

Clearing Assessment Report (CAR), Vegetation Management Plan (VMP) – CPS 818

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Construction of an Additional Heavy
Vehicle Parking Bay, Albany-Lake Grace
Road (M001) SLK 65.44 – SLK 65.71

Great Southern Region

EOS 3473

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1 PROPOSAL

1.1 Purpose and Justification

Albany Lake Grace Road (M001), also known as Chester Pass Road, is a single-carriageway, sealed road that serves as a vital heavy haulage route connecting northern communities such as Borden, Ongerup, Nyabing, Pingrup, and Lake Grace to Albany, accommodating tourist traffic, freight, and grain transport. This road also runs through the Stirling Range National Park, providing access to popular tourist attractions such as Bluff Knoll and Toolbrunup Peak.

The current road network is deficient in truck stopping bays for south-bound traffic on Albany-Lake Grace Road heading toward Albany. Utilising the existing road reserve, Main Roads' Great Southern Region proposes to construct an additional truck bay on the eastern side of Albany Lake Grace Road at its intersection with Stirling Range Drive, opposite an existing truck bay on the western side.

The scope of works will also include making provision for future toilet blocks at the truck bays by installing hardstands. Environmental and heritage approvals for the installation of the toilet blocks will be sought separately at a later date.

1.1.1 Main Roads Approach to Road Safety and the Environment

Main Roads is committed to minimising the environmental impacts of all of its activities and manages the State road network to achieve balanced economic, social, safety and environmental benefits for the community. Main Roads recognises that Western Australia's environment is significant from a global perspective and the unique conservation values that are contained within its road reserve. Main Roads road network often adjoins natural areas and, in some locations, the reserve itself hosts remnant vegetation with high environmental values. Although the reserves were not established for this purpose, Main Roads recognises that it has a responsibility to conserve the environmental values that occur within the State's road network and minimise the impact its Proposals have on the environment. In addition to providing a safe and efficient road network for all people using the roads under its control, Main Roads is also committed to protecting the natural environment.

In accordance with National and State Government road safety policies, Main Roads is also committed to substantially reducing road trauma on the road network through Safe System principles. The Safe System approach acknowledges that more than two thirds of all serious crashes are due to human error rather than deliberate risk taking (e.g. speeding or drink driving) and seeks to improve behaviour through education and enforcement while managing the safety of vehicles, speeds and the road and road infrastructure. It is shown that improving sub-optimal road formation will substantially reduce the likelihood and severity of road crashes. For example, according to the Road Safety Management Guideline, increasing the sealed shoulder from 0.5 m to 2 m will reduce Killed and Seriously Injured numbers by more than 50%.

As the statutory authority responsible for providing and managing a safe and efficient main road network in Western Australia, Main Roads focuses on improving road safety by thoroughly considering all environmental, economic and community benefits and impacts. It operates on a hierarchy of avoiding, minimising, reducing and then, if required, offsetting our environmental impacts. This has been achieved through changes in Proposal scope and design. Main Roads regularly reduces its clearing footprint by restricting earthworks limits for Proposals, steepening batters, installing barriers, establishing borrow pits in cleared paddocks and avoiding temporary clearing for storage, stockpiles and turn around bays to avoid and minimise its impacts.

Further details on measures to avoid, minimise and reduce are provided in Section 1.5.

1.2 Proposal Scope

Main Roads is proposing to construct a 280 m heavy vehicle parking bay for south bound traffic within the Main Roads-vested road reserve of Albany-Lake Grace Road (M001) SLK 65.44 to 65.71, as shown in **Figure 1**. The parking bay will mirror that of the previously constructed parking bay on the north-bound side of Albany-Lake Grace Road and is adjacent to Stirling Range National Park.

The scope of Works comprises:

- (a) construction and sealing of one heavy vehicle parking bay on Albany-Lake Grace Road, including associated drainage works and line marking
- (b) construction of hardstands for two future toilet block facilities
- (c) installation of signage, guide posts and a picnic table
- (d) maintenance of existing roads and access tracks, and
- (e) safe management of traffic through the Works.

Note: the scope of works includes construction of hardstands for future toilet blocks, but environmental and heritage approvals for the installation of the toilet blocks will be sought separately at a later date.

1.3 Proposal Location

The Proposal's Development Envelope is located within the Main Roads-vested southbound/eastern road reserve of Albany-Lake Grace Road (M001) SLK 65.44 to 65.71 within the City of Albany, as shown in **Figure 1**. The desktop assessment Study Area was confined to a 10 km radius from the Development Envelope, as shown in **Figure 2**.

The parking bay will mirror that of the previously constructed parking bay on the north-bound/western side of Albany-Lake Grace Road and is adjacent to Stirling Range National Park. The central coordinate of the Proposal is -34.39131211, 118.11235253.

1.4 Clearing Details

Proposed Clearing to be undertaken using CPS 818: up to 0.37 ha remnant roadside vegetation within a 0.6 ha Development Envelope.

Areas of Native Vegetation Clearing: The areas of native vegetation to be cleared are within the Development Envelope, as shown in **Figure 1**.

Type of Native Vegetation: The type of vegetation to be cleared under this Proposal is excellent condition *Eucalyptus decipiens*, *E. marginata* Mallee.



Figure 1 Development Envelope

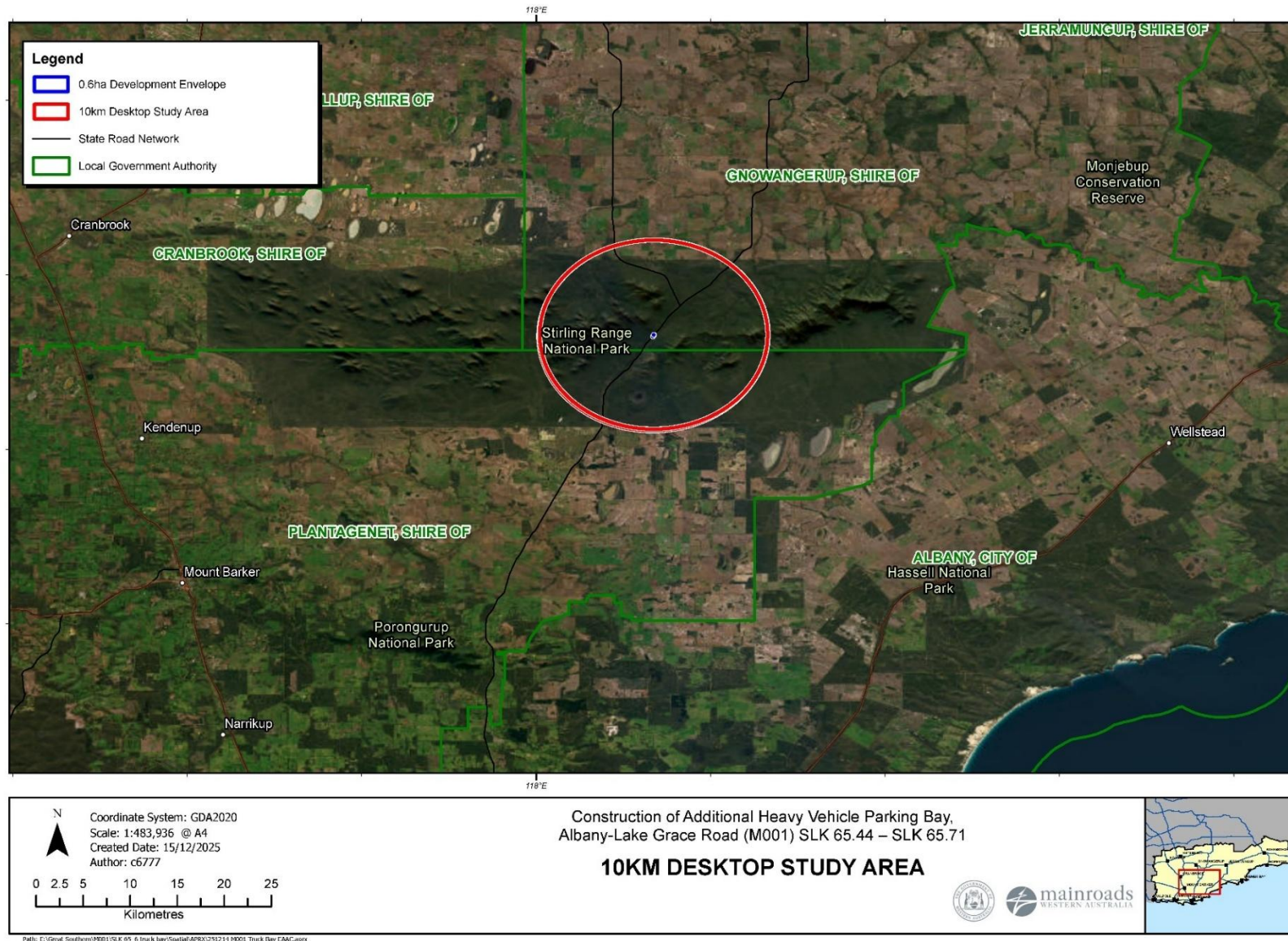


Figure 2 Desktop Study Area from the Development Envelope

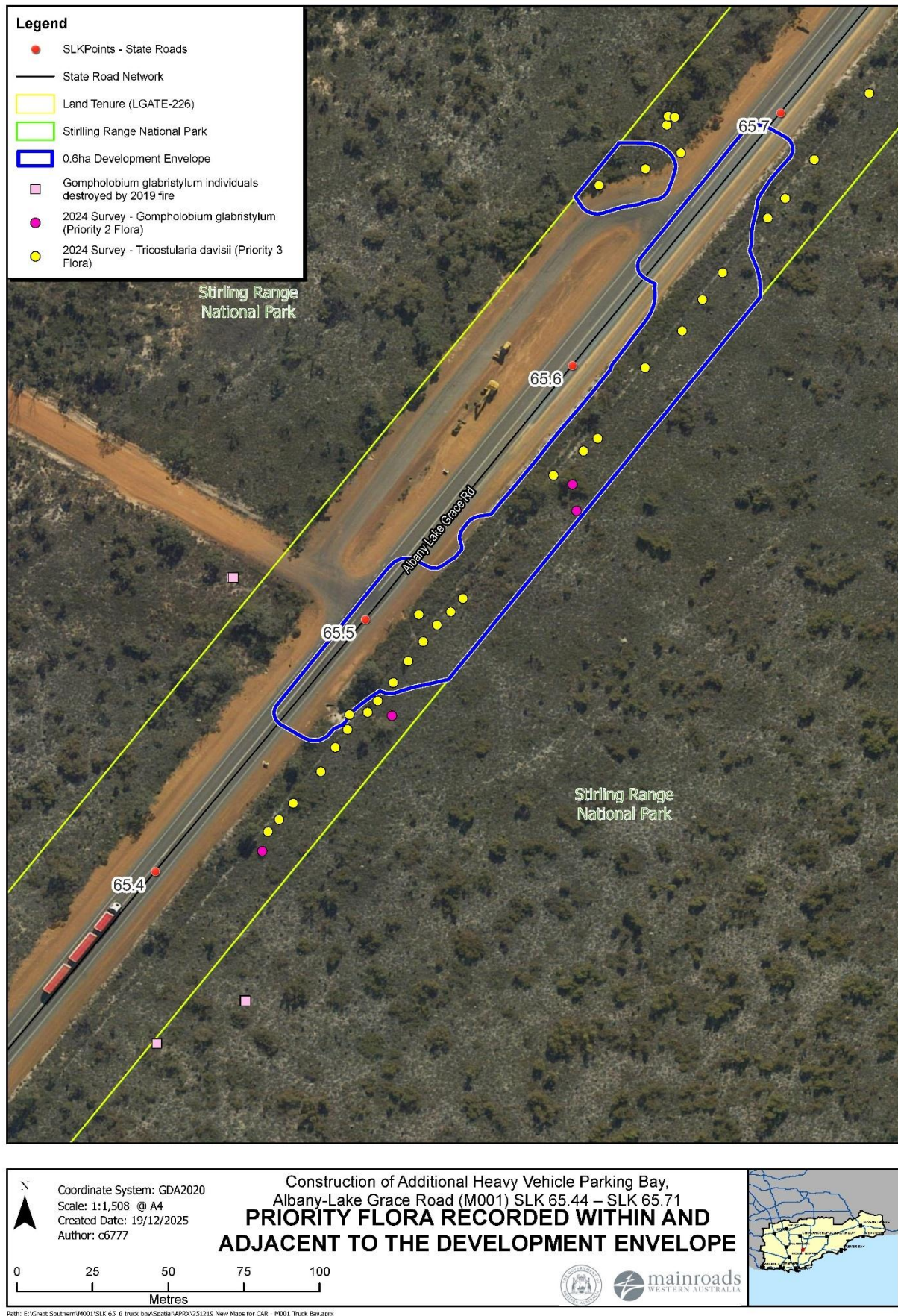


Figure 3. Priority flora recorded within and adjacent to the Development Envelope

1.5 Alternatives to Native Vegetation Clearing Considered During Proposal Development

The truck bay location has been strategically selected based on key fatigue management distances for drivers of heavy vehicles. If they are not constructed, there will be fewer safe stopping areas for heavy vehicles on the Great Southern road network, which could lead to increased deaths or serious injuries from fatigue-related crashes. The location also needed to complement and not conflict with commercial ventures, make provisions for all vehicle and road user types, improve visual and community amenity of the roadside and avoid direct and indirect environmental and heritage impacts.

The location needed to be serviceable all year round (i.e. not susceptible to flooding), whilst maximising a restful and safe journey by being a quiet location where ideally mobile phone reception was available. The location was also driven by engineering and safety factors to ensure it was on a straight ~300 m road section and not too close to curves that would impact sight distances when leaving or re-entering traffic flow. In addition, the truck bay was designed to be parallel to the existing truck bay (rather than staggered) to allow road trains to conduct a full turnaround using the bays in case of emergencies. The location was also advantageous since there was adequate room within the existing road reserve, avoiding the need for land acquisition.

The location also provides the option of retaining existing remnant vegetation to act as a screen, which will minimise disruption to users of the facility by through-traffic and visually enhance the through-road alignment, whilst providing shade for people using the rest areas and habitat for transient fauna. The location was also desirable since it consists of shrubs and scattered trees that provide partial vegetation screening, rather than full screening, so the truck bays will still be visible from the through-road and perceived by road users as a safe place to stop.

1.6 Measures to Avoid, Minimise, Reduce and Manage Proposal Clearing Impacts

The design and management measures implemented to avoid and minimise the potential clearing impacts of the Proposal are provided in Table 1.

Table 1. Measures Undertaken to Avoid, Minimise, Reduce and Manage the Proposal Clearing Impacts

Design or Management Measure	Discussion and Justification
Alignment to one side of existing road	The truck bay was designed to be parallel to the existing truck bay (rather than staggered) to allow road trains to conduct a full turnaround using the bays in case of emergencies. The location was advantageous since there was adequate room within the existing road reserve of the southbound lane of Albany Lake Grace Road, avoiding the need for land acquisition since the road reserve is adjacent to Stirling Range National Park on both sides.
Alternative alignment located within pasture or degraded areas	As outlined in Section 1.5, the truck bay location has been strategically selected based on a number of factors, including key fatigue management distances for drivers of heavy vehicles. The truck bay also needed to be parallel to the existing truck bay (rather than staggered) to allow road trains to conduct a full turnaround using the bays in case of emergencies. As a result, it could not be located within pasture or degraded areas. The truck bay has been designed within the existing road reserve of Albany Lake Grace Road, avoiding the need for land acquisition since the road reserve is adjacent to Stirling Range National Park on both sides.
Simplification of design to reduce number of lanes and/or complexity of intersections	The parking bay has been designed to mirror that of the previously constructed parking bay on the north-bound/western side of Albany-Lake Grace Road.
Steepen batter slopes	The use of steepened 1:4 foreslopes and 1:2 backslopes on the Proposal batters instead of 1:6 allowed for a reduced clearing area and ensured the works did not encroach into Stirling Range National Park. Any further reduction to the batter slopes would impede engineering, drainage and safety standards on highways of this traffic volume.
Installation of barriers	There was no opportunity for barriers in the design that would reduce the clearing footprint, since the main constraint was avoiding encroaching into Stirling Range National Park, which is adjacent to the road reserve on both sides.
Installation of kerbing	There was no opportunity for kerbing in the design. The implementation of kerbing would require the shoulder to be improved for the drainage scheme to operate correctly. In addition, kerbing would increase the earthworks footprint whereas the open cut drains currently on either side of the road are operating effectively.
Use of existing cleared areas for access tracks, construction storage and stockpiling	No temporary clearing for storage, side tracks, stockpiles, turn around bays etc. will be undertaken as part of the Proposal activities. All site facilities, including laydown areas, site offices, materials storage areas, construction vehicles/machinery parking areas and access tracks will be located on previously disturbed or cleared areas.
Drainage modification	A simplified drainage design consistent with the existing surface water regime has been adopted to minimise the earthworks footprint and associated clearing. This involves a combination of lowering the culvert invert levels and reprofiling the approach to Albany Lake Grace Road to minimise the earthworks from culvert inlet and outlet drains and reduce the extent of works, as well as associated impact to potential environmental values.

1.7 Approved Policies and Planning Instruments

The clearing of native vegetation in Western Australia is regulated under the EP Act and the *Environmental Protection (Clearing of Native Vegetation) Regulations 2004* (Clearing Regulations).

In addition to the matters considered in accordance with section 51O of the EP Act, Main Roads has also had regard to the below instruments where relevant.

Other Legislation potentially relevant for assessment of clearing and planning/other matters:

- *Biodiversity Conservation Act 2016* (WA) (BC Act)
- *Conservation and Land Management Act 1984* (WA) (CALM Act)
- *Country Areas Water Supply Act 1947* (WA) (CAWS Act)
- *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act)
- *Planning and Development Act 2005* (WA) (P&D Act)
- *Soil and Land Conservation Act 1945* (WA)
- *Rights in Water and Irrigation Act 1914* (WA)
- *Aboriginal Heritage Act 1972* (WA)

Other relevant policies and guidance documents:

- Environmental Offsets Policy (Government of Western Australia, 2011)
- A guide to the assessment of applications to clear native vegetation (Department of Environment Regulation, 2014)
- Procedure: Native vegetation clearing permits (Department of Water and Environmental Regulation, 2021)
- Environmental Offsets Guidelines (Government of Western Australia, 2014)
- Technical guidance – Flora and Vegetation Surveys for Environmental Impact Assessment (EPA, 2016)
- Technical guidance – Terrestrial Vertebrate Fauna Surveys for Environmental Impact Assessment (EPA, 2020)
- Approved conservation advice under section 266B of the EPBC Act for threatened flora/fauna/vegetation communities.
- *Carnaby's Cockatoo (*Calyptorhynchus latirostris*) Recovery Plan* (Department of Parks and Wildlife, 2013)
- Referral guideline for 3 WA threatened Black Cockatoo species (DCCEEW, 2022)
- Approved Conservation Advice for *Proteaceae Dominated Kwongan Shrublands of the southeast coastal floristic province of Western Australia*. Canberra: Department of the Environment. Department of the Environment (DotE 2014).

2 SCOPE AND METHODOLOGY ASSESSMENT OF CLEARING

Native vegetation will be cleared to accommodate this Proposal. This clearing will be undertaken using the Main Roads Statewide Clearing Permit CPS 818.

To comply with CPS 818, Main Roads must prepare a Clearing Assessment Report (CAR).

This CAR outlines the key activities associated with the Proposal, the existing environment and an assessment of native vegetation clearing. This assessment provides an evaluation of the vegetation clearing impacts associated with the Proposal using the ten Clearing Principles listed under s51 of the *Environmental Protection Act 1986* (EP Act) and strategies used to manage vegetation clearing.

2.1 Report Terminology and Sources

The following terms are used in this Clearing Report:

- **Development Envelope** – The maximum extent within which the Clearing Area will be located. This envelope is larger than the Clearing Area and the Proposal Area to allow for minor changes to the Proposal footprint as the design process continues, and to account for minor and unexpected changes that may occur during construction, such as working to avoid a large tree or encountering buried boulders or services. This flexibility allows the site personnel to make modifications to the Proposal to avoid areas that may contain better environmental values. The CAR has assessed all environmental values within the Development Envelope as though all of these values will be impacted, up to the amount specified within the Clearing Area. The Development Envelope for this Proposal is shown in **Figure 1**
- **Study Area** – The Study Area for the Proposal is the area covered by the Desktop Assessment and confined to a 10 km radius from the Development Envelope, as shown in **Figure 2**.
- **Native Vegetation Clearing Area (Clearing Area)** – The maximum amount of native vegetation to be cleared for the Proposal that will accommodate the designed earthworks and, typically, a nominal buffer to allow for the safe movement of machinery during construction. The Native Vegetation Clearing Area for this Proposal is 0.37 ha.
- **Survey Area** – Area covered by the field surveys, which is typically larger than the Development Envelope.

2.2 Desktop Assessment

A desktop assessment of the Development Envelope was undertaken by viewing internal datasets and other government agency managed databases, and consulting with relevant stakeholders where necessary. GIS layer viewing and mapping is done using ArcMap and/or Main Roads corporate mapping system known as iMaps. Referencing of the GIS layers accessed is done under the relevant methodology section of each clearing principle. Government managed databases were searched to locate additional information, which are found under References in **Section 10**.

2.3 Surveys and Assessments

The following biological and targeted surveys were undertaken to inform this CAR as outlined in Table 2 and a summary of the findings in these reports are presented in **Section 3.1**.

Table 2. Summary of Biological and Targeted Surveys Relevant to the Proposal

Consultant and Survey Name	Survey Details
Southern Ecology (2025). <i>Biological Survey Albany- Lake Grace Road (M001) Truck Bay SLK 65.44 – 65.71</i>	Survey Area: Survey Area comprised 0.92 ha within the full south-bound road reserve of Albany- Lake Grace Road (M001) from SLK 65.44 to 65.71, and the full road reserve north-west of the existing truck bay on the north-bound side. Type: Given the age of the previous surveys and the potential effect of the bushfire, another Biological Survey of the Development Envelope was undertaken in Spring 2024 by Southern Ecology, which included a detailed flora and vegetation survey, targeted significant flora survey, targeted Kwongkan TEC assessment, fauna survey and targeted Black Cockatoo assessment. Timing: Field surveys were undertaken over two days with two personnel on the 11th of October and 23rd of November 2024. Survey Results Shapefile TRIM Ref: D25#530681 Document TRIM Ref: D25#530676

3 SURVEY RESULTS

In accordance with CPS 818 condition 8 (e) (iii), a copy of the executive summary from the Southern Ecology (2025) biological survey is provided in **Appendix 1**.

3.1 Summary and Analysis of Southern Ecology (2025) Biological Survey

In Spring 2024, Southern Ecology (2025) undertook a detailed and targeted flora and vegetation survey, fauna survey and targeted black cockatoo assessment of a 0.9 ha Survey Area on the Albany-Lake Grace Road (M001) road reserve (SLK 65.44 – 65.71), adjacent to the Stirling Range National Park.

Vegetation Type and Condition

The Survey Area occurred on the grey sandy lower-slopes that occur between the quartzitic ridges and low mountains of the Stirling Range. One native remnant open mallee community was recorded, dominated by *Eucalyptus decipiens* and *E. marginata*, in excellent condition.

Weeds

During the 2024 Spring Survey, ten weed species were recorded within the Development Envelope and mostly confined to the road batter - none were listed as Weeds of National Significance or Declared Pests. One weed recorded, Victorian Tea Tree (**Gaudium laevigatum*) is considered locally significant in the City of Albany and was removed during the survey.

Kwongkan TEC

Historically, the lower slopes and flats in the National Park would have supported Kwongkan vegetation, where shrublands rich in Proteaceae occurred. The impact of *Phytophthora* and fire and have altered much of this vegetation (Moore 2007) and many of these shrublands have transitioned to Myrtaceae and Cyperaceae dominated vegetation types.

Southern Ecology (2025) completed a quantitative assessment of the vegetation in the Survey Area, which determined the mean cover of Proteaceae to be 9.1%. Consequently, the cover of Proteaceae falls below the >30% threshold required to align with the Kwongkan TEC. Notably, there was an absence of Proteaceae species that typically develop into large shrubs (i.e., *Banksia attenuata*, *B. baxteri*, *B. coccinea*). These taxa may have previously occurred at the site prior to the introduction

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of *Phytophthora*, but are unlikely to recolonise. The recorded vegetation unit was therefore not considered to be representative of the Kwongkan TEC.

Significant Flora

A total of 163 taxa was recorded from the Survey Area with an average species richness 64.8 ± 4 (S.E.) within 100m². Consequently, the Survey Area could be described to have a low turnover of species (low beta diversity) and moderate-high plot level (alpha) diversity. Populations of two significant taxa are confirmed to occur within the Survey Area - *Gompholobium glabristylum* (Priority 2) and *Tricostularia davisii* (Priority 3); however, Southern Ecology (2025) considered both likely to occur in the vicinity and to be potentially common in the Stirling Range:

- Four individuals of *Gompholobium glabristylum* (Priority 2) were recorded (three within the Survey Area and one additional plant within 7 m), which is a recently described, near endemic to the Stirling Range National Park (one outlying population occurs on Sukey Hill, west of Stirling Range National Park). Southern Ecology (2025) stated that its conservation listing is largely due to deficient population data as it is relatively common on slopes and flats within the range (Western Australian Herbarium, 1998–) and two individuals were previously recorded in the vicinity (< 50 m) (Astron, 2019), but were subsequently killed by fire. Southern Ecology (2025) considered potential suitable habitat for this taxon to be widespread in the vicinity of the Survey Area, with scattered plants potentially found over a wide area.
- *Tricostularia davisii* (Priority 3) was found to be abundant within and adjacent to the Survey Area (total of 607 individuals, 547 within the Survey Area). This taxon has recently been described by Barret et. al. (2021), who notes that “The species range is between Manypeaks and Cape Riche.” and “Further targeted surveys are warranted, but the species is probably not currently threatened.” Southern Ecology (2025) stated that it is their experience that the taxon’s apparent rarity is due to infrequent collection and that it is a widespread and often locally abundant taxon. In the previous survey in the vicinity (Astron 2019), this entity was referred to as *Tricostularia* sp. Wellstead (R. Davis 302). It was previously recorded from the sedge layer in three quadrats (between 0.4 and 11 km from the Survey Area). However, no population census was undertaken as the taxon was not conservation listed at the time of that survey. Southern Ecology (2025) considered that potential suitable habitat for this taxon is widespread in the vicinity of the Survey Area and populations are likely to be found over a wide area.

Fauna Habitat

Southern Ecology (2025) concluded that the open mallee dominated vegetation in the Survey Area provided limited fauna habitat due to low structural diversity and cover in the shrub and canopy layers. The key micro-habitats provided by this habitat type included the soft sandy soils in which fauna species may dig/burrow and the sparse myrtaceous/proteaceous flora species that may provide foraging habitat for a range of birds. A low sedgeland was present in moderate cover that may provide protection for traversing mammals.

Quokka (Threatened) and Western Brush Wallaby (Priority 4) are relatively common in the Stirling Range National Park and are likely to traverse through the site occasionally, but are unlikely to be resident.

Quenda (Priority 4) may utilise the low sedge layer and sandy soil for cover and foraging.

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The Survey Area provided limited habitat for avian fauna due to the open structure and absence of large trees. Western Whipbird (mallee) (Priority 4) was heard calling from a drainage line 150 m west of the Survey Area. Inland Western Rosella (Priority 4), Carnaby's Cockatoo (Threatened) and Baudin's Cockatoo (Threatened) may also traverse through or forage within the Survey Area.

Black Cockatoo Habitat Assessment

A foraging habitat quality assessment for Black Cockatoo species determined the remnant vegetation scores within the Survey Area (0.65 ha) as high quality (7/10) for Carnaby's and low (3/10) for Baudin's Cockatoo. Approximately 10 plants species were present in the Survey Area that are suitable for either Black Cockatoo species.

One confirmed breeding site and three roosting sites for Carnaby's Cockatoo occur within 15 km of the Survey Area. However, Southern Ecology (2025) confirmed that the Survey Area does not contain trees of sufficient size and diameter to support roosting or breeding for Black Cockatoo species.

Dieback Risk

Although a formal dieback survey was not undertaken, evidence of dieback infestation was observed within the Development Envelope during the 2024 Spring Survey, which was undertaken by a DBCA Registered Phytophthora Dieback Interpreter (Southern Ecology, 2025).

Main Roads contacted DBCA South Coast Region and obtained confirmation that there is no current dieback interpretation for Stirling Range National Park adjacent to the Development Envelope; however, according to the Dieback Information Delivery and Management System (DIDMS), a positive sample of *Phytophthora cinnamomi* was detected ~135 m north-east of the Development Envelope in 2005.

Given the Development Envelope and adjacent section of Stirling Range National Park was severely impacted by a bushfire in December 2019, with a positive dieback detection in 2005, it is likely that the vegetation within the Development Envelope is dieback infested.

Although the Proposal is located below the 26th parallel and in an area that receives more than 400 mm of annual rainfall per year, the movement of soil for the Proposal will only occur during dry conditions, with works scheduled to commence on 23 February 2026 and clearing only for 1-2 days of the 6 week total project duration. Given the Works are adjacent to Stirling Range National Park and in accordance with the Main Roads Environmental Procedure – Dieback Management, the DBCA Dieback Risk Assessment Form has been completed and the Works have been assessed as low risk. This determination is based on the works being restricted to dry soil conditions, being confined to a very small (280 m length) work area for a 6 week project duration, drainage being fully contained within the road reserve and physical barriers and other controls being implemented to ensure no plant, equipment or personnel enter the adjacent Stirling Range National Park.

Appendix 2 includes precautionary measures to reduce the risk of introduction and spread of dieback (and weeds) into the adjacent Stirling Range National Park.

4 DESKTOP ASSESSMENT OF VEGETATION

4.1 Desktop Vegetation Description

Table 3 and **Table 4** provide details of the vegetation type and its condition within the Development Envelope and the remaining extent of the association.

The Development Envelope is within the Esperance Plains Bioregion and Fitzgerald (EP01) subregion. This subregion is characterised by myrtaceous and proteaceous scrub and mallee heaths on sandplains overlying Eocene sediments. The native vegetation of the area is composed of Vegetation Association 975, "Other acacia, banksia, peppermint, cypress pine, casuarina, York gum *Acacia* spp., *Banksia* spp., *Agonis flexuosa*, *Callitris* spp., *Allocasuarina* spp., *Eucalyptus loxophleba*."

During the 2024 Spring Survey, one native remnant vegetation type was mapped within the Development Envelope: *Eucalyptus decipiens*, *E. marginata* Mallee in Excellent condition; however, the vegetation was observed to be partially modified by the impacts of *Phytophthora* dieback and fire, which has caused a reduction in proteaceous shrubs. The remaining areas of the Development Envelope were mapped as 'cleared', including the sealed road, the batter and two offshoot drains. The survey confirmed that the vegetation does not meet the criteria for *Proteaceae Dominated Kwongkan Shrublands of the Southeast Coastal Floristic Province of Western Australia* (Kwongkan TEC), even though it is within its mapped distribution.

Table 3. Summary of Vegetation Types within Development Envelope

Vegetation Type	Extent within Development Envelope (ha)	Total Extent Mapped (ha) within Survey Area
<i>Eucalyptus decipiens</i> , <i>Eucalyptus marginata</i> Mallee	0.37 ha mapped within 0.6 ha Development Envelope	0.66 ha mapped within 0.92 ha Survey Area
Cleared Areas	0.24 ha mapped within 0.6 ha Development Envelope	0.26 ha mapped within 0.92 ha Survey Area

Table 4. Pre-European Vegetation Representation (Beard 1975)

Pre-European Vegetation Association	Scale	Pre-European Extent (ha)	Current Extent (ha)	% Remaining	% Current Extent in DBCA Managed Land (proportion of pre-European Extent)
Veg Assoc No. 975 <i>Low woodland; jarrah</i>	Statewide	17,275.64	15,563.36	90.09	93.17
	IBRA Bioregion <i>Esperance Plains</i>	12,379.28	11,519.37	93.05	98.09
	IBRA Sub-region <i>Fitzgerald (EP01)</i>	12,379.28	11,519.37	93.05	98.09
	Local Government Authority <i>City of Albany</i>	24.20	4.20	17.37	No data available

5 ASSESSMENT AGAINST THE TEN CLEARING PRINCIPLES

In assessing whether the Proposal's proposed clearing is likely to have a significant impact on the environment, the Proposal was assessed against the ten Clearing Principles (EP Act, Schedule 5).

Each principle has been assessed in accordance with the former Department of Environment Regulation (now Department of Water and Environmental Regulation (DWER) '[A Guide to the Assessment of Applications to Clear Native Vegetation](#)' (Department of Environment Regulation, 2014) and other relevant clearing permit application decision reports prepared by DWER.

The proposed clearing is at or may be at variance with one or more of the ten Clearing Principles. As approved by DWER, the proposed clearing is at variance with principle (a) and (b), may be at variance with principle (h), is not at variance with principle (e) and is not likely to be at variance with the remaining clearing principles.

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

Proposed clearing is at variance to this Principle.

In Spring 2024, Southern Ecology (2025) undertook a detailed and targeted flora and vegetation survey, fauna survey and targeted black cockatoo assessment of a 0.9 ha Survey Area on the Albany-Lake Grace Road (M001) road reserve (SLK 65.44 – 65.71). The Survey Area occurs adjacent to the Stirling Range National Park, which contains many endemic flora and provides an important extensive, unfragmented habitat for fauna.

Prior to conducting the Spring 2024 survey (Southern Ecology, 2025), significant species reported within the 10 km Desktop Study Area were reviewed for spatial accuracy, as well their key morphological characteristics, flowering times, habitat preferences and the likelihood and location of potentially suitable habitat within the Survey Area. This information was used to optimise the targeted surveys and the location of sampling points during the Spring 2024 survey. Following the field survey, all significant flora identified in the desktop review that were not detected during the survey were re-assessed to determine their likelihood of occurrence in the Survey Area.

The desktop assessment identified no historic significant flora records within the Survey Area.

Four floristic quadrats were established within the Survey Area and a total of 163 taxa from 33 families, including 10 weeds were recorded (none are listed as WoNS or Declared Pests). The plant families most represented were Myrtaceae, Proteaceae, Fabaceae and Cyperaceae. Southern Ecology (2025) observed that the vegetation in the Survey Area was relatively homogenous across the four quadrats, therefore overall species richness was moderate. The richness of particular families such as Proteaceae and Ericaceae species was less than expected due to the impacts of *Phytophthora dieback* (i.e., would typically exceed the number of Myrtaceae).

One native remnant vegetation type (*Eucalyptus decipiens*, *E. marginata* Mallee, total 0.65 ha) was described from the Survey Area and all areas were classified as Excellent condition. The remaining 0.25 ha of the Survey Area is 'cleared', including the sealed road the batter and two offshoot drains.

No threatened flora individuals were recorded within the Survey Area during the Spring 2024 survey (Southern Ecology, 2025).

Two priority flora taxa were confirmed to occur within the Survey Area:

***Gompholobium glabristylum* (Priority 2)** is a recently described slender upright shrub with purple flowers that occurs on mountain slopes and surrounding flats on loamy sand soils. It is known from 30 records, 29 of which are located within the Stirling Range National Park (SRNP) and one is located outside the Park, approximately 30 km to the west. Three individuals were recorded in the Survey Area (and one additional plant within 7 m). The species is found throughout the SRNP with an east-west range of approximately 55 km (85 km including western outlying population). Southern Ecology (2025) considered this species may warrant listing as Priority 4 flora since its conservation listing is largely due to deficient population data, particularly since it is relatively common on slopes and flats within the range (Western Australian Herbarium, 1998–) and two individuals were previously recorded in the vicinity (< 50 m) (Astron, 2019), but were subsequently killed by fire. Potential suitable habitat for this taxon is widespread in the vicinity of the Survey Area and scattered plants are potentially found over a wide area. The Development Envelope is a small, narrow area adjacent to an expansive National Park (>100,000 ha) and is therefore unlikely to constitute significant habitat for *Gompholobium glabristylum*.

***Tricostularia davisii* (Priority 3)** is known from 11 Western Australian Herbarium records and is a recently described species within the 2021 revision of the genus (Barrett et. al. 2021). The description by Barret et. al. (2021) includes the following notes: "*The species range is between Manypeaks and Cape Riche.*" and "*Further targeted surveys are warranted, but the species is probably not currently threatened.*" A total of 547 individuals were recorded in the Survey Area (and 60 additional plants within 5 m). Most individuals occurred along a shallow drain that runs parallel with the road edge and it is considered highly likely that the species is more widespread than current records indicate. Southern Ecology (2025) found *Tricostularia davisii* (P3) to be abundant within and adjacent to the Survey Area and noted that the taxon's apparent rarity is due to infrequent collection, given it is a widespread and often locally abundant taxon, with seven of the 11 WA Herbarium records describing it as "common", "locally common", "frequent" and "plentiful". In the previous survey in the vicinity (Astron 2019), this entity was referred to as *Tricostularia* sp. Wellstead (R. Davis 302). It was previously recorded from the sedge layer in three quadrats (between 0.4 and 11 km from the Survey Area). However, no population census was undertaken as the taxon was not conservation listed at the time of that survey. Southern Ecology (2025) concluded that potential suitable habitat for this taxon is widespread in the vicinity of the Survey Area and further populations are likely to be recorded over a wider area in the region due to its listing as a Priority Flora. The Development Envelope is a small, narrow area adjacent to an expansive National Park (>100,000 ha) and is therefore unlikely to constitute significant habitat for *Tricostularia davisii*.

During construction, Main Roads proposes to demarcate significant flora close to but outside the Native Vegetation Clearing Area as a Special Environmental Area (SEA) prior to Works commencing to provide a physical barrier for on-site personnel.

Given the proposed works are adjacent to Stirling Range National Park and in accordance with the Main Roads Environmental Procedure – Dieback Management, the DBCA Dieback Risk Assessment Form has been completed and the works have been assessed as low risk for introduction and/or spread of dieback. This determination is based on the works being restricted to dry soil conditions (scheduled to commence on 23 February 2026), being confined to a very small (280 m length) work area for a 6 week project duration (with only 1-2 days clearing), drainage being fully contained to the road reserve and physical barriers and other controls being implemented to ensure no plant, equipment or personnel enter the adjacent Stirling Range

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National Park. These factors and measures also result in the proposed clearing presenting a low risk of introduction and/or spread of weeds.

The 2024 Spring Survey concluded that three mammals and four bird species of conservation significance may traverse habitats in the Development Envelope, but are unlikely to be resident.

1. Quokka (T) are likely to occur.
2. Western Brush Wallaby (P4) are likely to occur.
3. Quenda (P4) are likely to occur.
4. Western Whipbird (mallee) (P4) is likely to occur.
5. Carnaby's Cockatoo (T) is likely to occur;
6. Baudin's Cockatoo (T) is considered to possibly occur.
7. Inland Western Rosella (P4) is considered to possibly occur.

The vegetation within the Development Envelope was determined to be high quality foraging habitat for Carnaby's Cockatoo and low quality foraging habitat for Baudin's Cockatoo; however, it is surrounded by Stirling Range National Park which provides the same opportunity for foraging habitat – the loss of up to 0.37 ha vegetation is unlikely to have a significant impact on Carnaby's Cockatoos. The Development Envelope does not contain trees of sufficient size and diameter to support roosting or breeding for Black Cockatoo species.

Southern Ecology (2025) concluded that the vegetation, flora and fauna habitat within the Survey Area was representative and contiguous with Stirling Range National Park. The results of the 2024 Spring Survey indicate some new recruitment has occurred since 2019 (i.e., new plants of *Gompholobium glabristylum* (P2) in the Survey Area). However, Southern Ecology (2025) concluded that fire has likely exacerbated *Phytophthora dieback* impacts and combined with drought, continues to cause decline in Kwongkan Shrublands.

Clearing of up to 0.37 ha remnant roadside vegetation within a 0.6 ha Development Envelope is proposed, which will impact two Priority 2 flora individuals (of 4 surveyed) and 312 Priority 3 flora individuals (of 607 surveyed), but no threatened flora individuals. The vegetation does not meet the criteria for Kwongkan TEC and does not contain Black Cockatoo breeding or roosting trees, but is high quality foraging habitat for Carnaby's Cockatoo. As a result, the proposed clearing is at variance to this Principle.

Methodology

- Astron (2019)
- Barrett et. al. (2021)
- Southern Ecology (2025)
- Western Australian Herbarium (1998 -)
- Government GIS Shapefiles:
 - DBCA Threatened and Priority Ecological Community database search (Accessed December 2025)
 - DBCA Threatened and Priority flora database search (Accessed December 2025)
 - Natural Resource Management SLIP Soil Systems (Accessed December 2025)

(b) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a significant habitat for fauna.

Proposed clearing is at variance to this Principle.

Southern Ecology (2025) completed a fauna habitat assessment primarily focused on the identification of fauna habitat based on vegetation type in accordance with Basic fauna surveys in EPA guidance (EPA, 2020). Transects were traversed on foot throughout the Survey Area and the characteristics of fauna habitat were recorded. Identification of breeding, foraging and roosting habitat for three species of black cockatoo (Carnaby's Cockatoo, Baudin's Cockatoo and the Forest Red-tailed Black Cockatoo) was undertaken within the Survey Area, in accordance with guidance documents (DAWE 2022, DSEWPac 2012, MRWA 2022). The quality of fauna habitat types considered suitable for cockatoo foraging was assessed using the methodology of Bamford (2020), which derives a 10-point scale comparable to Main Road guidance (2022).

A desktop assessment of the 10 km Study Area identified that 24 conservation significant fauna taxa (seven mammals and 17 birds) have previously been recorded. Southern Ecology (2005) completed a pre-survey likelihood of occurrence assessment of those taxa and determined:

- No significant fauna had been previously recorded in the Survey Area.
- Four significant taxa (Quokka, Quenda, Carnaby's Cockatoo, Western Whipbird (mallee)) were considered 'likely' to occur as records occurred in close vicinity and habitat was putatively present.
- Three significant taxa (Forest Red-tailed Black-Cockatoo, Baudin's Cockatoo, western rosella) were considered 'possible' to occur as habitat was potentially present or they may pass through the area.
- It was considered unlikely that the remaining taxa would utilise habitats within the Survey Area.

Southern Ecology (2025) observed the vegetation in the Survey area as being composed of a very open mallee woodland of *Eucalyptus decipiens*, *E. marginata* over a mid-open shrubland of *Kingia australis* over a moderate to dense sedgeland of *Anarthria gracilis* and *Mesomelaena tetragona*. This open, mallee dominated habitat type provided limited structural diversity and cover in the shrub and canopy layers. The key micro-habitats provided by this habitat type included the soft sandy soils in which fauna species may dig/burrow and the sparse myrtaceous/proteaceous flora species that may provide foraging habitat for a range of birds. A low sedgeland was present in moderate cover that may provide protection for traversing mammals.

The 2024 Spring Survey confirmed that three mammals and four bird species of conservation significance may traverse habitats in the Development Envelope, but are unlikely to be resident.

1. *Setonix brachyurus* (**Quokka**) (T) are likely to occur - 22 records occur in the Study Area and Southern Ecology (2025) noted that road-killed quokka are observed intermittently near Moingup Springs. They may traverse through the site occasionally, but are unlikely to be resident.
2. *Notamacropus irma* (**Western Brush Wallaby**) (P4) are likely to occur - 21 records occur in the Study Area may occur in a range of habitats, including open mallee. They may traverse through the site occasionally, but are unlikely to be resident.
3. *Isodon fusciventer* (**Quenda**) (P4) are likely to occur - Four records occur in the vicinity, one within 100 m of the Survey Area. The dense low sedgeland within and soft sandy soils in the Survey Area are suitable for cover and foraging.

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4. *Psophodes nigrogularis subsp. oregon* (**Western Whipbird (mallee)**) (P4) is likely to occur - 44 records occur within the Study Area. Calls heard during field survey from drainage line 150 m west of the Survey Area.
5. *Zanda latirostris* (**Carnaby's Cockatoo**) (T) is likely to occur - Feeding habitat present. Two white tailed black cockatoos (Baudins or Carnaby's) were observed flying south approximately 200 m west of the Survey Area. No breeding or roosting habitat present.
6. *Zanda baudinii* (**Baudin's Cockatoo**) (T) is considered to possibly occur – Feeding habitat present. No breeding or roosting habitat present.
7. *Platycercus icterotis xanthogenys* (**Inland Western Rosella**) (P4) is considered to possibly occur - Three records occur in the vicinity, one within 500 m of the Survey Area. Suitable habitat is present for the species to traverse through the Survey Area.

Given the small area of clearing proposed and the short duration, long-term impacts to significant fauna is unlikely, particularly since the species are likely to be transient visitors and there is the opportunity to disperse into the adjacent vegetation of Stirling Range National Park, spanning over 100,000 ha.

During the works, all onsite personnel will be required to undertake visual monitoring and be vigilant to the presence of fauna, especially the above-listed significant species. Clearing will be undertaken in one direction and towards areas of native vegetation to allow animals to naturally disperse into adjacent habitat. In addition, physical barriers will be erected to ensure no works are undertaken outside the Development Envelope and no access beyond the road reserve into adjacent vegetation within Stirling Range National Park will be permitted.

Black Cockatoo Habitat Assessment

The 2024 Spring Survey determined that the vegetation within the Native Vegetation Clearing Area was high quality foraging habitat for Carnaby's Cockatoo and low quality foraging habitat for Baudin's Cockatoo; however, it is surrounded by Stirling Range National Park which spans over 100,000 ha and provides the same opportunity for foraging habitat – the loss of up to 0.37 ha vegetation within the Development Envelope is unlikely to have a significant impact on habitat availability for Carnaby's or Baudin's Cockatoos. The Development Envelope does not contain trees of sufficient size and diameter to support roosting or breeding for Black Cockatoo species.

Taxon	Foraging quality categories (from Bamford 2020)			Overall Score (High = 5-10; Low = 0-4)
	Starting Score (6 points)	Site context / breeding habitat (3 points)	Stocking Rate (1 point)	
Carnaby's Cockatoo	3/6 - Low to moderate foraging value due to sparse Proteaceae species.	3/3 – One breeding site and three roosting sites within 15km.	1/1 – Regularly observed in SRNP.	7
Baudin's Cockatoo	2/6 - Low foraging value woodland with scattered food plants 1-5% projected	0/3 – No known breeding or roosting sites within 15km.	1/1 – Regularly observed in SRNP.	3

Given the proposed clearing will impact high quality Carnaby's Cockatoo foraging habitat, albeit a very small extent in a local context, the proposed clearing is at variance to this Principle.

Methodology

- Bamford (2020)
- DAWE (2022)
- DSEWPac (2012)
- EPA (2020)
- Main Roads (2022)

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- Southern Ecology (2025)
- Government GIS Shapefiles:
 - DBCA Threatened and Priority fauna database search (Accessed December 2025)
 - Ecological Linkages (Accessed December 2025)

(c) Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, threatened flora.**Proposed clearing is not likely to be at variance to this Principle.**

Prior to conducting the Spring 2024 survey (Southern Ecology, 2025), threatened species reported within the 10 km Desktop Study Area were reviewed for spatial accuracy, as well their key morphological characteristics, flowering times, habitat preferences and the likelihood and location of potentially suitable habitat within the Survey Area. This information was used to optimise the targeted surveys and the location of sampling points during the survey. Following the field survey, all threatened flora identified in the desktop review that were not detected during the survey were re-assessed to determine their likelihood of occurrence in the Survey Area.

The desktop assessment identified no historic threatened flora records within the Survey Area. No threatened flora individuals were recorded within the Survey Area during the Spring 2024 survey (Southern Ecology, 2025). All threatened flora species previously recorded within the Desktop Study Area were considered unlikely to occur in the post survey likelihood of occurrence assessment, based on habitat not being suitable or the species not being detected, despite adequate search effort during the Spring 2024 field survey.

Based on the above, the proposed clearing is not likely to be at variance to this Principle.

Methodology

- Southern Ecology (2025)
- Government GIS shapefiles:
 - DBCA Threatened flora database search (Accessed December 2025)

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

Proposed clearing is not likely to be at variance to this Principle.

ArcGIS desktop assessments identified that the 10 km Desktop Study Area is within the mapped distribution of the following Threatened Ecological Communities (TECs) protected under State and/or Commonwealth legislation:

- Proteaceae Dominated Kwongkan Shrublands of the southeast coastal floristic province of Western Australia (Kwongkan Shrublands) – TEC (Endangered under EPBC Act 1999), also Priority 3 Priority Ecological Community.
- Montane heath and thicket of the eastern Stirling Range - TEC (Endangered under the EPBC Act 1999 and Critically Endangered under the BC Act 2016).

Previous biological surveys that included the Survey Area (Astron 2019, Southern Ecology 2024) confirmed that only the Kwongkan TEC was considered to potentially occur, since it previously occurred as a complex mosaic. Southern Ecology (2025) noted that the Montane heath and thicket of the eastern Stirling Range TEC occurs on mountain summits or on soil types not present in the Survey Area.

As a result, Southern Ecology (2025) completed a targeted quantitative vegetation assessment in Spring 2024 within the Survey Area, which included the Native Vegetation Clearing Area to address the potential occurrence of the Kwongkan TEC. Three 30 m line intercept transects were used to measure the cover of Proteaceous species, which ranged from 7.5 % to 12.2% (mean = 9.1 %). Consequently, the cover of Proteaceae was well below the > 30% threshold required to align with the TEC criteria.

Table C1 from Southern Ecology (2025). Analysis of floristic line intercept transect data (Table C2 and 3) against criteria for the Proteaceae Dominated Kwongkan Shrublands TEC (Kwongkan TEC) (DoTE 2014).

Key Characteristics	Transects (T)		
	T1	T2	T3
1) Occurs within the Southeast Coastal Floristic Province relating to south west Australian phytogeographic boundaries.	✓	✓	✓
AND 2) a) Characterised by Proteaceae species having 30% or greater cover of Proteaceae species across all layers where these shrubs occur (crowns measured as if they are opaque),	7.5% X	12.2% X	7.7% X
OR 2) b) Two or more diagnostic Proteaceae species are present that are likely to form a significant vegetative component when regenerated (see list of diagnostic species in Table 1 of the Conservation Advice). The use of diagnostic species is for situations in which the cover of Proteaceae species is reduced due to recent disturbance (e.g., fire).	Unlikely due to dieback	Unlikely due to dieback	Unlikely due to dieback
AND 3) a) Condition and size of patch (within and adjacent to survey area).	>10 ha	>10 ha	>10 ha
3) b) Condition result. High – 1 ha minimum; <30% perennial weed cover; no dieback. Moderate – 0.05 ha minimum (e.g., 5m x 100m in roadside); <70% perennial weed cover; dieback may be present.	Moderate - negligible weeds, high dieback impact	Moderate - negligible weeds, high dieback impact	Moderate - negligible weeds, high dieback impact
Confirmed ✓ or Dismissed X	X	X	X

Southern Ecology (2025) noted that since the vegetation age was five years since the previous fire in Summer 2019, most Proteaceae shrubs present were sufficiently mature. Notably, there was an

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absence of Proteaceae species that typically develop into large shrubs (i.e., *Banksia attenuata*, *B. baxteri*, *B. coccinea*), and although these taxa may have previously occurred within the Survey Area prior to the introduction of *Phytophthora*, they are unlikely to recolonise.

Based on the above, the proposed clearing is not likely to be at variance to this Principle.

Methodology

- Southern Ecology (2025)
- Government GIS shapefiles:
 - DBCA Threatened Ecological Community database search (Accessed December 2025)

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

Proposed clearing is not at variance to this Principle.

The National Objectives and Targets for Biodiversity Conservation recognise that the retention of 30 per cent or more of the pre-clearing extent of each ecological community is necessary if Australia's biological diversity is to be protected (Commonwealth of Australia, 2001) except in constrained areas (Perth and Peel) where 10 per cent representation should be maintained.

The Native Vegetation Clearing Area is within the Esperance Plains Interim Biogeographic Regionalisation of Australia (IBRA) bioregion and the Fitzgerald (EP01) subregion. Over 29 per cent of the Esperance Plains bioregion is protected within the national reserve system, including all lands protected by State and Commonwealth government, Indigenous Protected Areas and private lands (Department of the Environment and Energy, DotEE 2016).

The Native Vegetation Clearing Area has been broadly mapped as Vegetation Association 975, which is described as "Other acacia, banksia, peppermint, cypress pine, casuarina, York gum *Acacia* spp., *Banksia* spp., *Agonis flexuosa*, *Callitris* spp., *Allocasuarina* spp., *Eucalyptus loxophleba*."

Table 4 in Section 6.1 summarises the extent of pre-European Vegetation Association 975 remaining.

The current extent of Vegetation Association 975 is higher than 30 per cent for pre-European extent for Statewide, IBRA Bioregion, and IBRA Sub-region and is not considered under represented.

The native vegetation proposed for clearing is immediately adjacent to an expansive National Park and is not a significant remnant in an area that has been extensively cleared.

Based on the above, the proposed clearing is not at variance to this Principle.

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Methodology

- Commonwealth of Australia (2001)
- DotEE (2016)
- Government of Western Australia (2019)
- Government GIS shapefiles:
 - Pre-European vegetation (Accessed 4 November 2025)

(f) Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.
Proposed clearing is not likely to be at variance to this Principle.

According to available GIS datasets, the Native Vegetation Clearing Area does not intersect and is not within:

- an Internationally Important Wetland (i.e. RAMSAR)
- a Nationally Important Wetland
- any mapped South Coast Significant Wetlands

The nearest water course to the Native Vegetation Clearing Area is approximately 100 m to the east (a minor, non-perennial watercourse). The vegetation mapped within the Development Envelope by Southern Ecology (2025) is not growing in, or in association with, an environment associated with a watercourse or wetland.

Based on the above, the proposed clearing is not likely to be at variance to this Principle.

Methodology

- Southern Ecology (2025)
- Government GIS shapefiles:
 - Geomorphic Wetlands (Accessed December 2025)
 - Ramsar Wetlands (Accessed December 2025)
 - Important Wetlands (Accessed December 2025)
 - Watercourses (Accessed December 2025)
 - RIWI Act Rivers (Accessed December 2025)

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

Proposed clearing is not likely to be at variance to this Principle.

Southern Ecology (2025) states that two soil-landscape sub-systems occur within the Survey Area:

1. Stirling Range 3 Subsystem - Undulating rises and low hills of the Stirling Range foothills. Grey deep sandy duplex with stony soil and shallow gravel.
2. Stirling Range 6 Subsystem - Lower valley slopes with well-defined drainage lines originating from the Stirling Range. Shallow gravel with pale deep sand, brown loamy earth and semi-wet soil.

The Native Vegetation Clearing Area is mapped as having:

- a low salinity risk L1 (<3 % of map unit has a moderate to high salinity risk or is presently saline)
- a low to moderate flood risk of L1 to M1 (3-30 % of map unit has a moderate to high flood risk)
- A low to moderate waterlogging risk of L1 to M1 (3-30 % of map unit has a moderate to very high waterlogging risk)
- A low to moderate water erosion risk of L2 to M1 (3-30 % of map unit has a high to extreme water erosion risk)
- A high wind erosion risk of H1 and H2 (>50 % of map unit has a high to extreme wind erosion risk)

As outlined above, soils within the Native Vegetation Clearing Area have a low to moderate risk of land degradation, other than wind erosion. However, since the proposed clearing is for the creation of a truck bay that will be exposed for a short period of time prior to being sealed, land degradation through wind erosion is unlikely.

The Native Vegetation Clearing Area is also within an area that is mapped as having an extremely low probability of occurrence for Acid Sulphate Soils (CSIRO ASRIS).

The proposed clearing will temporarily expose the natural soils which may increase the risks related to erosion. However, given the minimal amount of clearing proposed for a short period, it is not likely to cause appreciable land degradation.

The proposed clearing is not likely to be at variance to this Principle.

Methodology

- Southern Ecology (2025)
- Government GIS Shapefiles:
 - Acid Sulfate Soil Risk Map (Accessed December 2025)
 - Soil landscape land quality – Water Erosion Risk (Accessed December 2025)
 - Soil landscape land quality – Wind Erosion Risk (Accessed December 2025)
 - Soil landscape land quality – Salinity Risk (Accessed December 2025)
 - Soil landscape land quality – Surface Acidity (Accessed December 2025)
 - Soil landscape land quality – Waterlogging Risk (Accessed December 2025)
 - Soil landscape land quality – Flood Risk (DPIRD-007) (Accessed December 2025)

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

Proposed clearing may be at variance to this Principle.

The Development Envelope is contained entirely within the road reserve of Albany-Lake Grace Road vested with Main Roads, which is adjacent to the mapped boundary of Stirling Range National Park. No other nature reserves or conservation areas are located within 10 km of the Development Envelope.

As outlined in Clearing Principle (a), the proposal presents a low risk to the introduction of dieback and/or weeds to the adjacent Stirling Range National Park, owing to several factors including: i) works being undertaken in dry soil conditions and ii) the small scale and nature of the proposed works, with the Development Envelope being confined to an area of approximately 280 m in length, drainage being fully contained to the road reserve and the total project duration being 6 weeks (1-2 days clearing). Furthermore, a range of precautionary measures will be taken to ensure vehicles, machinery and personnel do not enter Stirling Range National Park, including the provision of a physical barrier for the duration of the works (refer to Appendix 2 for further management actions).

Given the small amount of clearing proposed and low-complexity of the proposed truck bay construction under standard Main Roads operational controls, no direct or indirect impact (e.g. ground disturbance, dust, runoff) to the values of Stirling Range National Park are anticipated.

Based on the above, Main Roads considers the proposed clearing is not likely to be at variance to this Principle. DWER (2026) concluded that the proposed clearing may be at variance to this Principle.

Methodology

- DWER (2026)
- Government GIS Shapefiles:
 - DBCA Legislated Lands and Waters & Lands of Interest (Accessed December 2025)
 - DBCA Lands of Interest (Accessed December 2025)
 - Geomorphic Wetlands (conservation category wetlands only) (Accessed December 2025)
 - Ramsar Wetlands (Accessed December 2025)
 - Important Wetlands (Accessed December 2025)

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

Proposed clearing is not likely to be at variance to this Principle.

According to available GIS datasets, the Native Vegetation Clearing Area does not intersect and is not within:

- any groundwater or surface water catchments proclaimed under the *WA Rights in Water and Irrigation (RIWI) Act 1914*
- any Public Drinking Water Source Areas (PDWSAs)
- any catchments proclaimed under the *WA Country Areas Water Supply Act 1947* (CAWS Act).
- any watercourses or wetlands

The proposed clearing will not disturb or interrupt any natural drainage or surface run- off patterns.

Based on the above, the proposed clearing is not likely to be at variance to this Principle.

Methodology

- Government GIS Shapefiles:
 - RIWI Act, Surface Water Areas and Irrigation Districts (Accessed December 2025)
 - CAWSA Part 2A Clearing Control Catchments (Accessed December 2025)
 - RIWI Act, Groundwater Areas (Accessed December 2025)
 - Soil landscape land quality - Salinity Risk (Accessed December 2025)
 - Groundwater Salinity Statewide (Accessed December 2025)
 - Soil Mapping (Accessed December 2025)
 - Acid Sulfate Soil risk mapping (Accessed December 2025)
 - Soil landscape land quality - Subsurface Acidification Risk (Accessed December 2025)

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(j) Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.**Proposed clearing is not likely to be at variance to this Principle.**

Southern Ecology (2025) states that two soil-landscape sub-systems occur within the Survey Area:

1. Stirling Range 3 Subsystem - Undulating rises and low hills of the Stirling Range foothills. Grey deep sandy duplex with stony soil and shallow gravel.
2. Stirling Range 6 Subsystem - Lower valley slopes with well-defined drainage lines originating from the Stirling Range. Shallow gravel with pale deep sand, brown loamy earth and semi-wet soil.

The closest open Bureau of Meteorology (BoM) site is Moingup Springs (Station #010789). Based on climate data from this BoM station, the average annual rainfall the region receives is 619.10 mm (BoM, 2025), the majority of which falls between the months of April to October. Clearing will be undertaken in dry soil conditions, with ground disturbing works proposed during lower rainfall months of February and March 2026.

The Native Vegetation Clearing Area is located within an area categorised as having a low to moderate flood risk and waterlogging risk. Given the small clearing area proposed, the short duration of works, and the limited impact to the existing road drainage system, the proposed clearing is unlikely to cause or exacerbate the incidence or intensity of flooding.

The nearest water course to the Native Vegetation Clearing Area is approximately 100 m to the east (a minor, non-perennial watercourse) and it does not intersect any rivers or wetlands. The Proposal will not disturb or interrupt any natural drainage or surface run-off patterns.

Based on the above, the proposed clearing is not likely to be at variance to this Principle.

Methodology

- BoM (2025)
- Southern Ecology (2025)
- Government GIS Shapefiles:
 - Soil Mapping (Accessed December 2025)
 - Contours (Accessed December 2025)
 - Soil landscape land quality - Waterlogging Risk (Accessed December 2025)
 - Soil landscape land quality - Flood Risk (Accessed December 2025)

6 VEGETATION MANAGEMENT

Main Roads will avoid clearing native vegetation where possible. Where clearing cannot be avoided then this clearing is kept to a minimum. A Vegetation Management Plan (VMP) has been developed to manage and minimise vegetation clearing for the Proposal (refer to **Appendix 2**).

7 REHABILITATION, REVEGETATION AND OFFSETS

7.1 Revegetation and Rehabilitation

No temporary clearing will be undertaken as part of the Proposal activities and therefore no revegetation or rehabilitation will be conducted under CPS 818.

7.2 Offset Proposal

In accordance with CPS 818 condition 11(a), to offset the residual impacts from clearing up to 0.37 ha of high-quality Black Cockatoo foraging habitat, Main Roads has developed an Offset Proposal in accordance with the current WA environmental offsets Policy that has been approved by DWER.

8 STAKEHOLDER CONSULTATION

Main Roads will undertake stakeholder consultation in accordance with CPS 818 Condition 8.

Condition 8 of CPS 818/17 requires Main Roads to invite submissions from interested parties when the proposed clearing is considered likely to be seriously at variance, at variance or may be at variance with one of more of the ten clearing principles.

The CAR was published on the Main Roads website for a period of 21 days, between 22 December 2025 and 12 January 2026 inclusive. As part of this process, Main Roads invited submissions from the following stakeholders:

- Department of Water and Environmental Regulation (DWER)
- Shire of Gnowangerup
- Department of Biodiversity, Conservation and Attractions of WA – South Coast Region

Main Roads received no submissions during the advertised period, but later received submissions from the following stakeholders:

- Department of Water and Environmental Regulation (DWER)
- Department of Biodiversity, Conservation and Attractions of WA – South Coast Region

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Table 5 details the key issues raised and Main Roads response to these key issues.

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Table 5. Summary of Main Roads Responses to Stakeholder Submissions

Name of Stakeholder	Date of Consultation	Key Issue/Comment	Main Roads Response/Comment
Shire of Gnowangerup	22 December 2025	No comments received.	N/A
DBCA South Coast	22 December 2025	No comments received during submission period.	N/A
DBCA South Coast	22 January 2026	Truck bays with toilets encourage illegal camping, littering, toilet waste in the bush, increased fire risk, unauthorised access to the national park, spread of weeds and dieback, grain dumping and antisocial behaviour.	Whilst the concerns raised by DBCA are outside the scope of the proposed native vegetation clearing, Main Roads continues to work constructively with DBCA to ensure the broader land user issues raised are appropriately managed. The facilities at the new proposed heavy vehicle bay will be regularly inspected and adequately maintained. The ongoing and regular inspection/maintenance regime will reduce the likelihood of, and ensure appropriate management of: illegal camping, fires, littering, toilet waste, antisocial behaviour and grain dumping. Spread of weeds and dieback to the National Park from tourists/park visitors is a pre-existing risk that will not be significantly exacerbated by this clearing proposal, which is confined to the road reserve.
DWER	23 February 2026	- the proposed clearing may be at variance to clearing principle (h), given it is adjacent to Stirling Range National Park. - there is a high risk of the introduction and spread of weeds and dieback into Stirling Range National Park. - the clearing of native vegetation within the road reserve will likely	Weeds and dieback Given the proposed works are adjacent to Stirling Range National Park and in accordance with the Main Roads Environmental Procedure – Dieback Management, the DBCA Dieback Risk Assessment Form has been completed and the works have been assessed as low risk for introduction and/or spread of dieback. This determination is based on the works being restricted to dry soil conditions (scheduled to commence on 23 February 2026), being confined to a very small (280 m length) work area for a 6 week project duration (with only 1-2 days clearing), drainage being fully contained to the road reserve and

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Name of Stakeholder	Date of Consultation	Key Issue/Comment	Main Roads Response/Comment
		result in edge effects within Stirling Range National Park. it is recommended a permanent fence is constructed at the boundary of the Heavy Vehicle Parking Bay and Stirling Range National Park. DWER advised that clearing was at variance with principle (a) and (b) may be at variance with principle (h), not at variance with principle (e) and not likely to be at variance with the remaining clearing principles.	physical barriers and other controls being implemented to ensure no plant, equipment or personnel enter the adjacent Stirling Range National Park. These factors and measures also result in the proposed clearing presenting a low risk of introduction and/or spread of weeds. Edge effects The proposed native vegetation clearly is entirely confined to the road reserve and is a short term activity. Physical barriers and other controls will be implemented to ensure no plant, equipment or personnel enter the adjacent Stirling Range National Park. Boundary fence Main Roads investigated the potential of installing a boundary fence around the back of the heavy vehicle bay, but found it would not be effective since the remainder of the ~22 km of road reserve is unfenced allowing people to walk around the side of a proposed heavy vehicle bay and directly enter the national park. In addition, it would require a 300 m fence, which would be expensive to construct and maintain, and would result in unnecessary additional native vegetation clearing. Variance levels of Clearing Principles This document (including the VMP) has been updated to reflect any changes. This CAR/VMP has been approved by DWER on 23 February 2026.

9 COMPLIANCE WITH CPS 818

Table 5 summarises what further pre-clearing impact assessment is required in accordance with CPS 818.

Table 6. Summary of Additional Management Actions Required by CPS 818

Impact of Clearing	Yes/No or NA	Further Action Required
1. The CAR indicates that the clearing is 'At Variance' or 'May be at Variance' with one or more of the Clearing Principles.	Yes	1. Clearing Report to be published on website and submissions sought for 21 days. 2. Submissions invited from relevant parties, including the LGA, the owner or occupier of the land and other stakeholders in accordance with Condition 8 of CPS 818. 3. Vegetation Management Plan (VMP) has been completed, refer to Appendix 2. 4. Dieback Management Operational Controls proposed during construction have been documented, refer to Appendix 2. 5. An offset Proposal for approval by DWER has been prepared. 6. Summary of submissions and a statement addressing each of those submissions to be published on website
2. Clearing is at variance or may be at variance with Clearing Principle (g) land degradation, (i) surface or underground water quality <u>or</u> (j) the incidence of flooding.	No	No further action required.
3. Clearing is at variance with Clearing Principle (g) land degradation, (i) surface or underground water quality <u>and</u> (j) the incidence of flooding.	No	No further action required.
4. The Proposal involves clearing for temporary works (as defined by CPS 818).	No	No further action required.
5a. Proposal is within a Region that: • has rainfall greater than 400mm; and, • is South of the 26th parallel; and, • works are necessary in 'Other than dry conditions'; and, • works have potential for uninfested areas to be impacted.	No	Ground-disturbing works (soil movement, including clearing) will only be undertaken in dry soil conditions, which are defined as when soils (not dust) do not freely adhere to rubber tyres, tracks, vehicle chassis or wheel arches. Generally, dry conditions are unlikely to be present when greater than 5mm of rainfall over a 24-hour period is forecast. Standard Vehicle and Plant management actions from Annexure 204B (TABLE 204B.9.1), <u>Hygiene Checklists</u> will be applied. Dieback Management Operational Controls proposed during construction have been documented, refer to Appendix 2.

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Impact of Clearing	Yes/No or NA	Further Action Required
5b. Do the proposed works require clearing within or adjacent to DBCA managed lands in non-dry conditions?	No	Ground-disturbing works (soil movement, including clearing) will only be undertaken in dry soil conditions, which are defined as when soils (not dust) do not freely adhere to rubber tyres, tracks, vehicle chassis or wheel arches. Generally, dry conditions are unlikely to be present when greater than 5mm of rainfall over a 24-hour period is forecast. Standard Vehicle and Plant management actions from Annexure 204B (TABLE 204B.9.1), <u>Hygiene Checklists</u> will be applied. Dieback Management Operational Controls proposed during construction have been documented, refer to Appendix 2.
6. Main Roads has been notified by DWER or an environmental specialist that the area to be cleared is susceptible to a pathogen other than dieback.	No	No further action required.
7. Weeds are likely to spread to and result in environmental harm to adjacent areas of native vegetation that are in good or better condition.	No	No Weeds of National Significance or Declared Pests were identified during the 2024 Spring Survey. One individual of Victorian Tea Tree (<i>*Gaudium laevigatum</i>) was removed from the Survey Area that is considered locally significant in the City of Albany.
8. Did an environmental specialist conduct the survey or field assessment?	Yes	The Environmental Specialist undertaking the biological assessments was suitably qualified and had more than three years' experience.
9. Did an environmental specialist prepare the Assessment Report and any other associated documentation including the VMP, Dieback Management Plan or Offset Proposal?	Yes	The Environmental Specialist preparing the Assessment Report and any other associated documentation including the VMP, Dieback Management Plan or Offset Proposal was suitably qualified and had more than three years' experience.

10 REFERENCES

Astron (2019). *M001 Albany - Lake Grace Road 51-67 SLK – Biological Survey 2018 – prepared for Main Roads Western Australia*. MRWA TRIM document reference D19#406897

Bamford Consulting Ecologists (BCE). (2020). *Scoring System for the assessment of foraging value of vegetation for Black-Cockatoos*. Revised 5th June 2020.

Beard J.S. (1981 and various (depending on region)). *Vegetation Survey of Western Australia*. Swan 1:1,000,000, Vegetation Series. University of Western Australia Press. Nedlands, Western Australia. (and various Beard publications relevant to Study Area)

Barrett, RL, Bruhl, JJ, and Wilson, KL (2021). *Revision of generic concepts in Schoeneae subtribe Tricostulariinae (Cyperaceae) with a new Australian genus Ammothryon and new species of Tricostularia*. *Telopea*, 24.

Bureau of Meteorology Australia (BoM) 2025. Climate Averages for Australian Sites – Moingup Springs Station 010789 – Available online from <http://www.bom.gov.au/climate/data/index.shtml> Accessed 18 December 2025.

Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2005, Canberra.

Commonwealth Scientific and Industrial Research Organisation, 2015. Australian Soil Resource Information System (ASRIS). Available online from <http://www.asris.csiro.au>

Department of Agriculture, Water and the Environment (DAWE) (2022). *Referral guideline for 3 WA threatened black cockatoo species: Carnaby's Cockatoo, Baudin's Cockatoo and the Forest Red-tailed Black cockatoo*. Canberra, Australian Capital Territory.

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

Department of Sustainability, Environment, Water, Population and Communities (2012). *EPBC Act referral guidelines for three threatened black cockatoo species: Carnaby's cockatoo (endangered) *Calyptorhynchus latirostris* Baudin's cockatoo (vulnerable) *Calyptorhynchus baudinii* Forest red-tailed black cockatoo (vulnerable) *Calyptorhynchus banksii* naso*. At: <https://www.environment.gov.au/system/files/resources/895d4094-af63-4dd3-8dffad2b9b943312/files/referral-guidelines-wa-black-cockatoo.pdf>

Department of the Environment (2013). *Significant Impact Guidelines 1.1 – Matters of National Environmental Significance, Environment Protection and Biodiversity Conservation Act 1999*. Canberra, Australian Capital Territory.

Department of the Environment (DotE) (2014). *Approved Conservation Advice for Proteaceae Dominated Kwongan Shrublands of the southeast coastal floristic province of Western Australia*. Canberra: Department of the Environment. Available from: <http://www.environment.gov.au/biodiversity/threatened/communities/pubs/126-conservation-advice.pdf>. In effect under the EPBC Act from 01-Feb-2014

OFFICIAL

Department of the Environment and Energy [DotEE] (2016). *National Reserve System*, <http://www.environment.gov.au/topics/land/national-reserve-system>.

Environmental Protection Authority (2016). *Technical Guide – Terrestrial Flora and Vegetation Surveys for Environmental Impact Assessment* (eds. K Freeman, G Stack, S Thomas and N Woolfrey). Perth, Western Australia.

Environmental Protection Authority (2020). *Technical Guidance – Terrestrial Vertebrate Fauna Surveys for Environmental Impact Assessment*. Perth, Western Australia.

Government of Western Australia (2011). *WA Environmental Offset Policy*. Perth Western Australia.

Government of Western Australia (2014). *WA Environmental Offset Guidelines*. Perth, Western Australia.

Government of Western Australia, (2014). *Clearing Purpose Permit CPS818/11 issued to the Commissioner of Main Roads Western Australia, Clearing for Project Activities*. Department of Environment Regulation. Perth, Western Australia.

Government of Western Australia. (2019). 2018 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of March 2019. WA Department of Biodiversity, Conservation and Attractions, Perth. Available online from: <https://catalogue.data.wa.gov.au/dataset/dbca-statewide-vegetation-statistics>

Main Roads Western Australia (MRWA 2021) *Main Roads Environmental Factsheet: Technical Guidance on the Threatened Ecological Community Proteaceae Dominated Kwongan Shrublands of the Southeast Coastal Floristic Province*. MRWA TRIM document reference D17#526739

Main Roads Environmental Factsheet (MRWA 2022) *Technical Guidance Protecting Black Cockatoos – Baudin's Cockatoo, Carnaby's Cockatoo and Forest Red-tailed Black Cockatoo*. MRWA TRIM document reference D19#1011841

Moore, N (2007). *The role of fire on Phytophthora dieback caused by the root pathogen Phytophthora cinnamomi in the Stirling Range National Park*, Western Australia Nicole Moore, Sarah Barrett, Barbara Bowen/Bryan Shearer, and Giles Hard/Department of Environment and Conservation, Australia 2 Murdoch University, Perth, Australia.

Southern Ecology (2024). *Targeted Flora Survey: M001 Albany – Lake Grace Road 51 to 67 SLK – report prepared for Main Roads Western Australia*. MRWA TRIM document D24#1246792

Southern Ecology (2025). *Biological Survey Albany- Lake Grace Road (M001) Truck Bay SLK 65.44 – 65.71 – report prepared for Main Roads Western Australia*. MRWA TRIM document D25#530676

Western Australian Herbarium. 1998 – *FloraBase - The Western Australian Flora*. Department of Biodiversity, Conservation and Attractions. Available online from: <https://florabase.dpaw.wa.gov.au/>

11 APPENDICES

APPENDIX	TITLE
1	Executive Summary from <i>Southern Ecology (2025) Biological Survey Albany- Lake Grace Road (M001) Truck Bay SLK 65.44 – 65.71</i>
2	Vegetation Management Plan (VMP)

Appendix 1: CPS 818 condition 8 (e) (iii) – Executive Summary and Report Conclusions from Southern Ecology (2025) Biological Survey Albany- Lake Grace Road (M001) Truck Bay SLK 65.44 – 65.71 – report prepared for Main Roads Western Australia

1 SUMMARY

Main Roads is proposing to construct a 280 m long heavy vehicle parking bay on the Albany-Lake Grace Road (M001) road reserve (SLK 65.44 – 65.71) adjacent to the Stirling Range National Park (SRNP), approximately 70 km north of Albany. Astron (2019) and Southern Ecology (2023) have previously conducted detailed biological surveys that include the parking bay location. In 2024, Southern Ecology was engaged to undertake a contemporary assessment of 0.9 ha (the 'survey area'), to complete a detailed and targeted flora and vegetation survey, fauna survey and targeted Cockatoo assessment. The following results were obtained from the assessments:

VEGETATION

- One native remnant vegetation type was described from the survey area: - *Eucalyptus decipiens*, *E. marginata* Mallee (0.65ha); all areas were classified as Excellent condition. The remaining 0.25 ha of the survey area is 'cleared', including the sealed road, the batter and two offshoot drains.
- An assessment of Kwongkan TEC or "Proteaceae Dominated Kwongkan Shrublands of the Southeast Coastal Floristic Province of Western Australia" was undertaken. Three line intercept transects were used to measure the cover of Proteaceous species, which ranged from 7.5% to 12.2% (mean = 9.1%). Consequently, the cover of Proteaceae falls well below the >30% threshold required to align with the TEC criteria.
- The vegetation age was five years since the previous fire (burnt summer 2019), therefore most Proteaceae shrubs present were sufficiently mature. Notably, there was an absence of Proteaceae species that typically develop into large shrubs (i.e., *Banksia attenuata*, *B. baxteri*, *B. coccinea*). These taxa may have previously occurred at the site prior to the introduction of *Phytophthora*, but are unlikely to recolonise.

FLORA

- A total of 163 taxa from 33 families, including 10 weeds were recorded from four quadrats and from opportunistic observation. Average species richness ranged from 57 to 76 taxa per quadrat (mean = 64.8 ± 4 (S.E.)).
- Ten weed species were recorded that were mostly confined to the road batter; none are listed as Weeds of National Significance or Declared Pests. One weed recorded, Victorian Tea Tree (*Galearia laevigata*) is considered locally significant in the City of Albany.
- Populations of two conservation significant taxa are confirmed to occur within the survey area:
 - *Gompholobium glabristylum* (P2) - Three individuals were recorded in the survey area. The species is found throughout the SRNP with an east-west range of approximately 55km (85km including western outlying population) therefore may warrant listing as P4.

Tricostularia davisii (P3) - 547 individuals were recorded in the survey area. This recently described species (Barrett et. al. 2021) occurs "between Manypeaks and Cape Riche, east to Ravensthorpe and north to Lake King.

FAUNA

- The field assessment confirmed that three mammals and four bird species of conservation significance may utilise habitats in the survey area:
 - Quokka (T) are likely to occur. Twenty-two records occur in the study area and road killed quokka are observed intermittently near Moingup Springs. They may traverse through the survey area occasionally, but are unlikely to be resident.
 - Western Brush Wallaby (P4) are likely to occur. Twenty-one records occur in the study area and may occur in a range of habitats including open mallee. They may traverse through the survey area occasionally, but are unlikely to be resident.
 - Quenda (P4) are likely to occur. Four records occur in the vicinity, one within 100 m of the survey area. The dense low sedgeland and soft sandy soils in the survey area are suitable for cover and foraging.
 - Carnaby's Cockatoo (T) is likely to occur; Baudin's Cockatoo (T) is considered to possibly occur.
 - Inland Western Rosella (P4) is considered to possibly occur. Three records occur in the vicinity, one within 500 m of the survey area. Suitable habitat is present for the species to traverse through the survey area.
 - Western Whipbird (mallee) (P4) is likely to occur. Forty-four records occur within the study area. Calls heard during field survey in drainage line 150 m west of the survey area.
- A foraging habitat quality assessment for black cockatoo species determined the remnant vegetation (0.65 ha) scores as high quality (7/10) for Carnaby's and low (3/10) for Baudin's Cockatoo. Approximately 10 plants species present in the survey area are suitable for either black cockatoo species.
- The survey area does not contain trees of sufficient size and diameter to support roosting or breeding for cockatoo species. One confirmed breeding site and three roosting sites for Carnaby's cockatoo occur within 15 km of the survey area.

Appendix 2: Vegetation Management Plan (VMP)

CONSTRUCTION OF ADDITIONAL HEAVY VEHICLE PARKING BAY, ALBANY-LAKE GRACE ROAD (M001) SLK 65.44 – SLK 65.71

Purpose and Scope

This Vegetation Management Plan (VMP) has been prepared by Main Roads for the purpose of managing native vegetation clearing impacts associated with the construction of a 280 m heavy vehicle parking bay for south bound traffic within the Main Roads-vested road reserve of Albany-Lake Grace Road (M001) SLK 65.44 to 65.71. The parking bay will mirror that of the previously constructed parking bay on the north-bound side of Albany-Lake Grace Road and is adjacent to Stirling Range National Park.

The scope of Works comprises:

- (a) construction and sealing of one heavy vehicle parking bay on Albany-Lake Grace Road, including associated drainage works and line marking
- (b) construction of hardstands for two future toilet block facilities
- (c) installation of signage, guide posts and a picnic table
- (d) maintenance of existing roads and access tracks, and
- (e) safe management of traffic through the Works.

Clearing of up to 0.37 ha remnant roadside vegetation using CPS 818 within a 0.6 ha Development Envelope is required to undertake the proposed Works.

In specified circumstances, Main Roads Vegetation Management Plan is required to be approved by Department of Water and Environmental Regulation (DWER) as a condition of the Main Roads Statewide Clearing Permit CPS 818.

Actions, and their relevant timeframes, from this VMP will be documented within the relevant Tender Documentation (Specifications), such as:

- Specification 204 Environmental Management
- Specification 301 Vegetation Clearing and Demolition
- Specification 303 Materials and Water
- Specification 304 Rehabilitation of Disturbed Areas.

Once the Contract has been awarded, the Superintendent's Contract Management Team (or equivalent roles) are to ensure that the requirements are implemented by the Contractor.

Avoiding, Mitigating and Managing the Impacts of Clearing

A number of measures were undertaken to during the development and design of the Proposal to reduce its impact the environment.

For further information on the alternatives that were considered during the Proposal development, please go to **Section 1.5** of the Clearing Assessment Report for the Proposal.

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For further information on the measures undertaken to avoid, minimise, reduce and manage the Proposal's clearing impacts, please go to **Section 1.6** of the Clearing Assessment Report for the Proposal.

VMP Actions

General vegetation management actions to be undertaken is shown in **Appendix 2.1: General Vegetation Management Actions for Clearing**.

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Appendix 2.1: General vegetation management actions for clearing

Management Action	Responsibility	Timing
The Contractor must ensure plant, machinery and equipment, is cleaned down prior to arrival to the site.	Superintendent	During construction
Vehicle hygiene inspection checklists will be utilised to manage potential weed/dieback spread on earth-moving machinery.	Superintendent	During construction
No known dieback infested soil, mulch, fill or other material will be permitted into the works area.	Superintendent	During construction
All Clearing must be undertaken in such a way to allow fauna to move out of the Clearing area.	Superintendent	During construction
The Limits of Vegetation Clearing will be demarcated on site prior to the commencement of clearing to prevent entry into areas of native vegetation.	Superintendent	During construction
Natural drainage pathways will not be obstructed from stockpile gravel, crushed rock and excavated material.	Superintendent	During construction
All recently cleared, exposed and loose surface areas shall be protected from wind, water and soil erosion.	Superintendent	During construction
The Contractor will ensure that clearing of native vegetation is only undertaken in dry conditions, unless otherwise approved and / or directed by the Superintendent.	Superintendent	During construction
All Special Environmental Areas will be pegged in accordance with Main Roads' Drawing 201928-0001-1 Construction Peg Colour Code (https://www.mainroads.wa.gov.au/globalassets/technical-commercial/technical-library/standard-contract-drawings/vegetation/construction-environmental-management/201928-0001-construction-peg-colour-code-drawing.pdf?v=49bd3b).	Superintendent	During construction
The Contractor must develop and detail a Site induction training program as part of the CEMP that includes as a minimum, the significant environmental impacts, actual or potential, of work activities associated with the Contract	Superintendent	During construction

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The following specific actions shall also be implemented and will be the responsibility of the Superintendent to ensure they are completed prior to clearing commencing, unless otherwise specified:

- Significant flora close to but outside the Limit of Vegetation Clearing will be marked by Main Roads as Special Environmental Areas (SEAs) prior to Works commencing to provide a physical, continuous barrier for on-site personnel during the Works.
- The boundary of Stirling Range National Park adjacent to the Works will be marked by Main Roads as a Special Environmental Area (SEA) prior to Works commencing to provide a physical, continuous barrier for on-site personnel during the Works.
- Onsite personnel will not be permitted to enter roadside vegetation beyond the Limit of Vegetation Clearing or demarcated Special Environmental Areas under any circumstances.
- Although there are no known sites of Aboriginal heritage significance within the Works area and no Aboriginal heritage monitors are required during construction, if materials suspected to be of Aboriginal heritage significance are uncovered, the Contractor must cease all Works within 50m.

The above actions will be documented within Specifications 204 and 301.

Main Roads' pre-clearing **Hold Point** applies to all projects that require vegetation clearing, as documented within Specification 301 (301.12 PRE-CLEARING PROCESS). Accordingly, all Hold Point actions must be signed off prior to clearing commencing. This Hold Point comprises the following actions:

1. Prior to the commencement of any clearing operations, the Contractor must certify for the Superintendent's verification and approval that the following activities have been completed in accordance with the relevant specification:
 - a) The pegging of limits of vegetation clearing has been undertaken.
 - b) The pegged vegetation clearing area does not exceed the Limits of Vegetation Clearing.
 - c) Mature trees have been conserved as far as practicable.
 - d) The pegging of special environmental areas has been undertaken.
 - f) All pre-clearing weed control has been undertaken.
 - g) All pre-clearing fauna operational controls have been undertaken.
 - h) All pre-clearing dieback operational controls have been undertaken.
 - i) Suitable and unsuitable topsoil zones have been identified.
 - j) Vegetation and topsoil stockpile locations have been identified.
 - o) All clearing machinery is compliant with controls.

Monitoring and Maintenance Program

The Superintendent's Contract Management Team shall monitor the implementation of management actions that are a **Hold Point**. **Hold Point** actions must be signed off by the Superintendent's Representative to confirm it has occurred and recorded within the Superintendent's Contract Management Plan.

Non-Compliance

Non-compliance with management actions will trigger corrective actions, preventative actions and/or an incident investigation. Non-compliances will be recorded with Main Roads incident management system and reviewed by Main Roads Manager Environment.

The need for reporting non-compliances with VMP management actions to DWER will be determined as part of an incident investigation.

Revegetation

Revegetation will be undertaken in accordance with Condition 9 of CPS 818. Relevant requirements from Condition 9 and the elements to be implemented by the Contractor will be incorporated into the relevant Specification 304.