Native Vegetation Clearance

New Residence and Tourism Development, Coffin Bay

Data Report

Clearance under the *Native Vegetation Regulations 2017*

March 2021

Prepared by West Coast Revegetation NVC Accredited Consultant, Phil Landless

for Kane and Brooke Slater

Table of contents

1. Application information

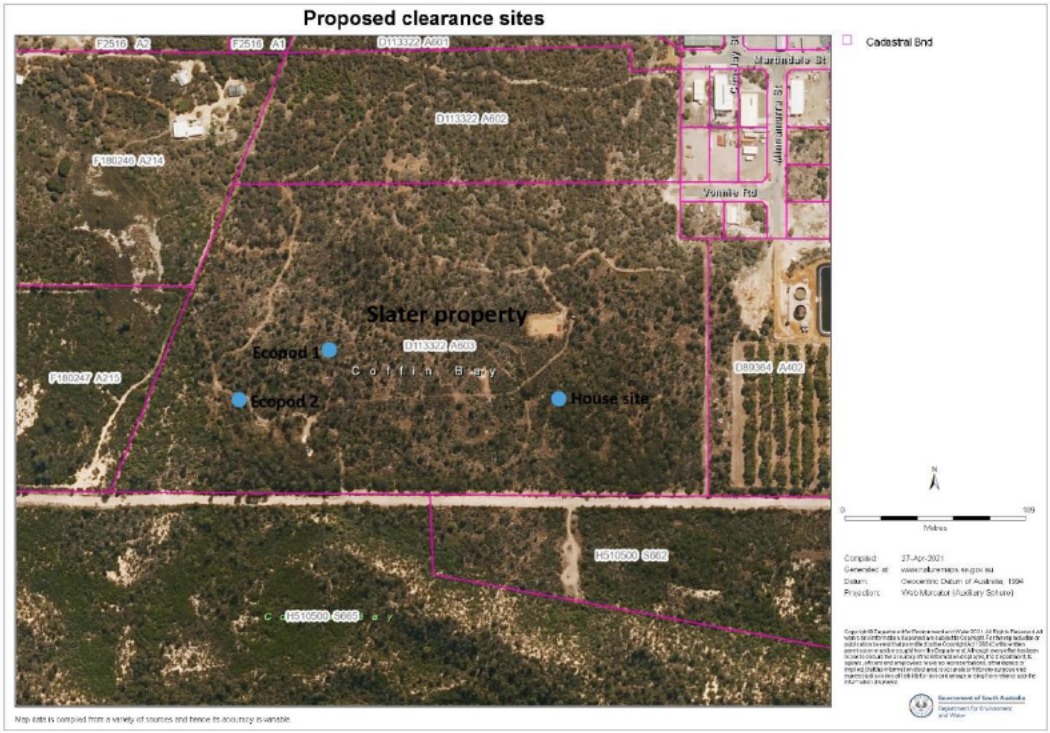
Application Details

Applicant:	Kane and Brooke Slater		
Key contact:	Kane Slater Mob: [redacted] Email: [redacted]		
Landowner:	Kane and Brooke Slater		
Site Address:	[redacted]		
Local Government Area:	Lower Eyre Peninsula	Hundred:	Lake Wangary
Title ID:	CT6179/893	Parcel ID	D113322 A603

Summary of proposed clearance

Purpose of clearance	a) Clearance required for the construction of a new dwelling b) Clearance required for Eco-pod 1 tourist accommodation c) Clearance required for Eco-pod 2 tourist accommodation
Native Vegetation Regulation	Schedule 1; Regulation 12(33), New dwelling or building.
Description of the vegetation under application	The application is to clear: a) 0.3 ha of *Eucalyptus diversifolia* Very Open mallee over sclerophyll shrubs in good condition (new dwelling) b) 0.22 ha of *Allocasuarina verticillata/Melaleuca lanceolata* Low Woodland in good condition (Eco-pod 1) c) 0.22 ha of *Allocasuarina verticillata/Melaleuca lanceolata* Low Woodland in good condition (Eco-pod 2)
Total proposed clearance - area (ha) and number of trees	a) Proposed clearance of 0.3 ha for the new dwelling b) Proposed clearance of 0.22 ha for Eco-pod 1 c) Proposed clearance of 0.22 ha for Eco-pod 2
Level of clearance	Level 4
Overlay (Planning and Design Code)	• Hazards (Bushfire – Medium Risk) • Hazards (Flooding – Evidence Required) • Native Vegetation • State Significant Native Vegetation

Map of proposed clearance area



Mitigation hierarchy	***a) Avoidance*** The main limitation to avoiding clearance of native vegetation is: • the applicants' insistence that the new dwelling and Ecopods must be built on the proposed sites. ***b) Minimization*** Extent, duration and intensity of the impacts to the house site will be minimized by the following: • access to the site is from an existing track and cleared area, so no extra clearing will be needed to gain access, • only the house site and associated CFS minimum 20m clearance from the dwelling will be cleared, • no other area on the applicant's land offers an alternative which would be less significant or more degraded than the proposed site. Extent, duration and intensity of the impacts to the Ecopod sites will be minimized by the following: • access to the sites is from existing tracks, so no extra clearing will be needed to gain access, • both sites are already cleared or semi-cleared of vegetation, • only the Ecopod sites and associated CFS minimum 20m clearance from the dwelling will be cleared, • The number of trees and understorey plants existing and to be established within the fuel reduction/fire protection zones shall only be reduced and maintained such that when considered overall a maximum coverage of 30% is attained (see Appendix 5, District Council of Lower Eyre Peninsula Tourism Accommodation Development Approval), • no other areas on the applicant's land offer alternatives which would be less significant or more degraded than the proposed sites. ***c) Rehabilitation or restoration***

	The proposed dwelling and Ecopod sites and associated areas for fire prevention and control will be permanent. Rehabilitation or restoration of the sites will not be possible**.** **d) *Offset*** The applicants plan to set aside an on-ground offset of 8.00 ha to satisfy the SEB points required.
SEB Offset proposal	8.00 ha on-ground SEB offset

2. Purpose of clearance

2.1 Description

The purpose of the three areas of clearance under application are:

a) To clear native vegetation for the construction of a new dwelling and associated CFS requirements,
b) To clear native vegetation for the construction of an Eco-pod for tourist accommodation and associated CFS requirements,
c) To clear native vegetation for the construction of a second Eco-pod for tourist accommodation and associated CFS requirements.

2.2 Background

The proposed clearance areas are situated on a 17.4 ha property owned by Kane and Brooke Slater, to the west of Coffin Bay township. The property adjoins the Coffin Bay National Park to the south-east. The property is covered with native vegetation in good condition on undulating calcrete rises with shallow soils. Several old vehicular access tracks crisscross the property.

There are three main vegetation associations on the property:

- *Allocasuarina verticillata* Drooping Sheoak/*Melaleuca lanceolata* Dryland Tea-tree Low Woodland
- *Eucalyptus diversifolia* Coastal White Mallee Mallee
- *Eucalyptus diversifolia* Coastal White Mallee Very Open Mallee

A previous application to clear native vegetation to establish a new dwelling and associated structures was approved in June 2016 (Application 2016/3061/932). This approval has lapsed and in correspondence from the Native Vegetation Council dated 8 December 2020 (NVC Reference 2020/3118/415) an updated application, including a new vegetation survey, has been requested.

2.3 General location maps

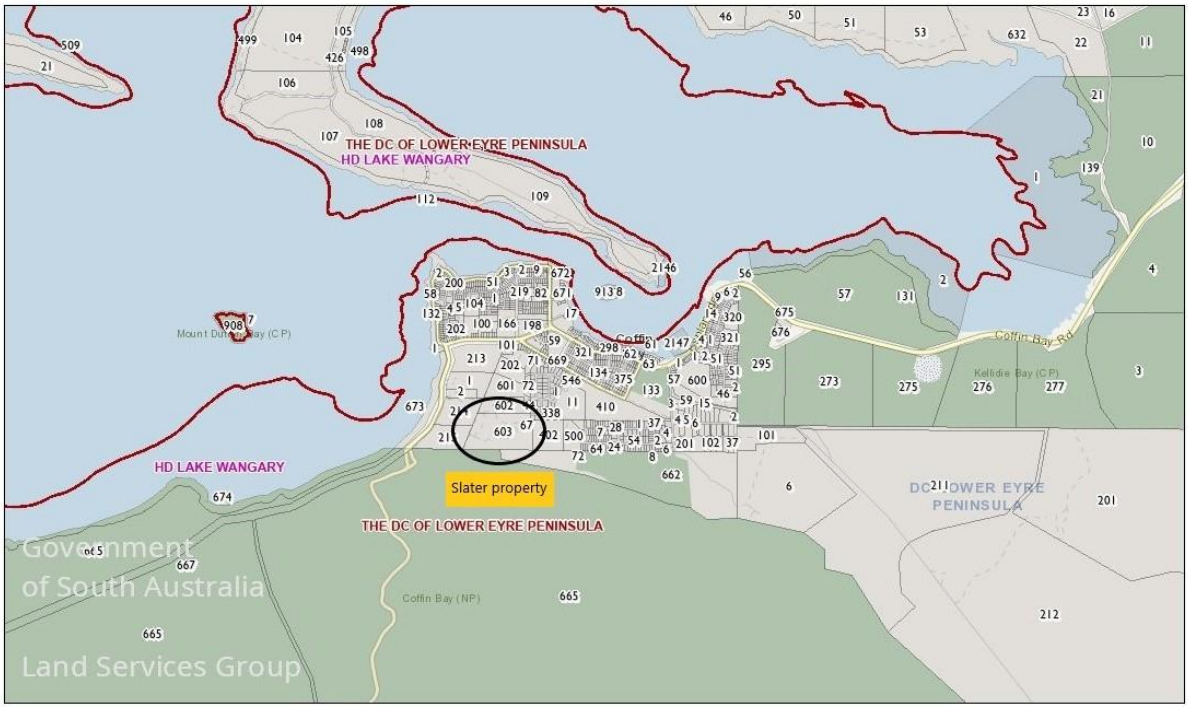


Figure 1. Location map of Slater property.

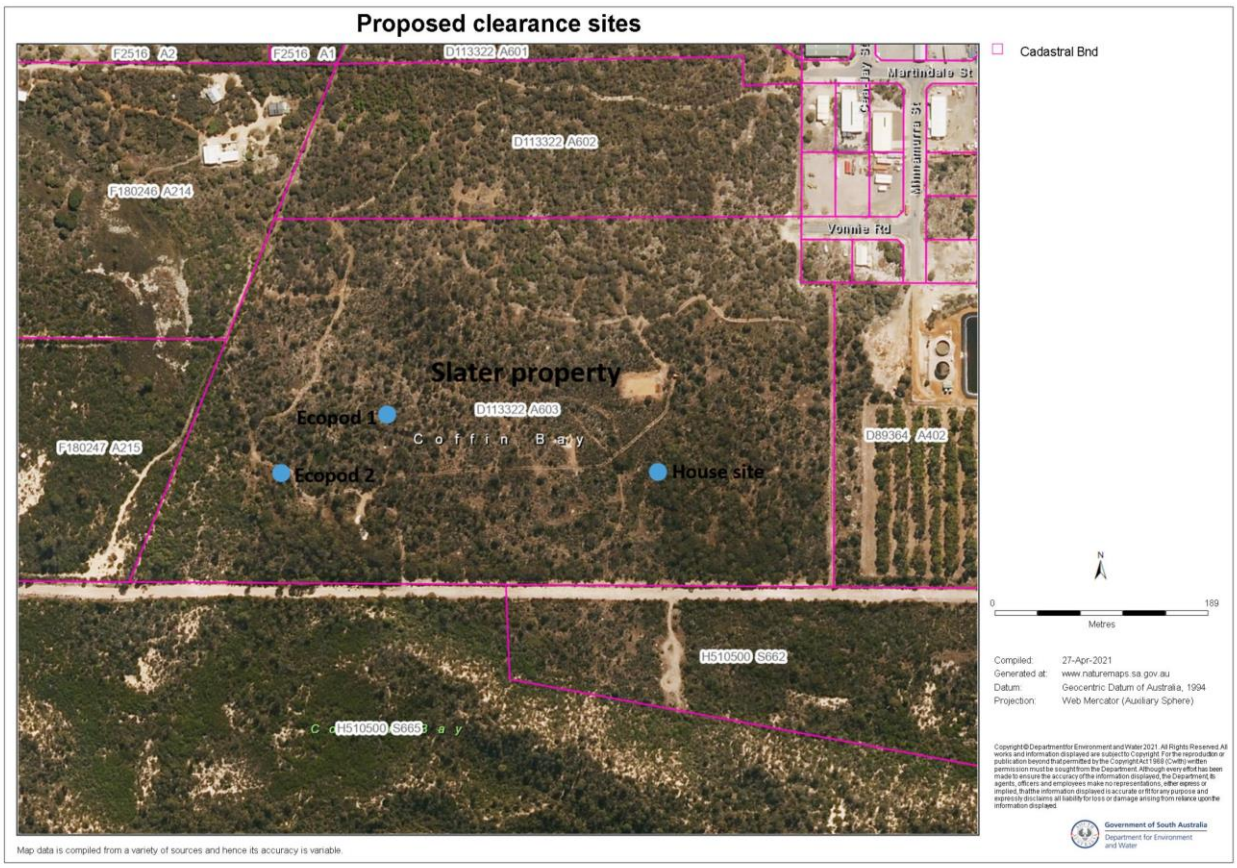


Figure 2. Site map of proposed clearances for new dwelling and Eco-pods.

2.4 Details of the proposal

The applicants propose to clear three areas of native vegetation on the property:

- **Block A:** proposal to clear 0.3 ha of native vegetation for the construction of a new dwelling and associated CFS requirements (200 m^2 dwelling footprint plus 2800 m^2 fuel reduction area),
- **Block B:** proposal to clear 0.22 ha of native vegetation for a tourist accommodation development (Eco-pod 1) and associated CFS requirements (33 m^2 building footprint plus 1720 m^2 fuel reduction area),
- **Block C:** proposal to clear 0.22 ha of native vegetation for a tourist accommodation development (Eco-pod 2) and associated CFS requirements (33 m^2 building footprint plus 1720 m^2 fuel reduction area).

The applicants also propose to satisfy any SEB requirement with an on-ground offset:

- **Block D:** proposal to use 8.00 ha of native vegetation on the property as an on-ground offset.

2.5 Approvals <u>required</u> *or* <u>obtained</u>

- Native Vegetation Act 1991. A previous application to clear native vegetation to establish a new dwelling and associated structures was approved in June 2016 (Application 2016/3061/932). This approval has lapsed and reapplication to clear native vegetation is the subject of this proposal.
- Development Plan Consent has been granted by the District Council of Lower Eyre Peninsula for the new dwelling (Dev. NO. 932/174/2017) and is included in the appendix.
- Development Plan Consent has been granted by the District Council of Lower Eyre Peninsula for the tourist accommodation (Eco-pods) and is included in the appendix.

2.6 Native Vegetation Regulation

The proposed clearances will be assessed under Regulation 12(33), New dwelling or building.

2.7 Development Application information (if applicable)

The land covered by this application is within the District Council of Lower Eyre Peninsula and is zoned Deferred Urban, Infrastructure and Strategic Employment. Relevant overlays are:

- Hazards (Bushfire – Medium Risk). This overlay seeks to ensure development responds to the medium level of bushfire risk by siting and designing buildings to mitigate threat and impact of bushfires on life and property and facilitating access for emergency service vehicles.
- Hazards (Flooding – Evidence Required). This overlay adopts a precautionary approach to mitigate potential impacts of potential flood risk through appropriate siting and design of development.
- Native Vegetation. This overlay seeks to protect, retain and restore areas of native vegetation.
- State Significant Native Vegetation. This overlay seeks to protect, retain and restore significant areas of native vegetation.

3. Method

3.1 Flora assessment

A desktop vegetation survey was conducted, using the BDBSA on Naturemaps, for the presence of species with state and/or national conservation status within a 5 km radius of the block (Table 1).

The flora assessment was conducted by NVC Accredited Consultant Phil Landless on 16 and 17 March 2021, in accordance with the Bushland Assessment Manual (NVC 2020).

For Blocks A (house site), B (Eco-pod 1) and C (Eco-pod 2) the whole sites were surveyed, and assessment data was recorded on Small Site Field Datasheets (less than 0.5 ha).

For Block D (SEB offset area) representative hectares were surveyed for each vegetation association, and assessment data was recorded on a Field Datasheets (greater than 0.5 ha).

All blocks were traversed on foot. Flora species were recorded as well as observations to assess the vegetation condition, conservation value and the landscape context of each block. Flora species with conservation status under the NP&W 1972 or the EPBC Act 1999 (as identified by the desktop survey) were actively searched for.

3.2 Fauna assessment

A desktop fauna survey was conducted using the BDBSA on Naturemaps. The search included the surrounding area within a radius of five kilometres (Table 2). During the field survey all fauna species with conservation status under the NP&W 1972 or the EPBC Act 1999 (as identified by the desktop survey) and any signs of their presence (tracks, scats, nests, etc.) and potential habitat were searched for and recorded.

4. Assessment Outcomes

4.1 Vegetation Assessment

General description of the vegetation, the site and matters of significance

All three blocks under application for clearance fall within the Avoid Bay IBRA Region and the Talia IBRA Subregion. Landform is undulating calcrete rises with a westerly aspect. Soil is shallow calcareous sand with limestone surface strew over most of the property. Moss and lichen were observed throughout on the soil surface.

The vegetation under application differed from block to block:

- Block A (house site): *Eucalyptus diversifolia* Very Open Mallee over *Acacia nematophylla/Templetonia retusa/Lasiopetalum discolour*, designated Site A1,
- Block B (Eco-pod 1): *Allocasuarina verticillata/Melaleuca lanceolata* Low Woodland, designated Site B1,
- Block C (Eco-pod 2): *Allocasuarina verticillata/Melaleuca lanceolata* Low Woodland, designated Site C1.

The property is a substantial area of native vegetation which adjoins the Coffin Bay National Park to the south-east. The vegetation is in good condition and provides a range of habitats for native fauna.

Details of the vegetation proposed to be impacted

Vegetation Association	**Block A, Site A1** (proposed dwelling site) *Eucalyptus diversifolia* Very Open Mallee over *Acacia nematophylla/Templetonia retusa/Lasiopetalum discolor*

Location: Site A1 **Position:** 53S 542130E 6168004N **Direction of photo:** West 253 degrees

General description	A total of eighteen flora species were recorded. Dominant species recorded were *Eucalyptus diversifolia* ssp. *diversifolia* Coastal White Mallee, *Acacia nematophylla* Coastal Wallowa and *Templetonia retusa* Cockies Tongue. Other common shrubs recorded were *Lasiopetalum discolor* Coast Velvet Bush and *Acrotriche patula* Prickly Ground-berry. Dominant lifeform recorded were mallees of very sparse foliage cover and shrubs of 1–2 metres tall projecting a mid-dense foliage cover. No introduced species were observed.
Threatened species or community	**Threatened flora species:** • *Isotoma scapigera* (Salt Isotome) • *Pleuropappus phyllocalymmeus* (Silver Candles) • *Podolepis jaceoides* (Showy Copper-wire Daisy) • *Poa fax* (Scaly Poa) • *Thysanotus wangariensis* (Eyre Peninsula Fringe Lily) • *Myoporum parvifolium* (Creeping Boobialla) • *Dodonaea procumbens* (Trailing Hopbush) Three of the seven threatened flora species identified in the threatened species search to be present within a 5 km radius of the site were considered to be possibly present on Site A1 (see Table 1) but none were observed. **Threatened plant community:** The vegetation association on the site, *Eucalyptus diversifolia* Very open Mallee does not appear in the Provisional List of Threatened Ecosystems included in the NVC Bushland Assessment Manual 2020.

	Threatened fauna species: • *Actitis hypoleucos* (Common Sandpiper) • *Arenaria interpres interpres* (Ruddy Turnstone) • *Biziura lobata menziesi* (Musk Duck) • *Cereopsis novaehollandiae novaehollandiae* (Cape Barren Goose) • *Corcorax melanorhamphos* (White-winged Chough) • *Dromaius novaehollandiae* (Emu) • *Egretta sacra sacra* (Pacific Reef Heron) • *Haemotopus fuliginosus fuliginosus* (Sooty Oystercatcher) • *Haemotopus longirostris* (Pied Oystercatcher) • *Halobaena caerulea* (Blue Petrel) • *Lichenostomus cratitius occidentalis* (Purple-gaped Honeyeater) • *Macronectes giganteus* (Southern Giant Petrel) • *Macronectes halli* (Northern Giant Petrel) • *Neophema elegans elegans* (Elegant Parrot) • *Neophema petrophila zietzi* (Rock Parrot) • *Psophodes leucogaster leucogaster* (White-bellied Whipbird eastern ssp) • *Stagonopleura guttata* (Diamond Firetail) • *Sternula nereis nereis* (Fairy Tern) • *Stipiturus malachurus* (Southern Emuwren) • *Strepera versicolor* (Grey Currawong) • *Hydrurga leptonyx* (Leopard Seal) • *Chelonia mydas* (Green Sea Turtle) • *Varanus rosenbergi* (Heath Goanna) Nine of the twenty-three threatened fauna species identified in the threatened species search to be present within a 5 km radius of the site were considered to be likely or possible to use the vegetation as habitat. Evidence (scats, tracks) of the presence of *Dromaius novaehollandiae* ssp. Emu was recorded (see Table 2).				
Landscape context score	1.05	Vegetation Condition Score	45.17	Conservation significance score	1.10
Unit biodiversity Score	52.17	Area (ha)	0.3 ha	Total biodiversity Score	15.65

Vegetation Association	**Block B, Site B1** (proposed Eco-pod 1 site) *Allocasuarina verticillata/Melaleuca lanceolata* Low Woodland over *Acacia leiophylla/Acacia nematophylla*

Location: Site B1 **Position:** 53S 541902E 6168060N **Direction of photo:** Southwest 230 degrees

General description	A total of twenty-seven flora species were recorded. Dominant species recorded were *Allocasuarina verticillata* Drooping Sheoak and *Melaleuca lanceolata* Dryland Tea-tree. Other common species include *Acacia leiophylla* Coast Golden Wattle, *Lasiopetalum discolor* Coast Velvet-bush and *Acacia nematophylla* Coast Wallowa. Dominant lifeform recorded was trees of 5-10 metres tall projecting a sparse foliage cover. Three introduced species were observed, including the environmental weeds *Pinus halepensis* Aleppo Pine and *Polygala myrtifolia* Myrtle-leaf Milkwort.
Threatened species or community	**Threatened flora species:** • *Isotoma scapigera* (Salt Isotome) • *Pleuropappus phyllocalymmeus* (Silver Candles) • Podolepis jaceoides (Showy Copper-wire Daisy) • *Poa fax* (Scaly Poa) • *Thysanotus wangariensis* (Eyre Peninsula Fringe Lily) • *Myoporum parvifolium* (Creeping Boobialla) • *Dodonaea procumbens* (Trailing Hopbush) Three of the seven threatened flora species identified in the threatened species search to be present within a 5 km radius of the site were considered to be possibly present on Site B1 (see Table 1) but none were observed. **Threatened plant community:** The vegetation association on the site, *Allocasuarina verticillata* Drooping Sheoak/*Melaleuca lanceolata* Dryland Tea-tree Low Woodland does not appear in the Provisional List of

	Threatened Ecosystems included in the NVC Bushland Assessment Manual 2020. **Threatened fauna species:** • *Actitis hypoleucos* (Common Sandpiper) • *Arenaria interpres interpres* (Ruddy Turnstone) • *Biziura lobata menziesi* (Musk Duck) • *Cereopsis novaehollandiae novaehollandiae* (Cape Barren Goose) • *Corcorax melanorhamphos* (White-winged Chough) • *Dromaius novaehollandiae* (Emu) • *Egretta sacra sacra* (Pacific Reef Heron) • *Haemotopus fuliginosus fuliginosus* (Sooty Oystercatcher) • *Haemotopus longirostris* (Pied Oystercatcher) • *Halobaena caerulea* (Blue Petrel) • *Lichenostomus cratitius occidentalis* (Purple-gaped Honeyeater) • *Macronectes giganteus* (Southern Giant Petrel) • *Macronectes halli* (Northern Giant Petrel) • *Neophema elegans elegans* (Elegant Parrot) • *Neophema petrophila zietzi* (Rock Parrot) • *Psophodes leucogaster leucogaster* (White-bellied Whipbird eastern ssp) • *Stagonopleura guttata* (Diamond Firetail) • *Sternula nereis nereis* (Fairy Tern) • *Stipiturus malachurus* (Southern Emuwren) • *Strepera versicolor* (Grey Currawong) • *Hydrurga leptonyx* (Leopard Seal) • *Chelonia mydas* (Green Sea Turtle) • *Varanus rosenbergi* (Heath Goanna) Nine of the twenty-three threatened fauna species identified in the threatened species search to be present within a 5 km radius of the site were considered to be likely or possible to use the vegetation as habitat. Evidence (scats, tracks) of the presence of *Dromaius novaehollandiae* ssp. Emu was recorded (see Table 2).				
Landscape context score	1.05	Vegetation Condition Score	40.54	Conservation significance score	1.10
Unit biodiversity Score	46.82	Area (ha)	0.22 ha	Total biodiversity Score	10.30

Vegetation Association	**Block C, Site C1** (proposed Eco-pod 2 site) *Allocasuarina verticillata/Melaleuca lanceolata* Low Woodland over *Acacia leiophylla/Acacia nematophylla*
 **Location:** Site C1 **Position:** 53S 541800E 6168006N **Direction of photo:** Northeast 35 degrees	
General description	A total of twenty-eight flora species were recorded. Dominant species recorded were *Allocasuarina verticillata* Drooping Sheoak and *Melaleuca lanceolata* Dryland Tea-tree. Other common species recorded include *Acacia leiophylla* Coast Golden Wattle, *Lasiopetalum discolor* Coast Velvet-bush and *Acacia nematophylla* Coast Wallowa. Dominant lifeform recorded was trees of 5-10 metres tall projecting a sparse foliage cover. Four introduced species were observed, including the environmental weeds *Pinus halepensis* Aleppo Pine and *Polygala myrtifolia* Myrtle-leaf Milkwort.
Threatened species or community	**Threatened flora species:** • *Isotoma scapigera* (Salt Isotome) • *Pleuropappus phyllocalymmeus* (Silver Candles) • *Podolepis jaceoides* (Showy Copper-wire Daisy) • *Poa fax* (Scaly Poa) • *Thysanotus wangariensis* (Eyre Peninsula Fringe Lily) • *Myoporum parvifolium* (Creeping Boobialla) • *Dodonaea procumbens* (Trailing Hopbush) Three of the seven threatened flora species identified in the threatened species search to be present within a 5 km radius of the site were considered to be possibly present on Site C1 (see Table 1) but none were observed. **Threatened plant community:** The vegetation association on the site, *Allocasuarina verticillata* Drooping Sheoak/*Melaleuca lanceolata* Dryland Tea-tree Low Woodland does not appear in the Provisional List of Threatened Ecosystems included in the NVC Bushland Assessment Manual 2020.

	Threatened fauna species: • *Actitis hypoleucos* (Common Sandpiper) • *Arenaria interpres interpres* (Ruddy Turnstone) • *Biziura lobata menziesi* (Musk Duck) • *Cereopsis novaehollandiae novaehollandiae* (Cape Barren Goose) • *Corcorax melanorhamphos* (White-winged Chough) • *Dromaius novaehollandiae* (Emu) • *Egretta sacra sacra* (Pacific Reef Heron) • *Haemotopus fuliginosus fuliginosus* (Sooty Oystercatcher) • *Haemotopus longirostris* (Pied Oystercatcher) • *Halobaena caerulea* (Blue Petrel) • *Lichenostomus cratitius occidentalis* (Purple-gaped Honeyeater) • *Macronectes giganteus* (Southern Giant Petrel) • *Macronectes halli* (Northern Giant Petrel) • *Neophema elegans elegans* (Elegant Parrot) • *Neophema petrophila zietzi* (Rock Parrot) • *Psophodes leucogaster leucogaster* (White-bellied Whipbird eastern ssp) • *Stagonopleura guttata* (Diamond Firetail) • *Sternula nereis nereis* (Fairy Tern) • *Stipiturus malachurus* (Southern Emuwren) • *Strepera versicolor* (Grey Currawong) • *Hydrurga leptonyx* (Leopard Seal) • *Chelonia mydas* (Green Sea Turtle) • *Varanus rosenbergi* (Heath Goanna) Nine of the twenty-three threatened fauna species identified in the threatened species search to be present within a 5 km radius of the site were considered to be likely or possible to use the vegetation as habitat. Evidence (scats, tracks) of the presence of *Dromaius novaehollandiae* ssp. Emu was recorded (see Table 2).

Landscape context score	1.05	Vegetation Condition Score	40.54	Conservation significance score	1.10
Unit biodiversity Score	46.82	Area (ha)	0.22 ha	Total biodiversity Score	10.30

Site map showing areas of proposed impact

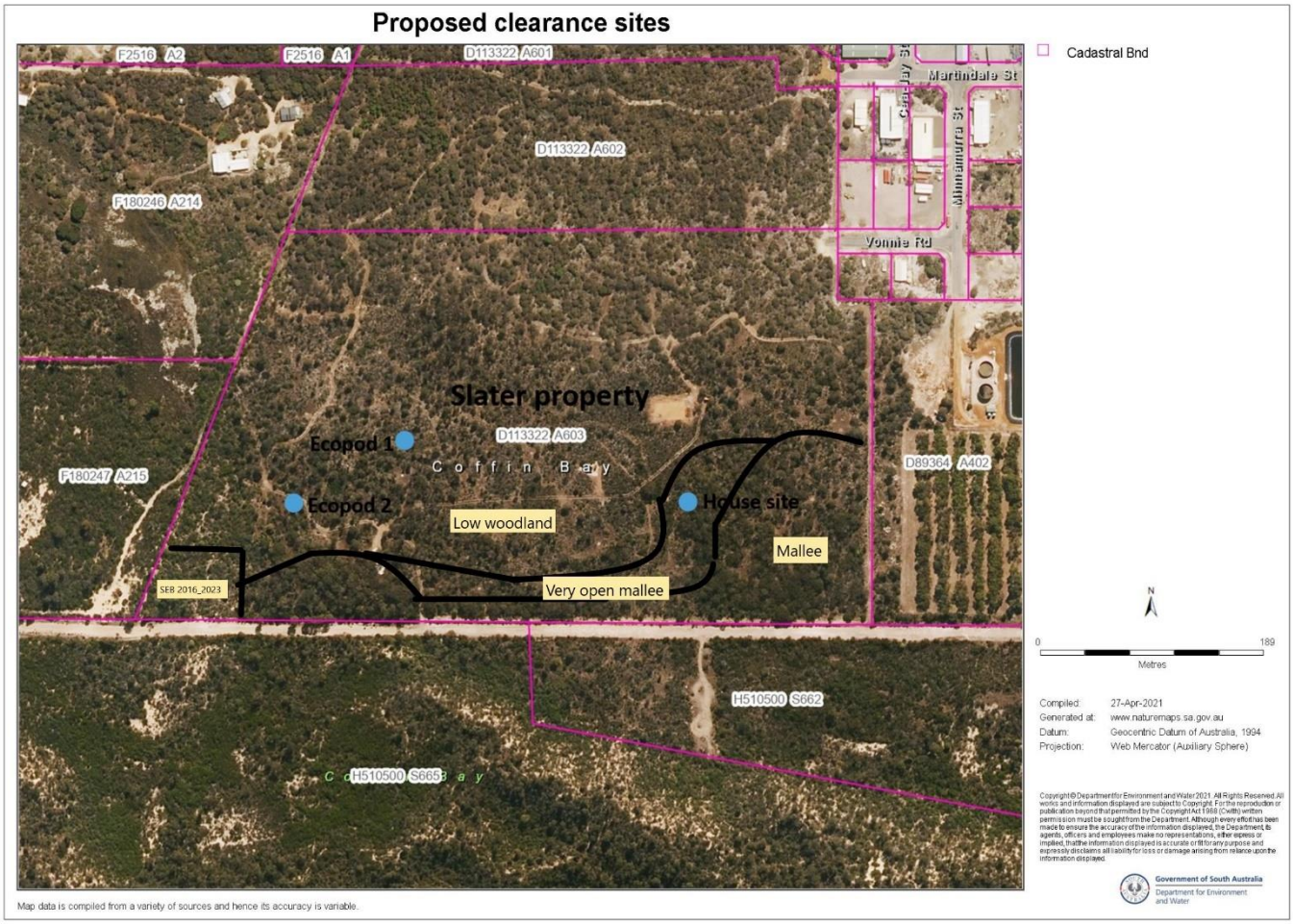


Figure 3. Areas of proposed impact and vegetation associations.

Photo log

Photolog appears as Appendix 6.

4.2 Threatened Species assessment

Threatened flora

No threatened ecological communities were identified on Block A (house site), Block B (Eco-pod 1) or Block C (Eco-pod 2).

Seven state threatened flora species under the NP&W Act 1972 were identified in the NatureMaps search as being previously recorded within a 5 km radius of Blocks A, B and C. Two of these are also considered nationally threatened under the EPBC Act 1999 (see Table 1 below). The likelihood of three of these species occurring in the study areas was deemed possible, but none were recorded during the field survey.

Table 1. Flora species observed on site, or recorded within 5km of the application area since 1995, or the vegetation is considered to provide suitable habitat

Flora Species (common name)	NP&W Act	EPBC Act	Data source	Date of last record	Species known habitat preferences	Likelihood of use for habitat – Comments
Isotoma scapigera (Salt Isotome)	R		3	1993	Moist mudflats often around salt marshes	Unlikely. No suitable habitat.
Pleuropappus phyllocalymmeus (Silver Candles)	V	VU	3	1969	Edges of saline depressions, usually with *Halosarcia*	Unlikely. No suitable habitat.
Podolepis jaceoides (Showy Copper-wire Daisy)	R		3	2012	Grassland, woodland and mallee, typically on higher nutrient soils	Possible
Poa fax (Scaly Poa)	R		3	1991	Dune mallee and coastal sands	Possible
Thysanotus wangariensis (Eyre Peninsula Fringe Lily)	R		3	1993	Low heath vegetation on sandy loam soils	Possible
Myoporum parvifolium (Creeping Boobialla)	R		3	2014	Clay soils, often in saline situations	Unlikely. No suitable habitat.
Dodonaea procumbens (Trailing Hopbush)	V	VU	3	1983	Low, wet areas in woodland, low open forest and grassland on sands and clays	Unlikely. No suitable habitat.
Source; 1- BDBSA, 2 - AoLA, 3 – NatureMaps 4 – Observed/recorded in the field, 5 - Protected matters search tool, 6 – others NP&W Act; E= Endangered, V = Vulnerable, R= Rare EPBC Act; Ex = Extinct, CR = Critically endangered, EN = Endangered; VU = Vulnerable						

Threatened fauna

Twenty-three state threatened fauna species under the NP&W Act were identified in the NatureMaps search as being previously recorded within a 5 km radius of Blocks A, B and C. Eight of these are also considered nationally threatened under the EPBC Act (see Table 2 below). The likelihood of eight of these species occurring in the study area was deemed likely or possible, but none were recorded during the field survey. The presence of one species, *Dromaius novaehollandiae* (Emu) was confirmed as fresh scats and tracks were observed during the field survey.

Table 2. Fauna species observed on site, or recorded within 5km of the application area since 1995, or the vegetation is considered to provide suitable habitat

Species (common name)	NP&W Act	EPBC Act	Data source	Date of last record	Species known habitat preferences	Likelihood of use for habitat – Comments
Actitis hypoleucos (Common Sandpiper)	R		3	1993	Coastal or inland wetlands (saline or fresh), on muddy	Unlikely

					edges and rocky shores	
Arenaria interpres interpres (Ruddy Turnstone)	R		3	2008	Exposed coastal rocks and reefs and on beaches	Unlikely
Biziura lobata menziesi (Musk Duck)	R		3	2004	Swamps, lakes, tidal inlets and bays	Unlikely
Cereopsis novaehollandiae novaehollandiae (Cape Barren Goose)	R		3	2007	Offshore islands while breeding, improved pasture on mainland	Unlikely
Corcorax melanorhamphos (White-winged Chough)	R		3	1996	Woodlands and taller mallee, feeding among the leaf litter.	Possible
Dromaius novaehollandiae (Emu)	ssp	ssp	3,4	2017	Sclerophyll forests and savanna woodland	Known. Fresh scats observed during field survey.
Egretta sacra sacra (Pacific Reef Heron)	R		3	1998	Beaches, rocky shores, tidal rivers and inlets, mangroves and exposed reefs	Unlikely
Haemotopus fuliginosus fuliginosus (Sooty Oystercatcher)	R		3	2017	Rocky coastline, estuaries	Unlikely
Haemotopus longirostris (Pied Oystercatcher)	R		3	2020	Sandy beaches, estuaries	Unlikely
Halobaena caerulea (Blue Petrel)		VU	3	1981	Islands in the sub-Antarctic southern oceans	Unlikely.
Lichenostomus cratitius occidentalis (Purple-gaped Honeyeater)	R		3	2003	Mallee heathland, shrubby vegetation	Possible
Macronectes giganteus (Southern Giant Petrel)	V	EN	3	2007	Large pelagic seabird of the Southern Ocean	Unlikely
Macronectes halli (Northern Giant Petrel)		VU	3	2009	Large pelagic seabird of the Southern Ocean	Unlikely
Neophema elegans elegans (Elegant Parrot)	R		3	1996	Open areas in grasslands, shrublands, mallee, woodlands, heath, saltmarsh and farmland	Likely

Neophema petrophila zietzi (Rock Parrot)	R		3	2017	Coastal dunes, saltmarsh, rocky islands	Unlikely
Psophodes leucogaster leucogaster (White-bellied Whipbird eastern ssp)	E	VU	3	2019	Dense coastal heath thickets, dense mallee scrub	Possible
Stagonopleura guttata (Diamond Firetail)	V		3	2019	Grassy woodland, forests, mallee	Possible
Sternula nereis nereis (Fairy Tern)	E	VU	3	2012	Coasts, estuaries	Unlikely
Stipiturus malachurus (Southern Emuwren)	ssp	ssp	3	1999	Dense scrub, heath, coastal heath, dune vegetation	Likely
Strepera versicolor (Grey Currawong)	ssp		3	2015	Forests, woodlands, mallee and heaths	Possible
Hydrurga leptonyx (Leopard Seal)	R		3	2009	Antarctic and sub-Antarctic regions	Unlikely
Chelonia mydas (Green Sea Turtle)	V	VU	3	1980	Coral reefs and seagrass pastures	Unlikely
Varanus rosenbergi (Heath Goanna)	V		3	2020	Heath, open forest, sand dunes, coastal areas and woodland	Likely
Source; 1- BDBSA, 2 - AoLA, 3 – NatueMaps 4 – Observed/recorded in the field, 5 - Protected matters search tool, 6 – others NP&W Act; E= Endangered, V = Vulnerable, R= Rare EPBC Act; Ex = Extinct, CR = Critically endangered, EN = Endangered; VU = Vulnerable						

Criteria for the likelihood of occurrence of species within the Study area.

Likelihood	**Criteria**
Highly Likely/Known	Recorded in the last 10 years, the species does not have highly specific niche requirements, the habitat is present and falls within the known range of the species distribution or; The species was recorded as part of field surveys.
Likely	Recorded within the previous 20 years, the area falls within the known distribution of the species and the area provides habitat or feeding resources for the species.
Possible	Recorded within the previous 20 years, the area falls inside the known distribution of the species, but the area provides limited habitat or feeding resources for the species. Recorded within 20 -40 years, survey effort is considered adequate, habitat and feeding resources present, and species of similar habitat needs have been recorded in the area.
Unlikely	Recorded within the previous 20 years, but the area provides no habitat or feeding resources for the species, including perching, roosting or nesting opportunities, corridor for movement or shelter. Recorded within 20 -40 years; however, suitable habitat does not occur, and species of similar habitat requirements have not been recorded in the area. No records despite adequate survey effort.

4.3 Cumulative impact

When exercising a power or making a decision under Division 5 of the Native Vegetation Regulations 2017, the NVC must consider the potential cumulative impact, both direct and indirect, that is reasonably likely to result from a proposed clearance activity.

- Clearance directly required for the developments:
  - Dwelling (Site A1) – building footprint of 200 m^2,
  - Ecopod 1 (Site B1) – building footprint of 33 m^2,
  - Ecopod 2 (Site C1) – building footprint of 33 m^2.

- Subsequent clearance that will be required:
  - Dwelling – 20 m around building for fuel reduction/fire protection,
  - Ecopod 1 – 20 m around building for fuel reduction/fire protection (CFS requirement),
  - Ecopod 2 – 20 m around building for fuel reduction/fire protection (CFS requirement).

4.4 Address the Mitigation Hierarchy

When exercising a power or making a decision under Division 5 of the Native Vegetation Regulations 2017, the NVC must have regard to the mitigation hierarchy. The NVC will also consider, with the aim to minimize, impacts on biological diversity, soil, water and other natural resources, threatened species or ecological communities under the EPBC Act or listed species under the NP&W Act.

a) Avoidance – outline measures taken to avoid clearance of native vegetation

The main limitation to avoiding clearance of native vegetation is:

- the applicants' insistence that the new dwelling and Ecopods must be built on the proposed sites.

b) Minimization – if clearance cannot be avoided, outline measures taken to minimize the extent, duration and intensity of impacts of the clearance on biodiversity to the fullest possible extent (whether the impact is direct, indirect or cumulative).

Extent, duration and intensity of the impacts to the house site will be minimized by the following:

- access to the site is from an existing track and cleared area, so no extra clearing will be needed to gain access,
- only the house site and associated CFS minimum 20m clearance from the dwelling will be cleared,
- no other area on the applicant's land offers an alternative which would be less significant or more degraded than the proposed site.

Extent, duration and intensity of the impacts to the Ecopod sites will be minimized by the following:

- access to the sites is from existing tracks, so no extra clearing will be needed to gain access,
- both sites are already cleared or semi-cleared of vegetation,
- only the Ecopod sites and associated CFS minimum 20m clearance from the dwelling will be cleared,
- The number of trees and understorey plants existing and to be established within the fuel reduction/fire protection zones shall only be reduced and maintained such that when considered overall a maximum coverage of 30% is attained (see Appendix 5, District Council of Lower Eyre Peninsula Ecopod Development Application),
- no other areas on the applicant's land offer alternatives which would be less significant or more degraded than the proposed sites.

c) Rehabilitation or restoration – outline measures taken to rehabilitate ecosystems that have been degraded, and to restore ecosystems that have been degraded, or destroyed by the impact of clearance that cannot be avoided or further minimized, such as allowing for the re-establishment of the vegetation.

The proposed dwelling and Ecopod sites and associated areas for fire prevention and control will be permanent. Rehabilitation or restoration of the sites will not be possible**.**

d) Offset – any adverse impact on native vegetation that cannot be avoided or further minimized should be offset by the achievement of a significant environmental benefit that outweighs that impact.

The applicants plan to set aside an on-ground offset of 8.00 ha to satisfy the SEB points required.

4.5 Principles of Clearance (Schedule 1, *Native Vegetation Act 1991*)

The Native Vegetation Council will consider Principles 1(b), 1(c) and 1(d) when assigning a level of Risk under Regulation 16 of the Native Vegetation Regulations. The Native Vegetation Council will consider all the Principles of clearance of the Act as relevant, when considering an application referred under the *Planning, Development and Infrastructure Act 2016*.

Data Report for level 3 or 4 application associated with a Development application

Principle of clearance	Considerations
Principle 1a - it comprises a high level of diversity of plant species.	Relevant information The number of plant species recorded (native and introduced): • Site A1: 18 plant species recorded • Site B1: 27 plant species recorded (3 introduced) • Site C1: 28 plant species recorded (4 introduced) Native plant species diversity score: • Site A1: 24 • Site B1: 21 • Site C1: 21
	Assessment against the principles • Site A1: **Seriously at variance** • Site B1: **Seriously at variance** • Site C1: **Seriously at variance**
	Moderating factors that may be considered by the NVC Only a very small area of vegetation will be impacted (0.74 ha total) relative to the amount of native vegetation on the property and within the local vicinity (within a 5 km radius).
Principle 1b - significance as a habitat for wildlife.	Relevant information Threatened species recorded or which may use the vegetation: • *Actitis hypoleucos* (Common Sandpiper) • *Arenaria interpres interpres* (Ruddy Turnstone) • *Biziura lobata menziesi* (Musk Duck) • *Cereopsis novaehollandiae novaehollandiae* (Cape Barren Goose) • *Corcorax melanorhamphos* (White-winged Chough) • *Dromaius novaehollandiae* (Emu) • *Egretta sacra sacra* (Pacific Reef Heron) • *Haemotopus fuliginosus fuliginosus* (Sooty Oystercatcher) • *Haemotopus longirostris* (Pied Oystercatcher) • *Halobaena caerulea* (Blue Petrel) • *Lichenostomus cratitius occidentalis* (Purple-gaped Honeyeater) • *Macronectes giganteus* (Southern Giant Petrel) • *Macronectes halli* (Northern Giant Petrel) • *Neophema elegans elegans* (Elegant Parrot) • *Neophema petrophila zietzi* (Rock Parrot) • *Psophodes leucogaster leucogaster* (White-bellied Whipbird eastern ssp) • *Stagonopleura guttata* (Diamond Firetail) • *Sternula nereis nereis* (Fairy Tern)

	• *Stipiturus malachurus* (Southern Emuwren) • *Strepera versicolor* (Grey Currawong) • *Hydrurga leptonyx* (Leopard Seal) • *Chelonia mydas* (Green Sea Turtle) • *Varanus rosenbergi* (Heath Goanna) The three sites under application are part of a larger property which provides a corridor for movements between remnant vegetation to the north and the Coffin Bay national Park. Threatened fauna scores: • Site A1: 0.1 • Site B1: 0.1 • Site C1: 0.1 Unit biodiversity scores: • Site A1: 52.17 • Site B1: 46.82 • Site C1: 46.82
	<u>Assessment against the principles</u> • Site A1: **Seriously at variance** • Site B1: **Seriously at variance** • Site C1: **Seriously at variance**
	<u>Moderating factors that may be considered by the NVC</u> Only a very small area of vegetation will be impacted (0.74 ha total) relative to the amount of native vegetation on the property and within the local vicinity (within a 5 km radius). The proposed clearances are not likely to have a significant impact on the threatened species which may use the vegetation as: • They will not lead to a long-term decrease in the population size, • The reduction of the area of occupancy will be minimal, • Existing populations will not be fragmented, • The surrounding habitat will be negligibly affected, • Availability and/or quality of surrounding habitat will not be modified, destroyed, removed or isolated to the extent that the species are likely to decline.
Principle 1c - plants of a rare, vulnerable or endangered species.	<u>Relevant information</u> Threatened species that were recorded for the site or that may be present but undetectable at the time of assessment: • *Isotoma scapigera* (Salt Isotome) • *Pleuropappus phyllocalymmeus* (Silver Candles) • *Podolepis jaceoides* (Showy Copper-wire Daisy) • *Poa fax* (Scaly Poa) • *Thysanotus wangariensis* (Eyre Peninsula Fringe Lily) • *Myoporum parvifolium* (Creeping Boobialla) • *Dodonaea procumbens* (Trailing Hopbush) Threatened Flora Scores • Site A1: 0 • Site B1: 0 • Site C1: 0
	<u>Assessment against the principles</u> • Site A1: **Not at variance** • Site B1: **Not at variance** • Site C1: **Not at variance**

	Moderating factors that may be considered by the NVC Only a very small area of vegetation will be impacted (0.74 ha total) relative to the amount of native vegetation on the property and within the local vicinity (within a 5 km radius). The proposed SEB on-ground offset will provide a benefit to threatened species well over and above what is required.
Principle 1d - the vegetation comprises the whole or part of a plant community that is Rare, Vulnerable or Endangered.	Relevant information Not applicable
	Assessment against the principles Not applicable
	Moderating factors that may be considered by the NVC Not applicable
Principle 1e - it is significant as a remnant of vegetation in an area which has been extensively cleared.	Relevant information IBRA Association remnancy figures: • Site A1: 71% • Site B1: 71% • Site C1: 71% IBRA Subregion remnancy figures: • Site A1: 56% • Site B1: 56% • Site C1: 56% Total Biodiversity Scores: • Site A1: 15.65 • Site B1: 10.30 • Site C1: 10.30
	Assessment against the principles • Site A1: **At variance** • Site B1: **At variance** • Site C1: **At variance**
	Moderating factors that may be considered by the NVC Only a very small area of vegetation will be impacted (0.74 ha total) relative to the amount of native vegetation on the property (which will be preserved under a Heritage Agreement) and within the local vicinity (within a 5 km radius). The proposed clearances are unlikely to have an impact on the remnant vegetation as the vegetation communities in question are not underrepresented on the property or in the local vicinity.
Principle 1f - it is growing in, or in association with, a wetland environment.	Relevant information Not applicable
	Assessment against the principles Not applicable
	Moderating factors that may be considered by the NVC Not applicable
Principle 1g - it contributes significantly	Relevant information Not applicable

to the amenity of the area in which it is growing or is situated.	Assessment against the principles Not applicable
	Moderating factors that may be considered by the NVC Not applicable

4.6 Risk Assessment

Site A1

Total clearance	No. of trees	
	Area (ha)	0.3 ha
	Total biodiversity Score	15.65
Seriously at variance with principle 1(b), 1(c) or 1 (d)		1(b) Significance as a habitat for wildlife
Risk assessment outcome		Level 4

Site B1

Total clearance	No. of trees	
	Area (ha)	0.22 ha
	Total biodiversity Score	10.30
Seriously at variance with principle 1(b), 1(c) or 1 (d)		1(b) Significance as a habitat for wildlife
Risk assessment outcome		Level 4

Site C1

Total clearance	No. of trees	
	Area (ha)	0.22 ha
	Total biodiversity Score	10.30
Seriously at variance with principle 1(b), 1(c) or 1 (d)		1(b) Significance as a habitat for wildlife
Risk assessment outcome		Level 4

5. Clearance summary

Clearance Area(s) Summary table

Block	Site	Species diversity score	Threatened Ecological community Score	Threatened plant score	Threatened fauna score	UBS	Area (ha)	Total Biodiversity score	Loss factor	Loadings	Reductions	SEB Points required	SEB payment	Admin Fee
A	A1	24	1	0	0.1	52.17	0.30	15.65	1			16.43	$11032.99	$606.81
B	B1	21	1	0	0.1	46.82	0.22	10.30	1			10.82	$7261.29	$399.37
C	C1	21	1	0	0.1	46.82	0.22	10.30	1			10.82	$7261.29	$399.37
						Total	**0.74**	**36.25**				**38.07**	**$25555.57**	**$1405.55**

Totals summary table

	Total Biodiversity score	Total SEB points required	SEB Payment	Admin Fee	Total Payment
Application	36.25	38.07	$25555.57	$1405.55	$26961.12

Economies of Scale Factor	Site A1: 0.5 Site B1: 0.5 Site C1: 0.5
Rainfall (mm)	Site A1: 509 mm Site B1: 509 mm Site C1: 509 mm

6. Significant Environmental Benefit

A Significant Environmental Benefit (SEB) is required for approval to clear under Division 5 of the *Native Vegetation Regulations 2017*. The NVC must be satisfied that as a result of the loss of vegetation from the clearance that an SEB will result in a positive impact on the environment that is over and above the negative impact of the clearance.

ACHIEVING AN SEB

Indicate how the SEB will be achieved by ticking the appropriate box and providing the associated information:

☒ Establish a new SEB Area on land owned by the proponent.

☐ Use SEB Credit that the proponent has established. Provide the SEB Credit Ref. No. _____

☐ Apply to have SEB Credit assigned from another person or body. The application form needs to be submitted with this Data Report.

☐ Apply to have an SEB to be delivered by a Third Party. The application form needs to be submitted with this Data Report.

☐ Pay into the Native Vegetation Fund.

PAYMENT SEB

The applicants are proposing to fulfil the SEB points requirement by setting aside an on-ground offset of 8.00 ha on their property.

ON-GROUND SEB

Ownership:	Kane and Brooke Slater		
Site Address:	[redacted]		
Local Government Area:	Lower Eyre Peninsula	Hundred:	Lake Wangary
Title ID:	CT6179/893	Parcel ID	D113322 A603

General description of the vegetation, the site and matters of significance

All three sites proposed as on-ground offsets fall within the Avoid Bay IBRA Region and the Talia IBRA Subregion. Landform is undulating calcrete rises with a westerly aspect. Soil is shallow calcareous sand with limestone surface strew. No landform features of significance were observed. Moss and lichen were observed throughout on the soil surface.

The vegetation under application contains three vegetation associations:

- *Eucalyptus diversifolia* Very Open Mallee over *Acacia nematophylla/Templetonia retusa/Lasiopetalum discolour*, designated Site D1,
- *Eucalyptus diversifolia* Mallee over a dense sclerophyll shrub understorey, designated Site D2,
- *Allocasuarina verticillata/Melaleuca lanceolata* Low Woodland over *Acacia leiophylla/Acacia nematophylla*, designated Site D3.

The proposed on-ground offset is a substantial area of native vegetation which adjoins the Coffin Bay National Park to the south-east and a pre-existing SEB area to the south-west (SEB reference 2016_2023). The vegetation is in good condition and provides a range of habitats for native fauna.

General location map

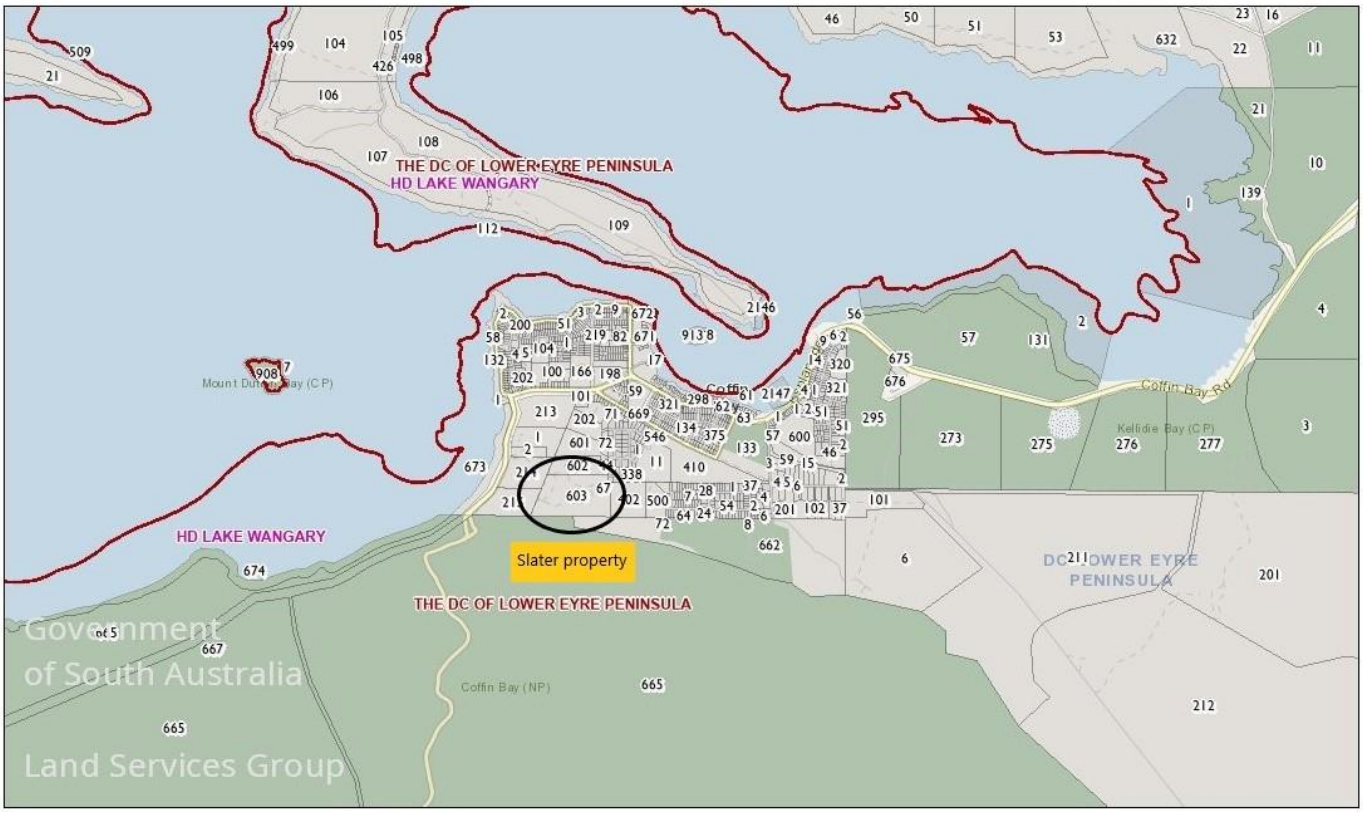


Figure 4. Location map of Slater property.

Description of the vegetation

Vegetation Association	**Block D, Site D1** *Eucalyptus diversifolia* Very Open Mallee with emergent *Allocasuarina verticillata* over *Acacia nematophylla/Templetonia retusa/Lasiopetalum discolor*
 **Location:** Site D1 **Position:** 53S 542122E 6168036N **Direction of photo:** West 250 degrees	
General description	A total of thirty-four flora species were recorded. Dominant species recorded were *Eucalyptus diversifolia* ssp. *diversifolia* Coastal White Mallee, *Allocasuarina verticillata* Drooping Sheoak, *Acacia nematophylla* Coastal Wallowa and *Templetonia retusa* Cockies Tongue. Other common shrubs recorded were *Lasiopetalum discolor* Coast Velvet Bush and *Acrotriche patula* Prickly Ground-berry. Dominant lifeform recorded were mallees of very sparse foliage cover and shrubs of 1–2 metres tall projecting a mid-dense foliage cover. Three introduced species were observed, *Pinus halepensis* Aleppo Pine, *Avena sp.* Oat and *Asparagus asparagoides* Bridal Creeper.
Threatened species or community	**Threatened flora species:** • *Isotoma scapigera* (Salt Isotome) • *Pleuropappus phyllocalymmeus* (Silver Candles) • *Podolepis jaceoides* (Showy Copper-wire Daisy) • *Poa fax* (Scaly Poa) • *Thysanotus wangariensis* (Eyre Peninsula Fringe Lily) • *Myoporum parvifolium* (Creeping Boobialla) • *Dodonaea procumbens* (Trailing Hopbush)

	Three of the seven threatened flora species identified in the threatened species search to be present within a 5 km radius of the site were considered to be possibly present on Site D1 (see Table 3) but none were observed. **Threatened plant community:** The vegetation association on the site, *Eucalyptus diversifolia* Very Open Mallee over *Acacia nematophylla/Templetonia retusa/Lasiopetalum discolor* does not appear in the Provisional List of Threatened Ecosystems included in the NVC Bushland Assessment Manual 2020. **Threatened fauna species:** • *Actitis hypoleucos* (Common Sandpiper) • *Arenaria interpres interpres* (Ruddy Turnstone) • *Biziura lobata menziesi* (Musk Duck) • *Cereopsis novaehollandiae novaehollandiae* (Cape Barren Goose) • *Corcorax melanorhamphos* (White-winged Chough) • *Dromaius novaehollandiae* (Emu) • *Egretta sacra sacra* (Pacific Reef Heron) • *Haemotopus fuliginosus fuliginosus* (Sooty Oystercatcher) • *Haemotopus longirostris* (Pied Oystercatcher) • *Halobaena caerulea* (Blue Petrel) • *Lichenostomus cratitius occidentalis* (Purple-gaped Honeyeater) • *Macronectes giganteus* (Southern Giant Petrel) • *Macronectes halli* (Northern Giant Petrel) • *Neophema elegans elegans* (Elegant Parrot) • *Neophema petrophila zietzi* (Rock Parrot) • *Psophodes leucogaster leucogaster* (White-bellied Whipbird eastern ssp) • *Stagonopleura guttata* (Diamond Firetail) • *Sternula nereis nereis* (Fairy Tern) • *Stipiturus malachurus* (Southern Emuwren) • *Strepera versicolor* (Grey Currawong) • *Hydrurga leptonyx* (Leopard Seal) • *Chelonia mydas* (Green Sea Turtle) • *Varanus rosenbergi* (Heath Goanna) Nine of the twenty-three threatened fauna species identified in the threatened species search to be present within a 5 km radius of the site were considered to be likely or possible to use the vegetation as habitat. Evidence (scats, tracks) of the presence of *Dromaius novaehollandiae* ssp. Emu was recorded (see Table 4).

Landscape context score	1.05	Vegetation Condition Score	50.99	Conservation significance score	1
Gain Score	5.88	Area (ha)	0.82 ha	SEB Points of Gain	4.82

Vegetation Association	**Block D, Site D2** *Eucalyptus diversifolia* Mallee over a dense sclerophyll shrub understorey
 **Location:** Site D2 **Position:** 53S 542189E 6167976N **Direction of photo:** West 264 degrees	
General description	A total of twenty-nine flora species were recorded. Dominant species recorded were *Eucalyptus diversifolia* ssp. *diversifolia* Coastal White Mallee, *Acacia nematophylla* Coastal Wallowa and *Templetonia retusa* Cockies Tongue. Other common shrubs recorded were *Lasiopetalum discolor* Coast Velvet Bush and *Acrotriche patula* Prickly Ground-berry. Dominant lifeform recorded were mallees of mid-dense foliage cover and shrubs of 1–2 metres tall projecting a mid-dense foliage cover. Three introduced species were observed, *Pinus halepensis* Aleppo Pine, *Lagurus ovatus* Hare's and *Asparagus asparagoides* Bridal Creeper.
Threatened species or community	**Threatened flora species:** • *Isotoma scapigera* (Salt Isotome) • *Pleuropappus phyllocalymmeus* (Silver Candles) • *Podolepis jaceoides* (Showy Copper-wire Daisy) • *Poa fax* (Scaly Poa) • *Thysanotus wangariensis* (Eyre Peninsula Fringe Lily) • *Myoporum parvifolium* (Creeping Boobialla) • *Dodonaea procumbens* (Trailing Hopbush) Three of the seven threatened flora species identified in the threatened species search to be present within a 5 km radius of the site were considered to be possibly present on Site C1 (see Table 3) but none were observed.

	Threatened plant community: The vegetation association on the site *Eucalyptus diversifolia* Mallee over a dense sclerophyll shrub understorey does not appear in the Provisional List of Threatened Ecosystems included in the NVC Bushland Assessment Manual 2020. **Threatened fauna species:** • *Actitis hypoleucos* (Common Sandpiper) • *Arenaria interpres interpres* (Ruddy Turnstone) • *Biziura lobata menziesi* (Musk Duck) • *Cereopsis novaehollandiae novaehollandiae* (Cape Barren Goose) • *Corcorax melanorhamphos* (White-winged Chough) • *Dromaius novaehollandiae* (Emu) • *Egretta sacra sacra* (Pacific Reef Heron) • *Haemotopus fuliginosus fuliginosus* (Sooty Oystercatcher) • *Haemotopus longirostris* (Pied Oystercatcher) • *Halobaena caerulea* (Blue Petrel) • *Lichenostomus cratitius occidentalis* (Purple-gaped Honeyeater) • *Macronectes giganteus* (Southern Giant Petrel) • *Macronectes halli* (Northern Giant Petrel) • *Neophema elegans elegans* (Elegant Parrot) • *Neophema petrophila zietzi* (Rock Parrot) • *Psophodes leucogaster leucogaster* (White-bellied Whipbird eastern ssp) • *Stagonopleura guttata* (Diamond Firetail) • *Sternula nereis nereis* (Fairy Tern) • *Stipiturus malachurus* (Southern Emuwren) • *Strepera versicolor* (Grey Currawong) • *Hydrurga leptonyx* (Leopard Seal) • *Chelonia mydas* (Green Sea Turtle) • *Varanus rosenbergi* (Heath Goanna) Nine of the twenty-three threatened fauna species identified in the threatened species search to be present within a 5 km radius of the site were considered to be likely or possible to use the vegetation as habitat. Evidence (scats, tracks) of the presence of *Dromaius novaehollandiae* ssp. Emu was recorded (see Table 4).				
Landscape context score	1.03	Vegetation Condition Score	54.60	Conservation significance score	1.10
Gain Score	5.40	Area (ha)	3.40 ha	SEB Points of Gain	18.37

Vegetation Association	**Block D, Site D3** *Allocasuarina verticillata/Melaleuca lanceolata* Low Woodland over *Acacia leiophylla/Acacia nematophylla*
 **Location:** Site D3 **Position:** 53S 541831E 6167987N **Direction of photo:** West 250 degrees	
General description	A total of forty flora species were recorded. Dominant species recorded were *Allocasuarina verticillata* Drooping Sheoak and *Melaleuca lanceolata* Dryland Tea-tree, *Acacia leiophylla* Coastal Golden Wattle and *Acacia nematophylla* Coastal Wallowa. Other common shrubs recorded were *Lasiopetalum discolor* Coast Velvet Bush and *Acrotriche patula* Prickly Ground-berry. Dominant lifeform recorded were trees of sparse foliage cover and shrubs of 1–2 metres tall projecting a mid-dense foliage cover. Three introduced species were observed, *Pinus halepensis* Aleppo Pine, *Polygala myrtifolia* Myrtle-leaf Milkwort and *Lagurus ovatus* Hare's Tail Grass.
Threatened species or community	**Threatened flora species:** • *Isotoma scapigera* (Salt Isotome) • *Pleuropappus phyllocalymmeus* (Silver Candles) • *Podolepis jaceoides* (Showy Copper-wire Daisy) • *Poa fax* (Scaly Poa) • *Thysanotus wangariensis* (Eyre Peninsula Fringe Lily) • *Myoporum parvifolium* (Creeping Boobialla) • *Dodonaea procumbens* (Trailing Hopbush) Three of the seven threatened flora species identified in the threatened species search to be present within a 5 km radius of the site were considered to be possibly present on Site C1 (see Table 3) but none were observed.

	Threatened plant community: The vegetation association on the site, *Allocasuarina verticillata/Melaleuca lanceolata* Low Woodland over *Acacia leiophylla/Acacia nematophylla* does not appear in the Provisional List of Threatened Ecosystems included in the NVC Bushland Assessment Manual 2020. **Threatened fauna species:** • *Actitis hypoleucos* (Common Sandpiper) • *Arenaria interpres interpres* (Ruddy Turnstone) • *Biziura lobata menziesi* (Musk Duck) • *Cereopsis novaehollandiae novaehollandiae* (Cape Barren Goose) • *Corcorax melanorhamphos* (White-winged Chough) • *Dromaius novaehollandiae* (Emu) • *Egretta sacra sacra* (Pacific Reef Heron) • *Haemotopus fuliginosus fuliginosus* (Sooty Oystercatcher) • *Haemotopus longirostris* (Pied Oystercatcher) • *Halobaena caerulea* (Blue Petrel) • *Lichenostomus cratitius occidentalis* (Purple-gaped Honeyeater) • *Macronectes giganteus* (Southern Giant Petrel) • *Macronectes halli* (Northern Giant Petrel) • *Neophema elegans elegans* (Elegant Parrot) • *Neophema petrophila zietzi* (Rock Parrot) • *Psophodes leucogaster leucogaster* (White-bellied Whipbird eastern ssp) • *Stagonopleura guttata* (Diamond Firetail) • *Sternula nereis nereis* (Fairy Tern) • *Stipiturus malachurus* (Southern Emuwren) • *Strepera versicolor* (Grey Currawong) • *Hydrurga leptonyx* (Leopard Seal) • *Chelonia mydas* (Green Sea Turtle) • *Varanus rosenbergi* (Heath Goanna) Nine of the twenty-three threatened fauna species identified in the threatened species search to be present within a 5 km radius of the site were considered to be likely or possible to use the vegetation as habitat. Evidence (scats, tracks) of the presence of *Dromaius novaehollandiae* ssp. Emu was recorded (see Table 4).				
Landscape context score	1.05	Vegetation Condition Score	62.08	Conservation significance score	1.10
Gain Score	4.47	Area (ha)	3.78 ha	SEB Points of Gain	16.88

<u>Site map</u> showing areas of the proposed SEB

Figure 5. Proposed SEB sites. Site D1 - Very open mallee; Site D2 - Mallee; Site D3 - Low woodland.

Photo log

Photolog appears as Appendix 6.

Fauna and Flora assessment

Threatened flora

No threatened ecological communities were identified on Block D (SEB offset site).

Seven state threatened flora species under the NP&W Act 1972 were identified in the NatureMaps search as being previously recorded within a 5 km radius of Block D. Two of these are also considered nationally threatened under the EPBC Act 1999 (see Table 3 below). The likelihood of three of these species occurring in the study area was deemed possible, but none were recorded during the field survey.

Table 3. Flora species observed on site, or recorded within 5km of the SEB application area since 1995, or the vegetation is considered to provide suitable habitat

Flora Species (common name)	NP&W Act	EPBC Act	Data source	Date of last record	Species known habitat preferences	Likelihood of use for habitat – Comments
Isotoma scapigera (Salt Isotome)	R		3	1993	Moist mudflats often around salt marshes	Unlikely

Pleuropappus phyllocalymmeus (Silver Candles)	V	VU	3	1969	Edges of saline depressions, usually with *Halosarcia*	Unlikely
Podolepis jaceoides (Showy Copper-wire Daisy)	R		3	2012	Grassland, woodland and mallee, typically on higher nutrient soils	Possible
Poa fax (Scaly Poa)	R		3	1991	Dune mallee and coastal sands	Possible
Thysanotus wangariensis (Eyre Peninsula Fringe Lily)	R		3	1993	Low heath vegetation on sandy loam soils	Possible
Myoporum parvifolium (Creeping Boobialla)	R		3	2014	Clay soils, often in saline situations	Unlikely
Dodonaea procumbens (Trailing Hopbush)	V	VU	3	1983	Low, wet areas in woodland, low open forest and grassland on sands and clays	Unlikely
Source; 1- BDBSA, 2 - AoLA, 3 – NatureMaps 4 – Observed/recorded in the field, 5 - Protected matters search tool, 6 – others NP&W Act; E= Endangered, V = Vulnerable, R= Rare EPBC Act; Ex = Extinct, CR = Critically endangered, EN = Endangered; VU = Vulnerable						

Threatened fauna

Twenty-three state threatened fauna species under the NP&W Act were identified in the NatureMaps search as being previously recorded within a 5 km radius of Block D. Eight of these are also considered nationally threatened under the EPBC Act (see Table 4 below). The likelihood of eight of these species occurring in the study area was deemed likely or possible, but none were recorded during the field survey. The presence of one species, *Dromaius novaehollandiae* Emu was confirmed as fresh scats and tracks were observed during the field survey.

Table 4. Fauna species observed on site, or recorded within 5km of the SEB application area since 1995, or the vegetation is considered to provide suitable habitat

Species (common name)	NP&W Act	EPBC Act	Data source	Date of last record	Species known habitat preferences	Likelihood of use for habitat – Comments
Actitis hypoleucos (Common Sandpiper)	R		3	1993	Coastal or inland wetlands (saline or fresh), on muddy edges and rocky shores	Unlikely
Arenaria interpres interpres (Ruddy Turnstone)	R		3	2008	Exposed coastal rocks and reefs and on beaches	Unlikely
Biziura lobata menziesi (Musk Duck)	R		3	2004	Swamps, lakes, tidal inlets and bays	Unlikely
Cereopsis novaehollandiae novaehollandiae (Cape Barren Goose)	R		3	2007	Offshore islands while breeding,	Unlikely

					improved pasture on mainland	
Corcorax melanorhamphos (White-winged Chough)	R		3	1996	Woodlands and taller mallee, feeding among the leaf litter.	Possible
Dromaius novaehollandiae (Emu)	ssp	ssp	3,4	2017	Sclerophyll forests and savanna woodland	Known. Fresh scats observed during field survey
Egretta sacra sacra (Pacific Reef Heron)	R		3	1998	Beaches, rocky shores, tidal rivers and inlets, mangroves and exposed reefs	Unlikely
Haemotopus fuliginosus fuliginosus (Sooty Oystercatcher)	R		3	2017	Rocky coastline, estuaries	Unlikely
Haemotopus longirostris (Pied Oystercatcher)	R		3	2020	Sandy beaches, estuaries	Unlikely
Halobaena caerulea (Blue Petrel)		VU	3	1981	Islands in the sub-Antarctic southern oceans	Unlikely
Lichenostomus cratitius occidentalis (Purple-gaped Honeyeater)	R		3	2003	Mallee heathland, shrubby vegetation	Possible
Macronectes giganteus (Southern Giant Petrel)	V	EN	3	2007	Large pelagic seabird of the Southern Ocean	Unlikely
Macronectes halli (Northern Giant Petrel)		VU	3	2009	Large pelagic seabird of the Southern Ocean	Unlikely
Neophema elegans elegans (Elegant Parrot)	R		3	1996	Open areas in grasslands, shrublands, mallee, woodlands, heath, saltmarsh and farmland	Likely
Neophema petrophila zietzi (Rock Parrot)	R		3	2017	Coastal dunes, saltmarsh, rocky islands	Unlikely
Psophodes leucogaster leucogaster (White-bellied Whipbird eastern ssp)	E	VU	3	2019	Dense coastal heath thickets, dense mallee scrub	Possible
Stagonopleura guttata (Diamond Firetail)	V		3	2019	Grassy woodland, forests, mallee	Possible
Sternula nereis nereis (Fairy Tern)	E	VU	3	2012	Coasts, estuaries	Unlikely

Stipiturus malachurus (Southern Emuwren)	ssp	ssp	3	1999	Dense scrub, heath, coastal heath, dune vegetation	Likely
Strepera versicolor (Grey Currawong)	ssp		3	2015	Forests, woodlands, mallee and heaths	Possible
Hydrurga leptonyx (Leopard Seal)	R		3	2009	Antarctic and sub-Antarctic regions	Unlikely
Chelonia mydas (Green Sea Turtle)	V	VU	3	1980	Coral reefs and seagrass pastures	Unlikely
Varanus rosenbergi (Heath Goanna)	V		3	2020	Heath, open forest, sand dunes, coastal areas and woodland	Likely
Source; 1- BDBSA, 2 - AoLA, 3 – NatueMaps 4 – Observed/recorded in the field, 5 - Protected matters search tool, 6 – others NP&W Act; E= Endangered, V = Vulnerable, R= Rare EPBC Act; Ex = Extinct, CR = Critically endangered, EN = Endangered; VU = Vulnerable						

Criteria for the likelihood of occurrence of species within the Study area.

Likelihood	**Criteria**
Highly Likely/Known	Recorded in the last 10 years, the species does not have highly specific niche requirements, the habitat is present and falls within the known range of the species distribution or; The species was recorded as part of field surveys.
Likely	Recorded within the previous 20 years, the area falls within the known distribution of the species and the area provides habitat or feeding resources for the species.
Possible	Recorded within the previous 20 years, the area falls inside the known distribution of the species, but the area provides limited habitat or feeding resources for the species. Recorded within 20 -40 years, survey effort is considered adequate, habitat and feeding resources present, and species of similar habitat needs have been recorded in the area.
Unlikely	Recorded within the previous 20 years, but the area provides no habitat or feeding resources for the species, including perching, roosting or nesting opportunities, corridor for movement or shelter. Recorded within 20 -40 years; however, suitable habitat does not occur, and species of similar habitat requirements have not been recorded in the area. No records despite adequate survey effort.

Environmental Benefits

Key environmental outcomes and associated benefits include:

- Preservation and rehabilitation, as a managed SEB on-ground offset, of an area of significant native vegetation,
- Removal of introduced weeds from the site,
- Control of feral animals, especially rabbits,
- Improved vegetation condition,

- Potential increase in the population of the threatened flora species,
- Potential improvement of the area as a habitat for local fauna species,
- Creation of a managed buffer zone between this property and the adjacent Coffin Bay National Park, reducing the spread of environmental weeds into the park.

Summary Table

Block	Site	Vegetation Association	UBS	Gain Score	Area (ha)	SEB Point of Gain
D	D1	*Eucalyptus diversifolia* Very Open Mallee over *Acacia nematophylla/Templetonia retusa/Lasiopetalum discolour*	58.89	5.88	0.82 ha	4.82
D	D2	*Eucalyptus diversifolia* Mallee over a dense sclerophyll shrub understorey	61.86	5.40	3.40 ha	18.37
D	D3	*Allocasuarina verticillata/Melaleuca lanceolata* Low Woodland over *Acacia leiophylla/Acacia nematophylla*	71.70	4.47	3.78 ha	16.88
				Total	**8.00 ha**	**40.07**

SEB Management Plan

The Management Plan for the proposed SEB area is submitted separately as a Word document.

7. Appendices

Appendix 1. Flora species recorded during the field survey.

Note: Asterisk (*) denotes introduced species.

Family	Species	Common	Site					
			A1	B1	C1	D1	D2	D3
Aizoaceae	*Carpobrotus rossii*	Native Pigface				√		√
Apocynaceae	*Alyxia buxifolia*	Sea Box	√	√	√	√	√	√
Asparagaceae	**Asparagus asparagoides f.*	Bridal Creeper				√	√	
Asteraceae	*Asteridea athrixioides*	Wirewort		√	√			√
	Helichrysum leucopsideum	Satin Everlasting	√					√
	Olearia axillaris	Coast Daisy-bush			√		√	√
	Senecio pinnatifolius group	Variable Groundsel	√	√	√	√	√	√
	Vittadinia australasica var. *australasica*	Sticky New Holland Daisy		√	√	√	√	√
Casuarinaceae	*Allocasuarina verticillata*	Drooping Sheoak	√	√	√	√	√	√
Chenopodiaceae	*Rhagodia candolleana* ssp. *candolleana*			√	√			√
Cyperaceae	*Gahnia deusta*	Limestone Saw-sedge	√	√	√	√	√	√
	Gahnia lanigera	Black Grass Saw-sedge	√	√		√	√	√
	Lepidosperma gladiatum	Coast Saw-sedge		√		√	√	√
Epacridaceae	*Leucopogon parviflorus*	Coast Beard-heath		√	√	√	√	√
Ericaceae	*Acrotriche cordata*	Blunt-leaf Ground-berry	√	√	√	√	√	√
	Acrotriche patula	Prickly Ground-berry	√	√	√	√	√	√
Euphorbiaceae	*Adriana quadripartita*	Coast Bitter-bush		√	√	√	√	√
Fabaceae	*Goodia medicaginea*	Western Golden-tip				√	√	√
	Hardenbergia violacea	Native Lilac		√		√	√	√
	Templetonia retusa	Cockies Tongue	√			√	√	√
Frankeniaceae	*Frankenia pauciflora* var.	Southern Sea-heath		√		√		√
Lauraceae	*Cassytha peninsularis*	Peninsula Dodder-laurel				√	√	√
Liliaceae	*Dianella revoluta* var. *revoluta*	Black-anther Flax-lily	√	√	√	√		√
	Lomandra effusa	Scented Mat-rush	√			√	√	
Malvaceae	*Lasiopetalum discolor*	Coast Velvet-bush	√	√	√	√	√	√
Mimosaceae	*Acacia cupularis*	Cup Wattle			√			

	Acacia cyclops	Western Coastal Wattle		√		√		√
	Acacia leiophylla	Coast Golden Wattle		√	√			√
	Acacia longifolia ssp. *sophorae*	Coastal Wattle		√	√			√
	Acacia nematophylla	Coast Wallowa	√	√	√	√	√	√
	Acacia paradoxa	Kangaroo Thorn	√			√		
Myrtaceae	*Eucalyptus diversifolia* ssp. *diversifolia*	Coastal White Mallee	√		√	√	√	√
	Eucalyptus rugosa	Coastal White Mallee	√					
	Melaleuca lanceolata	Dryland Tea-tree	√	√	√	√	√	√
Pinaceae	**Pinus halepensis*	Aleppo Pine		√	√	√	√	√
Pittosporaceae	*Billardiera cymose* ssp.	Sweet Apple-berry						√
	Bursaria spinosa	Bursaria			√	√	√	√
	Pittosporum angustifolium	Native Apricot	√	√	√	√	√	√
Poaceae	*Austrostipa elegantissima*	Feather Spear-grass						√
	Austrostipa flavescens	Coast Spear-grass				√		
	Avena fatua	Wild Oat			√	√		
	**Lagurus ovatus*	Hare's Tail Grass		√	√		√	√
	Rytidosperma caespitosum	Common Wallaby-grass				√		√
Polygalaceae	**Polygala myrtifolia*	Myrtle-leaf Milkwort		√	√			√
Ranunculaceae	*Clematis microphylla*	Old Man's Beard		√	√	√	√	√
Santalaceae	*Exocarpos cupressiformis*	Native Cherry					√	√
	Santalum acuminatum	Quandong			√	√	√	√

Appendix 2. Vegetation Assessment Scoresheets.

Bushland Vegetation Assessment Scoresheets associated with the proposed clearance and SEB Area submitted in Excel format.

Appendix 3. SEB Management Plan

Submitted separately as a Word document

Appendix 4. Development approval – new dwelling

DISTRICT COUNCIL OF LOWER EYRE PENINSULA

DECISION NOTIFICATION FORM

R19/4052
DEV. NO
932/174/2017

DATED 08/11/2017

REGISTERED ON 09/11/2017

TO: K D & B R Slater, [redacted]

LOCATION OF PROPOSED DEVELOPMENT:
[redacted]Coffin Bay 5607

Nature of Proposed Development Single Storey Detached Dwelling

BUILDING CLASSIFICATION:

From DISTRICT COUNCIL OF LOWER EYRE PENINSULA

In respect of this proposed development you are informed that:

Nature of Decision	Consent Granted	No. of Conditions	Consent Refused
Development Plan consent	Granted	9	
Land Division			
State Commission Assessment Panel			
Building Rules consent	Still required		
Public Space			
Other			
DEVELOPMENT APPROVAL	Still required		

One Representation(s) from third parties concerning your Category 3 proposal were received.

If there were representations, any consent and/or approval with conditions does not operate until the periods specified in the Act have expired. Reasons for this decision, any conditions imposed and the reasons for imposing those conditions are set out in the attached sheet.

No work can commence on this development unless a Development Approval has been obtained. If one or more consents have been granted on this Notification form, you must not start any site works or building work or change the use of the land until you have also received notification of a Development Approval.

Date of Decision 6 March 2019

Signed: .....
LEITH BLACKER
MANAGER DEVELOPMENT & ENVIRONMENTAL SERVICES

DISTRICT COUNCIL OF LOWER EYRE PENINSULA

FOR ENQUIRIES:

HEAD OFFICE:
32 Railway Terrace, CUMMINS SA 5631
Postal Address: Box 41, CUMMINS SA 5631
Telephone: (08) 8676 0400 Fax: (08) 8676 2375
Email: mail@dclep.sa.gov.au

BRANCH OFFICE:
38 Washington Street, PT LINCOLN SA 5606
Postal Address: Box 130, PT LINCOLN SA 5606
Telephone: (08) 8623 0600 Fax: (08) 8683 0232
Email: development@dclep.sa.gov.au

DEV. NO 932/174/2017

DEVELOPMENT PLAN CONSENT CONDITIONS:

1 The development hereby approved shall be undertaken strictly in accordance with the Floor Plan and Elevations prepared by Lowe and Redding Design (Project number 17-123 dated November 2017);

2 The residence shall be sited on Allotment 603 in accordance with the updated Site Plan prepared by P. A. Dansie and Associates (Project number 15283 dated 23 October 2017);

3 Native vegetation shall be cleared in accordance with the approval granted by the Native Vegetation Council by letter dated 27 June 2016 to Kane Slater and accompanying attachments and plans;

4 Stormwater from the development hereby approved shall be managed in accordance with the Stormwater Calculations prepared by Stassi Consulting Engineers (Job number 16290 dated 20 June 2016);

5 Sufficient vegetation clearance along the route of the proposed driveway shall be carried out to create safe access/egress for bushfire fighting appliances, other emergency vehicles and occupants;

6 A minimum dedicated supply of 22,000 litres of water shall be available on the development site at all times for bushfire fighting purposes;

7 The dwelling shall be connected to a rainwater tank with a storage capacity of not less than 150,000 litres for domestic consumption and use;

8 The provision of and access to the dedicated water supply for fire fighting purposes shall be in accordance with the same requirements of Part 2.3.4.1 of the Minister's Code: Undertaking development in Bushfire Protection Areas, Amended October 2012, ("the Minister's Code") applying to High Bushfire Risk areas;

9 An Asset Protection Zone shall be established and maintained around the proposed dwelling in accordance with Part 2.3.5 of the Minister's Code.

Reason for conditions: The ensure the approved development conforms to the relevant requirements of the Development Plan, that safe and convenient access is provided to the dwelling for all vehicle types, and the dwelling is designed and sited to reduce the impact of bushfire.

Planning Advisory Notes

Nil.

REASONS FOR CONDITIONS: To ensure adequate compliance with the provisions of the Development Act, 1993.

NOTE: Section 44 (4) A person must not contravene, or fail to comply with a condition imposed under this division.

PENALTY - Division 3 Fine - 7 years Imprisonment/$30,000.

SIGNED: ..... DATE: 6 March 2019

LEITH BLACKER
MANAGER DEVELOPMENT & ENVIRONMENTAL SERVICES

PLEASE NOTE:

A person may give notice required by Building Rules Assessment conditions in the following manner:

by leaving a written notice with an authorised officer of Council;
by posting a written notice to Council;
by facsimile to the Council;
by email to the Council;
by telephone to the Council.

You may have a right of appeal if this notification is:

a refusal; or,
a consent with conditions.
Such appeal must be lodged with the ERD Court:
The Environment Resources and Development Court
Samuel Way Building
Victoria Square
GPO BOX 2465
ADELAIDE 5001
Phone Number for General Enquiries: (08) 8204 0300

Appendix 5. Development approval – tourist accommodation

DISTRICT COUNCIL OF LOWER EYRE PENINSULA

DECISION NOTIFICATION FORM

R20/16305
DEV. NO
932/167/2019

DATED 06/12/2019

REGISTERED ON 06/12/2019

TO: K & B Slater, [redacted]

LOCATION OF PROPOSED DEVELOPMENT:
[redacted] Coffin Bay 5607

Nature of Proposed Development Tourist Accommodation (Four Eco-Pods)

BUILDING CLASSIFICATION:

From DISTRICT COUNCIL OF LOWER EYRE PENINSULA

In respect of this proposed development you are informed that:

Nature of Decision	Consent Granted	No. of Conditions	Consent Refused
Development Plan consent	Granted	7	
Country Fire Service conditions		37	
State Commission Assessment Panel			
Building Rules consent			
Public Space			
Other			
DEVELOPMENT APPROVAL	**Still Required**		

Two (2) Representation(s) from third parties concerning your Category 3 proposal were received.

If there were representations, any consent and/or approval with conditions does not operate until the periods specified in the Act have expired. Reasons for this decision, any conditions imposed and the reasons for imposing those conditions are set out in the attached sheet.

No work can commence on this development unless a Development Approval has been obtained. If one or more consents have been granted on this Notification form, you must not start any site works or building work or change the use of the land until you have also received notification of a Development Approval.

Date of Decision 23 July 2020

Signed: .....
LEITH BLACKER
DIRECTOR DEVELOPMENT & ENVIRONMENTAL SERVICES

DISTRICT COUNCIL OF LOWER EYRE PENINSULA

FOR ENQUIRIES:

HEAD OFFICE:
32 Railway Terrace, CUMMINS SA 5631
Postal Address: Box 41, CUMMINS SA 5631
Telephone: (08) 8676 0400 Fax: (08) 8676 2375
Email: mail@dclep.sa.gov.au

BRANCH OFFICE:
38 Washington Street, PT LINCOLN SA 5606
Postal Address: Box 130, PT LINCOLN SA 5606
Telephone: (08) 8623 0600 Fax: (08) 8683 0232
Email: development@dclep.sa.gov.au

DEV. NO 932/167/2019

DEVELOPMENT PLAN CONSENT CONDITIONS:

1. The development hereby approved shall be carried out in accordance with the plans and documentation submitted, and stamped by the Council received on 4 March 2020 and 12 March 2020, as contained in Development Application 932/167/19 except where varied by any conditions of consent;

   Reason: To ensure the development is undertaken in accordance with the approved plans, drawings, specifications and other documents submitted.

2. The primary access to the development shall be via Vonnie Road. An "Access Licence" shall be obtained from the Department for Environment and Water for the use of the fire access track in the Coffin Bay National Park and shall be utilised as a secondary access/egress only.

   Reason: Vonnie Road is an all-weather public road.

3. Each tourist accommodation pod must be connected to an approved wastewater disposal system and installed to the requirements of the South Australian Public Health Wastewater Regulations under the South Australian Public Health Act. Work cannot commence on site until Council has approved the proposed waste control system. A separate application is required for the installation of a wastewater system.

   Reason: To ensure the development is connected to an approved wastewater disposal system.

4. The tourist accommodation pods must not be occupied during days rated as "Catastrophic" or "Extreme" by the SA Country Fire Service.

   Reason: During such days it is not safe to be in bushfire prone areas.

5. The exterior of the buildings shall be of a colour which is environmentally sensitive with minimal glare properties and enhances the character and amenity of the locality. Exterior painting shall be completed within three (3) months of the construction being completed, to the reasonable satisfaction of the Council or its delegate.

   Reason: To ensure the visual appearance of buildings is compatible with the character and amenity of the locality.

6. All storm water from buildings and paved areas shall be disposed of in accordance with recognised engineering practices and with materials that will not result in the entry of water onto any adjoining property or building, and does not affect the stability of any building.

   Reason: To ensure stormwater is appropriately managed on site.

7. All construction waste and other rubbish shall be stored in such a manner that prohibits any waste being blown from the building site in the event of strong winds. When building works are complete, all waste shall be removed from the site to an approved waste disposal area.

   Reason: To ensure that the activities on the site, including during construction, do not pollute the environment in a way which causes or may cause environmental harm.

CONDITIONS REQUIRED BY THE SA COUNTRY FIRE SERVICE:

1. Access to the building site shall be of all-weather construction, with a minimum formed road surface width of 4 metres and must allow forward entry and exit for large fire-fighting vehicles.

2. The all-weather road shall allow fire-fighting vehicles to safely enter and exit the allotment in a forward direction by incorporating either:
   i. A loop road around the building, OR
   ii. A turning area with a minimum radius of 12.5 metres, OR
   iii. A 'T' or 'Y' shaped turning area with a minimum formed length of 11 metres and minimum internal radii of 9.5 metres.

3. Private access shall have minimum internal radii of 9.5 metres on all bends.

4. Vegetation overhanging the access road shall be pruned to achieve a minimum vehicular clearance of not less than 4 metres in width and a vertical height clearance of 4 metres.

5. The all-weather road shall incorporate passing bays. The combined width of the passing bay & access track shall be 6m, and a minimum formed length of 17 metres. The passing bays should be constructed at 200 metre intervals along the road or driveway. Where it is necessary to provide adequate visibility, such as the nearest point to the public road or other passing bay, passing bays may be required at intervals of less than 200 metres.

6. The water supply outlet shall be easily accessible and clearly identifiable from the access way and at a distance of no greater than 30 metres from the proposed building.

7. The dedicated water supply and its location should be identified with suitable signage (i.e. blue sign with white lettering "FIRE WATER").

8. Access to the dedicated water supply shall be of all-weather construction, with a minimum formed road surface width of 3 metres.

9. Provision shall be made adjacent to the water supply for a flat hardstand area (capable of supporting fire-fighting vehicles with a gross vehicle mass (GVM) of 21 tonnes) that is a distance equal to or less than 6 metres from the water supply outlet.

10. SA CFS appliance inlet is rear mounted; therefore the outlet/water storage shall be positioned so that the SA CFS appliance can easily connect to it rear facing.

11. A gravity fed water supply outlet may be remotely located from the tank to provide adequate access.

12. All non-metal water supply pipes for bushfire fighting purposes (other than flexible connections and hoses for fire-fighting) shall be buried below ground to a minimum depth of 300mm with no non-metal parts above ground level.

13. All water supply pipes for draughting purposes shall be capable of withstanding the required pressure for draughting.

14. Ideally a remote water supply outlet should be gravity fed, where this is not possible the following dimensions shall be considered as the maximum capability in any hydraulic design for draughting purposes:

    The dedicated water supply outlet for draughting purposes shall not exceed 5 metres maximum vertical lift (calculated on the height of the hardstand surface to the lowest point of the storage) and no greater than 6 metres horizontal distance.

    The suction outlet pipework from the tank shall be fitted with an inline non return valve of nominal internal diameter not less than that of the suction pipe and be located from the lowest point of extract from the tank. All fittings shall be installed to allow for easy maintenance.

15. A minimum supply of 22,000 litres of water for each Pod shall be available at all times for bushfire fighting purposes.

16. The minimum requirement of 22,000 litres may be combined with domestic use, providing the outlet for domestic use is located above the 22,000 litres of dedicated fire water supply in order for it to remain as a dedicated supply.

17. The bushfire fighting water supply shall be clearly identified and fitted with an outlet of at least 50mm diameter terminating with a compliant SA CFS fire service adapter, which shall be accessible to bushfire fighting vehicles at all times.

18. The water storage facility (and any support structure) shall be constructed of non-combustible material.

19. The dedicated fire-fighting water supply shall be pressurised by a pump that has –
i. A minimum inlet diameter of 38mm, AND
ii. Is powered by a petrol or diesel engine with a power rating of at least 3.7kW (5hp), OR
iii. A pumping system that operates independently of mains electricity and is capable of pressurising the water for fire-fighting purposes.

20. The dedicated fire-fighting water supply pump shall be located at or adjacent to the building/s to ensure occupants safety when operating the pump during a bushfire. An 'Operations Instruction Procedure' shall be located with the pump control panel.

21. The fire-fighting pump and any flexible connections to the water supply shall be protected by a non-combustible cover that allows adequate air ventilation for efficient pump operation.

22. All bushfire fighting water pipes and connections between the water storage facility and a pump shall be no smaller in diameter than the diameter of the pump inlet.

23. All non-metal water supply pipes for bushfire fighting purposes (other than flexible connections and hoses for fire-fighting) shall be buried below ground to a minimum depth of 300mm with no non-metal parts above ground level.

24. A fire-fighting hose (or hoses) shall be located so that all parts of the building are within reach of the nozzle end of the hose and if more than one hose is required they should be positioned to provide maximum coverage of the building and surrounds (i.e. at opposite ends of the building/s).

25. All fire-fighting hoses shall be capable of withstanding the pressures of the supplied water.

26. All fire-fighting hoses shall be of reinforced construction manufactured in accordance with AS 2620 or AS 1221.

27. All fire-fighting hoses shall have a minimum nominal internal diameter of 18mm and a maximum length of 36 metres.

28. All fire-fighting hoses shall have an adjustable metal nozzle, or an adjustable PVC nozzle manufactured in accordance with AS 1221.

29. All fire-fighting hoses shall be readily available at all times.

30. A vegetation management zone (VMZ) shall be established and maintained within 20 metres of each Pod (or to the property boundaries – whichever comes first) as follows:
    i. The number of trees and understorey plants existing and to be established within the VMZ shall be reduced and maintained such that when considered overall a maximum coverage of 30% is attained, and so that the leaf area of shrubs is not continuous. Careful selection of the vegetation will permit the 'clumping' of shrubs where desirable, for diversity, and privacy and yet achieve the 'overall maximum coverage of 30%'.
    ii. Reduction of vegetation shall be in accordance with SA Native Vegetation Act 1991 and SA Native Vegetation Regulations 2017.

iii. Trees and shrubs shall not be planted closer to the building(s) than the distance equivalent to their mature height.
iv. Trees and shrubs must not overhang the roofline of the building, touch walls, windows or other elements of the building.
v. Shrubs must not be planted under trees or must be separated by at least 1.5 times their mature height from the trees' lowest branches.
vi. Grasses within the zone shall be reduced to a maximum height of 10cm during the Fire Danger Season.
vii. No understorey vegetation shall be established within 1 metre of the building/s (understorey is defined as plants and bushes up to 2 metres in height).
viii. Flammable objects such as plants, mulches and fences must not be located adjacent to vulnerable parts of the building such as windows, decks and eaves
ix. The VMZ shall be maintained to be free of accumulated dead vegetation.

31. The applicants to prepare and display a BUSHFIRE SURVIVAL PLAN (BSP) designed specifically for the purpose of any guests that may be in residence during a bushfire event, especially during the Fire Danger Season.

32. This BSP should give clear directions to persons that may be unfamiliar with the area/locality and unfamiliar with what protective actions they may need to take to protect their lives during a bushfire event, including when to take such protective actions.

33. The BSP should address the possibility that the owners may not be present at the time of the bushfire event.

34. The BSP should not expect guests to be involved in fire-fighting operations.

35. The SA CFS 'Bushfire Safety and Survival for Business and Organisations' document (refer to CFS website) should be utilised as a basis for information and the drafting of the (GUEST) BSP.

36. The applicant should consider reducing operating hours and restrictions on days of extreme weather or bushfire events.

37. Given the complexities that the subject site presents, SA CFS further recommends the installation of a Manifest Box at the entrance of the property. This box (which looks a bit like a small meter box), should be red with white writing 'Fire Protection system' or similar, and clearly visible to fire crews as they access the property. Containing a site plan highlighting vehicle access, turning ability, building location, water i.e. fill locations, and fire protection equipment, and on-site hazards or storage of dangerous materials i.e. LPG, fuels or chemicals with a list of emergency contact phone numbers.

Planning Advisory Notes:

1. South Australia's native vegetation (including roadside vegetation) is protected by the NativeVegetation Act 1991 and the Native Vegetation Regulations 2003. Clearance of native vegetation not occur until any necessary approvals from the Native Vegetation Council have been received. Please contact the Department of Environment, Water and Natural Resource's Native Vegetation and Biodiversity Management Unit for further advice by phone 8303 9777 or email nvc@sa.gov.au.

2. The State Planning system is currently in the process of significant planning reforms. As of 31 July 2020 the District Council of Lower Eyre Peninsula will be transferred to the Planning and Design Code under the Planning, Development and Infrastructure Act 2016. The Planning and Design Code will replace the Lower Eyre Peninsula Council Development Plan. Therefore, some areas may see shifts in the principles governing development in their area.

   Further details in relation to the Planning Reforms can be found at https://www.saplanningportal.sa.gov.au/planning_reforms

Your Consent is valid for a period of 12 months from the date of this Consent and you must have obtained a Building Rules Consent and Development Approval within this period. Should Development Approval not be achieved within this timeframe, your consent will lapse and a new development application must be lodged, unless an extension is obtained. Should a request for extension be made after 31 July 2020, your request will be subject to the transitional provisions of the Planning, Development and Infrastructure Act 2016.

Country Fire Service Advisory Notes:

1. A site bushfire attack assessment was conducted in accordance with the National Construction Code of Australia [NCC] and Australian Standard™3959 (AS3959) "Construction of Buildings in Bushfire Prone Areas". This BAL report is considered relevant at the date of assessment: BAL FZ (Flame Zone).

2. A lower BAL (BAL 19) may be achievable should significant modification to the existing vegetation occur and a 20m Vegetation Management Zone (VMZ) is implemented and maintained.

3. Compliance with the fire protection requirements is not a guarantee the building will not burn, but its intent is to provide a 'measure of protection' from the approach, impact and passing of a bushfire.

REASONS FOR CONDITIONS: To ensure adequate compliance with the provisions of the Development Act, 1993.

NOTE: Section 44 (4) A person must not contravene, or fail to comply with a condition imposed under this division.

PENALTY - Division 3 Fine - 7 years Imprisonment/$30,000.

SIGNED: ..... DATE: 23 July 2020

LEITH BLACKER
DIRECTOR DEVELOPMENT & ENVIRONMENTAL SERVICES

PLEASE NOTE:

A person may give notice required by Building Rules Assessment conditions in the following manner:

by leaving a written notice with an authorised officer of Council;
by posting a written notice to Council;
by facsimile to the Council;
by email to the Council;
by telephone to the Council.

You may have a right of appeal if this notification is:

a refusal; or,
a consent with conditions.
Such appeal must be lodged with the ERD Court:
The Environment Resources and Development Court
Samuel Way Building
Victoria Square
GPO BOX 2465
ADELAIDE 5001
Phone Number for General Enquiries: (08) 8204 0300

Appendix 6. Photolog

Position: 53S 542138E 6168017N **Direction** South 170° **Site A1:** House site

Position: 53S 541918E 6168052N **Direction** East 80° **Site B1:** Ecopod 1

Position: 53S 541831E 6167987N **Direction** West 250° **Site C1:** Ecopod 2

Position: 53S 542122E 6168036N **Direction** West 250° **SEB Site D1:** Very open mallee

Position: 53S 542220E 6167902N **Direction** West 278° **SEB Site D2:** Mallee, along national park boundary

Position: 53S 542189E 6167976N **Direction:** West 250° **SEB Site D2:** Mallee

Position: 53S 541831E 6167987N **Direction:** West 250° **SEB Site D3:** Low woodland

Position: 53S 541876E 6168046N **Direction** West 250° **SEB Site D3:** Low woodland