

Native Vegetation Clearance Data Report

Holland Residential Subdivision

Clearance under the *Native Vegetation Regulations 2017*

March 2026

Prepared by Matthew Humphrey, Senior Environmental Consultant



Version Control

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Client				
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0.1	Matthew Humphrey	First draft for internal review	11 th March 2026	For Review
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Appendix 1: Flora Species List

Attachments:

1. Bushland Assessment Scoresheets (Excel format).
2. Mapping Files (in Shapefile format)

1. Application information

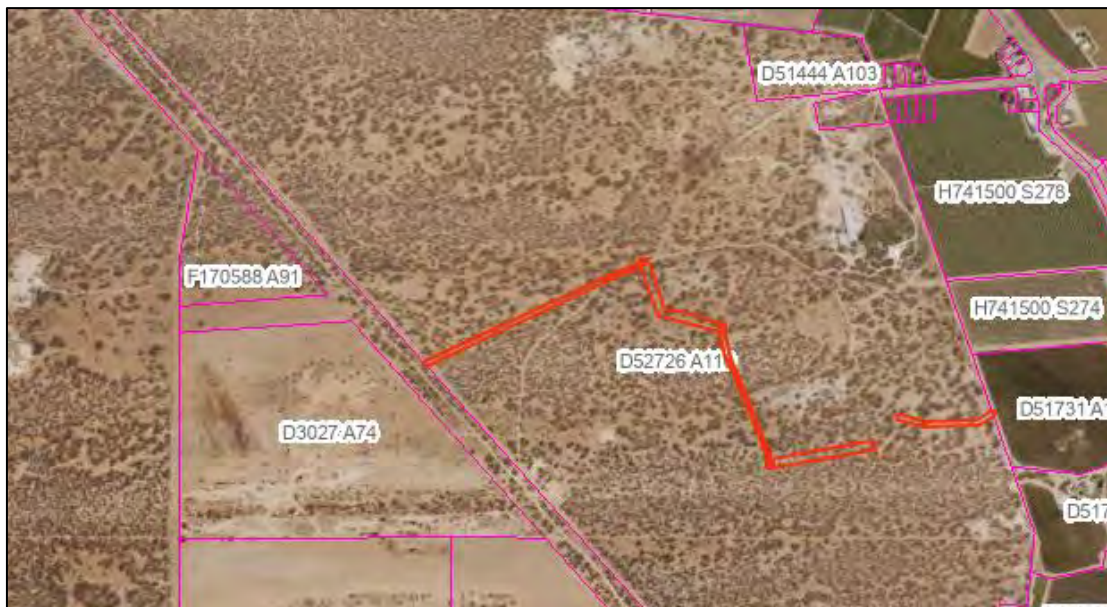
Application Details

Applicant:			
Key contact:			
Landowner:	As Above		
Site Address:	287 Story Avenue, Cooltong		
Local Government Area:	Renmark Paringa	Hundred:	Chaffey IA
Title ID:	CT 6159/269	Parcel ID	D52726 A110

Summary of proposed clearance

Purpose of clearance	Clearance relating to subdivision of a large allotment into 2 for residential development. Clearance required for boundary fencing alignment between parcels with pre identified building envelope and utility access established.
Native Vegetation Regulation	Regulation 12, Schedule 1; clause 35, Residential Subdivision
Description of the vegetation under application	<i>Eucalyptus oleosa</i> and <i>E. socialis</i> Woodland in good condition.
Total proposed clearance - area (ha) and number of trees	1.01998 ha
Level of clearance	Level 4
Overlay (Planning and Design Code)	Native Vegetation Overlay

Map of proposed clearance area



Mitigation hierarchy	Refer to Section: Address the mitigation Hierarchy.
SEB Offset proposal	Payment into the Native Vegetation Fund of \$21,870.05 (no GST) plus Administration Fee of \$1,202.85 (GST incl) = \$23,072.90

2. Purpose of clearance

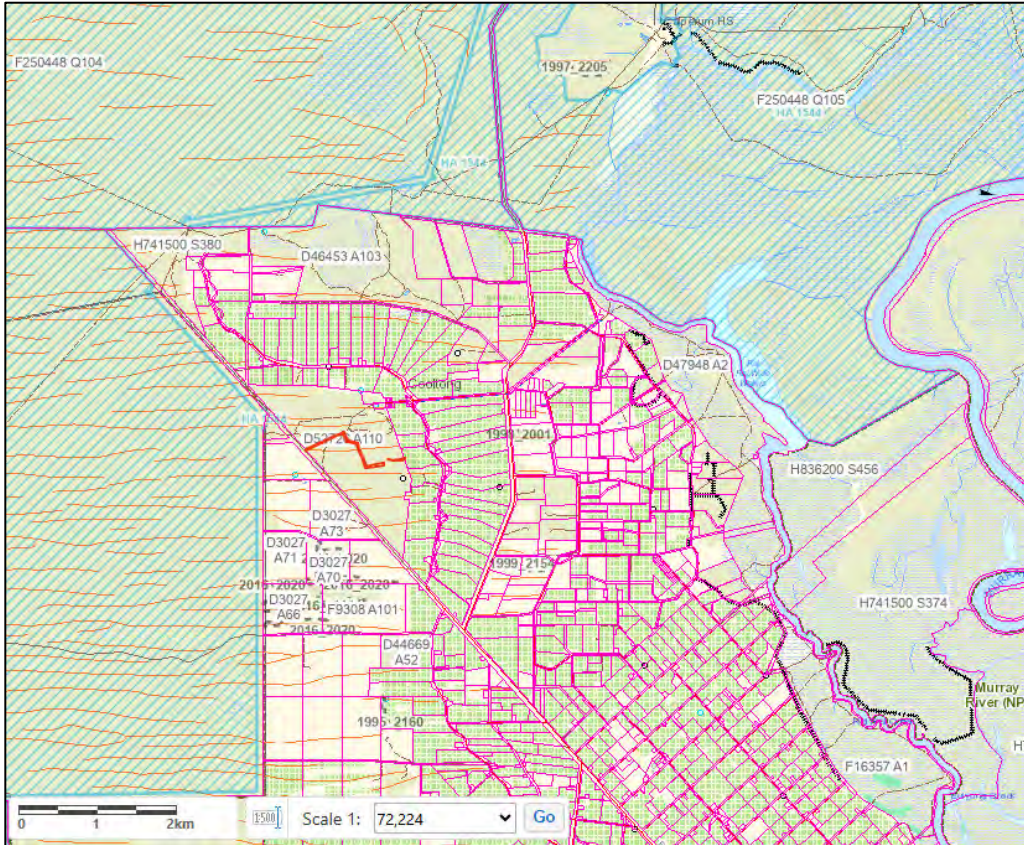
2.1 Description and Background

The native vegetation clearance is incidental to a residential subdivision. The land parcel is approximately 200ha, and the proposal is to sub-divide into 2 allotments, with the new allotment approx. 90 ha in size. The current development has been modified particularly to reduce allotment numbers due to the vegetation present and the potential for excessive clearance with a multi allotment development.

Historically, the property has been grazed by domestic stock and has associated infrastructure present such as fencing throughout the area. There are many sheds and storage facilities present onsite, as well as degraded areas which are devoid of native vegetation. The property adjoins a large area managed for conservation to the west (Calperum Station under Heritage Agreement), as well as adjoining horticultural development, predominantly vines and almond groves to the north and east. The southwestern edge of the property is bounded by a public road. Adjoining parcels are lifestyle blocks around 30-40ha in size and largely cleared.

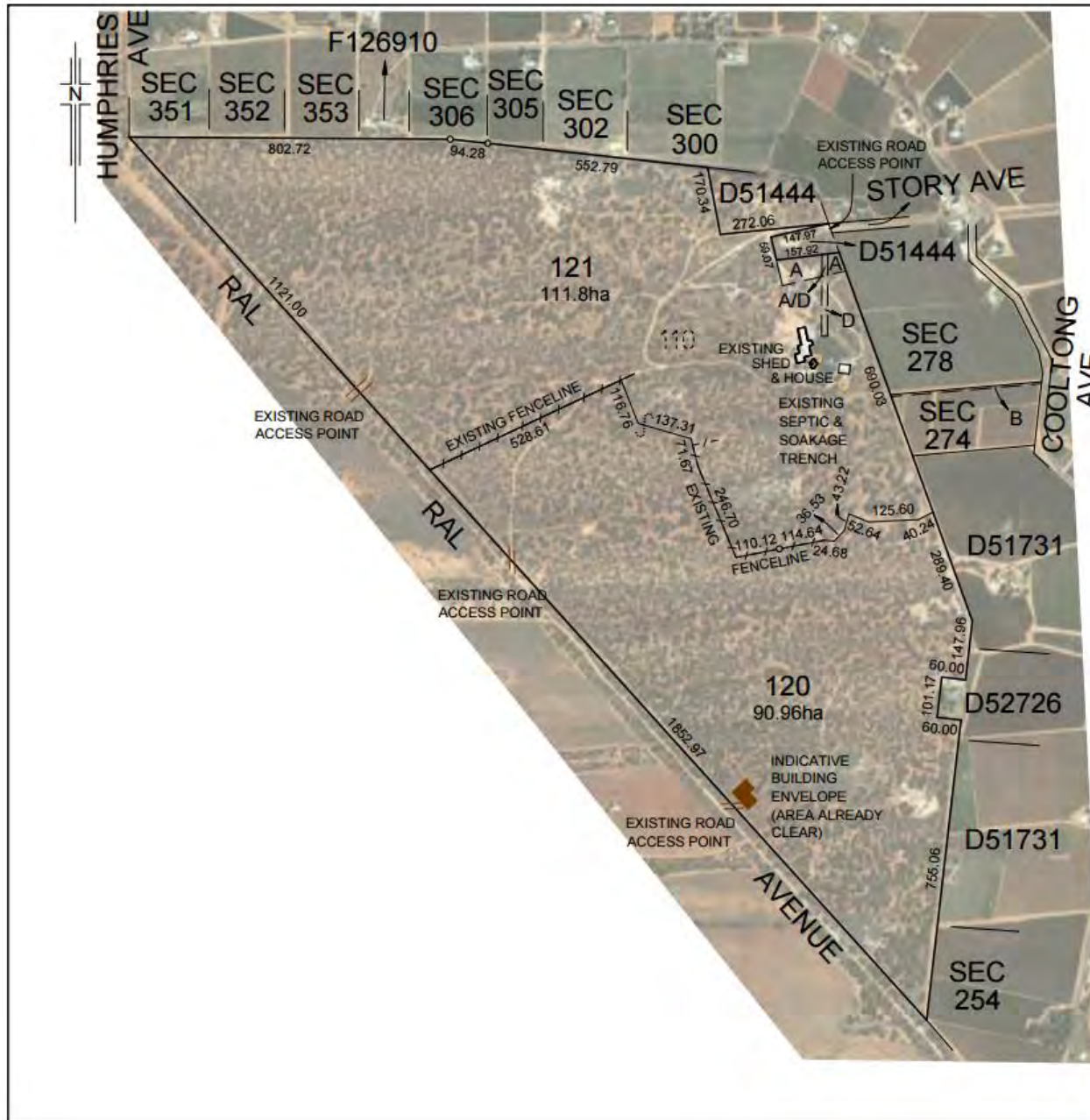
2.2 General location maps





2.3 Details of the Proposal – Refer Site Plans Below

The project aims to subdivide one land parcel into 2 parcels, with areas of 90ha and 111ha respectively. Including the provision for a new housing envelope on the southern side of allotment 120. The boundary between the proposed allotments (allotments 120 and 121), utilizes existing fencelines and naturally clear areas to minimise impacts to native vegetation. Subsequently the proposed boundary alignment does not follow a straight path.



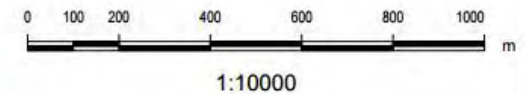
Proposed Land Division

**Allotment 110 in D52726
Chaffey Irrigation Area**

**CERTIFICATE OF TITLE
VOLUME 6159 FOLIO 269**

Renmark Paringa Council

**in the area named
COOLTONG**



Portion of Allotment 121 marked A is subject to an easement (RLG 8264727)
Portion of Allotment 121 marked D is subject to an easement to Distribution Lessor Corporation (subject to Lease 8890000) (TG 8461724)
Allotment 121 only is to retain the easement right over the land marked B (TG 12330925)

Proposed new boundary lines are located either along existing fencelines or along existing lines which are predominantly naturally clear at least 5 metres either side of the route selected

Dimensions and areas are approximate only and are subject to survey

Original Sheet Size A3

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2.4 Approvals required or obtained

- Native Vegetation Act 1991 (Application here-in)
- Planning, Development and Infrastructure Act 2016 (to be lodged)

2.5 Native Vegetation Regulation

This application is suggested to be assessed under the Regulation 12, Schedule 1; clause 35, Residential Subdivision

2.6 Development Application information

Zones

Rural Horticulture - RuH

Overlays

Dwelling ExcisionThe Dwelling Excision Overlay seeks to limit the creation of allotments to accommodate existing dwellings to avoid undermining primary production.

Hazards (Bushfire - Medium Risk)

The Hazards (Bushfire - Medium Risk) 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)

The Hazards (Flooding - Evidence Required) Overlay adopts a precautionary approach to mitigate potential impacts of potential flood risk through appropriate siting and design of development.

Murray-Darling Basin

The Murray-Darling Basin Overlay seeks to ensure sustainable water use in the Murray-Darling Basin area.

Native Vegetation

The Native Vegetation Overlay seeks to protect, retain and restore areas of native vegetation.

3. Method

This section details the assessment undertaken for the subject site, in accordance with the Native Vegetation Act 1991 (SA). The assessment aimed to document vegetation communities, species composition, evaluation of potential ecological function and potential presence of species listed under the National Parks and Wildlife Act 1972 (SA) and the Environment Protection and Biodiversity Conservation Act 1999 (Cth) (EPBC Act). This is overlain with the requirements of the applicable regulation.

Database Searches

Prior to fieldwork, desktop searches were conducted using relevant databases, including:

- NatureMaps (Department for Environment and Water, SA)
- Atlas of Living Australia
- Protected Matters Search Tool (Australian Government)
- Biological Database of South Australia

These searches were undertaken to identify known records of significant and threatened flora and fauna species and ecological communities within the proposed clearance area and surrounding region. Databases were queried for records made since 1995 and within 5km's of the proposed clearance site.

Field Assessment

The field assessment was conducted on 12th of January 2026 by Matthew Humphrey, Senior Environmental Consultant who is a Native Vegetation Accredited Consultant (SA), with a subsequent visit on the 7th of February 2026. Approximately 5 hours spent on site, following the Bushland Assessment Methodology as detailed in the Native Vegetation Council Bushland Assessment Manual. 100 Hectares of native vegetation was surveyed with three clear vegetation associations relating to initial plans identified. A Level 4 assessment was completed due to the size and nature of the proposed native vegetation clearance footprint.

Noting, an initial survey was completed for a much larger proposal to divide the allotment into 17 in 2025 with the aim to avoid and minimise impacts to native vegetation. The proposal was subsequently altered through several revisions of the plan. The survey methodology followed best-practice guidelines for flora and fauna assessments, aligning with the Bushland Assessment Methodology and the Native Vegetation Act 1991 and Regulations 2017; and included:

- Adherence to Regulation 12(35): Residential Sub-division
- Discussion with applicant measures to avoid and minimise native vegetation
- Consideration of all direct, non-direct and cumulative impacts to native vegetation
- Thorough mapping, and ground truthing of plans to ensure all impacts are included in the data report.
- Systematic Vegetation Surveys:
- Assessment of vegetation structure, floristic composition, and condition.

Targeted Searches & Opportunistic Observations:

- Focused searches in suitable habitats for flora species of conservation significance identified during database reviews and on-site.
- Focused search efforts in areas identified as potential habitat for conservation-listed fauna species, as indicated by desktop searches or previous observations.
- Recording flora species of interest and incidental fauna sightings throughout the site.

Fauna Assessment:

Habitat Condition Assessment:

- Evaluation of disturbance levels, weed presence, and overall ecological integrity.
- Evaluation of vegetation structure, resource availability (e.g., nesting sites, water sources), and signs of fauna activity (e.g., scats, tracks, burrows).

The 'Threatened Species Assessment' and 'Vegetation Assessment' sections of this report detail any further investigations undertaken or recommended to detect the presence or suitable habitat for threatened fauna and flora.

With consideration of the scope of the exercise, the sampling time and methods to detect threatened fauna species onsite, it was determined that the fauna assessment could rely on a desktop assessment, corroborated with the field assessment and local knowledge. Rather than costly and time intensive methods which sites which we would expect to have a high level of impact to utilise i.e. Motion-sensor cameras (mammals, reptiles), audio recorders (Birds, Frogs), nocturnal spotlighting, spot count. Scat surveys and nest searches.

The fauna assessment considered habitat suitability with the best-known data for the affected site and surroundings to ascertain the potential presence of threatened or endangered species, and the habitat suitability of such species, listed under the National Parks and Wildlife Act 1972 (SA) and the Environmental Protection and Biodiversity Conservation Act 1999 (Commonwealth). *Habitat suitability refers to the ability of a specific environment to support the survival, reproduction, and overall health of fauna species.

The following databases and tools were queried for fauna records since 1995 and within 5km of the affected area: EPBC Act Protected Matters Search Tool, Biological Database of South Australia, and Atlas of Living Australia.

4. Assessment Outcomes

4.1 Vegetation Assessment

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

The land is underlain by Loxton / Parilla Sands, partly veneered by Blanchetown Clay. These sediments are exposed in lower lying areas. A discontinuous calcrete cap overlies these Tertiary sediments. On the calcrete is a layer of highly calcareous medium textured material (Woorinen Formation), much of which is in rubbly form as a result of repeated wetting and drying during near surface exposure. Low dunes of Molineaux Sand are superimposed over the landscape.

The main terrain is typically undulating rises. Calcrete outcrops occur sporadically on both slopes and flats. Depressions occur where the calcareous materials have been largely removed either by solution or erosion. In these areas the Tertiary sediments are near the surface. The sandhills are typically low to moderate, rounded and oriented east - west.

Gradational sandy loams, some calcareous throughout and some only calcareous in the subsoil, are the dominant soils. Deep and gradational sands are common on sandhills, and shallow stony soils occur to some extent on flats.

The area has a history of light grazing and areas have been used for industrial manufacturing and storage. The vegetation is in reasonable condition with good stands of spinifex under blue mallee on the deeper sands of low dunes with a mix of chenopod shrubs on the flanks of the dunes and in the swales. There are areas of historical degradation that has resulted in weedy patches and obvious areas that sand and building materials have been quarried.

The area is close to Calperum Station which is a heritage agreement area and significant habitat for many mallee bird species and part of a large contiguous mallee vegetation area heading north and west from the site.

EPBC Matters of National Significance

Three Threatened Ecological Communities (TEC's) were identified in the Protected Matters Search Tool Report as being likely to occur may occur within the impact area. A thorough review of the Approved Conservation Advice for all three communities has been undertaken. Below is a summary of the review

River Murray downstream of the Darling River, and associated aquatic and floodplain systems (Critically Endangered) – The site is clearly identified to sit outside of the geographic area in which this TEC applies. It also does not fit the criteria for floodplain or riparian zone in which the TEC is intended to be listed.

Buloke Woodlands of the Riverina and Murray-Darling Depression Bioregions (Endangered) – the site does not contain the vegetation listed in the criteria for this TEC.

Mallee Bird Community of the Murray Darling Depression Bioregion (Endangered) - The mallee woodland vegetation under application is located within the Murray Darling Depression and is part of a patch at least 10 hectares in size. Further analysis of terrestrial birds which are recorded within 20km of the impact site, and within the last 10 years. Below is a table with a list derived from the BDBSA, of Mallee Birds – Dependent, Specialist and Associated species.

Species	Mallee Birds	Date record in the last 10 years (20kms)
<i>Polytelis anthopeplus monarchoides</i> (Regent Parrot)	Dependent	9 th February 2025
<i>Manorina flavigula melanotis</i> (Black-eared Miner)	Specialist	14 th Oct 2023
<i>Leipoa ocellata</i> (Malleefowl)	Specialist	20 th Oct 2018
<i>Microeca fascians</i> (Jacky Winter)	Dependent	23 rd April 2017
<i>Nesoptilotis leucotis</i> (White-eared Honeyeater)	Dependent	8 th May 2025

<i>Pachycephala inornata</i> (Gilbert's Whistler)	Associated	18 th Oct 2024
<i>Lophochroa leadbeateri</i> (Major Mitchell's Cockatoo)	Associated	15 th Oct 2023
<i>Melithreptus brevirostris</i> (Brown-headed Honeyeater)	Associated	20 th Oct 2024
<i>Plectorhyncha lanceolata</i> (Striped Honeyeater)	Associated	13 th May 2025

At least 3 Mallee Bird Community species, any mix of mallee specialist and dependent species, the ecological community may be present. Further surveys would be required to determine the presence of this threatened ecological community, in spatial terms, as well as validity of its application to this proposal.

Condition categories and thresholds - The Mallee Bird Community can exist in a number of forms, ranging from assemblages with a high diversity of mallee specialist or dependent species to assemblages with less mallee specialist or dependent species but a high number of mallee associated or other terrestrial bird species. Meeting the requirements of any of these condition categories and thresholds suggests that the area is good bird habitat for the MBC at this time and/or has the best potential to support even more of the MBC birds in the future if managed and/or restored appropriately. The categories below reflect these different conditions, but do not represent a gradient of condition; all are of equal value.

Category	Thresholds Bird species recorded from current bird surveys or collated existing records within 20km of the site and within the past ten years
Category A: High number of MBC species	At least 5 MBC species, any mix of mallee specialist and dependent species
Category B: Moderate number of MBC species including a mallee specialist species	3 to 4 MBC species INCLUDING at least one mallee specialist species
Category C: Moderate number of MBC species as well as mallee associated species	3 to 4 MBC species PLUS at least 5 mallee associated species
Category D: Moderate number of MBC species as well as terrestrial bird species	3 to 4 MBC species PLUS at least 20 or more terrestrial bird species,

Details of the vegetation association proposed to be impacted

Vegetation Association	A1 <i>Eucalyptus oleosa</i> and <i>E. socialis</i> Woodland over chenopod woodland
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General description	The area is dominated by <i>Eucalypts oleosa</i> and <i>E. socialis</i> over chenopods that appear to have been impacted by grazing in the past but are recovering. There are signs of historical tracks and disturbance in some areas.				
Threatened species or community	No threatened species were sighted during field assessment, using the methods described in this report. Refer to the Threatened Species Summary in Section 4.2 for more information. No confirmed Threatened Ecological Community Present.				
Landscape context score	1.11	Vegetation Condition Score	38.22	Conservation significance score	1.10
Unit biodiversity Score	46.67	Area (ha)	1.01998	Total biodiversity Score	47.60

Site map showing areas of proposed impact

There are 3 main vegetation communities across the parcel with the 2 major types shown below and the proposed clearance area in red. All vegetation types are found within the dune and swale system found locally with the major differences being canopy tree species and the composition of the understorey. The proposed clearance area is within the A1 vegetation type that is further down slope and comprises most of the interdunal space (green) between the deeper sands of the dunes (blue).



Photo log



Photo A looking North West



Photo B Looking North West



Photo C looking North West



Photo D looking South West



Photo E looking North West



Photo F Looking North

Location of Photos



4.2 Threatened Species assessment

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	EPBC Act	NP&W Act	Data source	Date of last record	Species known habitat preferences	Likelihood of use for habitat – Comments
<i>Anhinga novaehollandiae novaehollandiae</i>	Australasian Darter	-	R	3	6/3/2013	Darter's prefer smooth, open waters, for feeding, with tree trunks, branches, stumps or posts fringing the water, for resting and drying its wings. Most often seen inland, around permanent and temporary water bodies at least half a metre deep. It requires waters with sparse vegetation that allow it to swim and dive easily. It builds its nests in trees standing in water and will move to deeper waters if the waters begin to dry up.	Excluded from the assessment due to Aquatic Habitat requirement
<i>Aphelocephala leucopsis</i>	Southern Whiteface	-	V	2	1/1/2020	The Southern Whiteface prefers Dry open forests and woodland and inland scrubs of mallee, mulga and saltbush are the preferred habitat of Southern Whiteface, especially areas with fallen timber or dead trees and stumps.	Possible, the species can move through the landscape utilizing occasional food resources, there is good value breeding habitat available
<i>Burhinus grallarius</i>	Bush Stonecurlew	-	R	2,3	26/8/2007	Inhabits open forests and woodlands with a sparse grassy ground layer and fallen timber. Largely nocturnal, being especially active on moonlit nights. Bush Stone-curlew prefer 'untidy' landscapes covered in fallen timber and debris. The mottled grey-brown colour of their feathers makes them well camouflaged amongst the woody debris of their habitat.	Unlikely – does not provide critical or valuable habitat for this species.
<i>Cinclosoma (Malleeavis) castanotum</i>	Chestnut Quail-thrush	R	-	2	1/1/2001	Chestnut Quail-thrush are primarily found in semi arid to arid regions and particularly in mallee woodlands and shrublands. They have a preference for dense understorey and scrub.	Possible, the species can move through the landscape utilizing occasional food resources, there is good value breeding habitat available
<i>Corcorax melanorhamphos</i>	White-winged Chough	-	R	2,3	13/10/2020	Woodland and forest habitats with trees available for perching and open areas for foraging	Possible, the species can move through the landscape utilizing occasional food resources, there is good value breeding habitat available
<i>Falco (Hierofalco) hypoleucos</i>	Grey Falcon	R	VU	2	1/1/1970	It favours open lowland plains that are crossed by tree-lined watercourses but frequents other -habitats including grassland and sand dune habitats.	Possible, the species can move through the landscape utilizing occasional food resources, there is good value breeding habitat available

<i>Hieraaetus (Hieraaetus) morphnoides</i>	Little Eagle	VU	V	2	1/1/19 70	The Little Eagle is seen over woodland and forested lands and open country, extending into the arid zone	Possible, the species can move through the landscape utilizing occasional food resources, there is good value breeding habitat available
<i>Leipoa ocellata</i>	Malleefowl	VU	V	2,3	11/10/ 2018	Prefers areas of light sandy to sandy loam soils and habitats with a dense but discontinuous canopy and dense and diverse shrub and herb layers. Less frequently found in other eucalypt woodlands, such as Inland Grey Box, Ironbark or Bimble Box Woodlands with thick understorey, or in other woodlands such dominated by Mulga or native Cypress Pine species.	Possible, the vegetation is not suited but they may pass though while foraging
<i>Litoria raniformis</i>	Southern Bell Frog	VU	V	2	1/1/20 23	The Southern Bell Frog is dependent upon permanent freshwater lagoons for breeding. The ideal breeding habitat is the shallow part of lagoons (up to approximately 1.5 m) where there is generally a complex vegetation structure. Adults are usually found close to or in water or very wet areas in woodlands, shrublands, and open and disturbed areas. Eggs and tadpoles can be found in permanent lakes, swamps, dams, and lagoons with still water.	Excluded from the assessment due to Aquatic Habitat requirement
<i>Lophochroa leadbeateri</i>	Major Mitchell's Cockatoo	-	R	2	0/1/19 00	Major Mitchell's Cockatoos usually inhabit dry woodlands in arid and semi-arid areas, usually where eucalypts or acacias dominate the vegetation. They require old trees which support hollows that are large enough to be suitable for nesting in.	Unlikely – does not provide critical or valuable habitat for this species.
<i>Manorina (Myzantha) melanotis</i>	Black-eared Miner	EN	E	2	1/1/19 96	The Black-eared Miner is restricted to large patches of vegetation (30,000 hectares or greater), that have remained unburned for over 40 years, so fire is a key threat to the species. They mostly inhabit large patches of remnant mallee vegetation, but these habitats have been largely lost and fragmented since 1950.	Unlikely – does not provide critical or valuable habitat for this species.
<i>Morelia spilota</i>	Carpet Python		Rare	2,3	1/1/20 00	Carpet Pythons inhabit River Red Gum habitat, but can also be found in rocky areas and other habitats. They sometimes shelter in roof spaces and pump houses and provide a natural vermin control service as they eat rats and mice.	Possible, the vegetation is not suited but they may pass though while foraging
<i>Pachycephala (Timixos) inornata</i>	Gilbert's Whistler	Rare		2	1/1/20 10	Gilbert's Whistlers usually inhabit semi- arid mallee or box-ironbark eucalypt, acacia, cypress-pine or Belah shrublands and woodlands (or mixed assemblages of these), usually with a dense, continuous or patchy understorey of shrubs such as acacias, Eremophila, Dodonaea or Cassia; they inhabit these shrubs in the understorey.	Possible, the vegetation is not suited but they may pass though while foraging
<i>Plectorhyncha lanceolata</i>	Striped Honeyeater	Rare		2	1/1/20 01	The Striped Honeyeater is found in forests and woodlands, often along rivers, as well as mangroves and in urban gardens. The Striped Honeyeater feeds mainly on insects and spiders, but will	Possible, the vegetation is not suited but they may pass though while foraging

						also eat nectar and other plant sugars, along with seeds, berries, and fruit. It is mainly arboreal, feeding in pairs or small flocks in dense foliage, at the lower levels of the canopy.	
<i>Polytelis anthopeplus monarchoides</i>	Regent Parrot	Vulnerable	Vulnerable	3	7/3/2013	Woodland and forest habitats with trees available for perching and areas for foraging, large hollows needed for breeding and can utilise diverse areas for foraging including agronomic land use	Likely, there are known breeding sites nearby and the site may provide a brief foraging opportunity seasonally
<i>Spatula rhynchotis</i>	Australasian Shoveler	Rare		2	1/1/2001	The Australasian Shoveler is found in all kinds of wetlands, preferring large undisturbed heavily vegetated freshwater swamps. It is also found on open waters and occasionally along the coast.	Excluded from the assessment due to Aquatic Habitat requirement
<i>Tringa (Glottis) nebularia</i>	Common Greenshank		Endangered	2	1/1/2006	The Common Greenshank inhabits a variety of wetland habitats across its range. Key habitats include coastal and estuary, swamps with muddy or rocky shorelines and large natural or artificial wetlands.	Excluded from the assessment due to Aquatic Habitat requirement
<i>Varanus varius</i>	Lace Monitor	Rare		2	1/1/2023	Lace Monitors prefers heathy woodland and wet or dry forests and temperate woodland habitats with large Eucalypt trees with hollows. They shelter in burrows, hollow logs, and rock crevices. They utilise open paddocks and grazing land to search for food and shelter and when moving between patches of vegetation.	Possible, the vegetation is not suited but they may pass though while foraging
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 provide 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 provide 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.

Due to the nature of the proposed development (residential subdivision) all possible impacts to vegetation need to be considered at this early stage. As the proposal is for only two parcels, there will be the addition of 1 new dwelling on the new parcel which will be limited to within the building envelope identified, the possible impacts can be limited through site planning and siting of the proposed dwelling. All other cumulative direct and indirect impacts have been considered in this application.

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

Due to the cover of native vegetation on the land parcel, vegetation impacts could not be avoided. The proposed vegetation clearance outlined has been minimized by utilising cleared areas, and potential access for the new allotment via Storey Avenue and the existing fence lines to adhere to the requirements of the Residential Sub-division Regulation.

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).

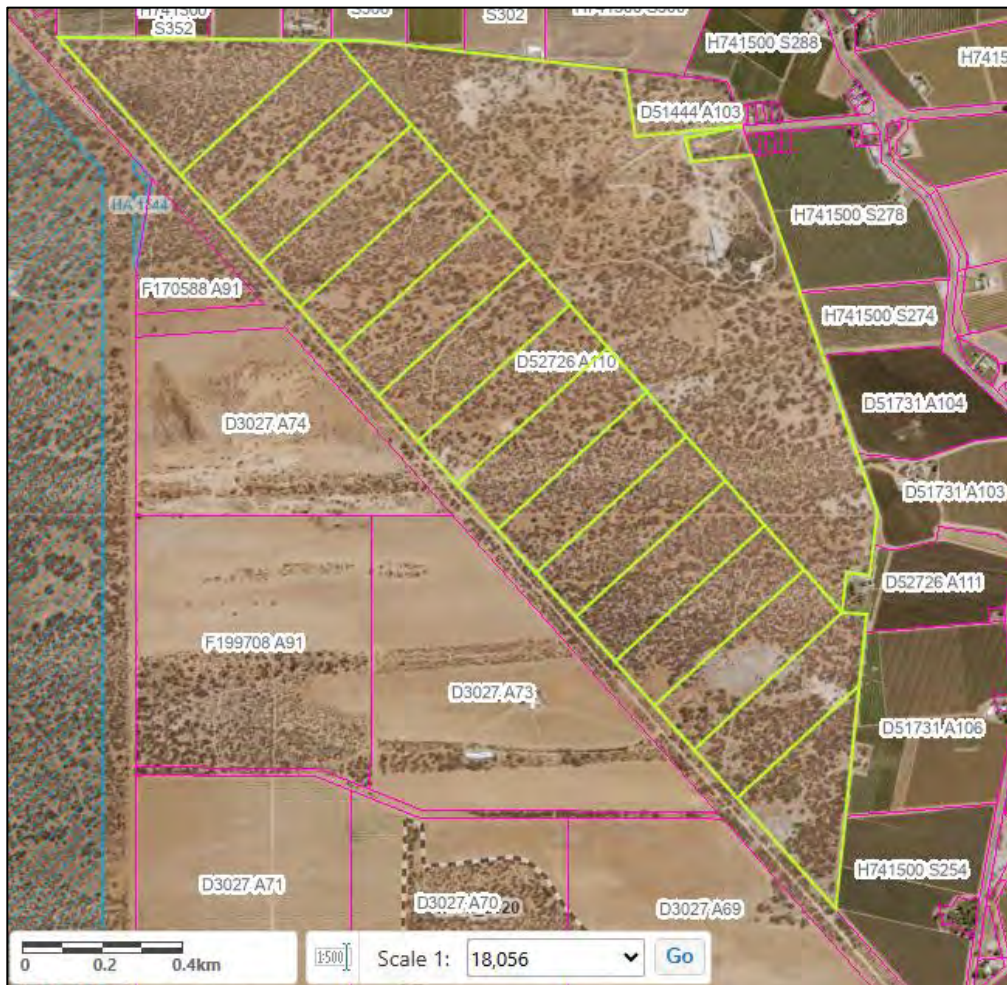
The current proposal (this application) aims to subdivide 1 land parcel into 2. Planning has been undertaken over the previous 12 months to modify the project which initially proposed sub-dividing 1 land parcel into 17 land parcels. After considerable review of previous plans, and in consultation with SA Accredited Consultant Matthew Humphrey and the council, this has been reduced to 1 additional land parcel. The main driver for the

review of the project was due to the implications on native vegetation, particularly for building envelopes and boundary fencing. Refer to plan below (since revised)

The new building envelope is positioned in an area that is comprised of introduced flora and has previously been impacted/ degraded and shows signs of earth works in the past. This site represents the area of least impact for a dwelling due to the lack of native vegetation. The site is also located adjacent to the road enabling vehicle access and also the provision of utilities without further clearance being required.

The principal clearance required for this application relates to clearance for fencing and boundary clearance between the proposed new parcels. The route for the boundary was established along existing fencing where possible to reduce clearance and allow for easier alignment.

Initial subdivision plan with seventeen allotments



- 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.**

No rehabilitation or restoration is included in this proposal.

- 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 applicant proposes to address the SEB Offset obligation by making a payment into the Native Vegetation Fund.

The NVC will only consider an offset once avoidance, minimization and restoration have been documented and fulfilled. The SEB Policy explains the biodiversity offsetting principles that must be met.

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*.

Principle of clearance	Considerations
<p>Principle 1a - it comprises a high level of diversity of plant species</p>	<p><u>Relevant information</u> 14 Native Species 0 Introduced Species</p> <p>Patches; A1 Bushland Plant Diversity Score – 16</p> <p><u>Assessment against the principle: At Variance – -A1</u></p>
<p>Principle 1b - significance as a habitat for wildlife</p>	<p><u>Relevant information</u> Refer to section 4.2 for details of a habitat assessment completed for this proposal. It provides a list of the fauna species that have previously been recorded within a 5km buffer of the site. The vegetation is on the edge of a large contiguous conservation area to the north and west that supports Mallee bird specialists. The site may act as a corridor between cleared horticultural land and intact conservation areas with the River Murray system near the site.</p> <p>Patches; A1 Threatened Fauna Score – 0.1 Unit biodiversity Score – 46.67</p> <p><u>Assessment against the principle: Seriously at Variance - A1</u></p> <p>Moderating factors that may be considered by the NVC – The Native Vegetation Council may choose to consider the 'Impact Significance' moderating factor when assessing this native vegetation application. The Native Vegetation Council may wish to decrease the risk from 'Seriously at variance' to 'At Variance' with impact significance considerations. This determination is at the assessment and discretion of the Native Vegetation Council.</p> <p>It is unlikely that this clearance impact will result in accelerated declines of the listed threatened species. Including a decrease in species occupancy and population size. Due to the location, it is unlikely to fragment existing local threatened species populations or adversely affect critical habitats of a species. It is noted that the cumulative impacts (from clearance, land degradation and other impacts) contribute to declines across the landscape and this can be seen in incremental and long-term degradation of habitats and species decline. However, much of the declines in species' have been observed from long term historical degradation across the landscape.</p>

Principle of clearance	Considerations
<p>Principle 1c - plants of a rare, vulnerable or endangered species</p>	<p><u>Relevant information</u> No threatened flora was located during the field assessment and there are no historical records of threatened flora in a 2km radius of the site.</p> <p>Two rated flora species were recorded within 5km radius of the impact site. Both are perennial, detectable at the time of survey if present. Neither were recorded within the impact area nor the land parcel.</p> <p><i>Dianella porracea</i> (Pale Flax-lily) V – recorded in 2011 <i>Exocarpos strictus</i> (Pale-fruit Cherry) R – recorded in 1983</p> <p>Threatened Flora Score(s) -0</p> <p><u>Assessment against the principle - Not at Variance</u></p>
<p>Principle 1d - the vegetation comprises the whole or part of a plant community that is Rare, Vulnerable or endangered:</p>	<p><u>Relevant information</u> There were no threatened communities under the EPBC Act or threatened ecosystems confirmed to be present through the desktop and field assessments. Three Threatened Ecological Communities (TEC's) were identified in the Protected Matters Search Tool Report as being likely to occur may occur within the impact area.</p> <ul style="list-style-type: none"> • River Murray downstream of the Darling River, and associated aquatic and floodplain systems (Critically Endangered) – not present. • Buloke Woodlands of the Riverina and Murray-Darling Depression Bioregions (endangered) – not present. • Mallee Bird Community of the Murray Darling Depression Bioregion (Endangered) – confirmation through further surveys if required. (as per the Approved Conservation Advice) <p>Threatened Community Score – 1</p> <p><u>Assessment against the principle - Not at Variance</u></p>
<p>Principle 1e - it is significant as a remnant of vegetation in an area which has been extensively cleared.</p>	<p><u>Relevant information</u> Remnancy Figures: IBRA Region: 58% IBRA Subregion:56%</p> <p>There are large areas of contiguous and healthy habitat similar to the area under this application in the immediate vicinity within the IBRA and subregion.</p> <p>Total Biodiversity Score – 47.60</p> <p><u>Assessment against the principle: At Variance -A1</u></p>

Principle of clearance	Considerations
Principle 1f - it is growing in, or in association with, a wetland environment.	<p><u>Relevant information</u> The vegetation is NOT associated with a wetland</p> <p><u>Assessment against the principle: Not at Variance – A1</u></p>
Principle 1g - it contributes significantly to the amenity of the area in which it is growing or is situated.	<p><u>Relevant information</u> The nature of the purpose and size of the clearance within this application will not have a negative impact on the immediate amenity of the area. The property is isolated towards the end of a terminating road and surrounded by horticultural land and native vegetation. The nature of the clearance (fenceline) should not impact amenity and will be minor in the broader landscape.</p>

Principles of Clearance (h-m) will be considered by comments provided by the local NRM Board or relevant Minister. The Data Report should contain information on these principles where relevant and where sufficient information or expertise is available.

4.6 Risk Assessment

Total clearance	No. of trees	-
	Area (ha)	1.01998 ha
	Total biodiversity Score	47.60
Seriously at variance with principle 1(b), 1(c) or 1 (d)		(1b)
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	1	16	1	0	0.1	46.67	1.01998	47.60	1			52.36	\$21,870.05	\$1,202.85
						Total	1.01998	47.60				52.36	\$21,870.05	\$1,202.85

Totals summary table

Economies of Scale Factor	0.5	SEB Uplift Factor	1.10
Rainfall (mm) Factor	253		
SEB Points of Gain/ha Factor	7	Management Cost (\$/ha)	\$25,408

	Total Biodiversity score	Total SEB points required	SEB Payment	Admin Fee	Total Payment
Application	47.60	52.36	\$21,870.05	\$1,202.85	\$23,072.90

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

Pay into the Native Vegetation Fund. - \$21,870.05 plus admin fee of \$1,202.85 = \$23,072.90

Appendix 1: Flora List

Species	Common Name
<i>Maireana pentatropis</i>	Erect Mallee Bluebush
<i>Roepera aurantiaca ssp.</i>	Shrubby Twinleaf
<i>Sclerolaena diacantha</i>	Grey Bindyi
<i>Olearia muelleri</i>	Mueller's Daisy-bush
<i>Rhagodia parabolica</i>	Mealy Saltbush
<i>Maireana appressa</i>	Pale-fruit Bluebush
<i>Maireana pentatropis</i>	Erect Mallee Bluebush
<i>Acacia oswaldii</i>	Umbrella Wattle
<i>Eriochiton sclerolaenoides</i>	Woolly-fruit Bluebush
<i>Roepera apiculata</i>	Pointed Twinleaf
<i>Senna artemisioides ssp. filifolia</i>	Fine-leaf Desert Senna
<i>Eucalyptus oleosa ssp.</i>	
<i>Eucalyptus socialis ssp.</i>	Beaked Red Mallee
<i>Senna artemisioides ssp. petiolaris</i>	