.430	0.073	0.073	0.480		0.035	General	
217- HZ 85	Patch	vriv0803	Endangered	0	no	0.350	0.030	0.030	0.510		0.012	General	
218- HZ 512	Patch	vriv0803	Endangered	0	no	0.260	0.010	0.010	0.240		0.002	General	
219- HZ 290	Patch	cvu_0175_61	Endangered	0	no	0.640	0.129	0.129	0.549		0.096	General	
220- HZ 291	Patch	cvu_0175_61	Endangered	1	no	0.640	0.465	0.465	0.549		0.346	General	
221- HZ 292	Patch	cvu_0175_61	Endangered	0	no	0.170	0.049	0.049	0.520		0.010	General	
222- HZ 293	Patch	cvu_0055	Endangered	1	no	0.600	0.222	0.222	0.577		0.157	General	

	Informa	ation provided by	or on behalf of t	he applica	nt in a GIS f	ile				Informa	ation calcu	ılated by EnSym
Zone	Туре	BioEVC	BioEVC conservation status	Large tree(s)	Partial removal	Condition score	Polygon Extent	Extent without overlap	SBV score	HI score	Habitat units	Offset type
223- HZ 294	Patch	cvu_0175_61	Endangered	2	no	0.720	0.390	0.390	0.557		0.328	General
224- HZ 296	Patch	cvu_0175_61	Endangered	0	no	0.380	0.061	0.061	0.490		0.026	General
225- HZ 297	Patch	cvu_0175_61	Endangered	0	no	0.170	0.048	0.048	0.530		0.009	General
226- HZ 298	Patch	cvu_0175_61	Endangered	0	no	0.490	0.373	0.373	0.523		0.209	General
227- HZ 322	Patch	cvu_0175_61	Endangered	3	no	0.720	0.437	0.437	0.529		0.361	General
228- HZ 438	Patch	cvu_0175_61	Endangered	1	no	0.490	0.266	0.266	0.526		0.149	General
230- HZ 270	Patch	cvu_0061	Vulnerable	2	no	0.620	0.507	0.507	0.646		0.388	General
231- HZ 271	Patch	cvu_0055	Endangered	0	no	0.450	0.602	0.602	0.579		0.321	General
232- HZ 272	Patch	cvu_0061	Vulnerable	1	no	0.670	0.073	0.073	0.610		0.059	General
233- HZ 272	Patch	cvu_0061	Vulnerable	1	no	0.670	0.704	0.704	0.575		0.557	General

	Informat	tion provided by	or on behalf of the	he applica	nt in a GIS f	ile				Informa	ation calcı	ılated by EnSym
Zone	Туре	BioEVC	BioEVC conservation status	Large tree(s)	Partial removal	Condition score	Polygon Extent	Extent without overlap	SBV score	HI score	Habitat units	Offset type
234- HZ 273	Patch	cvu_0061	Vulnerable	3	no	0.460	0.284	0.284	0.610		0.158	General
235- HZ 274	Patch	cvu_0061	Vulnerable	6	no	0.590	1.825	1.825	0.746		1.409	General
236- HZ 275	Patch	cvu_0061	Vulnerable	0	no	0.590	0.417	0.417	0.620		0.299	General
237- HZ 276	Patch	cvu_0061	Vulnerable	0	no	0.620	0.137	0.137	0.760		0.112	General
239- HZ 338	Patch	cvu_0061	Vulnerable	1	no	0.630	0.062	0.062	0.590		0.047	General
240- HZ 339	Patch	cvu_0061	Vulnerable	0	no	0.440	0.569	0.569	0.658		0.311	General
241- HZ 346	Patch	cvu_0061	Vulnerable	0	no	0.510	0.943	0.943	0.736		0.626	General
242- HZ 444	Patch	cvu_0061	Vulnerable	3	no	0.740	0.508	0.508	0.930		0.544	General
243- HZ 323	Patch	cvu_0061	Vulnerable	0	no	0.580	0.232	0.232	0.632		0.165	General
244- HZ 324	Patch	cvu_0061	Vulnerable	0	no	0.640	0.046	0.046	0.590		0.035	General

	Informa	tion provided by	or on behalf of ti	ne applica	nt in a GIS f	ile				Informa	ation calcı	ılated by EnSym
Zone	Туре	BioEVC	BioEVC conservation status	Large tree(s)	Partial removal	Condition score	Polygon Extent	Extent without overlap	SBV score	HI score	Habitat units	Offset type
245- HZ 305	Patch	nis_0803	Endangered	3	no	0.430	0.245	0.245	0.370		0.108	General
246- HZ 441	Patch	nis_0175_61	Endangered	1	no	0.410	0.049	0.049	0.370		0.021	General
247- HZ 175	Patch	vriv0068	Endangered	0	no	0.420	0.065	0.065	0.270		0.026	General
248- HZ 242	Patch	vriv0068	Endangered	4	no	0.560	0.306	0.306	0.270		0.163	General
249- HZ 326	Patch	vriv0055_61	Endangered	0	no	0.250	0.024	0.024	0.188		0.005	General
250- HZ 333	Patch	vriv0068	Endangered	0	no	0.150	0.004	0.004	0.270		0.001	General
251- HZ 344	Patch	vriv0068	Endangered	0	no	0.330	0.033	0.033	0.270		0.010	General
252- HZ 345	Patch	vriv0068	Endangered	1	no	0.320	0.065	0.065	0.270		0.020	General
253- HZ 177	Patch	nis_0803	Endangered	0	no	0.330	0.165	0.165	0.433		0.058	General
254- HZ 179	Patch	nis_0803	Endangered	0	no	0.280	0.378	0.378	0.240		0.098	General

	Informat	tion provided by	or on behalf of the	he applica	nt in a GIS f	ile				Informa	ation calcı	ılated by EnSym
Zone	Туре	BioEVC	BioEVC conservation status	Large tree(s)	Partial removal	Condition score	Polygon Extent	Extent without overlap	SBV score	HI score	Habitat units	Offset type
255- HZ 244	Patch	nis_0803	Endangered	0	no	0.130	0.019	0.019	0.770		0.003	General
256- HZ 306	Patch	nis_0803	Endangered	0	no	0.130	0.080	0.080	0.560		0.012	General
257- HZ 307	Patch	nis_0803	Endangered	0	no	0.130	0.188	0.188	0.621		0.030	General
258- HZ 309	Patch	nis_0803	Endangered	0	no	0.180	0.006	0.006	0.770		0.002	General
259- HZ 310	Patch	nis_0803	Endangered	0	no	0.220	0.144	0.144	0.770		0.042	General
260- HZ 403	Patch	cvu_0047	Vulnerable	0	no	0.160	0.037	0.037	0.490		0.007	General
261- HZ 404	Patch	cvu_0047	Vulnerable	0	no	0.160	0.012	0.012	0.490		0.002	General
262- HZ 435	Patch	cvu_0821	Depleted	0	no	0.230	0.048	0.048	0.490		0.012	General
263- HZ 390	Patch	cvu_0055	Endangered	0	no	0.090	0.024	0.024	0.100		0.002	General
264- HZ 443	Patch	cvu_0055	Endangered	2	no	0.380	0.052	0.052	0.100		0.016	General

	Informa	ntion provided by	or on behalf of ti	ne applica	nt in a GIS f	ile				Informa	ation calcu	lated by EnSym
Zone	Туре	BioEVC	BioEVC conservation status	Large tree(s)	Partial removal	Condition score	Polygon Extent	Extent without overlap	SBV score	HI score	Habitat units	Offset type
265- HZ 299	Patch	cvu_0055	Endangered	4	no	0.370	0.295	0.295	0.640		0.134	General
266- HZ 300	Patch	cvu_0055	Endangered	1	no	0.330	0.204	0.204	0.640		0.083	General
267- HZ 301	Patch	cvu_0175_61	Endangered	0	no	0.260	0.085	0.085	0.771		0.029	General
268- HZ 302	Patch	cvu_0175_61	Endangered	0	no	0.340	0.007	0.007	0.890		0.003	General
269- HZ 302	Patch	cvu_0175_61	Endangered	0	no	0.340	0.164	0.164	0.863		0.078	General
270- HZ 331	Patch	cvu_0055	Endangered	0	no	0.230	0.118	0.118	0.867		0.038	General
271- HZ 341	Patch	cvu_0055	Endangered	0	no	0.310	0.185	0.185	0.725		0.074	General
272- HZ 343	Patch	cvu_0055	Endangered	1	no	0.390	0.381	0.381	0.843		0.206	General
273- HZ 347	Patch	cvu_0055	Endangered	0	no	0.230	0.019	0.019	0.640		0.006	General
274- HZ 348	Patch	cvu_0055	Endangered	0	no	0.220	0.000	0.000	0.640		0.000	General

	Informat	tion provided by	or on behalf of the	he applica	nt in a GIS f	ile				Informa	ation calcu	ılated by EnSym
Zone	Туре	BioEVC	BioEVC conservation status	Large tree(s)	Partial removal	Condition score	Polygon Extent	Extent without overlap	SBV score	HI score	Habitat units	Offset type
275- HZ 349	Patch	cvu_0055	Endangered	0	no	0.230	0.004	0.004	0.640		0.001	General
276- HZ 350	Patch	cvu_0055	Endangered	0	no	0.180	0.027	0.027	0.640		0.006	General
277- HZ 119	Patch	cvu_0061	Vulnerable	0	no	0.400	0.006	0.006	0.580		0.003	General
278- HZ 281	Patch	cvu_0061	Vulnerable	0	no	0.270	0.004	0.004	0.600		0.001	General
279- HZ 282	Patch	cvu_0061	Vulnerable	0	no	0.580	0.001	0.001	0.520		0.000	General
280- HZ 282	Patch	cvu_0061	Vulnerable	0	no	0.580	0.000	0.000	0.520		0.000	General
281- HZ 282	Patch	cvu_0061	Vulnerable	0	no	0.580	0.068	0.068	0.541		0.045	General
282- HZ 283	Patch	cvu_0061	Vulnerable	0	no	0.270	0.043	0.043	0.580		0.014	General
283- HZ 284	Patch	cvu_0061	Vulnerable	1	no	0.350	0.067	0.067	0.600		0.028	General
284- HZ 285	Patch	cvu_0061	Vulnerable	1	no	0.580	0.314	0.314	0.604		0.219	General

	Informat	tion provided by	or on behalf of t	he applica	nt in a GIS f	ile				Informa	ation calcı	ılated by EnSym
Zone	Туре	BioEVC	BioEVC conservation status	Large tree(s)	Partial removal	Condition score	Polygon Extent	Extent without overlap	SBV score	HI score	Habitat units	Offset type
285- HZ 289	Patch	cvu_0061	Vulnerable	3	no	0.630	0.351	0.351	0.555		0.258	General
286- HZ 336	Patch	cvu_0061	Vulnerable	0	no	0.570	0.199	0.199	0.604		0.136	General
287- HZ 445	Patch	cvu_0061	Vulnerable	0	no	0.270	0.028	0.028	0.600		0.009	General
288- HZ 362	Patch	vriv0055_61	Endangered	0	no	0.400	0.017	0.017	0.240		0.006	General
289- HZ 59	Patch	vriv0803	Endangered	0	no	0.510	0.003	0.003	0.780		0.002	General
290- HZ 159	Patch	nis_0175_61	Endangered	0	no	0.580	0.001	0.001	0.940		0.001	General
291- SST 480	Scattered Tree	cvu_0175_61	Endangered	0	no	0.200	0.031	0.027	0.520		0.006	General
292- SST 481	Scattered Tree	cvu_0175_61	Endangered	0	no	0.200	0.031	0.027	0.520		0.006	General
293- SST 482	Scattered Tree	cvu_0175_61	Endangered	0	no	0.200	0.031	0.031	0.520		0.007	General
294- SST 483	Scattered Tree	cvu_0175_61	Endangered	0	no	0.200	0.031	0.031	0.496		0.007	General

	Informat	tion provided by	or on behalf of ti	he applica	nt in a GIS f	ile				Informa	ation calcu	ılated by EnSym
Zone	Туре	BioEVC	BioEVC conservation status	Large tree(s)	Partial removal	Condition score	Polygon Extent	Extent without overlap	SBV score	HI score	Habitat units	Offset type
295- SST 1233	Scattered Tree	cvu_0055	Endangered	0	no	0.200	0.031	0.030	0.490		0.007	General
296- SST 1234	Scattered Tree	cvu_0055	Endangered	0	no	0.200	0.031	0.030	0.490		0.007	General
297- SST 812	Scattered Tree	nis_0175_61	Endangered	0	no	0.200	0.031	0.031	0.342		0.006	General
298- SST 844	Scattered Tree	nis_0175_61	Endangered	0	no	0.200	0.031	0.031	0.370		0.006	General
299- SST 845	Scattered Tree	nis_0175_61	Endangered	0	no	0.200	0.031	0.019	0.370		0.004	General
300- SST 846	Scattered Tree	nis_0175_61	Endangered	0	no	0.200	0.031	0.018	0.370		0.004	General
301- SST 847	Scattered Tree	nis_0175_61	Endangered	0	no	0.200	0.031	0.030	0.370		0.006	General
302- LST 848	Scattered Tree	nis_0175_61	Endangered	1	no	0.200	0.070	0.069	0.370		0.014	General
303- SST 849	Scattered Tree	nis_0175_61	Endangered	0	no	0.200	0.031	0.018	0.370		0.004	General
304- SST 850	Scattered Tree	nis_0175_61	Endangered	0	no	0.200	0.031	0.013	0.370		0.003	General

	Informat	tion provided by	or on behalf of ti	ne applica	nt in a GIS f	ile				Informa	ation calcu	ılated by EnSym
Zone	Туре	BioEVC	BioEVC conservation status	Large tree(s)	Partial removal	Condition score	Polygon Extent	Extent without overlap	SBV score	HI score	Habitat units	Offset type
305- LST 780	Scattered Tree	vriv0055_61	Endangered	1	no	0.200	0.070	0.070	0.100		0.012	General
306- SST 972	Scattered Tree	vriv0068	Endangered	0	no	0.200	0.031	0.018	0.270		0.003	General
307- SST 973	Scattered Tree	vriv0068	Endangered	0	no	0.200	0.031	0.018	0.270		0.003	General
308- SST 982	Scattered Tree	vriv0055_61	Endangered	0	no	0.200	0.031	0.031	0.100		0.005	General
309- SST 983	Scattered Tree	vriv0068	Endangered	0	no	0.200	0.031	0.027	0.270		0.005	General
310- SST 984	Scattered Tree	vriv0068	Endangered	0	no	0.200	0.031	0.031	0.270		0.006	General
311- SST 985	Scattered Tree	vriv0068	Endangered	0	no	0.200	0.031	0.029	0.270		0.006	General
312- LST 986	Scattered Tree	vriv0068	Endangered	1	no	0.200	0.070	0.070	0.270		0.013	General
313- LST 895	Scattered Tree	cvu_0056	Endangered	1	no	0.200	0.070	0.066	0.640		0.016	General
314- SST 899	Scattered Tree	cvu_0056	Endangered	0	no	0.200	0.031	0.029	0.640		0.007	General

	Informat	tion provided by	or on behalf of ti	ne applica	nt in a GIS f	ile				Informa	ation calcu	ılated by EnSym
Zone	Туре	BioEVC	BioEVC conservation status	Large tree(s)	Partial removal	Condition score	Polygon Extent	Extent without overlap	SBV score	HI score	Habitat units	Offset type
315- LST 901	Scattered Tree	cvu_0056	Endangered	1	no	0.200	0.070	0.035	0.640		0.009	General
316- SST 902	Scattered Tree	cvu_0056	Endangered	0	no	0.200	0.031	0.007	0.640		0.002	General
317- SST 903	Scattered Tree	cvu_0056	Endangered	0	no	0.200	0.031	0.009	0.640		0.002	General
318- LST 904	Scattered Tree	cvu_0056	Endangered	1	no	0.200	0.070	0.039	0.640		0.010	General
319- SST 905	Scattered Tree	cvu_0056	Endangered	0	no	0.200	0.031	0.007	0.640		0.002	General
320- LST 915	Scattered Tree	cvu_0175_61	Endangered	1	no	0.200	0.070	0.023	0.770		0.006	General
321- SST 924	Scattered Tree	cvu_0175_61	Endangered	0	no	0.200	0.031	0.021	0.770		0.006	General
322- SST 925	Scattered Tree	cvu_0175_61	Endangered	0	no	0.200	0.031	0.014	0.770		0.004	General
323- LST 1207	Scattered Tree	cvu_0056	Endangered	1	no	0.200	0.070	0.039	0.640		0.010	General
324- SST 1208	Scattered Tree	cvu_0056	Endangered	0	no	0.200	0.031	0.010	0.640		0.003	General

	Informat	ion provided by	or on behalf of ti	ne applica	nt in a GIS f	ile				Informa	ation calcu	ılated by EnSym
Zone	Туре	BioEVC	BioEVC conservation status	Large tree(s)	Partial removal	Condition score	Polygon Extent	Extent without overlap	SBV score	HI score	Habitat units	Offset type
325- SST 1209	Scattered Tree	cvu_0056	Endangered	0	no	0.200	0.031	0.000	0.640		0.000	General
326- LST 1210	Scattered Tree	cvu_0056	Endangered	1	no	0.200	0.070	0.039	0.640		0.010	General
327- SST 1212	Scattered Tree	cvu_0056	Endangered	0	no	0.200	0.031	0.011	0.647		0.003	General
328- SST 1213	Scattered Tree	cvu_0056	Endangered	0	no	0.200	0.031	0.017	0.641		0.004	General
329- SST 1091	Scattered Tree	vriv0055_61	Endangered	0	no	0.200	0.031	0.031	0.240		0.006	General
330- SST 533	Scattered Tree	vriv0055_61	Endangered	0	no	0.200	0.031	0.027	0.140		0.005	General
331- SST 534	Scattered Tree	vriv0055_61	Endangered	0	no	0.200	0.031	0.027	0.140		0.005	General
332- SST 443	Scattered Tree	cvu_0023	Depleted	0	no	0.200	0.031	0.020	0.200		0.004	General
333- SST 442	Scattered Tree	cvu_0023	Depleted	0	no	0.200	0.031	0.020	0.200		0.004	General
334- SST 447	Scattered Tree	cvu_0127	Vulnerable	0	no	0.200	0.031	0.031	0.200		0.006	General

	Informat	tion provided by	or on behalf of ti	ne applica	nt in a GIS f	ile				Informa	ation calcu	ılated by EnSym
Zone	Туре	BioEVC	BioEVC conservation status	Large tree(s)	Partial removal	Condition score	Polygon Extent	Extent without overlap	SBV score	HI score	Habitat units	Offset type
335- SST 305	Scattered Tree	cvu_0018	Vulnerable	0	no	0.200	0.031	0.029	0.620		0.007	General
336- SST 302	Scattered Tree	cvu_0018	Vulnerable	0	no	0.200	0.031	0.030	0.620		0.007	General
337- SST 299	Scattered Tree	cvu_0018	Vulnerable	0	no	0.200	0.031	0.023	0.629		0.006	General
338- SST 253	Scattered Tree	cvu_0047	Vulnerable	0	no	0.200	0.031	0.031	0.540		0.007	General
339- SST 254	Scattered Tree	vriv0055_61	Endangered	0	no	0.200	0.031	0.031	0.100		0.005	General
340- LST 1388	Scattered Tree	cvu_0175_61	Endangered	1	no	0.200	0.070	0.055	0.230		0.010	General
341- LST 1387	Scattered Tree	cvu_0175_61	Endangered	1	no	0.200	0.070	0.055	0.230		0.010	General
342- LST 154	Scattered Tree	vriv0056	Vulnerable	1	no	0.200	0.070	0.070	0.300		0.014	General
343- SST 150	Scattered Tree	vriv0056	Vulnerable	0	no	0.200	0.031	0.031	0.480		0.007	General
344- SST 144	Scattered Tree	vriv0056	Vulnerable	0	no	0.200	0.031	0.031	0.410		0.007	General

	Informat	tion provided by	or on behalf of ti	ne applica	nt in a GIS f	ile				Informa	ation calcu	ılated by EnSym
Zone	Туре	BioEVC	BioEVC conservation status	Large tree(s)	Partial removal	Condition score	Polygon Extent	Extent without overlap	SBV score	HI score	Habitat units	Offset type
345- SST 140	Scattered Tree	vriv0056	Vulnerable	0	no	0.200	0.031	0.031	0.880		0.009	General
346- SST 139	Scattered Tree	vriv0056	Vulnerable	0	no	0.200	0.031	0.029	0.880		0.008	General
347- SST 449	Scattered Tree	vriv0055_61	Endangered	0	no	0.200	0.031	0.031	0.140		0.005	General
348- LST 1457	Scattered Tree	vriv0061	Vulnerable	1	no	0.200	0.070	0.070	0.510		0.016	General
349- SST 505	Scattered Tree	vriv0803	Endangered	0	no	0.200	0.031	0.030	0.530		0.007	General
350- SST 1435	Scattered Tree	vriv0803	Endangered	0	no	0.200	0.031	0.022	0.530		0.005	General
351- SST 1508	Scattered Tree	vriv0803	Endangered	0	no	0.200	0.031	0.022	0.530		0.005	General
352- LST 284	Scattered Tree	vriv0274	Endangered	1	no	0.200	0.070	0.070	0.980		0.021	General
353- SST 287	Scattered Tree	vriv0274	Endangered	0	no	0.200	0.031	0.011	0.980		0.003	General
354- SST 286	Scattered Tree	vriv0274	Endangered	0	no	0.200	0.031	0.013	0.980		0.004	General

	Informat	ion provided by	or on behalf of ti	ne applica	nt in a GIS f	ile				Informa	ation calcu	ılated by EnSym
Zone	Туре	BioEVC	BioEVC conservation status	Large tree(s)	Partial removal	Condition score	Polygon Extent	Extent without overlap	SBV score	HI score	Habitat units	Offset type
355- SST 285	Scattered Tree	vriv0274	Endangered	0	no	0.200	0.031	0.018	0.980		0.005	General
356- SST 518	Scattered Tree	vriv0055_61	Endangered	0	no	0.200	0.031	0.031	0.930		0.009	General
357- SST 519	Scattered Tree	vriv0055_61	Endangered	0	no	0.200	0.031	0.021	0.930		0.006	General
358- SST 520	Scattered Tree	vriv0055_61	Endangered	0	no	0.200	0.031	0.021	0.930		0.006	General
359- SST 1552	Scattered Tree	vriv0175_61	Endangered	0	no	0.200	0.031	0.015	0.976		0.004	General
360- SST 1551	Scattered Tree	vriv0175_61	Endangered	0	no	0.200	0.031	0.017	0.970		0.005	General
361- SST 1553	Scattered Tree	vriv0175_61	Endangered	0	no	0.200	0.031	0.026	0.990		0.008	General
362- SST 1555	Scattered Tree	vriv0175_61	Endangered	0	no	0.200	0.031	0.022	0.990		0.007	General
363- SST 1556	Scattered Tree	vriv0175_61	Endangered	0	no	0.200	0.031	0.022	0.990		0.007	General
364- LST 539	Scattered Tree	vriv0056	Vulnerable	1	no	0.200	0.070	0.066	0.880		0.019	General

	Informat	ion provided by	or on behalf of ti	ne applica	nt in a GIS f	ile				Informa	ation calcu	ılated by EnSym
Zone	Туре	BioEVC	BioEVC conservation status	Large tree(s)	Partial removal	Condition score	Polygon Extent	Extent without overlap	SBV score	HI score	Habitat units	Offset type
365- SST 537	Scattered Tree	vriv0055_61	Endangered	0	no	0.200	0.031	0.026	0.880		0.007	General
366- LST 538	Scattered Tree	vriv0056	Vulnerable	1	no	0.200	0.070	0.066	0.880		0.019	General
367- LST 545	Scattered Tree	vriv0055_61	Endangered	1	no	0.200	0.070	0.043	0.880		0.012	General
368- LST 544	Scattered Tree	vriv0055_61	Endangered	1	no	0.200	0.070	0.040	0.880		0.011	General
369- SST 543	Scattered Tree	vriv0055_61	Endangered	0	no	0.200	0.031	0.000	0.880		0.000	General
370- LST 542	Scattered Tree	vriv0055_61	Endangered	1	no	0.200	0.070	0.070	0.880		0.020	General
371- SST 346	Scattered Tree	vriv0055_61	Endangered	0	no	0.200	0.031	0.025	0.470		0.006	General
372- SST 549	Scattered Tree	vriv0055_61	Endangered	0	no	0.200	0.031	0.021	0.250		0.004	General
373- SST 548	Scattered Tree	vriv0055_61	Endangered	0	no	0.200	0.031	0.021	0.250		0.004	General
374- SST 550	Scattered Tree	vriv0055_61	Endangered	0	no	0.200	0.031	0.017	0.830		0.005	General

	Informat	tion provided by	or on behalf of ti	ne applica	nt in a GIS f	ile				Informa	ation calcu	ılated by EnSym
Zone	Туре	BioEVC	BioEVC conservation status	Large tree(s)	Partial removal	Condition score	Polygon Extent	Extent without overlap	SBV score	HI score	Habitat units	Offset type
375- SST 551	Scattered Tree	vriv0055_61	Endangered	0	no	0.200	0.031	0.017	0.830		0.005	General
376- SST 1513	Scattered Tree	vriv0055_61	Endangered	0	no	0.200	0.031	0.031	0.227		0.006	General
377- SST 568	Scattered Tree	vriv0055_61	Endangered	0	no	0.200	0.031	0.031	0.870		0.009	General
378- SST 628	Scattered Tree	vriv0055_61	Endangered	0	no	0.200	0.031	0.031	0.780		0.008	General
379- SST 697	Scattered Tree	vriv0055_61	Endangered	0	no	0.200	0.031	0.031	0.410		0.007	General
380- SST 695	Scattered Tree	vriv0055_61	Endangered	0	no	0.200	0.031	0.031	0.410		0.007	General
381- SST 676	Scattered Tree	vriv0055_61	Endangered	0	no	0.200	0.031	0.031	0.610		0.008	General
382- SST 647	Scattered Tree	vriv0055_61	Endangered	0	no	0.200	0.031	0.027	0.533		0.006	General
383- LST 714	Scattered Tree	vriv0055_61	Endangered	1	no	0.200	0.070	0.064	0.699		0.016	General
384- SST 717	Scattered Tree	vriv0803	Endangered	0	no	0.200	0.031	0.021	0.760		0.006	General

	Informat	tion provided by	or on behalf of ti	he applica	nt in a GIS f	ile				Informa	ation calcu	ılated by EnSym
Zone	Туре	BioEVC	BioEVC conservation status	Large tree(s)	Partial removal	Condition score	Polygon Extent	Extent without overlap	SBV score	HI score	Habitat units	Offset type
385- SST 724	Scattered Tree	cvu_0803	Endangered	0	no	0.200	0.031	0.019	0.760		0.005	General
386- SST 725	Scattered Tree	cvu_0803	Endangered	0	no	0.200	0.031	0.019	0.641		0.005	General
387- SST 726	Scattered Tree	cvu_0803	Endangered	0	no	0.200	0.031	0.027	0.530		0.006	General
388- SST 727	Scattered Tree	nis_0175_61	Endangered	0	no	0.200	0.031	0.031	0.420		0.007	General
389- SST 775	Scattered Tree	nis_0061	Vulnerable	0	no	0.200	0.031	0.031	0.190		0.006	General
390- SST 813	Scattered Tree	nis_0061	Vulnerable	0	no	0.200	0.031	0.021	0.918		0.006	General
391- SST 431	Scattered Tree	vriv0815	Vulnerable	0	no	0.200	0.031	0.031	0.460		0.007	General
392- LST 428	Scattered Tree	vriv0815	Vulnerable	1	no	0.200	0.070	0.070	0.460		0.015	General
393- LST 788	Scattered Tree	vriv0068	Endangered	1	no	0.200	0.070	0.070	0.450		0.015	General
394- HZ 236	Patch	vriv0055_61	Endangered	1	no	0.390	0.271	0.271	0.100		0.087	General

	Informat	tion provided by	or on behalf of the	he applica	nt in a GIS f	ile				Informa	ation calcu	ılated by EnSym
Zone	Туре	BioEVC	BioEVC conservation status	Large tree(s)	Partial removal	Condition score	Polygon Extent	Extent without overlap	SBV score	HI score	Habitat units	Offset type
395- HZ 391	Patch	cvu_0055	Endangered	0	no	0.160	0.021	0.021	0.100		0.003	General
396- HZ 439	Patch	cvu_0055	Endangered	2	no	0.350	0.105	0.105	0.100		0.030	General
397- HZ 180	Patch	nis_0803	Endangered	0	no	0.240	0.029	0.029	0.258		0.006	General
398- HZ 181	Patch	nis_0803	Endangered	0	no	0.280	0.132	0.132	0.309		0.036	General
399- HZ 243	Patch	nis_0803	Endangered	1	no	0.220	0.054	0.054	0.770		0.016	General
400- HZ 308	Patch	nis_0803	Endangered	0	no	0.090	0.008	0.008	0.770		0.001	General
401- HZ 351	Patch	nis_0803	Endangered	0	no	0.160	0.002	0.002	0.460		0.000	General
402- HZ 337	Patch	cvu_0055	Endangered	0	no	0.430	0.099	0.099	0.610		0.051	General
403- HZ 337	Patch	cvu_0055	Endangered	0	no	0.430	0.039	0.039	0.501		0.019	General
404- HZ 337	Patch	cvu_0055	Endangered	0	no	0.430	0.000	0.000	0.610		0.000	General

	Informat	tion provided by	or on behalf of ti	ne applica	nt in a GIS f	ile				Informa	ation calcı	ılated by EnSym
Zone	Туре	BioEVC	BioEVC conservation status	Large tree(s)	Partial removal	Condition score	Polygon Extent	Extent without overlap	SBV score	HI score	Habitat units	Offset type
405- HZ 346	Patch	cvu_0061	Vulnerable	0	no	0.510	0.012	0.012	0.520		0.007	General
406- HZ 434	Patch	cvu_0047	Vulnerable	0	no	0.160	0.004	0.004	0.490		0.001	General
407- HZ 255	Patch	cvu_0175_61	Endangered	0	no	0.320	0.013	0.013	0.100		0.003	General
408- HZ 291	Patch	cvu_0175_61	Endangered	0	no	0.640	0.000	0.000	0.530		0.000	General
409- HZ 335	Patch	cvu_0055	Endangered	1	no	0.670	0.062	0.062	0.567		0.049	General
410- HZ 334	Patch	cvu_0055	Endangered	0	no	0.600	0.031	0.031	0.574		0.022	General
411- HZ 341	Patch	cvu_0055	Endangered	0	no	0.310	0.000	0.000	0.770		0.000	General
412- HZ 319	Patch	cvu_0175_61	Endangered	0	no	0.340	0.011	0.011	0.770		0.005	General
413- SST 773	Scattered Tree	nis_0175_61	Endangered	0	no	0.200	0.031	0.031	0.370		0.006	General
414- SST 828	Scattered Tree	nis_0175_61	Endangered	0	no	0.200	0.031	0.031	0.370		0.006	General

	Informat	tion provided by	or on behalf of ti	ne applica	nt in a GIS f	ile				Informa	ation calcu	ılated by EnSym
Zone	Туре	BioEVC	BioEVC conservation status	Large tree(s)	Partial removal	Condition score	Polygon Extent	Extent without overlap	SBV score	HI score	Habitat units	Offset type
415- SST 829	Scattered Tree	nis_0175_61	Endangered	0	no	0.200	0.031	0.031	0.370		0.006	General
416- LST 831	Scattered Tree	nis_0175_61	Endangered	1	no	0.200	0.070	0.070	0.370		0.014	General
417- SST 1258	Scattered Tree	cvu_0056	Endangered	0	no	0.200	0.031	0.031	0.100		0.005	General
418- LST 785	Scattered Tree	vriv0055_61	Endangered	1	no	0.200	0.070	0.070	0.260		0.013	General
419- LST 781	Scattered Tree	nis_0187	Endangered	1	no	0.200	0.070	0.070	0.770		0.019	General
420- LST 782	Scattered Tree	nis_0187	Endangered	1	no	0.200	0.070	0.042	0.460		0.009	General
421- LST 783	Scattered Tree	nis_0187	Endangered	1	no	0.200	0.070	0.041	0.460		0.009	General
422- LST 281	Scattered Tree	cvu_0175_61	Endangered	1	no	0.200	0.070	0.070	0.552		0.016	General
423- LST 1489	Scattered Tree	cvu_0047	Vulnerable	1	no	0.200	0.070	0.070	0.880		0.020	General
424- SST 265	Scattered Tree	cvu_0175_61	Endangered	0	no	0.200	0.031	0.031	0.230		0.006	General

	Informa	tion provided by	or on behalf of th	ne applica	nt in a GIS f	ile				Informa	ation calcu	ılated by EnSym
Zone	Туре	BioEVC	BioEVC conservation status	Large tree(s)	Partial removal	Condition score	Polygon Extent	Extent without overlap	SBV score	HI score	Habitat units	Offset type
427- HZ 159	Patch	nis_0175_61	Endangered	0	no	0.580	0.012	0.012	0.410		0.007	General
428- HZ 162	Patch	vriv0056	Vulnerable	0	no	0.540	0.014	0.014	0.780		0.010	General
429- HZ 163	Patch	vriv0803	Endangered	0	no	0.320	0.020	0.020	0.650		0.008	General
430- HZ 161	Patch	vriv0803	Endangered	0	no	0.490	0.012	0.012	0.650		0.008	General
431- HZ 190	Patch	nis_0067	Endangered	0	no	0.360	0.017	0.017	0.920		0.009	General
238- HZ 325	Patch	cvu_0055	Endangered	0	no	0.710	0.083	0.083	0.610		0.071	General
229- HZ 102	Patch	cvu_0061	Vulnerable	1	no	0.630	0.468	0.468	0.650		0.365	General

Appendix 2: Information about impacts to rare or threatened species' habitats on site

This table lists all rare or threatened species' habitats mapped at the site.

Species common name	Species scientific name	Species number	Conservation status	Group	Habitat impacted	% habitat value affected
Euroa Guinea-flower	Hibbertia humifusa subsp. erigens	505083	Vulnerable	Dispersed	Habitat importance map	0.0045
Squirrel Glider	Petaurus norfolcensis	11137	Endangered	Dispersed	Habitat importance map	0.0030
Mugga	Eucalyptus sideroxylon subsp. sideroxylon	504493	Rare	Dispersed	Habitat importance map	0.0026
Crimson Spider-orchid	Caladenia concolor	504347	Endangered	Dispersed	Habitat importance map	0.0024
Western Silver Wattle	Acacia decora	500027	Vulnerable	Dispersed	Habitat importance map	0.0023
Yarran Wattle	Acacia omalophylla	500069	Endangered	Dispersed	Habitat importance map	0.0019
Painted Honeyeater	Grantiella picta	10598	Vulnerable	Dispersed	Habitat importance map	0.0015
Plump Windmill Grass	Chloris ventricosa	500757	Vulnerable	Dispersed	Habitat importance map	0.0014
Rugose Toadlet	Uperoleia rugosa	13151	Endangered	Dispersed	Habitat importance map	0.0014
Narrow Goodenia	Goodenia macbarronii	501513	Vulnerable	Dispersed	Habitat importance map	0.0013
Cottony Cassinia	Cassinia ozothamnoides	501560	Vulnerable	Dispersed	Habitat importance map	0.0013
Brown Toadlet	Pseudophryne bibronii	13117	Endangered	Dispersed	Habitat importance map	0.0013
Barking Owl	Ninox connivens connivens	10246	Endangered	Dispersed	Habitat importance map	0.0012
Northern Sandalwood	Santalum lanceolatum	503005	Endangered	Dispersed	Habitat importance map	0.0012
Bent-leaf Wattle	Acacia flexifolia	500035	Rare	Dispersed	Habitat importance map	0.0011
Speckled Warbler	Chthonicola sagittatus	10504	Vulnerable	Dispersed	Habitat importance map ; special site	0.0010
Grey-crowned Babbler	Pomatostomus temporalis temporalis	10443	Endangered	Dispersed	Habitat importance map	0.0010
Ausfeld's Wattle	Acacia ausfeldii	500013	Vulnerable	Dispersed	Habitat importance map	0.0009
Dookie Daisy	Brachyscome gracilis	505494	Vulnerable	Dispersed	Habitat importance map	0.0009

Western Golden-tip	Goodia medicaginea	501518	Rare	Dispersed	Habitat importance map	0.0009
Common Fringe-sedge	Fimbristylis dichotoma	501368	Vulnerable	Dispersed	Habitat importance map	0.0009
Bush Stone-curlew	Burhinus grallarius	10174	Endangered	Dispersed	Habitat importance map	0.0008
Mueller Daisy	Brachyscome muelleroides	500465	Endangered	Dispersed	Habitat importance map	0.0008
Warby Range Swamp- gum	Eucalyptus cadens	503707	Vulnerable	Dispersed	Habitat importance map	0.0008
Umbrella Grass	Digitaria divaricatissima var. divaricatissima	501045	Vulnerable	Dispersed	Habitat importance map	0.0007
Purple Diuris	Diuris punctata	501084	Vulnerable	Dispersed	Habitat importance map	0.0007
Regent Honeyeater	Anthochaera phrygia	10603	Critically endangered	Dispersed	Habitat importance map	0.0007
Spur-wing Wattle	Acacia triptera	500097	Rare	Dispersed	Habitat importance map	0.0007
Late-flower Flax-lily	Dianella tarda	505085	Vulnerable	Dispersed	Habitat importance map	0.0006
Broom Bitter-pea	Daviesia genistifolia s.s.	503813	Rare	Dispersed	Habitat importance map ; special site	0.0006
Silver Perch	Bidyanus bidyanus	528544	Vulnerable	Dispersed	Habitat importance map	0.0006
Golden Sun Moth	Synemon plana	15021	Critically endangered	Dispersed	Habitat importance map	0.0006
Small-leaf Bush-pea	Pultenaea foliolosa	502848	Rare	Dispersed	Habitat importance map	0.0006
Deane's Wattle	Acacia deanei subsp. paucijuga	504201	Rare	Dispersed	Habitat importance map	0.0006
Superb Parrot	Polytelis swainsonii	10277	Endangered	Dispersed	Habitat importance map	0.0006
Golden Cowslips	Diuris behrii	501061	Vulnerable	Dispersed	Habitat importance map	0.0006
Currawang	Acacia doratoxylon	500030	Rare	Dispersed	Habitat importance map	0.0006
Clover Glycine	Glycine latrobeana	501456	Vulnerable	Dispersed	Habitat importance map	0.0005
Dark Wire-grass	Aristida calycina var. calycina	503630	Rare	Dispersed	Habitat importance map	0.0005
Murray River Turtle	Emydura macquarii	5135	Vulnerable	Dispersed	Habitat importance map	0.0005
Rosemary Grevillea	Grevillea rosmarinifolia subsp. rosmarinifolia	504066	Rare	Dispersed	Habitat importance map	0.0005

Delicate Crane's-bill	Geranium sp. 6	505347	Vulnerable	Dispersed	Habitat importance map	0.0005
Pepper Grass	Panicum laevinode	504808	Vulnerable	Dispersed	Habitat importance map	0.0005
Southern Pygmy Perch (Murray-Darling lineage)	Nannoperca australis (Murray- Darling lineage)	903231	Vulnerable	Dispersed	Habitat importance map	0.0005
Bearded Dragon	Pogona barbata	12177	Vulnerable	Dispersed	Habitat importance map	0.0005
Silver Tea-tree	Leptospermum multicaule	501960	Vulnerable	Dispersed	Habitat importance map	0.0005
Velvet Daisy-bush	Olearia pannosa subsp. cardiophylla	502317	Vulnerable	Dispersed	Habitat importance map	0.0005
Swift Parrot	Lathamus discolor	10309	Endangered	Dispersed	Habitat importance map	0.0004
Veiled Fringe-sedge	Fimbristylis velata	501369	Rare	Dispersed	Habitat importance map	0.0004
Slender Club-sedge	Isolepis congrua	501773	Vulnerable	Dispersed	Habitat importance map	0.0004
Brolga	Grus rubicunda	10177	Vulnerable	Dispersed	Habitat importance map	0.0004
Flat-leaf Bush-pea	Pultenaea platyphylla	502865	Rare	Dispersed	Habitat importance map	0.0004
Pale Swamp Everlasting	Coronidium gunnianum	504655	Vulnerable	Dispersed	Habitat importance map	0.0004
Grey Grass-tree	Xanthorrhoea glauca subsp. angustifolia	507229	Endangered	Dispersed	Habitat importance map	0.0004
Brush-tailed Phascogale	Phascogale tapoatafa	11017	Vulnerable	Dispersed	Habitat importance map	0.0004
Fuzzy New Holland Daisy	Vittadinia cuneata var. morrisii	505060	Rare	Dispersed	Habitat importance map	0.0004
Black Falcon	Falco subniger	10238	Vulnerable	Dispersed	Habitat importance map	0.0004
Growling Grass Frog	Litoria raniformis	13207	Endangered	Dispersed	Habitat importance map	0.0004
Small Scurf-pea	Cullen parvum	502773	Endangered	Dispersed	Habitat importance map	0.0004
Murray-Darling Rainbowfish	Melanotaenia fluviatilis	4774	Vulnerable	Dispersed	Habitat importance map	0.0003
Yellow Hyacinth-orchid	Dipodium hamiltonianum	501067	Endangered	Dispersed	Habitat importance map	0.0003
Dwarf Brooklime	Gratiola pumilo	503753	Rare	Dispersed	Habitat importance map	0.0003
Chestnut-rumped Heathwren	Calamanthus pyrrhopygius	10498	Vulnerable	Dispersed	Habitat importance map	0.0003

Striped Legless Lizard	Delma impar	12159	Endangered	Dispersed	Habitat importance map	0.0003
Yellow-tongue Daisy	Brachyscome chrysoglossa	503654	Vulnerable	Dispersed	Habitat importance map	0.0003
Stiff Groundsel	Senecio behrianus	503101	Endangered	Dispersed	Habitat importance map	0.0003
Striped Water-milfoil	Myriophyllum striatum	503869	Vulnerable	Dispersed	Habitat importance map	0.0003
Lewin's Rail	Lewinia pectoralis pectoralis	10045	Vulnerable	Dispersed	Habitat importance map	0.0003
Jericho Wire-grass	Aristida jerichoensis var. subspinulifera	504631	Endangered	Dispersed	Habitat importance map	0.0003
Yarra Gum	Eucalyptus yarraensis	501326	Rare	Dispersed	Habitat importance map	0.0003
Woolly Wattle	Acacia lanigera var. lanigera	505093	Rare	Dispersed	Habitat importance map	0.0003
Floodplain Fireweed	Senecio campylocarpus	507136	Rare	Dispersed	Habitat importance map	0.0003
Tick Indigo	Indigofera adesmiifolia	503780	Vulnerable	Dispersed	Habitat importance map	0.0003
Rye Beetle-grass	Tripogon Ioliiformis	503455	Rare	Dispersed	Habitat importance map	0.0003
Ridged Water-milfoil	Myriophyllum porcatum	502257	Vulnerable	Dispersed	Habitat importance map	0.0002
Murray Cod	Maccullochella peelii	4871	Vulnerable	Dispersed	Habitat importance map	0.0002
Long Eryngium	Eryngium paludosum	501238	Vulnerable	Dispersed	Habitat importance map	0.0002
Square-tailed Kite	Lophoictinia isura	10230	Vulnerable	Dispersed	Habitat importance map	0.0002
Matted Flax-lily	Dianella amoena	505084	Endangered	Dispersed	Habitat importance map	0.0002
Branching Groundsel	Senecio cunninghamii var. cunninghamii	503104	Rare	Dispersed	Habitat importance map	0.0002
Smooth Minuria	Minuria integerrima	502201	Rare	Dispersed	Habitat importance map	0.0002
Grey-headed Flying-fox	Pteropus poliocephalus	11280	Vulnerable	Dispersed	Habitat importance map	0.0002
Buloke	Allocasuarina luehmannii	500678	Endangered	Dispersed	Habitat importance map	0.0002
Waterbush	Myoporum montanum	502240	Rare	Dispersed	Habitat importance map	0.0002
Grey Falcon	Falco hypoleucos	10236	Endangered	Dispersed	Habitat importance map	0.0002
Hooded Mosquito-orchid	Acianthus collinus	505621	Vulnerable	Dispersed	Habitat importance map	0.0002
Hairy Tails	Ptilotus erubescens	502825	Vulnerable	Dispersed	Habitat importance map	0.0002

Broad-shelled Turtle	Chelodina expansa	5133	Endangered	Dispersed	Habitat importance map	0.0002
Silky Umbrella-grass	Digitaria ammophila	501041	Vulnerable	Dispersed	Habitat importance map	0.0002
Carpet Python	Morelia spilota metcalfei	62969	Endangered	Dispersed	Habitat importance map	0.0002
Lanky Buttons	Leptorhynchos elongatus	501941	Endangered	Dispersed	Habitat importance map	0.0002
Button Rush	Lipocarpha microcephala	502020	Vulnerable	Dispersed	Habitat importance map	0.0002
Pale Flax-lily	Dianella sp. aff. longifolia (Riverina)	507399	Vulnerable	Dispersed	Habitat importance map	0.0001
Hairy Hop-bush	Dodonaea boroniifolia	501087	Rare	Dispersed	Habitat importance map	0.0001
Smooth Darling-pea	Swainsona galegifolia	503992	Endangered	Dispersed	Habitat importance map	0.0001
Kamarooka Mallee	Eucalyptus froggattii	501279	Rare	Dispersed	Habitat importance map	0.0001
Riverina Bitter-cress	Cardamine moirensis	505032	Rare	Dispersed	Habitat importance map	0.0001
Trailing Hop-bush	Dodonaea procumbens	501090	Vulnerable	Dispersed	Habitat importance map	0.0001
Spiny Rice-flower	Pimelea spinescens subsp. spinescens	504823	Endangered	Dispersed	Habitat importance map	0.0001
Rough-grain Love-grass	Eragrostis trachycarpa	501197	Rare	Dispersed	Habitat importance map	0.0001
Hardhead	Aythya australis	10215	Vulnerable	Dispersed	Habitat importance map	0.0001
Eastern Great Egret	Ardea modesta	10187	Vulnerable	Dispersed	Habitat importance map	0.0001
Australasian Shoveler	Anas rhynchotis	10212	Vulnerable	Dispersed	Habitat importance map	0.0001
Baillon's Crake	Porzana pusilla palustris	10050	Vulnerable	Dispersed	Habitat importance map	0.0001
Dwarf Cassinia	Cassinia diminuta	507664	Rare	Dispersed	Habitat importance map	0.0001
Lace Monitor	Varanus varius	12283	Endangered	Dispersed	Habitat importance map	0.0001
Musk Duck	Biziura lobata	10217	Vulnerable	Dispersed	Habitat importance map	0.0001
Australian Painted Snipe	Rostratula australis	10170	Critically endangered	Dispersed	Habitat importance map	0.0001
Dense Mint-bush	Prostanthera decussata	502739	Rare	Dispersed	Habitat importance map	0.0001
Dwarf Bitter-cress	Rorippa eustylis	502944	Rare	Dispersed	Habitat importance map	0.0001

Water Shield	Brasenia schreberi	500487	Vulnerable	Dispersed	Habitat importance map	0.0001
Australian Little Bittern	Ixobrychus dubius	10195	Endangered	Dispersed	Habitat importance map	0.0001
Blue-billed Duck	Oxyura australis	10216	Endangered	Dispersed	Habitat importance map	0.0001
Intermediate Egret	Ardea intermedia	10186	Endangered	Dispersed	Habitat importance map	0.0001
White-bellied Sea-Eagle	Haliaeetus leucogaster	10226	Vulnerable	Dispersed	Habitat importance map	0.0001
Deane's Wattle	Acacia deanei subsp. deanei	504238	Endangered	Dispersed	Habitat importance map	0.0001
Glandular Early Nancy	Wurmbea biglandulosa subsp. biglandulosa	503580	Rare	Dispersed	Habitat importance map	0.0001
White-throated Needletail	Hirundapus caudacutus	10334	Vulnerable	Dispersed	Habitat importance map	0.0001
Southern Swainson-pea	Swainsona behriana	504944	Rare	Dispersed	Habitat importance map	0.0001
Twiggy Sida	Sida intricata	503143	Vulnerable	Dispersed	Habitat importance map	0.0001
Little Egret	Egretta garzetta nigripes	10185	Endangered	Dispersed	Habitat importance map	0.0000
Hickory Wattle	Acacia penninervis var. penninervis	500074	Rare	Dispersed	Habitat importance map	0.0000
Powerful Owl	Ninox strenua	10248	Vulnerable	Dispersed	Habitat importance map	0.0000
Silky Swainson-pea	Swainsona sericea	504946	Vulnerable	Dispersed	Habitat importance map	0.0000
Flat-headed Galaxias	Galaxias rostratus	4692	Vulnerable	Dispersed	Habitat importance map	0.0000
Grassland Velleia	Velleia arguta	503487	Rare	Dispersed	Habitat importance map	0.0000
Western Rat-tail Grass	Sporobolus creber	503228	Vulnerable	Dispersed	Habitat importance map	0.0000
Pale-flower Crane's-bill	Geranium sp. 3	505344	Rare	Dispersed	Habitat importance map	0.0000
Common Bent-wing Bat (eastern ssp.)	Miniopterus schreibersii oceanensis	61342	Vulnerable	Dispersed	Habitat importance map	0.0000
Buloke Mistletoe	Amyema linophylla subsp. orientalis	500217	Vulnerable	Dispersed	Habitat importance map	0.0000
Common Pipewort	Eriocaulon scariosum	501218	Rare	Dispersed	Habitat importance map	0.0000
Forest Bitter-cress	Cardamine papillata	505034	Vulnerable	Dispersed	Habitat importance map	0.0000
Small Burr-grass	Tragus australianus	503418	Rare	Dispersed	Habitat importance map	0.0000

Woodland Leek-orchid	Prasophyllum sp. aff. validum A	505904	Endangered	Dispersed	Habitat importance map	0.0000
Two-colour Panic	Panicum simile	502408	Vulnerable	Dispersed	Habitat importance map	0.0000
Spiny Lignum	Duma horrida subsp. horrida	502230	Rare	Dispersed	Habitat importance map	0.0000
Elegant Parrot	Neophema elegans	10307	Vulnerable	Dispersed	Habitat importance map	0.0000
Grey Goshawk	Accipiter novaehollandiae novaehollandiae	10220	Vulnerable	Dispersed	Habitat importance map	0.0000
Australasian Bittern	Botaurus poiciloptilus	10197	Endangered	Dispersed	Habitat importance map	0.0000
Freshwater Catfish	Tandanus tandanus	528545	Endangered	Dispersed	Habitat importance map	0.0000
Large-flower Crane's-bill	Geranium sp. 1	505342	Endangered	Dispersed	Habitat importance map	0.0000
Slender Violet-bush	Hybanthus monopetalus	501711	Rare	Dispersed	Habitat importance map	0.0000
Slender Darling-pea	Swainsona murrayana	503321	Endangered	Dispersed	Habitat importance map	0.0000
Slender Stylewort	Levenhookia sonderi	501998	Rare	Dispersed	Habitat importance map	0.0000
Spotted Emu-bush	Eremophila maculata subsp. maculata	501204	Rare	Dispersed	Habitat importance map	0.0000
Freckled Duck	Stictonetta naevosa	10214	Endangered	Dispersed	Habitat importance map	0.0000
Small Milkwort	Comesperma polygaloides	500798	Vulnerable	Dispersed	Habitat importance map	0.0000
Tufted Club-sedge	Isolepis wakefieldiana	501789	Rare	Dispersed	Habitat importance map	0.0000
Arching Flax-lily	Dianella sp. aff. longifolia (Benambra)	505560	Vulnerable	Dispersed	Habitat importance map	0.0000
Plump Swamp Wallaby- grass	Amphibromus pithogastrus	503624	Endangered	Dispersed	Habitat importance map	0.0000
Brackish Plains Buttercup	Ranunculus diminutus	504314	Rare	Dispersed	Habitat importance map	0.0000
Swamp Everlasting	Xerochrysum palustre	503763	Vulnerable	Dispersed	Habitat importance map	0.0000
Purple Blown-grass	Lachnagrostis punicea subsp. punicea	504206	Rare	Dispersed	Habitat importance map	0.0000
Swamp Fireweed	Senecio psilocarpus	504659	Vulnerable	Dispersed	Habitat importance map	0.0000
Woolly Ragwort	Senecio garlandii	505246	Endangered	Dispersed	Habitat importance map	0.0000
Plains Yam-daisy	Microseris scapigera s.s.	504657	Vulnerable	Dispersed	Habitat importance map	0.0000

Blue Burr-daisy	Calotis cuneifolia	500594	Rare	Dispersed	Habitat importance map	0.0000
Yellow Burr-daisy	Calotis lappulacea	500598	Rare	Dispersed	Habitat importance map	0.0000
Austral Crane's-bill	Geranium solanderi var. solanderi s.s.	505337	Vulnerable	Dispersed	Habitat importance map	0.0000

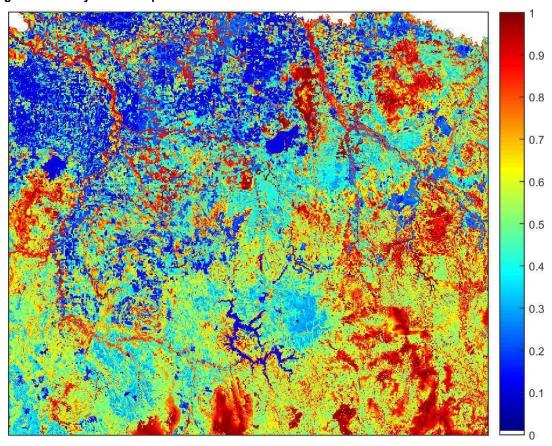
Habitat group

- Highly localised habitat means there is 2000 hectares or less mapped habitat for the species
- Dispersed habitat means there is more than 2000 hectares of mapped habitat for the species

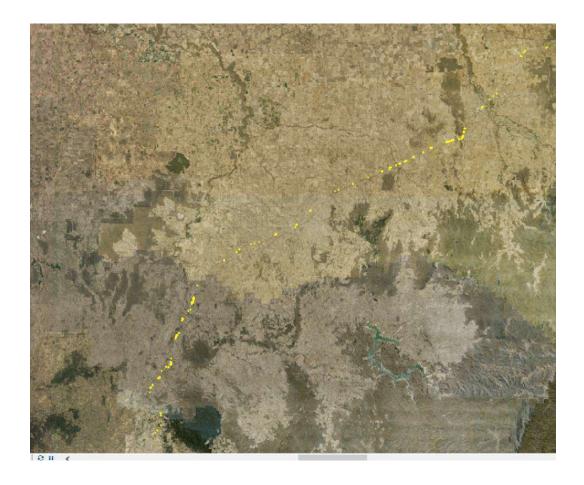
Habitat impacted

- Habitat importance maps are the maps defined in the Guidelines that include all the mapped habitat for a rare or threatened species
- Top ranking maps are the maps defined in the Guidelines that depict the important areas of a dispersed species habitat, developed from the highest habitat importance scores in dispersed species habitat maps and selected VBA records
- Selected VBA record is an area in Victoria that represents a large population, roosting or breeding site etc.

Appendix 3 - Images of mapped native vegetation 2. Strategic biodiversity values map



3. Aerial photograph showing mapped native vegetation



 $Yellow\ boundaries\ denote\ areas\ of\ proposed\ native\ vegetation\ removal.$

Attachment 3 – Native Vegetation Credit Register report



This report lists native vegetation credits available to purchase through the Native Vegetation Credit Register.

This report is **not evidence** that an offset has been secured. An offset is only secured when the units have been purchased and allocated to a permit or other approval and an allocated credit extract is provided by the Native Vegetation Credit Register.

Date and time: 04/07/2022 12:15 Report ID: 14826

What was searched for?

General offset

General habitat units	Strategic biodiversity value	Large trees	Vicinity (0	Catchment Management Authority or Municipal district)
15.334	0.495	102	CMA	Goulburn Broken
			or CMA	North East
			or CMA	Port Phillip and Westernport
			or LGA	Benalla Rural City
			or LGA	Indigo Shire
			or LGA	Mitchell Shire
			or LGA	Strathbogie Shire
			or LGA	Wangaratta Rural City
			or LGA	Wodonga City

Details of available native vegetation credits on 04 July 2022 12:15

These sites meet your requirements for general offsets.

Credit Site ID	GHU	LT	СМА	LGA	Land owner	Trader	Fixed price	Broker(s)
BBA-0670	17.868	149	Port Phillip and Westernport	Cardinia Shire	No	Yes	No	Abezco, VegLink
BBA-0677	17.807	1527	Port Phillip and Westernport	Whittlesea City	No	Yes	No	Abezco, VegLink
BBA-0678	46.625	2629	Port Phillip and Westernport	Nillumbik Shire	No	Yes	No	VegLink
BBA-2871	16.068	1645	Port Phillip and Westernport	Yarra Ranges Shire	Yes	Yes	No	VegLink
VC_CFL- 3074_01	20.226	2928	North East	Towong Shire	Yes	Yes	No	VegLink

These sites meet your requirements using alternative arrangements for general offsets.

Credit Site ID	GHU	LT CMA	LGA	Land	Trader	Fixed	Broker(s)
				owner		price	

These potential sites are not yet available, land owners may finalise them once a buyer is confirmed.

Credit Site ID	GHU	LT CMA	LGA	Land	Trader	Fixed	Broker(s)
				owner		price	

There are no potential sites listed in the Native Vegetation Credit Register that meet your offset requirements.

LT - Large Trees

CMA - Catchment Management Authority

LGA - Municipal District or Local Government Authority

Next steps

If applying for approval to remove native vegetation

Attach this report to an application to remove native vegetation as evidence that your offset requirement is currently available.

If you have approval to remove native vegetation

Below are the contact details for all brokers. Contact the broker(s) listed for the credit site(s) that meet your offset requirements. These are shown in the above tables. If more than one broker or site is listed, you should get more than one quote before deciding which offset to secure.

Broker contact details

Broker Abbreviation	Broker Name	Phone	Email	Website
Abezco	Abzeco Pty. Ltd.	(03) 9431 5444	offsets@abzeco.com.au	www.abzeco.com.au
Baw Baw SC	Baw Baw Shire Council	(03) 5624 2411	bawbaw@bawbawshire.vic.gov.au	www.bawbawshire.vic.gov.au
Bio Offsets	Biodiversity Offsets Victoria	0452 161 013	info@offsetsvictoria.com.au	www.offsetsvictoria.com.au
Contact NVOR	Native Vegetation Offset Register	136 186	nativevegetation.offsetregister@d elwp.vic.gov.au	www.environment.vic.gov.au/nativ e-vegetation
Ecocentric	Ecocentric Environmental Consulting	0410 564 139	ecocentric@me.com	Not avaliable
Ethos	Ethos NRM Pty Ltd	(03) 5153 0037	offsets@ethosnrm.com.au	www.ethosnrm.com.au
Nillumbik SC	Nillumbik Shire Council	(03) 9433 3316	offsets@nillumbik.vic.gov.au	www.nillumbik.vic.gov.au
TFN	Trust for Nature	8631 5888	offsets@tfn.org.au	www.trustfornature.org.au
VegLink	Vegetation Link Pty Ltd	(03) 8578 4250 or 1300 834 546	offsets@vegetationlink.com.au	www.vegetationlink.com.au
Yarra Ranges SC	Yarra Ranges Shire Council	1300 368 333	biodiversityoffsets@yarraranges.vi c.gov.au	www.yarraranges.vic.gov.au

@ The State of Victoria Department of Environment, Land, Water and Planning 2022



This work is licensed under a Creative Commons Attribution 4.0 International licence. You are free to re-use the work under that licence, on the condition that you

credit the State of Victoria as author. The licence does not apply to any images, photographs or branding, including the Victorian Coat of Arms, the Victorian Government logo and the Department of Environment, Land, Water and Planning (DELWP) logo. To view a copy of this licence, visit http://creativecommons.org/licenses/by/4.0/

For more information contact the DELWP Customer Service Centre 136 186 or the Native Vegetation Credit Register at nativevegetation.offsetregister@delwp.vic.gov.au

Disclaimer

This publication may be of assistance to you but the State of Victoria and its employees do not guarantee that the publication is without flaw of any kind or is wholly appropriate for your particular purposes and therefore disclaims all liability for any error, loss or other consequence which may arise from you relying on any information in this publication.

Obtaining this publication does not guarantee that the credits shown will be available in the Native Vegetation Credit Register either now or at a later time when a purchase of native vegetation credits is planned.

Notwithstanding anything else contained in this publication, you must ensure that you comply with all relevant laws, legislation, awards or orders and that you obtain and comply with all permits, approvals and the like that affect, are applicable or are necessary to undertake any action to remove, lop or destroy or otherwise deal with any native vegetation or that apply to matters within the scope of Clauses 52.16 or 52.17 of the Victoria Planning Provisions and Victorian planning schemes



Appendix 4 Summary of Consultation (August 2022)



CONSULTATION PHASE/TYPE	CONSULTATION ACTIVITIES	DOC VERSION	DATE SENT	STAKEHOLDER	DATE COMMENT RECEIVED	KEY THEMES
Environment Report (ER) Exhibition Period 1 November 2021 to 28 November 2021	A draft EMF (Attachment F) was included as part of the ER but draft EPRs were not included. Comments were received to inform the preparation of the EMF/EPRs. Activities included:	D	Via DELWP Public Exhibition Notices ARTC email 1 October 2021	DoT	2 December 2021	Request for further consultation and input on design, offset retention, fauna connectivity, any impacts on DoT land, incident notification and landscaping plans
20 November 2021	ARTC provided the community the opportunity to view the Environment Report during a four-week exhibition period from 1 November to 28 November 2021. ARTC published and publicised the report, and provided an avenue for public	D	Via DELWP Public Exhibition Notices ARTC email 1 October 2021	EPA	No comments received	N/A
	submissions, within this exhibition period. Contents of the report include Part A consultation report, ecology impact assessment,	D	1 November 2021	Whittlesea City Council	No comments received	N/A
	ARTC exhibited copies of the report at the State Library of Victoria, and at our ARTC shopfronts-in Benalla, Euroa and Wangaratta, during the exhibition period. Communications advised community members to come in to have any questions answered related to the Environment Report. In locations where ARTC does not have a shopfront, information sessions were held in Seymour, Wandong and	D	3 November 2021	Mitchell Shire Council	2 December 2021	Ensure compliance will be achieved with the EMF/EPRs request for continued consultation more frequent auditing and results made available to Council and community groups ensure management plans reference general environmental duty updates to responsibilities and approvals identify relevant RAPs and cultural heritage training.
	Broadford on 19 November 2021. These information sessions included members of the ARTC Environment Team and resulted in 43 conversations with community members.	D	3 November 2021	Strathbogie Shire Council	No comments received	N/A
	Communications for the exhibition period commenced from 25 October 2021 via north east regional newspapers, geotype of a communication and an appropriate regional media and appr	D D	3 November 2021 3 November 2021	Benalla Rural City Council Wangaratta Rural	No comments received No comments	N/A
	targeted social media and an e-newsletter was distributed. Council and key stakeholders were notified via email that the report was on exhibition and provided the opportunity for a briefing. A briefing was provided to Mitchell Shire Council and Wandong Community Group.	_		City Council	received	
		D	1 November 2021	Wodonga City Council	No comments received	N/A



CONSULTATION PHASE/TYPE	CONSULTATION ACTIVITIES	DOC VERSION	DATE SENT	STAKEHOLDER	DATE COMMENT RECEIVED	KEY THEMES
	The ARTC website was also updated by 1 November 2021 to include the report. ARTC also made the report available on USB to be mailed out upon request.					
Consultation with DELWP		IR1100- TRANSMIT- 000409	13 May 2021		Comments received between 7 May 2021 – 6 May 2022	Further detail requested for the following items: - Threatened species - Hollow-bearing trees - Impact avoidance - Mitigation measures - Threatening processes - Restoration plan - General detail on management measures proposed to mitigate impacts. - Report structure. - Consultation - Habitat connectivity - Request for EVC impact summary table
EMF and EPR Consultation: 30 November 2021 – February 2022	Consultation Activities included: Correspondence was sent directly to all stakeholders, which included - A copy of the draft EMF and EPR's - A comments sheet for stakeholders to submit comments on the draft EMF and EPRs	D	30 November 2021	DoT		No further comments provided. Comments on the ER included feedback on the EMF/EPRs
		D	30 November 2021	EPA		Requested inclusion of references to relevant EPA publications, standards and guidelines and suggested an independent person be nominated to approve works between 10pm and 7am
	 A cover note describing the EMF and EPRs and the B2A Inland Rail Project 	D	29 November 2021	Whittlesea City Council	16 December 2021	Identified an error for correction
		D	29 November 2021	Mitchell Shire Council	9 December 2021	- include site specific environmental management pans (SEPs) - more frequent audits - management of weeds, remnant vegetation, and hollow bearing trees - compliance with general environmental duties request to be consulted on management plans - provide support for affected landowners and include in the SDP - heritage inductions and inclusion of requirements for HOs - explore opportunities to improve public areas - waste management plan to consider reuse



CONSULTATION PHASE/TYPE	CONSULTATION ACTIVITIES	DOC VERSION	DATE SENT	STAKEHOLDER	DATE COMMENT RECEIVED	KEY THEMES
				Strathbogie Shire Council	03 February 2022	Confirmed no feedback would be provided
		D		Benalla Rural City Council	No comments were received	N/A
		D	30 November 2021	Wangaratta Rural City Council	14 December 2021	Requested review of management plans, correction to flood mitigation requirements and suggested that local consultants are used, where available.
		D	29 November 2021	Wodonga City Council	10 December 2021	No specific comments provided.
		E IR1100- TRANSMIT- 000646	From 26 July 2021 – 2 February 2022	DELWP	5 August 2021 to 2 February 2022	 Roles and responsibilities Independent Environmental Auditor Regulatory context amendments Approval of project management plans (FFMP) Evaluating environmental performance Environment event – management and notification Consultation with Councils Environmental approvals register Clearing to be kept to minimum extent practical (following meeting held with DELWP on 02/02/2022)



CONSULTATION PHASE/TYPE	CONSULTATION ACTIVITIES	DOC VERSION	DATE SENT	STAKEHOLDER	DATE COMMENT RECEIVED	KEY THEMES
EMF and EPR Consultation *Note: Version I of the EMF/EPRs to be forward from 8 August 2022	All Councils and Agencies were contacted in late July, to advise them that their comments were sought on the updated EMF and EPRs and to arrange briefing sessions with relevant staff. All councils and Agencies were sent the following information on the 8 th August 202 - Cover letter requesting comments on the EMF/EPRs - Comments sheet to enable all stakeholders to provide comments in a consistent format - A copy of the EMF and EPRs - A copy of the EMF and EPR with tracked changes to clearly outline where changes had been made; and - A summary table of the changes made as result of the Minister's assessment of the ER	l	27 July 2022	DoT		Responded with a number of comments including: - request for review of the management plans and continued consultation - inclusion of stop work procedures - additional measures to protect ecological values and reuse of cleared vegetation - management of impacts to DoT assets and - inclusion of cultural heritage protections, contaminated land and surface water mitigations Additional discussions were also held to close out DoT comments
		I	27 July 2022	EPA	•	Minor comments to update references to EPA publications
	Briefings to all stakeholders were offered throughout August 2022. Relevant Council officers attended briefing sessions on 4 August 2022, 10 August 2022, 11 August and the 23 August 2022.	I	25 July 2022	Whittlesea City Council	No comments were received (Note: no works are planned in the Whittlesea local government area)	
	Additional information was provided to each Council on the 15 August 2022 which outlined: - the applicable overlays for their LGA, their specific requirements, and impacts to relevant ecological values within their LGA.	I	25/7/2022	Indigo Shire Council	26 August 2022	Responded with a request that offsets are provided within the Council area.
		I	22 July 2022	Mitchell Shire Council	31 August 2022	Responded with a number of comments including: - ensure robust monitoring and audit process - consideration of foot and mouth disease - support of the installation of artificial hollows and request to manage canopy loss - request for further targeted surveys - design for electrification and climate change - include noise mitigation measures in the Communication Management Plan



CONSULTATION PHASE/TYPE	CONSULTATION ACTIVITIES	DOC VERSION	DATE SENT	STAKEHOLDER	DATE COMMENT RECEIVED	KEY THEMES
		I	22 July 2022	Strathbogie Shire Council	19 August 2022 – no further comments	Responded with no further comments on the EMF/EPR
		I	25 July 2022	Benalla Rural City Council	31 August 2022	Responded with no further comments on the EMF/EPR
		I	25 July 2022	Wangaratta Rural City Council	25 August 2022	Responded with minor comments on the EMF/EPR
		I	26 July 2022	Wodonga City Council	16 August 2022	Responded with no further comments on the EMF/EPR
Updated EMF/EPRs provided to DELWP	Ongoing consultation with DELWP	J	26 August 2022	DELWP	1 September 2022	Responded with a number of clarifications and requirements: - management of ecological impacts - monitoring and adaptive management; - clarification on consultation processes and responses