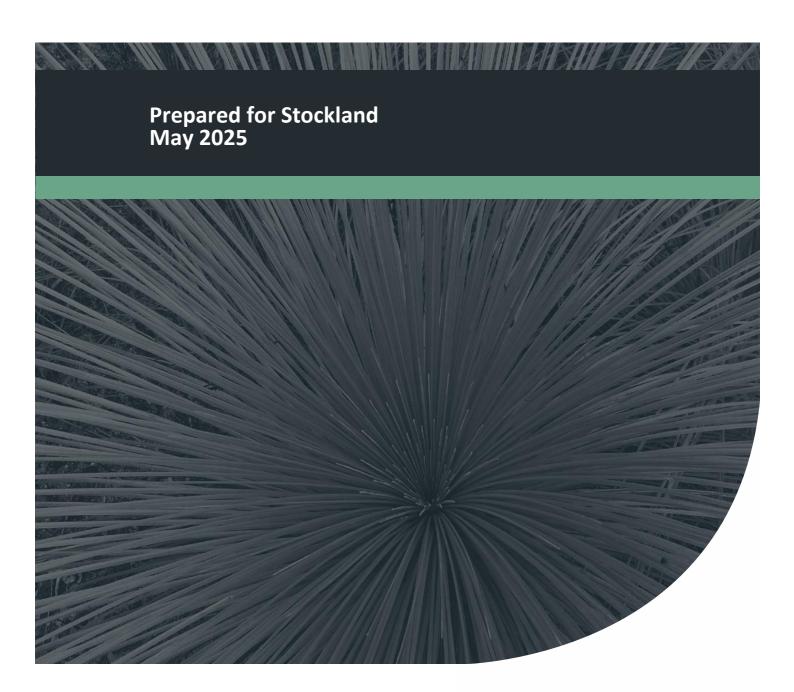


Clearing Permit Application

Lot 31 Rendezvous Road, Vasse

Project No: EP23-093(10)





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Executive Summary

Emerge Associates (Emerge) have been engaged by Stockland (the 'proponent') to prepare a clearing permit application to support the construction of a lifestyle village within Lot 31 Rendezvous Road, Vasse (also referred to as 'the proposal'). The site is zoned 'urban development' under the City of Busselton Local Planning Scheme No. 21 and is generally bound by Cockatoo Loop to the north, Rendezvous Road to the south and land proposed for urban development to the east and west.

The site is approximately 14 hectares (ha) in size and contains 2.75 ha of native vegetation. Vegetation ranges from degraded to completely degraded condition and is largely trees over paddock grasses. No threatened ecological communities (TECs), priority ecological communities (PECs), threatened flora or priority flora have been identified within the site, nor are they likely to occur based on the lack of biodiversity and historic disturbance within the site. Vegetation in the site provides suitable habitat for conservation significant fauna species such as the three black cockatoo species, western ringtail possum and quenda.

Based on the *Geomorphic Wetlands on the Swan Coastal Plain* dataset the majority of the site is mapped as a multiple use wetland (MUW). A seasonally inundated resource enhancement wetland (REW) exists in the southeast extent of the site and is largely cleared of vegetation.

The development has been subject to full consideration by the state government through the Regional Development Assessment Panel (RDAP), with input/review by the City of Busselton, the Department of Water and Environmental Regulation (DWER) and the Department of Biodiversity, Conservation and Attractions (DBCA) as part of the process. Development approval was received on the 12 March 2025 for the lifestyle village.

There are a number of conditions controlling development within the site in accordance with the approval that are relevant to the proposed clearing activities and include:

- Protection of vegetation in accordance with the plan of development.
- Provision and maintenance of vegetation buffer planting within the site and along Rendezvous
 Road
- Preparation and implementation of Landscape Plans, which detail location, number and size of
 existing and proposed trees and shrubs, proposed planting within buffer areas, verge
 treatments and integration of mosquito management measures.
- Preparation and implementation of Construction Environmental Management Plan, which
 includes addressing how construction of the site will retain and enhance the existing ecological
 corridors/linkages and any clearing modifications.
- Preparation and implementation of a revised Water Management Plan (noting the plan has already been revised and approved).
- Preparation and implementation of a Construction Management Plan, addressing activities such as stormwater and sediment control, noise and vibration and dust.
- Preparation and implementation of a Tree Protection Plan.

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In accordance with the development approval, a **total of 1.89 ha of the existing vegetation will be retained**, with 0.86 ha proposed to be cleared and this area to be cleared is referred to as 'the



application area'. The REW wetland is not required to be retained as part of the development approval, however some of the vegetation associated with this feature is being retained.

The clearing is associated with riparian vegetation (mostly *Melaleuca rhaphiophylla* and some *Eucalyptus rudis*, with minor areas of *Agonis flexuosa* (likely planted) and *Corymbia calophylla*) in 'degraded' or 'degraded-completely degraded' condition. As the vegetation being cleared fits the definition for 'riparian', the clearing does not easily fit under the Environmental Protection (Clearing of Native Vegetation) 2004 exemptions (Regulation 5, Item 1), and Schedule 6 exemptions pursuant to the *Environmental Protection Act 1986* do not appear to be applicable. Initial discussions with DWER indicated that this application may not be suitable for a referral pathway but consideration of this would be provided as part of a clearing permit application process.

As a result of the clearing the following values will be impacted:

- 0.86 ha of the Abba vegetation complex (which has less than 10% remaining), which is approximately 0.0002 % of the area remaining of that complex.
- 0.86 ha of 'degraded' and 'degraded to completely degraded' condition vegetation.
- 0.53 ha of native foraging habitat for Carnaby's, Baudin's and forest red-tailed black cockatoos.
- Ten black cockatoo habitat trees (out of 77 within the site), none with suitable hollows that could be used for breeding. Nine of the habitat trees are *Eucalyptus rudis*, while one is *Corymbia calophylla*.
- 0.86 ha of refuge habitat for western ringtail possum, of which only 0.028 ha is composed of Agonis flexuosa (located were the internal road connects to Cockatoo Loop in the north). The remainder of the vegetation being removed is mostly Melaleuca rhaphiophylla (even where mapped as part of the eucalypt woodland habitat). The majority of the vegetation being removed is associated with paddock trees not connected to other vegetation.

Avoidance of native vegetation has been a key underlying principle for the project, with detailed design work progressed to enable 1.89 ha of native vegetation to be retained. This has required balancing significant fill required across the site (up to 2 m) and earthworks to enable retention. Development approval conditions have already been applied to the project to ensure retention and protection of the identified vegetation.

In addition to the outlined retention, 4.6 ha of planting is required to be implemented as part of the development approval (mix of landscape buffer planting and open space areas, proposed by the proponent), as well as 350 trees within streetscapes. Overall, there will be a net gain within the site in terms of areas that will be vegetated with predominantly native species.

While the approved development results in the clearing or 0.86 ha of native vegetation, the clearing can be managed in accordance with the clearing principles. E

While 0.86 ha of native vegetation is proposed to be removed, the proposed clearing has a low environmental impact and is consistent with the EP Act Clearing Principles, particularly given the extensive retention (1.89 ha, 70% of the native vegetation in the site) and new planting (4.6 ha, more than 30% of the site including 1.89 ha of understorey planting associated with the retained vegetation) that will be implemented as part of existing development conditions.



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Appendices

Appendix A

Proposed Development Layout

Appendix B

Development Approval

Appendix C

Environmental Assessment Report

Appendix D

Planting list



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Abbreviation Tables

Table A1: Abbreviations – Organisations

Organisations		
ANZECC	Australian and New Zealand Environment and Conservation Council	
DBCA	Department of Biodiversity, Conservation and Attractions	
DCCEEW	Department of Climate Change, Energy, the Environment and Water	
DWER	Department of Water and Environment Regulation	
EPA	Environmental Protection Authority	
RDAP	Regional Development Assessment Panel	
WAPC	Western Australian Planning Commission	

Table A2: Abbreviations – General terms

General terms			
CCW	Conservation category wetland		
CEMP	Construction Environmental Management Plan		
СМР	Construction Management Plan		
ESA	Environmentally sensitive area		
FCT	Floristic community type		
IBRA	Interim Biogeographic Regionalisation of Australia		
MUW	Multiple use wetland		
NVIS	National Vegetation Inventory System (ESCAVI 2003)		
P1	Priority 1		
P2	Priority 2		
Р3	Priority 3		
P4	Priority 4		
P5	Priority 5		
PEC	Priority ecological community		
REW	Resource enhancement wetland		
Т	Threatened		
TEC	Threatened ecological community		
UFI	Unique feature identifier		
WMP	Water Management Plan		



Table A3: Abbreviations –Legislation

Legislation			
BC Act Biodiversity Conservation Act 2016			
EP Act	Act Environmental Protection Act 1986		
EPBC Act Environment Protection and Biodiversity Conservation Act 1999			
EPP	Environment Protection Policy		
PD Act	Planning and Development Act 2005		

Table A4: Abbreviations – units of measurement

Units of measurement	Units of measurement			
cm	Centimetre			
ha	Hectare			
Km	Kilometre			
m	Metre			
m ²	Square metre			
m AHD	m in relation to the Australian height datum			
mm	Millimetre			

Table A5: Key terms

Key terms					
The site	This encompasses the full extent of Lot 31 Rendezvous Road, Vasse that is subject to the development approval.				
Avoidance area	Refers to the areas that support native vegetation and associated values that have been avoided through the proposal design process.				
Application area	Refers to the area of native vegetation that is proposed to be cleared within the site and is the subject of this clearing permit application.				



Introduction 1

1.1 Background

Stockland (the 'proponent') is seeking a clearing permit to construct a lifestyle village (Appendix A) within Lot 31 Rendezvous Road, Vasse (herein referred to as 'the site'). The site, shown in Figure 1, consists of an area of approximately 14 hectares (ha) and is located within the City of Busselton. The site is bounded by vegetated recreation reserves to the north and east, Cockatoo Loop to the northeast, existing rural land uses (proposed for future urban development) to the east and west, and Rendezvous Road and rural land uses to the south. The site is currently zoned 'urban development' under the City of Busselton Local Planning Scheme (LPS (No. 21) and is located within the 'Wetland' and 'Environmental Conditions' Special Control Areas.

The development of the site as a lifestyle village has been approved (Appendix B) pursuant to the Planning and Development Act 2005. It was subject to full consideration by the state government through the Regional Development Assessment Panel (RDAP), with input/review by the City of Busselton, Department of Water and Environmental Regulation (DWER) and Department of Biodiversity, Conservation and Attractions (DBCA) as part of the process. Development approval was received on the 12 March 2025 for the lifestyle village.

A total of 2.75 ha of native vegetation is present within the site. In accordance with the development approval, a total of 1.89 ha of the existing vegetation will be retained, with 0.86 ha proposed to be <u>cleared</u> and the area to be cleared is referred to as 'the application area'.

The clearing is associated with riparian affiliated vegetation (mostly Melaleuca rhaphiophylla and some Eucalyptus rudis, with minor areas of Agonis flexuosa (likely planted) and Corymbia calophylla) in 'degraded' and 'degraded-completely degraded' condition. As the vegetation being cleared fits the definition for 'riparian', the clearing does not easily fit under the Environmental Protection (Clearing of Native Vegetation) 2004 exemptions (Regulation 5, Item 1), and Schedule 6 exemptions pursuant to the Environmental Protection Act 1986 do not appear to be applicable given the proposed development is not subject to subdivision. Initial discussions with DWER indicated that this application may not be suitable for a referral pathway but consideration of this approval pathway would be provided as part of a clearing permit application process.

1.2 Purpose of this report

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This document provides supporting information for a clearing permit in relation to the clearing of 0.86 ha of native vegetation where it intersects the proposed development. It provides:

- An overview of the proposed development (Section 2)
- An outline of the environmental values within the site (Section 3)
- Consideration of the mitigation hierarchy, including avoidance and mitigation (Section 4)
- Detail on the planning approval (Section 5)
- An assessment of the proposed clearing against all clearing principles listed in Schedule 5 of the Environmental Protection Act 1986 (EP Act) (Section 6).



1.3 Supporting documentation

A range of investigations have been undertaken within the site to support the relevant approval processes required for the proposed development. This includes the following:

- Reconnaissance Flora and Vegetation Assessment, Lot 31 Rendezvous Road, Vasse (Emerge Associates 2024b) (submitted via IBSA)
- Basic Fauna and Targeted Black Cockatoo Assessment, Lot 31 Rendezvous Road, Vasse (Emerge Associates 2024a) (submitted via IBSA)
- Environmental Assessment Report, Lot 31 Rendezvous Road, Vasse (Emerge Associates 2025)
 (see Appendix C)

It should be noted that since these reports were prepared, detailed review and refinement of the vegetation extent has been undertaken to support this clearing permit (e.g. removing shadow extending beyond the canopy extent from the area values) and as a result the area values detailed in this application are different to the area values presented in the site specific investigations. The values have not just, it is just that the mapping has been accurately completely to reflect actual vegetation extent. The flora, vegetation and fauna assessment reports have not been updated to reflect this, given these documents were submitted to support the development application and therefore are already in the public realm.

1.4 Clearing application area

0.86 ha of native vegetation (as defined under the EP Act) is proposed to be cleared. The location and extent of the clearing area is shown in **Figure 1** and is referred to as the 'application area'. The approved development layout is shown in **Appendix A**.

While the site contains 2.75 ha of native vegetation as defined under the EP Act, 0.86 ha is proposed to be cleared with 1.89 ha to remain and has been identified as the 'avoidance area' as shown in **Figure 1.**



Proposed Development 2

The site is proposed to be developed and operate as a lifestyle village with the development layout shown in Figure 2 and provided in Appendix A.

The development will include:

- Approximately 213 residential dwellings
- An interconnected road and pedestrian network, including street trees (at least 350) and landscaped verges.
- Car and RV parking spaces throughout.
- A club house and social precinct, which will have landscape grounds, a swimming pool and pickleball courts.
- Retention of existing vegetation through the central and eastern portions of the site (providing connections to external landholdings to the north and south), which will be subject to additional understorey planting following removal of weeds. This area will be maintained from both a bushfire perspective as low fuel (and has been factored in as part of the design approach already) and to address weeds.
- Landscape buffer planting along Rendezvous Road to provide screening for/from rural land uses to the south. This includes planting internal to the site and external along Rendezvous Road reserve, as per the development approval conditions. This vegetation is assumed to be a bushfire hazard.
- Low threat planting around the perimeter of the site (low threat managed area), which will include a mix of trees, understorey species and grass areas.
- Drainage areas, including basins and swales. Planting will include wetland-type species, aligned with the overstorey species being removed as part of the outlined clearing.

Overall, approximately 4.6 ha (more than 30%) of the site will have some form of landscaping and planting, with 1.89 ha of that being existing vegetation that is being retained (from a total of 2.75 ha of existing native vegetation).

The proponent will be responsible for the long-term implementation, management and maintenance of the entire site, including planting areas.



3 Existing Environment

3.1 Historical land uses and clearing

Review of historical images available from February 1970 onwards shows that the majority of the site was cleared of native vegetation prior to 1970. While some areas of the site appear to have been subject to re-establishment of native vegetation, the spatial extent of this does not appear to have substantially changed from 1970 to the current time (WALIA 2024).

The historic imagery also indicates that the site appears to have historically been used for general rural activities, most likely grazing and other extensive (low intensity) agricultural uses. There is no indication of any intensive agricultural or other land uses, activities or buildings/structures across the history of available aerial imagery.

3.2 Flora and vegetation

Emerge Associates completed a flora and vegetation assessment for the site, with survey work completed 11 May 2023 and 14 November 2023 in accordance with EPA's *Technical Guidance – Flora and Vegetation Surveys for Environmental Impact Assessment* (EPA 2016). The survey boundary incorporated the entire site as well as a portion within Rendezvous Road reserve to the south (not part of this application, nor is native vegetation proposed to be impacted by this proposal).

This assessment was undertaken to identify plant communities and vegetation condition, as well as the presence of priority or threatened flora species and ecological communities. The following provides a summary of the values identified within the site. The report has been submitted through the Index of Biodiversity Surveys for Assessment (IBSA), and captured as part of the *Environmental Assessment Report* (EAR) provided in **Appendix C**.

3.2.1 Regional vegetation complexes

The site is contained within the Swan Coastal Plain IBRA region and within the 'SWA02' or Perth subregion. The Perth subregion is characterised mainly by banksia low woodland on leached sands with melaleuca swamps where ill-drained; and woodland of *Eucalyptus gomphocephala* (tuart), *E. marginata* (jarrah) and *Corymbia calophylla* (marri) on less leached soils (Beard 1990). This subregion is recognised as a biodiversity hotspot and contains a wide variety of endemic flora and vegetation types.

Variations in native vegetation can be further classified based on regional vegetation mapping. DBCA (2021) mapping shows the site as comprising the 'Abba Complex', which is described as vegetation ranging from an open forest of *Corymbia calophylla ,Eucalyptus marginata, Banksia* spp. to woodland of *Eucalyptus rudis* and *Melaleuca* spp. in low lying areas (Heddle *et al.* 1980). The vegetation within the site would be representative of the 'woodland of *Eucalyptus rudis* and *Melaleuca* spp. in low lying areas', discussed below.

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The 'Abba Complex' complex was determined to have 6.54% of its pre-European extent remaining on the Swan Coastal Plain in 2018, with 0.17% protected for conservation purposes¹ (Government of Western Australia 2019a).

3.2.2 Threatened or priority flora

The Protected Matters Search Tool (DCCEEW 2024) and DBCA's threatened and priority flora databases (reference no. 13-0724F) identified 70 threatened and priority flora occurring or potentially occurring within a 10 km radius of the site.

Of the 70 conservation significant species identified from database searches, none were considered to have 'high' or 'moderate' likelihood of occurrence within the site. All threatened and priority flora species were deemed to have 'low' or 'negligible' likelihood of occurrence due to lack of suitable habitat or absence of reliable records.

No occurrences of threatened or priority flora species were recorded within the site as part of the survey. The threatened and priority flora species identified in the desktop assessment are considered to have low likelihood of occurrence due to the lack of suitable habitat and high vegetation disturbance (degraded grazed understorey).

3.2.3 Plant communities and condition

Three plant communities were identified within the survey area and are described in **Table 1** and shown in **Figure 3**.

Table 1: Description and extent of vegetation units identified within the site

Code	Description	Total area (ha)	Propor tion of site (%)	Representative photograph
CcEr	Closed forest to woodland of Corymbia calophylla and Eucalyptus rudis over scattered Agonis flexuosa over low closed grassland and forbland of *Zantedeschia aethiopica over non-native grasses.	2.28	16.19	

_

¹Defined as being listed in the DBCA-legislated lands and waters dataset as either Crown reserves or lands managed under Section 8A of the Conservation and Land Management Act that have an IUCN category of I – IV (Government of Western Australia 2019).



Code	Description	Total area (ha)	Propor tion of site (%)	Representative photograph
Mr	Low closed forest to woodland of Melaleuca rhaphiophylla over standing water and low closed non-native grassland with occasional native forbs and sedges.	0.53	3.76	
Non- native	Low closed grassland, forbland and sedgeland of predominantly non-native species.	11.27	80.05	
Total	1	14.08	100	

Vegetation condition, shown in **Figure 4**, varied from 'completely degraded' to 'degraded' and has been outlined in **Table 2**. The majority of the vegetation (11.27 ha) was in completely degraded condition. Examples of the vegetation condition have been provided in **Plate 1** to **Plate 7**.



Table 2: Extent of vegetation condition categories within the site

Condition category (Keighery 1994)	Total area (ha)	Proportion of site (%)	
Pristine	0	0	
Excellent	0	0	
Very good	0	0	
Good	0	0	
Degraded	2.45	17.40	
Degraded – completely degraded	0.36	2.55	
Completely degraded	11.27	80.05	
Total	14.08	100	



Plate 1: 'Degraded' condition vegetation, associated with CcEr plant community through the central portion of the site (areas being retained, mostly Eucalyptus rudis and Melaleuca rhaphiophylla)





Plate 2: 'Degraded' condition vegetation, associated with CcEr plant community through the northern portion of the site (areas being retained, more Corymbia calophylla and Eucalyptus rudis and some Agonis flexuosa)



Plate 3: 'Degraded-completely degraded' condition vegetation, associated with CcEr plant community through the southern portion of the site (examples of areas being removed).





Plate 4: 'Degraded' condition vegetation, associated with CcEr plant community through the central portion of the site, but mostly Melaleuca rhaphiophylla (examples of areas being removed). Vegetation in background being retained.



Plate 5: 'Degraded' condition vegetation, associated with Mr plant community through the central-eastern portion of the site (areas being retained)





Plate 6: 'Degraded-completely degraded' condition vegetation, associated with Mr plant community through the eastern half of the site (examples of vegetation being removed)



Plate 7: Completely degraded' condition vegetation, associated with 'non-native' plant community through majority of the site (areas being developed, vegetation in background being retained/in adjacent landholdings)



3.3 Fauna assessment

Emerge completed a Basic Fauna Survey and Targeted Black Cockatoo Assessment with field survey of the site on 11 May 2023 and 14 November 2023, to the standards of the Technical Guidance - Terrestrial vertebrate fauna surveys for environmental impact assessment (EPA 2020) and the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) Black cockatoo referral guidelines (DAWE 2022).

This assessment was undertaken to identify fauna habitat and usage, with a detailed assessment of black cockatoo habitat, including the presence of breeding and foraging habitat. It should be noted that the survey report included vegetation within the northern verge of the Rendezvous Road reserve, immediately adjacent to the southern boundary of the site. None of the vegetation in Rendezvous Road is proposed to be removed or disturbed by activities within the site and has been excluded from the data summarised below.

The following sections provide a summary of the values identified within the site. The report has been submitted through the Index of Biodiversity Surveys for Assessment (IBSA) and captured as part of the *Environmental Assessment Report* (EAR) provided in **Appendix C**.

3.3.1 Fauna habitat

Three broad fauna habitats were identified within the site, as listed in in **Table 3** and shown in **Figure 5**.

Table 3: Fauna habitats identified within the site

Fauna habitat	Description	Total area (ha)	Proportion of site (%)	Representative photograph
Eucalypt woodland	Closed forest to woodland of Corymbia calophylla over scattered Agonis flexuosa over herbland Pteridium esculentum (brack en) over non-native grassland. • Moderate microhabitat complexity. • Microhabitats consist of fallen logs and woody debris. • Utilised mostly by common and widespread avifauna. • Marri provide a foraging resource to Carnaby's,	2.28	16.19	



Fauna habitat	Description	Total area (ha)	Proportion of site (%)	Representative photograph
Riparian vegetation	Low closed forest to woodland of <i>Melaleuca</i> rhaphiophylla over low nonative grassland with scattered herbs and sedges and standing water for much of the year. • Moderate microhabitat complexity. • Microhabitats consist of fallen logs, woody debris, riparian vegetation. • Utilised mostly by common and widespread avifauna particularly wetland species when	0.53	3.76	
Grassland	Dense non-native grassland with scattered native trees and shrubs. • Low microhabitat complexity. • Occasional rabbit diggings. • Likely only utilised by fauna for traversal between habitats.	11.27	80.05	

Of the 1.89 ha of native vegetation being retained within the site:

- 1.75 ha is the 'eucalypt woodland' habitat type (which is 76% of that habitat type within the site).
- 0.20 ha is the 'riparian' habitat type (which is 38% of that habitat type within the site).

3.3.2 Threatened and priority fauna

A total of 28 native and two introduced fauna species were directly or indirectly (from foraging evidence) recorded during the field survey. No threatened species, specially protected species and priority fauna species were recorded within the site during the field survey.

Of the species indicated as potentially occurring, six threatened, one specially protected and four priority species were classified as having a 'high' or 'moderate' likelihood of occurrence (Emerge Associates 2024a). The legislative or policy status and habitat preferences of these species are summarised in **Table 4**.



The remainder of the conservation significant fauna species identified in the desktop assessment (92 species) were considered as having a 'low', negligible' or 'nil' likelihood of occurrence. This is detailed in the fauna survey report.

Table 4: Summary of conservation significant fauna species with potential to occur in the site

Species name	Common name	Status		Habitat description	
		WA EPBC Act			
Birds					
Apus pacificus	Pacific swift	MI	МІ	Aerial, migratory species that is most often seen over inland plains and sometimes above open areas, foothills or in coastal areas. Sometimes occurs over settled areas, including towns, urban areas and cities. Potential occasional aerial visitor.	
Calyptorhynchus banksii naso	Forest red-tailed black cockatoo	VU	VU	Eucalypt and Corymbia forests, often in hilly interior. More recently also observed in more open agricultural and suburban areas including Perth metropolitan area. Attracted to seeding Corymbia calophylla, Eucalyptus marginata, introduced Melia azedarach and Eucalyptus spp. trees. Suitable habitat present, discussed below.	
Falco peregrinus	Peregrine falcon	OS	-	Mainly found around cliffs along coasts, rivers, ranges and around wooded watercourses and lakes. Potential occasional aerial visitor.	
Ninox connivens connivens	Barking owl (southwest subpop.)	P3	-	Open forests, woodlands, dense scrubs, foothills, river red gums, and other large trees near watercourses penetrating otherwise open country. Also Melaleuca woodlands, mangroves, rainforests and deciduous vine scrubs (Johnstone and Storr 1998; Pizzey & Knight 2012). Potential visitor.	
Tyto novaehollandiae novaehollandiae	Australian masked owl	Р3	-	Forests, open woodlands, farmlands with large trees. E.g. river red gums, adjacent cleared country, timbered watercourses, paperbark woodlands and caves (Pizzey & Knight 2012). Potential visitor.	
Zanda baudinii	Baudin's black cockatoo	EN	EN	Mainly eucalypt forests. Attracted to seeding <i>Corymbia</i> calophylla, Banksia spp., Hakea spp., and to fruiting apples and pears. Suitable habitat present, discussed below.	
Zanda latirostris	Carnaby's black cockatoo	EN	EN	Mainly proteaceous scrubs and heaths and adjacent eucalypt woodlands and forests; also plantations of <i>Pinus</i> spp. Attracted to seeding <i>Banksia</i> spp., <i>Dryandra</i> spp., <i>Hakea</i> spp., <i>Eucalyptus</i> spp., <i>Corymbia calophylla</i> , <i>Grevillea</i> spp., and <i>Allocasuarina</i> spp. Suitable habitat present, discussed below.	
Invertebrates					
Bothriembryon irvineanus	Irvine's bothriembryontid land snail (Cape Naturaliste)	P2	-	Habitat unknown. Found in the Cape Naturalist region.	
Mammals					
Isoodon fusciventer	Quenda	P4	-	Dense scrubby, often swampy, vegetation with dense cover up to one metre high. Suitable (but habitat present, discussed below. Suitable habitat present, discussed below.	



Species name Common name Status **Habitat description EPBC Act** CDPhascogale South-western Dry sclerophyll forests and open woodlands that contain hollowtapoatafa brush-tailed bearing trees but a sparse ground cover. Similar habitat wambenger preferences to western ringtail possum. phascogale **Pseudocheirus** CR CR Western ringtail On the Swan Coastal Plain in Agonis flexuosa woodlands and occidentalis Agonis flexuosa/ Eucalyptus gomphocephala forests. Also possum Eucalyptus marginata forests (DBCA 2017). Suitable habitat

present, discussed below.

3.3.2.1 Black cockatoos

Three threatened species of black cockatoo occur in the south-west of WA (referred to herein collectively as 'black cockatoos'), namely:

- Zanda latirostris (Carnaby's black cockatoo) which is listed as 'endangered' under the EPBC Act and the BC Act.
- Zanda baudinii (Baudin's black cockatoo) which is listed as 'endangered' under the EPBC Act and the BC Act.
- Calyptorhynchus banksii naso (forest red-tailed black cockatoo) which is listed as 'vulnerable' under the EPBC Act and the BC Act.

Black cockatoo habitat is conventionally separated into breeding, roosting and foraging categories which can be described as:

- Breeding habitat refers to 'habitat trees' which consist of native trees of a suitable species
 that either contain nesting hollows or have a large enough diameter at breast height5 (DBH) to
 develop a nesting hollow over time (DAWE 2022). Black cockatoos typically utilise breeding
 habitat within their defined breeding season: August to March for Baudin's black cockatoo,
 July to December for Carnaby's black cockatoo breed and throughout the year for forest redtailed black cockatoo, with peaks in April June and August October (DAWE 2022).
- Roosting habitat consists of a stand of tall trees (>8 m) within 6 km of water and food resources and 12 km of additional foraging resources where black cockatoos rest overnight (Shah 2006; Glossop *et al.* 2011; Le Roux 2017; DAWE 2022).
- **Foraging habitat** is vegetation that black cockatoos are known to feed on, which varies between black cockatoo species (Groom 2011; Johnstone *et al.* 2011; DAWE 2022). A full range of foraging plants and their foraging category assigned by Emerge Associates is available in the fauna survey report.

A detailed black cockatoo habitat assessment was undertaken for the site. The outcomes are summarised below.



Breeding habitat

A total of 77 black cockatoo habitat trees (suitable species with a diameter at breast height (DBH) or 500 mm or greater) were recorded within the site as shown in **Figure 6**.

The habitat trees comprised 41 *Corymbia calophylla* (marri) and 36 *Eucalyptus rudis* (flooded gum). None of the habitat trees within the site were identified to contain suitable hollows based on ground level inspection.

A total of ten (10) potential black cockatoo nesting trees would be removed during the clearing as shown in **Figure 6**. None of the trees contain suitable hollows. Nine (9) of the trees are *Eucalyptus rudis*, and one (1) is *Corymbia calophylla*.

The potential black cockatoo habitat trees that are being removed do not currently support suitable nesting hollows for black cockatoos and therefore could not currently support black cockatoo breeding activity within the site.

Roosting habitat

No roosts or evidence of roosting were observed within the site during the survey. Tall trees within the site can provide suitable roosting habitat, the majority of which is being retained.

Foraging habitat

The majority of native vegetation (predominantly the plant community **CcEr**) within the site is considered suitable foraging habitat for the three black cockatoo species. This includes:

- 2.29 ha of native foraging habitat for Carnaby's black cockatoo;
- 2.28 ha of native foraging habitat for Baudin's black cockatoo; and
- 2.28 ha of native foraging habitat for forest red-tailed black cockatoo.

Foraging habitat recorded in the site is shown in **Figure 6**. Of the 1.89 ha being retained, 1.75 ha is native foraging habitat for the black cockatoo species.

3.3.2.2 Western ringtail possum

Records of the western ringtail possum (critically endangered) had been recorded throughout the local area particularly as opportunistic spotlighting or day observations in DBCA records. Both the **eucalypt woodland** and **riparian** habitat in the site contains western ringtail possum foraging plant species and is likely to provide suitable foraging and refuge habitat for the species in conjunction with areas of vegetation surrounding the survey area. No dreys were observed during the survey.

Only a small portion of the area being cleared (0.028 ha of 0.86 ha total clearing) contains primary/preferred habitat of *Agonis flexuosa* (approximately five individual trees). This area is associated with the internal road network and the connection to Cockatoo Loop. This alignment was chosen to avoid impacting black cockatoo habitat trees. All the vegetation being retained, 1.89 ha, would be habitat used by western ringtail possum.



3.3.2.3 Quenda

Quenda require dense ground cover to persist in an area and, as such, much of the site would not provide suitable habitat. However, the species is common around Busselton and may forage in the site, particularly where the **riparian** habitat is most dense.

The more dense areas of riparian vegetation are being retained (0.20 ha), and future planting within the site will provide further habitat for the species and connections to reserves surrounding the site.

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4 Application of Mitigation Hierarchy

In accordance with A guide to the assessment of applications to clear native vegetation (DER 2014), the clearing has been considered in the context of the impact mitigation hierarchy and outlined below.

4.1 Avoidance

From the beginning of the project, the existing vegetation within the site was identified as a key asset for retention and protection, and the design team has worked diligently to balance size and location of lifestyle community development requirements, fill needs (for sewer, drainage and groundwater separation) and bushfire, in order to retain as much vegetation as possible.

During the initial development process for the lifestyle village, the 'proponent' considered a number of options for how the development could be accommodated across the broader site.

A total of 2.75 ha of native vegetation is present within the site (trees over paddock grasses in degraded to completely degraded condition). The proponent is **retaining 1.89 ha** (nearly 70%) in open space areas that will remain under their ownership and protected in perpetuity. This is shown in **Figure 1**. The retention of vegetation is a commitment of and requirement of the development approval.

Since the development approval was granted, the proponent has also re-designed the project to retain additional vegetation (associated with the **Mr** plant community) within the south-eastern portion of the site, which has not originally proposed for retention due to likely impacts from fill. Detailed design has worked through this further and been able to support retention. This is included with the 1.89 ha total.

Through the refined design as part of the development approval, the application area (see **Figure 1**) as presented in this clearing permit application has avoided impacts within the site as delineated by the avoidance area. This includes the avoidance of 1.89 ha of native vegetation which includes:

- 1.76 ha of native foraging habitat for Carnaby's, Baudin's and forest red-tailed black cockatoos.
- 67 black cockatoo habitat trees.

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• 1.89 ha of foraging, refuge and dispersal habitat for western ringtail possum.

The road network has been located to avoid clearing of trees, in particular habitat trees. Through the central portion of the site (in a north-south alignment), the road traverses the stand of vegetation at an existing cleared point, with tree canopy over the road to be maintained. Therefore while it appears that the road network intersects vegetation, the trunk/stems of the vegetation has been avoided. Habitat trees at the entry for Cockatoo Loop have also been avoided through the strategic placement of the road.



4.2 Minimise

The proposed development will have mitigation measures in place both during clearing and construction, and post development as part of ongoing operation of the lifestyle village. These mitigation measures are already captured through the requirements of the development approval for the proposal.

Clearing activities will be managed in accordance with a Construction Environmental Management Plan (CEMP) and Tree Protection Plan, to be prepared and implemented by the proponent to minimise potential impacts to native vegetation and fauna habitat.

The CEMP will be approved by the City of Busselton on advice for the DWER and DBCA and will include (but will not be limited to) the following procedures:

- Clearly defining the extent of the clearing area before any clearing activities commence, with vehicle and personnel access limitations to the avoidance area. Trees to be protected in accordance with Tree Protection Plan and arborist advice, which includes delineation of a tree protection zone.
- Clearly defining habitat trees to be retained within the avoidance area.
- A pre-clearing fauna inspection to identify potential fauna interactions, including an inspection of trees for hollows and signs of use one (1) to two (2) days before clearing occurs.
- A fauna spotter to be present during clearing works to direct and manage works to avoid direct impacts to fauna. Fauna will be managed in accordance with licences pursuant to the Biodiversity Conservation Act 2016.
- Implementation of hygiene protocols during the clearing and construction process to appropriately manage construction to prevent potential spread of weeds, dieback and feral animals into areas of retained vegetation. This will include:
 - Vehicles, machinery, and personnel to be free of mud/soil and plant material upon entering the site. Inspections to be completed prior to works commencing.
 - Minimising clearing and earthworks in wet soils during wet conditions.
 - Using landscaping species not identified as weeds.
 - Ensuring the project is maintained in a clean and tidy manner to ensure feral and other species are not attracted to the site. Waste material is to be disposed of appropriately through waste services and/or to licenced landfill during construction and as part of ongoing operation.

4.3 Rehabilitation

New planting, including buffer planting within the southern boundary of the site (along Rendezvous Road plus additional planting in Rendezvous Road reserve) will be undertaken and is required through the development approval. The open spaces and streetscapes will also be subject to further planting (including street trees). The areas where new planting is proposed is shown in **Figure 2**.



Planting will include the following:

- An extensive front verge and shared/common landscaping (1.17 ha) and street tree (at least 350 trees) network across the site. The proponent will be responsible for ongoing management of these assets.
- Landscape buffer planting along Rendezvous Road (0.43 ha). The proponent will be responsible for maintaining this planting in perpetuity.
- Low threat planting around the perimeter of the site (1.02 ha), which will include native groundcovers and trees. The proponent will be responsible for maintaining this planting in perpetuity.
- Native vegetation planting associated with drainage areas (0.48 ha). This will include retention
 of existing vegetation, plus planting with native sedges, shrubs and trees, with trees species
 reflecting those that are being removed.
- Weed control and understorey planting associated with the retained vegetation through the central portion of the site (1.5 ha).
- Ongoing weed control within all open space areas as part of maintaining the development to the standard expected by residents. This will include landscape buffer planting and areas of retained vegetation.

A list of plant species proposed is provided in **Appendix D**.

As per the landscape concept plan provided through the development application and progression of detailed design, a total of 4.6 ha of planted open space areas (not including gardens within individual lots) will be implemented within the site in accordance with the development approval. This includes a mix of retained vegetation (1.89 ha of overstorey vegetation), revegetation planting within landscape buffer areas along Rendezvous Road and low fuel managed areas around the perimeter and throughout the site.

4.4 Offset

Given the outlined avoidance, mitigation and rehabilitation activities, no offset is proposed.

Removal of the vegetation within the application area would not significantly reduce the available vegetation, its connectivity or the vegetation available to fauna species in the area, particularly when considering the retention of vegetation and proposed new planting (required as a condition of the existing development approval). The proposed new planting will provide a net gain.

No residual significant impact is anticipated.



5 Planning Instruments and Other Environmental Approvals

As outlined, the proposal has been subject to a development application pursuant to the *Planning and Development Act* 2005 (PD Act), and was assessed by the City of Busselton and Regional Development Assessment Panel (RDAP), and approved by the RDAP. The Department of Water and Environmental Regulation (DWER) and Department of Biodiversity, Conservation and Attractions reviewed the proposal and provided comment to the City and the RDAP.

Development approval was granted for the proposal on the 12 March 2025. A copy of the approval is provided in **Appendix C**.

There is a significant commitment (and requirement based on the approval) to retain large portions of the vegetation on site and to manage impacts to land, water, fauna and surrounding land parcels, to ensure only the areas permitted to be removed through the approval are impacted.

The approval can be referred to for more detail, but conditions of the approval that control activities and support protection of the vegetation, fauna and landforms include:

- Condition 3.1 Preparation and implementation of a Final Landscaping Plan follows the approached detailed in the development approval, with large areas of vegetation retained (1.89 ha) and additional planting (total 4.6 ha) throughout the development (including buffer planting, perimeter low threat planting and street trees).
- Condition 3.5 Preparation and implementation of a Construction Environmental
 Management Plan (CEMP), to detail how vegetation will be retained and enhanced, as well as protection of fauna. This is to be approved by the City in consultation with DWER and DBCA.
- Condition 3.11 Engineering drawings and specifications to be in accordance with the approved Water Management Plan.
- Condition 3.13 Preparation and implementation of a Construction Management Plan, addressing noise, dust, waste management, stormwater and sediment control during construction.
- Condition 3.14 Preparation and implementation of a Tree Protection Plan, to detail trees/vegetation to be retained, and methods to ensure protection throughout construction and implementation. This plan has formed the basis for the retention/removal identified in the attached figures
- Condition 8 Ongoing landscape obligations, specifying replanting of any new planting if it is removed, dies or is assessed by the City as seriously damaged.
- Advice note 15 requirements for the CEMP, to address how construction will retain and enhance existing ecological corridors and any clearing modification.
- Advice note 16 outline of *Biodiversity Conservation Act 2016* (BC Act) requirements with regard to licences, with specific consideration to western ringtail possum.



6 Response to EP Act Clearing Principles

A total of 0.86 ha of native vegetation is proposed to be cleared within the site.

Under Section 51C of the EP Act, clearing of native vegetation is an offence unless a clearing permit has been obtained or an exemption applies.

As noted in **Section 1**, given the development approval, typically clearing to implement the proposal would be exempt in accordance with Regulation 5, Item 1 of the Environmental Protection (Clearing of Native Vegetation) 2004 Regulations. However, as the vegetation is riparian affiliated vegetation (mostly *Melaleuca rhaphiophylla* and some *Eucalyptus rudis*, with minor areas of *Agonis flexuosa* (likely planted) and *Corymbia calophylla*), the exemption does not appear to be applicable. The clearing is low environmental impact, with significant retention and revegetation proposed through the implementation of the proposal, with conditions controlling the avoidance, mitigation and management measures. When considering the information presented, it would be prudent for DWER to also consider if a clearing referral pathway could be suitable instead, as initial advice from DWER suggested it might not be suitable. The level of existing approval controls for the development mean impacts would be low and will need to be managed.

Outside of the application of exemptions, when assessing clearing permit applications, DWER has regard to the ten clearing principles contained in Schedule 5 of the EP Act so far as they are relevant to the matter under consideration. In support of this clearing application, consideration and response to the ten clearing principles have been outlined in the following sections.

6.1 Principle (a) – Native vegetation should not be cleared if it comprises a high level of biological diversity.

Native vegetation is described and mapped at different scales to illustrate patterns in its distribution. At a continental scale the *Interim Biogeographic Regionalisation for Australia* (IBRA) divides Australia into floristic subregions (Environment Australia 2000).

The site is contained within the Swan Coastal Plain IBRA region and within the 'SWA02' or Perth subregion. The Perth subregion is characterised by mainly banksia low woodland on leached sands with melaleuca swamps where ill-drained; and woodland of *Eucalyptus gomphocephala* (tuart), *E. marginata* (jarrah) and *Corymbia calophylla* (marri) on less leached soils (Beard 1990). This subregion is recognised as a biodiversity hotspot and contains a wide variety of endemic flora and vegetation types.

Variations in native vegetation can be further classified based on regional vegetation mapping. DBCA (2021) mapping shows the site as comprising the 'Abba Complex', which is described as vegetation ranging from an open forest of *Corymbia calophylla ,Eucalyptus marginata*, *Banksia* spp. to woodland of *Eucalyptus rudis* and *Melaleuca* spp. in low lying areas (Heddle *et al.* 1980).



The 'Abba Complex' complex was determined to have 6.54% (3,326.20 ha) of its pre-European extent remaining on the Swan Coastal Plain based on the most recent dataset (2018), with 0.17% protected for conservation purposes² (Government of Western Australia 2019a).

The vegetation within the site has characteristics of the Abba complex, with *Corymbia calophylla*, *Eucalyptus rudis* and *Melaleuca rhaphiophylla* present in the site. The clearing area (0.86 ha of a total of 1.89 ha) includes 0.53 ha of the **CcEr** plant community; and 0.33 ha of the **Mr** plant community. The native vegetation being cleared is in 'degraded' to 'degraded-completely degraded' condition and has a predominantly weedy understorey, with native overstorey species.

No threatened or priority flora species have been identified within the site. No threatened or priority ecological communities have been identified either. Due to the level of historical disturbance, fauna habitat is largely associated with the overstorey species and the majority of species that could occur would only be visitors to the site and/or would also persist in the adjacent larger reserves.

Based on the assessed vegetation values, the vegetation being cleared does not support a high level of biological diversity (being largely scattered trees over paddock grasses). The proponent, as part of the proposal, will be planting up to 4.6 ha of vegetated/landscaped areas within the site, and includes endemic/native species being removed (*Eucalyptus rudis* and *Melaleuca rhaphiophylla*, as per **Appendix D**) and this will include improving the understorey in areas of retained vegetation, which is mostly composed of non-native paddock grasses.

The proposed clearing is therefore not considered to be at variance with Principle (a).

6.2 Principle (b) – Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a significant habitat for fauna indigenous to Western Australia.

The outcomes of the fauna assessment indicates that a number of conservation significant fauna species may utilise vegetation within the site for habitat purposes. This includes the three black cockatoo species, western ringtail possum and quenda, which have been discussed below in the following sub-sections.

Overall, 1.89 ha (70%) of the 2.75 ha of native vegetation within the site is being retained, with 4.6 ha (over 30%) of the 14 ha site to be dedicated to vegetated/landscape areas once the proposal is implemented as shown in **Figure 2**. This includes maintaining existing remnant vegetation in the north-south corridor through the western half of the site and in the south-eastern portion of the site. New planting will provide linkages on all boundaries of the site and connects to the reserve areas immediately to the north and to Rendezvous Road along the southern boundary. Fauna will be able to utilise the site for foraging, dispersal and refuge, with the existing extent of connected habitat largely unchanged.

The proposed clearing is therefore not considered to be at variance with Principle (b).

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²Defined as being listed in the DBCA-legislated lands and waters dataset as either Crown reserves or lands managed under Section 8A of the CALM Act that have an IUCN category of I – IV (Government of Western Australia 2019).



6.2.1 Black cockatoos

6.2.1.1 Foraging habitat

2.28 ha of native vegetation within the site is considered native foraging habitat (native species that are consumed regularly) for the three black cockatoo species. The extent of foraging habitat within the site is shown in **Figure 6**. Of the 2.28 ha of foraging habitat within the site, 1.75 ha (76%) is being retained.

A review of publicly available data indicates that the extent of black cockatoo foraging habitat within 12 km of the site is 3,873 ha and is shown in **Figure 7**. The foraging habitat to be cleared as part of the proposed development (0.53 ha) represents 0.0001% of the foraging habitat within 12 km of the site.

Approximately 271 ha of the 3,873 ha (7%) of the black cockatoo foraging habitat is within state or local protected land (e.g. national park, state forest, parks and recreation reserves). These values have been calculated based on a review of the vegetation complex data and native vegetation extent remaining and reservations or zoning applying to the land. The proposed clearing of foraging habitat, which represents 0.0001% of the remaining vegetation would not result in cumulative impacts on the three black cockatoo species to the extent that the occurrence of the species locally or regionally would be affected.

The retention of 1.75 ha of foraging habitat and planting of additional food resources within the 4.6 ha of vegetated/landscape areas within the site will ensure the three black cockatoos species can still utilise the site and that additional resources will be available over time.

6.2.1.2 Black cockatoo breeding and roosting habitat

The site contains 77 black cockatoo habitat trees, ten of which are proposed to be cleared. None of the habitat trees were identified as containing suitable or potentially suitable hollows for black cockatoo species. Nine (9) of the ten (10) habitat trees are *Eucalyptus rudis*, which is not a species commonly used for breeding in this portion of the species range.

The proposed habitat tree removal represents 12% of the existing habitat trees within the site. 67 of the existing habitat trees will be retained as part of the proposed development, and significant design consideration has been given to locate development areas and roads to minimise impacts on habitat trees.

No evidence of roosting such as branch clippings, droppings or feathers were observed within the site. The retained foraging habitat within the site (1.75 ha) could also provide roosting habitat.

The retention of 1.75 ha of foraging habitat and 67 habitat trees, plus planting of additional tree species within the 4.6 ha of vegetated/landscape areas within the site will ensure the three black cockatoos species can still utilise the site, and that future breeding opportunities (as trees grow and continue to mature) can still be realised in the short term, along with new planting for the longer term.



6.2.2 Other conservation significant species

6.2.2.1 Western ringtail possum

All native vegetation within the site would be possible foraging, refuge and dispersal habitat for western ringtail possum, with the **eucalypt woodland** habitat the higher value. A small area of *Agonis flexuosa* (part of the eucalypt woodland) is being removed (0.028 ha) within the northern portion of the site, associated with the road connection to Cockatoo Loop. This location was chosen as it minimises the removal of habitat trees. The *Agonis flexuosa* being removed is shown in **Plate 8**.



Plate 8: Small area of Agonis flexuosa being removed at the connection from the site to Cockatoo Loop

Western ringtail possum habitat suitability mapping prepared by DBCA indicates that the more connected areas of native vegetation across the site are identified as having a 'high' suitability for the species. Almost all the vegetation mapped as having high suitability is being retained.

The extent of remaining habitat within 12 km of the site, would be similar to that described for black cockatoos above. The clearing of 0.86 ha of native vegetation represents 0.0002% of the (at least) 3,783 ha of habitat within 12 km of the site (noting wetland vegetation, which is not suitable for black cockatoos would provide habitat for western ringtail possum and increase the vegetation within 12 km). The proposed clearing will not reduce the range of the species or the ability for individuals to survive within the site.

The retention of 1.89 ha of native vegetation and additional planting within the 4.6 ha of the vegetated/landscape areas within the site will ensure the western ringtail possum can still utilise the site and disperse across the site from the reserves to the north and Rendezvous Road to the south. It is likely that the site will be able to support more individuals than the current extent, particularly when lot gardens (not included in the 4.6 ha value) are considered as well.

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Vehicle interactions, a key impact for the species aside from habitat loss, are not considered a significant risk given the low travel speeds that need to be adhered to (30 - 40 km/hr generally) within the site, and the private nature of the development which means only residents will be using the road network.

Fauna management protocols (a condition of development approval) during clearing will ensure possums are managed appropriately, and any found would be released within the site or the reserves adjacent.

6.2.2.2 Quenda

The vegetation across the site has limited understorey, meaning it is unlikely to provide significant habitat for fauna (and if found, would be mostly in areas with long grasses/some understorey vegetation, which have generally been grazed by livestock until recently). The **riparian** habitat is considered the most likely habitat utilised by this species. Of the riparian habitat in the site, 0.33 ha is being removed, and 0.20 ha is being retained.

Through the additional planting within the 4.6 ha of the vegetated/landscape areas within the site, better habitat would be available for quenda and other ground dwelling species. Re-introduction of groundcover and understorey species is a key commitment as part of the planting approach. Quenda and other similar species would be able to disperse across the site from the reserves to the north and Rendezvous Road to the south through vegetated corridors.

Similar to western ringtail possum, vehicle interactions are not considered a significant risk given the low travel speeds that need to be adhered to (30 - 40 km/hr generally) within the site, and the private nature of the development which means only residents will be using the road network.

6.3 Principle (c) – Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, rare flora.

No occurrences of threatened or priority flora species were recorded within the site as part of the flora and vegetation assessment. The assessment spanned the optimal seasonal period to detect flora in the southwest of WA and so is not subject to sessional limitation.

As no threatened or priority flora have been identified within the site, the proposed clearing is not considered to be at variance with Principle (c).

6.4 Principle (d) – Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of a threatened ecological community.

The flora and vegetation assessment found that the plant communities identified within the application area do not represent a threatened ecological community (TEC) or priority ecological community (PEC).

As no TECs or PECs have been identified within application area, the proposed clearing is not considered to be at variance with Principle (d).



Principle (e) – Native vegetation should not be cleared if it is significant as a 6.5 remnant of native vegetation in an area that has been extensively cleared.

The EPA's Guidance Statement No. 33 Environmental Guidance for Planning and Development has identified a level of 30% retention of pre-European extent of each vegetation association/complex outside of the areas constrained of urban development, stating a region with levels below 30% should be fully retained (EPA 2008). Where constrained by urban development, like the Swan Coastal Plain, at least a 10% retention target of the pre-European extent of each vegetation association/complex is considered ideal (EPA 2008).

The application area is located within the Perth subregion Interim Biogeographic Regionalisation for Australia (IBRA) dataset. The vegetation in the site is representative of the Abba Complex, which has 6.5% (3,326.2 ha) of its pre-European (1750) (50,892.78 ha) extent remaining as of 2018 (Government of Western Australia 2019b). Of the remaining Abba vegetation association (3,326.2 ha), 0.17% (85.81 ha) is protected for conservation, with 0.36% (183.20 ha) within managed DBCA lands (Government of Western Australia 2019b).

The native vegetation in the site (2.75 ha) represents 0.0008% of the remaining Abba Complex (3,362.2 ha). The clearing of 0.86 ha of native vegetation from the site represents 0.0002% of the remaining Abba Complex. 1.89 ha (0.0005% of the remaining extent) within the site is being retained.

Through the development approval process, the development has been designed to avoid existing native vegetation, with 70% (1.89 ha) of the existing native vegetation within the site to be retained. As detailed in Section 2 and Section 4 controls will be implemented during clearing and construction to manage impacts to vegetation, and there are also conditions requiring the long-term maintenance of vegetation and includes the requirement for replanting as necessary. The urban development zoning of the site means it could be utilised for typical subdivision which may not achieve the same retention, long-term protection, and maintenance afforded through the lifestyle village development.

Therefore, while the proposed clearing could be considered at variance with Principle (e) given the low remaining percentage of the Abba Complex overall (the vegetation in the site is 0.0008% of the current extent), the proposed development retains 1.89 ha (70%) of the native vegetation and will contribute to 4.6 ha of additional planted areas, using a mix of species of, which a number are associated with the Abba Complex. This vegetation would not be guaranteed for retention with another development.

The proposed clearing is not considered to be at variance with Principle (e) based on the retention and additional planting proposed.

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6.6 Principle (f) – Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.

Wetlands of national or international significance may be afforded special protection under Commonwealth or international agreements. Review of the *Ramsar List of Wetlands of International Importance* (DBCA 2017) and *A Directory of Important Wetlands in Australia – Western Australia* (DBCA 2018) indicates that no Ramsar or listed 'important wetlands' are located within or near the site.

A review of the DWER hydrography mapping (DWER-031 dataset) suggests that there are minor surface water features occurring within the site. This includes a 'watercourse – minor perennial' and an area identified as 'area subject to inundation' that occur within the site (DWER 2018). A minor waterway exists along the western boundary and through the northern portion of the site and is associated with the main corridor of vegetation across the site. The waterway conveys runoff from a large catchment south of the site via a 450 mm culvert beneath Rendezvous Road into the reserves north of the site. The surface water features is being retained as part of the proposed development, along with vegetation associated with this feature.

The Geomorphic Wetlands, Swan Coastal Plain dataset recorded one 'multiple use' category wetland feature (UFI 15809) which extends across majority of the site (DBCA 2023) and is classed as a palusplain. The dataset also records one 'resource enhancement' category wetland feature (UFI 13206) occurring in the south-eastern portion of the site and extends along the eastern boundary. UFI13206 is classed as a sumpland. Native vegetation associated with the resource enhancement wetland is in 'degraded' to 'degraded-completely' degraded condition. The locations of the geomorphic wetlands in the site are shown in **Figure 9**.

As part of the development approval process, and in consultation with the DWER and DBCA (Krish Seewraj, pers comm., 6 March, 2024), it was noted that the resource enhancement wetland within the site contained limited values (noting the majority of the mapped feature is composed of paddock grasses), and that retention of the degraded condition resource enhancement wetland within private ownership and within the site is not a priority for either DWER or DBCA, and that it would be preferable for any environmental enhancement work to be aimed at the wetland areas surrounding (and north of) the site that are managed by the City of Busselton. Appropriate consideration of the interface with the main body of the wetland in the nature reserve to the north would be a relevant consideration.

As granted by the development approval, the resource enhancement wetland will be largely filled and developed, however consideration for the adjacent values has been addressed through:

- Vegetation (associated with the **Mr** vegetation unit) adjacent to the eastern boundary of site will be retained.
- A minimum 21 m-wide setback has been provided between future dwellings and the wetland feature. This will include landscape areas, along with road and footpath networks. There will be a separation in height provided by fill material, which will also assist with a managed interface, preventing uncontrolled access and managing hydrological connections.
- Permanent permeable fencing, which will assist with managing uncontrolled access, but support passive surveillance of the wetland area.



- The implementation of screen planting along the eastern, north-eastern and eastern boundary
 of the site, increasing vegetated areas and provided for a managed interface between the site
 and surrounding areas; and
- Maintaining the hydrological function of the wetland feature, in accordance with the approved (and conditioned) Water Management Plan. Drainage is retained onsite, and pre-development flows are maintained.

Further information is available in **Appendix C**.

While the removal of riparian-characteristic vegetation from the site could be considered at variance with Principle (f), based on the retention of the minor waterway and associated vegetation through the central and northern portion of the site and approval for the development of the resource enhancement wetland area, the clearing is not considered to be at variance. As detailed in **Section 2** and **Section 4** controls will be implemented during clearing and construction to manage impacts to vegetation, and hydrological function needs to be managed in accordance with the approved Water Management Plan (a condition of the development approval). Wetland plant species are included in the planting mix and will be introduced across greater areas of the site primarily through the low fuel managed perimeter areas and drainage areas, where not as much fill will be introduced.

The proposed clearing is therefore not considered to be at variance with Principle (h).

6.7 Principle (g) – Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.

The regional soil-landform mapping prepared by the Department of Primary Industries and Regional Development (DPIRD) indicates the majority of site is located within the Abba Wet Flats Phase (refer **Figure 10**) of the Abba Plain system which can be described as 'Winter wet flats and slight depressions with sandy grey brown duplex (Abba) and gradational (Busselton) soils.'

The south-eastern portion of the site is mapped as the Jindong Flats Phase (refer **Figure 10**), also within the Abba Plain system, which can be described as 'Well drained flats with sandy gradational grey brown (Busselton) soils, some red brown sands and loams (Marybrook Soils).

The mapped land degradation risks associated with these soils are waterlogging (>70%), wind erosion (10-30%) and acidification (70%). Salinity mapping (DPIRD-09) indicates 3-10% and <3% of the Abba Systems map unit and Jindong Flats Phase units respectively have a moderate to high salinity risk or is presently saline.

The site is mapped as having 'high to moderate' risk of ASS within 3 m of the soil surface throughout the majority of the site. ASS is only likely to be a consideration if excavation (primarily for the installation of services, of which sewer is typically the deepest) extends below the permanent groundwater table. At least 2 m of fill sand will be imported to the site for development. As such, exposure to potential ASS during development is unlikely and management measures are unlikely to be required to be implemented. Management of ASS in accordance with DWER requirements is a condition of the development approval.

As discussed in **Section 2** and **Section 4** any risk of land degradation will be minimised through controls applied during clearing and construction processes (such as dust suppression, mulching,



management of acid sulfate soils and erosions control as required), and will be adopted through the preparation and implementation of a CEMP, CMP and if required, an acid sulfate soil management plan. Further, a Water Management Plan will be implemented to guide design and maintenance of the proposal to actively manage surface and groundwater and prevent erosion.

The proposed clearing is not going to result in the development being at variance to Principle (g).

6.8 Principle (h) – Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area.

The application area is not located in close proximity to any mapped environmentally sensitive areas (ESAs) (refer **Figure 8**). While one ESA is nearby the site, it is 500 m to the west and does not intersect the site.

The land directly to the north and north-east of the site is designated as recreation reserve with potential for impact due to clearing based on the proximity. The scattered remnant vegetation proposed to be cleared within the site may contribute to the linkage with the reserves and be used by some fauna to migrate between habitats, particularly the reserve to the north which appears to be in good condition. Linkage to the land to the north is maintained by retaining vegetation that links the south-west of the site to the reserve in the north 9along the minor surface water feature) and through the additional planting proposed across the site, associated with the low threat managed areas (around the perimeter), as shown in **Figure 2.**

No vegetation clearing is proposed outside the site to implement the approved development. The Tree Protection Plan (condition of approval) will accommodate tree protection zones for vegetation both internal and external to the site where they occur in close proximity to the site boundary. The CEMP will ensure only vegetation approved for clearing is removed, with actions to ensure demarcation and protection during clearing, construction and ongoing. The implementation/ adherence to the Water Management Plan will ensure the hydrological function for surrounding areas is maintained.

The proposed clearing will not be at variance to Principle (h).

6.9 Principle (i) – Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water.

Deterioration in quality of surface water or underground water can occur as a result of activities that result in sedimentation, increased nutrient levels, changes to pH (through acid sulphate soils), salinity or changes in water regimes of groundwater dependent ecosystems.

As outlined above, given the small amount of vegetation to be cleared (0.86 ha); retention of the majority of existing vegetation (1.89 ha), mitigation measures to be employed during clearing (dust suppression and surface stabilisation where required); and the long-term management of exposed surfaces post-clearing (planting of drainage areas and streetscapes, landscape buffer planting,



management of stormwater infrastructure etc.) the clearing of vegetation and development of the site is not likely to cause a deterioration in water quality. The management of water quality is a specific criteria that is addressed in the Water Management Plan (approved by DWER and the City of Busselton). Adherence to the plan is a condition of approval.

The proposed clearing of native vegetation is small (0.86 ha) and is mostly paddock trees with vegetation in 'degraded' to 'degraded-completely degraded' condition.

Issues that could cause a deterioration in water quality in relation to the clearing footprint have been considered as part of the design for the development and through the preparation and implementation of the Water Management Plan. These can be well managed and are already conditioned as part of the development approval, therefore the proposed clearing is not likely to be at variance with Principle (i).

6.10 Principle (j) – Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.

Managing stormwater is a key consideration and requirement for the development approval. A Water Management Plan has been prepared and approved the City of Busselton and DWER through the development application process, and it is a condition of approval for detailed engineering design to be in accordance with this plan.

The Water Management Plan provides the framework for actions and measures to address groundwater, surface water (stormwater), flood mitigation, water conservation and wastewater. The Water Management Plan aims to maintain the pre-development hydrological regime based on:

- Water conservation At the lot scale, potable water consumption will be reduced by the implementation of water conservation measures (e.g. water efficient fixtures, use of water sensitive urban design (WSUD) measures, and planting of water wise species). At an estate level, open spaces will be irrigated during the establishment period by the use of scheme water or water cart, and long term will be designed to minimise the requirement for irrigation but will be irrigated as required. All landscaped areas within open spaces will also adopt water wise gardening (WWG) principles and will be the responsibility of the proponent.
- Wastewater servicing the site will connect to a reticulated sewer network.
- Surface water management runoff from roofs, impervious areas within lot and road reserves will be treated as close to source as possible using a treatment train approach, which incorporates vegetated bio-retention areas (BRAs) and flood storage areas (FSAs), which are addressed in the drainage areas shown in Figure 2. Treatment will occur via contact with new planted vegetation and the underlying soil profile (which will adsorb nutrients). The small (i.e. first 15 mm), minor (20% Annual Exceedance Probability (AEP)) and the major (1% AEP) rainfall event runoff will be managed by the infiltration infrastructure that mimic the predevelopment hydrology at key control points (culverts at Rendezvous Road and Tortoise Rise). Runoff from the upstream catchment (south of Rendezvous Road) will be conveyed by the drainage infrastructure (including the minor surface water feature that is being maintained along the western and northern boundary).



- Groundwater management will include imported fill to control groundwater levels across
 the entire development and the use of subsoil drains beneath road pavement (within the road
 reserve) to ensure that adequate clearance between groundwater, lot level is provided. The
 sub-surface storage invert levels will be kept ensuring placement at or above the maximum
 observed ground water level.
- **Flood protection** is addressed by use of imported fill and providing adequate surface water storage across the site.

The proposed clearing is not considered to be at variance with Principle (j), with flood mitigation considered in detail by the development approval. Clearing in the site is not anticipated to cause or exacerbate the incidence or intensity of flooding.



7 Summary

The site contains 2.75 ha of native vegetation. Of this 1.89 ha will be retained as part of the proposed lifestyle village, while 0.86 ha will be removed.

With the 0.86 ha of vegetation being removed:

- 0.86 ha is 'degraded' to 'degraded-completely degraded' condition native vegetation as defined by the EP Act.
- 0.53 ha is native foraging habitat for the three black cockatoo species.
- It includes ten (10) habitat trees for black cockatoos, none with suitable or potentially suitable hollows that could be used for breeding. Nine (9) of the trees are *Eucalyptus rudis*, and one (1) is a *Corymbia calophylla*.
- 0.86 ha is foraging, refuge and dispersal habitat for western ringtail possum, but is dominated by mostly paddock trees.

While 0.86 ha of native vegetation is proposed to be removed, the proposed clearing has a low environmental impact and is consistent with the EP Act Clearing Principles, particularly given the extensive retention (1.89 ha, 70% of the native vegetation in the site) and new planting (4.6 ha, more than 30% of the site) that will be implemented as part of the development. A summary of the clearing principles has been provided in **Table 5**.

Table 5: Summary of response to each clearing principle

Clearing principle	Level of variance	Response to clearing permit principle
Principle (a)	Not at variance	The 'degraded' to degraded-completely degraded' vegetation within the site that is being removed does not represent a high level of biological diversity. The more connected vegetation within the site (higher values) is being retained meaning the existing connections across the landscape will be maintained. The proposed new planting will contribute to enhancing the biodiversity value through improved species diversity and vegetation structure.
Principle (b)	Not at variance	The vegetation within the site is mostly overstorey species over paddock grasses. The removal of 0.86 ha will not decrease the availability of foraging, breeding or refuge habitat to the extent that it would change the distribution of species. The retention of 1.89 ha of vegetation plus the addition of 4.6 ha of vegetated/landscape areas will maintain existing landscape connections and increase the foraging, breeding and refuge habitat available.
Principle (c)	Not at variance	No State or Commonwealth listed threatened or priority flora species have been recorded within the site and are considered highly unlikely to occur.
Principle (d)	Not at variance	No State or Commonwealth listed TECs or PECs have been identified within site and are considered highly unlikely to occur.
Principle (e)	Not at variance	While the vegetation within the site is representative of the Abba Complex, which retains 6.5% of its pre-European extent, the development has been designed to avoid as much of the native vegetation on the site as possible (1.89 ha is being retained), with the area being cleared 0.0002% of the remaining Abba Complex. The proposal will contribute to retention and protection of 1.89 ha of the Abba Complex which would not necessarily be guaranteed otherwise.



Clearing principle	Level of variance	Response to clearing permit principle
Principle (f)	Not at variance	There are multiple use and resource enhancement wetlands within the site. The resource enhancement wetland, through consultation with the DWER and DBCA as part of the development approval, was not required to be retained. Vegetation associated with the resource enhancement wetland is being retained (0.20 ha of 0.53 ha), and additional planting with wetland species found in the site and surrounds will occur as part of implementing drainage areas and the low threat (perimeter) managed areas.
Principle (g)	Not at variance	The site is mapped as the Abba Wet Flats Phase and Jindong Flats Phase which have high to extreme risks for waterlogging, acidification and wind erosion. Fill will address waterlogging for development. A number of management plans are condition as part of the approval, namely Construction Environmental Management Plan, Construction Management Plan, Water Management Plan, Tree Protection Plan and Landscape Plans, which all address the management of land degradation.
Principle (h)	Not at variance	No ESAs are within the site or in close proximity. Recreation reserves managed by the City of Busselton are located to the north and north-east of the site. Linkage to from the south-west of the site to the reserve to the north is maintained through the retained 1.89 ha of vegetation, and enhanced through the new planting within the retained vegetation and 4.6 ha of the site. Conditions of the development approval ensure vegetation outside the site will not be cleared or impacted by the development.
Principle (i)	Not at variance	Given the small amount of vegetation to be cleared; mitigation measures to be employed during clearing (dust suppression and surface stabilisation where required); and the long-term management of exposed surfaces post-clearing (through future development, including stormwater management), the clearing is not likely to cause a deterioration in water quality.
Principle (j)	Not at variance	The proposed clearing is not likely to cause or exacerbate a risk of flooding given the extent of works and design measures to be implemented to manage surface water in accordance with the approved (by DWER and the City of Busselton) Water Management Plan.

The proposed lifestyle village development within the site is subject to development approval, granted 12 March 2025. The approval provides for the protection and retention of the outlined 1.89 ha, and also for the planting of 4.6 ha of vegetation in vegetated and landscaped open space areas. All the avoidance, mitigation and rehabilitation measures detailed as part of this clearing permit application is already regulated through the development approval granted pursuant to the *Planning and Development Act 2005*.

The clearing within the site has low environmental impact, with the development design maintaining and enhancing ecological corridors across the site, and the area of vegetation to be present post-development to be increased by nearly 100% (4.6 ha in total, compared to 2.75 ha currently).



8 References

8.1 General references

The references listed below have been considered as part of preparing this document.

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Department of Biodiversity, Conservation and Attractions (DBCA) 2018, *Directory of Important Wetlands in Australia - Western Australia (DBCA-045)*.

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Department of Environment Regulation (DER) 2014, A guide to the assessment of applications to clear native vegetation under Part V Division 2 of the Environmental Protection Act 1986, Perth.

Department of Environment and Energy (DoEE) 2017, Revised draft referral guideline for three threatened black cockatoo species: Carnaby's Cockatoo (Endangered) Calyptorhynchus latirostris, Baudin's Cockatoo (Vulnerable) Calyptorhynchus baudinii and Forest Red-tailed Black Cockatoo (Vulnerable) Calyptorhynchus banksii naso, Canberra, Australia.

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Heddle, E. M., Loneragan, O. W. and Havel, J. J. 1980, 'Vegetation Complexes of the Darling System Western Australia', in Department of Conservation and Environment (ed.), Atlas of Natural Resources Darling System Western Australia, Perth.

Keighery, B. 1994, *Bushland Plant Survey: A guide to plant community survey for the community*, Wildflower Society of WA (Inc), Nedlands.

Western Australian Land Information Authority (WALIA) 2024, *Landgate Map Viewer Plus*, https://map-viewer-plus.app.landgate.wa.gov.au/index.html.

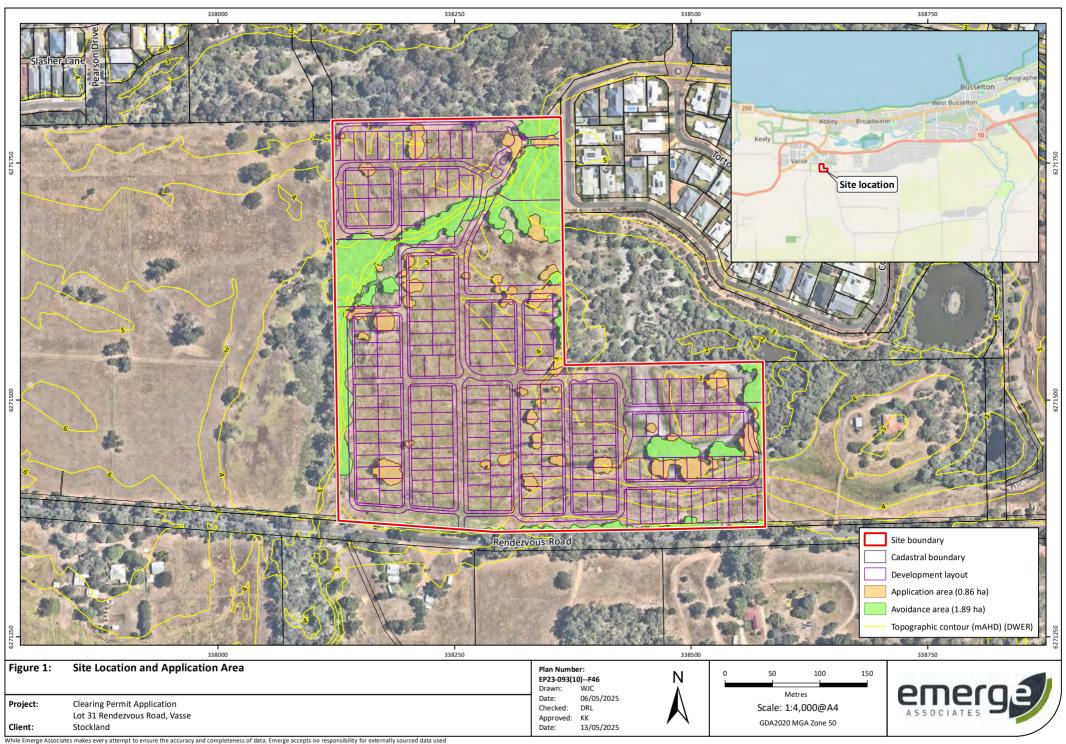


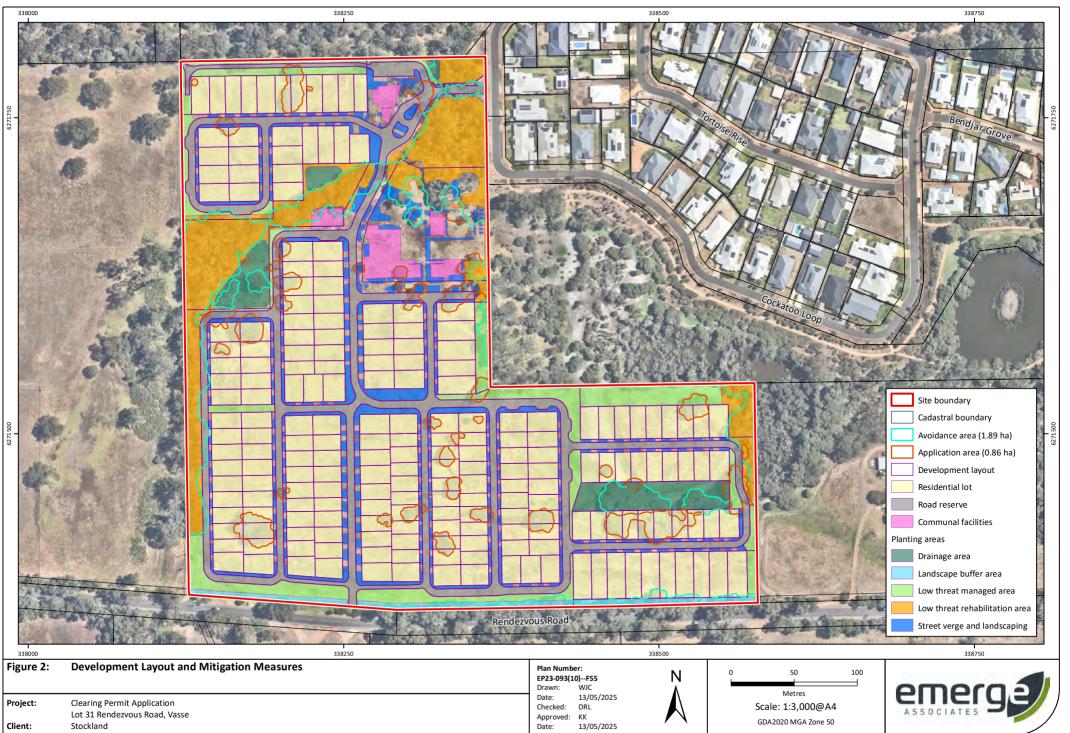
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Figures

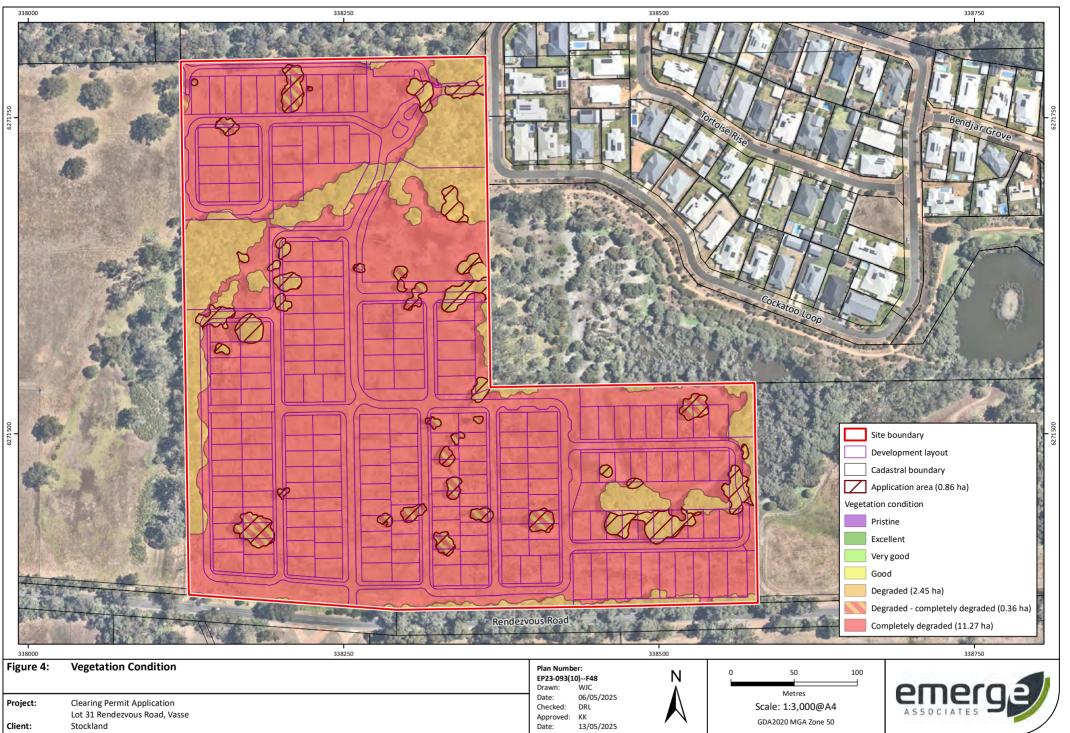


- Figure 1: Site Location and Application Area
- Figure 2: Development Layout and Mitigation Measures
- Figure 3: Plant Communities
- Figure 4: Vegetation Condition
- Figure 5: Fauna Habitat
- Figure 6: Black Cockatoo Habitat
- Figure 7: Black Cockatoo Habitat Context
- Figure 8: Ecological Linkages and Environmentally Sensitive Areas
- Figure 9: Hydrological Features
- Figure 10: Landforms, Soils and Topography

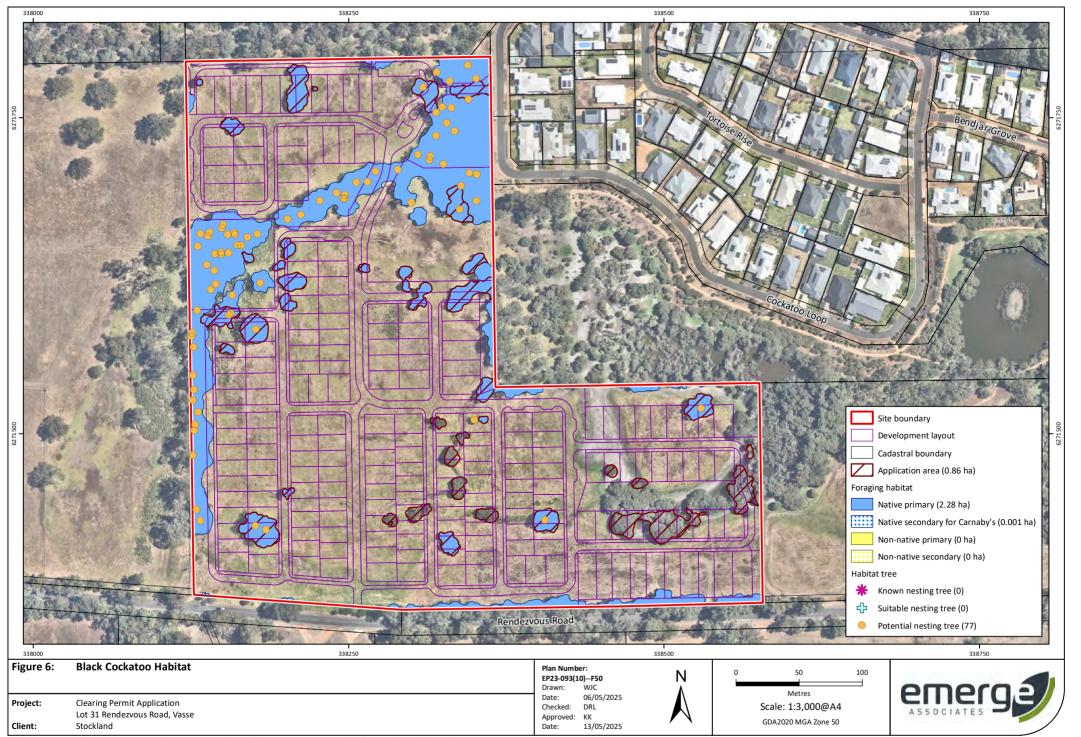


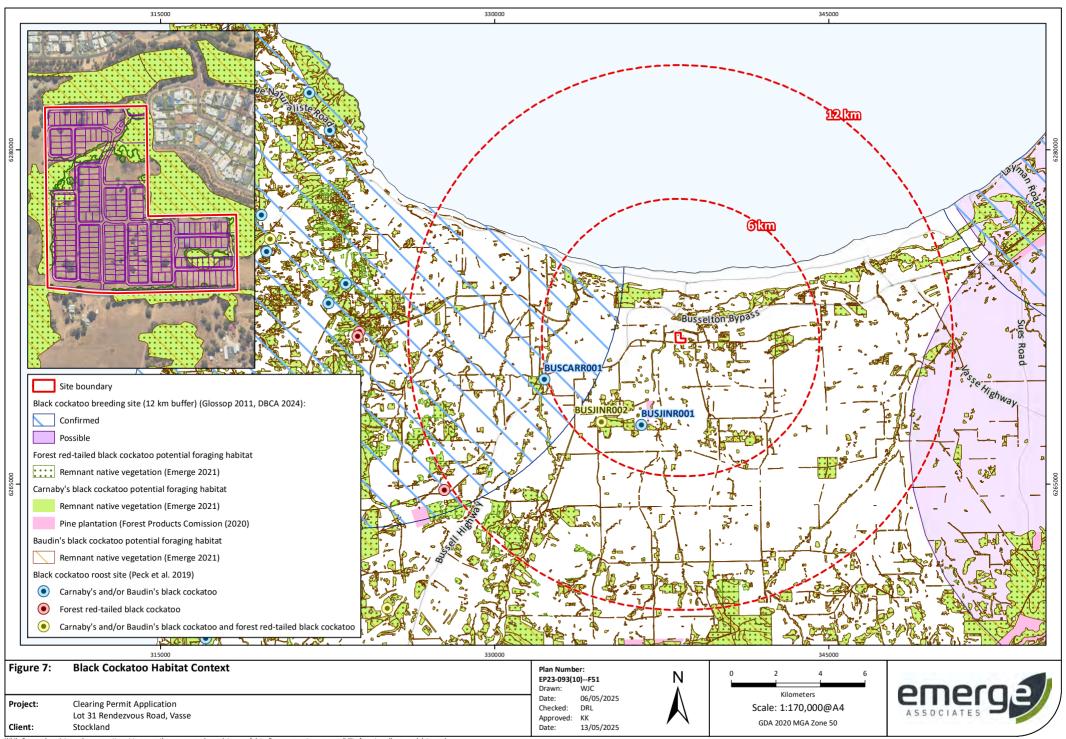


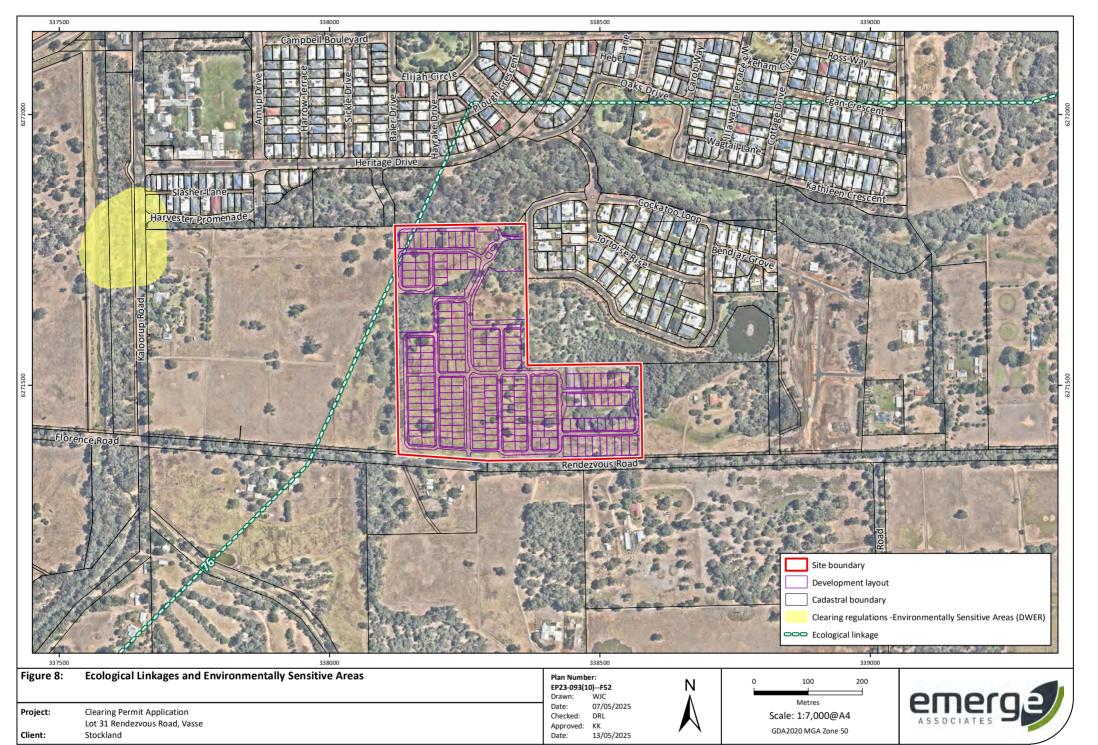


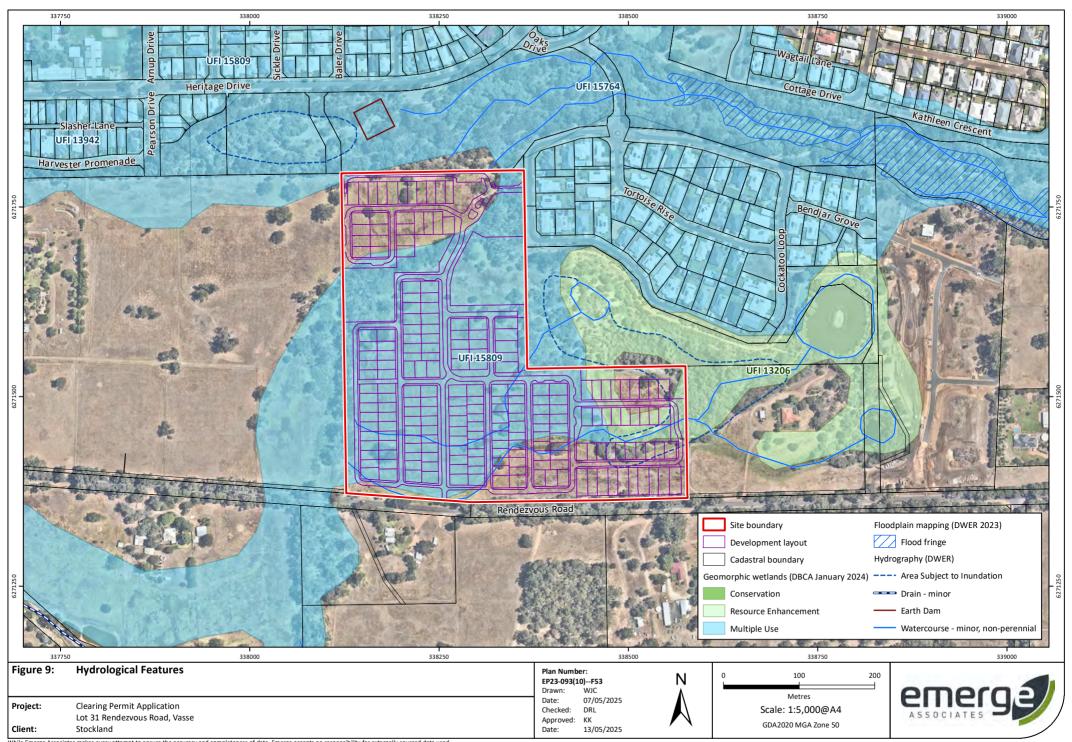


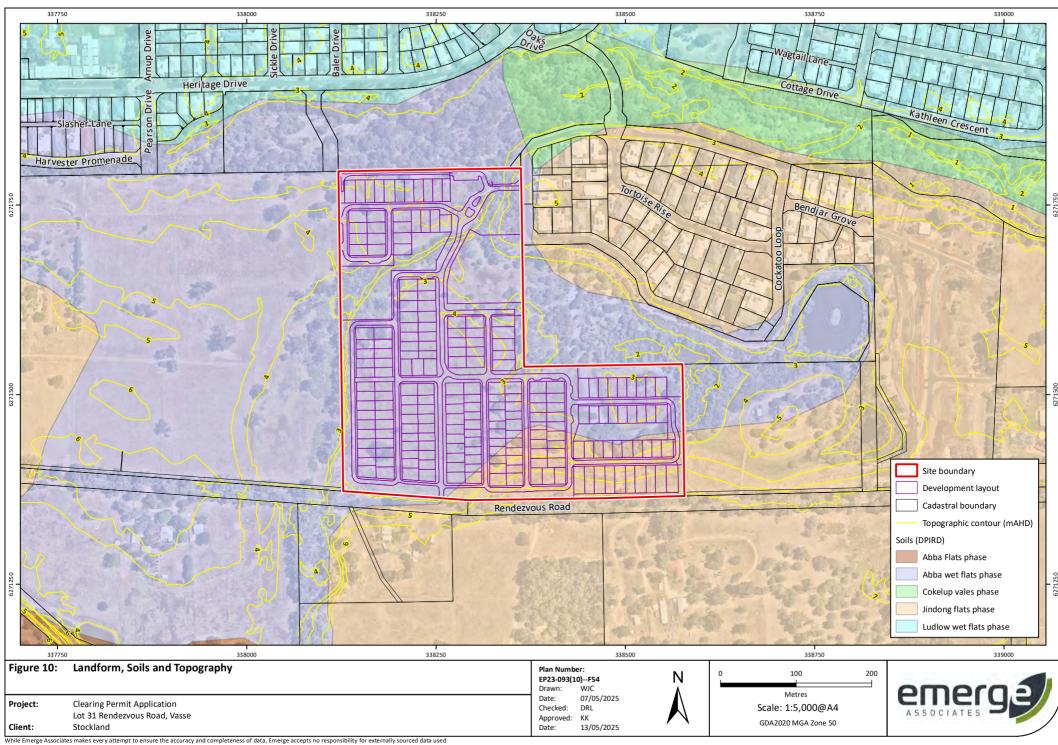












Appendix A

Proposed Development Layout





SCALE 1:1000 @ A1 SIZE

Appendix B

Development Approval



LG Ref: DA24/0621 DAP Ref: DAP/24/02760 Enquiries: (08) 6551 9919

Denise Morgan CDP Town Planning & Urban Design 2/464 Murray Street, Perth WA 6000

Dear Denise,

REGIONAL DAP - CITY OF BUSSELTON - DAP APPLICATION - DA24/0621 - DETERMINATION

Property Location:	Lot 31 Rendezvous Road, Vasse
	Grouped Housing with Communal Facilities for Over 55's (Independent Living Complex)

Thank you for your Form 1 Development Assessment Panel (DAP) application and plans submitted to the City of Busselton on 13 September 2024 for the above-mentioned development.

This application was considered by the Regional DAP at its meeting held on 6 March 2025, where in accordance with the provisions of the City of Busselton Town Planning Scheme No.21, it was resolved to **approve** the application as per the attached notice of determination.

Should the applicant not be satisfied by this decision, an application may be made to amend or cancel this planning approval in accordance with regulation 17 and 17A of the *Planning and Development (Development Assessment Panels) Regulations 2011*.

Please also be advised that there is a right of review by the State Administrative Tribunal in accordance with Part 14 of the *Planning and Development Act 2005*. Such an application must be made within 28 days of the determination, in accordance with the *State Administrative Tribunal Act 2004*.

Should you have any queries with respect to the conditions of approval, please contact Emma Craddock on behalf of the City of Busselton on 08 9781 1712.

Yours sincerely,

DAP executive director

12 March 2025

Encl. DAP Determination Notice

Approved Plans

Cc: Emma Craddock

City of Busselton

Planning and Development Act 2005

City of Busselton Town Planning Scheme No.21

Regional Development Assessment Panel

Determination on Development Assessment Panel Application for Planning Approval

Property Location: Lot 31 Rendezvous Road, Vasse

Application Details: Grouped Housing with Communal Facilities for Over 55's

(Independent Living Complex)

In accordance with regulation 8 of the *Planning and Development (Development Assessment Panels) Regulations 2011*, the above application for planning approval was **granted** on 6 March 2025, subject to the following:

- 1. **Accept** that the DAP Application reference DAP/24/02760 is appropriate for consideration as a "Use not listed (Independent Living Complex)" land use and compatible with the objectives of the Urban Development zone in accordance with Clause 3.4.2 of the City of Busselton Local Planning Scheme No. 21;
- 2. Approve DAP Application reference DAP/24/02760 and accompanying plans DA010 Rev. B, DA011 Rev. B, DA012 Rev. B, DA100 Rev. B, DA101 Rev. B, DA150 Rev. A, DA151 Rev. A, DA200 Rev. B, DA250 Rev. A, DA251 Rev. A, DA300 Rev. B, DA351 Rev. A, DA599 Rev. B, DA600 Rev. B, DA605 Rev. B, DA606 Rev. B, DA610 Rev. B, DA611 Rev. B, DA612 Rev. B, DA620 Rev. B, DA625 Rev. B, DA626 Rev. B, DA630 Rev. B, DA635 Rev B, DA636 Rev. B, DA640 Rev. B, DA645 Rev. B, DA646 Rev. B, DA656 Rev. A, DA656 Rev. A, DA666 Rev. B, DA665 Rev. A, DA666 Rev. B, DA670 Rev B, DA675 Rev B, DA676 Rev. B) in accordance with Clause 68 of Schedule 2 (Deemed Provisions) of the Planning and Development (Local Planning Schemes) Regulations 2015, and the provisions of the City of Busselton Local Planning Scheme No. 21, subject to the following conditions:

Conditions

GENERAL CONDITIONS

- 1. This decision constitutes planning approval only and is valid for a period of four years from the date of approval. If the subject development is not substantially commenced within the specified period, the approval shall lapse and be of no further effect.
- 2. The development hereby approved shall be undertaken in accordance with the signed and stamped, Approved Development Plans, and except as may be modified by the following conditions.

PRIOR TO COMMENCEMENT OF WORKS CONDITIONS

- 3. The development hereby approved, or works required to implement the development, shall not commence until the following plans or details have been submitted to the City and have been approved in writing:
 - 3.1 Final Landscaping Plan (LP) for each stage that includes the following:
 - a. The location, number, size and species of existing and proposed trees and shrubs;
 - b. Details of all planting, as per (a) above, within the landscape buffer adjacent to Rendezvous Road of a density to provide sufficient screening of the development;
 - c. Any lawns to be established;
 - d. Those areas to be reticulated or irrigated;
 - e. Details of the proposed fencing and entry gates including, but not limited to, the design and the materials to be used and fencing to provide demarcation to the boundaries of adjoining Reserves (R42973 and R53029).
 - f. Verge treatments, including hard and soft landscaping treatments.
 - g. Integration of mosquito management measures required by the mosquito management plan.
 - 3.2 House option No. 4 to demonstrate how a dedicated storage area in accordance with Part C, clause 2.1 and in accordance with the definition of 'Storage' as outlined in A1 Definitions of the Residential Design Codes Volume 1 can be provided.
 - 3.3 A mosquito management plan.
 - 3.4 An Acid Sulphate Soil Investigation Report and an Acid Sulphate Soils Management Plan shall be submitted to and approved by the City of Busselton in consultation with the Department of Water and Environmental Regulation.
 - 3.5 A Construction Environmental Management Plan shall be submitted to and approved by the City of Busselton in consultation with the Department of Water and Environmental Regulation and Department of Biodiversity, Conservation and Attractions.
 - 3.6 All vehicle parking, access ways, points of ingress and egress must be designed and constructed to a minimum standard in accordance with the Australian Standard for Parking Facilities Off-Street Car Parking (AS 2890.1) and shall be developed in the form and layout depicted on the approved plans to the satisfaction of the City.
 - 3.7 Accessible car parking and access shall be provided and designed in accordance with the Australian Standard for Parking Facilities Off-Street Car Parking for people with disabilities (AS 2890.6).

- 3.8 Lighting Management Plan consistent with the 'dark sky principles' and the requirements of Australian Standard AS 4282—2023 Control of the obtrusive effects of outdoor lighting, including no use of flood lights and not causing light emissions off site.
- 3.9 A Waste Management Plan indicating:
 - (i) Details of proposed bin storage areas including, but not limited to, the design and the materials to be used in their construction. The minimum area for bin storage is 1m² per bin; and
 - (ii) Details of the collection areas, which are to be designed and constructed in concrete.
- 3.10 A revised Water Management Plan shall be submitted and approved by the City, in consultation with the Department of Water and Environmental Regulation.
- 3.11 Engineering drawings and specifications for each stage are to be submitted and approved by the City of Busselton, and works undertaken in accordance with the approved engineering drawings and specifications and approved plan of development, for the filling and/or draining of the land, including ensuring that stormwater is contained on-site, or appropriately treated and connected to the local drainage system. Engineering drawings and specifications are to be in accordance with an approved Water Management Plan.
- 3.12 A detailed schedule of external finishes (including materials, colour schemes and details) must be submitted and approved by the City prior to the commencement of any building works. The development must be finished in accordance with the approved schedule.
- 3.13 A Construction Management Plan. The Construction Management Plan should address the following issues, where applicable:
 - a) public safety and amenity;
 - b) site plan and security;
 - c) contact details of essential site personnel, construction period and operating hours;
 - d) community information, consultation and complaints management
 - e) temporary realignment of pedestrian access ways (including crossing points and lighting);
 - f) noise, vibration, air and dust management;
 - g) dilapidation reports of nearby properties;
 - h) traffic, access and parking management;
 - i) waste management and materials re-use;
 - j) sanitary facilities;
 - k) earthworks, excavation, land retention/piling methods and associated matters:
 - 1) stormwater and sediment control;
 - m) street tree management and protection;
 - n) asbestos removal management Plan;
 - o) any other matter deemed relevant by the City.

Construction works shall take place in accordance with the approved details at all times.

- 3.14 A Tree Protection Plan (TPP) prepared in accordance with Australian Standard AS 4970-2009 Protection of trees on development sites for the trees to be retained on the site, adjoining road reserves and for vegetation within the adjoining Reserves (R42973 and R53029). The approved TPP shall be implemented before any of the substantive development is commenced and shall be retained throughout the development period until such time as all equipment, machinery and surplus materials have been removed from the site. Within any vegetation areas identified to be protected with fencing, nothing shall be stored or placed, and the ground levels shall not be altered.
- 3.15 A development staging plan.
- 4. The development hereby approved, or any works required to implement the development shall not commence until a contribution towards community facilities in the Broadwater Precinct has been paid to the City of Busselton.

PRIOR TO OCCUPATION/USE OF THE DEVELOPMENT CONDITIONS

- 5. The development hereby approved shall not be occupied or used until all plans, details or works required by condition 3 and 4 have been implemented.
 - 5.1 A copy of the Certificate of Title with the Section 70A notification registered against it.
 - 5.2 The development being connected to reticulated water and sewerage.
 - 5.3 Information is to be provided to demonstrate that the measures and works contained in the bushfire management plan ("Lot 31 Rendezvous Road, Vasse, Version B, dated February 2025" and prepared by Emerge Associates) have been implemented. This information should include a completed 'Compliance Certificate' prepared by the bushfire planning practitioner.
 - 5.4 A notification, pursuant to Section 165 of the Planning and Development Act 2005 is to be placed on the certificates of title of the proposed lot(s) advising of the existence of a hazard or other factor. Notice of this notification is to be included on the diagram or plan of survey (deposited plan), the notification is to state as follows:
 - "This lot is in close proximity to known mosquito breeding areas. The predominant mosquito species is known to carry viruses and other diseases."

- 5.5 Notification in the form of a section 70A notification, pursuant to the Transfer of Lands Act 1893 (as amended) is to be placed on the Certificates of Title of the proposed lot(s) advising that:
 - "This land is within a bushfire prone area as designated by an Order made by the Fire and Emergency Services Commissioner and is subject to a Bushfire Management Plan (Lot 31 Rendezvous Road, Vasse, Version B, dated February 2025 and prepared by Emerge Associates)."
- 5.6 A restrictive covenant between the applicant and the City being entered into, at the full cost of the applicant, which restricts the occupancy to aged (over 55's) persons.

ON-GOING CONDITIONS

- 6. The works undertaken to satisfy Condition(s) 2, 3, 4 and 5 shall be subsequently maintained for the life of the development.
- 7. The development hereby approved shall at all times comply with the definition of "Independent Living Complex" as defined in Western Australian Planning Commission Position Statement: Residential accommodation for ageing persons March 2004:
 - "a development with self-contained, independent dwellings for aged or dependent persons together with communal amenities and facilities for residents and staff that are incidental and ancillary to the provisions of such accommodation, but does not include a development which includes these features as a component of a residential aged care facility."
- 8. Landscaping and reticulation shall be implemented in accordance with the approved Landscape Plan and shall thereafter be maintained to the satisfaction of the City of Busselton. Unless otherwise first agreed in writing, any trees or plants which, within a period of five years from first planting, are removed, die or, as assessed by the City as being seriously damaged, shall be replaced within the next available planting season with others of the same species, size and number as originally approved.
- 9. The tennis/pickleball courts shall comply with the following:
 - i. Fencing shall not exceed 3.8 metres in height and shall be of PVC coated link-mesh fencing in dark tones.
 - ii. Light poles to be a maximum height of 6 metres, measured from finished ground level of the tennis court.
 - iii. Lighting must not exceed an illumination level of three (3) lux beyond a distance of three (3) metres from the tennis court.
 - iv. Lighting must be adequately screened or shielded to ensure that the light source is not visible from a habitable-room window of an adjoining dwelling.
- 10. Any Aged or Dependent Persons' Dwelling must be designed and used only for the permanent accommodation of a person who:
 - (i) is aged 55 years or more; or

- (ii) has a recognised form of disability requiring special or supported accommodation; and may also accommodate the spouse or carer of that person and in any case no more than one other person.
- 11. The implementation of the landscaping plan for the buffer along Rendezvous Road and within the northern wetland is to be planted within the first planting season, concurrently with the commencement of stage 1, to the satisfaction of the City of Busselton.

Advice Notes

- 1. If the applicant and/or owner are aggrieved by this decision, there may be a right of review under the provisions of Part 14 of the Planning and Development Act 2005. A review must be lodged with the State Administrative Tribunal, and must be lodged within 28 days of the decision being made by the Regional DAP.
- 2. Please note it is the responsibility of the applicant / owner to ensure that, in relation to substantial commencement, this development approval remains current and does not lapse. The City of Busselton does not send reminder notices in this regard.
- 3. Please be advised that when forwarding payment for contributions and/or bonds to the City of Busselton, whether it be in person or through the mail, you will need to include a copy of this correspondence (decision on application for development approval) for receipting purposes.
- 4. The payment towards community facilities in the Broadwater precinct is required as a result of the City of Busselton Local Planning Scheme No. 21 Development Contribution Special Control Area provisions and is calculated on the basis of \$2303.00 for every additional unit approved in the Broadwater precinct (Aged Persons units attract a 50% contribution rate). The contribution will be retained within a separate fund to be used solely for the upgrading, improving and provision of the City's community facilities consistent with a community facility plan for the precinct.
- 5. The contribution fee is upgraded in line with the Consumer Price Index for Perth on 30 June each year. The fee applicable will be determined at the time of payment.
- 6. In accordance with the requirements of the Local Government (Uniform Local Provisions) Regulations 1996, you are hereby notified that any vehicle access from the land to a road or other public thoroughfare must be in accordance with the City of Busselton's adopted Crossover Policy and Vehicle Crossovers Technical Specification.
- 7. You are advised that the colour of the roofing materials shall be in accordance with Local Planning Policy 3.1 Reflective Building Materials. The City actively discourages the use of building materials that have a solar reflectance value greater than 50%. Colour(s) should complement the locality and not be of undesirable impact.

- 8. In accordance with the provisions of the Building Act 2011, and Building Regulations 2012, an application for a building permit must be submitted to, and approval granted by the City, prior to the commencement of the development hereby permitted.
- 9. The City's development approval should not be construed as an indication of future support of any proposed subdivision.
- 10. A Food Business Notification/Registration form is to be submitted for approval by an Environmental Health Officer and should include a detailed sketch plan of fit out of premise (Clubhouse).
- 11. Swimming Pool shall comply with the Health (Aquatic Facilities) Regulations 2007.
- 12. Should the treatment room within the Clubhouse include skin penetration treatments (dry needling, acupuncture, waxing, etc) an application for a skin penetration business shall be made to the City of Busselton.
- 13. The clubhouse is required to comply with the Health (Miscellaneous Provisions) Act 1911; the Health (Public Building) Regulations 1992 and the Building Code of Australia.
- 14. The City recommends that a Bushfire Evacuation Plan be prepared to manage the safety of the occupants in a Bushfire Event.
- 15. The Construction Environmental Management Plan shall address how construction of the site will retain and enhance existing ecological corridors/linkages and any clearing vegetation modifications.
- 16. You are advised Agonis flexuosa (WA Peppermint Trees) provide key habitat for the "critically endangered" Pseudocheirus occidentalis (Western Ringtail Possum). The Western Ringtail Possum are awarded protection under the Biodiversity Conservation Act 2016 and you may face penalties for taking or disturbing (including intentionally disturbing, trapping/relocating or causing harm/death) a Western Ringtail Possum. A section 40 ministerial authorisation to take or disturb threatened fauna under the Biodiversity Conservation Act 2016 is to be obtained prior to clearing occurring. A fauna handler is required to be onsite prior to and during any clearing operations and is required to hold a Section 40 Ministerial Authorisation. The fauna handler is to provide a post clearing report to DBCA swlanduseplanning@dbca.wa.gov.au that includes the numbers of adult or juvenile western ringtail possums observed, taken or disturbed, any injuries or fatalities, and the location of the fauna after clearing has occurred.
- 17. A development application will be required in the instance a 'hit up wall' is required to support pickleball activities and shall consider appropriate noise mitigation measures.
- 18. The City notes that the development as approved will be constructed as a staged development in accordance with an approved staging plan. Conditions may be cleared in stages to the satisfaction of the City.

Where an approval has so lapsed, no development shall be carried out without further approval having first been sought and obtained, unless the applicant has applied and obtained Development Assessment Panel approval to extend the approval term under regulation 17(1)(a) or local government approval under regulation 17A of the *Planning and Development (Development Assessment Panels) Regulations 2011*.

Appendix C

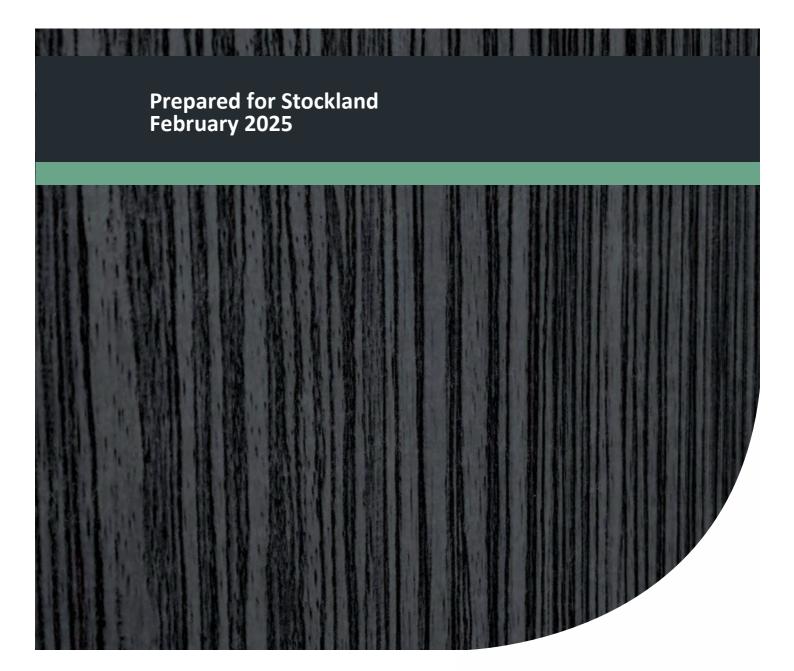
Environmental Assessment Report

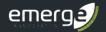




Lot 31 Rendezvous Road, Vasse

Project No: EP23-093





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D.	February 2025	Kirsten Knox	KK	Kirsten Knox	KK	
В	Updated to address	Updated to address revised development layout and City of Busselton comments.				

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Integrated Science & Design



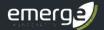
Executive Summary

This *Environmental Assessment Report* (EAR) has been prepared on behalf of Stockland (the proponent) to support a development application for the construction and operation of a lifestyle village at Lot 31 Rendezvous Road, Vasse, herein referred to as 'the site'. The site consists of an area approximately 14 hectares (ha) in size and is located within the City of Busselton.

The site is currently zoned 'urban development' under the City of Busselton Local Planning Scheme (LPS (No. 21) and is located within the 'Wetland' and 'Environmental Consideration' Special Control Areas. It is bounded by vegetated recreation reserves to the north and east, Cockatoo Loop to the northeast, existing rural land uses (proposed for future urban development) to the east and west, and Rendezvous Road and rural land uses to the south.

The environmental attributes and values relevant to the site are summarised as follows:

- The majority of the site is classified as having a 'high to moderate risk' of acid sulfate soils (ASS) occurring within 3 m of the natural soil surface.
- Native vegetation exists in the northern and southeastern extents of the site but is generally in 'degraded' or worse condition and largely comprised of overstorey species over paddock grasses.
- No threatened ecological communities (TECs), priority ecological communities (PECs), threatened flora or priority flora have been identified within the site, nor are they likely to occur based on the lack of biodiversity and historic disturbance within the site.
- The site (including the northern side of Rendezvous Road reserve) contains 114 black cockatoo habitat trees (trees with a diameter at breast height 500 mm or greater in diameter). No trees with suitable hollows for black cockatoos were identified within the site. One tree with suitable hollows was identified in the portion of Rendezvous Road adjacent to the south of the site. While multiple conservation significant species were deemed to have high or moderate likelihood of occurrence in the site, these are largely associated with the areas with remnant native overstorey species.
- Groundwater levels measured within the site indicate that groundwater is within close
 proximity to the natural soil surface. Groundwater quality data indicates that existing total
 nitrogen (TN) and total phosphorus (TP) values exceed the National Water Quality
 Management Strategy guideline values, however, is generally consistent with what would be
 expected for historical agricultural land in the region.
- Based on the Geomorphic Wetlands on the Swan Coastal Plain dataset the majority of the site
 is mapped as a multiple use wetland (MUW). A seasonally inundated resource enhancement
 wetland (REW) exists in the southeast extent of the site and is largely cleared of vegetation.
 Discussions with the Department of Water and Environmental Regulation (DWER) and the
 Department of Biodiversity, Conservation and Attractions (DBCA) indicate the REW does not
 need to be retained.
- In addition to the REW, a number of earth dams and drainage areas are the only surface water features located within the site. The site is located within an area identified as 'Area Subject to Inundation', due to its hydrological connection to the nearby Broadwater Estuary feature.



Lot 31 Rendezvous Road, Vasse

- The site is in the vicinity of a number of major roads (Bussell Highway to the north) but does
 not fall within the respective assessment area under State Planning Policy 5.4 Road and Rail
 Noise.
- The site is adjacent to rural landscape character values, with the key viewing location of the site being from Rendezvous Road. The City of Busselton has requested that the visual impact of the development to the rural land uses to the south be considered.
- Areas of bushfire hazard have been identified outside the site and are associated with unmanaged grassland, forest, woodland and scrub vegetation. A 5m-wide scrub landscape buffer is also assumed to be located within the site adjacent to Rendezvous Road.

Based on the environmental values or attributes identified within the site, this EAR details how the values will be addressed and/or managed as part of the proposed development. As a summary, this includes:

- Acid sulfate soils (ASS): ASS can be managed as a condition of development approval, based on the standard development process. ASS is only likely to require management where works extend below the permanent groundwater table, or 3 m below the natural surface. Based on the fill required within the site, this is unlikely to be an issue.
- Flora and vegetation: native vegetation, largely associated with remnant overstorey species, is present within the site, between the northeastern boundary and western boundary, as well as in the southeastern extent of the site. Where possible, the development layout has accommodated the retention of the majority of the native vegetation across the site in open space area, with approximately 78% of the existing canopy retained. The retained vegetation provides for green linkages across the site within the open space areas and will be linked by street trees. Retained trees will be subject to assessment by an arborist, and this will guide excavation and civil works in the vicinity of the trees. Further investigation will be undertaken as drainage and engineering design is worked through to retain additional melaleuca trees in the central-eastern portion of the site.
- Fauna: the site is considered to consist of suitable habitat for conservation significant black cockatoos, other avifauna, quenda, south-western brush-tailed phascogales and western ringtail possums. Native vegetation within the site will generally be retained and are connected across the site (approximately 78% of the existing vegetation canopy, with further investigation of additional melaleuca trees), therefore adequate habitat for dispersal and foraging will remain. The biodiversity values within the site will be enhanced through the proposed landscaping, providing additional native species for foraging and dispersal.
- Hydrology: water management within the site will be based on maintaining the existing hydrological regime of the site which includes infiltrating as close to source as possible using a treatment train approach, which incorporates vegetated bio-retention areas and flood storage areas. The small (i.e. first 15 mm), minor (20% Annual Exceedance Probability (AEP)) and the major (1% AEP) rainfall event runoff will be managed by the infiltration infrastructure that mimic the predevelopment hydrology at key control points (culverts at Rendezvous Road and Tortoise Rise). Runoff from the upstream catchment (south of Rendezvous Road) will be conveyed by the drainage infrastructure (including the drainage feature that is being maintained along the western and northern boundary). Clearance to groundwater will be addressed through the introduction of fill sand and use of sub-soil drains. Further detail on the

(Emerge Associates 2025e).



water management requirements are detailed within the Water Management Plan (WMP)

- Wetlands: the site is located within the 'Wetland' Special Control Area as identified within the City of Busselton's LPS No. 21. The hydrological function of the MUW will be managed through the implementation of the WMP (Emerge Associates 2025e). It was also determined, in consultation with DBCA and DWER, that the REW in the southeast extent of the site was not required to be retained, as long as its hydrological function was maintained and the interface with adjoining wetland features to the north were managed appropriately. The management of the hydrological function is detailed within the WMP (Emerge Associates 2025e) and the development will provide a landscape interface to the wetland to the north, graduated from developed areas to the more natural wetland values.
- Mosquitos and nuisance insects: The existing seasonally inundated REW will not be retained as part of the development, therefore removing a key standing water body from potentially attracting mosquitos and nuisance insects. The management of stormwater will be addressed in the WMP (Emerge Associates 2025e) to avoiding pooling of water where these insects may breed. The City of Busselton has a comprehensive mosquito management program in place for monitoring and treatment areas of risk. The main source of mosquito habit will be the existing wetland area to the north and north-east of the site, an existing feature likely subject to the City's management program.
- Visual impact: the visual amenity and rural character of Rendezvous Road will be maintained through the proposed setback of lots from the site boundary, retention of road verge vegetation, the proposed vertical rail fencing panels (visually permeable) and the implementation of buffer planting along the southern boundary of the site.
- Bushfire risks: Provision of appropriate separation between future built form and bushfire hazards has been accommodated as part of the development design through the provision of managed (by the proponent) landscaped areas, roadways and setback of dwellings within lots. All areas withing the site, outside of the 5 m-wide landscape buffer along Rendezvous Road, will be designed and maintained to achieve low threat in accordance with Section 2.2.3.2 of AS 3959 (in order to not be a hazard). Vehicle access will accommodate emergency evacuation, with direct access to Rendezvous Road and Cockatoo Loop.

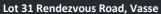
Overall, the environmental attributes and values of the site can be accommodated within the proposed development or can be managed as a condition of development approval in line with the relevant state and local government legislation, policies and guidelines.

Project number: EP23-093 | February 2025



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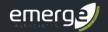
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Appendices

Appendix A

Proposed development layout

Appendix B

Statement of Environmental Effects as per City of Busselton LPS No.21

Appendix C

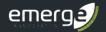
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List of Abbreviations

Table A1: Abbreviations – General terms

General terms	
AEP	Annual exceedance probability
AHD	Australian Height Datum
AHIS	Aboriginal Heritage Inquiry System
ASS	Acid Sulfate Soil
ASSDMP	Acid Sulfate Soil and Dewatering Management Plan
EAR	Environmental Assessment Report
ESA	Environmentally sensitive area
IBRA	Interim Biogeographic Regionalisation of Australia
MUW	Multiple use wetland
PEC	Priority ecological community
PF	Priority flora
PDWSA	Public drinking water source area
REW	Resource enhancement wetland
TEC	Threatened ecological community
TF	Threatened flora

Table A2: Abbreviations – Legislation and policies

Legislation and po	Legislation and policies		
AH Act	Aboriginal Heritage Act 1972		
BC Act	Biodiversity Conservation Act 2016		
EP Act	Environmental Protection Act 1986		
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999		

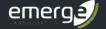
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Table A3: Abbreviations – Organisations

Organisations	
DCCEEW	Department of Climate Change, Energy, the Environment and Water (federal)
DBCA	Department of Biodiversity Conservation and Attractions
DoH	Department of Health
DPLH	Department of Planning, Lands and Heritage
DWER	Department of Water and Environmental Regulation
EPA	Environmental Protection Authority
WAPC	Western Australian Planning Commission

Table A4: Abbreviations – Planning and building terms

Planning and building terms		
ВМР	Bushfire Management Plan	
LPS	Local Planning Scheme	
SCA	Special Control Area	
WMP	Water Management Plan	



1 Introduction

1.1 Background

Stockland (the 'proponent') is seeking to progress a development application for a proposed lifestyle village within Lot 31 Rendezvous Road, Vasse (herein referred to as 'the site'), as shown in the development layout in **Appendix A**. The site, shown in **Figure 1**, consists of an area of approximately 14 hectares (ha) and is located within the City of Busselton. The site is bounded by vegetated recreation reserves to the north and east, Cockatoo Loop to the northeast, existing rural land uses (proposed for future urban development) to the east and west, and Rendezvous Road and rural land uses to the south .

The site is currently zoned 'urban development' under the City of Busselton Local Planning Scheme (LPS (No. 21) and is located within the 'Wetland' and 'Environmental Conditions' Special Control Areas.

1.2 Purpose of this report

The purpose of this Environmental Assessment Report (EAR) is to provide a synthesis of information regarding the environmental values and attributes of the site. Specifically, this report:

- Identifies the existing environmental values and attributes of the site (Section 2)
- Discusses the land use and environmental planning context for the development area (Section 2)
- Discusses how the development will respond to the existing environmental features and values as the project is implemented (Section 5)
- Identifies future environmental management requirements as part of the future planning and development process (Section 5)

The EAR is the key supporting environmental document for the development application and is intended to facilitate consideration of relevant environmental issues by the local government and various state government agencies and authorities.

1.2.1 City of Busselton LPS No. 21 – Schedule 6 (Statement of Environmental Effects)

In addition, this EAR addresses the Statement of Environmental Effects in accordance with Schedule 6 of the City of Busselton LPS No.21 based on the site's location within the 'Wetland' Special Control Area. The following matters are addressed within this EAR:

- A full description of the proposed development.
- A statement of the objectives of the proposed development.
- A full description of the existing environment likely to be affected by the proposed development if carried out.
- An identification and analysis of the likely interactions between the proposed development and the environment.
- An analysis of the likely environmental impacts or consequences of carrying out the proposed development, including the effect on:

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Lot 31 Rendezvous Road, Vasse

- The growth of native plant communities;
- The survival of native wildlife populations;
- o The provision and quality of habitats for both indigenous and migratory species; and
- The surface and groundwater characteristics of the site on which the development is proposed to be carried out and of the surrounding area, including acidity, salinity and water quality.
- Whether adequate safeguards and rehabilitation measures have been, or will be, taken to protect the environment.
- Any feasible alternatives to the carrying out of the proposed development and the reasons for choosing the latter.
- The consequences of not carrying out the proposed development.
- Details of any wetlands surrounding the land to which the application for development approval relates and the appropriateness of imposing conditions requiring the carrying out of works to preserve or enhance the value of the surrounding wetlands.

A specific summary addressing the Statement of Environmental Effects has been provided in **Appendix B**.



2 Proposed Development

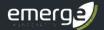
The site is proposed to be developed and operate as a lifestyle village with the development layout provided in **Appendix A.** The development will include:

- Approximately 213 residential dwellings
- A club house and social precinct
- A swimming pool
- Pickleball courts
- An interconnected road and pedestrian network
- Car and RV parking spaces throughout
- A community garden and landscaped areas.

Key considerations for the development of the site have been:

- Providing a liveable space that supports residents to live an engaging and comfortable lifestyle.
- The retention and protection of as many of the existing trees as possible through an interconnected open space network, providing linkages to the existing nature reserve to the north and north-east and Rendezvous Road to the south.
- Providing for the movement of water (surface and groundwater) through the site, both as part
 of managing stormwater events, and ensuring hydrological events are maintained. This
 includes infiltrating on site and using sub-surface systems.
- Minimising visual impact through the use of permeable fencing and planted interfaces, with buildings setback from the site boundary.
- Balancing bushfire risk with surrounding hazards as well as planting/vegetated areas within the
 site. The proponent will be responsible for the implementation and long-term management of
 all open space areas and interface zones, to ensure development within the site can satisfy
 bushfire management requirements.

The response of the development to the site conditions and management considerations to support the development process have been outlined in the following sections.



3 Existing Environment

The outcomes of desktop and site-specific investigations undertaken by Emerge and others have informed the identification and assessment of the existing environmental attributes and values within the site and are discussed in the below **Section 3.1** to **Section 3.7**.

In order to understand the environmental values within or nearby to the site and consider appropriate management responses, Emerge Associates have reviewed a range of information sources including local and regional reports, databases and mapping as well as a site visit and preparation of other site-specific investigations. Site specific investigations include:

- Contamination Soil Investigation (Emerge Associates 2023a)
- Environmental Due Diligence (Emerge Associates 2023b)
- Flora and Vegetation Assessment (Emerge Associates 2024c)
- Black Cockatoo and Fauna Assessment (Emerge Associates 2024a)
- Water Management Plan (Emerge Associates 2025e)
- Bushfire Management Plan (Emerge Associates 2024b)

The Environmental Protection Authority (EPA) identifies a number of environmental principles, factors and objectives within the *Statement of Environmental Principles, Factors and Objectives* (EPA 2018), which are used to guide the determination of significant environmental impacts and whether impacts can be appropriately mitigated or managed. Existing environmental values have been described according to the applicable EPA environmental factor (where applicable to the site), which include:

- Landforms
- Terrestrial environmental quality
- Flora and vegetation
- Terrestrial fauna
- Inland waters
- Social surroundings.

3.1 General location and site context

The site is located on the southern end of the Swan Coastal Plain, approximately 720 m south of the Vasse town centre and 8 km southwest of the Busselton town centre. The site and properties to the southeast and west are zoned as urban development. Land to the south, beyond Rendezvous Road, is zoned as rural, land to the northeast is zoned as residential and land to the north and east is zoned as recreation.

The site is located in an area that has historically been cleared to support agricultural purposes. Remnant vegetation to the north and east of the site is located within City of Busselton managed reserves.

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Lot 31 Rendezvous Road, Vasse

3.2 Landform and soils

3.2.1 Topography

The majority of the site is generally flat and low lying, with elevation ranging from approximately 3 m Australian Height Datum (AHD) across the majority of the site, to approximately 6 m AHD in the southern portion of the site. Topographic contours across the site are shown in **Figure 1**.

3.2.2 Landform, soils and geology

The regional soil-landform mapping prepared by the Department of Primary Industries and Regional Development (DPIRD) indicates the majority of site is located within the Abba Wet Flats Phase of the Abba Plain system which can be described as 'Winter wet flats and slight depressions with sandy grey brown duplex (Abba) and gradational (Busselton) soils.'

The south-eastern portion of the site is mapped as the Jindong Flats Phase, also within the Abba Plain system, which can be described as 'Well drained flats with sandy gradational grey brown (Busselton) soils, some red brown sands and loams (Marybrook Soils).'

The soil-landscape mapping for the site and immediate surrounds is shown in Figure 2.

3.2.3 Acid sulfate soils

Acid sulfate soils (ASS) is the name commonly given to naturally occurring soils and sediment containing iron sulphide (iron pyrite) materials. In their natural state, ASS are generally present in waterlogged and/or anoxic conditions and do not present any risk to the environment. ASS can pose issues when oxidised, producing sulphuric acid, which can present a range of risks for the surrounding environment, infrastructure and human health.

The Department of Water and Environment Regulation (DWER) provides broad-scale mapping indicating areas of potential ASS risk (DWER 2024a). A review of the DWER mapping indicates that the majority site is classified as having a 'high to moderate' risk of ASS occurring within 3 metres of the natural soil surface. Two small areas of the site, in the northwest and along the southern boundary are mapped as having 'moderate to low risk' of ASS occurring. This shown in **Plate 1**.

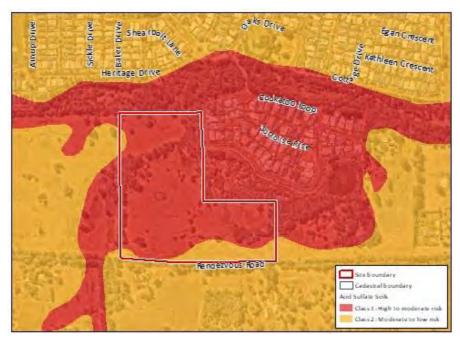


Plate 1: Acid sulfate soil risk mapping (DWER 2024a) within the site and surrounds.

3.2.4 Potential site contamination

A review of the DWER Contaminated Sites Database (DWER 2024b) indicates that the site is not identified publicly as a registered 'contaminated site' pursuant to the Contaminated Sites Act 2003, nor are other registered sites located nearby. In addition, a review of the Department of Defence Unexploded Ordnance (UXO) Mapping Application (DoD 2020) indicates that the site is not identified as being at risk of having UXO within the site.

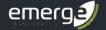
A Contamination Soil Investigation of the site was undertaken by Emerge Associates in 2023 (Emerge Associates 2023b) which involved the advancement of 15 test pits across the site to a maximum depth of 1.0 metre below ground level (mBGL). Samples were submitted for laboratory analysis of total recoverable hydrocarbons (TRH); benzene, toluene, ethylbenzene, xylenes and naphthalene (BTEXN); polycyclic aromatic hydrocarbons (PAH); per and polyfluoroalkyl substances (PFAS) and heavy metals, and results indicated no exceedances of human health assessment levels. Multiple analytes reported marginal exceedances of laboratory limits of reporting, however none of the adopted assessment criteria were exceeded. There were no reported findings of asbestos in soil.

3.3 Biodiversity and natural area assets

3.3.1 Flora and vegetation

3.3.1.1 Regional context

Native vegetation can be described and mapped at different scales or units in order to illustrate general patterns in its distribution. At a continental scale the *Interim Biogeographic Regionalisation of Australia* (IBRA) divides the Swan Coastal Plain into two floristic subregions, the Perth Plateau and the Dandaragan Plateau (Environment Australia 2000).



The site is located within the Perth subregion of the Swan Coastal Plain, which is characterised as mainly containing *Banksia* low woodland on leached sands with *Melaleuca* swamps where illdrained; and woodland of *Eucalyptus gomphocephala* (tuart), *E. marginata* (jarrah) and *Corymbia calophylla* (marri) on less leached soils (Beard 1990).

At a regional scale, vegetation complex mapping undertaken by the Department of Biodiversity Conservation and Attractions (DBCA) maps the northern and western extent of the site as occurring within the 'Abba' vegetation complex. The Abba complex is described as 'a mixture of open forest of Corymbia calophylla (Marri) - Eucalyptus marginata (Jarrah) - Banksia species and woodland of Corymbia calophylla (Marri) with minor occurrences of Corymbia haematoxylon (Mountain Marri). Woodland of Eucalyptus rudis (Flooded Gum) - Melaleuca species along creeks and on flood plains.'

Regional vegetation mapping is shown in Figure 3.

3.3.1.2 Site specific investigations

Emerge Associates completed a reconnaissance flora and vegetation survey for the site on on 11 May 2023 and 14 November 2023 in accordance with EPA's *Technical Guidance – Flora and Vegetation Surveys for Environmental Impact Assessment* (EPA 2016). The survey boundary incorporated the entire site.

The survey included traversing the site on foot and recording composition and condition of vegetation. Photographs were taken during the survey to show particular site conditions. Prior to the field survey, information on the habitat preferences of threatened and priority flora species and communities were reviewed. Areas of potentially suitable habitat for threatened and priority flora species were opportunistically traversed along transects and searched for conservation significant species, as required.

The findings of the survey are summarised below, and the report is provided as **Appendix C**.

3.3.1.3 Vegetation units

Three vegetation units were identified within the site during the field survey and descriptions of each is provided below in **Table 1**. The associated vegetation mapping is shown in **Figure 4**.

Table 1: Description and extent of vegetation type identified within the site

Vegetation Community	Description	Area (ha)
CcEr	Closed forest to woodland of <i>Corymbia calophylla</i> and <i>Eucalyptus rudis</i> over scattered <i>Agonis flexuosa</i> over low closed grassland and forbland of predominantly non-native species.	2.69
Mr	Low closed forest to woodland of <i>Melaleuca rhaphiophylla</i> over low closed grassland, forbland and sedgeland of predominantly non-native species.	0.64
Non-native	Low closed grassland, forbland and sedgeland of predominantly non-native species.	10.75

Plates 2-4 below, provide an indication of the vegetation type and condition, identified during the site visit.

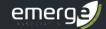




Plate 2: Example of CcEr vegetation within the site



Plate 3: Example of Mr vegetation within the site





Plate 4: Example of non-native vegetation within the site

3.3.1.4 Vegetation condition

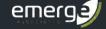
The majority of the site was heavily disturbed with limited intact native vegetation present. The vegetation was therefore determined to be in 'degraded,' 'degraded – completely degraded' or 'completely degraded' condition. Vegetation condition is shown in **Figure 5** and detailed below in **Table 2**.

Table 2: Vegetation condition categories within the site

Condition category (Keighery (1994))	Size (ha)
Pristine	0
Excellent	0
Very good	0
Good – very good	0
Good	0
Degraded	2.94
Degraded – completely degraded	0.39
Completely degraded	10.75

3.3.1.5 Threatened and priority ecological communities

Generally, ecological communities can be described as vegetation communities that are assemblages of species that occur together in a particular type of habitat. An ecological community's structure, composition and distribution are determined by a range of environmental factors. 'Threatened



ecological communities' (TECs) are ecological communities that are recognised as rare or under threat and therefore warrant special protection.

Selected TECs are afforded statutory protection at a Commonwealth level under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). TECs listed under the EPBC Act are categorised as either 'critically endangered', 'endangered' or 'vulnerable'. Any action likely to have a significant impact on a TEC listed under the EPBC Act (either critically endangered or endangered TECs) requires approval from the Commonwealth Minister for the Environment.

Within Western Australia, state-listed threatened flora and TECs are statutorily protected through the *Biodiversity Conservation Act 2016* (BC Act), and licences (or similar) may be required where these values are proposed to be disturbed or modified.

An ecological community under consideration for listing as a TEC in Western Australia, but which does not yet meet survey criteria or has not been adequately defined, or which is rare but not currently threatened, is referred to as a 'priority ecological community' (PEC). Whilst PECs are not afforded statutory protection in Western Australia, they are considered during the approval process.

Known locations of TECs and PECs within 5 km of the site were searched for using the publicly available *Weed and native flora dataset* (Keighery *et al.* 2012) and the *Protected Matters Search Tool* (DCCEEW 2024). These search results indicate that two PEC/TECs have moderate likelihood of occurrence within the site:

- Corymbia calophylla woodlands on heavy soils of the southern Swan Coastal Plain (floristic community type 1b as originally described in Gibson et al. 1994)
- Eucalyptus patens, Corymbia calophylla, Agonis flexuosa Closed Low Forest

Given the disturbed nature of the site, results of the field survey indicated that no TECs or PECs occur within the site, including those listed as having moderate likelihood of occurrence.

3.3.1.6 Conservation significant flora

Certain flora species that are considered to be rare or under threat warrant special protection under Commonwealth and/or state legislation. At a Commonwealth level, flora species may be listed as 'threatened' pursuant to the EPBC Act and any action likely to have a significant impact on a listed threatened species requires approval from the Commonwealth Minister for the Environment.

At a state level, plant species may also be classed as 'threatened' under the BC Act. Species which are potentially rare or threatened, or meet the criteria for near threatened, or have recently been removed from the threatened species list are classed as 'priority' flora species. However, priority flora species are not afforded statutory protection.

A search was conducted for threatened and priority flora within a 2 km radius of the site using the *Protected Matters Search Tool* (DCCEEW 2024) and *NatureMap* (DBCA 2020b). A total of 70 threatened and priority flora species were identified as potentially occurring in the wider local area. A likelihood of occurrence assessment was undertaken and, based on geological characteristics and the disturbed nature of the site due to long-term agricultural use, none of these threatened and priority flora species were identified as likely to occur within the site. The flora and vegetation assessment (Emerge Associates 2024) is included in **Appendix C**.

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3.3.2 Ecological linkages

Ecological linkages are linear landscape elements that allow for the movement of fauna, flora and genetic material between areas of remnant habitat. The movement of fauna and the exchange of genetic material between vegetation remnants improve the viability of those remnants by allowing greater access to breeding partners and food sources, refuge from disturbances such as fire and maintenance of genetic diversity of plant communities and populations. Ecological linkages are ideally continuous or near-continuous as the more fractured a linkage is, the less ease flora and fauna have in moving within the corridor (Alan Tingay and Associates 1998).

The South West Biodiversity Project identified and mapped regional ecological linkages in the south west of Western Australia (Molloy *et al.* 2009). This mapping was based on high level analysis using aerial photography and linking areas based on the potential level of connection (e.g. green areas) in proximity to other areas. The linkages are not specific, and more of a general indication of possible connection.

Ecological linkage no. 76 is generally shown across the northwest extent of the site and connects with an ecological linkage to the south and north. The general location of the ecological linkage compared to the site is shown in **Figure 6**.

3.3.3 Environmentally sensitive areas

'Environmentally sensitive areas' (ESAs) are prescribed under the *Environmental Protection (Clearing of Native Vegetation) Regulations 2004* and have been identified to protect native vegetation values of areas surrounding significant, threatened or scheduled flora, vegetation communities or ecosystems. Exemptions under the *Environmental Protection (Clearing of Native Vegetation)*Regulations 2004 do not apply within ESAs. However, exemptions under Schedule 6 of the EP Act still apply.

Based upon a review of the *Clearing Regulations – Environmentally Sensitive Areas* dataset (DWER 2017) the site is not mapped as an ESA. The location of ESAs in the surrounding area are shown in **Figure 6**.

3.3.4 Terrestrial fauna

3.3.4.1 Habitat types

Based on the fauna assessment (Emerge Associates 2024a) three broad fauna habitats were identified within the site (and generally align with the vegetation units summarised in **Section 3.3.1.3**) and include:

- Eucalypt woodland (2.69 ha within the site, and 0.22 ha within northern verge of the Rendezvous Road reserve), which is comprised of low closed forest to woodland of Corymbia calophylla over scattered Agonis flexuosa over bracken and non-native grasses. It is described as having moderate microhabitat complexity.
- Riparian vegetation (0.65 ha within the site), which is comprised of low closed forest to woodland of Melaleuca rhaphiophylla over low non-native grasses with scattered herbs and

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- sedges and standing water most of the year. It is described as having moderate microhabitat complexity.
- Grassland (10.82 ha within the site and Rendezvous Road reserve), which is composed of dense non-native grassland with scattered trees and shrubs and described as having low microhabitat complexity.

The 'eucalypt woodland' and 'riparian vegetation' habitat types have the greater habitat value given the generally contiguous cover of native tree canopy. However, both habitats are relatively small in extent and largely lack native understorey vegetation. Therefore, they are unlikely to be of importance to ground dwelling native species. The remaining habitats are likely to be predominantly used by common and widespread native and non-native fauna with non-specific habitat requirements, which enable them to persist in highly modified environments.

3.3.4.2 Species of conservation significance

Certain fauna species that are considered to be rare or under threat warrant special protection under state and/or federal legislation. At a federal level, fauna species may be listed as 'threatened' pursuant to the EPBC Act and any action likely to have a significant impact on a listed threatened species requires approval from the Commonwealth Minister for the Environment.

In Western Australia, fauna taxa may be classed as 'specially protected' under the BC Act which is enforced by Department of Biodiversity, Conservation and Attractions (DBCA). Specially protected fauna species are listed under Schedules 1 to 7 according to their conservation status. It is an offence to 'take' or 'disturb' threatened fauna without Ministerial approval.

Fauna species that do not currently meet the criteria for listing as threatened but are potentially rare or threatened may be added to the DBCA's *Priority Fauna List*. These species are classified into 'priority' levels based on threat. Whilst priority species are not under direct statutory protection, they are considered during state approval processes.

To understand the extent of significant fauna species that are likely to occur within the local area, searches were undertaken of the DBCA's *NatureMap* database (DBCA 2020b) and the Department of Climate Change, Energy, the Environment and Water (DCCEEW) *Protected Matters* database (DCCEEW 2024). It is important to note that these searches do not take into account the types and condition of fauna habitat occurring on the site but are based on the proximity of the site to known occurrence of significant species.

Six threatened, one specially protected and four priority species were classified as having a 'high' or 'moderate' likelihood of occurrence (Emerge Associates 2024a). The legislative or policy status and habitat preferences of these species are summarised in **Table 3**.

The remainder of the conservation significant fauna species identified in the desktop assessment (92 species) were considered as having a 'low', negligible' or 'nil' likelihood of occurrence.

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Table 3: Summary of conservation significant fauna species with potential to occur in the site

Species name	Common name	Status		Habitat description
		WA	EPBC Act	
Birds				
Apus pacificus	Pacific swift	MI	MI	Aerial, migratory species that is most often seen over inland plains and sometimes above open areas, foothills or in coastal areas. Sometimes occurs over settled areas, including towns, urban areas and cities
Calyptorhynchus banksii naso	Forest red-tailed black cockatoo	VU	VU	Eucalypt and Corymbia forests, often in hilly interior. More recently also observed in more open agricultural and suburban areas including Perth metropolitan area. Attracted to seeding Corymbia calophylla, Eucalyptus marginata, introduced Melia azedarach and Eucalyptus spp. trees
Falco peregrinus	Peregrine falcon	OS	-	Mainly found around cliffs along coasts, rivers, ranges and around wooded watercourses and lakes
Ninox connivens connivens	Barking owl (southwest subpop.)	P3	-	Open forests, woodlands, dense scrubs, foothills, river red gums, and other large trees near watercourses penetrating otherwise open country. Also Melaleuca woodlands, mangroves, rainforests and deciduous vine scrubs (Johnstone and Storr 1998; Pizzey & Knight 2012).
Tyto novaehollandiae novaehollandiae	Australian masked owl	Р3	-	Forests, open woodlands, farmlands with large trees. E.g. river red gums, adjacent cleared country, timbered watercourses, paperbark woodlands and caves (Pizzey & Knight 2012).
Zanda baudinii	Baudin's black cockatoo	EN	EN	Mainly eucalypt forests. Attracted to seeding <i>Corymbia</i> calophylla, Banksia spp., Hakea spp., and to fruiting apples and pears
Zanda latirostris	Carnaby's black cockatoo	EN	EN	Mainly proteaceous scrubs and heaths and adjacent eucalypt woodlands and forests; also plantations of <i>Pinus</i> spp. Attracted to seeding <i>Banksia</i> spp., <i>Dryandra</i> spp., <i>Hakea</i> spp., <i>Eucalyptus</i> spp., <i>Corymbia calophylla</i> , <i>Grevillea</i> spp., and <i>Allocasuarina</i> spp.
Invertebrates				
Bothriembryon irvineanus	Irvine's bothriembryontid land snail (Cape Naturaliste)	P2	-	Habitat unknown. Found in the Cape Naturalist region.
Mammals				
Isoodon fusciventer	Quenda	P4	-	Dense scrubby, often swampy, vegetation with dense cover up to one metre high
Phascogale tapoatafa wambenger	South-western brush-tailed phascogale	CD	-	Dry sclerophyll forests and open woodlands that contain hollow- bearing trees but a sparse ground cover
Pseudocheirus occidentalis	Western ringtail possum	CR	CR	On the Swan Coastal Plain in Agonis flexuosa woodlands and Agonis flexuosa/ Eucalyptus gomphocephala forests. Also Eucalyptus marginata forests (DBCA 2017).

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Of the species identified in Table 3:

- Pacific swift and peregrine falcon are highly mobile species that may opportunistically fly over the site, and if present are only likely to briefly perch or occur in the air space above the site and are largely independent from terrestrial habitat.
- Numerous records of the Australian masked owl and barking owl (southwest subpopulation)
 were found for the species in the remnant bushland surrounding the site. Both species occur in
 open woodlands and large trees near waterways which are consistent with the habitat found
 within the site, which may contribute to the broader existing areas of suitable habitat.
- Quenda require dense ground cover to persist in an area and, as such, much of the site would not provide suitable habitat. However, the species is common around Busselton and may forage in the site, particularly where riparian vegetation is most dense.
- The south-western brush-tailed phascogale species is known to have inhabited native bushland surrounding the survey site according to DBCA records. The areas of connected tree canopy may provide habitat for the species.
- Records of the western ringtail possum had been recorded throughout the local area based on
 opportunistic spotlighting or day observations in DBCA records. The eucalypt woodland habitat
 in the site contains western ringtail possum foraging plant species and is likely to provide
 suitable habitat for the species in conjunction with surrounding areas of vegetation.

With regard to the black cockatoos:

- Foraging evidence from Baudin's black cockatoo was recorded within the site during the survey.
- 113 potential and 1 suitable black cockatoo nesting trees were identified within the combined
 area of the site and the northern portion of the Rendezvous Road reserve directly adjacent to
 the site. Nesting trees for black cockatoos are generally native trees containing nesting hollows
 or with a diameter at breast height (DBH) of 500 mm or greater that could develop a nesting
 hollow over time. The location of the identified potential black cockatoo nesting trees is shown
 in Figure 7.
- 2.91 ha of native foraging habitat has identified within the site (2.69 ha) and Rendezvous Road (0.22 ha). This is largely associated with the 'eucalypt woodland' habitat type.

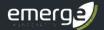
For further detail on the fauna assessment refer to **Appendix D**.

3.4 Hydrology

3.4.1 Groundwater

Information on the regional groundwater resources obtained from the DWER *Water Register* (DWER 2020a) indicates that the site is underlain by a multi-layered aquifer system comprised of the following resources:

 Perth-Superficial Swan aquifer. The site is within the Busselton-Capel area, Dunsborough-Vasse subarea and the resource reportedly has allocation available, if the aquifer is found to physically exist beneath the site.



- Leederville aquifer. The site is within the Busselton Capel area, Dunsborough-Vasse subarea and this resource is fully allocated.
- Sue Coal Measures aquifer. The site is within the Busselton-Capel area, Cowaramup-Vasse subarea and the resource reportedly has allocation available, though this would likely occur at significant depth.

Limited regional groundwater level information is available, and a review of historical aerial imagery (Landgate 2023) indicates that the south-eastern portion of the site experiences seasonal inundation. This was supported by observations during the site visit, where water was observed pooling at the natural soil surface during the winter period (when groundwater is typically highest).

Groundwater level monitoring across five (5) monitoring wells from October to December 2023 and July to October 2024 indicates that groundwater is generally present at or close to the surface at most monitoring locations. Maximum groundwater levels ranged from between 2.74 metres with respect to the Australian Height Datum (mAHD) and 3.6 mAHD, with the latter being at the southern boundary of the site. It is noted that these levels were collected following significant rainfall in Busselton and therefore may also reflect surface water conditions. Groundwater levels across the site and near the surface are inferred to be permanent superficial aquifers.

Groundwater quality data collected over the October to December 2023 and July to October 2024 monitoring periods indicates that total nitrogen (TN) and total phosphorus (TP) exceed the National Water Quality Management Strategy (NWQMS) guideline (Australian Government 2011) values for surface water in slightly disturbed ecosystems at all monitoring locations (noting the parameters are not directly applicable to groundwater, but no other guidelines exist). Notwithstanding the measured values, it is noted that the nutrient concentrations recorded are generally consistent with what would be expected for historical agricultural land in the region. The comparison of results should therefore be viewed as providing context to the site conditions but does not necessarily indicate cause for concern or action.

3.4.2 Surface water

The site is located in the coastal catchment area, as identified through the DWER *Hydrographic Catchments* dataset (DWER 2018). At a local level, the site is located within the Busselton Coast basin.

A review of the DWER hydrography mapping (DWER-031 dataset) suggests that there are minor surface water features occurring within the site. This includes a 'watercourse – minor perennial' an area identified as 'Area Subject to Inundation' that occur within the site. The DWER Hydrography is shown in the attached **Figure 8**.

One minor waterway exists to the west of the site, namely Buayanyup River, and a significant tributary of Buayanyup River exists to the south of the site. None of these surface water features are likely to pose waterway management or waterway setback requirements that would affect the future proposed development of the site.

A minor waterway exists along the western boundary and through the northern portion of the site. The waterway conveys runoff from a large catchment south of the site via a culvert beneath

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Rendezvous Road. The waterway has some mature remnant trees, however there is little understorey, reflecting the historical agricultural (grazing) uses of the site. The flows associated with this waterway will need to be maintained as part of the development of the site. A biophysical assessment has been completed for the waterway as part of the WMP (Emerge Associates 2025e), to determine and appropriate corridor to protect the values.

3.4.3 Wetlands

Wetlands are areas which are permanently, seasonally or intermittently waterlogged or inundated with water. Naturally occurring wetland features are common across the Swan Coastal Plain and can contain fresh or salty water, which may be flowing or still. Wetlands can be further categorised based on their hydrological characteristics and physical structure.

The location, mapped boundaries and management categories of wetlands across the Swan Coastal Plain were originally identified in the *Wetlands of the Swan Coastal Plain: Wetland Mapping, Classification and Evaluation* (Hill et al. 1996). This information was subsequently converted into the publicly available *Geomorphic Wetlands of the Swan Coastal Plain* database, which is maintained by DBCA. The management categories of wetlands are conservation, resource enhancement and multiple use, and are detailed in **Table 4**.

Table 4: Geomorphic Wetlands of the Swan Coastal Plain management categories (Hill et al. 1996)

Management category	Description of wetland	Management objectives
Conservation (CCW)	Support high levels of attributes	Preserve wetland attributes and functions through reservation in national parks, crown reserves and state-owned land. Protection provided under environmental protection policies.
Resource Enhancement (REW)	Partly modified but still supporting substantial functions and attributes	Restore wetland through maintenance and enhancement of wetland functions and attributes. Protection via crown reserves, state or local government owned land, environmental protection policies and sustainable management on private properties.
Multiple Use (MUW)	Few wetland attributes but still provide important hydrological functions	Use, development and management considered in the context of water, town and environmental planning through land care.

A review of the DBCA geomorphic wetlands dataset mapping (DBCA-019 dataset) indicates a Resource Enhancement Wetland (REW) ID 13206 occurs in the south-eastern portion of the site and extends along the north and eastern boundary of the site. It is classed as a sumpland. A Multiple Use Wetland (MUW) ID 15809 extends across the majority of the site and is classed as a palusplain. The extent of the currently mapped geomorphic wetlands is shown on **Figure 8**.

In consultation with the DWER and DBCA (Krish Seewraj, pers comm., 6 March, 2024), it was noted that the REW within the site contained limited values (noting the majority of the mapped feature is composed of paddock grasses), and that retention of the degraded condition REW within private ownership and within the site is not a priority for either DWER or DBCA, and that it would be preferable for any environmental enhancement work to be aimed at the wetland areas surrounding (and north of) the site that are managed by the City of Busselton. Appropriate consideration of the interface with the main body of the wetland in the nature reserve to the north would be a relevant consideration.

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As outlined in **Section 1.2.1**, the site is also located within the 'Wetland' Special Control Area as identified within the City of Busselton's LPS No.21, where additional provisions apply to ensure the development does not compromise the sustainability and preservation of wetland ecosystems. Development within a Wetland Special Control Area is required to address the potential environmental impacts of the development and prepare a statement of environmental impact. This is further considered in **Section 0**.

3.4.4 Flooding and flood mitigation

The Broadwater Estuary and other nearby interconnected hydrological features are often subject to inundation. A 1% average exceedance probability (AEP) flood elevation (1.65 mAHD) will be relevant to the site as a downstream tailwater condition and has the potential to affect finished floor levels within the site. The City of Busselton has advised that while the site is slightly removed from the Broadwater Estuary, there is sufficient hydrological connection for this to be a consideration for the site.

3.4.5 Public drinking water source areas

Public Drinking Water Source Areas (PDWSAs) are proclaimed by the DWER to protect identified drinking water sources, including surface water and groundwater sources (DoW 2009). They are proclaimed under the *Metropolitan Water Supply, Sewerage and Drainage Act 1909* or the *Country Areas Water Supply Act 1947* as Water Reserves, Catchment Areas or Underground Water Pollution Control Areas. PDWSAs provide the population with the majority of its drinking water supplies and can be vulnerable to contamination from a range of land uses. Once an area is identified as a PDWSA, consideration needs to be given to the intended land use and associated activities to ensure that they are appropriate in meeting the water protection quality objectives of the area.

The site is not located within a proclaimed PDWSA.

3.5 Heritage

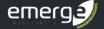
3.5.1 Indigenous heritage

The Aboriginal Heritage Inquiry System (AHIS) is maintained pursuant to Section 38 of the *Aboriginal Heritage Act 1972* (AH Act) by the Department of Planning, Lands and Heritage, containing information on Registered Aboriginal Heritages Sites and Other Heritage Places throughout Western Australia.

In accordance with the *Aboriginal Heritage Act Guidelines* (DPLH 2023), a search of the AHIS online database (DPLH 2020) was undertaken. No Aboriginal Heritage sites were identified within the site. The closest Aboriginal Heritage sites (Site IDs: 675, Broadwater Lakes Burial and 38904, Busselton Wetlands) overlap and are located approximately 2.1 km to the northeast of the site and are shown on **Figure 9**.

3.5.2 Non-Indigenous heritage

A desktop search of the Australian Heritage Database (DCCEEW 2022), the State Heritage Office database (Heritage Council WA 2022) and the City of Busselton Local Heritage List (City of Busselton



2014) indicated there are no registered non-indigenous heritage sites are located within the site or in close proximity.

3.6 Other land use considerations

3.6.1 Historic and existing land uses

Based on a review of publicly available historic aerial imagery (WALIA 2024), the majority of the site was cleared of native vegetation prior to 1970, with the exception of patches of vegetation along the waterway/drainage feature and the inundated parts of the wetland area. The site appears to have historically been used for general rural activities, most likely grazing and other extensive (low intensity) agricultural uses. There is no indication of any intensive agricultural or other land uses, activities or buildings/structures across the history of available aerial imagery. Review of historic land ownership records indicate that the site has was owned by various farmers between 1907 and 1999 (Emerge Associates 2023b).

Evidence of ground disturbance can be seen in historical aerial images from approximately 2013 onwards. However, as discussed in **Section 3.2.4**, no unacceptable soil contamination was encountered during the Soil Contamination Investigation at the site (Emerge Associates 2023a), indicating that this ground disturbance is insignificant.

3.6.2 Amenity

3.6.2.1 Noise

Impacts from road noise is a consideration that has the potential to cause harm at development sites. *State Planning Policy 5.4 Road and rail noise* (SPP 5.4) (WAPC 2019) recognises that excessive noise has the potential to affect the health and amenity of a community as a whole, as well as the wellbeing of individuals. The policy aims to protect people from unreasonable levels of transport noise by establishing a standardised set of criteria to be used in the assessment of development proposals. Under SPP 5.4, new noise sensitive land uses (which includes residential development) within the trigger distance of an existing transport corridor is required to meet specific criteria.

The site is located outside of the trigger distances from nearby major road and rail routes identified by SPP 5.4. As such, no further consideration of noise with regard to SPP 5.4 is required.

3.6.2.2 Mosquitos and nuisance insects

Mosquitos and other nuisance insects (midges, etc.) are a concern for local governments and health authorities, given they can spread disease (such as Ross River virus with mosquitos), cause nuisance to the community, and affect both health and lifestyle.

Given the presence of a seasonally inundated REW within the site, as well as the presence of a wider network of wetlands and hydrological features within and surrounding the site, the implications of mosquitos and nuisance insects with regard to the Department of Health (DoH) *Chironomid midge and mosquito risk assessment guide for constructed waterbodies* (Department of Health 2007) has been considered for the site.



As the site is located near a large network of existing waterbodies and may be subject to impacts from nearby nuisance (mosquito and midge etc.) populations, the management of mosquitos and nuisance insects is discussed further in **Section 5.4.1**.

3.6.2.3 Visual impact

Whilst there are no requirements or overlays for the proposed development with regards to visual impact, the City of Busselton has requested that visual impacts of the development be reduced along Rendezvous Road to maintain the existing rural and scenic character of the broader locality.

The site is located in an area zoned for residential development, but also abuts rural areas proposed to remain in the long-term. Rendezvous Road is the main viewing corridor for the site, although glimpses are possible from Cockatoo Loop in the north through the vegetated parks and recreation reserve and remnant vegetation in the site. The site currently has a rural character of open paddocks with scattered clumps of vegetation which are glimpsed through breaks in the roadside vegetation (largely tall trees with grassy breaks) along Rendezvous Road. Similar views are obtained for the landholdings to the east and west, although both contain existing houses and sheds.

The land to the south of Rendezvous Road has similar views, predominantly cleared areas with patches of remnant vegetation that are viewed intermittently through breaks in the roadside vegetation (see **Plate 5** for an example of the character). To the north of Cockatoo Loop, the area has a more residential feel with dwellings, gardens, streetlights and roads and footpaths present (see **Plate 6** for an example of the character).

Management of visual impact is considered further in Section 5.4.2.



Plate 5: Existing views along Rendezvous Road, looking west from near the western edge of the site

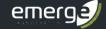




Plate 6: Residential development to the north of Cockatoo Loop, looking over roadside/verge planting adjacent to the parks and recreation reserve

3.6.3 Surrounding land uses

The site is located on the outskirts of Vasse town centre. The general area in the immediate vicinity of the site, and as outlined above, is characterised by agricultural properties, low-density housing, and minimal commercial land. The current land uses and zoning surrounding the site include:

- Land zoned 'rural' under the City of Busselton LPS No.21 to the south, which is currently generally used for agricultural purposes.
- Land zoned 'recreation' to the north and east, comprising council managed reserves with remnant native vegetation or revegetation areas.
- Land zoned 'urban development' to the west and east, currently used for agricultural purposes but anticipated to be redeveloped in the future.
- Land zoned 'residential' to the northeast (Cockatoo Loop), where recent residential development has progressed in the last 10 years.

There are no land uses identified surrounding the site that would be incompatible with the proposed future development within the site.

3.7 Bushfire hazards

The site is identified as being bushfire prone by the Office of Bushfire Risk Management's (OBRM) *Map of Bushfire Prone Areas*, as shown in **Plate 7**. The identification of a site within an area declared as bushfire prone necessitates that further assessment of the determined bushfire risk of the proposed development is to be undertaken in accordance with Australian Standard 3959:2018 *Construction of buildings in bushfire prone areas* (AS 3959) (Standards Australia 2018a), State Planning Policy 3.7 *Planning in Bushfire Prone Areas* (SPP 3.7) (WAPC 2015) and the *Guidelines for*



Planning in Bushfire Prone Areas Version 1.4 (the Guidelines) (DPLH & WAPC 2021). This has been addressed through the preparation of a Bushfire Management Plan (Emerge Associates 2025b) for the site.

All areas within the site and surrounding 150 m have been assessed for the presence of bushfire prone vegetation, and have been classified as per Table 2.5 of *Australian Standard 3959 – 2018 Construction of buildings in bushfire prone areas* (AS 3959) (Standards Australia 2018a), (Standards Australia 2018b). The identified bushfire hazards (i.e. classified vegetation) based on the assumed post-development conditions are shown in **Figure 10** and include:

- Forest (Class A) vegetation to the north and east within the existing nature reserve, as well as to the south associated with vegetation along Rendezvous Road.
- Woodland (Class B) vegetation to the west of the site, within the current rural landholdings proposed for urban development.
- Scrub (Class D) vegetation along the southern boundary of the site, adjacent to Rendezvous Road, associated with a 5 m-wide strip of vegetation that will be planted for screening purposes.
- Grassland (Class G) vegetation to the west, east and south, associated with existing paddock areas used for grazing or similar.

For the life of the project, the proponent will manage the open space areas across the site to achieve low threat. The strip of scrub vegetation is assumed to be unmanaged. No vegetation outside the site has been assumed to be modified compared to existing conditions as part of considering bushfire risk. The management bushfire hazards as part of the proposed development have been addressed in **Section 5.5**.

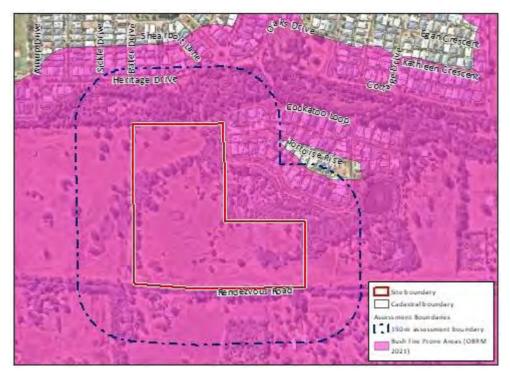
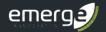


Plate 7: Areas within and surrounding the site identified as "bushfire prone areas" (as indicated in purple) under the state-wide Map of Bushfire Prone Areas (OBRM 2024).



4 Summary of relevant environmental factors

Table 5 provides a summary of the environmental values/factors that have been investigated for the site and outlines those that will require further specific consideration as part of future development within the site, and if applicable these are discussed further in **Section 5**.

Table 5: Relevant environmental values/factors and considerations for the site.

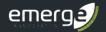
Environmental value/ factor	Relevant considerations		
Landform and soils	Regional ASS risk mapping indicates the majority of the site is located within an area identified as having a 'high to moderate' risk of ASS occurring within 3 m of the natural soil surface. This factor will require further consideration and is addressed in Section 5.1 .		
Flora and vegetation	No conservation significant flora and vegetation values have been identified within the site. Retention of existing remnant overstorey vegetation is considered further in Section 5.2 .		
Ecological linkages	An ecological linkage has been identified within the northwestern extent of the site. Consideration of this factor is addressed in Section 5.2 .		
Environmentally sensitive areas (ESAs)	The site is not mapped as an ESA. As such, no further consideration of this factor is required.		
Terrestrial fauna	Due to the historical disturbance and degraded nature of vegetation within the site, the site contains limited habitat values. However, the proposed development may have the potential to impact conservation significant fauna species. Management of fauna has been further considered within Section 5.2 .		
Groundwater	Limited regional groundwater level information is available. However, levels measured within the site indicate that groundwater is within close proximity to the natural soil surface. The management of groundwater is further considered in Section 5.3 as part of managing groundwater and surface water.		
Surface water	The site is located within an area identified as 'Area Subject to Inundation.' Management of surface water, including stormwater will be a consideration for future development and is discussed further in Section 5.3 as part of managing groundwater and surface water.		
Wetlands	The majority of the site is classified as a multiple use wetland (ID 15809), while the south-eastern portion of the site is mapped as a resource enhancement wetland (ID 13206). The management of the wetland functions associated with the site is further addressed within Section 0 .		
Flooding and flood mitigation	The Broadwater Estuary was deemed by the City to have sufficient hydrological connection to the site to warrant consideration of flooding and flood mitigation. This is addressed within Section 5.3 as part of managing groundwater and surface water.		
PDWSAs	The site is not located within a PDSWA. Accordingly, no further consideration of this factor is required as part of this EAR.		
Indigenous heritage	No further specific consideration for Aboriginal heritage is detailed within this EAR. While no Aboriginal sites were identified within the site, it is important to note that if during construction Aboriginal artefacts or sites are uncovered, works should cease, and a suitably qualified expert should be brought in to survey the potential site as these are protected under the AH Act. If required, based on the outcomes of the survey, permission under the AH Act to manage and disturb sites should be sought.		

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 ${\it Table 5: Relevant\ environmental\ values/factors\ and\ considerations\ for\ the\ site.}$

Environmental value/ factor	Relevant considerations
Non-indigenous heritage	No non-indigenous heritage values have been identified within, or in close proximity to the site and therefore no further consideration of this factor is provided as part of this EAR.
Historic and existing land uses	The site and surrounds have historically been used for agricultural land uses. This land use is not considered to have had significant impact on the site and therefore no further consideration of this factor is provided as part of this EAR.
Potential site contamination	No registered contaminated sites were identified within or in close proximity to the site, and sampling of the site indicated that previous land uses have not resulted in contamination. No further consideration of this factor is provided as part of this EAR.
Noise	The site is located within the vicinity of multiple major roads, as outlined in SPP 5.4. However, it is located outside of the respective noise investigation areas for each road and therefore no further consideration of this factor is provided as part of this EAR.
Mosquitos and nuisance insects	The site is located near a large network of existing waterbodies and may be subject to impacts from nearby nuisance (mosquito and midge etc.) populations. This is further considered in Section 5.4 .
Visual impact	The City of Busselton has requested that the development have a minimal impact on the visual amenity of Rendezvous Road. Maintenance of the rural landscape character type is a key consideration and is discussed further in Section 5.4 .
Surrounding land uses	There are no land uses identified surrounding the site that would be incompatible with the proposed future development within the site. No further consideration of this factor is provided as part of this EAR.
Bushfire hazard	The site and majority of surrounds is mapped within a bushfire prone area and classified vegetation (i.e. bushfire hazards) has been identified with 150 m of the site. Management of bushfire hazards is further considered in the Bushfire Management Plan (Emerge Associates 2025b) and Section 5.5 .



5 Management of Environmental Values

This section outlines the management of the environmental values and attributes that have been identified as requiring specific consideration based on their presence within the site and the requirements of the City of Busselton LPS No. 21.

5.1 Acid sulfate soils management

As outlined within **Section 3.2.3**, the risk of ASS occurring within 3 m of the natural soil surface is mapped as 'high to moderate' throughout the majority of the site. ASS is only likely to be a consideration if excavation (primarily for the installation of services, of which sewer is typically the deepest) extends below the permanent groundwater table.

ASS can be managed as a condition of development approval, in accordance with typical urban development requirements. Once the extent of excavation and/or dewatering has been confirmed, it will be determined if the nature of disturbance within the site meets the DWER's guideline *Identification and investigation of acid sulfate soils and acidic landscapes* (DER 2015), and if so, further investigation of ASS can be undertaken to support development, including the preparation of an Acid Sulfate Soils and Dewatering Management Plan (ASSDMP). An ASSDMP will guide development to ensure that potential acidification resulting from the disturbance of ASS can be mitigated through effective management.

It is anticipated that approximately 2 metres of fill sand will be imported to the site for development. As such, exposure to potential ASS during development is unlikely and management measures are unlikely to be required to be implemented.

5.2 Biodiversity management

5.2.1 Flora and vegetation

The site comprises some areas of native vegetation, mostly remnant native overstorey species over a predominantly non-native grass understorey. A key principle guiding development within the site is to maximise the retention of the existing vegetation values wherever possible and is demonstrated in **Figure 11**, based on the location of open space areas. Portions of the **Mr** vegetation unit within the central eastern portion of the site will be removed as part of creating a useable open space network, however further investigation through detailed design will likely result in greater retention. Smaller patches of scattered native vegetation are also proposed to be removed and cannot be retained due to the extent of filling required across the site.

Management measures to be implemented as part of development of the site include (but are not limited to):

Retaining existing overstorey vegetation within the open space areas, particularly along the
western boundary and through the northern portion of the site. At least approximately 78% of
the existing tree canopy is proposed for retention (visible in Figure 11) and includes the
majority of the identified potential habitat trees. This will contribute to the maintenance of an

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Lot 31 Rendezvous Road, Vasse

- ecological linkage across the site, connecting vegetation along Rendezvous Road to the nature reserve to the north.
- Further investigation of the retention of melaleuca trees in the eastern portion of the site, as identified in **Figure 11**. Retention will be based on engineering, hydrological and landscape detailed design.
- Locating development to avoid any large (greater than 500 mm diameter at breast height) remnant native trees wherever possible, particularly with regard to the new vehicle cross-overs along Rendezvous Road.
- Identification of works exclusion zones on engineering drawings and as part of clearing, excavation and filling activities.
- Identification of tree/vegetation retention areas on engineering drawings and delineation of tree protection zones (TPZ). These will be identified as 'no go zones' or similar and managed in accordance with arborist advice. No go zones/TPZs will be clearly demarcated on the ground, using flagging tape or fencing. No storage of machinery or equipment will be permitted under retained trees/vegetation.
- Where possible, as part of clearing, mulch vegetation in situ and utilise within landscaped areas
- Implement hygiene protocols during the clearing and construction process to minimise introduction/spread of weeds and plant pathogens. This will include:
 - Vehicles, machinery, and personnel to be free of mud/soil and plant material upon entering the site. Inspections to be completed prior to works commencing.
 - Minimising clearing and earthworks during wet conditions.
 - Using landscaping species not identified as weeds.
- Enhance biodiversity and utilise native plants for landscaping wherever possible/suitable and source from an accredited nursery supplier. Detailed landscape design can be addressed as a condition of development approval.

An excerpt of the landscape design report has been included in **Appendix E** and generally shows the retained trees and landscape approach. It is noted that the landscape design report excerpts are from the original submission and do not reflect the revised development layout. The detailed landscape design, anticipated to be a condition of approval will reflect the specific environmental considerations outlined in this EAR.

Clearing/modification of the existing vegetation within the site will be required as part of implementing the proposed development. The development approval will provide a valid clearing exemption pursuant to the Environmental Protection (Clearing of Native Vegetation) Regulations 2005. The management measures can be documented within a construction environmental management plan to support development within the site and would be approved by the City of Busselton.

5.2.2 Ecological linkages

As discussed above, native vegetation has been retained where possible within the development plans (approximately 78% of the existing tree canopy is proposed for retention). Vegetation retention, combined with planting of native understorey species will enhance biodiversity within the site and contribute to the broader ecological linkages within the area.

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The removal of small patches of native vegetation within the site is not considered to have a significant impact on the ecological linkage running through the northwestern portion of the site or the ecological value of the broader area, particularly given the extensive street tree planting proposed across the site. Connections north to south and east to west are facilitated by the development layout and approach.

5.2.3 Fauna

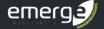
The site is considered to have a high likelihood of occurrence for conservation significant black cockatoos and western ringtail possums. **CcEr** vegetation is likely to be used for foraging for these species. In addition, a large number of potential black cockatoo nesting trees and one suitable nesting tree have been identified within the site. The majority of native vegetation will be retained as part of the development (see **Figure 11**), and biodiversity enhanced by the planting of native understorey species within the open space areas.

Impacts to native fauna will be minimal given the long-term retention of the majority of remnant native vegetation within the site, particularly the potential black cockatoo habitat trees in the northern and western portion of the site. Nine (9) of the 114 potential habitat trees are likely to be impacted/removed, with no impacts on the single tree with potentially suitable hollows (located in Rendezvous Road reserve). However, fauna could be affected as part of the development activities, and in addition to the vegetation protection measures, fauna management will include (but is not limited to):

- Identification of works exclusion zones on engineering drawings, associated with tree retention areas.
- Identification of tree/vegetation retention areas on engineering drawings and delineation of tree protection zones (TPZ). These will be identified as 'no go zones' or similar and managed in accordance with arborist advice. No go zones/TPZs will be clearly demarcated on the ground, using flagging tape or fencing. No storage of machinery or equipment will be permitted under retained trees/vegetation.
- Where possible, as part of clearing, mulch vegetation in situ and utilise within landscaped areas.
- Implementation of fauna management protocols by an experienced fauna specialist under a
 valid license from the DBCA. This would include fauna trapping and relocation prior to clearing
 if required (particularly for western ringtail possum), pre-clearing fauna inspection and having
 a fauna spotter present during clearing activities.
- Ensuring the project is maintained in a clean and tidy manner to ensure feral and other species are not attracted to the site. Waste material is to be disposed of appropriately through waste services and/or to licenced landfill during construction and as part of ongoing operation.

Clearing/modification of the existing vegetation within the site will be required as part of implementing the proposed development and will be the main impact to fauna species.

The short-term potential impacts associated with this (e.g. during construction) can be managed as part of the development process through implementation of fauna management protocols. In the long-term fauna will still be able to persist across the site given the maintenance of the western/northern corridor of remnant trees (and connected canopy), the extensive landscaping



(including street trees) and connection to broader vegetated areas. Vehicle strike is a potential issue; however the low vehicle speeds will enable residents to limit fauna interactions.

Sufficient fauna habitat will remain within the site and the development is not considered to significantly impact this environmental value. The management measures can be documented within a construction environmental management plan to support development within the site and would be approved by the City of Busselton.

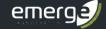
5.3 Hydrological values

5.3.1 Groundwater and surface water

A Water Management Plan (WMP) (Emerge Associates 2025e) has been prepared to support the development within the site and provides the framework for actions and measures to address groundwater, surface water (stormwater), flood mitigation, water conservation and wastewater. The objective for the WMP is to maintain the pre-development hydrological regime. Management will be based on:

- Water conservation At lot scale, potable water consumption will be reduced by the implementation of water conservation measures (e.g. water efficient fixtures, use of water sensitive urban design (WSUD) measures, and planting of water wise species). At an estate level, open spaces will be irrigated during the establishment period by the use of scheme water or water cart, and long term will be designed to minimise the requirement for irrigation but will be irrigated as required. All landscaped areas within open spaces will also adopt water wise gardening (WWG) principles and will be the responsibility of the proponent.
- Wastewater servicing —the site will connect to a reticulated sewer network.
- Surface water management runoff from roofs, impervious areas within lot and road reserves will be treated as close to source as possible using a treatment train approach, which incorporates vegetated bio-retention areas (BRAs) and flood storage areas (FSAs). Treatment will occur via contact with vegetation and the underlying soil profile (which will adsorb nutrients). The small (i.e. first 15 mm), minor (20% Annual Exceedance Probability (AEP)) and the major (1% AEP) rainfall event runoff will be managed by the infiltration infrastructure that mimic the predevelopment hydrology at key control points (culverts at Rendezvous Road and Tortoise Rise). Runoff from the upstream catchment (south of Rendezvous Road) will be conveyed by the drainage infrastructure (including the drainage feature that is being maintained along the western and northern boundary).
- Groundwater management will include imported fill to control groundwater levels across
 the entire development and the use of subsoil drains beneath road pavement (within the road
 reserve) to ensure that adequate clearance between groundwater, lot level is provided. The
 sub-surface storage invert levels will be kept ensuring placement at or above the maximum
 observed ground water level.
- **Flood protection** is addressed by use of imported fill and providing adequate surface water storage across the site.

The WMP (Emerge Associates 2025e) can be referred to for further information and specific management detail.



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5.3.2 Wetland values

As discussed within **Section 3.4.3**, the site is located within the 'Wetland' Special Control Area as identified within the City of Busselton's LPS No.21, the majority of the site is classified as a MUW (ID 15809) and a REW occurs in the southeastern portion of the site (ID 13206).

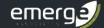
The intention of the 'Wetland' Special Control Area is to ensure that development does not compromise the sustainability and preservation of the wetland ecosystems identified within the Busselton region.

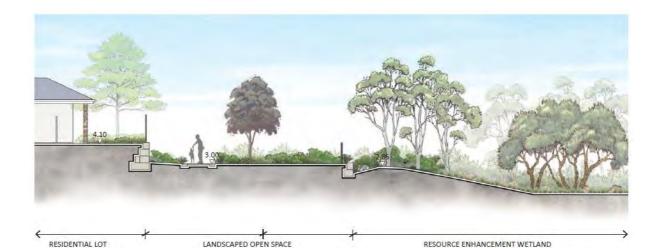
MUWs are considered to contain few wetland attributes and functions and do not require any specific spatial considerations (i.e. protection/retention) as part of the proposed development. Development on land mapped as a MUW is considered suitable if the hydrological function is addressed appropriately. The management of groundwater and surface water is summarised in **Section 5.3.1** and detailed within the WMP (Emerge Associates 2025e).

In consultation with DBCA and DWER, they indicated that the REW feature was not a priority for retention (given the degraded nature and private ownership) however the development interface with the adjacent wetland values to the north would need to be considered. The REW will be largely filled and developed, however consideration for the adjacent values has been addressed through:

- Vegetation (associated with the Mr vegetation unit) adjacent to the eastern boundary of site will be retained.
- A minimum 21 m-wide setback has been provided between future dwellings and the wetland feature. This will include landscape areas, along with road and footpath networks. There will be a separation in height provided by fill material, which will also assist with a managed interface, preventing uncontrolled access.
- Permanent permeable fencing, which will assist with managing uncontrolled access, but support passive surveillance of the wetland area.
- The implementation of screen planting along the eastern, north-eastern and eastern boundary
 of the site (and example of the proposed approach is provided in Plate 8 and will be refined
 through the detailed landscape design process which will be approved by the City of
 Busselton); and
- Maintaining the hydrological function of the wetland feature, as summarised in Section 5.3.1
 and detailed within the WMP (Emerge Associates 2025e). Drainage is retained onsite, and predevelopment flows are maintained.

A Statement of Environment Effect with regard to the management of the wetland values within proximity to the site has been provided in **Appendix B**.





SECTION KK: BOUNDARY AND INTERFACE BETWEEN LOTS AND RESOURCE ENHANCEMENT WETLAND (THROUGH LOT 182)

Plate 8: Cross-section showing intent of interface with wetland to the north

5.4 Amenity

5.4.1 Mosquito and nuisance insect management

The existing wetland features within the site are not proposed to be retained as part of the development. However, the potential for standing water due to the shallow depth of groundwater and nature of seasonal groundwater fluctuations must be considered with regards to potential habitat for mosquitoes and nuisance insects. Consideration for hydrology within the site, including reduction of pooling and standing water, is addressed within the WMP (Emerge Associates 2025e).

Existing vegetation adjacent to the southern boundary of the site (in rendezvous Road reserve) will not be impacted by the development within the site, and will be enhanced by the landscape planting, and provides a barrier to mosquito and nuisance insect movement based on prevailing winds, as per the Department of Health Mosquito Management Manual. Similarly existing vegetation within the nature reserve to the north will assist with providing a barrier to mosquito and nuisance insect movement. The development is unlikely to increase areas of stagnant water which provides the potential for mosquitoes to breed, with drainage infrastructure designed to remove and infiltrate water as quickly as possible.

The site is surrounded by a broader network of hydrological features, including a number of wetlands, which are typically subject to seasonal periods of standing water. These areas would already be subject to management as part of the City of Busselton's comprehensive mosquito management program.

5.4.2 Visual impact management

Whilst the site is not subject to any landscape-related overlays under LPS No.21, the City of Busselton has requested that the visual impact of the development be considered for Rendezvous Road, to maintain the existing rural and scenic character of the broader locality.

Lot 31 Rendezvous Road, Vasse



The proposed development plan includes a setback from Rendezvous Road and retention of established vegetation along the road verge. It also provides for a 5 m-wide buffer planting (up to 6 m-high dense shrub/tree planting) along the southern boundary, adjacent to Rendezvous Road.

The proposed development will minimise visual impacts on the existing rural and scenic character through:

- The scale and form of the development, which comprises single storey buildings.
- The implementation of a setback for lots from Rendezvous Road;
- The implementation of screen planting along the southern boundary of the site; and
- Retention (and where required, supplementation) of established road verge vegetation along Rendezvous Road.

The proposed screening along Rendezvous Road will consist of existing native vegetation, with additional shrub planting (4-6 m in height), to balance screening and bushfire risk. An indication of the proposed cross-section showing the intent of the screening is provided in **Plate 9**. The bushfire setbacks for the proposed screening planting has been accommodated through the design and is further discussed in **Section 5.5**.



SECTION FF: SOUTHERN BOUNDARY AND INTERFACE TO RENDEZVOUS ROAD (THROUGH LOT 147)



Plate 9: Cross-section showing intent of interface along Rendezvous Road, including screening planting

Busselton.

Environmental Assessment Report Lot 31 Rendezvous Road, Vasse

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Overall, the scale and form of development and screen planting, in combination with the setback of lots, will assist in reducing the potential visibility of the proposed development from Rendezvous Road, and the existing rural and scenic characters of the local area can be maintained. Detailed landscape design will address these requirements and be subject to the approval of the City of

5.5 Bushfire management

As discussed within **Section 3.7**, the entire site, outside of the 5 m-wide landscape buffer along Rendezvous Road, will be modified and managed to achieve low threat, and therefore the key bushfire hazards will be external to the site and are associated with areas of unmanaged vegetation surrounding the site. No fuel load management is assumed external to the site or within the landscape buffer screening and the proponent will be responsible for the long term management of open space areas within the site.

The BMP (Emerge Associates 2025b) demonstrates that the required bushfire protection measures can be achieved, in accordance with the relevant guidelines and standards. Specifically:

- *Element 1 Location*: the proposed built form can be located to achieve a bushfire attack level (BAL) rating of BAL-29 or less, as required by SPP 3.7.
- Element 2 Siting and Design: appropriate separation from surrounding bushfire hazards can be provided in the form of an asset protection zone, to ensure the proposed built form can achieve a BAL rating of BAL-29 or less. This will be achieved through the location of carparks, low threat managed open space areas and through the use of in-lot building setbacks. These areas will be designed and managed to achieve low threat in accordance with Section 2.2.3.2 of AS 3959. The open space areas will be a key recreation space used by future residents, and therefore an important asset that will be well maintained and managed.
- Element 3 Vehicular Access: The site will connect to existing public roads, through a private through-road driveway network (which will be the responsibility of the proponent to maintain) which complies with the requirements of road standards and the bushfire guidelines. The site will connect to existing public roads Cockatoo Loop and Rendezvous Road, which provide access to multiple destinations, including Vasse townsite.
- *Element 4 Water*: the site is located within a reticulated water supply network and will be provided with a permanent and secure reticulated water supply, which will be installed in accordance with the Water Corporation/Busselton Water specifications.

The Bushfire Management Plan (Emerge Associates 2025b) can be referred to for further detail.



6 Conclusions

This EAR has been prepared on behalf of the proponent to support the development application for Lot 31 Rendezvous Road, Vasse to support the construction and operation of a lifestyle village.

Based on the environmental values or attributes identified within the site, this EAR details how the values identified within **Table 5** are able to be managed as part of the proposed development. This includes:

- Acid sulfate soils (ASS): ASS can be managed as a condition of development approval, based on the standard development process. ASS is only likely to require management where works extend below the permanent groundwater table, or 3 m below the natural surface. Based on the fill required within the site, this is unlikely to be an issue.
- Flora and vegetation: native vegetation, largely associated with remnant overstorey species, is present within the site, between the northeastern boundary and central western boundary, as well as in the southeastern extent of the site. Where possible, the development layout has accommodated the retention of the majority of the native vegetation across the site in open space area, with approximately 78% of the existing canopy retained. The retained vegetation provides for green linkages across the site within the open space areas and will be linked by street trees. Retained trees will be subject to assessment by an arborist, and this will guide excavation and civil works in the vicinity of the trees. Further investigation will be undertaken as drainage and engineering design is worked through to retain additional melaleuca trees in the eastern portion of the site.
- Fauna: the site is considered to consist of suitable habitat for conservation significant black cockatoos, other avifauna, quenda, south-western brush-tailed phascogales and western ringtail possums. Native vegetation within the site will generally be retained and are connected across the site (approximately 78% of the existing vegetation canopy, with further investigation of additional melaleuca trees), therefore adequate habitat for dispersal and foraging will remain. The biodiversity values within the site will be enhanced through the proposed landscaping, providing additional native species for foraging and dispersal.
- Hydrology: water management within the site will be based on maintaining the existing hydrological regime of the site which includes infiltrating as close to source as possible using a treatment train approach, which incorporates vegetated bio-retention areas and flood storage areas. The small (i.e. first 15 mm), minor (20% Annual Exceedance Probability (AEP)) and the major (1% AEP) rainfall event runoff will be managed by the infiltration infrastructure that mimic the predevelopment hydrology at key control points (culverts at Rendezvous Road and Tortoise Rise). Runoff from the upstream catchment (south of Rendezvous Road) will be conveyed by the drainage infrastructure (including the drainage feature that is being maintained along the western and northern boundary). Clearance to groundwater will be addressed through the introduction of fill sand and use of sub-soil drains. Further detail on the water management requirements are detailed within the WMP (Emerge Associates 2025e).
- **Wetlands:** the site is located within the 'Wetland' Special Control Area as identified within the City of Busselton's LPS No. 21. The hydrological function of the MUW will be managed through the . It was also determined, in consultation with DBCA and DWER, that the REW in the southeast extent of the site was not required to be retained, as long as its hydrological

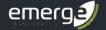
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Lot 31 Rendezvous Road, Vasse

function was maintained and the interface with adjoining wetland features to the north were managed appropriately. The management of the hydrological function is detailed within the WMP (Emerge Associates 2025e) and the development will provide a landscape interface to the wetland to the north, graduated from developed areas to the more natural wetland values.

- Mosquitos and nuisance insects: The existing seasonally inundated REW will not be retained as part of the development, therefore removing a key standing water body from potentially attracting mosquitos and nuisance insects. The management of stormwater will be addressed in the WMP (Emerge Associates 2025e) to avoiding pooling of water where these insects may breed. The City of Busselton has a comprehensive mosquito management program in place for monitoring and treatment areas of risk. The main source of mosquito habit will be the existing wetland area to the north and north-east of the site, an existing feature likely subject to the City's management program.
- **Visual impact:** the visual amenity and rural character of Rendezvous Road will be maintained through the proposed setback of lots from the site boundary, retention of road verge vegetation, the proposed vertical rail fencing panels (visually permeable) and the implementation of buffer planting along the southern boundary of the site.
- Bushfire risks: Provision of appropriate separation between future built form and bushfire
 hazards has been accommodated as part of the development design through the provision of
 managed (by the proponent) landscaped areas, roadways and setback of dwellings within lots.
 All areas within the site, outside of the 5 m-wide landscape buffer along Rendezvous Road, will
 be designed and maintained to achieve low threat in accordance with Section 2.2.3.2 of AS
 3959 (in order to not be a hazard). Vehicle access will accommodate emergency evacuation,
 with direct access to Rendezvous Road and Cockatoo Loop.

Overall, the environmental attributes and values of the site can be accommodated within the proposed development or can be managed as a condition of development approval in line with the relevant state and local government legislation, policies and guidelines.



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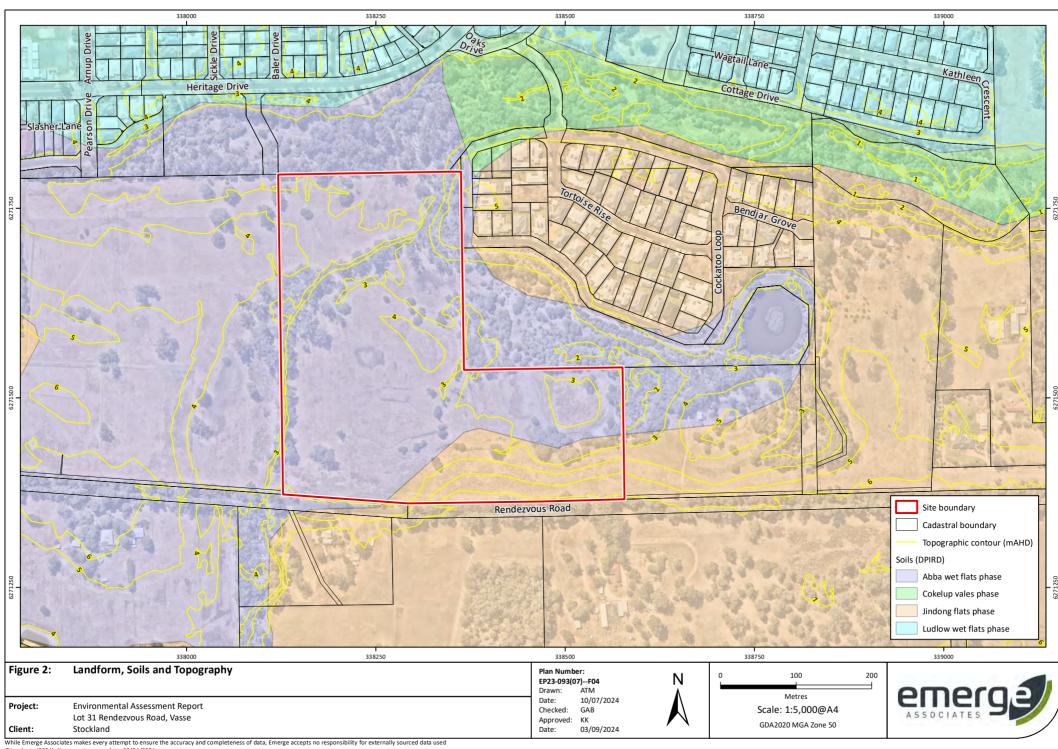
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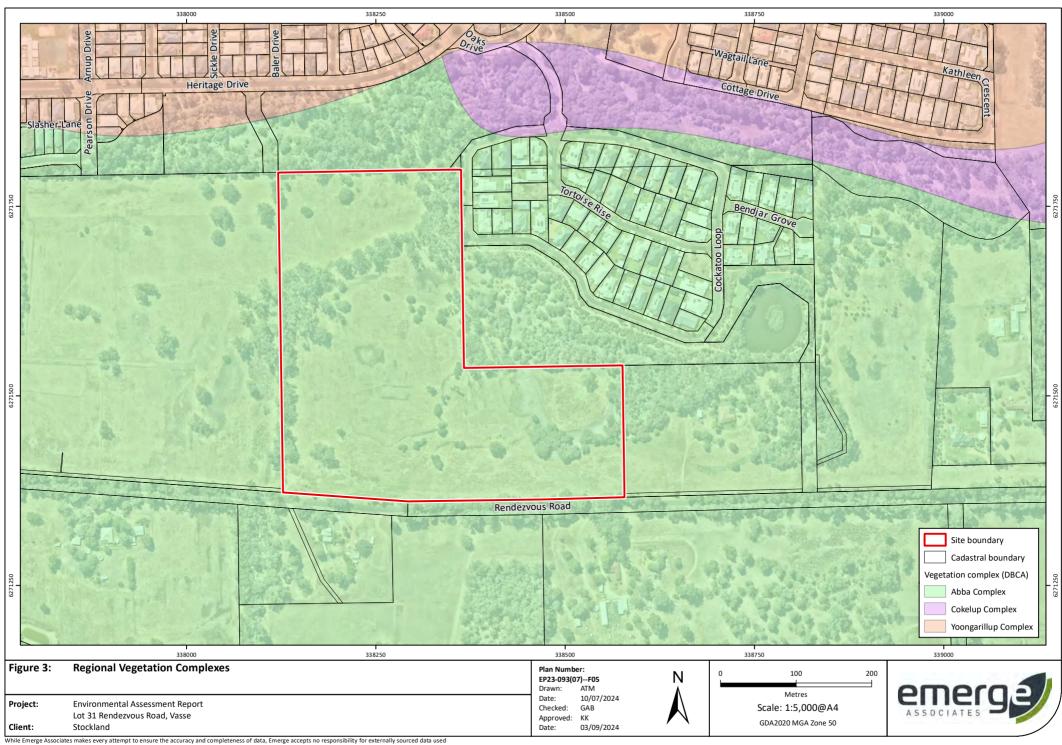
Figures

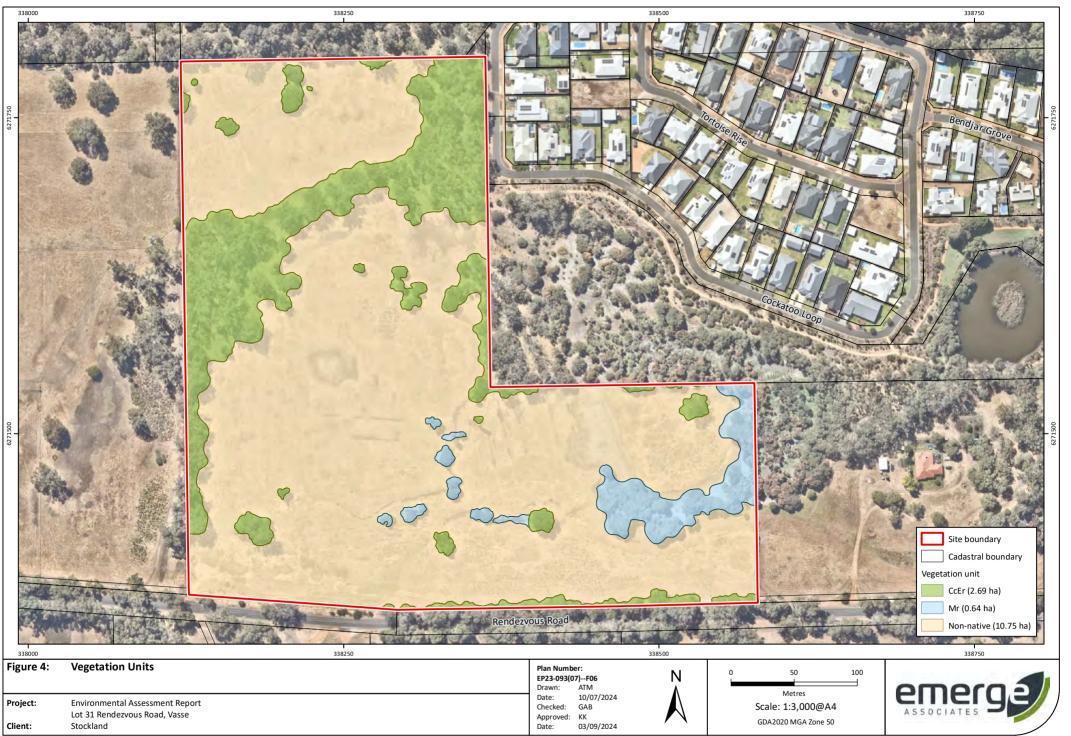


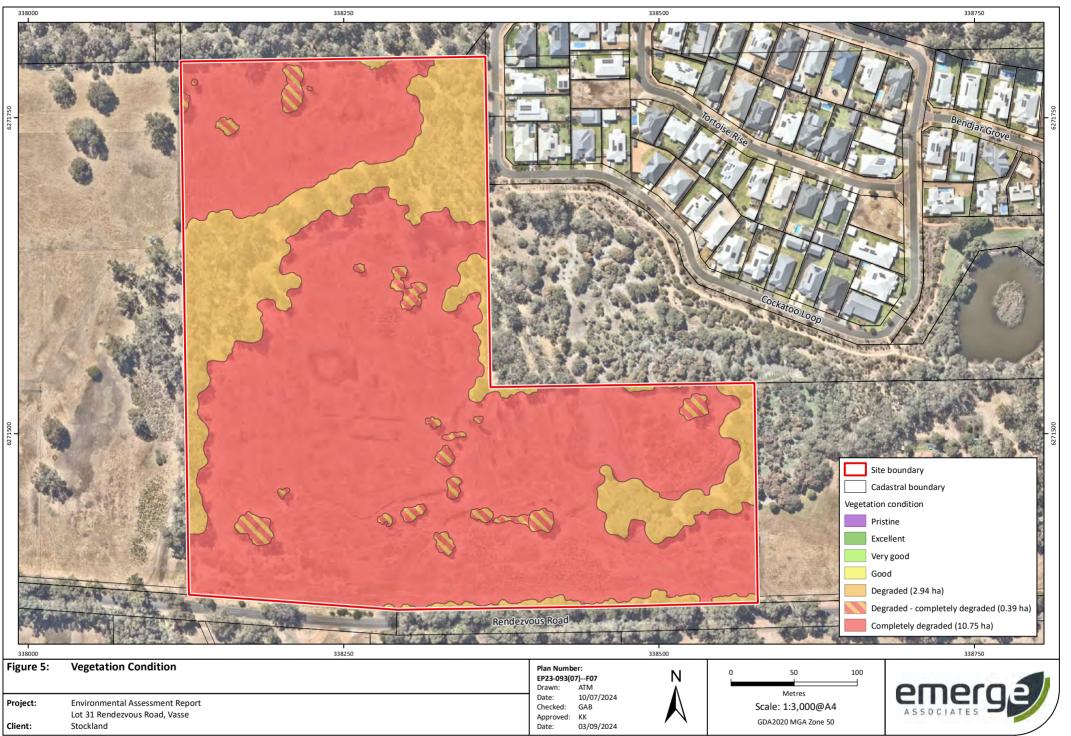
- Figure 1: Location Plan
- Figure 2: Landform, Soils and Topography
- Figure 3: Regional Vegetation Complexes
- Figure 4: Vegetation Units
- Figure 5: Vegetation Conditions
- Figure 6: Ecological Linkages and Environmentally Sensitive Areas
- Figure 7: Fauna Habitat and Black Cockatoo Habitat Trees
- Figure 8: Hydrological Features
- Figure 9: Aboriginal Heritage Places
- Figure 10: Post Development AS 3959 Vegetation Classifications and Effective Slope
- Figure 11: Key Management Considerations

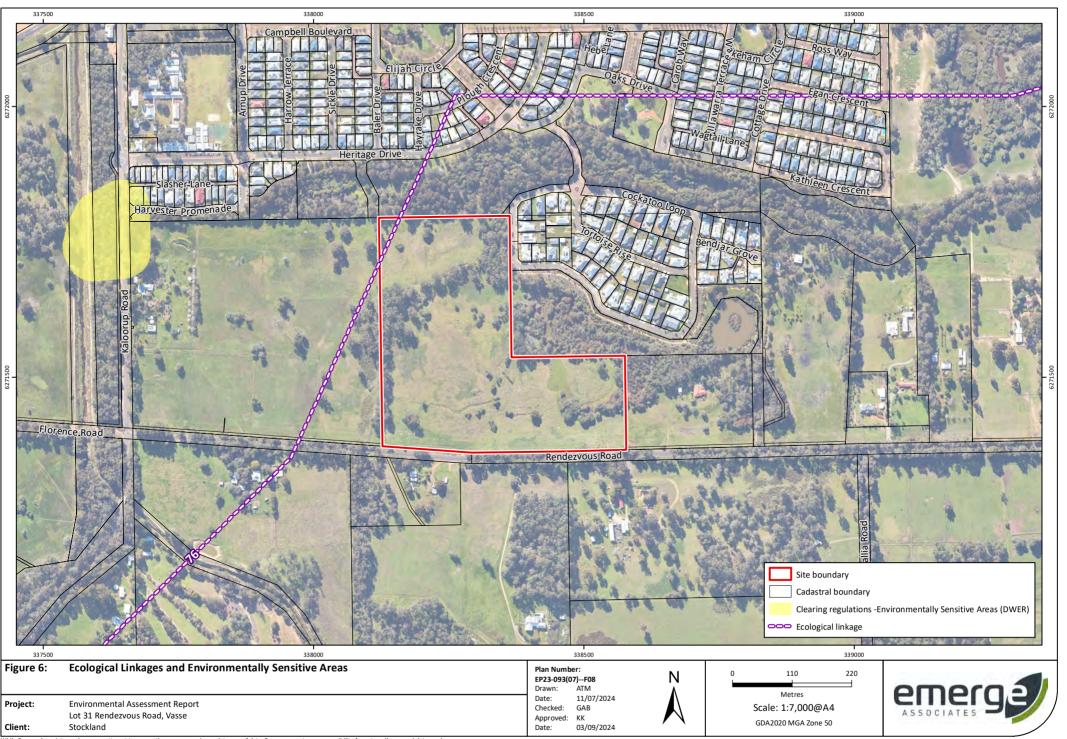


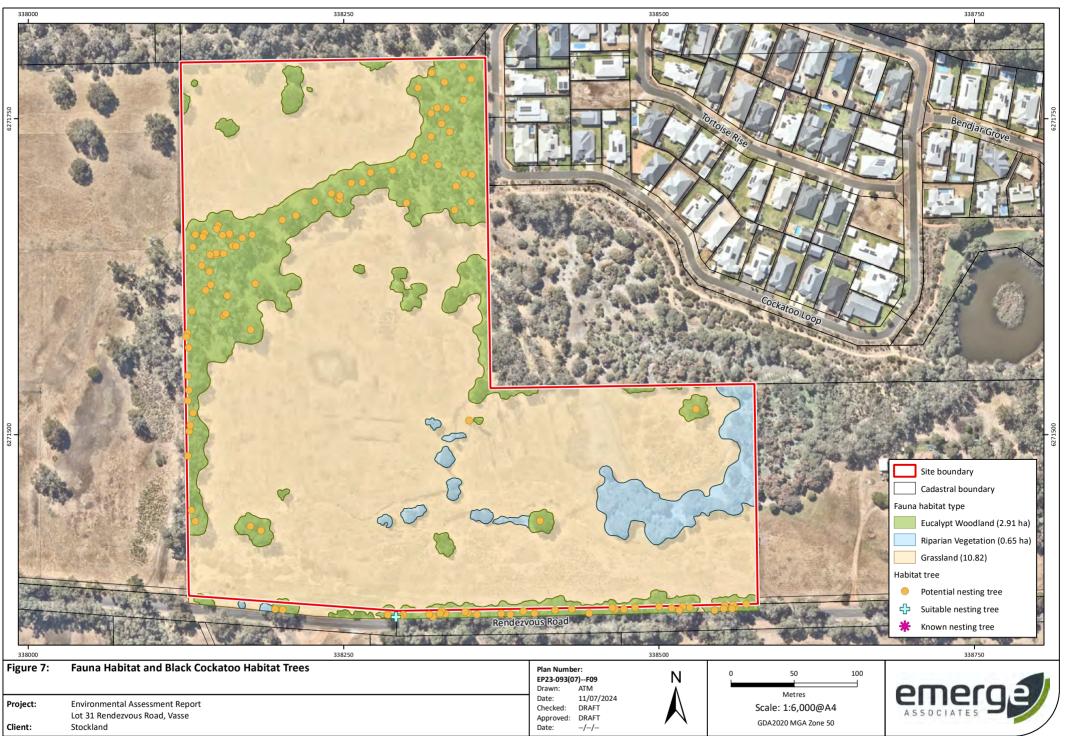


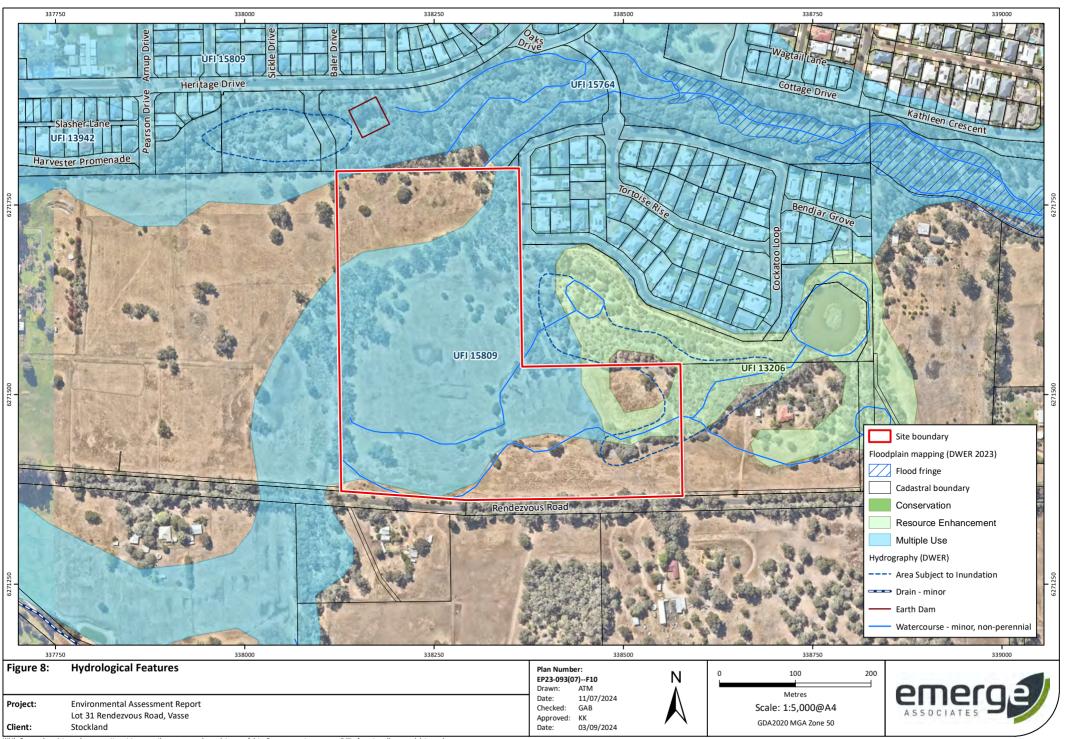


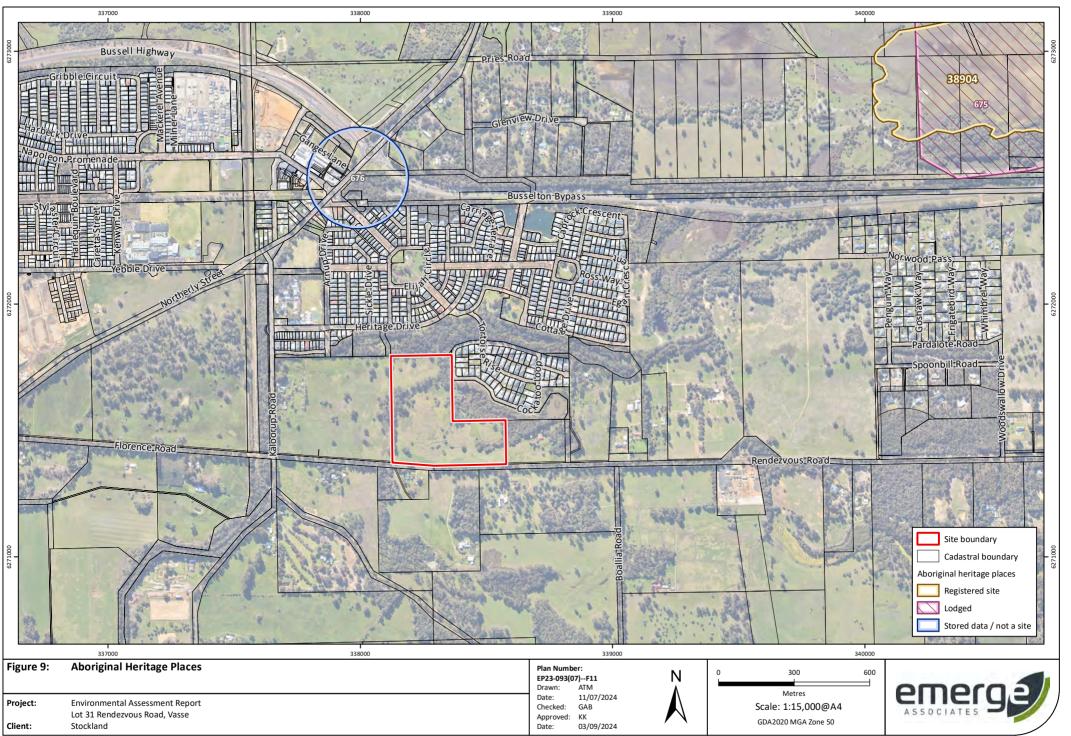


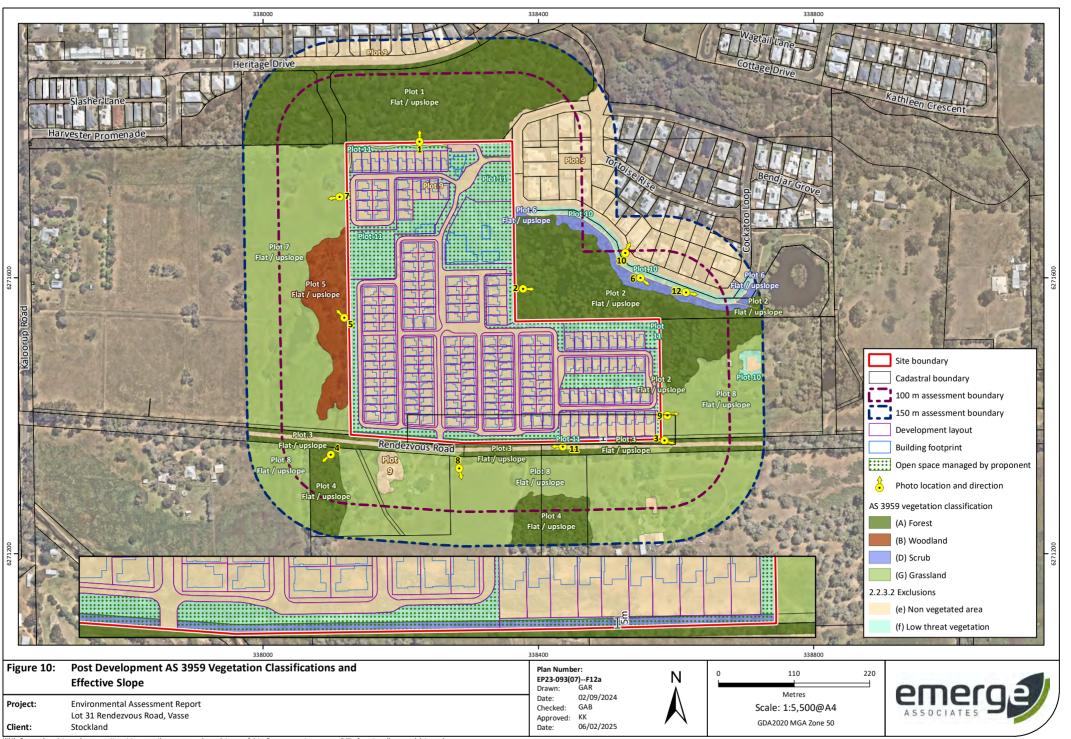














Appendix A

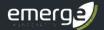
Proposed development layout



Appendix B



Statement of Environmental Effects as per City of Busselton LPS No.21



City of Busselton Local Planning Scheme No. 21 – Statement of Environmental Effects

This appendix has been prepared to specifically address the Statement of Environmental Effects in accordance with Schedule 6 of the City of Busselton LPS No.21 based on the site's location within the 'Wetland' Special Control Area. It is based on information provided with in the Environmental Assessment Report (EAR), which has been summarised below to provide a clear Statement of Environmental Effect.

A full description of the proposed development

The site is proposed to be developed as a lifestyle village in accordance with the development layout provided in **Appendix A** of the EAR. The development will include:

- Approximately 216 residential dwellings
- A club house and social precinct
- A swimming pool
- Pickleball courts
- An interconnected road network
- Car and RV parking spaces throughout
- A community garden and landscaped areas.

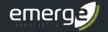
A statement of the objectives of the proposed development

The objective of the lifestyle development is to create independent living environments for active but ageing residents whilst also promoting community involvement and social inclusion.

A full description of the existing environment likely to be affected by the proposed development if carried out

A detailed description of the existing environment within the site and surrounds has been provided within **Section 3** of the EAR. A summary has been provided below:

- The majority of the site is classified as having a 'high to moderate risk' of acid sulfate soils (ASS) occurring within 3 m of the natural soil surface. The majority of the site (outside areas of retained vegetation) will be filled with up to 2 m of sand fill.
- Native vegetation exists in the northern and southeastern extents of the site but is generally in 'degraded' or worse condition. It is largely associated with remnant native overstorey species over non-native grasses.
- No threatened ecological communities (TECs), priority ecological communities (PECs), threatened flora or priority flora have been identified within the site, nor are they likely to occur based on the historic disturbance within the site.
- The site (including the northern verge of the Rendezvous Road reserve) contains 114 black cockatoo habitat trees, and a variety of conservation significant species (including the three black cockatoo species and western ringtail possum) were deemed to have high or moderate



likelihood of occurrence in the site. One tree has a potentially suitable hollow for black cockatoos.

- Groundwater levels measured within the site indicate that groundwater is within close
 proximity to the natural soil surface through portions of the year. Groundwater quality data
 indicates that Total Nitrogen and Total Phosphorus exceed the National Water Quality
 Management Strategy guideline values, however, is generally consistent with what would be
 expected for historical agricultural land in the region.
- A number of earth dams and drainage lines are indicated across the site, with a drainage located along the western and northern boundaries and associated with the majority of vegetation. The site also identified as an 'Area Subject to Inundation' as part of the Broadwater Estuary feature.
- Based on the Geomorphic Wetlands on the Swan Coastal Plain dataset the majority of the site
 is mapped as a multiple use wetland (MUW). A seasonally inundated resource enhancement
 wetland (REW) has been identified in the southeast extent of the site. Both features are
 associated with limited native vegetation values. The REW in particular is largely composed of
 cleared paddock areas.
- Areas of bushfire hazard have been identified outside the site and are associated with unmanaged grassland, forest, woodland and scrub within landholdings in all directions.

An identification and analysis of the likely interactions between the proposed development and the environment

Given the relatively degraded nature of the site, interactions between the proposed development and the environment (particularly those associated with wetland values) are limited and are predominantly associated with maintaining the hydrological function (i.e. movement/maintenance of groundwater and surface water) of the MUW and REW within the site. Management of these interactions is detailed within **Section 5** of the EAR and also considered below.

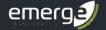
An analysis of the likely environmental impacts or consequences of carrying out the proposed development, including the effect on:

The growth of native plant communities

Native plant communities identified within the site include **CcEr** and **Mr** vegetation. This vegetation was generally observed to be in 'degraded' or worse condition. The development proposes to retain large areas (approximately 78%) of the existing vegetation (a mix of both vegetation units) within interconnected open space areas, with additional investigation of **Mr** vegetation in the south-east. Retained vegetation will be supplemented with the planting of native understorey species to enhance biodiversity in the local area and improve vegetation condition within the site (whilst also managing bushfire risk).

The survival of native wildlife populations

Native **CcEr** and **Mr** vegetation recorded within the site is suitable for a number of conservation significant species, including black cockatoos, the south-western brush-tailed phascogale, quenda and western ring-tailed possum. The majority of this vegetation will be retained, with linkages



maintained across the site through the open space areas and the proposed retention of vegetation. The proposed landscaping of the site will improve the biodiversity and condition of available fauna habitat. It is expected that fauna will still persist within the site once development is complete.

The provision and quality of habitats for both indigenous and migratory species

The site in its current condition provides potential foraging habitat for indigenous and/or migratory species. Waterbirds may visit the site, and while standing water will not be present to the same extent within the site, avifauna will still be able to access the nature reserve and wetland area to the immediate north of the site. The function of this wetland feature will not be detrimentally impacted by the proposed development based on the proposed and detailed management of hydrological function across the site and its interactions with surrounding areas.

As previously outlined, large areas of existing vegetation are retained across the site and the proposed landscaping within the site will improve habitat quality.

The surface and groundwater characteristics of the site on which the development is proposed to be carried out and of the surrounding area, including acidity, salinity and water quality:

Surface water and groundwater values associated with the site can be managed appropriately as part of development and has been considered in **Section 5** of the EAR. Specific considerations include:

- Acid sulphate soils (ASS): ASS can be managed as a condition of development approval, based on the standard development process. ASS is only likely to require management where works extend below the permanent groundwater table, or 3 m below the natural surface. Based on the fill required within the site, this is unlikely to be an issue.
- Surface water: the waterway in the western and northern portion of the site will be retained and accommodated within an open space corridor. The proposed development will accommodate the building requirements outlined by the City of Busselton to ensure finished floor levels be above the defined flood event (DFE) level as part of managing coastal risk. Storm and surface water will be managed through the implementation of drainage infrastructure, including sub-surface and surface stormwater storage and treatment, as outlined in the WMP (Emerge Associates 2025e).
- **Groundwater:** groundwater is within close proximity to the natural soil surface and as a result, imported fill will be required to provide the required clearance between groundwater and finished floor levels. DWER and the City of Busselton recommends finished floor levels be at least 0.5 m above the defined flood event (DFE) flood level.

Whether adequate safeguards and rehabilitation measures have been, or will be, taken to protect the environment

The proposed development is located in an area where existing rural land uses have removed the majority of wetland values (particularly those associated with vegetation/habitat), although the areas still supports hydrological functions.

No specific natural rehabilitation is proposed, however the outlined management measures (detailed in **Section 5** of the EAR) will ensure adequate safeguards are in place through the proposed design

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Lot 31 Rendezvous Road, Vasse

and construction, and then as part of ongoing management, to ensure the hydrological function of the wetlands are maintained. Environmental values will be improved through the proposed landscaping, which will increase biodiversity and fauna values compared to the current cleared areas and degraded native vegetation, and existing hydrological functions will be maintained by providing separation to groundwater, maintaining pre development surface water flows and improving the water quality leaving the site through the treatment of stormwater.

Open space corridors will connect vegetation across the site, linking Rendezvous Road with the vegetation in the nature reserve to the north.

Any feasible alternatives to the carrying out of the proposed development and the reasons for choosing the latter

No feasible alternative locations were identified or considered; however, the location of the site was chosen based on:

- Appropriate zoning of the site to accommodate the proposed land use.
- The close proximity to transport routes and Vasse/Busselton town centres.
- Proximity to existing services such as reticulated water supply, sewerage and power.
 Wastewater is a key consideration for managing nutrient inputs to wetland areas, and as the site will extend and connect with the sewer network, potential nutrient impacts from wastewater will not be a consideration.
- Areas of the site are already cleared of native vegetation, and where native vegetation does
 exist, it is considered to be in 'degraded' or worse condition. The site does not have significant
 fauna values.
- Visual impacts can be managed through appropriate landscape planting and siting of buildings and other infrastructure.

The consequences of not carrying out the proposed development

If the proposed development was not carried out, a valuable lifestyle community would not be available to the local area.

Details of any wetlands surrounding the land to which the application for development approval relates and the appropriateness of imposing conditions requiring the carrying out of works to preserve or enhance the value of the surrounding wetlands

The wetland attributes within and surrounding the site have been identified within **Section 3.4.3** of the EAR and include:

- The majority of the site is mapped as a multiple use wetland (ID 15809). Multiple use wetlands are considered to contain few wetland attributes and functions and do not require any specific spatial considerations (i.e. protection/retention). Development of land mapped as a multiple use wetland is considered suitable if the hydrological function is addressed appropriately.
- While the southeastern extent of the site is mapped as a resource enhancement wetland (ID 13206), in consultation with DBCA and DWER, it was determined that the resource enhancement wetland contained limited ecological values and did not need to be retained as part of the development, as long as the hydrological functions within the site were maintained.

Environmental Assessment Report



Lot 31 Rendezvous Road, Vasse

- The hydrological functions of the wetlands can be addressed through the management of groundwater and surface water in accordance with the Water Management Plan, and include:
 - Providing separation between the finished floor levels of development and groundwater;
 - Managing stormwater based on WSUD principles, including treatment trains to remove nutrients and infiltrating rainfall close to source; and
 - Maintaining the pre-development environment with regard to surface water flows.
 - Connecting the development to the reticulated sewer network, meaning wastewater will not result in additional nutrients.
 - Managing nutrients as part, which as the proponent will be responsible for landscape across the site in the long-term, can be addressed through management procedures.
- A number of geomorphic wetlands, including MUWs to the north (UFI 15764) and southwest (UFI 15809), and a REW to the north and east of the site (UFI 13206), as well as other interconnected surface water features are mapped within close vicinity of the site.
 Development within the site can be managed to minimise impact these features, through:
 - Vegetation (associated with the Mr vegetation unit) adjacent to the eastern boundary of site will be retained.
 - A minimum 21 m-wide setback has been provided between future dwellings and the
 wetland feature to the north. This will include landscape areas, along with road and
 footpath networks. There will be a separation in height provided by fill material, which
 will also assist with a managed interface, preventing uncontrolled access.
 - o Permanent permeable fencing, which will assist with managing uncontrolled access, but support passive surveillance of the wetland area.
 - The implementation of screen planting along the eastern, north-eastern and southern boundary of the site; and
 - Maintaining the hydrological function of the wetland feature, as summarised in Section
 5.3 and detailed within the WMP (Emerge Associates 2025e). Drainage is retained onsite, and pre-development flows are maintained.

Development conditions that would be applied to support implementation of the proposed development would align with those typical to urban/residential development including management of acid sulphate soils, groundwater separation and stormwater, and environmental management as well as landscape design. The knowledge required to implement the development requirements is well understood, and ongoing management within the site will be the responsibility of the proponent and therefore will not require additional community resources to achieve the necessary outcomes. The proponent will be responsible for implementation and the long-term management of the open space areas, drainage infrastructure and development in general in the long-term, with residents of these types of developments having high expectations on the amenity and condition of infrastructure.

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Lot 31 Rendezvous Road, Vasse

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Appendix C



Flora and Vegetation Report (Emerge Associates 2024)

Appendix D

Basic Fauna and Black Cockatoo Assessment (Emerge Associates 2024)



Appendix E

Excerpts from Preliminary Landscape Plan (Emerge Associates 2024)



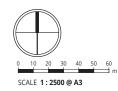
4.0 Preliminary Landscape Plan

4.1 Overall Masterplan



LEGEND

- 01 ENTRY STATEMENT WALL
- 02 PRIMARY VEHICLE ENTRY
- RETAINED TREES AND BUSH WITH MANAGED UNDERSTOREY PLANTING
- 04 VISITOR PARKING
- **05** CHASER
- SERVICE ACCESS ROUTE AND FIREBREAK/
 WALKING TRACK
- 07 SPLIT ENTRY ROAD
- 08 VEHICLE ENTRY GATES
- 09 VEHICLE BRIDGE CROSSING OVER STREAM
- 10 CLUBHOUSE AND WELLNESS PRECINCT
- 11 COMMUNITY GREEN
- LANDSCAPED GARDEN WITH NATIVE GRASSES UNDER RETAINED TREES
- 13 HOBBY AND ARTS SHED
- 14 DRAINAGE BASIN
- 15 LANDSCAPED OPEN SPACE
- 16 CARAVAN PARKING BAYS
- 17 SECONDARY VEHICLE EXIT

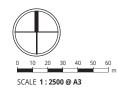


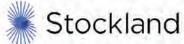


5.0 Connectivity & Pedestrian Movement

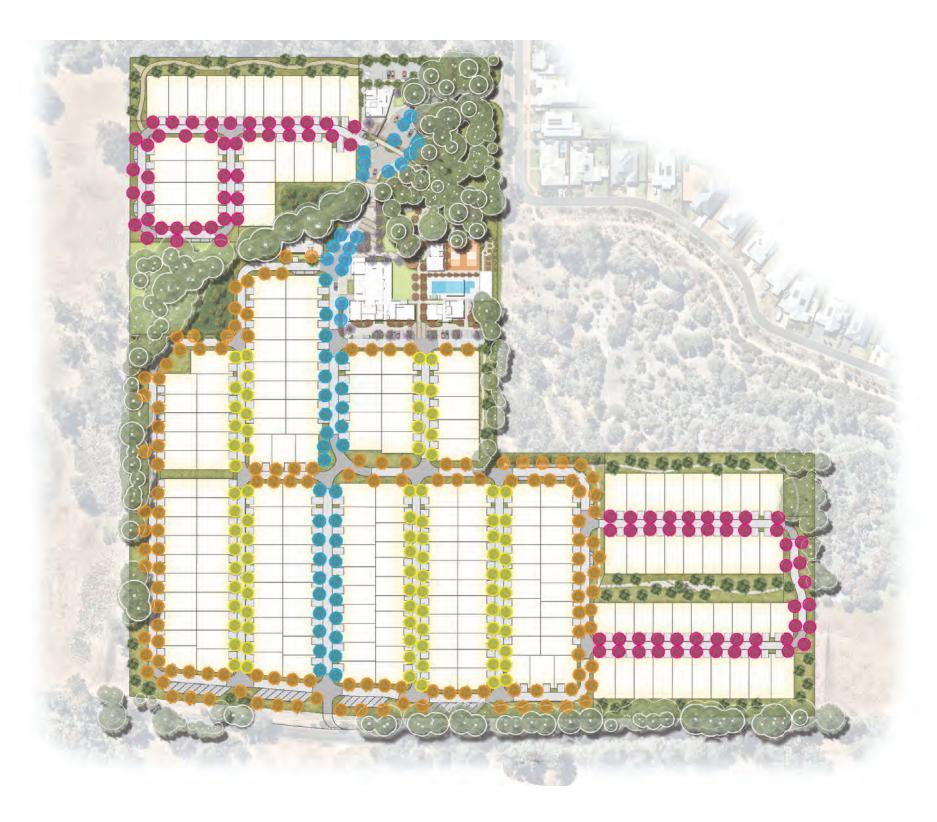








6.0 Street Tree Masterplan



LEGEND



Pyrus ussuriensis Manchurian Pear Height: 9m Flower: White Season: Spring



Corymbia ficifolia grafted Carramar Red Carramar Red Height: 7-8m Flower: Red







Melaleuca viridiflora Weeping Red Flowering Paperbark Height: 6-8m Flower: Red





Agonis flexuosa Burgundy Burgundy Willow Myrtle Height: 5-8m Flower: White Season: Spring

Wadandi Significance



Bush Tucker



Seasonal Floral Display



Medicinal / Cultural Use



SCALE 1:2500 @ A3



9.0 Retained Tree Strategy

9.1 Tree Retention and Removal Plan



LEGEND



EXISTING HABITAT TREE TO BE RETAINED



EXISTING TREE TO BE RETAINED



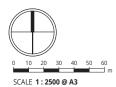
EXISTING TREE TO BE REMOVED



→ PHOTO LOCATIONS

NOTES:

- 1. DETAILED ARBORIST REPORT TO BE UNDERTAKEN.
- 2. TREE RETENTION AND REMOVAL PLAN TO BE REFINED IN ACCORDANCE WITH RECOMMENDATIONS OF PROJECT ARBORIST.
- 3. ARBORICULTURAL IMPACT ASSESSMENT (AIS) AND
 ARBORICULTURAL METHOD STATEMENT (AMS) TO BE PREPARED
 BY PROJECT ARBORIST. ALL WORKS CARRIED OUT IN THE VICINITY
 OF RETAINED TREES WILL BE UNDERTAKEN IN ACCORDANCE WITH
 THE ABOVE AIS AND AMS DOCUMENTS, BEST-PRACTICE TREE
 PROTECTION GUIDANCE AND AS 4970-2009.
- 4. TREE PROTECTION FENCING TO BE INSTALLED IN ACCORDANCE WITH AIS, AMS AND AS 4970-2009 FOR THE DURATION OF CONSTRUCTION WORKS.





10.0 Fencing

10.1 Fencing Plan



LEGEND



GRANITE PIERS WITH VERTICAL RAIL INFILL PANELS 1.8m HEIGHT - PRIORITY AREAS

FENCE TYPE 1



GRANITE PIERS (CORNERS ONLY) & VERTICAL RAIL INFILL PANELS 1.8m HEIGHT

FENCE TYPE 2



GRANITE PIERS ON CORNERS & LOT BOUNDARIES, VERTICAL RAIL INFILL PANELS 1.5m HEIGHT

FENCE TYPE 3



GRANITE PIERS ON CORNERS & LOT BOUNDARIES, 600mm HEIGHT RENDERED INFILL WALL, VERTICAL RAIL INFILL PANELS 1.5m HEIGHT

FENCE TYPE 4



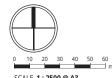
FEATURE RENDERED WALL & GRANITE PIERS TO END LOTS

FENCE TYPE 5



CONSERVATION FENCING 1.1m HEIGHT

FENCE TYPE 6



SCALE 1:2500 @ A3



Appendix D



Clearing Permit Application Lot 31 Rendezvous Road, Vasse



Plant schedules

NOTE: Final species to be nominated in consultation with City of Busselton and subject to availability.

Street trees – Approx. 350

Species name	Common name
Pyrus ussuriensis	Manchurian Pear
Pyrus fauriei	Korean Sun Pear
Ulmus parvifolia Inspire	Inspire Chinese Elm
Corymbia ficifolia Carramar Red	Carramar Red Flowering Gum
Corymbia grafted Coral Pink	Pink Marri
Eucalyptus victrix	Little Ghost Gum
Melaleuca viridiflora	Weeping Red Flowering Paperbark
Melaleuca leucadendra	Weeping Paperbark
Eucalyptus erythrocorys	Illyarrie
Agonis flexuousa Burgundy	Burgundy Weeping Peppermint
Eucalyptus lane-poolei	Salmon White Gum
Eucalyptus cladocalyx nana	Dwarf Sugar Gum

Landscape buffer area

Species name	Common name	Growth form
Agonis flexuosa	WA Peppermint	Tree
Corymbia calophylla	Marri	Tree
Eucalyptus gomphocephala	Tuart	Tree
Acacia rostellifera	Summer Scented Wattle	1-6m ht
Astartea fascicularis	Dainty Astartea	0.3-3m ht
Banksia sessilis	Parrot Bush	0.5-5m ht
Beaufortia sparsa	Swamp Flame Flower	1-3m ht
Calothamnus quadrifidus	Crimson Netbush	0.9-2m ht
Calothamnus rupestris	Mouse Ears	0.9-4m ht
Gompholobium tomentosum	Hairy Yellow Pea	0.3-1m ht
Hakea linearis		0.6-4m ht
Hakea prostrata	Porstrate Hakea	1-3m ht

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Species name	Common name	Growth form
Hakea varia	Variable Leaf Hakea	1-4m ht
Kunzea glabrescens	Green Leaf Spearwood	1.5-4m ht
Melaleuca huegelii	Chenille Honeymyrtle	0.5-5m ht
Paraserienthes lophantha	Cape Wattle (shrub or tree)	1-10m ht
Pericalymma ellipticum	Swamp Tea Tree	To 3m ht
Regelia ciliata	Swamp Regelia	0.8-2m ht
Scaevola nitida	Shining Fanflower	0.3-3m ht
Taxandria linearifolia	Swamp Peppermint	To 5m ht
Templetonia retusa	Cockies Tongue	0.3-4m ht
Viminaria juncea	Swish Bush	1-4m ht

Low threat rehabilitation area (groundcover/herbs tubestock planted @3/m²)

Species name	Common name
Anigozanthus flavidus	Green Kangaroo Paw
Anigozanthus flavidus Red	Red Kangaroo Paw
Anigozanthus manglesii	Red Green Kangaroo Paw
Billardia fusiformis	Australian Bluebell
Conostylis aculeata	Prickly Conostylis
Conostylis candicans	Grey Cottonheads
Dianella revoluta	Blue Flax Lily
Dichondra repens	Kidney Weed
Hibbertia grossulariifolia	
Hypocalymma angustifolium	White Myrtle
Kennedia coccinea	Coral Vine
Kennedia prostrata	Running Postman
Orthrosanthus polystachys	Many Spike Orthrosanthus
Orthrosanthus laxus	Morning Iris
Patersonia occidentalis	Purple Flag
Thysanotus multiflorus	Many-Flowered Fringe Lily

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Low threat managed areas / street verges and landscaping

Species name	Common name
Eucalyptus rudis	Flooded Gum
Melaleuca preissiana	Modong
Melaleuca rhaphiophylla	Swamp Paperbark
Anigozanthus flavidus	Green Kangaroo Paw
Anigozanthus flavidus Red	Red Kangaroo Paw
Anigozanthus manglesii	Red Green Kangaroo Paw
Banksia dallanneyi	Couch Honeypot
Conostylis aculeata	Prickly Conostylis
Conostylis candicans	Grey Cottonheads
Darwinia citriodora	Lemon Scented Darwinia
Dianella revoluta	Blue Flax Lily
Grevillea obtusifolia Gin Gin Gem	Gin Gin Gem Grevillea
Grevillea crithmifolia prostrate	
Hibbertia grossulariifolia	
Hypocalymma angustifolium	White Myrtle
Lomandra longifolia Tanika	Tanika Lomandra
Pimelea ferruginea	Pink Rice Flower
Westringea fruticosa Grey Box	Grey Box Westringea
Myoporum insulare	Coastal Boobialla

Drainage areas

Species name	Common name
Eucalyptus rudis	Flooded Gum
Melaleuca preissiana	Modong
Melaleuca rhaphiophylla	Swamp Paperbark
Baumea articulata	Jointed Twig Rush
Baumea juncea	Bare Twig Rush
Baumea preissii	
Conostylis aculeata	Prickly Conostylis
Ficinia nodosa	Knotted Club Rush
Juncus kraussii	Sea Rush

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Species name	Common name
Juncus pallidus	Pale Rush
Melaleuca lateritia	Robin Red Breast Bush
Melaleuca thymoides	
Melaleuca seriata	