

Document Reference: EP22-096(08)—016 DTA

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Emerge Environmental Services Pty Ltd ABN  
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Attention:

Environmental Protection Authority

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To whom it may concern,

## **NOTICE REQUIRING FURTHER INFORMATION – CLARKE ROAD LARGE FORMAT RETAIL AND HARDWARE DEVELOPMENT (APP-0024953)**

This letter is a response to the Environmental Protection Authority's (EPA) notice, dated 26 March 2024, requesting further information on the Section 38 Referral Supporting Document - Lot 100 and Lot 256 Clarke Road (Emerge Associates 2023).

### **1 INTRODUCTION**

Colchester Pty Ltd. (the proponent) intend to develop Lot 100 and Lot 256 Clarke Road, Margaret River (the development area) to construct a large format hardware and retail development (referred to herein as 'the Proposal'). The development area is located approximately 900 meters (m) south of Margaret River town site in the southwest of Western Australia. It is bound by existing commercial areas to the north and south, the South Regional TAFE Margaret River Campus to the east and Clarke Road and a local reserve to the west.

On behalf of the proponent, Emmerge Associates referred the Proposal to the EPA in late 2023 pursuant to Section 38 of the *Environmental Protection Act 1986* (EP Act). The EPA determined that the referral did not provide enough information about the Proposal to enable the EPA to make a decision whether or not the Proposal should be assessed. The EPA have requested the following further information on the proposal:

- 1. To outline how the mitigation hierarchy (particularly avoidance and proposal design) has been fully explored and applied to the proposed development.*
- 2. To identify and quantify the significant residual impacts and proposed offsets, including completing the offset template (an example is in Appendix 1 of the WA Offsets Guidelines) and the residual impact significance model table (an example is on Page 11 of the WA Environmental Offsets Guideline).*
- 3. Where significant residual impacts remain, propose an appropriate offsets package and demonstrate how the proposed offset will counterbalance the significant residual impact. Demonstrate the consideration of the six Principles outlined in the WA Environmental Offsets Policy and EA Environmental Offset Guideline.*

This letter has been prepared to outline the response to this request for further information and is structured in accordance with these items.

## 2 APPLICATION OF THE MITIGATION HIERACHY AND PROPOSAL DESIGN REFORM

The Section 38 Referral Supporting Document submitted to the EPA, outlined a range of measures proposed to mitigate the direct and indirect impacts of the Proposal in accordance with the mitigation hierarchy for relevant environmental factors. The initial referral supporting document which considered impacts to all relevant environmental factors as a result of the Proposal, is provided in **Appendix A**.

In addition to the management measures provided in the referral, the proponent has revised the Proposal design to increase the avoidance footprint and therefore reduce the anticipated residual environmental impacts to both flora and vegetation and fauna values. In this respect, the Proposal and associated new development layout provides for an increase to the size of landscaped areas from 0.19 ha to 0.43 ha. This includes the provisioning of green corridors along the northern, eastern and southern boundaries and the maintenance of the green areas originally proposed along the western boundary of the development area. It would provide an environment where western ringtail possum (WRP) can traverse the development area and connect with other suitable habitat in the surrounding areas. The area of retained vegetation has been increased from 0.13 ha to 0.27 ha, which includes tree canopy that will extend over the hardstand areas. Based on this, the anticipated residual impact on WRP habitat has reduced from 1.65 ha to 1.57 ha. Furthermore, the number of black cockatoo habitat trees being retained has also increased to five (previously two were proposed to be retained). Carnaby's black cockatoo foraging habitat that was initially proposed for clearing has reduced from 1.65 ha to 1.57 ha, whilst Baudin's and Forest red-tailed black cockatoo reduced from 1.37 ha to 1.34 ha. Ultimately, the Proposal and associated development layout revisions have improved habitat retention outcomes, but as a consequence, reduced the gross developable floor within the development area, which does have real implications for the overall viability of the project, but which can be managed. The revised design of the Proposal is provided in **Appendix B**.

A Construction Environmental Management Plan (CEMP) has also been prepared as part of additional mitigation measures for impacts during clearing, construction and ongoing operation. This management plan will be submitted with the planning application and is expected to be a condition of the development approval, and has been attached in **Appendix C**.

The updated management measures based on the mitigation hierarchy outlined in the Section 38 Referral Supporting Document (**Appendix A**, pp. 34-35 and 51) are presented below in **Table 1 and 2**.

Table 1: Mitigation measures to minimise impacts to flora and vegetation

Impacts	Mitigation measures
<b>Direct Impacts</b>	
<ul style="list-style-type: none"> <li>Clearing of native vegetation</li> </ul>	<p><u>Avoidance</u></p> <ul style="list-style-type: none"> <li>No threatened or priority ecological communities (TECs and PECs) or threatened or priority flora species will be impacted as a result of the proposal.</li> <li>Following the completion of the flora, vegetation and fauna assessments, the development footprint was reduced to avoid the removal of 0.27 ha of native vegetation within 0.43 ha of landscaped areas within lots 100 and 256.</li> <li>By avoiding the removal of 0.27 ha of native vegetation, 0.12 ha of marri forest and 0.15 ha of peppermint forest fauna habitat associated with the 'Cowaramup, C1 and Cw1' vegetation complexes in 'completely degraded' to 'very good' condition will remain and be retained.</li> <li>It is acknowledged that vegetation to be retained within the development area will potentially be subject to modification for bushfire management purposes, which may require some pruning of lower tree branches (i.e. up to a height of 2 m from ground level), and understorey weed and dead plant material removal. Notably however, mature trees comprising native Marri and Peppermint vegetation will remain and ultimately comprise 0.27 ha of native vegetation as highlighted above.</li> </ul> <p><u>Minimisation</u></p> <ul style="list-style-type: none"> <li>The disturbance footprint has been minimised to 1.57 ha of native vegetation clearing from the previous 1.65 ha.</li> <li>The following mitigation measures are documented and outlined further within the CEMP specifically for flora and vegetation: <ul style="list-style-type: none"> <li>Identify tree/vegetation retention areas on engineering drawings, and delineate as 'no go zones'. No go zones will be clearly demarcated on the ground, using flagging tape or fencing. Demarcation measures will further prevent potential edge effects outside the development area i.e. accidental unauthorised clearing.</li> <li>No storage or machinery equipment will be permitted under retained trees/vegetation.</li> <li>Hygiene measures for vehicles, tools, equipment, and machinery prior to works to prevent the spread of disease and weeds.</li> <li>Maintenance of works area in a clean and tidy manner to prevent the attraction of feral or pest animals that may impact on native vegetation.</li> <li>As part of clearing, mulch vegetation in situ and utilise within landscaped areas.</li> </ul> </li> </ul> <p><u>Rehabilitate</u></p> <ul style="list-style-type: none"> <li>Native vegetation species will be incorporated within the landscaping areas, aiming to reintroduce some of the vegetation, habitat values, and re-establish movement corridors lost through clearing.</li> <li>Native tree species will be incorporated into the carparking areas, with 19 trees proposed (previously 16).</li> <li>Weed removal as specified in the CEMP, will be the responsibility of the revegetation specialist who will coordinate the control of weeds as required.</li> </ul>

Table 1: Mitigation measures to minimise impacts to flora and vegetation (continued)

Impacts	Mitigation measures
<b>Indirect impacts</b>	
<ul style="list-style-type: none"> <li>• Introduction and spread of weeds and plant diseases/pathogens</li> <li>• Generation of dust</li> <li>• Alteration of surface or groundwater</li> </ul>	<p><u>Avoidance</u></p> <ul style="list-style-type: none"> <li>• There are no surface or groundwater features within the development area. No groundwater abstraction or dewatering will be undertaken during the implementation of the proposal. The development area is located within an existing commercial precinct with provision for connection to the existing local water and drainage network.</li> <li>• Measures will be applied during the implementation of the Proposal to reduce or avoid any potential indirect impacts such as the spread of weeds and creation of dust (see below).</li> </ul> <p><u>Minimisation</u></p> <ul style="list-style-type: none"> <li>• Implement hygiene protocols during the clearing and construction process to minimise introduction/spread of weeds and plant pathogens. This will include: <ul style="list-style-type: none"> <li>○ Vehicles, machinery and personnel to be free of mud/soil and plant material upon entering the development area. Inspections to be completed prior to works commencing.</li> <li>○ Minimising clearing and earthworks during wet conditions to prevent the spread of dieback.</li> <li>○ Implementing soil and erosion control measures in accordance with the Shire of Augusta Margaret River <i>Erosion and Sediment Control Local Law 2019</i> (SAMR 2019).</li> <li>○ Using landscaping species not identified as weeds.</li> </ul> </li> <li>• Undertake weed control in areas of retained vegetation, particularly with regard to arum lily. This can be documented in the landscape plans, required as a condition of development approval.</li> <li>• Implement dust management measures during clearing/earthworks. These would include activities such as: avoiding works during periods of strong winds, and the utilisation of water suppression as required. This will be documented within a construction environmental management plan, required as a condition of development approval.</li> <li>• Implement stormwater management measures, which will include infiltrating as much stormwater within the development area as possible, through use of swales/basins and/or soakwells, and connecting the existing local stormwater drainage network for management of larger volumes. A drainage and/or stormwater management plan will be prepared as a condition of development approval, As part of engineering drawings.</li> </ul> <p><u>Rehabilitate</u></p> <ul style="list-style-type: none"> <li>• Native vegetation species will be incorporated within the landscaping areas, aiming to reintroduce some of the vegetation, habitat values, and re-establish movement corridors lost through clearing. The landscape works will require the management and removal of weeds across the development area, which is considered a positive outcome.</li> </ul>

Table 2: Mitigation measures to minimise impacts to significant terrestrial fauna

Impacts	Mitigation measures
<b>Direct Impacts</b>	
<ul style="list-style-type: none"> <li>• Direct loss of fauna habitat from clearing and ground disturbance including:               <ul style="list-style-type: none"> <li>○ Clearing of 1.57 ha of western ringtail possum habitat.</li> <li>○ Clearing of up to 1.57 ha of Carnaby's black cockatoo foraging habitat</li> <li>○ Clearing up to 1.34 ha of Baudins and forest red-tailed black cockatoo foraging habitat.</li> <li>○ Clearing of 23 black cockatoo habitat trees.</li> </ul> </li> </ul>	<p><u>Avoidance</u></p> <ul style="list-style-type: none"> <li>• By avoiding the removal of 0.27 ha of native vegetation, 0.12 ha of marri forest and 0.15 ha of peppermint forest fauna habitat associated with the 'Cowaramup, C1 and Cw1' vegetation complexes in 'completely degraded' to 'very good' condition will remain and be retained.</li> <li>• The reduction in development and disturbance footprint has avoided the removal of 0.27 ha of WRT and CBC habitat, and 0.12 ha for Baudin's and Forest red-tailed black cockatoos, and five (5) habitat trees.</li> <li>• Avoidance of three (3) large peppermint trees in the south-east corner identified with existing WRP drey's.</li> <li>• It is acknowledged that vegetation and ultimately fauna habitat, to be retained within the development area will potentially be subject to modification for bushfire management purposes, which may require some pruning of lower branches (i.e. up to a height of 2 m from ground level), and understorey weed and dead plant material removal. Notably however, mature trees comprising native Marri and Peppermint vegetation (Marri and Peppermint fauna habitat) will remain and ultimately comprise 0.27 ha of native vegetation as highlighted above.</li> </ul> <p><u>Minimisation</u></p> <ul style="list-style-type: none"> <li>• Following the completion of fauna assessments, the development footprint was reduced, to retain approximately an additional 0.14 ha of native vegetation and 3 habitat trees within 0.43 ha of landscaped areas, which comprises 1.34 ha of Marri Forest and 0.23 ha of Peppermint Forest fauna habitat, and 1.57 ha of WTP and CBC foraging habitat, and 1.34 ha Baudin's and Forest Red-tailed black cockatoo foraging habitat respectively.</li> <li>• Implementation of fauna management protocols by an experienced fauna specialist under a valid license from the DBCA. This would include pre-clearing fauna inspection and having a fauna spotter present during clearing activities, fauna trapping if required and managed dispersal to surrounding suitable habitat prior to clearing (particularly for WRP, should the species be present at the time). The proponent acknowledges that any handling of threatened fauna during the implementation of the Proposal will require Ministerial Authorisation under Section 40 of the <i>Biodiversity Conservation Act 2016</i>. This is documented within the CEMP. Additional measures as outlined in the CEMP are as follows:               <ul style="list-style-type: none"> <li>○ Undertake clearing outside of the main fauna breeding season (spring) where possible, and in stages along one front to allow fauna to move from clearing area into adjacent habitat (i.e. surrounding area).</li> <li>○ Vehicle and machinery speed limits to prevent fauna strikes.</li> <li>○ No storage or machinery equipment will be permitted under retained trees/vegetation.</li> <li>○ Hygiene measures for vehicles, tools, equipment, and machinery prior to works to prevent the spread of disease and weeds that may impact fauna.</li> <li>○ Use of a fauna spotter during clearing, particularly during clearing of all large trees with hollows.</li> <li>○ Maintenance of works area in a clean and tidy manner to prevent the attraction of feral or pest animals.</li> <li>○ Clearing of vegetation in one direction allowing for the movement of fauna to adjacent vegetation (if fauna trapping is not required) or as deemed appropriate by the fauna specialist if identified during construction.</li> <li>○ Potential traffic control measures to let fauna cross into nearby habitat from the development area.</li> </ul> </li> </ul>

Table 2: Mitigation measures to minimise impacts to significant terrestrial fauna (continued)

Impacts	Mitigation measures
<b>Direct Impacts (continued)</b>	
<ul style="list-style-type: none"> <li>• Direct loss or injury to fauna individuals</li> </ul>	<p><u>Rehabilitate</u></p> <ul style="list-style-type: none"> <li>• Native vegetation species will be incorporated within the landscaping areas, aiming to reintroduce some of the vegetation, habitat values, and re-establish movement corridors lost through clearing.</li> </ul> <p>Native tree species will be incorporated into the carparking areas, with 19 trees proposed (previously 16).</p>
<b>Indirect Impacts</b>	
<ul style="list-style-type: none"> <li>• Introduction and spread of weeds and plant diseases/pathogens</li> <li>• Attraction of predators and competitors</li> <li>• Fragmentation of habitat corridors</li> </ul>	<p><u>Minimisation</u></p> <ul style="list-style-type: none"> <li>• Implement hygiene protocols during the clearing and construction process to minimise introduction/spread of weeds and plant pathogens. This will include: <ul style="list-style-type: none"> <li>○ Vehicles, machinery and personnel to be free of mud/soil and plant material upon entering the Proposal area. Inspections to be completed prior to works commencing.</li> <li>○ Minimising clearing and earthworks during wet conditions.</li> <li>○ Implementing soil and erosion control measures in accordance with the Shire of Augusta Margaret River <i>Erosion and Sediment Control Local Law 2019</i> (SAMR 2019).</li> <li>○ Using landscaping species not identified as weeds.</li> </ul> </li> </ul> <p>This will be documented within a construction management plan, required as a condition of development approval.</p> <ul style="list-style-type: none"> <li>• Ensure the Development Envelope and works area is maintained in a clean and tidy manner to ensure feral and other species are not attracted to the development area.</li> <li>• Waste material is to be disposed of appropriately through waste services and/or to licenced landfill. This will be documented within a construction management plan, required as a condition of development approval.</li> <li>• Utilise wooden boundary fencing (which provide better grip), to facilitate movement of western ringtail possum between vegetation corridors along the northern, eastern and western boundaries of the Development Envelope. This can be documented in the engineering design drawings.</li> <li>• Install fauna awareness signs within the Proposal, to highlight to future businesses and visitors the potential for fauna to occur and care to be taken. The Shire of Augusta Margaret River have a number of standard signs that could be used.</li> </ul> <p><u>Rehabilitate</u></p> <ul style="list-style-type: none"> <li>• Not applicable.</li> </ul>

### 3 ADDITIONAL SURVEYS

#### Desktop Assessment

In March 2024, a desktop WRP study utilising the 'Department of Biodiversity Conservation and Attraction' (DBCA) and community survey group 'Nature Conservation Margaret River Region' (NCMRR) datasets, was conducted to support the proposal's *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) assessment process through a response to an additional information request. The study sought to provide recent data (last 5 years) on WRP activity within the wider Margaret River area, with estimates on WRP density, abundance and average home range size up to 12 km from the proposal.

The study found significant activity for WRP occurred within 10 km of the Proposal area, and specifically within the town area and 2 km of the Proposal area.

The NCMRR data from 2018/2019 identified 237 possums within areas of native vegetation proximal to Margaret River town, with 1.4 ( $\pm 0.04$ ) possums per survey sighted on average within the transect areas. The DBCA dataset contained 469 sightings over seven years and indicated that 1.5 ( $\pm 0.05$ ) possums per survey were sighted on average within 10 km of the Proposal area. Within 1 km distance of the Proposal area, a total of 121 possums per survey were sighted and 5.5 ( $\pm 1.6$ ) possums found on average per square kilometre over the seven years.

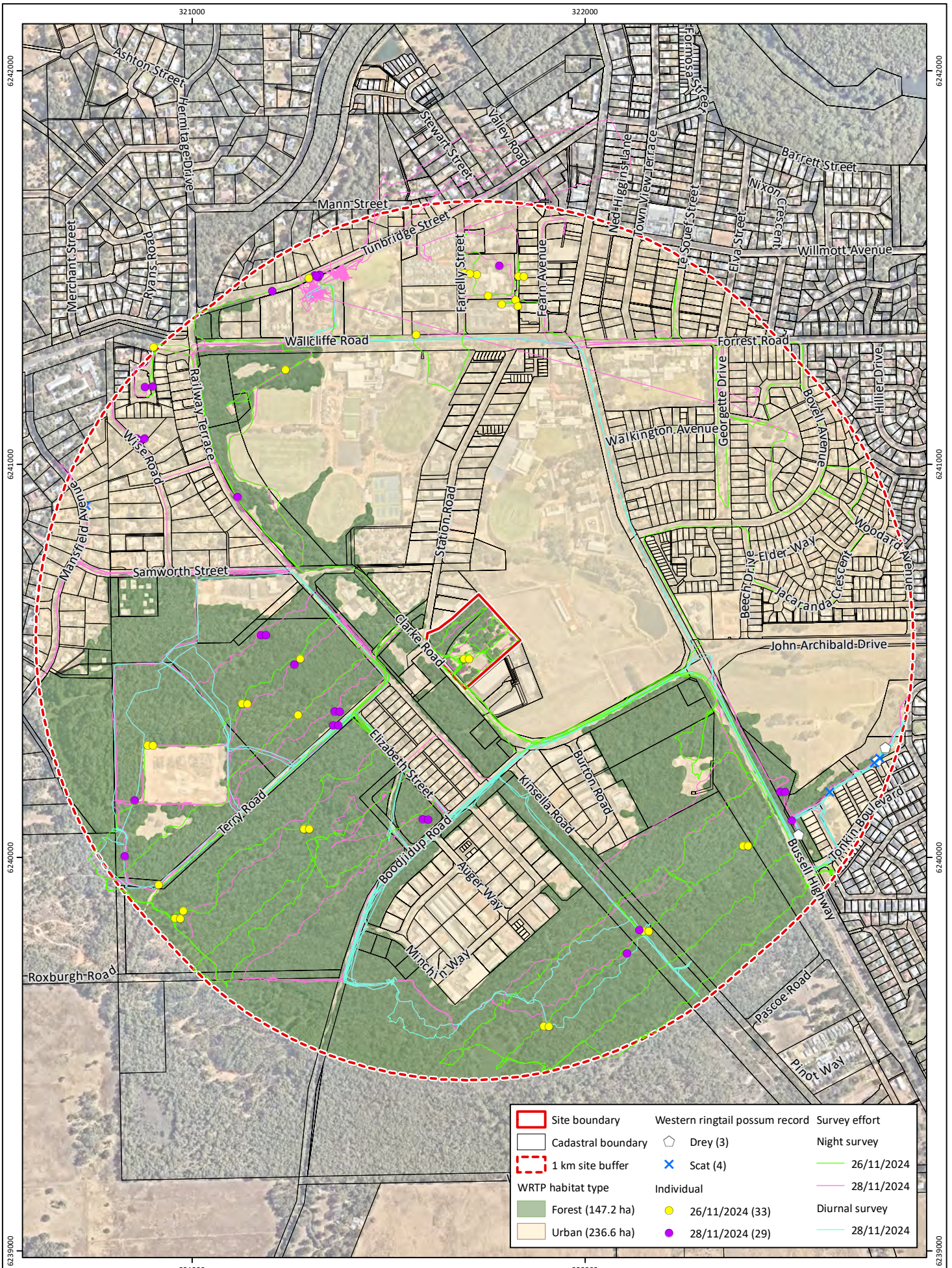
This suggests that the number of possums identified within the development area (five (5) individuals the first survey period, and four (4) individuals the second period, an average of 4.5 possums within the development area) (Emerge Associates 2024) is similar to that in the surrounding area.

#### Targeted Assessment

Emerge Associates conducted additional targeted WRP surveys to support the proposal's *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) assessment process through Preliminary Documentation. The targeted WRP assessment was completed in accordance with the *Survey guidelines for Australia's threatened mammals* (DSEWPaC 2011) and was conducted from the 26<sup>th</sup> to the 28<sup>th</sup> of November 2024 during both day and night for a survey area 1 km in size (which encompasses the development area) (see **Figure 1**).

The assessment identified two habitat types persistent within the Proposal and wider area, namely 'forest' and 'urban'. The majority of the WRP identified were recorded within the forest habitat during both survey nights (21 and 17 individuals), possums recorded within the urban habitat occurred in more vegetated areas containing peppermint trees (including parks and rows of street trees). Three dreys were opportunistically recorded within the forest habitat adjacent to the urban area, which was dominated by peppermint trees, with WRP scats also found in this area. Two individual WRP were identified within the development area on the first night of survey. No WRP were identified on the second night survey within the development area, which indicates WRP utilise the development area opportunistically and would not be present at all times and therefore already moving between the development area and surrounding habitat. The species appears to be more frequently using the more intact 'forest' areas in the locality which provide better habitat values. The number of recorded WRP within the survey area indicate that full occupation capacity for WRP for the local area has not been reached, and any WRP that may occur in the development area opportunistically would disperse to nearby habitat. Therefore, the removal of habitat within the development area would not fragment or inhibit the ability for WRP to continue to disperse and occupy the surrounding local area.

It is noted that any impact on WRP (and black cockatoo) will be assessed by the Commonwealth Department of Climate Change, Energy, the Environment and Water (DCCEEW) through the preliminary documentation presently being prepared. The preliminary documentation will include the detailed outcomes of the most recent targeted WRP surveys including a comprehensive survey report.



**Figure 1: Western Ringtail Possum Habitat Value**

Plan Number:  
EP22-096(08)--F56  
Drawn: GAR  
Date: 19/12/2024  
Checked: DTA  
Approved: JDH  
Date: 19/12/2024



0 100 200 300  
Metres  
Scale: 1:12,500@A4  
GDA 1994 MGA Zone 50



**Project:** EPA Referral Response to Request for Further Information  
Lots 100 and 256 Clarke Road, Margaret River  
**Client:** Colchester Pty Ltd

#### 4 RESIDUAL IMPACT SIGNIFICANCE MODEL

Based on the application of mitigation hierarchy and as summarised in **Section 3**, considerable effort has gone into understanding the values of the development area and impacts associated with the Proposal, revising the Proposal design, and preparing management measures that prevent any remaining residual impact from being significant in the first instance.

In order for the EPA to determine the correct level of assessment for the proposal, EPA services has requested the proponent '*identify and quantify the significant residual impacts and proposed offsets, including completing the offset template and residual impact significance model table*' provided in the WA Offsets Guidelines 2014.

The following residual impacts are anticipated as a result of the Proposal once mitigation measures have been applied:

- The permanent loss of up to 1.57 ha of native vegetation representing the 'Cowaramup, C1' vegetation complex.
- The permanent loss of 1.57 ha of Carnaby's black cockatoo foraging habitat.
- The permanent loss of 1.34 ha of Baudin's and Forest Red-tailed black cockatoo foraging habitat.
- The permanent loss of 23 black cockatoo habitat trees (none contain suitable hollows for nesting) .
- The permanent loss of 1.57 ha of WRP foraging habitat.

In the application of the residual impact significance model, there is evidence to suggest the Proposal meets the definition and criteria of 'Residual impacts that are not significant' and therefore does not require any offsets.

Overall, the residual impacts to fauna, flora and vegetation are not considered to be significant because:

- No direct or indirect impacts to TECs and/or PEC, conservation reserves or major ecological linkages will occur as there were not identified within the development envelope during ecological survey (Emerge Associates 2023a, b). The clearing of vegetation within the development envelope will not cause significant fragmentation of surrounding remnant vegetation patches, and has since seen revision in the design to maximise connectivity and habitat corridors around the development area.
- No direct or indirect impact to conservation significant flora species (priority and threatened species) will occur as there were not identified within the project area despite conducting the survey in late September 2022 to ensure flowering periods for the majority of native species in the southwest including conservation significant and conspicuous perennial geophyte species such as *Caladenia huegelii* (Emerge Associates 2023b).
- The 'Cowaramup, C1' vegetation complex has 6,541 ha or 34% of its original extent remaining, of which 2,066 ha (approx. 11%) is protected for conservation purposes (Government of Western Australia 2019). The clearing of native vegetation within the development accounts for just 0.03% of the total vegetation complex extent.
- The application of the mitigation hierarchy has prevented remaining residual impacts from becoming significant or cumulating to critical levels for the region; given that the cumulative potential clearing of native vegetation within 1 km of the existing native vegetation would only increase from 0.34% (0.43 ha) to 1.62% (2.08 ha) and from 1.54% (271.83 ha) to 1.55% (273.83 ha) with a 12km radius. Details for the basis of this assessment are found in **Section 7 of Appendix A**
- Any direct or indirect impacts as a result of the Proposal can be mitigated through the implementation of the CEMP through the clearing, construction and operation phases. For example, the direct impact associated with the removal of trees on hollow bearing fauna will be mitigated through the implementation of additional tree inspections for potential hollows within the development area that may be utilised by vertebrate fauna species prior to clearing, which will seek to delay works until fauna have left the hollow. This will be the responsibility of the fauna

specialist and will be reviewed before clearing commences. The indirect impacts of disease and displacement of flora and fauna caused by public access to the development area will be mitigated through the use of fencing at all times, to which is the responsibility of the civil or landscape contractor, and will be reviewed daily during clearing and construction activities.

- WRP infrequently visit and utilise the development area before dispersing into suitable and well-connected forest and urban habitat in the surrounds. The number of recorded possums within the recent survey area indicate that full occupation capacity for WRP for the local area has not been reached, and any WRP that may occur in the development area opportunistically would disperse to nearby habitat. Therefore, the removal of habitat within the development area would not fragment or inhibit the ability for WRP to continue to disperse and occupy the surrounding local area.
- An assessment of the potential impact of the Proposal to WRP using the 'critically endangered' and 'endangered' species significant impact criteria (DotE 2013) was prepared to support the EPBC Act assessment process. It was considered unlikely that impacts on WRP were significant.
- Impacts to WRP can be managed through the implementation of the CEMP. For example, the machine operator will be instructed to 'gently bump' trees previously not identified for retention should the experienced zoologist find WRP present in hollows or dreys prior to felling. The operator and zoologist will wait and observe the tree for a short time. If no possum appears to be present then the tree shall be pushed over slowly to minimise risk of injury to the animal.
- A basic and targeted fauna assessment to the standard required of a 'basic' fauna survey and a 'targeted' black cockatoo and western ringtail possum survey was conducted last September (2023) and found 144.68 ha of suitable habitat (Marri and Peppermint forest) for WRP will persist within a 1 km radius of the proposal, which comprises approximately 126 ha within parks and recreation reserves that are unlikely to ever be cleared (see **Appendix A**, Plate 18 ). The proposed clearing represents 1.14% of vegetation within 1 km of the Proposal.
- The basic and targeted fauna assessment also found 144.68 ha of suitable habitat (Marri and Peppermint forest) for black cockatoos persists within a 1 km radius of the Proposal, which comprises approximately 126 ha within parks and recreation reserves that are unlikely to ever be cleared (see **Appendix A**, Plate 19). The proposed clearing represents 1.14% of vegetation within 1 km of the Proposal.
- Impacts to black cockatoos can be managed through the implementation of the CEMP. As previously mentioned, pre-clearing management actions will be conducted to potentially delay clearing for fauna (including black cockatoos) to leave hollows.
- Potential foraging habitat for black cockatoos have been identified within 12 km of the Proposal (shown in Plate 19 of **Appendix A**), 15,075 ha of which the majority lies within parks and recreation reserves, national parks or state forest and is unlikely to be cleared. The proposed clearing represents 0.011% of habitat available within 12km.

## 5 OFFSETS

There are no significant residual impacts anticipated as a result of the Proposal. In accordance with 'principle 2' of *WA Environmental Offsets Policy 2011*, environmental offsets will not be applied to minor environmental impacts, or cases where the residual impact is not considered to be significant. Thus, an offset is not proposed, nor the completion of the offsets template and its accompanying principles or supporting packages in this instance (Government of WA 2011).

## 6 SUMMARY AND CLOSING

This letter addresses the notice requiring further information by the EPA to consider the Proposal within Lots 100 and 256 Clarke Road, Margaret River, in particular:

- The request for clarity on how the mitigation hierarchy (particularly avoidance and Proposal design) has been fully explored and applied to the proposed development, which has been outlined consistent with the measures and developments in existing documentation such as the Environmental Protection Act referral and CEMP.
- With the identification of the appropriate level of significance of residual impacts and completion of the Residual Impact Significance Model.
- The absence of remaining significant residual impacts as a result of the application of the mitigation hierarchy, additional survey information and revised Proposal design thus requiring no offsets.

Thank you for the opportunity to provide additional information.

Should you have any questions about the provided information, do not hesitate to contact the undersigned on [Jason.Hick@emergeassociates.com.au](mailto:Jason.Hick@emergeassociates.com.au).

Yours sincerely  
Emerge Associates



**Jason Hick**  
PRINCIPAL ENVIRONMENTAL CONSULTANT

cc: Colchester Pty Ltd – James Tribe

Encl: Appendix A – Clarke Road s38 Referral Supporting Document (EP22-096(06)–005 DVB  
Appendix B – Revised site plan  
Appendix C – Clarke Road CEMP (EP22-096(08)—013 DTA

## 7 REFERENCES

- Department of the Environment (DotE) 2013, *Matters of National Environmental Significance - Significant impact guidelines 1.1 Environment Protection and Biodiversity Conservation Act 1999*, Canberra.
- Department of Sustainability, Environment, Water, Populations and Communities (DSEWPaC) 2011, *Survey guidelines for Australia's threatened fish - Guidelines for detecting fish listed as threatened under the Environment Protection and Biodiversity Conservation Act 1999, ACT*.
- Emerge Associates 2024, *Clarke Road Request Response*, EP22-096(07)--012a DVB, Version A.
- Emerge Associates 2023a, *Basic and Targeted Fauna Assessment - Lot 100 and 256 Clarke Road, Margaret River*, EP22-096(02)--003 NAW, Version A.
- Emerge Associates 2023b, *Detailed Flora and Vegetation Assessment - Lot 100 and 256 Clarke Road, Margaret River*, EP22-096(01)--002 MS, Version A.
- Government of Western Australia (Government of WA) 2011, *WA Environmental Offsets Policy*.
- Government of Western Australia 2019, *2018 South West Vegetation Complex Statistics. Current as of March 2019*, WA Department of Biodiversity, Conservation and Attractions, Perth.
- Shire of Augusta Margaret River (SAMR) 2019, *Shire of Augusta Margaret River Erosion and Sediment Control Local Law 2019*, Western Australia

# Appendix A

Clarke Road s38 Referral Supporting Document



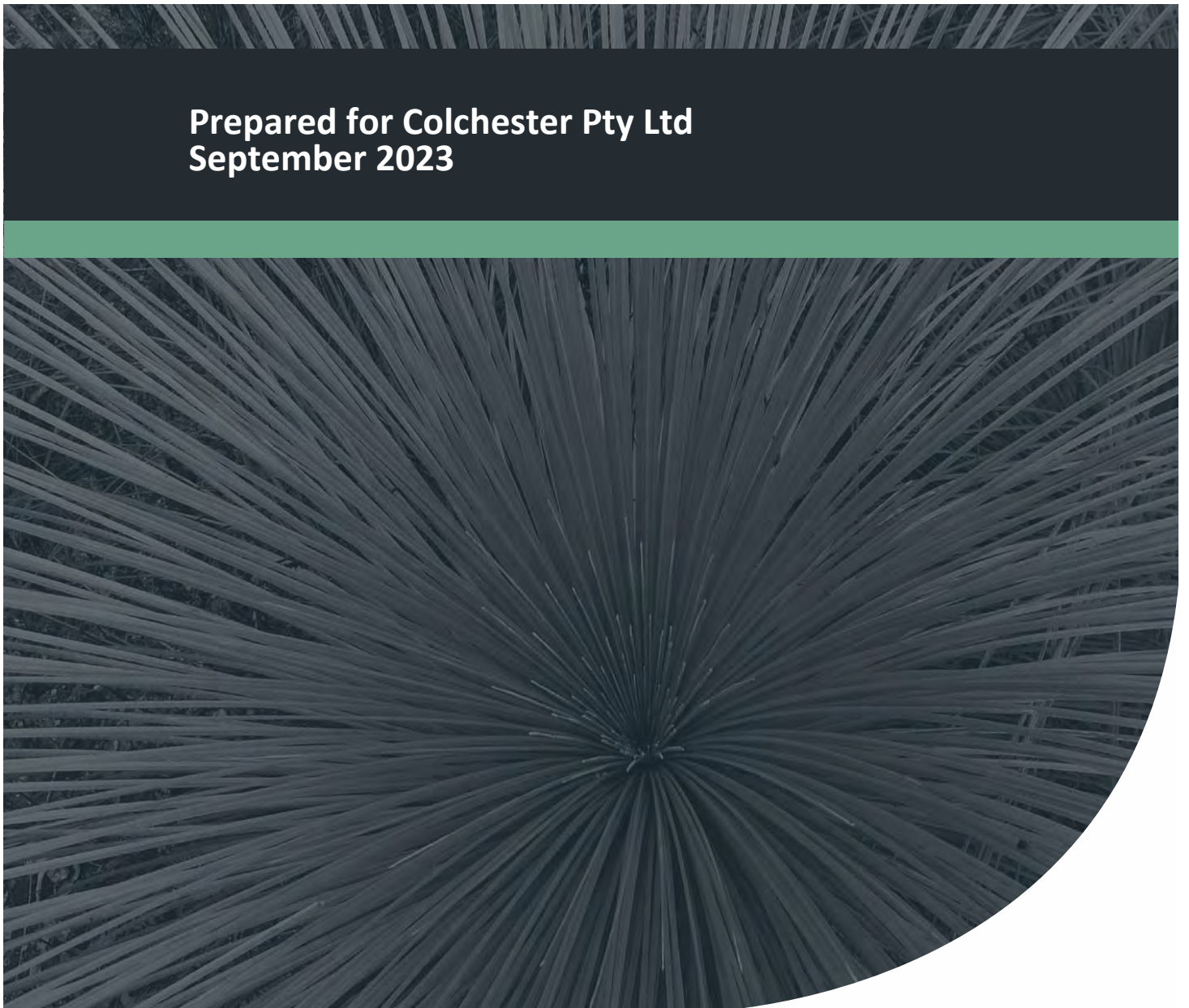


# Section 38 Referral Supporting Document

Lot 100 and Lot 256 Clarke Road, Margaret River

Project No: EP22-096

**Prepared for Colchester Pty Ltd  
September 2023**



## Section 38 Referral Supporting Document

Lot 100 and Lot 256 Clarke Road, Margaret River



### Document Control

<b>Doc name:</b>		Section 38 Referral Supporting Document Lot 100 and Lot 256 Clarke Road, Margaret River			
<b>Doc no.:</b>		EP22-096(06)—005a DVB			
Version	Date	Author		Reviewer	
1	September 2023	Daniel Bussell	DVB	Kirsten Knox	KK
	Report issued for client comment.				
A	September 2023	Daniel Bussell	DVB	Kirsten Knox	KK
	Updated following client review.				

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## Section 38 Referral Supporting Document

Lot 100 and Lot 256 Clarke Road, Margaret River



### Executive Summary

Colchester Pty Ltd (the Proponent) are proposing to develop a single hardware showroom with a nursery and warehouse and a consolidated 10 showrooms in a single building within Lot 100 and Lot 256 Clarke Road in Margaret River (referred to herein as the 'Proposal'). The Proposal is located 900 m west of the Margaret River town centre and covers an area 2.86 ha in size, which is also the Development Envelope. It is bounded by private commercial landholdings to the north and south, the South Regional TAFE Margaret River Campus to the east and Clarke Road to the west and has been subject to residential development historically.

The Proposal is located in an area zoned as 'service commercial' under the Shire of Augusta Margaret River Local Planning Scheme No. 1 (and draft Shire of Augusta Margaret River Local Planning Scheme No. 2) and is able to support the proposed land use. The Proposal will be subject to a development approval pursuant to the *Planning and Development Act 2005* and will be comprised of the following activities:

- Clearing of vegetation and earth working.
- Construction of the new buildings, hardstand, vehicle cross-overs and carpark areas.
- Establishment of landscaping areas (0.19 ha), which will include retention of existing vegetation (0.13 ha).

This document provides the relevant information to support a Section 38 Referral under Part IV of the *Environmental Protection Act 1986* (EP Act). It provides regulatory authorities with the appropriate level of information to review the environmental impact associated with implementing the Proposal. In addition, the Proponent will refer the Proposal to the Commonwealth Department of Climate Change, Energy, the Environment and Water (DCCEEW) under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

Based on a range of investigations undertaken to support the Proposal, the key environmental factors, in consideration of the Environmental Protection Authority (EPA) factor guidelines, that could be impacted include flora and vegetation, and terrestrial fauna.

#### **Flora and vegetation**

The vegetation within the site is part of the Cowaramup C1, of which 6,540.87 ha (34.46 %) remains in the South West forest region. 10.88% of this vegetation complex is reserved and protected. None of the vegetation within the Proposal area was identified to contain threatened or priority flora, or threatened or priority ecological communities.

The Proposal area has been subject to disturbance and vegetation removal in the past, with portions of the vegetation in the site being regrowth. The vegetation condition across the Proposal varies, and implementation will result in the loss of 1.65 ha of native vegetation comprising:

- 0.46 ha in very good condition.
- 0.32 ha in good to degraded condition.
- 0.58 ha in degraded condition.
- 0.29 ha in degraded to completely degraded condition.

## Section 38 Referral Supporting Document

Lot 100 and Lot 256 Clarke Road, Margaret River



### Terrestrial fauna

Investigation undertaken within the Proposal area indicate that vegetation within the site could support a number of conservation significant fauna species, including the western ringtail possum and the three black cockatoo species (Carnaby's, Baudin's and forest red-tailed). A targeted western ringtail possum survey observed a number of possums within the site; while a targeted black cockatoo habitat assessment found no breeding trees with suitable hollows. A 0.13 ha area of the existing vegetation within the Proposal is to be retained within the proposed landscape areas.

The Proposal will result in a loss of up to 1.65 ha of native fauna habitat including:

- 1.65ha of marri forest and peppermint forest habitat suitable for western ringtail possum.
- 1.65 ha of marri forest and peppermint forest habitat providing Carnaby's cockatoo foraging habitat.
- 1.37 ha of marri forest habitat providing Baudin's and forest red-tailed black cockatoo foraging habitat.
- 26 habitat trees, none with suitable hollows.

The vegetation to be removed within the Proposal is 1.14 % of western ringtail possum habitat identified within 1 km. For the black cockatoo species, within 12 km of the Proposal, 15,076 ha of foraging habitat is found, with the clearing of the Proposal comprising 0.01% of this.

### Mitigation and management

The Proponent will implement a range of management measures as part of the Proposal, to ensure impacts to flora and vegetation, and in particular terrestrial fauna, are minimised as much as possible. These can be managed as condition of a development approval, through the preparation and implementation of a construction environmental management plan and/or fauna management plan (which would need to be reviewed and approved by the Shire of Augusta Margaret River).

Management measures proposed to be undertaken by the Proponent include:

- Identify tree/vegetation retention areas on engineering drawings, and delineate as 'no go zones'. No go zones will be clearly demarcated on the ground, using flagging tape or fencing.
- As part of clearing, mulch vegetation in situ and utilising this within landscaped areas.
- No storage or machinery equipment will be permitted under retained trees/vegetation.
- Incorporate native vegetation species within the landscaping areas, aiming to reintroduce some of the vegetation and habitat values lost through clearing.
- Native tree species will be incorporated into the carparking areas, with 16 trees proposed.
- Implementation of fauna management protocols by an experienced fauna specialist under a valid license from the DBCA. This would include fauna trapping and relocation prior to clearing (particularly for western ringtail possum), pre-clearing fauna inspection and having a fauna spotter present during clearing activities.
- Using wooden boundary fencing to facilitate movement of western ringtail possum between corridors of vegetation to the east and west.
- Implementing hygiene protocols during the clearing and construction process to minimise introduction/spread of weeds and plant pathogens.
- Implementing soil and erosion control measures in accordance with the Shire of Augusta Margaret River *Erosion and Sediment Control Local Law 2019* (SAMR 2019).

## Section 38 Referral Supporting Document

Lot 100 and Lot 256 Clarke Road, Margaret River



- Undertake weed control in areas of retained vegetation, particularly with regard to arum lily.
- Implement dust management measures during clearing/earthworks. These would include activities such as: avoiding works during periods of strong winds, and the utilisation of water suppression as required.
- Implement stormwater management measures, which will include infiltrating as much stormwater within the Proposal area as possible, through use of swales/basins and/or soakwells and connecting the existing local stormwater drainage network for management of larger volumes.

The mitigation hierarchy of 'avoid, minimise and rehabilitate' has been considered in the assessment of this Proposal. While 1.65 ha of vegetation will be removed, in the context of the likely cumulative impacts of the Proposal, more than 144.68 ha of similar/equivalent (or better) vegetation is located within 1 km of the Proposal, with at least 126 ha of this reserved and protected. This along with the management measures that will be implemented mean this Proposal will not have significant residual impact. As such, the Proposal is considered environmentally acceptable if implemented in accordance with the management measures proposed in this document, which can be addressed through the development approval process.

## Section 38 Referral Supporting Document

Lot 100 and Lot 256 Clarke Road, Margaret River



## Table of Contents

<b>1.</b>	<b>Introduction .....</b>	<b>1</b>
1.1	Purpose and scope .....	3
1.2	Proponent .....	3
1.3	Environmental impact assessment process .....	4
1.3.1	Environmental Protection Act 1986 .....	4
1.3.2	Environmental Protection and Biodiversity Conservation Act 1999 .....	4
1.3.3	Other approvals and regulation .....	5
<b>2.</b>	<b>The Proposal .....</b>	<b>7</b>
2.1	Background .....	7
2.2	Justification of development .....	7
2.3	Alternative sites .....	8
2.4	Proposal description .....	9
<b>3.</b>	<b>Potential Key Environmental Factors and Impact Assessment .....</b>	<b>12</b>
3.1	EPA principles and factors.....	12
3.2	Key environmental factor - Flora and Vegetation.....	22
3.2.1	EPA objective.....	22
3.2.2	Policy and guidance.....	22
3.2.3	Receiving environment .....	22
3.2.3.1.	Studies and information sources.....	22
3.2.3.2.	Regional vegetation .....	23
3.2.3.3.	Land systems .....	25
3.2.3.4.	Vegetation types .....	25
3.2.3.5.	Vegetation condition.....	29
3.2.3.6.	Threatened and priority ecological communities .....	31
3.2.3.7.	Conservation significant flora .....	31
3.2.4	Likely environmental impacts .....	32
3.2.4.1.	Direct.....	33
3.2.4.2.	Indirect .....	33
3.2.5	Application of mitigation hierarchy.....	34
3.2.6	Assessment and significance of residual impacts .....	35
3.2.6.1.	Direct.....	35
3.2.6.2.	Indirect .....	36
3.2.7	Likely environmental outcome.....	37
3.3	Key environmental factor – Terrestrial Fauna .....	37
3.3.1	EPA objective.....	37
3.3.2	Policy and guidance.....	37
3.3.3	Receiving environment .....	38
3.3.3.1.	Studies and information sources.....	38
3.3.3.2.	Regional context.....	38
3.3.3.3.	Fauna habitat .....	39
3.3.3.4.	Fauna diversity .....	42
3.3.4	Likely environmental impacts .....	49
3.3.4.1.	Direct impacts .....	49
3.3.4.2.	Indirect impacts.....	50
3.3.5	Application of the mitigation hierarchy .....	50
3.3.6	Assessment and significance of residual impacts .....	52
3.3.6.1.	Direct.....	52
3.3.6.2.	Indirect .....	56
3.3.7	Likely environmental outcome.....	57

## Section 38 Referral Supporting Document

Lot 100 and Lot 256 Clarke Road, Margaret River



<b>4. Offsets</b>	<b>58</b>
<b>5. Consideration of Matters of National Environmental Significance</b>	<b>59</b>
<b>6. Holistic impact assessment</b>	<b>60</b>
<b>7. Cumulative environmental impact assessment</b>	<b>62</b>
7.1 Potential cumulative impacts of current and proposed development	62
7.2 Analysis of cumulative impacts	64
<b>8. Consultation</b>	<b>67</b>
8.1 Key stakeholders	67
8.2 Stakeholder consultation	67
<b>9. Conclusion</b>	<b>68</b>
<b>10. References</b>	<b>70</b>
10.1 General references	70

## List of Tables

Table 1: Proponent details	3
Table 2: Decision-making authorities and processes relevant to the proposal	5
Table 3: Summary of the Proposal.	9
Table 4: Proposed extent of physical elements.	10
Table 5: Principles from the Environmental Protection Act 1986.	12
Table 6: Consideration of environmental factors in relation to the proposal.	14
Table 7: Summary of the pre-European vegetation association mapped within the Proposal area and remaining extent (Government of Western Australia 2019b).	23
Table 8: South West Forest region vegetation complex mapped within the Proposal area and remaining extent (Government of Western Australia 2019a).	23
Table 9: Plant communities identified within the Development Envelope	25
Table 10: Vegetation condition identified within the Development Envelope	29
Table 11: Conservation significant flora species considered to have potential to occur in the Proposal area based on known habitat preferences	31
Table 12: Mitigation measures to minimise impacts to flora and vegetation	34
Table 13: Comparison of clearing within the Development Envelope and mapped Beard vegetation association for the Shire of Augusta Margaret River.	36
Table 14: Comparison of clearing within the Development Envelope and mapped South West forest region vegetation complexes for the Shire of Augusta Margaret River.	36
Table 15: Fauna habitats identified within the Development Envelope (Emerge Associates 2023a)	39
Table 16: Likelihood of occurrence assessment categories and definitions	43
Table 17: Conservation significant fauna species found to occur or are likely to occur within the Development Envelope.	43
Table 18: Mitigation measures to minimise impacts to significant terrestrial fauna	51
Table 19: Summary of Matters of National Environmental Significance relevant to the Proposal.	59
Table 20: Interconnection of key environmental factors and holistic impact assessment.	61
Table 21: Native vegetation within areas zoned for intensive development with potential to be cleared (excluding the Proposal).	63
Table 22: Summary of cumulative impact of clearing in the context of future development areas and vegetation remaining (including the Proposal area)	64
Table 23: Stakeholder consultation	67

## Section 38 Referral Supporting Document

Lot 100 and Lot 256 Clarke Road, Margaret River



## List of Plates

Plate 1: Proposal location.....	2
Plate 2: Outline of elements associated with the Development Envelope, including indication of native vegetation clearing extent .....	11
Plate 3: Hydrography, soils and topography for the Proposal area and nearby. ....	21
Plate 4: Regional vegetation association and complex mapping within and surrounding the Proposal area .....	24
Plate 5: Plant communities identified within the Proposal area (Emerge Associates 2023b).....	26
Plate 6: Plant community <b>Af</b> in 'degraded to completely degraded' condition .....	27
Plate 7: Plant community <b>Cc</b> in 'degraded' condition .....	27
Plate 8: Plant community <b>CcHh</b> in 'very good' condition .....	28
Plate 9: <b>Non-native</b> vegetation in 'completely degraded' condition .....	28
Plate 10: Condition of vegetation Identified within the Proposal area (Emerge Associates 2023b) .....	30
Plate 11: Fauna habitat types identified within the Development Envelope.....	40
Plate 12: Example of the marri forest habitat within the Proposal area.....	41
Plate 13: Example of the peppermint forest habitat within the Proposal area .....	41
Plate 14: Example of the cleared habitat within the Proposal area .....	42
Plate 15: Western ringtail possum habitat and survey results within the Proposal area .....	45
Plate 16: Carnaby's black cockatoo foraging and potential breeding habitat identified within the Proposal area. ....	47
Plate 17: Baudin's and forest red-tailed black cockatoo foraging and potential breeding habitat identified within the Proposal area.....	48
Plate 18: Potential western ringtail possum habitat identified within 1 km of the site with similar values to the Proposal area. ....	53
Plate 19: Black cockatoo habitat values identified within 12 km of the Proposal area. ....	55
Plate 20: Cumulative native vegetation clearing impacts within 1km of the Proposal, based on the existing zoning or reservation of the land.....	65
Plate 21: Cumulative native vegetation clearing impacts within 12km of the Proposal, based on the existing zoning and/or reservation of the land .....	66

## Section 38 Referral Supporting Document

Lot 100 and Lot 256 Clarke Road, Margaret River



### Abbreviation Tables

Table A1: Abbreviations – Organisations

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

Table A2: Abbreviations – General terms

General terms	
ASS	Acid Sulfate Soils
CR	Critically endangered
EN	Endangered
ESA	environmentally sensitive area
FCT	Floristic community type
IBRA	<i>Interim Biogeographic Regionalisation of Australia</i>
MI	Migratory
NVIS	National Vegetation Inventory System (ESCAVI 2003)
P1	Priority 1
P2	Priority 2
P3	Priority 3
P4	Priority 4
P5	Priority 5
PEC	Priority Ecological Community
PMST	Protected Matters Search Tool
SPP	State Planning Policy
T	Threatened
TEC	Threatened ecological community
UFI	Unique feature identifier
VU	Vulnerable

## Section 38 Referral Supporting Document

Lot 100 and Lot 256 Clarke Road, Margaret River



*Table A3: Abbreviations –Legislation*

Legislation	
BC Act	<i>Biodiversity Conservation Act 2016 (WA)</i>
EP Act	<i>Environmental Protection Act 1986</i>
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1986</i>
LG Act	<i>Local Government Act 1995</i>
PD Act	<i>Planning and Development Act 2005</i>

*Table A4: Abbreviations – units of measurement*

Units of measurement	
DBH	Diameter at breast height
cm	centimetre
ha	hectare
m	metre
m <sup>2</sup>	square metre
m AHD	m in relation to the Australian height datum
mm	millimetre

## Section 38 Referral Supporting Document

Lot 100 and Lot 256 Clarke Road, Margaret River



### 1. Introduction

Colchester Pty Ltd (the Proponent) are proposing to develop a single hardware showroom with a nursery and warehouse and a consolidated group of 10 showrooms in a single building within Lot 100 and Lot 256 Clarke Road in Margaret River (referred to herein as the 'Proposal'). The Proposal is located 900 m west of the Margaret River town centre and includes a Development Envelope (which is also the footprint) 2.86 ha in size. The Proposal is bounded by private commercial landholdings to the north and south, the South Regional TAFE Margaret River Campus to the east and Clarke Road to the west. The location of the Proposal is shown in **Plate 1**, and has been subject to disturbance in the past as part of previous residential land uses.

The entirety of the Proposal is zoned 'Service commercial' under the *Shire of Margaret River Local Planning Scheme No. 1*. It is located within an existing commercial precinct within the Margaret River town site and will connect to existing utility services such as power, telecommunications and sewerage. The Proposal area has been identified by the State Government for development, with an expectation from the State Government (DevelopmentWA) (upon sale of the land) that it is developed for its intended commercial purpose, and if it is not, it could be reacquired by the State Government based on the existing ownership deed. This is to prevent land banking, and ensure economic development of Margaret River town is maximised in identified locations.

Throughout this document, the terms 'Proposal' and 'Development Envelope' are used interchangeably throughout this document. The Development Envelope relates to the entire landholding comprised of Lot 100 and Lot 256 Clarke Road, Margaret River and includes cross-over areas from the existing road (total area is 2.86 ha). This is because the proposed land use will require clearing and earthworking to support the permanent construction of buildings, hardstand and carpark areas as well as landscaping across the entire landholding. Landscaping areas within the site will include planting of native species, while small areas of remnant vegetation are proposed to be retained. As the understorey vegetation in the landscaping areas may need to be modified (pruning, management of ground fuels) as part of implementing bushfire management requirements, a conservative approach has been undertaken and potential impacts to areas of retained vegetation have been included in the Development Envelope.

# Section 38 Referral Supporting Document

## Lot 100 and Lot 256 Clarke Road, Margaret River



Plate 1: Proposal location.

## Section 38 Referral Supporting Document

Lot 100 and Lot 256 Clarke Road, Margaret River



### 1.1 Purpose and scope

The purpose of this document is to support a Section 38 referral to the Environmental Protection Authority (EPA) pursuant to the *Environmental Protection Act 1986* (EP Act) and should be read in conjunction with the EP Act Referral Form prepared for the Proposal.

This document provides information on the proposal, the likely environmental impacts, the proposed mitigation measures and the predicted environmental outcomes as a result of development. It also provides information on potential impacts on Matters of National Significance (MNES) under the Commonwealth *Environmental Protection and Biodiversity and Conservation Act 1999* (EPBC Act).

This document has been prepared in accordance with the *Environmental Impact Assessment (Part IV Division 1 and 2) Administrative Procedures 2021* (EPA 2021a) and *Environmental Impact Assessment (Part IV Division 1 and 2) Procedures Manual* (EPA 2021b) to provide succinct information for the EPA in support of the development of the Proposal, the scope of the document includes:

- A description and justification of the Proposal (**Section 2**).
- Description of the potential environmental impacts (**Section 3 to Section 7**).
- An outline of the mitigation measures to avoid, minimise or reduce impacts (**Section 3 to Section 7**).
- Assessment on the significance and residual impacts of each relevant key environmental factor (**Section 3 to Section 7**).
- Holistic assessment of potential impacts (**Section 6**).
- Consideration of cumulative environmental impacts (**Section 7**).
- A summary of stakeholder consultation undertaken to support the Proposal (**Section 8**).

### 1.2 Proponent

**Table 1** provides the details of the proponent, Colchester Pty Ltd.

*Table 1: Proponent details*

	Proponent details
Name	Colchester Pty Ltd.
ABN	78 651 055 873
Postal address	677 Murray St, West Perth, WA 6005
Proponent contact	James Tribe (Director)
Project manager	James Tribe (Director)
Consultant contact (Emerge Associates)	Kirsten Knox Unit 6/14 Fearn Ave, Margaret River WA (08) 9758 8159 <a href="mailto:Kirsten.knox@emergeassociates.com.au">Kirsten.knox@emergeassociates.com.au</a>

## Section 38 Referral Supporting Document

Lot 100 and Lot 256 Clarke Road, Margaret River



### 1.3 Environmental impact assessment process

#### 1.3.1 Environmental Protection Act 1986

The Proposal is being referred under Part IV and Section 38 of the *Environmental Protection Act 1986* (EP Act) which is the primary legislative instrument for environmental protection and impact assessment in Western Australia (WA). The act specifies procedures for assessment and appeal processes, including responsibilities and functions of the WA Minister for the Environment and the Environmental Protection Authority (EPA). Under Part IV of the EP Act, the EPA is responsible for providing advice to the Minister for significant proposals assessed under Part IV of the EP Act. Where a Proposal is subject to formal environmental impact assessment (EIA), the Proponent must demonstrate that:

- best practicable measures have been taken in planning and designing the Proposal to avoid, and where this is not possible, to minimise impacts on the environment; and
- the unavoidable impacts of the Proposal should be found to be environmentally acceptable, considering cumulative impacts which have already occurred in the region, and principles of sustainability.

The EPA uses environmental principles, factors and associated objectives as the basis for assessing whether a proposal's impact on the environment is acceptable. The preliminary key environmental factors relevant to this Proposal are detailed further in **Section 3**, and include Flora and Vegetation and Terrestrial Fauna, with clearing of vegetation that provides habitat for threatened fauna species a key impact.

#### 1.3.2 Environmental Protection and Biodiversity Conservation Act 1999

The *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) provides a legal framework to protect and manage nationally and internationally important flora, fauna, ecological communities and heritage places (among others), defined as 'Matters of National Environmental Significance' (MNES). If an action is likely to have a significant impact upon a protected matter then it must be referred to the Department of Climate Change, Energy, the Environment and Water (DCCEEW) for assessment under the EPBC Act.

Under the EPBC Act, an action will require approval from the Minister if the action is deemed to be a controlled action (likely to have, has had or will have a significant impact). This assessment is undertaken by Department of Climate Change, Energy, the Environmental and Water (DCCEEW), guided by the *Matters of National Environmental Significance - Significant Impact Guidelines 1.1* (Department of the Environment 2013).

The Proponent will be referring the Proposal pursuant to the EPBC Act. If assessed, the proponent has specified the Proposal is not seeking assessment in accordance with the bilateral agreement made under section 45 of the EPBC Act.

## Section 38 Referral Supporting Document

Lot 100 and Lot 256 Clarke Road, Margaret River



## 1.3.3 Other approvals and regulation

Apart from the EP Act and EPBC Act, the Proposal will be subject to compliance under other state legislation and guided by relevant policy and guidance documents. **Table 2** provides an outline of the other relevant legislative requirements and the extent to which impacts can be managed and the EPA objectives can be achieved.

Table 2: Decision-making authorities and processes relevant to the proposal

Decision making authority	Legislation or Agreement regulating the activity	Approval required	Whether and how statutory decision-making process can mitigate impacts on the environment?
Minister for Environment  Chief Executive Officer Department of Biodiversity Conservation and Attractions (DBCA)	<i>Biodiversity Conservation Act 2016 (WA)</i>	Section 40 authorisation to take or disturb listed ecology matters.	The <i>Biodiversity Conservation Act 2016</i> (BC Act) provides for the listing of flora, fauna and threatened ecological communities and Ministerial authorisation (Section 40) is required to 'take' or 'disturb' listed matters.  For activities expected to impact threatened fauna or flora, the Proponent will be required to obtain an authorisation and/or licence to take or disturb. This includes a requirement to outline how the mitigation hierarchy (avoidance, mitigation) has been applied, and monitoring to support implementation. The authorisation (and licence) details conditions in terms of how activities that can do harm will be managed and is approved by the Minister.
Department of Water and Environmental Regulation (DWER)	<i>Environmental Protection Act 1986 (Part V)</i>	Permit to clear native vegetation	In Western Australia, clearing or native vegetation is required to be undertaken in accordance with a valid permit or exemption pursuant to Part V of the EP Act. As the Proposal is not located within an environmentally sensitive area, or associated with riparian vegetation, clearing within the site will likely be exempt from requiring a clearing permit in accordance with Regulation 5 Item 1 of the Environmental Protection (Clearing of Native Vegetation) Regulations 2004. This is where clearing is associated with the construction of a building or other structure as long as other approvals (e.g. planning approvals and/or building licence) have been obtained. Generally, conditions of planning approval can be applied related to managing impacts to vegetation and fauna, and is discussed further below.

## Section 38 Referral Supporting Document

Lot 100 and Lot 256 Clarke Road, Margaret River



Table 2: Decision-making authorities and processes relevant to the proposal (continued)

Decision making authority	Legislation or Agreement regulating the activity	Approval required	Whether and how statutory decision-making process can mitigate impacts on the environment?
<p>Development Assessment Panel</p> <p>Shire of Augusta Margaret River</p>	<p><i>Planning and Development Act 2005 (PD Act)</i></p> <p>Planning and Development (Development Assessment Panels) Regulations 2011</p> <p>Planning and Development (Local Planning Schemes) Regulations 2015</p> <p><i>Shire of Augusta Margaret River Local Planning Scheme No.1</i></p> <p><i>Local Government Act 1995 (LG Act)</i></p>	<p>Development approval</p>	<p>The PD Act and LG Act provide a range of statutory approval mechanisms to avoid, mitigate and manage environmental impacts when making decisions on changes in land use, subdivision, development applications, building and works and carrying out municipal activities.</p> <p>Planning decisions must have due regard for statutory State Planning Policies (SPPs) pursuant to the PD Act, as well as local polices. SPPs mostly have a sustainability and/or environmental basis and those relevant to the proposal include urban growth and settlement; water resources; environment and natural resources; and planning in bushfire prone areas.</p> <p>The Proposal will be subject to development application and associated approval process, and due to the likely value of the project (greater than \$2 million), will be subject to approval by the Regional Joint Development Assessment Panel (JDAP). The application will be lodged with the Shire of Augusta Margaret River, and will also be assessed by the Shire (with them responsible for the preparation of a responsible authority report); however the decision on approval will be via the JDAP. As it relates to the EPA's objectives the decision maker must have due regard for:</p> <ul style="list-style-type: none"> <li>•the purpose and intent of the local planning scheme;</li> <li>•orderly and proper planning, including consideration of the Shire of Augusta Margaret River Local Planning Scheme No.1 (or as updated);</li> <li>•preservation of amenity;</li> <li>•SPPs and any other relevant policies; and</li> <li>•any other matters in the public interest.</li> </ul> <p>Conditions of approval will ensure development addresses environmental matters, including protection and management of native vegetation and fauna habitat, environmental management, landscaping, materials and bushfire.</p>

## Section 38 Referral Supporting Document

Lot 100 and Lot 256 Clarke Road, Margaret River



## 2. The Proposal

This section describes the Proposal content and is consistent with the EPA Proposal Content Document prepared for the referral. It provides an overview of the Proposal and the context within which the development is to be proposed to be undertaken.

### 2.1 Background

As outlined, the entirety of the Proposal is zoned 'Service commercial' under the *Shire of Margaret River Local Planning Scheme No. 1*. The landholding associated with the Proposal has been identified for commercial development since the mid 1980's. It was rezoned to 'Service commercial' prior to 1996, before the statutory referral of scheme amendments to the EPA under Section 48A (S48A) of the EP Act was in effect. As such, the development of the landholding for commercial purposes has not previously been considered by the EPA.

The *Shire of Augusta-Margaret River Local Planning Strategy Shire of Augusta-Margaret River (2022)* indicates the Proposal is located within an area of Margaret River identified as the Station Road commercial precinct. This area is designated to allow for businesses with a commercial focus, which are car dependent and have low capacity for street activation to be situated out of the main town centre. The Proposal involves the development of a large format hardware and retail storeroom with a separate consolidated showroom building. The Proposal and surrounding area is shown in **Plate 1**.

To support the Proposal, the Proponent has undertaken the following assessments to understand environmental values and potential impacts:

- A detailed flora and vegetation survey, undertaken in accordance *EPA Technical Guidance Flora and Vegetation Surveys for Environmental Impact Assessment* (EPA, 2016). The survey established if any threatened flora or threatened/priority ecological communities were present in the Development Envelope. The full report is provided as Attachment C to the referral package.
- A basic fauna assessment, with a targeted western ringtail possum and black cockatoo habitat assessment, undertaken in accordance *EPA Technical Guidance Terrestrial Vertebrate Fauna Surveys for Environmental Impact Assessment* (EPA 2020a). The assessment evaluated the habitats within the Development Envelope and included targeted searches for western ringtail possum and black cockatoo species. The full report is provided as Attachment D to the referral package.

### 2.2 Justification of development

In developing a business case for the large retail development, the Proponent has assessed and balanced both environmental and economic priorities. The Proposal is to bring forward much needed commercial floorspace, to provide for the local community and create local employment opportunities. Key justification and consideration for the Proposal includes:

## Section 38 Referral Supporting Document

Lot 100 and Lot 256 Clarke Road, Margaret River



### Pre-existing commercial area

The Proposal area is situated approximately 900 m south of the Margaret River town centre in an existing commercial precinct. The Proposal area is the last undeveloped land parcel in the precinct, and is therefore situated where existing local customers and a local workforce operate, and satisfies the intentions of the *Shire of Augusta Margaret River Local Planning Strategy* Shire of Augusta-Margaret River (2022), consolidating commercial development in an existing area.

As outlined, the Proposal area has been identified by the State Government for development, with an expectation from the State Government (DevelopmentWA) (upon sale of the land) that it is developed for its intended commercial purpose, and if it is not, it could be reacquired by the State Government based on the existing ownership deed. This is to prevent land banking, and ensure economic development of Margaret River town is maximised in the identified locations.

### Pre-existing disturbance

The Proposal area has been subject to historic disturbance, based on a review of publicly available historic aerial photography (WALIA 2023). The Proposal area has had some form of development since at least 1954, with large buildings and partial clearing evident in historic aerials, with a large portion of the Proposal area cleared of native vegetation in 2004, with some regrowth occurring subsequently. The detailed flora and vegetation survey identified nearly 60% of the Proposal area as being subject to vegetation in degraded to completely degraded condition (discussed further in **Section 3.2.3.5** and in the full report provided as Attachment C of the referral package).

### Pre-existing utilities and services

In addition to the zoning of the Proposal area and its location within an existing commercial precinct, the area is already serviced by a range of utilities including power, telecommunications, wastewater, and potable water. This was an important consideration and reduces the potential for environmental impacts if development was progressed in a different area where services had to be extended.

## 2.3 Alternative sites

The feasibility of the Proposal location within the Station Road commercial precinct and the consideration of other suitable locations within the Margaret River area have been assessed during project planning.

The Proposal is located in an area that is specifically designated to accommodate showrooms and larger format retail operations. These are uses which form an appropriate interface between industrial areas and more sensitive land uses and are designed to ensure consumers can safely and easily access the retail and service businesses, with a key focus on commuter vehicle access given the bulky goods nature of the goods and services offered. The Proposal is located in an appropriately zoned area. It has also been historically identified for the intended use, with sale of land by the State Government (as discussed above and still applicable) having specific clauses relating to the land being developed and not remaining vacant and preventing valuable/useful sites for economic activity and necessary commercial services from occurring.

## Section 38 Referral Supporting Document

Lot 100 and Lot 256 Clarke Road, Margaret River



Alternative locations for the Proposal are restricted by the lack of appropriately zoned land. The *Shire of Augusta-Margaret River Local Planning Strategy* has identified that no other land is proposed to be re-zoned/supported for commercial or industrial development. Under the *Shire of Augusta-Margaret River Local Planning Scheme No.1* (and draft *Shire of Augusta-Margaret River Local Planning Scheme No.2*), the remaining area of undeveloped industrial land is further south of the Perimeter Road (approximately 4 km south-east of the Proposal area). This land is intended to be more for industrial land uses that require spatial separation from residential and commercial activities due to noise, odour and/or vibration impacts, as well as accommodating vehicles of a particular size and nature that would be constrained in a more commercial/town site area (as detailed within the provisions of the *Shire of Augusta-Margaret River Local Planning Scheme No.1* and draft *Shire of Augusta-Margaret River Local Planning Scheme No.2*). This land needs to be maintained and available for specific industrial-type operations with separation requirements, which are important for the local economy in Margaret River. The Proposal would not be the best or most suitable use in this area. Furthermore, this land is also not available for immediate development, with land parcels not created, and the road network and servicing not constructed.

The *Shire of Augusta-Margaret River Local Planning Strategy* Shire of Augusta-Margaret River (2022) has identified that following establishment of the future industrial area south of the Perimeter Road, if existing industrial land uses moved to this area, the existing light industrial area could transition and enable expansion of the existing commercial precinct. However, this would be reliant on existing established businesses choosing to move and is not specified as a requirement in the strategy and is not reasonable to rely upon.

### 2.4 Proposal description

As outlined, the Proposal is located on Lots 100 and 256 Clarke Road, Margaret River, approximately 900 m south of Margaret River town centre within the existing Station Road commercial precinct. The location and areas surrounding the Proposal are shown in **Plate 1**. **Table 3** presents the key proposal characteristics, detailed in accordance with EPA's instruction and template: *Defining the key proposal characteristics*. (EPA 2016c)

Table 3: Summary of the Proposal.

Subject	Detail
Proposal title	Hardware showroom and warehouse other showrooms
Proponent name	Colchester Pty Ltd
Short description	Development of a hardware building with plant nursery, separate large format retail buildings and associated hardstand and carparks.

The proposed development is for commercial purposes and is detailed in accordance with the Proposal Content Document and will include the following elements:

- Construction of one large hardware building comprising an incidental plant nursery and warehouse.
- Construction of a consolidated single building comprising 10 showrooms.
- Construction of hardstand areas supporting carparking and internal roads, including crossovers into the Proposal area.

## Section 38 Referral Supporting Document

Lot 100 and Lot 256 Clarke Road, Margaret River



- Establishment of landscaped areas, including retained vegetation.
- Ongoing operation of the hardware warehouse and showrooms.

A summary of key proposal elements and area extents are detailed in **Table 4** below.

*Table 4: Proposed extent of physical elements.*

Element	Location	Proposed extent
<b>Physical elements</b>		
Building 1: Single building with hardware warehouse and incidental plant nursery.	See <b>Plate 2</b>	0.51 ha
Building 2: Consolidated building comprising ten (10) showrooms with separate frontages.	See <b>Plate 2</b>	0.68 ha
Hardstand areas consisting of internal roads, carpark and crossovers.	See <b>Plate 2</b>	1.48 ha
Landscaped areas, including retained vegetation.	See <b>Plate 2</b>	0.19 ha
Total footprint		2.86 ha

The identified Proposal elements represent the total Development Envelope required to site and establish the Proposal. It is noted that the Proposal includes landscaped areas (0.19 ha), which contains 0.13 ha of retained vegetation. Existing vegetation within these areas will likely require some modification for bushfire management purposes, including pruning and removal/thinning of understorey vegetation. The vehicle cross-overs have been aligned with largely existing cleared areas.

# Section 38 Referral Supporting Document

Lot 100 and Lot 256 Clarke Road, Margaret River

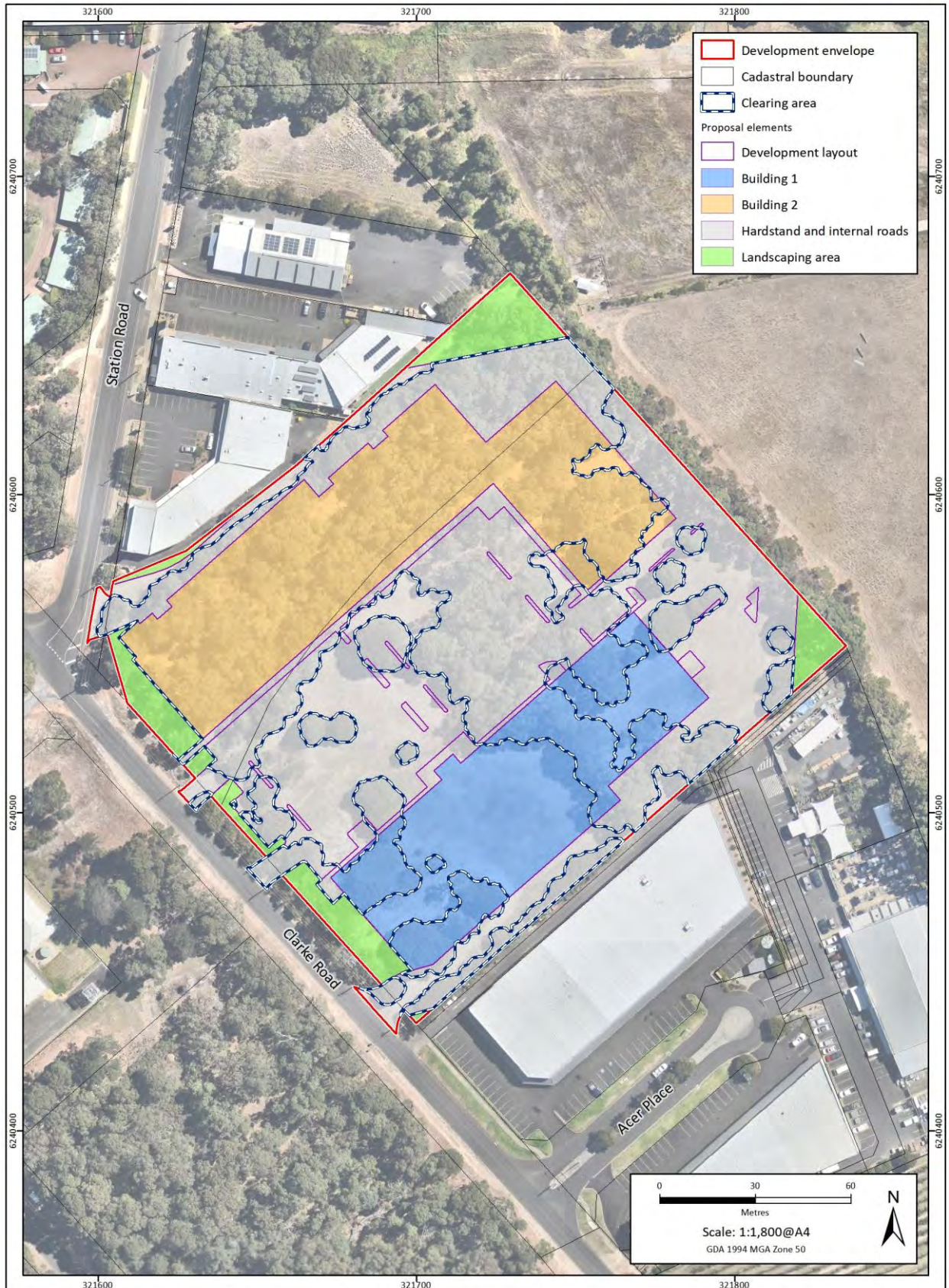


Plate 2: Outline of elements associated with the Development Envelope, including indication of native vegetation clearing extent

## Section 38 Referral Supporting Document

Lot 100 and Lot 256 Clarke Road, Margaret River



### 3. Potential Key Environmental Factors and Impact Assessment

#### 3.1 EPA principles and factors

In accordance with EPA's *Statement of environmental principles, factors, objectives and aims of EIA* (EPA 2021d), this section has considered both the principles of the EP Act and the environmental factors, and how these apply to the Proposal.

The principles are outlined in **Table 5**, while the environmental factors are detailed in **Table 6**. Consideration of the environmental factors has been informed by a desktop analysis of available information, consideration of the land development process, and detailed field investigations, and has helped narrow those factors to be assessed in detail.

Based on the assessment of EPA's environmental factors detailed in **Table 6**, Flora and Vegetation and Terrestrial Fauna have been identified as the preliminary key factors that require further assessment to understand the significance of potential impacts. These factors have been considered in further detail in **Section 3.2** and **Section 3.3** respectively. The remaining factors are not considered key factors and and/or are not applicable to the Proposal and therefore have not been subject to detailed assessment.

Table 5: Principles from the Environmental Protection Act 1986.

Principle	Consideration of principle in the proposal
<p><b>1. The precautionary principle</b>  <i>Where there are threats of serious or irreversible damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation.</i></p> <p><i>In application of this precautionary principle, decisions should be guided by:</i></p> <ul style="list-style-type: none"> <li>a. <i>careful evaluation to avoid, where practicable, serious or irreversible damage to the environment; and</i></li> <li>b. <i>an assessment of the risk-weighted consequences of various options.</i></li> </ul>	<p>The proponent has addressed the precautionary principle by developing a suitable understanding of the environmental values of the site (flora, vegetation, fauna, wetlands, surface water, groundwater, surrounding land uses) such that decisions regarding the development and its design can be made without the risk of any potentially unknown environmental values being impacted.</p> <p>Comprehensive biological surveys and assessments have been undertaken by experienced ecologists to inform the assessment of the Proposal.</p> <p>The design and proposed management measures has been informed by and responds to the outcomes of environmental investigations, through the adoption of some impact avoidance where possible, but predominantly mitigation through management. This reduces the risk of significant environmental impacts occurring.</p>

## Section 38 Referral Supporting Document

Lot 100 and Lot 256 Clarke Road, Margaret River



Table 5: Principles from the Environmental Protection Act 1986.

Principle	Consideration of principle in the proposal
<p><b>2. The principle of intergenerational equity</b> The present generation should ensure that the health, diversity and productivity of the environment is maintained and enhanced for the benefit of future generations.</p>	<p>The Proposal is located within an area designated for commercial land uses and is the last remaining undeveloped land parcel. It will consolidate the proposed development as part of an existing commercial precinct. Services are already available to the site, and do not require further disturbance outside the Development Envelope. The Proposal area has been subject to clearing and degradation historically, with the majority of the vegetation in degraded or completely degraded condition. Whilst implementation of the development may result in some environmental impacts, impact avoidance measures have been incorporated as part of both the design process and proposed implementation, with areas of vegetation retained and management measures for fauna proposed as part of the construction process.</p>
<p><b>3. The principle of the conservation of biological diversity and ecological integrity</b> Conservation of biological diversity and ecological integrity should be a fundamental decision.</p>	<p>Based on the outcomes of the environmental investigations, the Proposal has responded to values identified within the Development Envelope and implemented changes to the design, reducing the footprint of each Proposal element to enable the retention of vegetation, including fauna habitat. Re-establishment of native trees within the Development Envelope as part of the proposed landscaping will reintroduce native flora species as part of landscaping design, bringing back diversity.</p>
<p><b>4. Principles relating to improved valuation, pricing and incentive mechanisms</b></p> <p>a. <i>Environmental factors should be included in the valuation of assets and services.</i></p> <p>b. <i>The polluter pays principles – those who generate pollution and waste should bear the cost of containment, avoidance and abatement.</i></p> <p>c. <i>The users of goods and services should pay prices based on the full life-cycle costs of providing goods and services, including the use of natural resources and assets and the ultimate disposal of any waste.</i></p> <p>d. <i>Environmental goals, having been established, should be pursued in the most cost-effective way, by establishing incentive structure, including market mechanisms, which enable those best placed to maximise benefits and/or minimise costs to develop their own solution and responses to environmental problems.</i></p>	<p>Smaller, isolated and more disturbed areas of environmental values (such as those within the Proposal) are typically less ecologically viable and can be more difficult to maintain or restore in the long-term, and ongoing management costs become increasingly higher, which is generally not practical for land management authorities. In some situations, these areas are suitable to support multiple uses, whereby some environmental characteristics can be retained (for example mature trees) while also allowing for other uses. The landscaped areas (and retained vegetation) have been located to maximise connection to surrounding ecological corridors (within road reserves and along fence lines), providing an opportunity to increase movement of ecological values across the landscape.</p> <p>Use and disposal of goods, services and waste will be managed in accordance with existing state and local arrangements. The site minimises the requirement for use of natural resources, such as fill, given the existing soil values (predominantly sandy). The Proponent will be responsible for funding the cost of environmental avoidance, mitigation, and management.</p>
<p><b>5. The principle of waste minimisation</b> <i>All reasonable and practicable measures should be taken to minimise the generation of waste and its discharge into the environment.</i></p>	<p>The Proponent will take all reasonable and practical measures to minimise the generation of waste and its discharge into the environment during clearing and construction, and through the design on the Proposal. Waste will be minimised by adopting the hierarchy of waste controls: avoid, minimise, reuse, recycle and safe disposal.</p>

## Section 38 Referral Supporting Document

Lot 100 and Lot 256 Clarke Road, Margaret River



Table 6: Consideration of environmental factors in relation to the proposal.

Theme	Factor	Objective	Relevance to Proposal
<b>Sea</b>	Benthic Communities and Habitats	To protect benthic communities and habitat so that biological diversity and ecological integrity and maintained.	<b>Not applicable.</b> The Proposal is not associated with activities that will impact on or disturb any benthic habitats.
	Coastal Processes	To maintain the geophysical processes that shape coastal morphology so that the environmental values of the coast are protected.	<b>Not applicable.</b> The Proposal is not associated with activities that will impact on or be in the vicinity of coastal processes.
	Marine Environmental Quality	To maintain the quality of water, sediment and biota so that environmental values are protected.	<b>Not applicable.</b> The Proposal is not associated with activities that will impact on or disturb any marine environments.
	Marine Fauna	To protect marine fauna so that biological diversity and ecological integrity are maintained.	<b>Not applicable.</b> The Proposal is not associated with activities that will impact on or disturb any marine environments.
<b>Land</b>	Flora and Vegetation	To protect flora and vegetation so that biological diversity and ecological integrity are maintained	<b>Preliminary key factor.</b> Vegetation has been disturbed historically, based on a review of available historic aerial photography with vegetation in the Proposal including areas of regrowth. No threatened or priority flora or threatened or priority ecological communities were identified within the Proposal area based on the outcomes of the detailed flora and vegetation survey. No vegetation was identified to be locally endemic or associated with restricted habitats. However native flora and vegetation that provides habitat for fauna species will be impacted by clearing required to establish the Proposal. Flora and vegetation has therefore been identified as a preliminary key factor and is considered further in <b>Section 3.1</b> .
	Landforms	To maintain the variety and integrity of distinctive physical landforms so that environmental values are protected	<p><b>Not a key factor.</b> Distinctive landforms are not present within or adjacent to the Proposal based on the physical environment and the geology/morphology identified during the desktop review and supporting investigations.</p> <p>The Proposal area is located within the Leeuwin Block, which is characterised by lateralised granitic and gneissic basement rock (DPIRD 2020). The Proposal area is located within the Cowaramup upland system and is characterised by flats and gentle slopes comprised of predominantly duplex sandy gravels or grey deep sandy duplexes (DPIRD 2022a), as shown in <b>Plate 3</b>. This land system is well represented in the broader area surrounding the Proposal. The Proposal area and associated geology does not contain landform features, such as cliffs, caves, dunes or exposed rock formations, which might indicate the presence of significant landforms as defined by the factor guidance.</p> <p>(continued below)</p>

## Section 38 Referral Supporting Document

Lot 100 and Lot 256 Clarke Road, Margaret River



Table 6: Consideration of environmental factors in relation to the proposal.

Theme	Factor	Objective	Relevance to Proposal
Land (continued)	Landforms (continued)	To maintain the variety and integrity of distinctive physical landforms so that environmental values are protected	<p>(continued from above)</p> <p>Impacts within the Development Envelope from the Proposal will be limited to minor earthworks, including ground disturbance (clearing of vegetation and removal/screening of topsoil), minor filling (if required) and compaction to support carparks and building footings. This type of activity, and potential impacts such as degradation, can be managed through the building and engineering approvals that will be required as a condition of development approval, for which the Shire of Augusta Margaret River will be the responsible authority. The Shire of Augusta Margaret River have a specific policy and for managing sedimentation and erosion SAMR (2019) and includes requiring proponents to consider the landform and slope, and potential for erosion (SAMR 2018). As no landform features are present that are considered distinctive, nor would the proposed activity lead to degradation of the stability or integrity of any landforms (noting management required through the planning approval process), landforms are not considered to be a key factor requiring further assessment. The EPA objective for this factor can be met.</p>
	Subterranean Fauna	To protect subterranean fauna so that biological diversity and ecological integrity are maintained.	<p><b>Not a key factor.</b> The Proposal area is unlikely to contain habitat which supports subterranean fauna such as stygofauna (aquatic animals that inhabit groundwater in caves, aquifers and water-saturated interstitial voids) and troglofauna (air breathing animals that inhabit air-filled caves and smaller voids above the water table) that would be impacted by the activities that are to be undertaken as part of the Proposal. Groundwater drawdown and/or dewatering is often a common risk to these species.</p> <p>Historically, subterranean fauna in the region has predominantly been identified in association with the caves formed in older more cemented dunes of the Tamala Limestone, and in close association with aquatic root mat communities of specific tree species (karri, marri and peppermint) and soil/geological conditions. The soil/geological requirements that are associated with these aquatic root mat communities are not found within the Proposal area.</p> <p>There is a very low likelihood of impact to stygofauna and troglofauna from the Proposal due to no groundwater abstraction or dewatering being undertaken, and excavation being limited to the ground surface (no minimising intersection of air-filled voids and/or intersecting groundwater). The absence of dewatering and groundwater abstraction removes the possibility of groundwater drawdown and associated loss of subterranean fauna habitat.</p> <p>The risks of unexpected spills or contamination, altered surface hydrology and altered subsurface water infiltration can be minimised through mitigation measures that would be required as part of the development approval process, including stormwater management plans to guide infiltration of stormwater and use of water sensitive urban design practices. Management of stormwater will be required as a condition of development approval, for which the Shire of Augusta Margaret River will be the responsible authority.</p> <p>(continued below)</p>

## Section 38 Referral Supporting Document

Lot 100 and Lot 256 Clarke Road, Margaret River



Table 6: Consideration of environmental factors in relation to the proposal.

Theme	Factor	Objective	Significance to proposal
<b>Land (continued)</b>	Subterranean Fauna (continued)	To protect subterranean fauna so that biological diversity and ecological integrity are maintained.	(continued from above)  As no landform features or groundwater will be impacted by the Proposal, subterranean fauna unlikely to be impacted by the Proposal. The EPA objective for this factor can be met and subterranean fauna is not a considered to be a key factor
	Terrestrial Environmental Quality	To maintain the quality of land and soils so that environmental values are protected	<b>Not a key factor.</b> Terrestrial Environmental Quality is associated with the land uses practices causing impacts to soil quality, including erosion, salinity, acid sulfate soils (ASS), agricultural practices such as large-scale irrigation or intensive cropping, and waste structures such as those for waste rock and tailing storage facilities. The Proposal will not result in activities that will impact soil quality.  A small portion of the Proposal area, within the north-east corner, is mapped as having a 'moderate to low' risk of ASS occurring within 3 m of the natural soil surface (DWER 2023a), as shown in <b>Plate 3</b> . ASS is typically only a risk where the permanent groundwater table is intersected, or dewatering is proposed within soil types prone to ASS. None of these activities are required or proposed in this portion of the Development Envelope, or more broadly for the proposal. Service connections (sewerage, in particular) are already existing. Furthermore, the area identified as having a moderate to low risk of ASS is proposed to be retained, to protect existing native vegetation and will be a future landscape area and therefore subject to limited disturbance.  As outlined for the landform factor, impacts within the Development Envelope will be limited to minor earthworks, including ground disturbance (clearing of vegetation and removal/screening of topsoil), minor filling (if required) and compaction to support hardstand areas and building footings. This type of activity, and potential impacts such as degradation, can be managed through the standard building and engineering approvals that will be required as a condition of development approval, for which the Shire of Augusta Margaret River will be the responsible authority. The Shire of Augusta Margaret River have a specific policy and for managing sedimentation and erosion SAMR (2019) and includes requiring proponents to consider the landform and slope, and potential for erosion (SAMR 2018). There will be limited risk of ongoing erosion or degradation following construction, with the majority of the Proposal proposed to be hardstand areas. The EPA objective for this factor can be met.
	Terrestrial Fauna	To protect terrestrial fauna so that biological diversity and ecological integrity are maintained	<b>Preliminary key factor.</b> Construction of the Proposal will require clearing of 1.65 ha of native vegetation which has been identified as fauna habitat for threatened fauna species, namely western ringtail possum and the three black cockatoo species. Terrestrial fauna is identified a preliminary key factor and considered further in <b>Section 3.2</b> .

## Section 38 Referral Supporting Document

Lot 100 and Lot 256 Clarke Road, Margaret River



Table 6: Consideration of environmental factors in relation to the proposal.

Theme	Factor	Objective	Significance to proposal
<b>Water</b>	Inland Waters	To maintain the hydrological regimes and quality of groundwater and surface water so that environmental values are protected	<p><b>Not a key factor.</b> No surface water or groundwater features are identified within the Development Envelope or nearby that would be detrimentally impacted by the Proposal. No groundwater abstraction is required or proposed, and stormwater will be infiltrated locally and/or disposed via the local drainage network.</p> <p>There are no surface water features, such as wetlands (RAMSAR, Important Wetlands in Australia, geomorphic), rivers, creeks or man-made drains (or similar) mapped within or directly adjacent to the Proposal area DBCA (2018a), and no features were identified as part of the investigations within the Proposal area. No surface water features will be impacted by the Proposal, with stormwater required to be managed in accordance with the state planning policies and the Better Urban Water Management framework (WAPC 2008). The nearest surface water feature is a floodplain feature identified approximately 260 m east of the Proposal within the South Regional TAFE Margaret River Campus and appears to now be a dam used as part of the TAFE's agricultural studies. Stormwater from the Proposal will not be discharged to this feature.</p> <p>A review of the Water Register (DWER 2021) indicates the site is found within the 'Busselton-Capel' groundwater area and the 'Cape to Cape North' subarea. This groundwater subarea is composed of two aquifers, the surficial and fractured rock, both of which rely on rainfall for recharge. The site is situated above the Cape to Cape north combined Leeuwin superficial aquifer which is subject to faults/fractures (e.g. fractured rock aquifer). This aquifer is known to be highly seasonal, and have highly variable abstraction potential (DoW 2008). No groundwater mapping is available for the Proposal area. As outlined, no abstraction of groundwater is required or proposed to support development within the Proposal area.</p> <p>It is possible that the Proposal will alter the existing hydrological regimes, based on the majority of the existing natural surfaces being converted to hardstand and building areas. This is not an uncommon occurrence in the land development process, and is able to be managed through standard development approval conditions, The proponent will be required to prepare a drainage plan, and demonstrate that the pre-development hydrological regimes (e.g. runoff from the Proposal area) will be met following development. Swales and/or drainage basins as well as soakwells are typical features utilised to manage infiltration of stormwater and to improve water quality. A stormwater/drainage management plan will be required to support development and will need to be approved by the Shire of Augusta Margaret River with advice from the Department of Water and Environmental Regulation (as required) prior to development commencing.</p> <p>No onsite wastewater treatment or disposal is required within the Proposal area given it will connect to the existing reticulated sewer network operated by the Water Corporation.</p> <p>The EPA objective for this factor can be met through the requirements of the planning process.</p>

## Section 38 Referral Supporting Document

Lot 100 and Lot 256 Clarke Road, Margaret River



Table 6: Consideration of environmental factors in relation to the proposal.

Theme	Factor	Objective	Significance to proposal
Air	Air Quality	To maintain air quality and minimise emissions so that environmental values are protected	<p><b>Not a key factor.</b> A search for the nearest air quality monitoring site (approximately 40km north of the Proposal) and a review of available monitoring data indicates that the air quality in the general area is considered 'good' based on the Air Quality Index (AQI) (DWER 2023b). The main impact to air quality associate with the Proposal will be the potential temporary generation of dust during clearing and construction activities, but will be dependent on weather conditions. Machinery and vehicles interactions with the soil and potential generation of dust can be mitigated through the use of commonly employed dust suppression measures, . such as water truck dust suppression, avoiding clearing and construction during periods of high wind and utilising hydromulch if the Proposal was to remain without surface cover for any period of time.</p> <p>The Proposal is intended to support multiple large-format warehouse and retail buildings, largely associated with bulky goods or similar that would not result in particulates or similar being contributed to the broader air shed, that would be any different to the existing land uses within the commercial zone, and use or private vehicles of similar by residents and businesses (e.g. under the service commercial zoning, land uses will not including polluting industries). The Proposal will not pose a risk to air quality, with dust able to be managed through the development approval process, and the EPA objective for this factor can be met.</p>
	Greenhouse Gas Emissions	To minimise the risk of environmental hard associated with climate change by reducing greenhouse gas emissions as far as practicable.	<p><b>Not a key factor.</b> Implementing the Proposal will result in greenhouse gas emissions, including scope 1 emissions associated with the clearing of 1.65 ha of vegetation and construction of the Proposal, requiring the likely use of diesel fuels in machinery and vehicles; and Scope 2 emissions associated with the consumption of purchased electricity to support ongoing operation. Based on the National Greenhouse Accounts Factors 2023 (NGAF 2022) and the Commercial Building Baseline Study 2022 (Strategy Policy Research Pty Ltd 2022), an estimation of the scope 1 emissions indicates clearing of 1.65 ha of native vegetation (assuming general woodland vegetation) suggests it will result in 350-450 tCO<sub>2</sub>-e; while during operations, and using the 'retail and wholesale trade buildings' from the Commercial Building Baseline Study 2022 for the Bunbury region, 11,900 m<sup>2</sup> of floor area (the warehouse and retail showrooms) could result in approximately 1,309 tCO<sub>2</sub>-e per year (considering both gas and electricity use).</p> <p>Neither scope 1 or scope 2 emissions will exceed the EPA trigger of 100,000 tonnes of CO<sub>2</sub>-e for scope 1 or scope 2 emissions, and therefore detailed assessment is not required. It is possible that individual building owners/tenants will apply measures that reduce consumption of electricity, reducing the emissions further. The Proposal is unlikely to result in greenhouse gas emissions that would mean the EPA objective for this factor cannot be met.</p>

## Section 38 Referral Supporting Document

Lot 100 and Lot 256 Clarke Road, Margaret River



Table 6: Consideration of environmental factors in relation to the proposal.

Theme	Factor	Objective	Significance to proposal
People	Social Surroundings	To protect social surroundings from significant harm	<p><b>Not a key factor.</b> This factor considers a range of aesthetic, cultural, economic and social values which could be affected by physical and/or biological surroundings. A clear link between the proposal and impacts on biological/physical values and social surrounds is required.</p> <p><u>Nearby land uses and amenity considerations</u> As identified in <b>Section 2</b> and <b>Plate 1</b>, the Proposal is located within the existing Station Road Commercial Precinct with land zoned service commercial to the north and south, public purpose to the east (associated with the South Regional TAFE Margaret River Campus) and reserved parks and recreation to the west (associated with a mix undeveloped land, and community purposes such as the Montessori primary school and State Emergency Services depot and community garden). Land zoned 'composite industry' is located further west and is a mix of home businesses. Under the service commercial zoning, no land uses would be permitted that would result in the introduction of industrial development that would impact the amenity for existing land uses.</p> <p>Noise and dust impacts could occur during construction, however, can be managed to ensure nearby land uses, particularly the school and TAFE are not detrimentally impacted. This includes:</p> <ul style="list-style-type: none"> <li>• Restricting hours of construction in accordance with the Environmental Protection (Noise) Regulations 1997.</li> <li>• Utilising dust suppression measures, such as water spraying and reducing activities on high wind days to prevent dust generation and deposition.</li> <li>• Managing potential sedimentation and erosion in accordance with the Shire of Augusta Margaret River requirements.</li> <li>• Designing for and managing stormwater, to ensure pre-development conditions are maintained in accordance with the Better Urban Water Management Framework (WAPC 2008).</li> <li>• Minimising waste and disposing material appropriately to licenced facilities, including recycling and reuse as appropriate.</li> </ul> <p>The Proposal is located in an area under <i>State Planning Policy 6.1 Leeuwin Naturaliste Ridge</i> (WAPC 1998), identified for development. The proposed commercial development is therefore in accordance with the policy and is consolidating development within areas identified as a townsite.</p> <p>(continued below)</p>

## Section 38 Referral Supporting Document

Lot 100 and Lot 256 Clarke Road, Margaret River



Table 6: Consideration of environmental factors in relation to the proposal.

Theme	Factor	Objective	Significance to proposal
People (continued)	Social Surroundings	To protect social surroundings from significant harm	<p>(continued from above)</p> <p><u>Cultural heritage considerations</u> A review of the Aboriginal Heritage Places dataset indicates a number of surveys have been undertaken in the area and included the site, and no known Aboriginal heritage sites occur within or in the vicinity of the Proposal.</p> <p>Several local European heritage sites are mapped nearby to the site, identified through the local Augusta-Margaret River heritage survey (DPLH 2020), these include:</p> <ul style="list-style-type: none"> <li>• ‘Margaret River Senior High School’, located north-east of the Proposal.</li> <li>• ‘Margaret River Railway Station Group’, mapped as multiple sites with the closest approximately 20 m to the west of the Proposal.</li> </ul> <p>None of the sites are identified within the Development Envelope and will not be impacted as a result of implementing the Proposal.</p> <p>No significant impact to social surroundings are likely, and any impacts would be short-term (during construction) and can be managed as part of the standard planning and building approvals processes, ensuring the EPA objective for this factor can be met.</p>
	Human Health	To protect human health from significant harm	<b>Not applicable.</b> No radioactive substances or emissions are associated with the Proposal.

# Section 38 Referral Supporting Document

## Lot 100 and Lot 256 Clarke Road, Margaret River

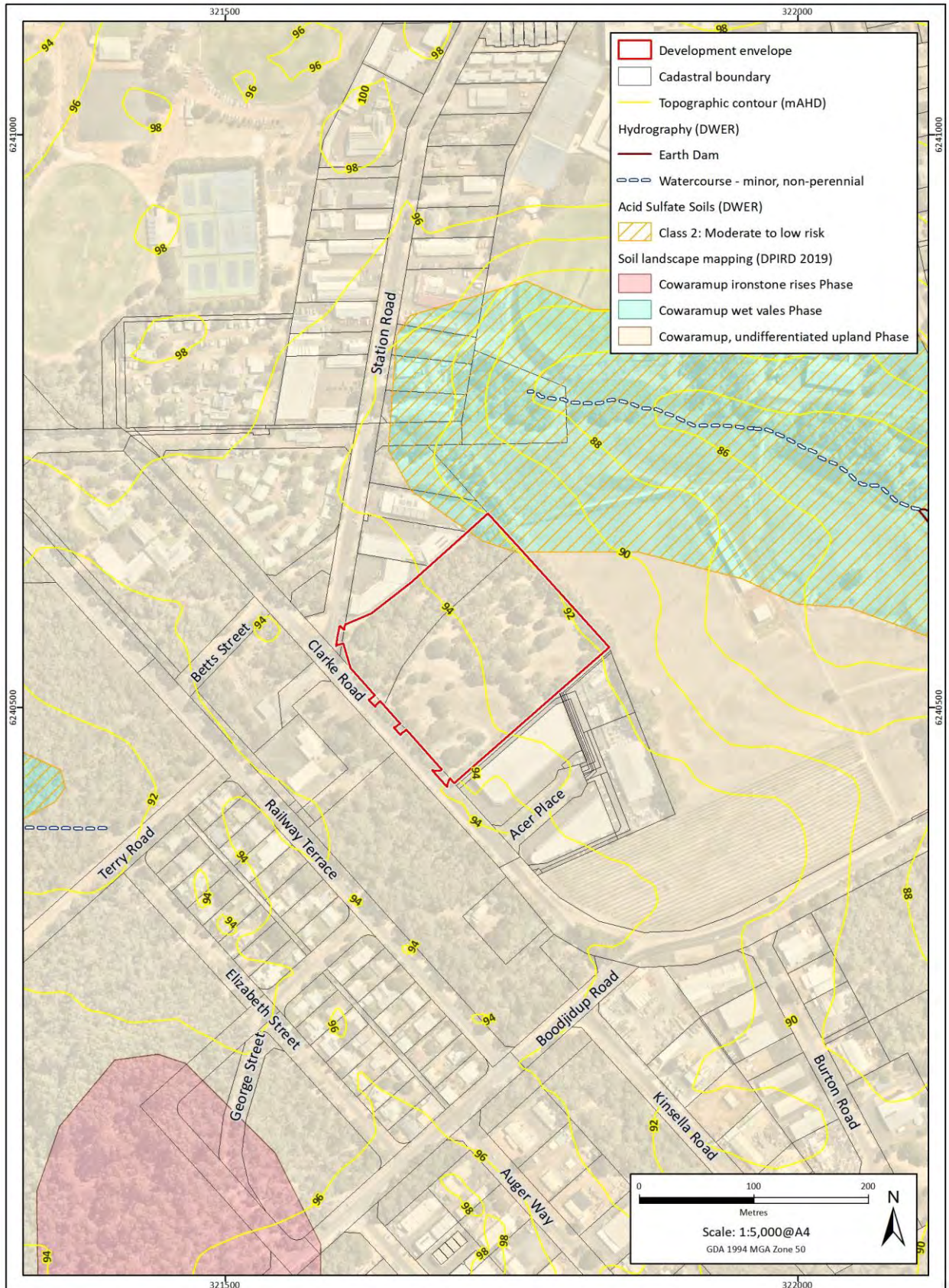


Plate 3: Hydrography, soils and topography for the Proposal area and nearby.

## Section 38 Referral Supporting Document

Lot 100 and Lot 256 Clarke Road, Margaret River



### 3.2 Key environmental factor - Flora and Vegetation

#### 3.2.1 EPA objective

The EPA's *Environmental Factor Guidelines for Flora and Vegetation* (EPA 2016b) states that the broad objective for Flora and Vegetation is '*To protect so that biological diversity and ecological integrity are maintained*'.

#### 3.2.2 Policy and guidance

The flora and vegetation investigations that have informed the Proposal have been conducted in accordance with the *Technical Guidance - Flora and Vegetation Surveys for Environmental Impact Assessment* (EPA 2016d) and the *Environmental Factor Guideline: Flora and Vegetation* (EPA 2016b).

#### 3.2.3 Receiving environment

##### 3.2.3.1 Studies and information sources

A review of publicly available datasets and investigations, as well as a site-specific *Detailed Flora and Vegetation Assessment* (Emerge Associates 2023b) (with multiple site visits over different time periods) has been undertaken to understand the values within the Proposal area. The outcomes are summarised further below.

The *EPA Flora and Vegetation Technical Guidance* (EPA 2016d) identifies spring to be the optimal season to undertake survey in the Southwest region, which the Proposal area is found within. The field survey was undertaken in late September 2022 and was determined to coincide with appropriate seasonality for the detection of inconspicuous annual and perennial geophytic species (as identified in the database searches) which can require visible flowers for identification. The remaining species identified as part of database searches were larger or perennial species, which can typically be identified outside of the main flowering period.

Historical average rainfall for the Margaret River area over the May – August period is 816.9 mm (BoM 2023). In 2022, slightly below average accumulated rainfall occurred over the months of May – August (720.1mm), however significantly higher rainfall (149mm) was experienced in August leading into the survey, above the August average of 135mm meaning flora species would still be expected to flower. A follow up survey was conducted in February 2023, to capture species that may be present outside spring and to confirm identified vegetation communities and condition.

It is noted that a single floristic quadrat was recorded within the Proposal area and is based on the vegetation condition and small size of the survey area, and was determined sufficient by qualified ecologists. The quadrat is located in the portion of the Proposal area with the best quality vegetation. Good accessibility and visibility across the survey area allowed for comprehensive opportunistic observations to form a complete flora inventory. Targeted searches were conducted for conservation significant flora identified in the desktop review in areas with indicators of suitable habitat. On ground observations, supported by photography, were used to describe the identified vegetation. A summary of the flora and vegetation values within the Proposal area is detailed in the following sections. The *Detailed Flora and Vegetation Assessment* is (provided as Attachment C of the referral package).

## Section 38 Referral Supporting Document

Lot 100 and Lot 256 Clarke Road, Margaret River



## 3.2.3.2. Regional vegetation

Vegetation can be described and mapped at different scales or units in order to illustrate general patterns in its distribution. At a continental scale the *Interim Biogeographic Regionalisation of Australia* (IBRA) identifies the Proposal area within the Warren (WAR01) IBRA subregion (Environment Australia 2000). The Warren subregion is characterised as comprising tall *Eucalyptus diversicolor* (karri) on deep loams or forest or *Eucalyptus marginata* (jarrah) to *Corymbia calophylla* (marri) on leached sands and extensive Melaleuca (paperbark) and sedge swamps in valleys (Beard 1990).

Native vegetation within the Development Envelope and adjacent land can be classified based on regional vegetation associations. Broad scale mapping (1: 250,000) of the regional vegetation association dataset by Beard *et al.* (2013) identifies the pre-European vegetation extents across Western Australia and shows the entire Proposal area is described as the Boranup (3) association. It is estimated that the Boranup (3) vegetation association has 38.51% of its original extent remaining in the Southwest Forest Region (Government of Western Australia 2019b), as summarised in **Table 7**.

Table 7: Summary of the pre-European vegetation association mapped within the Proposal area and remaining extent (Government of Western Australia 2019b).

Vegetation association	Description	Original extent (ha)	Extent remaining (ha)	% remaining
Boranup (3)	Mainly jarrah and marri <i>Eucalyptus marginata</i> , <i>Corymbia calophylla</i> .	38,671.83	14,891.02	38.51

Vegetation complex mapping undertaken by Department of Biodiversity, Conservation and Attractions (DBCA 2018b) maps vegetation within the South West Forest region of Western Australia at a finer local scale (1: 50,000). The mapping indicates the Proposal area is found within the Cowaramup (C1) vegetation complex. This complex is described in **Table 8**, and it is estimated that 34.46% remains within the Southwest Forest Region based on its estimated pre-European extent (Government of Western Australia 2019a).

Table 8: South West Forest region vegetation complex mapped within the Proposal area and remaining extent (Government of Western Australia 2019a).

Vegetation complex	Description	Original extent (ha)	Extent remaining (ha)	% remaining
Cowaramup (C1)	Open to tall open forest of jarrah ( <i>Eucalyptus marginata subsp. marginata</i> ), marri ( <i>Corymbia calophylla</i> ) and bull banksia ( <i>Banksia grandis</i> ) on the lateritic uplands in the hyperhumid zone.	18,981.79	6,540.87	34.46

# Section 38 Referral Supporting Document

Lot 100 and Lot 256 Clarke Road, Margaret River

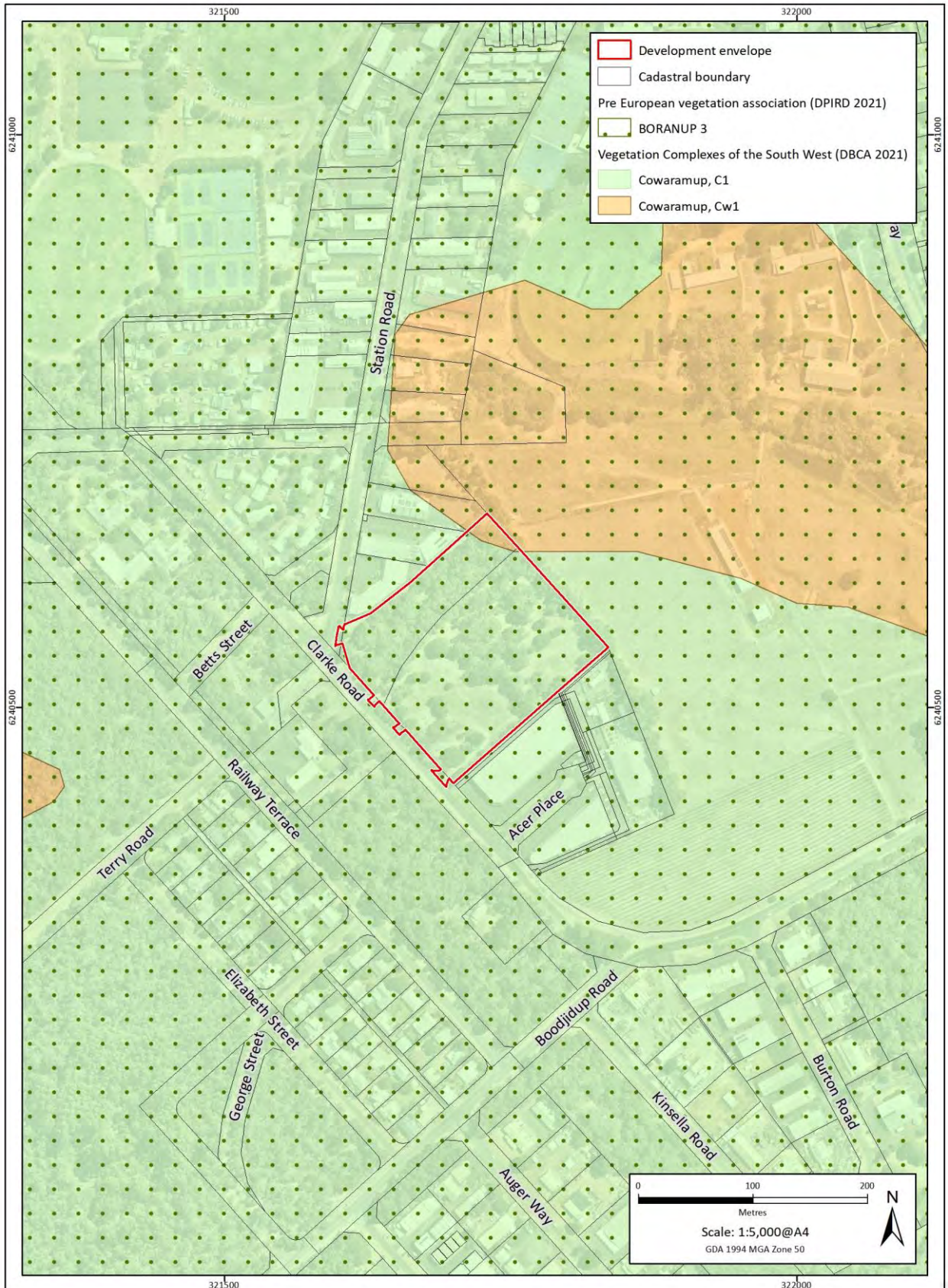


Plate 4: Regional vegetation association and complex mapping within and surrounding the Proposal area

## Section 38 Referral Supporting Document

Lot 100 and Lot 256 Clarke Road, Margaret River



### 3.2.3.3. Land systems

The Soil Landscapes and Land System Mapping of WA describes broad soil and landscape characteristics from regional to local scales, ranging from 1:20,000 to 1:125,000 (DPIRD 2022a). As outlined in **Table 6**, the majority of the Proposal area is identified as the ‘Cowaramup, undifferentiated upland phase’, which is described as ‘*flats and gentle slopes (0-5% gradient) with gravelly duplex (Forest Grove) and pale grey mottled (Mungite) soils*’ (DPIRD 2022a). A small portion of the Development Envelope is identified as ‘Cowaramup wet vales phase’ and is described as a ‘*small, broad U-shaped drainage depressions with swampy floors and gravelly duplex (Forest Grove) soils on side slopes and poorly drained alluvial soils on valley floor*’. These features are identified in **Plate 3**.

Detailed soil assessments have not occurred over the Development Envelope, however, soil characteristics were identified as sandy brown soils as part of the flora, vegetation and fauna investigations (Emerge Associates 2023b), and appeared consistent with the ‘duplex sandy gravel’ soils identified by the state soil mapping (DPIRD 2022b) as occurring over the area.

### 3.2.3.4. Vegetation types

Three native plant communities and one non-native plant community were identified within the Proposal area and have been summarised in **Table 9** below.

Table 9: Plant communities identified within the Development Envelope

Vegetation code	Description	Extent within Development Envelope (ha)	Extent proposed for clearing (ha)
Af	Low open forest <i>Agonis flexuosa</i> over occasional native shrubs and/or forbs over closed non-native grass/forbland of pasture weeds ( <b>Plate 6</b> ).	0.33	0.28
Cc	Closed forest <i>Corymbia calophylla</i> over occasional native shrubs and/or forbs over closed non-native grass/forbland of pasture weeds ( <b>Plate 7</b> ).	0.59	0.59
CcHh	Closed forest <i>Corymbia calophylla</i> and occasional <i>Eucalyptus diversicolor</i> and <i>Agonis flexuosa</i> over open shrubland <i>Hibbertia hypericoides</i> , <i>Xanthorrhoea preissii</i> , <i>Hakea lissocarpa</i> and <i>Acacia pulchella</i> over open forbland <i>Burchardia congesta</i> , <i>B. multiflorus</i> , <i>Patersonia occidentalis</i> and <i>P. umbrosa</i> over open to sparse grass/forbland of pasture weeds (see <b>Plate 8</b> ).	0.86	0.78
Non-native	Heavily disturbed areas comprising predominantly closed grass/forbland of pasture weeds with occasional native and non-native trees, shrubs or forbs (see <b>Plate 9</b> ). Bare ground and tracks were also included in this community.	1.08	1.08
<b>Total area</b>		<b>2.86</b>	<b>2.73</b>

# Section 38 Referral Supporting Document

Lot 100 and Lot 256 Clarke Road, Margaret River



Plate 5: Plant communities identified within the Proposal area (Emerge Associates 2023b)

Section 38 Referral Supporting Document  
Lot 100 and Lot 256 Clarke Road, Margaret River



*Plate 6: Plant community Af in 'degraded to completely degraded' condition*



*Plate 7: Plant community Cc in 'degraded' condition*

Section 38 Referral Supporting Document  
Lot 100 and Lot 256 Clarke Road, Margaret River



*Plate 8: Plant community **CcHh** in 'very good' condition*



*Plate 9: **Non-native** vegetation in 'completely degraded' condition*

## Section 38 Referral Supporting Document

Lot 100 and Lot 256 Clarke Road, Margaret River



## 3.2.3.5. Vegetation condition

Vegetation condition within the Development Envelope ranged from very good to completely degraded and have been summarised in **Table 10** and **Plate 10**.

Table 10: Vegetation condition identified within the Development Envelope

Condition category (Keighery 1994)	Extent within Development Envelope (ha)	Extent proposed for clearing (ha)
Pristine	0	0
Excellent	0	0
Very good	0.50	0.46
Good	0	0
Good - degraded	0.36	0.32
Degraded	0.58	0.58
Degraded - completely degraded	0.34	0.29
Completely degraded	1.08	1.08
<b>Total</b>	<b>2.86</b>	<b>2.73</b>

Areas identified to be in 'very good' condition were associated with the '**CcHh**' plant community, while areas in 'good to degraded' condition were associated with the '**Cc**' plant community. These areas of vegetation are located within the northern portions of the Development Envelope and comprise marri trees with varying understorey species (see **Plate 7** and **Plate 8** for an example of the vegetation).

Areas identified to be in 'degraded' and 'degraded to completely degraded' condition were associated with the '**Af**' plant community and comprise predominantly peppermint trees with a non-native grass understorey. These degraded areas are considered highly modified from their natural state and exist as scattered individual trees or patches of trees throughout the central to southern extents of the Development Envelope (see **Plate 6**). Approximately half the Development Envelope is comprised of cleared areas comprised of predominately pasture grasses and weeds which were identified as 'completely degraded' (see **Plate 9**).

# Section 38 Referral Supporting Document

Lot 100 and Lot 256 Clarke Road, Margaret River



Plate 10: Condition of vegetation Identified within the Proposal area (Emerge Associates 2023b)

## Section 38 Referral Supporting Document

Lot 100 and Lot 256 Clarke Road, Margaret River



### 3.2.3.6. Threatened and priority ecological communities

A search of the DBCA Threatened and Priority Communities Database identified two TECs and one PECs occurring or potentially occurring within a 10 km radius of the Proposal. Based on geomorphology, soils and regional vegetation patterns, and vegetation types recorded within the Development Envelope during the survey none of these TECs or PECs were considered to have potential to occur and were not identified.

### 3.2.3.7. Conservation significant flora

A total of 41 native and 47 non-native species representing 35 families and 73 genera were recorded during quadrat sampling or through opportunistic detection whilst traversing the Proposal area (Emerge Associates 2023b). The dominant families containing native taxa were Fabaceae (eight native taxa and six weed taxa) and Proteaceae (four native taxa). The most common genus were *Eucalyptus* with four taxa and *Acacia* with three taxa.

A complete species list is provided in the flora and vegetation survey provided as Attachment C to the referral package.

A search of the EPBC Act Protected Matters Search Tool (PMST), DBCA NatureMap and DBCA's threatened and priority flora database (reference no. 79-0922FL) was undertaken to understand potential conservation significant flora that may occur within Proposal area. The database results identified a total of 15 threatened and 70 priority flora species occurring or potentially occurring within a 10 km radius of Proposal.

Based on background information available, suitable habitat was considered to potentially occur within the Proposal area for two threatened flora species and 11 priority flora species, which are summarised in **Table 11**.

*Table 11: Conservation significant flora species considered to have potential to occur in the Proposal area based on known habitat preferences*

Species	Level of significance		Life strategy	Habitat	Flowering period
	State	EPBC Act			
<i>Caladenia huegelii</i>	CR	EN	PG	Well-drained, deep sandy soils in lush undergrowth in a variety of moisture levels.	Sep-early Nov
<i>Verticordia plumosa</i> var. <i>ananeotes</i>	CR	EN	P	Sand in open jarrah woodland or sandy/clay soils with marri.	Nov-Dec
<i>Deyeuxia inaequalis</i>	P1	-	A/P	Loam soils.	Nov-Dec
<i>Netrostylis</i> sp. Nannup (P.A. Jurjevich 1133)	P1	-	P	Sand and clay loam in valley flats and creeks.	Undocumented (likely Mar-Nov)

## Section 38 Referral Supporting Document

Lot 100 and Lot 256 Clarke Road, Margaret River



Table 11: Conservation significant flora species considered to have potential to occur in the Proposal area based on known habitat preferences (continued)

Species	Level of significance		Life strategy	Habitat	Flowering period
<i>Amperea micrantha</i>	P2	-	P	Sandy soils.	Oct-Nov
<i>Andersonia</i> sp. Echidna (A.R. Annels ARA 5500)	P2	-	P	Brown laterite and sandy loam on slopes and flats.	Nov-Dec
<i>Xyris maxima</i>	P2	-	P	Black peaty sand on drainage flats.	Nov-Dec/Jan
<i>Actinotus repens</i>	P3	-	P	Sand, clay or loam in wetlands or low-lying areas in scrub, woodland or forest.	Dec-Mar
<i>Lepyrodia heleocharoides</i>	P3	-	P	Moist peaty sand. Dry or seasonally inundated heath or woodland, swamps.	Dec
<i>Stylidium lowrieianum</i>	P3	-	P	Sand or sandy loam over limestone. Eucalypt or Agonis woodland, forest.	Oct-Nov
<i>Tricostularia davisii</i>	P3	-	P	Variety of soils in mallee woodland and heath on flats, hillsides and valleys.	Oct-Nov
<i>Eucalyptus rudis</i> subsp. <i>cratyantha</i>	P4	-	P	Loam on flats and hillsides.	Jul-Sep
<i>Gahnia scleroides</i>	P4	-	P	Loam, sandy soils. Moist shaded situations.	Feb, Apr, Jun, Aug or Nov

A=Annual, CR=critically endangered, EN=endangered, P1-P4=Priority 1-Priority 4, P=perennial, PG=perennial geophyte.

No threatened or priority flora species listed under the federal EPBC Act, state BC Act or DBCA priority list were identified within the Proposal area during the *Detailed Flora and Vegetation Assessment* (Emerge Associates 2023b).

### 3.2.4 Likely environmental impacts

Potential impacts to flora and vegetation values within the Proposal area include:

- Clearing of up to 1.65 ha of native vegetation (excludes the non native plant community).
- Alteration of existing surface or ground water regimes as a result of the introduction of impervious surfaces, changing the hydrology vegetation is reliant on.
- Introduction and spread of weeds and plant diseases which could impact health of retained or nearby vegetation.
- Generation of dust, which could impact health of retained or nearby vegetation.

These are discussed in further detail below.

## Section 38 Referral Supporting Document

Lot 100 and Lot 256 Clarke Road, Margaret River



### 3.2.4.1. Direct

#### Clearing of 1.65 ha of native vegetation

Clearing of vegetation to implement the Proposal would result in the permanent loss of 1.65 ha of native vegetation, which is 1.1% of similar vegetation within 1 km of the Proposal area, and 0.1% within 12 km. This is comprised of (noting 'completely degraded' has been excluded given it is not considered to contain native vegetation):

- 0.46 ha (0.32%) assessed to be in 'very good' condition;
- 0.32 ha (0.22%) in 'good – degraded' condition;
- 0.58 ha (0.4%) in 'degraded' condition; and
- 0.29 ha (0.2%) in 'degraded – completely degraded' condition.

No threatened or priority flora, or threatened or priority ecological communities were identified within the Proposal area, and clearing will not impact on any of these values. The proposed clearing is unlikely to result in a significant impact to flora and vegetation.

### 3.2.4.2. Indirect

#### Alteration of surface or ground water regimes

The construction of the Proposal will include clearing and earth working, which is likely to result in localised compaction through vehicle access and material laydown areas, followed by the creation of permanent hardstand areas. As a result, the infiltration of rainfall and behaviour of surface water across the site will change, and will become more localised within the landscape areas and through the use of soakwells. This is not expected to be a significant impact or change existing surface water or groundwater regimes given infiltration will still occur.

#### Introduction and spread of weeds and plant disease/pathogens

Weeds, pests and plant disease/pathogens can compete for resources and/or damage vegetation to the extent that it declines in health (EPA 2016a). It is possible as a result of clearing and construction weeds and/or plant pathogens (e.g. phytophthora dieback) could be introduced to the Development Envelope, particularly with construction vehicles and machinery and associated movement of soils from other areas if machinery is dirty.

As described in the flora and vegetation assessment, 69.9% of the Proposal area is in degraded or completely degraded condition (Emerge Associates 2023b), which means there is a higher likelihood of weed species occurring given the disturbed nature. One declared pest (C3) pursuant to the *Biosecurity and Agriculture Management Act 2007* (BAM Act), \**Zantedeschia aethiopica* (arum lily), was recorded within the Proposal area, with a number of individuals recorded scattered throughout. Two weeds of national significance (WoNS) were also recorded: \**Genista linifolia* and \**Genista monspessulana*.

Implementation of the Proposal will enable existing weed species to be removed, and where present in the retained areas managed actively. Construction activities can be managed (discussed below) to limit the potential for works to introduce or spread weeds and pathogens through machinery and vehicle movements. This is not expected to be a significant impact to flora and vegetation.

## Section 38 Referral Supporting Document

Lot 100 and Lot 256 Clarke Road, Margaret River



### Generation of dust

During clearing and construction, vehicle movements within the Development Envelope have the potential to generate and deposit dust that could impact on retained or nearby vegetation. Dust deposition has the potential to smother vegetation species.

As discussed in **Table 6**, dust can be managed (discussed below) to avoid impacts on vegetation, through use of water and controlling activities during certain weather conditions. It is expected that bare ground (which could generate the dust) will be converted to hardstand areas in relatively quick sequence, removing the dust source. Landscape areas generally contain existing vegetation, and vegetative cover will reduce the potential for dust. This is not expected to be a significant impact to flora and vegetation.

### 3.2.5 Application of mitigation hierarchy

The Proposal has a range of measures proposed to mitigate the direct and indirect impacts of the future development on flora and vegetation as part of clearing, construction and operation, in accordance with the mitigation hierarchy for environmental factors (EPA 2023). The management measures based on the mitigation hierarchy are summarised in **Table 12**.

Table 12: Mitigation measures to minimise impacts to flora and vegetation

Impacts	Mitigation measures
<b>Direct impacts</b>	
<ul style="list-style-type: none"> <li>Clearing of native vegetation</li> </ul>	<p><u>Avoidance</u></p> <ul style="list-style-type: none"> <li>Not applicable. The Proposal is located within land appropriately zoned for the intended land use, which has been subject to historical disturbance since at least the 1950's based on publicly available aerial photography. The majority of the vegetation identified for clearing (approximately 72%) is in 'good-degraded' to 'completely degraded' condition.</li> </ul> <p><u>Minimisation</u></p> <ul style="list-style-type: none"> <li>Following the completion of the flora, vegetation and fauna assessments, the development footprint was reduced, to retain approximately 0.13 ha of native vegetation within 0.19 ha of landscaped areas. A focus was to maximise the retention of marri and peppermint trees where possible.</li> <li>Identify tree/vegetation retention areas on engineering drawings, and delineate as 'no go zones'. No go zones will be clearly demarcated on the ground, using flagging tape or fencing. This will be documented within a construction management plan, required as a condition of development approval.</li> <li>As part of clearing, mulch vegetation in situ and utilise within landscaped areas.</li> <li>No storage or machinery equipment will be permitted under retained trees/vegetation.</li> </ul> <p><u>Rehabilitate</u></p> <ul style="list-style-type: none"> <li>Native vegetation species will be incorporated within the landscaping areas, aiming to reintroduce some of the vegetation and habitat values lost through clearing. Landscaping areas are shown in <b>Plate 2</b>.</li> <li>Native tree species will be incorporated into the carparking areas, with 16 trees proposed.</li> </ul>

## Section 38 Referral Supporting Document

Lot 100 and Lot 256 Clarke Road, Margaret River



Table 12: Mitigation measures to minimise impacts to flora and vegetation(continued)

Impacts	Mitigation measures
<b>Indirect impacts</b>	
<ul style="list-style-type: none"> <li>• Introduction and spread of weeds and plant diseases/pathogens</li> <li>• Generation of dust</li> <li>• Alteration of surface or groundwater</li> </ul>	<p><u>Avoidance</u></p> <ul style="list-style-type: none"> <li>• Not applicable. The Proposal is located within an existing commercial precinct with provision for connection to the existing local water and drainage network.</li> </ul> <p><u>Minimisation</u></p> <ul style="list-style-type: none"> <li>• Implement hygiene protocols during the clearing and construction process to minimise introduction/spread of weeds and plant pathogens. This will include: <ul style="list-style-type: none"> <li>○ Vehicles, machinery and personnel to be free of mud/soil and plant material upon entering the Proposal area. Inspections to be completed prior to works commencing.</li> <li>○ Minimising clearing and earthworks during wet conditions.</li> <li>○ Implementing soil and erosion control measures in accordance with the Shire of Augusta Margaret River <i>Erosion and Sediment Control Local Law 2019</i> (SAMR 2019).</li> <li>○ Using landscaping species not identified as weeds.</li> </ul> This will be documented within a construction management plan, required as a condition of development approval.</li> <li>• Undertake weed control in areas of retained vegetation, particularly with regard to arum lily. This can be documented in the landscape plans, required as a condition of development approval.</li> <li>• Implement dust management measures during clearing/earthworks. These would include activities such as: avoiding works during periods of strong winds, and the utilisation of water suppression as required. This will be documented within a construction management plan, required as a condition of development approval.</li> <li>• Implement stormwater management measures, which will include infiltrating as much stormwater within the Proposal area as possible, through use of swales/basins and/or soakwells, and connecting the existing local stormwater drainage network for management of larger volumes. A drainage and/or stormwater management plan will be prepared as a condition of development approval, As part of engineering drawings.</li> </ul> <p><u>Rehabilitate</u></p> <ul style="list-style-type: none"> <li>• Not applicable.</li> </ul>

### 3.2.6 Assessment and significance of residual impacts

#### 3.2.6.1. Direct

##### Clearing of 1.65 ha of native vegetation

The impact of clearing 1.65 ha within the Proposal area has been considered in the context of the broader vegetation mapping (both Beard vegetation association and South West forest region vegetation complexes, see **Plate 4**) and the extent of vegetation remaining.

As detailed in **Table 13** and **Table 14**, the regional vegetation association Boranup (3) and South West forest region vegetation complex Cowaramup (C1) both have greater than 30% of their original extents remaining within the Shire of Augusta Margaret River. The extent remaining is above the target threshold for 30% retention of the pre-clearing extent of ecological communities within a bioregion (Environment Australia 2001), and much of this vegetation is within reserved/protected land (e.g. parks and recreation reserve, National Park or State forest). The proposed clearing within the Development Envelope would equate to 0.015% of the remaining Boranup (3) vegetation association within the Shire of Augusta Margaret River, and 0.025% of the Cowaramup (C1) complex.

## Section 38 Referral Supporting Document

Lot 100 and Lot 256 Clarke Road, Margaret River



Table 13: Comparison of clearing within the Development Envelope and mapped Beard vegetation association for the Shire of Augusta Margaret River.

Vegetation association	Original extent (ha)	Extent remaining (ha)	% remaining	Extent to be cleared (ha)	% to be cleared based on extent remaining
Boranup (3)	31,405.97	10,698.94	34.93	1.65	0.015

Table 14: Comparison of clearing within the Development Envelope and mapped South West forest region vegetation complexes for the Shire of Augusta Margaret River.

Vegetation complex	Original extent (ha)	Extent remaining (ha)	% remaining	Extent to be cleared (ha)	% to be cleared based on extent remaining
Cowaramup (C1)	18,981.79	6,540.87	34.46	1.65	0.025

Direct impacts associated with the Proposal (clearing of 1.65 ha) is not likely to result in a significant residual impact for flora and vegetation. Clearing will be limited to approximately 0.46 ha of very good condition vegetation and 0.32 ha of good-degraded condition vegetation, with the remaining vegetation (0.87 ha) in degraded or completely degraded condition and 1.08 ha in completely degraded condition). No threatened ecological community (TEC) or priority ecological community (PEC) or conservation significant flora were identified within the Proposal area and none will be impacted by the clearing within the Development Envelope.

### 3.2.6.2. Indirect

#### Alteration of surface water and groundwater regimes

As outlined previously (see **Table 12**), through the implementation of a stormwater/drainage management plan, and addressing the *Better Urban Water Management* framework (WAPC 2008), a significant residual impact to flora and vegetation is unlikely. Stormwater will be infiltrated as close to source as possible, using drainage swales/basins and/or soakwells maintaining the existing hydrological regimes, with larger rainfall events managed through the existing drainage network within the broader commercial precinct.

#### Introduction and spread of weeds and plant disease/pathogens

**Table 12** has outlined a range of mitigation measures that will be implemented to minimise the introduction and/or spread of weed and disease/plant pathogens. These include (but are not limited to): ensuring vehicles, equipment and personnel are free of soil/mud/plant material upon entry; weed control in areas of retained vegetation; and avoiding use of weed species in landscape planting. Through these measures, which are standard management approaches typically required as part of the land development process, no significant residual impact to flora and vegetation (within the Development Envelope or adjacent areas) is likely.

## Section 38 Referral Supporting Document

Lot 100 and Lot 256 Clarke Road, Margaret River



### Generation of dust

Dust could be generated as part of clearing and earthworks, however, will be time limited (e.g. only occur over a short period of time) and can be managed through measures which are standard management approaches typically required as part of the land development process. This includes use of water suppression and minimising activities on high wind days. No significant residual impact to flora and vegetation (within the or adjacent areas) is likely.

#### 3.2.7 Likely environmental outcome

The proposed clearing of 1.65 ha of native vegetation is not anticipated to result in a significant loss of biological diversity at the local or regional scale, and no known conservation significant flora or ecological communities occur within the Development Envelope. Vegetation ranges in condition from very good to completely degraded, with 1.95 ha (69.9%) in degraded or completely degraded condition. The vegetation identified within the Development Envelope is not considered unique to the area and is well represented in the Shire of Augusta Margaret River with over 30% remaining.

The identified indirect impacts to flora and vegetation as a result of clearing and construction are able to be reduced through the application of mitigation measures that are standard practice for the land development process, and are typically conditioned through other approval processes.

The Proposal is able to meet the EPA's objective for the Flora and Vegetation environmental factor.

### 3.3 Key environmental factor – Terrestrial Fauna

#### 3.3.1 EPA objective

The EPA's *Environmental Factor Guideline: Terrestrial Fauna* (EPA 2016b) states that the broad objective for terrestrial fauna is: '*to protect terrestrial fauna so that biological diversity and ecological integrity are maintained*'.

#### 3.3.2 Policy and guidance

The fauna investigations that have informed the Proposal have been conducted in accordance with the *Technical Guidance – Terrestrial vertebrate fauna surveys for environmental impact assessment* (EPA 2020b) and the *Environmental Factor Guideline: Terrestrial Fauna* (EPA 2016b).

In addition, other guidance material that has been referenced includes:

- *Referral guideline for 3 WA threatened black cockatoo species* (DCCEEW 2022).
- *Western Ringtail Possum (Pseudocheirus occidentalis) Recovery Plan* (DPaW 2017)
- *Carnaby's Cockatoo (Calyptorhynchus latirostris) Recovery Plan* (DPaW 2013)

## Section 38 Referral Supporting Document

Lot 100 and Lot 256 Clarke Road, Margaret River



### 3.3.3 Receiving environment

#### 3.3.3.1. Studies and information sources

A *Basic and Targeted Fauna Assessment* (Emerge Associates 2023a) was completed for the Proposal area in accordance with the EPA's *Technical Guidance - Terrestrial Fauna Surveys* (EPA 2016d). It included review of a number of databases and literature sources, namely:

- *Protected Matters Search* within 10 km radius of the Proposal.
- *NatureMap* search within a 10 km radius of the Proposal.
- DBCAs conservation significant fauna database (reference no. FAUNA#7348)
- Various literature resources used to assist the identification of fauna species and habitat.

The desktop assessment identified the potential for conservation significant fauna to occur within the Proposal area, including western ringtail possum (*Pseudocheirus occidentalis*) and the three black cockatoo species (Carnaby's (*Zanda latirostris*); Baudin's (*Zanda baudinii*); and forest red tailed (*Calyptorhynchus banksia naso*). Field investigations were undertaken in late September 2022, with additional follow-up work in June 2023 and included:

- Day-time visual inspection of the Development Envelope and adjoining areas for signs of fauna, including targeted searches for western ringtail possum and the black cockatoo species (e.g. scats, diggings, dreys, nests, burrows, feeding signs)
- Hollow bearing trees suitable for breeding by black cockatoos
- Direct observations of terrestrial vertebrate fauna and signs
- Two non-consecutive, night-time spotlight surveys for western ringtail possum.

The fauna assessment is provided separately as Attachment D within the referral package (Emerge Associates 2023a). A summary of the results of the assessment outcomes are provided below.

#### 3.3.3.2. Regional context

Vegetation types and resulting fauna habitats strongly influence the diversity and composition of fauna taxa present within an area. Native vegetation is described and mapped at different scales in order to illustrate patterns in its distribution.

As outlined in **Section 3.2.3.2**, at a continental scale the *Interim Biogeographic Regionalisation of Australia* (IBRA) divides Australia into floristic subregions (Environment Australia 2000), and then further divided into vegetation associations and complexes. The Proposal area is found within the Warren 'WAR01' region and subregion and the 'Boranup 3' vegetation association and 'Cowaramup, C1' vegetation complex. These are detailed in **Section 3.2.3.2**, with the vegetation descriptions indicating habitat suitable for western ringtail possum and black cockatoos could be present within the Proposal area.

Ecological linkages represent areas of native vegetation which provide a corridor or linkage between patches of vegetation to allow movement of flora and fauna and their genetic material through the landscape, helping to maintain metapopulations. Ecological linkages are often continuous or near-continuous as the more fractured a linkage is, the less ease flora and fauna have in moving within the corridor (Alan Tingay and Associates 1998).

## Section 38 Referral Supporting Document

Lot 100 and Lot 256 Clarke Road, Margaret River



The Perth Biodiversity Project, supported by the Western Australia Local Government Association (WALGA), have identified and mapped regional ecological linkages within the Perth Metropolitan Region (WALGA and PBP 2004). This study was extended beyond the Perth Metropolitan Region through the South West Biodiversity Project, resulting in the identification and mapping of the South West regional ecological linkages (Molloy *et al.* 2009).

No mapped ecological linkages occur within the Proposal area. One ecological linkage occurs approximately 1.65 km to the north-east of the Proposal area, and is associated with the Margaret River.

### 3.3.3.3. Fauna habitat

The fauna assessment identified three fauna habitat types within the Proposal area, with the locations shown in **Plate 11** and description of each habitat type identified below in **Table 15** (Emerge Associates 2023a). Areas within the northern portion of the Proposal area consist predominantly of marri forest, whilst cleared areas and non-continuous patches of peppermint forest were identified throughout the remainder of the area.

Table 15: Fauna habitats identified within the Development Envelope (Emerge Associates 2023a)

Fauna habitat	Description	Extent within Development Envelope (ha)	Extent proposed for clearing (ha)
Marri forest	Closed forest of <i>Corymbia calophylla</i> over open shrubland of native shrubs and/or forbs over native and non-native grasses (see <b>Plate 12</b> ).	1.45	1.37
Peppermint forest	Low open forest of <i>Agonis flexuosa</i> over occasional native shrubs and/or forbs over closed non-native grass/forbland of pasture weeds (see <b>Plate 13</b> )	0.33	0.28
Cleared	Heavily disturbed areas comprising predominantly grassland (see <b>Plate 14</b> )	1.08	1.08
<b>Total</b>		<b>2.86</b>	<b>2.73</b>

The marri forest habitat identified within the northern portion of the Development Envelope comprised similar species to the Cowaramup (C1) vegetation complex mapped over the broader Proposal area. None of the habitat types identified in the survey were considered a type confined to the Development Envelope and all occur commonly in areas surrounding and adjacent to the Proposal and is discussed further in **Section 3.3.4**.

# Section 38 Referral Supporting Document

Lot 100 and Lot 256 Clarke Road, Margaret River



Plate 11: Fauna habitat types identified within the Development Envelope

# Section 38 Referral Supporting Document

Lot 100 and Lot 256 Clarke Road, Margaret River



*Plate 12: Example of the marri forest habitat within the Proposal area*



*Plate 13: Example of the peppermint forest habitat within the Proposal area*

## Section 38 Referral Supporting Document

Lot 100 and Lot 256 Clarke Road, Margaret River



Plate 14: Example of the cleared habitat within the Proposal area

### 3.3.3.4. Fauna diversity

As outlined, a search was conducted for fauna species that have been recorded within a 10 km radius using the *Protected Matters Search Tool* (DCCEE 2023b), *NatureMap* (DBCA 2023), DBCA's conservation significant fauna database (reference no. FAUNA#7348) and literature references. These searches identified 514 fauna species (includes native and non-native) as occurring or potentially occurring within 10 km of the Proposal, of which 73 are conservation significant.

This was followed by a field assessment, which identified species through direct sighting or indirectly based on calls, foraging evidence and other signs. The survey identified 9 bird species and 1 mammal species within the Development Envelope. Of the 10 species identified, two conservation significant fauna were recorded and include western ringtail possum and Carnaby's black cockatoo.

Based on the desktop searches and field survey outcomes, an assessment on the likelihood of occurrence of conservation significant fauna within the Proposal area was undertaken using the categories outlined in **Table 16**.

## Section 38 Referral Supporting Document

Lot 100 and Lot 256 Clarke Road, Margaret River



Table 16: Likelihood of occurrence assessment categories and definitions

Likelihood of occurrence	Definition
Recorded	The species was recorded during the current field survey or during previous field surveys.
Likely	The Development Envelope contains suitable habitat for the species and it is likely the species may occur based on presence of a recent historical record within or close to the Development Envelope.
Possible	The Development Envelope contains habitat of at least marginal quality and/or extent for the species and the Development Envelope is located within the known distribution range of the species which is supported by recent literature records from near the Development Envelope.
Unlikely	The Development Envelope contains no or marginal habitat for the species and/or no recent literature records occur near the Development Envelope.

Based on the outcomes of the likelihood of occurrence assessment, eight (8) species were identified as recorded, likely or possible to occur based on habitat requirements, species distribution and site conditions. These species are summarised in **Table 17** and are discussed further below.

Table 17: Conservation significant fauna species found to occur or are likely to occur within the Development Envelope.

Species	Common Name	BC Act listing	EPBC Act listing	Likelihood of occurrence
<b>Birds</b>				
<i>Apus pacificus</i>	Pacific swift	Migratory	Migratory	<b>Possible:</b> May opportunistically occur in or fly over the site on commute but only for short periods of time.
<i>Calyptorhynchus banksii naso</i>	Forest red-tailed black cockatoo	Vulnerable	Vulnerable	<b>Likely:</b> Suitable roosting and foraging habitat present.
<i>Falco peregrinus</i>	Peregrine falcon	Migratory	Migratory	<b>Possible:</b> May opportunistically occur in or fly over the Proposal area on commute or while searching for prey but only for short periods of time.
<i>Tyto novaehollandiae novaehollandiae</i>	Australian masked owl	Priory 3	-	<b>Possible:</b> May opportunistically occur in or fly over the Proposal area on commute or while searching for prey but only for short periods of time.
<i>Zanda baudinii</i>	Baudin's black cockatoo	Endangered	Endangered	<b>Likely:</b> Suitable roosting and foraging habitat present.

## Section 38 Referral Supporting Document

Lot 100 and Lot 256 Clarke Road, Margaret River

Table 17: Conservation significant fauna species found to occur or are likely to occur within the Development Envelope.(continued)

Species	Common Name	BC Act listing	EPBC Act listing	Likelihood of occurrence
<b>Birds (continued)</b>				
<i>Zanda latirostris</i>	Carnaby's black cockatoo	Endangered	Endangered	<b>Recorded:</b> Foraging evidence observed. Suitable roosting and foraging habitat present.
<b>Mammals</b>				
<i>Phascogale tapoatafa wambenger</i>	South-western brush-tailed phascogale	Conservation dependent	-	<b>Possible:</b> Suitable habitat present and recent records of this species occur near the Proposal area.
<i>Pseudocheirus occidentalis</i>	Western ringtail possum	Critically endangered	Critically endangered	<b>Recorded:</b> Multiple individuals recorded during the survey with dreys recorded on site. Suitable habitat present.

### Western ringtail possum

The majority of native vegetation (1.78 ha) within the Proposal area would represent foraging and/or refuge for western ringtail possum. This is comprised of 1.45 ha of the marri forest habitat type and 0.33 ha of the peppermint forest habitat type.

The targeted western ringtail possum assessment identified three western ringtail possum drey's (all identified within one large peppermint within the south-west portion of the Development Envelope) during the diurnal survey (shown in **Plate 15**). The nocturnal surveys identified five western ringtail possum individuals through direct sighting on the first survey evening and four through direct sighting on the second survey evening. All individuals were identified within the habitat types 'peppermint forest' and 'marri forest'. The recorded locations of all sightings are shown in **Plate 15**.

# Section 38 Referral Supporting Document

Lot 100 and Lot 256 Clarke Road, Margaret River



Plate 15: Western ringtail possum habitat and survey results within the Proposal area

## Section 38 Referral Supporting Document

Lot 100 and Lot 256 Clarke Road, Margaret River



### Black cockatoo species

The targeted black cockatoo habitat assessment identified habitat known to provide foraging and potential roosting sites for Carnaby's black cockatoo, Baudin's black cockatoo and forest red-tailed black cockatoo (see **Plate 16** and **Plate 17**). No black cockatoo species were directly heard or observed feeding or roosting within the Development Envelope, however Carnaby's black cockatoo (Endangered) were identified through foraging evidence of chewed marri nuts.

A total of 1.78 ha of Carnaby's black cockatoo foraging habitat (1.45 ha of primary; and 0.33 ha of secondary) and 1.45 ha of Baudin's and forest red-tailed black cockatoo foraging habitat was identified within the Development Envelope. The majority of the foraging habitat occurs as a contiguous area of forest vegetation and comprises a combination of primary, secondary and non-food plants. The dominant primary food plant is marri, while the dominant secondary food plant was peppermint trees. No evidence of roosting was observed, with the nearest known roost 900 m to the west of the Development Envelope.

A total of 28 habitat trees (with a diameter at breast height of 500 mm or greater) were identified within the Development Envelope, however none were identified to contain hollows suitable for use by black cockatoos for nesting.

### Other conservation significant species

Whilst not detected in the field component of the survey, as outlined in **Table 17** it is possible that a further four conservation significant species may occur within the Development Envelope and include:

- Pacific swift (migratory) and peregrine falcon (migratory), which are highly mobile species that may opportunistically fly over or forage in the Development Envelope for short periods of time as part of a much larger home range. This species would not breed within the Development Envelope. Any occurrence of the pacific swift would likely be in the air space and largely independent from terrestrial habitat.
- Australian masked owl (priority 3) is found in the southwest and inhabit heavily forested areas. While the Development Envelope contains a small area of forest habitat, it does not provide any breeding opportunities due to the lack of hollows. This species may be a temporary visitor for foraging as part of a larger home range.
- South-western brush-tailed phascogale (conservation dependent) inhabits forests and woodland areas across the southwest of Western Australia. The forested area within the Development Envelope is relatively small in comparison to similar habitat in the local and wider area, therefore this species may be a temporary visitor for foraging as part of a larger home range.

The remaining species identified in the broader desktop and database searches are considered unlikely to occur due to lack of suitable habitat within the Development Envelope or because the Proposal is situated outside of the species known distribution.

# Section 38 Referral Supporting Document

Lot 100 and Lot 256 Clarke Road, Margaret River

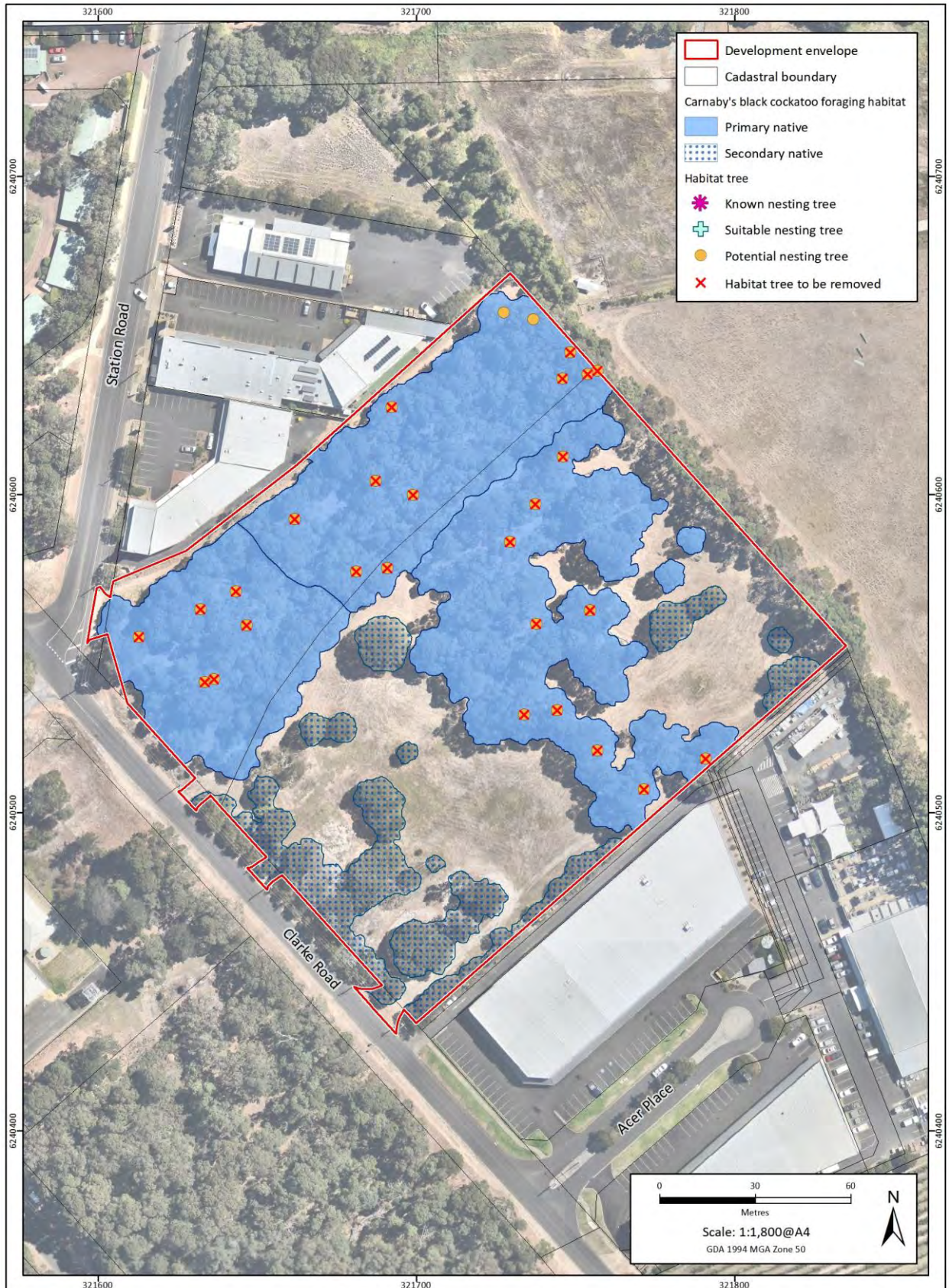


Plate 16: Carnaby's black cockatoo foraging and potential breeding habitat identified within the Proposal area.

# Section 38 Referral Supporting Document

Lot 100 and Lot 256 Clarke Road, Margaret River

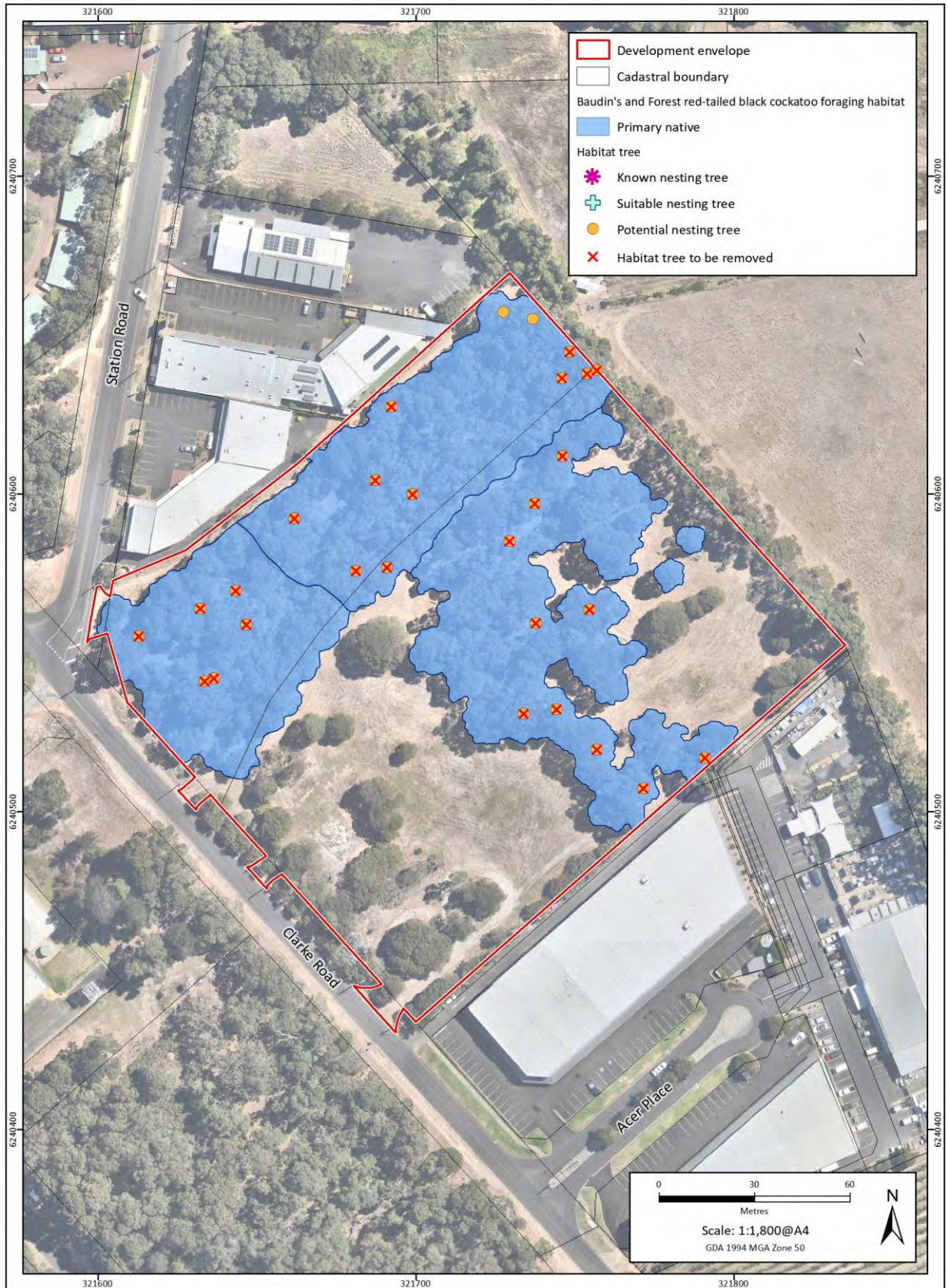


Plate 17: Baudin's and forest red-tailed black cockatoo foraging and potential breeding habitat identified within the Proposal area.

## Section 38 Referral Supporting Document

Lot 100 and Lot 256 Clarke Road, Margaret River



### 3.3.4 Likely environmental impacts

Potential impacts to terrestrial fauna values within the Proposal area include:

- Direct loss of 1.65 ha of fauna habitat from clearing and ground disturbance.
- Direct loss of or injury to fauna individuals through clearing and machinery or vehicle movements.
- Introduction and spread of weeds and plant diseases which could impact health of retained or nearby vegetation.
- Attraction of predators or competitors
- Fragmentation of native habitat corridors.

These are discussed in further detail below.

#### 3.3.4.1. Direct impacts

##### **Direct loss of fauna habitat from clearing and ground disturbance**

Clearing of vegetation to implement the Proposal would result in the permanent loss of 1.65 ha of native vegetation (which is 1.1% of similar vegetation within 1 km of the Proposal) that provides habitat for a number of conservation significant fauna species. Habitat impacted includes:

- 1.65 ha of native vegetation representing habitat for western ringtail possum.
- 1.65 ha of native vegetation representing foraging habitat for Carnaby's black cockatoo (1.37 ha primary foraging habitat and 0.28 ha secondary foraging habitat), and 26 habitat trees.
- 1.37 ha of native vegetation representing foraging habitat for Baudin's and Forest red-tailed black cockatoo species and 26 habitat trees.

None of the black cockatoo habitat trees were identified to contain hollows (suitable or otherwise) and therefore would not support breeding by the three black cockatoo species.

##### **Direct loss of or injury to fauna individuals from clearing and machinery**

It is possible that through clearing of vegetation within the Proposal, fauna individuals may suffer fatalities or be injured through physical disturbance of vegetation and vehicle strike. Western ringtail possums may be particularly susceptible given individuals were identified utilising vegetation within the Proposal as part of the nocturnal surveys, and dreys were also identified. Deaths of or injury of individual fauna are not expected to affect the conservation status and distribution of any fauna species, and would be no different to the existing risk posed by the constructed and utilised public road network that habitat within the site connects to.

## Section 38 Referral Supporting Document

Lot 100 and Lot 256 Clarke Road, Margaret River



### 3.3.4.2. Indirect impacts

#### **Introduction and spread of weeds and plant disease/pathogens**

Similar to that discussed in **Section 3.2.6.2**, weeds, pests and plant disease/pathogens can compete for resources and/or damage vegetation to the extent that it declines in health (EPA 2016b) and reduced available fauna habitat. It is possible as a result of clearing and construction weeds and/or plant pathogens (e.g. phytophthora dieback) could be introduced to the Development Envelope, particularly with construction vehicles and machinery and associated movement of soils from other areas if machinery is dirty.

Construction activities can be managed to limit the potential for works to introduce or spread weeds and pathogens through machinery and vehicle movements. This is not expected to be a significant impact to flora and vegetation and in turn fauna habitat.

#### **Attraction of predators and competitors**

Inappropriate management of waste, particularly putrescible waste, generated by the Proposal may provide additional food source for scavengers (feral cats) and vermin (house mice, rats) that could compete or predate on native fauna species. The waste likely to be generated will be managed in accordance with the Shire of Augusta Margaret River waste management requirements, including use of centralised commercial waste disposal. Waste is not anticipated to be a significant issue during construction, with waste predominantly inert materials.

#### **Fragmentation of habitat corridors**

Clearing of vegetation (and fauna habitat) within the Proposal may result in the fragmentation of habitat connections across the landscape. The vegetation within the Development Envelope currently connects to a vegetation corridor adjacent to the eastern boundary (fence line planting, including non-natives) which extends to the north and south (although is relatively disconnected from broader areas of vegetation), as well as vegetation to the west within the Clarke Road reserve. The Proposal is separated from the more extensive areas of native vegetation by Clarke Road, although this would not prevent species such as western ringtail possum traversing between the areas (by crossing the road at ground level).

### 3.3.5 Application of the mitigation hierarchy

The Proposal has a range of measures proposed to mitigate the direct and indirect impacts of the future development on fauna values as part of clearing, construction and operation, in accordance with the mitigation hierarchy for environmental factors (EPA 2023). The management measures based on the mitigation hierarchy are summarised in **Table 18**.

## Section 38 Referral Supporting Document

Lot 100 and Lot 256 Clarke Road, Margaret River



Table 18: Mitigation measures to minimise impacts to significant terrestrial fauna

Impacts	Mitigation Measures
<b>Direct</b>	
<ul style="list-style-type: none"> <li>• Direct loss of fauna habitat from clearing and ground disturbance including:               <ul style="list-style-type: none"> <li>○ Clearing of 1.65 ha of western ringtail possum habitat.</li> <li>○ Clearing of up to 1.65 ha of Carnaby's black cockatoo foraging habitat</li> <li>○ Clearing up to 1.37 ha of Baudins and forest red-tailed black cockatoo foraging habitat.</li> <li>○ Clearing of 26 habitat trees.</li> </ul> </li> <li>• Direct loss or injury to fauna individuals</li> </ul>	<p><u>Avoidance</u></p> <ul style="list-style-type: none"> <li>• Not applicable. The Proposal is located within land appropriately zoned for the intended land use, which has been subject to historical disturbance since at least the 1950's based on publicly available aerial photography.</li> </ul> <p><u>Minimisation</u></p> <ul style="list-style-type: none"> <li>• Following the completion of the flora, vegetation and fauna assessments, the development footprint was reduced, to retain approximately an additional 0.05 ha of native vegetation and 2 habitat trees within 0.19 ha of landscaped areas. A focus was to maximise the retention of marri and peppermint trees where possible, and includes large peppermint tree in the south-east corner identified with existing drey's.</li> <li>• Identify tree/vegetation retention areas on engineering drawings, and delineate as 'no go zones'. No go zones will be clearly demarcated on the ground, using flagging tape or fencing. This will be documented within a construction management plan, required as a condition of development approval.</li> <li>• Implementation of fauna management protocols by an experienced fauna specialist under a valid license from the DBCA. This would include fauna trapping and relocation prior to clearing (particularly for western ringtail possum), pre-clearing fauna inspection and having a fauna spotter present during clearing activities. This will be documented within a fauna management plan, required as a condition of development approval.</li> </ul> <p><u>Rehabilitate</u></p> <ul style="list-style-type: none"> <li>• Native vegetation species will be incorporated within the landscaping areas, aiming to reintroduce some of the vegetation and habitat values lost through clearing. Landscaping areas are shown in <b>Plate 2</b>.</li> <li>• Native tree species will be incorporated into the carparking areas, with 16 trees proposed.</li> </ul>
<b>Indirect</b>	
<ul style="list-style-type: none"> <li>• Introduction and spread of weeds and plant diseases/pathogens</li> <li>• Attraction of predators and competitors</li> <li>• Fragmentation of habitat corridors</li> </ul>	<p><u>Avoidance</u></p> <ul style="list-style-type: none"> <li>• Not applicable. The Proposal is located within land appropriately zoned for the intended land use. None of the impacts from the proposed clearing and development of the Proposal will result in impacts/risks different to those already present in the area.</li> </ul> <p><u>Minimisation</u></p> <ul style="list-style-type: none"> <li>• Implement hygiene protocols during the clearing and construction process to minimise introduction/spread of weeds and plant pathogens. This will include:               <ul style="list-style-type: none"> <li>○ Vehicles, machinery and personnel to be free of mud/soil and plant material upon entering the Proposal area. Inspections to be completed prior to works commencing.</li> <li>○ Minimising clearing and earthworks during wet conditions.</li> <li>○ Implementing soil and erosion control measures in accordance with the Shire of Augusta Margaret River <i>Erosion and Sediment Control Local Law 2019</i> (SAMR 2019).</li> <li>○ Using landscaping species not identified as weeds.</li> </ul>               This will be documented within a construction management plan, required as a condition of development approval.             </li> <li>• Ensure the Development Envelope and works area is maintained in a clean and tidy manner to ensure feral and other species are not attracted to the site. Waste material is to be disposed of appropriately through waste services and/or to licenced landfill. This will be documented within a construction management plan, required as a condition of development approval.</li> <li>• Utilise wooden boundary fencing (which provide better grip), to facilitate movement of western ringtail possum between vegetation corridors along the eastern and western boundaries of the Development Envelope. This can be documented in the engineering design drawings.</li> <li>• Install fauna awareness signs within the Proposal, to highlight to future businesses and visitors the potential for fauna to occur and care to be taken. The Shire of Augusta Margaret River have a number of standard signs that could be used.</li> </ul> <p><u>Rehabilitate</u></p> <ul style="list-style-type: none"> <li>• Not applicable.</li> </ul>

## Section 38 Referral Supporting Document

Lot 100 and Lot 256 Clarke Road, Margaret River



### 3.3.6 Assessment and significance of residual impacts

#### 3.3.6.1. Direct

##### **Clearing 1.65 ha of western ringtail possum habitat**

In May 2018, the western ringtail possum was listed as critically endangered under the EPBC Act based on information that suggested the population had reduced from an estimated 18,000 in 2005 to 3,400 in 2015. In contrast to these estimates, population studies were commissioned by Main Roads Western Australia (Biota Environmental Sciences 2020) and included consideration of the species distribution from Bunbury to Busselton, around Manjimup and Margaret River, and from Walpole to Albany. The study outcomes suggested that the population estimate could be 20,118 mature individuals, compared to the 2015 estimate of 3,400 mature individuals. This suggests it is possible that western ringtail possums could be in greater numbers than suggested in May 2018. Anecdotal information from a number of the local catchment and natural resource management groups also suggests that western ringtail possum appears to be adapting to urban environments (Nature Conservation Margaret River Region 2018; Hub 2020; GeoCatch 2023; NRM 2023).

The *Significant impact guidelines for the vulnerable western ringtail possum (Pseudocheirus occidentalis) in the southern Swan Coastal Plain, Western Australia* (Department of the Environment 2009) identifies that for areas designated core habitat area, there is a possibility of a significant impact on the species where more than 0.5 ha in a remnant habitat patch is cleared; more than 50% of a remnant habitat patch is cleared; and/or fragmentation of existing habitat linkages occur. The guidelines only identified areas of western ringtail possum habitat between Dunsborough and Australind, and the DBCA provides habitat suitability mapping within a similar region. The Margaret River area (including the Proposal area) is not identified by the significant impact guidelines (as it occurs outside the Swan Coastal Plain) however, and as outlined, areas of suitable habitat identified as 'peppermint forest' and 'marri forest' and individuals were located during the survey to occur within the Development Envelope.

The Proposal will result in the clearing of 1.37 ha of 'marri forest' and 0.28 ha 'peppermint forest' habitat, however 144.68 ha of similar habitat has been identified within 1 km radius of the Development Envelope with the majority of this (approximately 126 ha) within parks and recreation reserve and unlikely to be cleared. The proposed clearing represents 1.14 % of vegetation within 1 km of the Proposal. These habitat areas are shown in **Plate 18**. Impacts to western ringtail possum can be managed as part of implementing the Proposal, with trapping and relocation able to minimise the likelihood of direct loss or injury of individuals, with habitat available in the immediate vicinity of the Proposal for release. Vegetation will be retained within the Development Envelope, and landscape areas will be planted with native species suitable for both western ringtail possum and the three black cockatoo species. Use of wooden fencing will help maintain linkages between vegetation (tree canopy) corridors to the immediate east and west of the Development Envelope, enabling movement across the Proposal to be maintained.

While more than 0.5 ha of suitable western ringtail possum will be removed, impacts to the species as a result of implementing the Proposal are not likely to result in a significant residual impact, based on the measures to be implemented, and given the habitat in the broader area for ongoing occupation of the species.

# Section 38 Referral Supporting Document

## Lot 100 and Lot 256 Clarke Road, Margaret River

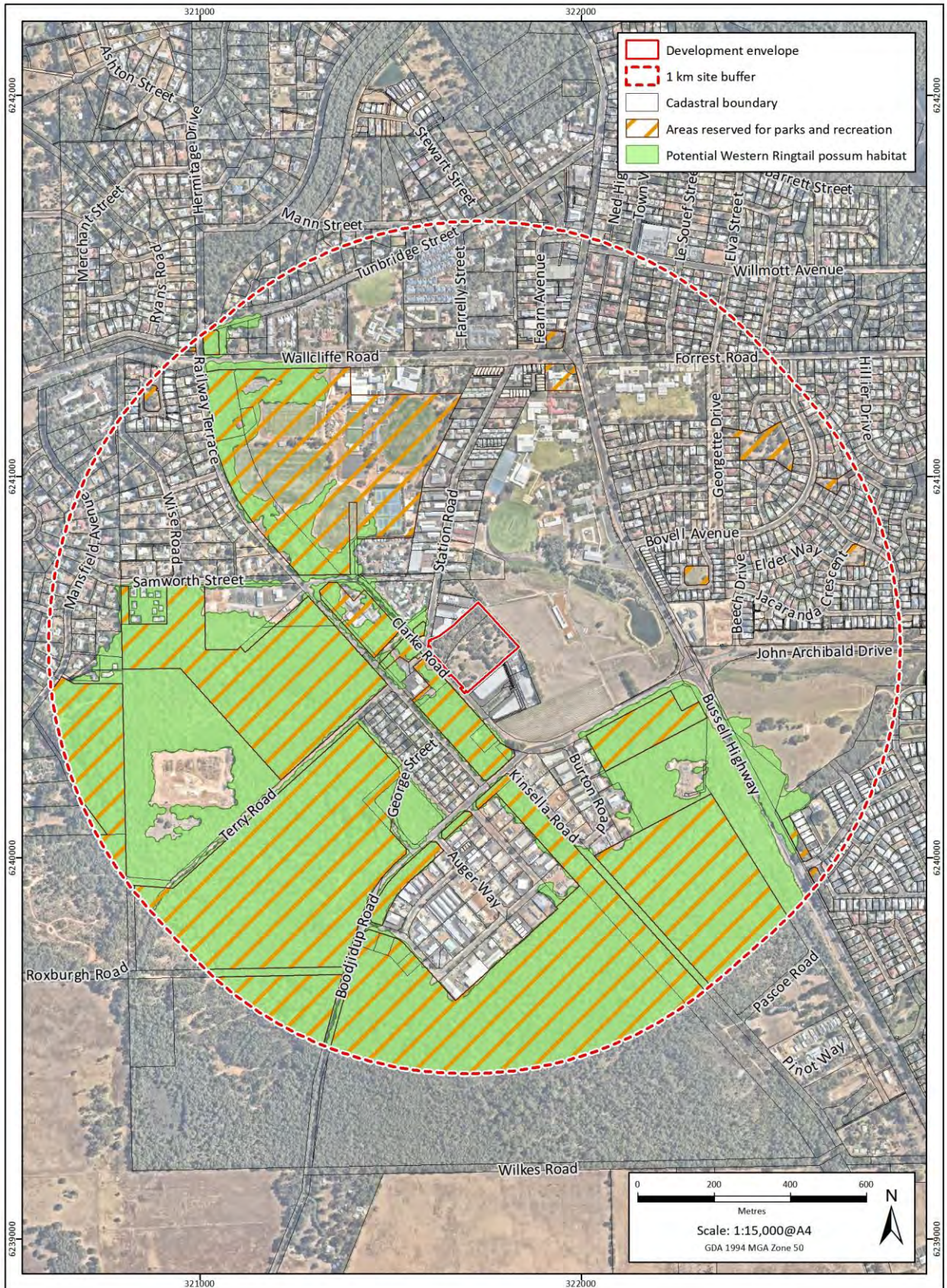


Plate 18: Potential western ringtail possum habitat identified within 1 km of the site with similar values to the Proposal area.

## Section 38 Referral Supporting Document

Lot 100 and Lot 256 Clarke Road, Margaret River



### Clearing of up to 1.65 ha of black cockatoo habitat

The *Referral guideline for 3 WA threatened black cockatoo species* (DCCEEW 2022) provides guidance on what actions are likely to require referral based on potential impacts to the three black cockatoo species. This includes:

- The loss of breeding habitat.
- The loss of one or more known or suitable nesting trees.
- The loss of a known night roosting site.
- The loss of equal to or greater than 1 hectare of high-quality foraging habitat.
- The loss of more than 10 hectares of low-quality foraging habitat.

Implementation of the Proposal will result in the clearing to 1.65 ha of Carnaby's black cockatoo foraging habitat (comprised of 1.37 ha primary native plants and 0.28 ha secondary native plants), 1.37 ha of Baudin's and forest red-tailed black cockatoo species, as well as 26 habitat trees. None of the habitat trees contain hollows (suitable or otherwise) that would be able to support breeding, and no evidence of roosts or roosting was identified. The nearest roosting site is 900 m west of the Proposal. Known roosting sites are shown in **Plate 19**.

Glossop *et al.* (2011) has mapped 'areas requiring investigation as Carnaby's black cockatoo feeding habitat' for the Swan Coastal Plain and Jarrah Forest regions, based on regional vegetation mapping that may contain plant species known to be foraged upon by Carnaby's black cockatoo and therefore may potentially provide foraging habitat for Carnaby's black cockatoo. In order to account for clearing of native vegetation that has occurred since the Glossop *et al.* (2011) dataset was created and to incorporate updated vegetation mapping and information on foraging behaviour of Carnaby's black cockatoo, Emerge have revised this dataset to represent the most up to date information available. Furthermore, Emerge have used a similar methodology to Glossop *et al.* (2011) to define potential foraging habitat for Baudin's black cockatoo and forest-red tailed cockatoos. Further detail on this is provided in the *Basic and Targeted Fauna Assessment* (Emerge Associates 2023a).

The outcomes of this habitat mapping within 12 km of the Proposal are provided in **Plate 19**. This shows that significant areas (15,076 ha) of potential foraging habitat have been identified. The clearing with the Development Envelope (1.65 ha) equates to 0.011% of habitat available within 12 km of the Proposal. Similar to comments for western ringtail possum, the majority of this vegetation is within parks and recreation reserves, national parks or state forest and unlikely to be cleared.

While more than 1 ha of foraging habitat for the three black cockatoo species and 26 habitat trees (none with suitable hollows) will be removed, impacts to the species as a result of implementing the Proposal are not likely to result in a significant residual impact, based the measures to be implemented, and given the significant areas of habitat in the broader area available for ongoing occupation by the three species.

Section 38 Referral Supporting Document  
 Lot 100 and Lot 256 Clarke Road, Margaret River

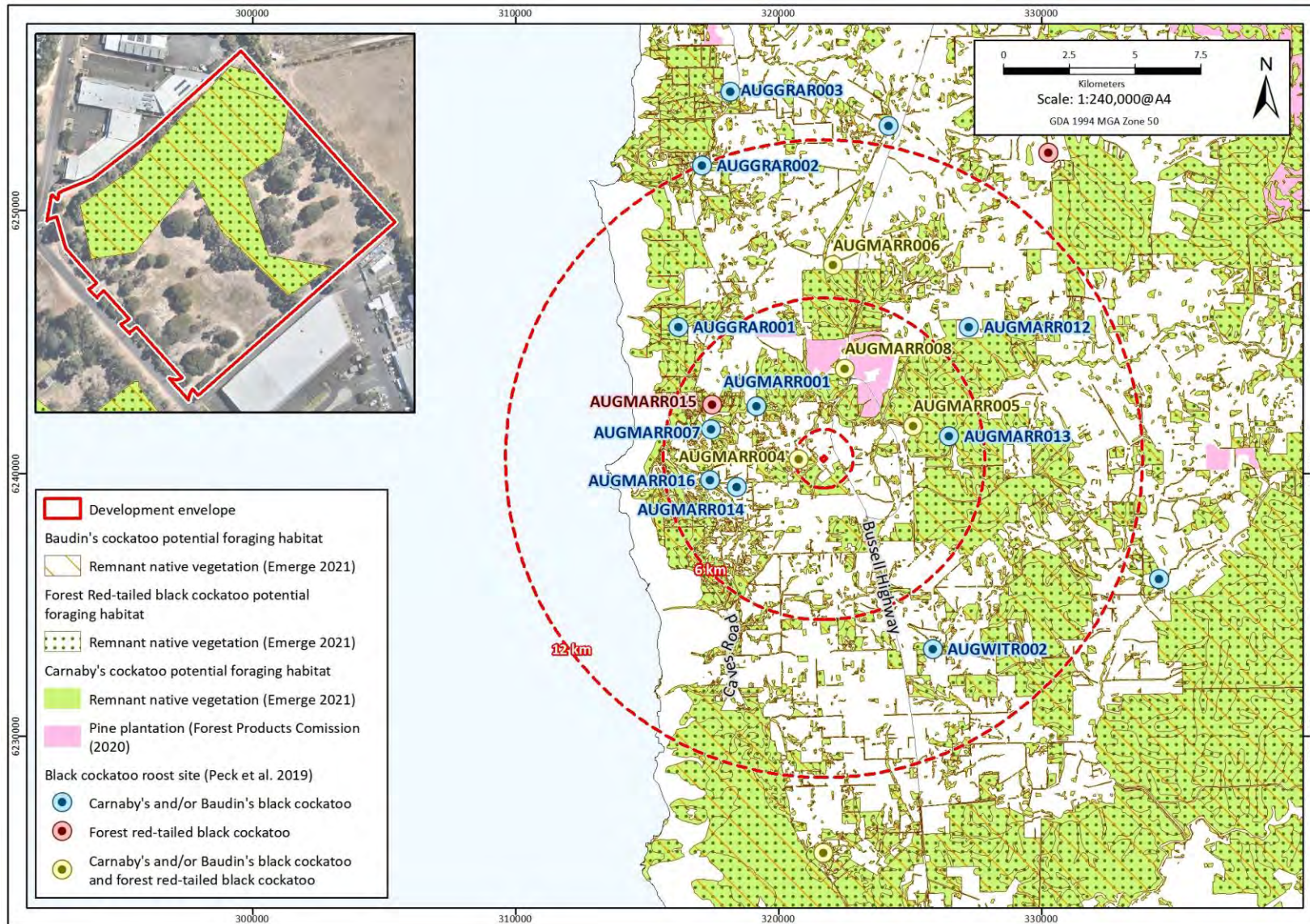


Plate 19: Black cockatoo habitat values identified within 12 km of the Proposal area.

## Section 38 Referral Supporting Document

Lot 100 and Lot 256 Clarke Road, Margaret River



### Direct loss or injury to fauna individuals

Fauna individuals could be killed or injured as part of the clearing activities within the Proposal area, however, this can be managed through measures which are standard management approaches typically required as part of the land development process. This includes trapping and relocation (with habitat available within the immediate vicinity of the Proposal area) ahead of works commencing, pre-clearing inspections and having a fauna spotter present during clearing works. The requirements will be detailed within a fauna management plan. No significant residual impact to fauna individuals is likely.

### 3.3.6.2. Indirect

#### Introduction and spread of weeds and plant disease/pathogens

**Table 12** and **Table 18** have outlined a range of mitigation measures that will be implemented to minimise the introduction and/or spread of weed and disease/plant pathogens. These include (but are not limited to): ensuring vehicles, equipment and personnel are free of soil/mud/plant material upon entry; weed control in areas of retained vegetation; and avoiding use of weed species in landscape planting. Through these measures, which are standard management approaches typically required as part of the land development process, no significant residual impact to fauna habitat (within the Development Envelope or adjacent areas) is likely.

#### Attraction of predators and competitors

**Table 18** have outlined a range of mitigation measures that will be implemented to minimise the attraction of predators and competitors, primarily managing waste to minimise the attractiveness of the Proposal area for species. The Proposal is located within an existing commercial precinct, and the Proposal is unlikely to introduce new risks/threats compared to those already posed by existing development, nor contribute to cumulative change. No significant residual impact to fauna habitat (within the Development Envelope or adjacent areas) is likely.

#### Fragmentation of habitat corridors

While **Table 18** have outlined a range of mitigation measures that will be implemented to minimise the impact of the proposed clearing in terms of habitat fragmentation. No significant residual impact to fauna (within the Development Envelope or adjacent areas) is likely, with movement of key species (western ringtail possum) encouraged through use of wooden fencing connecting to corridors of vegetation adjacent to the perimeter, and planting of native species throughout the landscape and carpark areas supporting refuge.

## Section 38 Referral Supporting Document

Lot 100 and Lot 256 Clarke Road, Margaret River



### 3.3.7 Likely environmental outcome

The proposed clearing of 1.65 ha of native vegetation will result in impacts to habitat suitable for conservation significant species, namely western ringtail possum, Carnaby's black cockatoo, Baudin's black cockatoo and forest red-tailed black cockatoo, is not likely to result in a significant loss of biological diversity or affect ecological integrity. The clearing required for the Proposal and associated habitat loss are unlikely to have significant residual impacts at either a local or regional scale, with the removal of up to 1.65 ha of habitat representing 1.14% of habitat within 1 km for western ringtail possum; and 0.011% of habitat within 12 km for the three black cockatoo species. Individuals (particularly for western ringtail possum) can be relocated as part of works, with habitat available in the local area and likely apart of existing ranges for individuals.

The identified indirect impacts to terrestrial fauna as a result of clearing and construction are able to be reduced through the application of mitigation measures that are standard practice for the land development process, and are typically conditioned through other approval processes.

The Proposal is able to meet the EPA's objective for the Terrestrial Fauna environmental factor.

## Section 38 Referral Supporting Document

Lot 100 and Lot 256 Clarke Road, Margaret River



### 4. Offsets

The assessment of residual impacts, following application of the mitigation hierarchy, has indicated whilst some impacts are expected as a result of the Proposal, these can be managed (as discussed in **Section 3.2** and **Section 3.3**) and there is no significant residual impact predicted. Accordingly, no offsets have been proposed.

## Section 38 Referral Supporting Document

Lot 100 and Lot 256 Clarke Road, Margaret River



## 5. Consideration of Matters of National Environmental Significance

Under the federal EPBC Act, proposals that have the potential to significantly impact MNES should be referred to the Minister for the Environment (via the Department of Climate Change, Energy the Environment and Water (DCCEEW)) to determine if the activities require further formal assessment as a controlled action. The Proposal has not been previously referred nor deemed a controlled action under the EPBC Act and no controlled action provisions are currently applicable. As outlined in **Section 1.3.2**, the Proponent will be referring the Proposal pursuant to the EPBC Act.

A summary of the MNES categories are outlined in **Table 19**. Based on the results of the investigations specific to the Development Envelope (as discussed in **Section 3**) the Proposal has the potential to impact on a number of listed threatened species.

*Table 19: Summary of Matters of National Environmental Significance relevant to the Proposal.*

Matters of National Environmental Significance	Relevance to the Proposal
World Heritage areas	Not relevant. There are no World Heritage areas within or in the vicinity of the Proposal.
National Heritage Places	Not relevant. There are no National Heritage Places within or in the vicinity of the Proposal.
Wetlands of international importance (listed under the Ramsar convention)	Not relevant. There are no Wetlands of International Importance within or in the vicinity of the Proposal.
Listed threatened species and ecological communities	Field investigations within the Development Envelope identified the proposal will require clearing of up to 1.65 ha of native vegetation that contains habitat values for the following listed threatened fauna species : <ul style="list-style-type: none"> <li>• Carnaby's black cockatoo (endangered), and up to 1.65 ha Carnaby's black cockatoo foraging habitat.</li> <li>• Baudin's black cockatoo (endangered), and up to 1.37 ha of foraging habitat.</li> <li>• Forest red-tailed black cockatoo (vulnerable) and up to 1.37 ha of foraging habitat.</li> <li>• 28 black cockatoo habitat trees which meet the criteria for potential nesting trees, however none contain hollows (suitable or otherwise).</li> <li>• Western ringtail possum (critically endangered), with up to 1.65 ha of foraging and/or refuge habitat.</li> </ul>
Listed migratory species (protected under international agreements)	Not relevant. Although migratory species may occasionally occur in the vicinity of the Proposal, this is mostly going to be species utilising the air space above the Proposal for short periods of time and significant impacts are unlikely.
Commonwealth marine areas	Not relevant. The Proposal is not located in a Commonwealth marine area.
Great Barrier Reef Marine Park	Not relevant. The Proposal is not located in the Great Barrier Reef Marine Park.
Nuclear actions (including uranium mines)	Not relevant. The Proposal does not include activities that would be considered a Nuclear Action.
Water resources (that relate to coal seam gas development and large coal mining development)	Not relevant. The Proposal is not a coal seam gas or coal mining development.

## Section 38 Referral Supporting Document

Lot 100 and Lot 256 Clarke Road, Margaret River



### 6. Holistic impact assessment

Each of the identified key environmental factors has been addressed in detail separately in **Section 3**, and through this the Proposal is predicted to meet the EPA's objectives for each factor. The Proponent has considered the interrelationships between factors when applying the mitigation hierarchy (avoid, minimise, rehabilitate) and as part of developing the mitigation and management measures for this Proposal. Where possible, the management and mitigation measures described throughout have considered these in a holistic approach, both in terms of benefiting all factors but also in how it will be integrated with clearing and construction activities.

The Proponent recognises the connections and interactions between the preliminary key environmental factors and has considered these interrelationships when applying the mitigation hierarchy (avoid, minimise, rehabilitate) and developing mitigation and management measures for this Proposal. Where possible, the management and mitigation measures described throughout this document have considered a holistic perspective; they are also considered sufficient to meet the principles contained in the EP Act and the EPA's objectives for individual factors.

As identified in **Section 3**, implementing the Proposal will result in the direct loss of 1.65 ha of native vegetation through clearing, and includes:

- 1.65 ha of habitat suitable for western ringtail possum.
- 1.65 ha of foraging habitat suitable for Carnaby's black cockatoo and 28 potential breeding trees (none with suitable hollows).
- 1.37 ha of foraging habitat suitable for Baudin's and forest red-tailed black cockatoos and 28 potential breeding trees (none with suitable hollows).

This vegetation has been disturbed historically (since at least 1954, based on available historic aerial photography), with large portions of the Proposal area subject to clearing with vegetation in the site representing regrowth. None of the vegetation has been identified to contain threatened or priority flora, or threatened or priority ecological communities.

Given the connection and interactions between the Flora and Vegetation and Terrestrial Fauna factors, the Proponent has further considered the potential combined impacts and interactions of these factors to understand if there are any gaps in approach from a holistic perspective. This is in accordance with the *Instructions: Referral of a proposal under section 38 of the Environmental Protection Act 1986* (EPA 2021c) to consider connections and interactions between relevant environmental factors.

The interconnection between flora and fauna can generally be observed in the reliance of terrestrial fauna on flora and vegetation for habitat, movement, refuge and food, and flora and vegetation on terrestrial fauna in the form of pollination, seed dispersal and decomposition processes. In acknowledgment of these connections, additional impacts that may not have been adequately identified have been considered in **Table 20**.

## Section 38 Referral Supporting Document

Lot 100 and Lot 256 Clarke Road, Margaret River



Table 20: Interconnection of key environmental factors and holistic impact assessment.

EPA environmental factor	Potential impacts from interrelation of factors	Proposed mitigation measures	Likely environmental outcome
<ul style="list-style-type: none"> <li>• Flora and Vegetation</li> <li>• Terrestrial Fauna</li> </ul>	<ul style="list-style-type: none"> <li>• Fragmentation to patches of vegetation adjacent and external to the Development Envelope and limiting fauna movements (particularly western ringtail possum) to areas of adjacent habitat e.g. the eastern boundary and the Clarke Road reserve.</li> <li>• Degradation of fauna habitat due to modifications to retained vegetation for bushfire purposes within the Development Envelope.</li> </ul>	<ul style="list-style-type: none"> <li>• Protection of vegetation during clearing, through delineation on engineering drawings and marking on the ground.</li> <li>• Re-introduction of native species within landscaped areas and tree planting within the carpark areas.</li> <li>• Use of wooden boundary fences, to support use/movement by western ringtail possum.</li> <li>• The bushfire management plan (Bushfire Prone Planning 2023) has assumed the retained vegetation in the north-east and south-east are a bushfire hazard and not subject to management.</li> </ul>	<ul style="list-style-type: none"> <li>• Vegetation within the area is already fragmented by existing commercial areas, cleared land associated with the TAFE and public roads. Mitigation measures will support the connection of vegetation surrounding the Proposal, minimising additional fragmentation of this vegetation. These mitigation measures had already been identified within <b>Section 3</b>. The EPA objectives can be achieved.</li> <li>• The key conservation significant fauna species (western ringtail possum and the three black cockatoo species) largely utilise the canopy of, therefore and landscape modification is unlikely to change the habitat values of retained vegetation for these species. Planting within the Proposal will utilise native species and contribute to returning some values that will be removed to implement the development. These mitigation measures had already been identified within <b>Section 3</b>. The EPA objectives can be achieved.</li> </ul>

From the information presented in **Table 20**, there may be inherent connections and interactions between environmental factors, however each factor can be managed individually, and therefore do not pose a significant risk through their interconnectivity.

As discussed in **Section 3.1**, the Proposal addresses principles of the EP Act, including:

- **Precautionary approach:** The Proposal has been appropriately planned and subject to comprehensive biological surveys and assessments that have identified the relevant environmental values and demonstrate that the Proposal will not cause significant impacts to the environment.
- **Conservation of biological diversity and ecological integrity:** The Proposal has been planned and will be designed and constructed in a manner that minimises impacts to biological diversity and ecological integrity.
- **Intergenerational equity:** The Proposal will maintain land and soil quality, support the ongoing hydrological function of the area and consolidate development within areas that have long been planned to support the proposed use, rather than new areas not identified. This will contribute to maintaining environmental quality for the benefit of future generations.

## Section 38 Referral Supporting Document

Lot 100 and Lot 256 Clarke Road, Margaret River



### 7. Cumulative environmental impact assessment

In accordance with EPA's instructions within a *Referral of a proposal under section 38 of the Environmental Protection Act 1986 Instructions* (EPA 2021c), the Proponent has assessed the significance of the impacts of the Proposal relative to the identified key environmental factors, through a cumulative impact lens considering the successive, incremental and interactive impacts on the environment of the Proposal with past, present and reasonably foreseeable future activities within the impact area. For the Proposal, the key impact for both Flora and Vegetation and Terrestrial Fauna is the clearing of 1.65 ha of native vegetation, particularly with regard to habitat loss for western ringtail possum, Carnaby's black cockatoo, Baudin's black cockatoo and forest red-tailed black cockatoo. This has been considered at a more local scale of 1 km, and a greater area of 12 km (based on the key conservation significant fauna species and ranges for these species).

Relevant to this cumulative impact assessment, and as discussed in **Section 2.2**, the main reason for selecting the location for the Proposal was its supporting commercial land use zoning (which has been in place for over 30 years) and proximity to an existing commercial precinct, which provides for connection to existing utility services, reduces the need for more extensive external works, and consolidates the Proposal within an area where community would already travel and expect such uses significantly lowering the need for additional works that could impact on the environment.

#### 7.1 Potential cumulative impacts of current and proposed development

Within the land use planning framework, the ability to undertake specific activities is governed by the *Planning and Development Act 2005* (and associated regulations), and through this local governments are required to prepare local planning schemes that allocate zones and reserves that dictate permissible types of development. The *Shire of Augusta Margaret River Local Planning Scheme No. 1* (and draft *Shire of Augusta Margaret River Local Planning Scheme No. 2*, given there has been some significant change in land zoned for development) and the Augusta Margaret River Regional Land Supply Assessment (DPLH 2019) has been used as a basis for understanding areas within 1 km and 12 km respectively that could be developed and therefore may result in clearing of existing native vegetation. The land supply assessment outlines land available for development (urban, commercial and industrial, which can have the greatest impact from a vegetation clearing perspective when compared to rural residential and rural) and includes timeframes up to 10 years in the future.

As part of this, Emerge have reviewed the *Shire of Augusta Margaret River Local Planning Strategy* (Shire of Augusta Margaret River 2022) and publicly available structure plans or other development approvals, to understand if the assumptions of the regional land supply assessment (DPLH 2019) were reasonable. The review indicated that the land supply assessment in combination with the existing zoning and reservations for the area was a reasonable prediction on potential future development. This approach aligns with a valid method that could be used to predict future project activities, consistent with the 'reasonably foreseeable future activities' as defined in the *Environment Impact Assessment (Part IV Divisions 1 and 2) Procedures Manual* (EPA 2021b).

To understand the area of native vegetation that could be impacted, the pre-European vegetation extent (of vegetation remaining) prepared by Department of Primary Industries and Regional

## Section 38 Referral Supporting Document

Lot 100 and Lot 256 Clarke Road, Margaret River



Development (DPIRD) (DPIRD 2021) has been used as a base input to identify native vegetation (rather than current canopy), and has then been overlaid with the zones and reservation from the *Shire of Augusta Margaret River Local Planning Scheme No. 1* and the Augusta Margaret River land Supply Assessment (prepared by the Department of Planning, Lands and Heritage (DPLH 2019)). Where pre-European vegetation was mapped within land identified as part of future land supply, it was assumed all this vegetation could be removed and this assessment has not included the Proposal (which under the land supply is already assumed to be developed). Vegetation within land reserved for a conservation purposes, such as parks and recreation, national park or state forest have been assumed to remain.

Importantly, this represents a conservative approach to the assessment of vegetation clearing, given it is typical in the land development process to retain existing vegetation within public open space. This is especially relevant within the Shire of Augusta Margaret River, who through their *Local Planning Strategy* (Shire of Augusta-Margaret River 2022) have identified vegetation retention as a key driver. The majority of the structure plans reviewed identify large areas of existing remnant vegetation for retention, however as the spatial footprint is not publicly available, this could not be included in the assessment and vegetation is assumed to be removed. Therefore, the methodology used to predict future clearing of native vegetation would overestimate the extent of future clearing required to implement the various identified future development areas.

**Table 21** summarises the extent of existing pre-European vegetation within 1 km and 12 km of the Proposal area respectively (see **Plate 20** and **Plate 21**), and the area of vegetation that could be removed cumulatively not including the Proposal. In total 0.34% of the remaining native vegetation within 1 km of the Proposal area could be cleared based on the zoning/land supply; while 1.54% of the remaining native vegetation in 12 km could be cleared. By including clearing in the Development Envelope (summarised in **Table 22**), the clearing of native vegetation within 1 km would increase to 1.62% (an increase by 1.28%) cumulatively; while within 12 km it would increase to 1.55% (an increase of 0.01%).

*Table 21: Native vegetation within areas zoned for intensive development with potential to be cleared (excluding the Proposal).*

Description	Area (ha) of existing pre-European vegetation	Vegetation with potential to be cleared based on zoning/land supply	
		ha	% of remaining
Native vegetation within 1 km (see <b>Plate 20</b> )	128.2	0.43	0.34%
Native vegetation within 12 km (see <b>Plate 21</b> )	17,685.1	271.83	1.54%

## Section 38 Referral Supporting Document

Lot 100 and Lot 256 Clarke Road, Margaret River



Table 22: Summary of cumulative impact of clearing in the context of future development areas and vegetation remaining (including the Proposal area)

Native vegetation within certain distance (km)	Area (ha) of existing pre-European vegetation	Area (ha) of vegetation within the Proposal to be cleared	Area (ha) with potential to be cleared (excluding the Proposal)	Cumulative total of potential clearing (ha)	% of cleared area based on extent of existing vegetation
1 km	128.2	1.65	0.43	2.08	1.62%
12 km	17,685.1	1.65	271.83	273.48	1.55%

## 7.2 Analysis of cumulative impacts

The clearing of 1.65 ha of vegetation within the Development Envelope would increase the cumulative potential clearing of native vegetation within 1 km from 0.34% (0.43 ha) to 1.62% (2.08 ha) of the existing native vegetation; while within 12 km it would increase from 1.54% (271.83 ha) to 1.55 % (273.83 ha). This is not unexpected given the extensive areas within the Shire of Augusta Margaret River that are reserved as parks and recreation, national park and/or state forest, with large areas of native vegetation protected.

Within the broader 12 km area, not all vegetation would be preferred habitat for the key conservation significant species (western ringtail possum and the three black cockatoo species). However, as part of the fauna assessment, a review of remnant native vegetation within 1 km of the Proposal was completed, and identified the majority of remnant native vegetation as suitable (as shown in **Plate 18**), with approximately 126 ha within parks and recreation reserve (see **Plate 20**). As outlined, within 1 km of the Proposal area, the cumulative clearing of native vegetation could be 1.62% (2.08 ha) of the remaining 144.68 ha. This would not significantly alter the extent of vegetation and fauna habitat available for the survival of species.

The outcomes of the cumulative impact assessment indicate that the clearing of the Proposal in combination with the potential clearing based on developable land in the broader area is unlikely to lead to a significant residual impact, meeting the precautionary and intergenerational equity principles under the EP Act.

# Section 38 Referral Supporting Document

## Lot 100 and Lot 256 Clarke Road, Margaret River

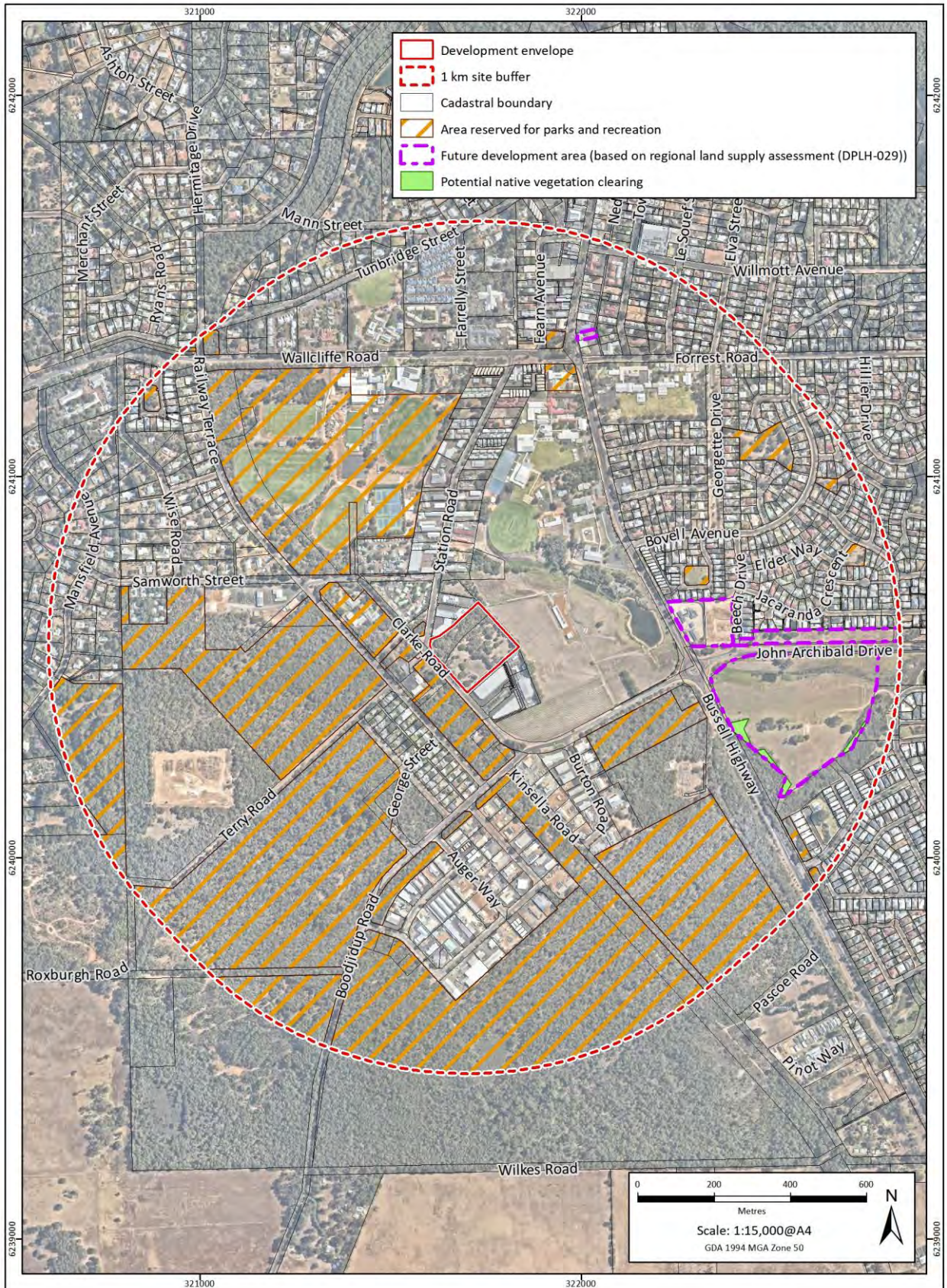


Plate 20: Cumulative native vegetation clearing impacts within 1km of the Proposal, based on the existing zoning or reservation of the land

# Section 38 Referral Supporting Document

## Lot 100 and Lot 256 Clarke Road, Margaret River

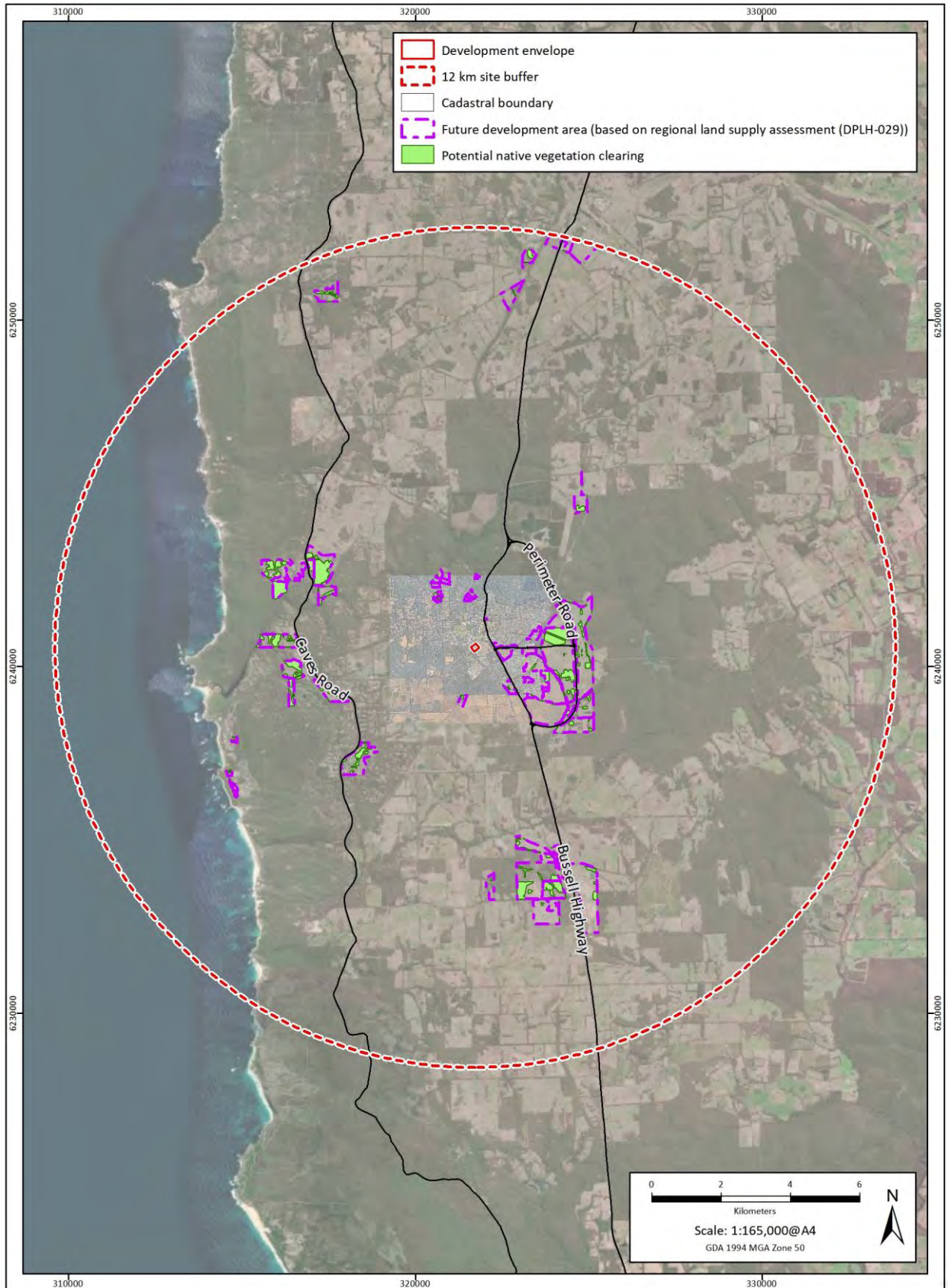


Plate 21: Cumulative native vegetation clearing impacts within 12km of the Proposal, based on the existing zoning and/or reservation of the land

## Section 38 Referral Supporting Document

Lot 100 and Lot 256 Clarke Road, Margaret River



### 8. Consultation

#### 8.1 Key stakeholders

The proponent has identified the following key stakeholders in regard to the Proposal.

- Shire of Augusta Margaret River (SAMR)
- Department of Climate Change, Energy the Environment and Water (DCCEEW) (Commonwealth)
- Department of Biodiversity, Conservation and Attractions (DBCA)
- Department of Fire and Emergency Services (DFES)
- Department of Planning, Lands and Heritage (DPLH)
- Department of Water and Environmental Regulation (DWER)
- Margaret River local residents
- Undalup Association
- Wadandi traditional owners
- West Australian Planning Commission (WAPC)

#### 8.2 Stakeholder consultation

Stakeholder consultation is to be chiefly undertaken through the development application public advertising process, where the application information will be made available to the various stakeholders in accordance with the *Planning and Development Act 2005* (and associated regulations). The advertising process requires the proponent to respond to any concerns raised by government agencies or the local community through public submissions. It is expected this will allow relevant stakeholders including those identified above to engage as the Proposal progresses.

**Table 23** provides a summary of the key stakeholder consultation actions completed to date in relation to the Proposal.

*Table 23: Stakeholder consultation*

Stakeholder	Date	Issues /topics raised	Proponent response / outcome
Senior Planner, Shire of Augusta-Margaret River Senior	21 July 2022	Discuss and seek feedback on the Proposal.	Shire recommendations were to undertake environmental surveys, to understand the environmental values within the Proposal.
Environmental Protection Authority Services Unit within the Department of Water and Environmental Regulation	3 March 2023	Discuss the Proposal and seek advice as to the environmental approval process.	Officer recommendations were to progress both a Section 38 EP Act referral and EPBC Act referral.

## Section 38 Referral Supporting Document

Lot 100 and Lot 256 Clarke Road, Margaret River



### 9. Conclusion

Colchester Pty Ltd (the Proponent) are proposing to develop a single hardware showroom with a nursery and warehouse and a consolidated 10 showrooms in a single building within Lot 100 and Lot 256 Clarke Road in Margaret River (referred to as the 'Proposal' and 'Development Envelope' interchangeably throughout this assessment).

The Proposal is located in an area zoned as 'service commercial' under the *Shire of Augusta Margaret River Local Planning Scheme No. 1*, and is within a broader commercial precinct that support similar types of land uses. The Proposal is the last remaining parcel of land within this precinct that remains undeveloped and was sold by the State Government (DevelopmentWA) on the expectation it is developed for its intended commercial purpose, and if it is not, it could be reacquired by the State Government based on the existing ownership deed. This is to prevent land banking, and ensure economic development of Margaret River town is maximised in identified locations such as the commercial precinct the Proposal is located within. To implement the Proposal the following activities will be undertaken:

- Clearing of vegetation and earth working.
- Construction of the new buildings, hardstand, vehicle cross-overs and carpark areas
- Establishment of landscaping areas, which will include retention of 0.13 ha of existing vegetation, and planting using native species.

The key preliminary environmental factors to be impacted by the Proposal are Flora and Vegetation and Terrestrial Fauna, based on the clearing of up to 1.65 ha of native vegetation.

#### **Flora and vegetation**

The vegetation within the site is part of the Cowaramup (C1) complex, of which 6,540.87 ha remains in the South West forest region. Approximately 10.88% of this vegetation complex is reserved and protected. None of the vegetation within the Proposal area was identified to contain threatened or priority flora, or threatened or priority ecological communities. The vegetation is also not considered to be regionally significant. The vegetation condition across the Proposal varies, and implementation will result in the loss of 1.65 ha of native vegetation comprising:

- 0.46 ha in 'very good' condition.
- 0.32 ha in 'good to degraded' condition.
- 0.58 ha in 'degraded' condition.
- 0.29 ha in 'degraded to completely degraded' condition.

#### **Terrestrial fauna**

Investigation undertaken within the Proposal area indicate that vegetation within the site could support a number of conservation significant fauna species, including the western ringtail possum and the three black cockatoo species (Carnaby's, Baudin's and forest red-tailed). A targeted western ringtail possum survey observed a number of possums within the site; while a targeted black cockatoo habitat assessment found foraging habitat and 28 habitat trees, but none with suitable

## Section 38 Referral Supporting Document

Lot 100 and Lot 256 Clarke Road, Margaret River



hollows. 0.13 ha of the existing vegetation within the Proposal is to be retained within the proposed landscape areas.

The Proposal will result in a loss of up to 1.65 ha of native fauna habitat including:

- 1.65 ha of marri forest (1.37 ha) and peppermint forest (0.28 ha) habitat suitable for western ringtail possum.
- 1.65 ha of marri forest (1.37 ha) and peppermint forest (0.28) habitat providing Carnaby's cockatoo foraging habitat.
- 1.37 ha of marri forest habitat providing Baudin's and forest red-tailed black cockatoo foraging habitat.
- 26 black cockatoo habitat trees, none that contain suitable hollows and therefore would not support breeding.

The vegetation to be removed within the Proposal represents 1.14 % of similar habitat within 1 km for western ringtail possum. For the black cockatoos species, within 12 km of the Proposal, 15,076 ha of foraging habitat is found, with the Proposal comprising 0.011 % of this.

The mitigation hierarchy of 'avoid, minimise, rehabilitate and offset' has been considered in the assessment of this Proposal. The potential impacts to flora and vegetation and terrestrial fauna have been considered in detail as part of this assessment, and while 1.65 ha of vegetation will be removed, in the context of the likely cumulative impacts of the Proposal, 126 ha of similar/equivalent (or better) vegetation is reserved and protected within 1 km (with the vegetation removal associated with the Proposal 1.14 % of the remaining vegetation). The Proposal, based on the management measures that will be implemented (such as protecting vegetation within the Proposal, fauna trapping and relocation, use of a fauna spotter during clearing, weed and plant pathogen hygiene protocols, wooden fences to support connections to existing vegetation, stormwater management in accordance with the *Better Urban Water Management framework*, management of sedimentation and erosion) and consideration of the clearing within 1 km and 12 km, will not have significant residual impacts and as such, is considered environmentally acceptable if implemented in accordance with the management measures proposed in this document.

The Proposal will be subject to a development approval pursuant to the *Planning and Development Act 2005*, and as conditions of approval, the range of management measures committed to by the Proponent as part of this referral can be conditioned.

## Section 38 Referral Supporting Document

Lot 100 and Lot 256 Clarke Road, Margaret River



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# Appendix B

Revised site plan







**SITE CRITERIA**

<b>1. Site Area (LOT 100 + LOT 256)</b>	<b>28,366m<sup>2</sup></b>
<b>2. Landscaping</b>	<b>1,418m<sup>2</sup></b>
a. Required 5% of Site Area	1,461m <sup>2</sup>
b. Provided	1,375m <sup>2</sup>
New Soft Landscaping	1,375m <sup>2</sup>
Retained Bushland	4.0
<b>Total</b>	<b>2,836m<sup>2</sup> (9.9%)</b>
Hard	928m <sup>2</sup>
<b>Total</b>	<b>3,764m<sup>2</sup></b>
<b>3. Floor Area (GFA)</b>	
a. Hardware	5,056m <sup>2</sup>
b. Showroom (80%)	5,480m <sup>2</sup>
c. Warehouse (20%)	1,374m <sup>2</sup>
<b>Total</b>	<b>11,910m<sup>2</sup> (42.0%)</b>
<b>4. Carparking</b>	<b>Carbays</b>
a. Cars Required	
<b>By Local Authority Carparking Requirements</b>	
i. Hardware	101.3
ii. Showroom	109.6
200m <sup>2</sup> @ 1 Per 50m <sup>2</sup> To 200m <sup>2</sup>	4.0
Warehouse	11.8
1,174m <sup>2</sup> @ 1 Per 100m <sup>2</sup> Above 200m <sup>2</sup>	11.8
<b>Total</b>	<b>226.7</b>
<b>By Hardware Tenant Requirements</b>	
i. GFA 11,900m <sup>2</sup> @ 1/40m <sup>2</sup>	297.5
b. Provided	
i. Carpark + Trailer Bays	220
ii. Staff Parking	32
<b>Total</b>	<b>268</b>

**Landscaping**  
A. Hard Landscaping  
Defined as paved walkways either open or covered.  
B. Soft Landscaping  
Defined as vegetative landscaping.

**Gross Floor Area : GFA**  
A. All Floor Areas on this plan are shown as GROSS FLOOR AREA.  
Unless otherwise noted as Nett Floor Area.  
B. Definition of Gross Floor Area is defined as:  
i/ GROSS FLOOR AREA OF TENANCY:  
Gross Floor Area of an individual Tenancy is defined as the area contained between the centre line of common tenancy walls and the outside edge of external walls.  
ii/ GROSS FLOOR AREA OF A BUILDING:  
Gross Floor Area of a Building is defined as the total area contained between the outside edge of external walls.

**Nett Floor Area : NFA**  
A. Nett Floor Area of a Tenancy on this plan is defined as the area between external or tenancy dividing walls.  
B. This area is inclusive of toilets if the toilets are exclusive to the Tenancy.

**Note:**

- This Site Plan will require reassessment BAL.
- This revised Site Plan will require Bunnings approval

**SITE PLAN**  
SCALE: 1 : 500



# Appendix C

Construction Environmental Management Plan



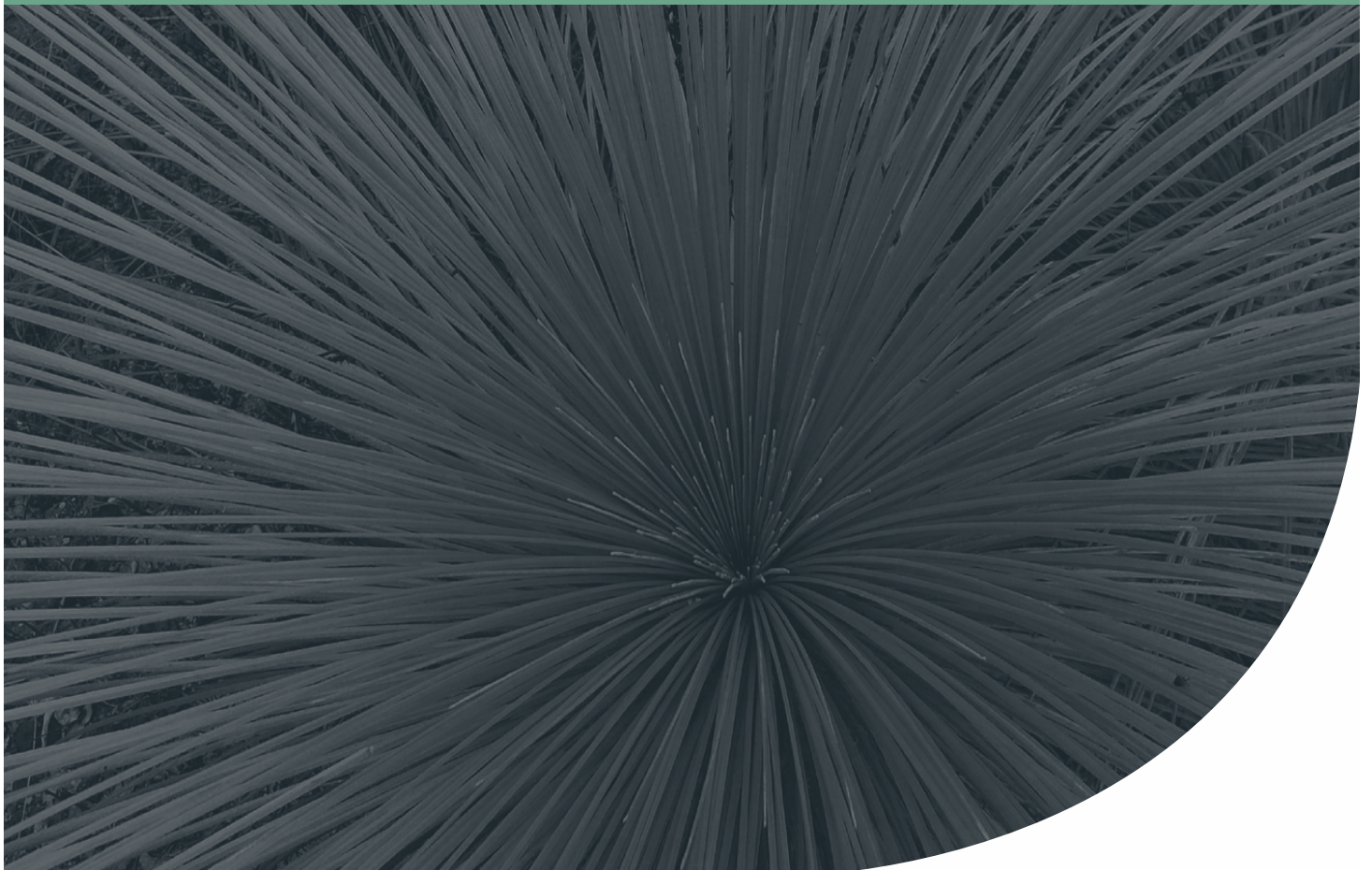


# Construction Environmental Management Plan

Lots 100 and 256 Clarke Road, Margaret River

Project No: EP22-096(08)

**Prepared for Colchester Pty Ltd  
December 2024**



# Construction Environmental Management Plan

Lots 100 and 256 Clarke Road, Margaret River



## Document Control

<b>Doc name:</b> Construction Environmental Management Plan Lots 100 and 256 Clarke Road, Margaret River					
<b>Doc no.:</b> EP22-096(08)--013a DTA					
Version	Date	Author		Reviewer	
1	May 2024	Donald Asaye	DTA	Kirsten Knox	KK
	Report prepared for client review				
a	December 2024	Donald Asaye	DTA	Pascal Scholz	PPS
	Report prepared for EPA response				

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# Construction Environmental Management Plan

Lots 100 and 256 Clarke Road, Margaret River



## Executive Summary

Emerge Associates have prepared this Construction Environmental Management Plan (CEMP) to support the development, subsequent construction and life of a large format hardware and retail development on Lots 100 and 256 Clarke Road, Margaret River (herein referred to as 'the site'). The site is approximately 2.86 ha in size and is located within the Shire of Augusta Margaret River. The site is bound by Clarke Road to the west, commercial landholdings to the north and south and the South Regional TAFE Margaret River Campus to the east.

The site comprises 1.84 ha native vegetation which is predominantly in the northern portion, with smaller patches of scattered native trees in amongst cleared areas. The vegetation in the site has value as fauna habitat, including:

- 1.46 ha of Marri forest; and
- 0.38 ha of Peppermint forest habitat.

Fauna that may utilise the site include birds (such as black cockatoos) and arboreal fauna species (such as western ring-tail possum (WRP)).

Based on the proposed development, 0.12 ha of the marri forest will be retained, and 0.15 ha of the peppermint forest will be retained within the 0.43 ha of landscape areas (noting the canopy has been included where the trunk of a tree is within the retained areas). The remaining vegetation will be cleared as part of the development of the site.

This CEMP has been prepared to outline the management measures that will be implemented to avoid and/or minimise impacts to vegetation and fauna as part of the clearing, construction and ongoing operation within the site.

A summary of the management actions to be implemented as part of this plan have been outlined below and include:

- Identification of trees identified for retention, with a suitable tree protection zone to be accommodated as part of works, with temporary fencing to be installed around the retained trees during construction.
- Cleaning of machinery, equipment, vehicles and tools prior to entering and when leaving the site to prevent disease spread (phytophthora dieback and weeds).
- Maintenance of a clean and tidy work area to ensure feral and other species are not attracted to the site.
- A pre-clearing fauna inspection will be completed to identify potential for fauna interactions during clearing and recent evidence of fauna activity.
- A fauna spotter will be present during clearing to direct and manage works to avoid impacts to fauna wherever possible and ensure fauna is able to disperse to nearby habitat.
- Clearing to be undertaken in one direction toward suitable habitat for fauna such as WRP to disperse. This can include traffic control measures to avoid impacts on fauna dispersing across roads to nearby habitat.
- Any fauna handling procedures will require a licence from the Department of Biodiversity Conservation and Attractions (DBCA) pursuant to the *Biodiversity Conservation Act 2016*.

# Construction Environmental Management Plan

Lots 100 and 256 Clarke Road, Margaret River



- Installation of wooden boundary fences to the north, south and east, to support movement of arboreal fauna (particularly western ringtail possums) across the site and assist dispersal to nearby habitat.
- Install fauna awareness signage to educate businesses and visitors of the potential for fauna to occur and for care to be taken. The Shire of Augusta Margaret River have a number of standard signs that could be used.
- Planting within the site using native species, including the trees in the carpark.
- Ongoing protection of retained vegetation within landscape areas. If vegetation is required to be removed (e.g. it is unsafe at any point), local government approval will be required.

The actions within this plan will be the responsibility of Colchester Pty Ltd until handover to future operators and thereafter it will be the responsibility of future operators.

All contractors engaged to undertake works within the site by Colchester Pty Ltd will be required to adhere to this plan.

# Construction Environmental Management Plan

Lots 100 and 256 Clarke Road, Margaret River



## Table of Contents

<b>1</b>	<b>Introduction .....</b>	<b>1</b>
1.1	Project background .....	1
1.2	Proposed development.....	1
1.3	Purpose and scope of work.....	2
<b>2</b>	<b>Environmental Features.....</b>	<b>3</b>
2.1	Landform and soils.....	3
2.2	Hydrology.....	3
2.2.1	Groundwater.....	3
2.2.2	Surface water.....	4
2.2.3	Wetlands.....	4
2.3	Flora and vegetation.....	4
2.4	Fauna.....	5
2.5	Potential impacts.....	6
<b>3</b>	<b>Management Framework .....</b>	<b>7</b>
3.1	Personnel.....	7
3.2	Timing.....	7
3.3	Prior to clearing.....	7
3.3.1	License application.....	7
3.3.2	Pre-clearing survey.....	7
3.3.3	Fauna dispersal.....	8
3.3.3.1	Western ringtail possum.....	8
3.3.3.2	Other fauna species.....	8
3.3.4	Tree retention.....	9
3.4	During clearing.....	9
3.4.1	Disease and weed management.....	9
3.4.2	Vegetation and tree retention.....	10
3.4.3	Fauna spotting.....	10
3.5	After clearing.....	10
3.6	During construction.....	11
3.6.1	Disease management.....	11
3.6.2	Weed management.....	11
3.6.3	Feral and pest animals.....	12
3.6.4	Fauna management.....	12
3.6.5	Tree retention.....	12
3.7	Post clearing and construction.....	12
<b>4</b>	<b>Implementation.....</b>	<b>13</b>
<b>5</b>	<b>References .....</b>	<b>17</b>

# Construction Environmental Management Plan

Lots 100 and 256 Clarke Road, Margaret River



## List of Tables

Table 1: Management actions and responsibilities to support clearing and construction ..... 14

## Figures

- Figure 1: Site Location
- Figure 2: Disturbance Area
- Figure 3: Fauna Habitat Values

## Appendices

### Appendix A

Development Layout

# Construction Environmental Management Plan

Lots 100 and 256 Clarke Road, Margaret River



## Abbreviation Tables

*Table A1: Abbreviations – Organisations*

Organisations	
DBCA	Department of Biodiversity, Conservation and Attractions
DCCEEW	Department of Climate Change, Energy, the Environment and Water

*Table A2: Abbreviations – General terms*

General terms	
P1	Priority 1
P2	Priority 2
P3	Priority 3
P4	Priority 4
P5	Priority 5
CEMP	Construction Environmental Management Plan
WRTP	Western ring-tail possum
CBC	Carnaby's black cockatoo
BBC	Baudin's black cockatoo
FRBC	Forest red-tailed black cockatoo

*Table A3: Abbreviations – Legislation*

Legislation	
BC Act	Biodiversity Conservation Act 2016
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999
MNES	Matters of National Environmental Significance

*Table A4: Abbreviations – units of measurement*

Units of measurement	
cm	Centimetre
ha	Hectare

# Construction Environmental Management Plan

Lots 100 and 256 Clarke Road, Margaret River



## 1 Introduction

### 1.1 Project background

Emerge Associates have prepared this document on behalf of Colchester Pty Ltd (the proponent) to support the development and subsequent construction of a large format hardware and retail development on Lots 100 and 256 Clarke Road, Margaret River (herein referred to as 'the site'). The site is approximately 2.96 ha in size and is located within the Shire of Augusta Margaret River (shown in **Figure 1**). The site is bound by Clarke Road to the west, commercial landholdings to the north and south and the South Regional TAFE Margaret River Campus to the east.

The site is zoned 'service commercial' under the Shire of Margaret River Local Planning Scheme No. 1 and is located within an existing commercial precinct of the Margaret River town.

### 1.2 Proposed development

The proposed development within the site is shown in **Appendix A** and comprises:

- hardstand areas of carpark, laydown areas, cross-overs and internal access roads and footpaths,
- hardware warehouse and plant nursery, and
- large showroom building with 10 separate store fronts and landscaped areas.

The proposed development has a disturbance footprint of 2.96 ha which comprises a 1.84 ha native vegetation (1.57 ha of which will be cleared to facilitate construction of buildings, associated infrastructure and landscaping (see **Figure 2**)), and 1.12 ha that has been historically cleared and comprises predominantly closed grass/forbs and of pasture weeds with occasional native and non-native trees, shrubs or forbs.

An area comprising 0.27 ha of existing native vegetation is to be retained within the Project area as part of future landscaping areas. This includes canopy of trees that extends into the disturbance area, with the trunks located in the landscape areas/retained vegetation. Some modification, including understory fuel management within the retained vegetation, may be required as part of bushfire management considerations, however the overstorey will remain. An additional 0.19 ha of existing cleared areas within the future landscaping areas will be installed with local native plants. The landscaping areas are shown in **Figure 3**.

Activities within the site to support the proposed development include:

- Clearing of vegetation
- Bulk earthworks including cutting and filling of the land (where required).
- Civil construction, including construction of hardstand areas (carpark, internal access roads, laydown areas) and installation of service infrastructure (including sewer, water, gas, electricity, communications).
- Construction of buildings.
- Installation of landscaping vegetation.
- Ongoing operation and maintenance of the hardstand and landscape areas.

# Construction Environmental Management Plan

Lots 100 and 256 Clarke Road, Margaret River



Noise and dust impacts as a result of construction will be of a short duration and will be managed through the implementation of standard construction management measures and compliance with state legislation (e.g. Environmental Protection (Noise) Regulations 1997). Noise and dust will be no different to existing activities in the commercial/industrial area where the site is located.

## 1.3 Purpose and scope of work

Emerge Associates (Emerge) have prepared this Construction Environmental Management Plan (CEMP) to support the proposed construction activities and subsequent life of the commercial development.

The purpose of this CEMP is to provide guidance for the management that will avoid and minimise impacts to environmental values, particular fauna species (including those identified as Matters of National Environmental Significance (MNES) under the Environment Protection and Biodiversity Conservation Act 1999 (*EPBC Act*)) during clearing and construction works on the site. The CEMP also aims to ensure that all works will be undertaken in line with the *Animal Welfare Act 2002*.

The management actions and methods outlined will be applied within the site for the construction and life of the commercial development. This plan is to be implemented by the proponent or its agents.

# Construction Environmental Management Plan

Lots 100 and 256 Clarke Road, Margaret River



## 2 Environmental Features

### 2.1 Landform and soils

The site is located within the Leeuwin Block, which is characterised by lateralised granitic and gneissic basement rock (DPIRD 2020).

Based on regional soil-landscape mapping the majority of the site is located within the soil-landscape system 'Cowaramup, undifferentiated upland phase', which is described as 'Flats and gentles slopes (0-5% gradient) with gravelly duplex (Forest Grove) and pale grey mottled (Mungite) soils' (DPIRD 2022). A small portion of the site is identified as 'Cowaramup wet vales phase' and is described as 'Small, broad U-shaped drainage depressions with swampy floors. Gravelly duplex (Forest Grove) soils on side slopes and poorly drained alluvial soils on valley floor'.

The site is not known to contain any unique geological features or landforms, and these land systems are well represented in the broader area.

As outlined, impacts site during construction will be limited minor earthworks, including ground disturbance (clearing of vegetation and removal/screening of topsoil), minor filling (if required) and compaction to support carparks and building footings. This type of activity, and potential impacts such as degradation, can be managed through the building and engineering approvals that will be required as a condition of development approval, for which the Shire of Augusta Margaret River will be the responsible authority. The Shire of Augusta Margaret River have a specific policy and for managing sedimentation and erosion (SAMR (2019) and includes requiring proponents to consider the landform and slope, and potential for erosion (SAMR 2018). This will be addressed separately as a condition of the development approval.

### 2.2 Hydrology

#### 2.2.1 Groundwater

A review of the Water Register (DWER 2021) indicates the site is found within the 'Busselton-Capel' groundwater area and the 'Cape to Cape North' subarea. This groundwater subarea is composed of two aquifers, the surficial and fractured rock, both of which rely on rainfall for recharge. The site is situated above the Cape to Cape north combined Leeuwin superficial aquifer which is subject to faults/fractures (e.g. fractured rock aquifer). This aquifer is known to be highly seasonal, and have highly variable abstraction potential (DoW 2008). No groundwater mapping is available for the Project area.

No abstraction of groundwater is required or proposed to support development, with the development to be connected to the reticulated water scheme network.

## Construction Environmental Management Plan

Lots 100 and 256 Clarke Road, Margaret River



### 2.2.2 Surface water

There are no surface water features, such as wetlands (RAMSAR, Important Wetlands in Australia, geomorphic), rivers, creeks or man-made drains (or similar) mapped within or directly adjacent to the site and none were recorded during the detailed flora and vegetation survey (Emerge Associates 2023b). The nearest surface water feature is a floodplain feature identified approximately 260 m east of the site within the South Regional TAFE Margaret River Campus and appears to be a dam used as part of the TAFE's agricultural studies.

Soil landscape land quality – Water Erosion Risk mapping identifies most of the site as '<3% of the map unit has a high to extreme water erosion risk' which is the lowest water erosion risk category.

No public drinking water source areas occur within 4km of the site.

No surface water features will be impacted by the development within the site. Stormwater is required to be managed in accordance with the state government planning policies and the Better Urban Water Management framework (WAPC 2008). This will require a water/drainage management plan as a part of the development approval process, with water managed onsite or disposed via the existing stormwater network. This will be addressed separately as a condition of the development approval.

### 2.2.3 Wetlands

A review of relevant publicly available databases including the *Geomorphic Wetlands South West* dataset (DBCA 2018) indicates that there are no Ramsar, nationally significant or other mapped wetlands within or adjacent to the site.

This was confirmed during the September 2022 *Detailed Flora and Vegetation Assessment* (Emerge Associates 2023b) which did not record any wetlands or wetland vegetation within or adjacent to the site.

## 2.3 Flora and vegetation

A detailed flora and vegetation survey (Emerge Associates 2023c) was undertaken for the site and identified the following:

- Vegetation has been disturbed historically, based on a review of available historic aerial photography and observations during the fieldwork.
- No threatened or priority flora or threatened or priority ecological communities were identified within the site.
- No vegetation was identified to be locally endemic or associated with restricted habitats.
- Three native plant communities and one non-native community were identified within the site and comprise of:
  - 0.38 ha of **Af** - Low open forest *Agonis flexuosa* over occasional native shrubs and/or forbs over closed non-native grass/forbland of pasture weeds.
  - 0.59 ha of **Cc** - Closed forest *Corymbia calophylla* over occasional native shrubs and/or forbs over closed non-native grass/forbland of pasture weeds.

# Construction Environmental Management Plan

Lots 100 and 256 Clarke Road, Margaret River



- 0.87 ha of **CcHh** - Closed forest *Corymbia calophylla* and occasional *Eucalyptus diversicolor* and *Agonis flexuosa* over open shrubland *Hibbertia hypericoides*, *Xanthorrhoea preissii*, *Hakea lissocarpha* and *Acacia pulchella* over open forbland *Burchardia congesta*, *B. multiflorus*, *Patersonia occidentalis* and *P. umbrosa* over open to sparse grass/forbland of pasture weeds.
- 1.12 ha of **Non-native** - Heavily disturbed areas comprising predominantly closed grass/forbland of pasture weeds with occasional native and non-native trees, shrubs or forbs. Bare ground and tracks were also included in this community.
- Vegetation condition ranged from very good to completely degraded. This included:
  - 0.50 ha in very good condition.
  - 0.37 ha in good – degraded condition.
  - 0.58 ha in degraded condition.
  - 0.39 ha in degraded to completely degraded.
  - 1.12 ha in completely degraded condition.

Within the site, 1.57 ha of vegetation will be cleared, while 0.27 ha will be retained. Vegetation being retained is considered to be in generally 'very good', 'good', or 'degraded' condition. The retained vegetation will need to be protected during clearing and construction, and managed as part of the ongoing operations within the site. Native tree species and plants will be incorporated and re-introduced within these areas (proposed 19 trees to be planted in carpark areas).

## 2.4 Fauna

A basic fauna and targeted black cockatoo and WRP assessment was completed across the site (Emerge Associates 2023a). The survey was completed in reference to the EPA's technical guidance (EPA 2020), *the Referral guidelines for 3 WA threatened black cockatoo species: Carnaby's Cockatoo, Baudin's Cockatoo and the Forest Red-tailed Black cockatoo* (DAWE 2022) and *Survey guidelines for Australia's threatened mammals* (DSEWPaC 2011).

The survey identified the following habitat types (see **Figure 3**):

- 1.46 ha (51% of the site) of 'Marri forest';
- 0.38 ha (11% of the site) of 'Peppermint forest'; and
- 1.12 ha (38% of the site) of 'Cleared' areas which have little habitat value.

In addition, the habitat types with native vegetation (Marri forest and Peppermint forest) provide habitat for a range of birds and arboreal fauna species, including conservation significant species such as:

- *Pseudocheirus occidentalis* (WRP), with 3 dreys identified in the south-east corner of the site (see **Figure 3**) as well as up to five individuals during the nocturnal survey.
- Three species of black cockatoo, namely *Zanda baudinii* (BBC), *Zanda latirostris* (CBC and *Calyptorhynchus banksia naso* (FRBC).

Specifically:

# Construction Environmental Management Plan

Lots 100 and 256 Clarke Road, Margaret River



- Twenty eight (28) potential breeding habitat trees for black cockatoos were recorded within the site. None of these trees through detailed assessment (review with pole camera and drone) were identified to contain suitable or potentially suitable hollows.
- No roosts or evidence of roosting by black cockatoos was recorded; however tall native and non-native trees within the site could be used as roosting.
- 1.57 ha of foraging habitat for CBC was mapped within the site, 1.34 ha (85%) comprises high quality foraging habitat.
- 1.34 ha of foraging habitat for BBC and FRBC was mapped in the site of and would be considered high quality native foraging habitat.
- Both the Marri forest and Peppermint forest vegetation (1.84 ha) would be suitable habitat for WRP.

Emerge Associates conducted additional targeted WRP surveys to support the proposal's *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) assessment process through Preliminary Documentation. The targeted WRP assessment was completed in accordance with the *Survey guidelines for Australia's threatened mammals* (DSEWPaC 2011) and was conducted from the 26<sup>th</sup> to the 28<sup>th</sup> of November 2024 during both day and night for a survey area 1 km in size (which encompasses the development area).

The assessment identified two habitat types persistent within the proposal and wider area, namely 'forest' and 'urban'. The majority of the WRP identified were recorded within the forest habitat during both survey nights (21 and 17 individuals), possums recorded within the urban habitat occurred in more vegetated areas containing peppermint trees (including parks and rows of street trees). Three dreys were opportunistically recorded within the forest habitat adjacent to the urban area, which was dominated by peppermint trees, with WRP scats also found in this area. Two individual WRP were identified within the development area on the first night of survey. No WRP were identified on the second night survey within the development area, which indicates WRP utilise the development area opportunistically and would not be present at all times and therefore already moving between the development area and surrounding habitat. The species appears to be more frequently using the more intact 'forest' areas in the locality which provide better habitat values.

## 2.5 Potential impacts

Development will result in selective ground disturbance and clearing, with 0.47 ha of the site proposed to be landscaped and/or composed of retained vegetation. An area of 0.27 ha of vegetation is proposed to be retained and a further 0.19 ha of already cleared area is to be installed with native plants and trees.

Ground disturbance and clearing of vegetation within the site has the potential to directly impact upon vegetation, birds, arboreal fauna species and ground dwelling fauna species and their habitat.

The management framework outlined in **Section 3** and the actions detailed in **Section 4** will minimise impacts to vegetation and fauna values, including identified MNES.

# Construction Environmental Management Plan

Lots 100 and 256 Clarke Road, Margaret River



## 3 Management Framework

The impacts from the implementation of the proposed development will be to vegetation and fauna values. Vegetation will be permanently removed, but fauna will be able continue to utilise the site post-construction, based on the retained vegetation that will be present as well as the proposed additional landscaping.

This section focuses on the management framework that will be implemented to avoid and minimise impacts to WRP and black cockatoos.

### 3.1 Personnel

The fauna management actions outlined in this plan will be undertaken by a suitably qualified zoologist, fauna specialist or environmental scientist with knowledge of the site.

The vegetation management actions outlined in this plan will be undertaken by the proponent with support from an environmental scientist with knowledge of the site.

### 3.2 Timing

Timeframes for vegetation and fauna management actions and construction works will be subject to development approval and will need to be confirmed as part of the works program.

In order to minimise the risk of disturbing active bird nests, where possible clearing will generally be undertaken outside of the main bird breeding season (spring). Pre clearing fauna inspections will be undertaken at least five days prior to ground disturbance and clearing of vegetation, whilst a suitably qualified zoologist, fauna specialist or environmental scientist with knowledge of the site will be present during the clearing process.

### 3.3 Prior to clearing

#### 3.3.1 License application

A *Regulation 28 licence (Fauna taking (relocation) licence)* will be gained from the Department of Biodiversity Conservation and Attractions (DBCA) pursuant to the *Biodiversity Conservation Act 2016* (and associated regulations) prior to implementing the specified actions.

#### 3.3.2 Pre-clearing survey

A basic and targeted fauna assessments have already been conducted on the site to characterise fauna, black cockatoo and WRP values. As outlined, the surveys determined two broad fauna habitats (Marri forest and Peppermint forest) were present in the site and used to varying degrees by conservation significant species, in particular WRP and black cockatoos (refer **Section 2.4**).

At least five days prior to clearing an inspection will be undertaken by an experienced fauna specialist to identify recent evidence of conservation significant fauna activity. In particular, the site will be searched for signs of recent use by native ground-dwelling vertebrate fauna such as reptiles,

# Construction Environmental Management Plan

Lots 100 and 256 Clarke Road, Margaret River



as well as arboreal mammal species, in particular WRP. Use by black cockatoos will also be considered, noting none of the habitat is currently suitable for breeding so breeding is not expected.

All suitable habitat trees will be examined for signs of current use. If dreys or hollows are observed to be currently in use for breeding by native vertebrate fauna, clearing should be delayed until the young have left the nest, if possible. Alternatively, a 10 m 'tree protection zone' will be established around these tree(s) until the young have left the hollow. The tree protection zone will be clearly marked and no machinery will enter.

### 3.3.3 Fauna dispersal

#### 3.3.3.1 Western ringtail possum

WRP have been identified as using vegetation within the site proposed for removal, and as a result dispersal may occur (noting the species is already utilising the site and surrounding habitat for dispersal/movement). It is noted that the trees identified to contain dreys are being retained as part of the development. Dispersal is animals moving to nearby habitat outside the clearing area.

Should WRP occur within the site during clearing activities, the species is likely to disperse to nearby habitat on its own, as clearing would be undertaken in one direction (towards nearby habitat), which would further create noise from machinery. Alternatively, the following may be undertaken to assist the dispersal of WRP to disperse to nearby habitat without the need for translocation (i.e. trapping and relocating the species to nearby habitat):

- Completing daytime survey of trees marked for removal and relocating dreys to nearby habitat (should dreys occur within the clearing area) in accordance with a DBCA licence.
- Completing evening head-torching to locate WRPs. Food lures, such as apple/peanut paste, will be used to encourage animals to move out of and stay out of the clearing area. The lures will be placed in trees outside the clearing area in nearby WRP habitat as identified during recent targeted surveys.
- If the above does not result in animals staying outside the clearing area and as a last resort, cage traps will be set in the tree (wired to more or less horizontal branches and baited with apple/peanut paste) to capture animals. Animals would then be released that evening or the next day (possibly the next evening) outside the clearing area within nearby habitat.

On the morning of clearing, trees within the clearing area will be checked for any possums that may have returned. If a possum is present in a tree that is to be cleared, the following will be undertaken:

- Try to remove it in daylight (hand-capture with a pole-net or using the pole technique to encourage it to move into a nearby 'safe' tree); or
- Leave that tree and attempt to trap/remove the animal the next night if the animal doesn't disperse on its own.

#### 3.3.3.2 Other fauna species

Fauna traps for ground dwelling native vertebrate species will be deployed if required. The fauna species and habitat to be targeted for trapping will be determined during the pre-clearing fauna survey. The locations of traps will be determined by an experienced zoologist with knowledge of the

# Construction Environmental Management Plan

Lots 100 and 256 Clarke Road, Margaret River



site according to assessment of suitable habitat. If it is predominantly reptiles that are likely to be disturbed, these can be managed during clearing and will not require a trapping program.

Where trapping is determined to be applicable for other fauna species, the potential to shelter traps from public view is limited and the loss or vandalism of traps is a concern. To mitigate this risk a smaller number of traps will initially be deployed in areas where they are sheltered from public view. Should native fauna be caught, the number of traps may be increased.

The trapping program (where determined relevant) will consist of the following (where identified as required as part of the pre-clearing survey):

- A combination of traps such as cage traps, large Elliott traps, pit traps and funnel traps, dependent on the potential habitat present.
- The number of cage and Elliott traps utilised will be dependent on the location and extent of habitat considered likely to support animals suited to these traps.
- The traps will be left open for minimum of five nights.
- Traps will be baited with “universal bait” (peanut butter, rolled oats and sardines).
- Traps will be checked within three hours of sunrise every morning.
- If conservation significant fauna are consistently caught in the traps, trapping will be extended for longer, until numbers reduce.
- Other fauna encountered opportunistically will be captured if possible.

Any fauna handling required will be undertaken in accordance with DBCA’s *Standard Operating Procedures (DBCA 2023a, d, e, c, f, b)*. Any native vertebrate fauna captured will be handled appropriately and located to nearby habitat, as specified in the granted DBCA *Fauna taking (relocation) licence*.

### 3.3.4 Tree retention

Any trees identified for retention will be clearly marked and protected to avoid unintended removal or damage in line with *AS 4970-2009 Protection of Trees on Development Sites* (Standards Australia 2009) or in accordance with recommendations by a qualified arborist. This will include temporary fencing or similar as necessary.

In addition to this, flagging or fencing of site boundaries will occur to ensure that no removal of native vegetation occurs outside of the site, unless approved.

## 3.4 During clearing

### 3.4.1 Disease and weed management

The soil borne water mold *Phytophthora cinnamomi* or other *Phytophthora* sp. (*phytophthora dieback*) kill susceptible plants by attacking their root system which inhibits uptake of water and nutrients. It is unknown whether *phytophthora dieback* occurs in the site.

Dieback is spread through movement of soil and mud, especially by vehicles and footwear (DPaW 2015), as are weed species.

# Construction Environmental Management Plan

Lots 100 and 256 Clarke Road, Margaret River



To ensure dieback or other pathogens and weeds (not already present in the site) are not introduced to or spread within the site (if present) the following management measures shall be undertaken during implementation of this plan:

- Vehicles, tools, equipment (including boots) and machinery shall be free of all mud, soil and plant material on arrival at the site.
- If vehicles, tools, equipment (including boots) and machinery are temporarily removed from the site during works they must be free of all mud, soil and plant material on return.

## 3.4.2 Vegetation and tree retention

Clearing will be undertaken in accordance with the approved earthworks and clearing plans.

Any vegetation or trees identified for retention will be avoided. Temporary fencing will be regularly inspected and maintained throughout the clearing and construction process.

No machinery or plant will be parked under retained vegetation.

## 3.4.3 Fauna spotting

An experienced zoologist with knowledge of the site will be present as a fauna spotter during clearing of vegetation. This role will involve active searching for vertebrate fauna in areas to be cleared and areas just cleared. This searching will aim to identify the presence of bird or marsupial species in trees and more common ground dwelling fauna species, such as small mammals, lizards and snakes (which may have returned to the site after any trapping). If encountered, these animals will be assisted to disperse to nearby vegetation/suitable habitat.

A post-clearing assessment will be undertaken of any trees with hollows identified. Once felled, hollows will be inspected by the fauna spotter and any vertebrate fauna within the hollow will be removed and translocated appropriately.

Should injured fauna be encountered, the severity of injuries will be assessed by a zoologist. If the zoologist considers that an injured native animal has a reasonable chance of being satisfactorily rehabilitated, it will be transferred to a registered DBCA wildlife carer. Where the zoologist considers that injured fauna are unlikely to be satisfactorily rehabilitated, they will be humanely euthanised.

Any fauna handling required will be undertaken in accordance with DBCA's *Standard Operating Procedures* (DBCA 2023a, d, e, c, b, f). Any native vertebrate fauna captured during clearing will be handled appropriately and translocated to an appropriate location as specified in the *Fauna taking (relocation) licence* for the development.

## 3.5 After clearing

On completion of the pre-clearing fauna spotting program, a report summarising the number of fauna dispersed will be prepared and submitted to DBCA outlining species and number of any fauna individuals where practical.

## Construction Environmental Management Plan

Lots 100 and 256 Clarke Road, Margaret River



### 3.6 During construction

#### 3.6.1 Disease management

To ensure dieback or other pathogens are not introduced to or spread within the site (if present) the following management measures shall be undertaken during implementation of this plan:

- Vehicles, tools, equipment (including boots) and machinery shall be free of all mud, soil and plant material on arrival at the site.
- If vehicles, tools, equipment (including boots) and machinery are temporarily removed from the site during work they must be free of all mud, soil and plant material on return.
- Imported fill, mulch material and tubestock shall be certified free of dieback and disease.

#### 3.6.2 Weed management

Weeds can degrade native vegetation through competition for space and resources. Weed management will involve multiple stages of control actions: active control prior to tubestock planting, hygiene measures during construction and active control following planting.

The cover of weeds within the site is expected to be zero or close to at the commencement of revegetation as landform reshaping and vegetation clearing will strip weedy material and topsoil away for disposal at depth or in an appropriate waste receptacle.

Prior to planting, an appropriately qualified revegetation contractor will be engaged to complete a blanket and/or spot-spray to knock down any and all weeds using a broad-spectrum herbicide formulation such as Roundup® (glyphosate 360 g/L).

Following planting:

- An appropriately qualified revegetation contractor will then be engaged to conduct weed control until planting areas are established.
- The type of weed control required will be determined by the appropriately qualified revegetation contractor during monitoring but is likely to include both manual (hand weeding) and chemical (herbicide) based approaches including broad spectrum or selective formulations.
- The application of these methods will be dependent on-site conditions and are likely to change over the course of this plan, but will be undertaken on calm days to reduce the risk of spray drift.
- As a guide, weed control is likely to be required twice per year. As plants establish, they will occupy more space and reduce the available space for weeds and the need for weed control.

Where possible, physical weed control methods should be used to reduce the overall load of chemicals applied to the environment.

Herbicides will only be applied by a Department of Health licensed pest management technician according to the manufacturer's instructions, as provided on product label and the Australian Pesticides and Veterinary Medicines Authority *Permit No. 13333- Permit to allow minor use of an agvet chemical product for control of environmental weeds in various situations*. Reference will also be made to *Water Note No. 22 Herbicide Use in Wetlands* (WARC 2001).

## Construction Environmental Management Plan

Lots 100 and 256 Clarke Road, Margaret River



### 3.6.3 Feral and pest animals

The works areas are to be maintained in a clean and tidy manner to ensure that feral and other species are not attracted to site.

### 3.6.4 Fauna management

Wooden boundary fencing (which provide better grip) will be installed along the norther, southern and eastern boundary of the site to facilitate movement of western ringtail possum between vegetation corridors.

Any fauna observed during construction will be allowed to move to areas of adjacent vegetation, if appropriate. If fauna is required to be removed or if injured fauna is encountered, an appropriate fauna specialist will be engaged, or DBCA WildCare helpline will be called (08 9474 9055).

Any fauna handling required will be undertaken in accordance with DBCA's *Standard Operating Procedures* (or as updated).

### 3.6.5 Tree retention

Any trees/vegetation identified for retention within the 'landscaped areas/retained vegetation' (see **Figure 3**) will continue to be protected to avoid unintended removal or damage in line with *AS 4970-2009 Protection of Trees on Development Sites* (Standards Australia 2009) or in accordance with recommendations by qualified arborist.

## 3.7 Post clearing and construction

Landscape areas will be established as part of the development process, and any removal of vegetation (e.g. vegetation is unsafe) will need to be approved by the Shire of Augusta Margaret River.

Fauna awareness signs will be installed across the site in public areas to highlight to businesses and visitors the potential for fauna to occur and care to be taken. The Shire of Augusta Margaret River have a number of standard signs that can be used, and will form part of the development approval.

Wooden fencing will be maintained in good working order to facilitate movement of fauna, particularly western ringtail possums, across the site.

# Construction Environmental Management Plan

Lots 100 and 256 Clarke Road, Margaret River



## 4 Implementation

The implementation of this CEMP will primarily be the responsibility of the proponent. All contractors engaged to undertake works within the site will be required to adhere to this plan.

The key management actions and associated responsibilities are provided in **Table 1** below.

# Construction Environmental Management Plan

Lots 100 and 256 Clarke Road, Margaret River



Table 1: Management actions and responsibilities to support clearing and construction

No.	Timing	Management action	Location	Responsibility	Status/Monitoring
1	Clearing and construction	<b>1A.</b> No pets, traps (unless authorised by DBCA) or firearms permitted on site.	All areas	Civil/ landscape contractor	To be reviewed daily during clearing and construction activities.
		<b>1B.</b> Fauna shall not be fed or intentionally harmed.	All areas	Civil/ landscape contractor	To be reviewed daily during clearing and construction activities.
		<b>1C.</b> The works area to be maintained in a clean and tidy manner to ensure that feral and other species are not attracted to site.	All areas	Civil/ landscape contractor	To be reviewed daily during clearing and construction activities.
		<b>1D.</b> Where present, ensure vehicle access gates are secured	All areas	Civil/ landscape contractor	To be reviewed daily during clearing and construction activities.
		<b>1E.</b> For management of disease (such as dieback), all machinery, equipment (including boots), vehicles and tools to be cleaned of soil before entering the site and when leaving the site.	All areas	Civil/ landscape contractor	To be reviewed daily during clearing and construction activities.
		<b>1F.</b> Artificial illumination for construction activities to be minimised at all times	All areas	Civil/ landscape contractor	To be reviewed daily during clearing and construction activities.
2	Prior to clearing	<b>2A.</b> Obtain Regulation 28 licence ( <i>Fauna taking (relocation)</i> ) from DBCA.	All areas	Fauna specialist	Licence to be gained prior to clearing.
		<b>2B.</b> Mark all trees identified for retention on approved construction drawings with coloured flagging tape to avoid incidental clearing or damage. Install temporary fencing (or other suitable alternative) to clearly delineate vegetation.	All areas	Proponent/civil contractor	To review before clearing commences.
		<b>2C.</b> Inspection of dreys and tree hollows identified within the site. Should any hollows be in use by native vertebrate fauna species, clearing will be delayed until the young have left the hollow, if possible. Alternatively, a 10 metre (m) 'tree protection zone' will be established around these tree(s) until the young have left the hollow. The tree protection zone will be clearly marked and no machinery will enter.	All areas	Fauna specialist	To review before clearing commences.
		<b>2D.</b> Implementation of pre clearing fauna checks at least five nights prior to clearing.	All areas	Fauna specialist	To review before clearing commences.
		<b>2E.</b> Communicate fauna management requirements to all employees.	All areas	Fauna specialist	To review before clearing commences.

# Construction Environmental Management Plan

Lots 100 and 256 Clarke Road, Margaret River



Table 1: Management actions and responsibilities to support clearing and construction (continued)

No.	Timing	Management action	Location	Responsibility	Status/Monitoring
3	During clearing	<b>3A.</b> Clearing shall be limited to areas identified for removal.	All areas	Proponent/civil contractor	To be reviewed daily during clearing activities.
		<b>3B.</b> Maintain temporary fencing (or other suitable alternative) around retained vegetation. No plant or machinery is to be parked/stored under retained vegetation to prevent compaction of soil and tree roots.	Landscape areas	Proponent/civil contractor	To be reviewed daily during clearing activities.
		<b>3C.</b> Use of a fauna spotter during clearing, particularly during clearing of all large trees with hollows. Dispersal of any native vertebrate fauna to nearby suitable habitat.	All areas	Proponent/civil contractor	To be reviewed daily.
		<b>3D.</b> Allow all observed fauna during clearing to move to areas of adjacent vegetation, if appropriate. If fauna is required to be removed or if injured fauna is encountered, fauna specialist to determine appropriate action or call DBCA WildCare Helpline (08 9474 9055).	All areas	Proponent/civil contractor and fauna specialist	To be reviewed daily during clearing activities.
		<b>3E.</b> Undertake clearing outside of the main fauna breeding season (spring) where possible, and in stages along one front to allow fauna to move from clearing area into adjacent habitat (i.e. surrounding area).	All areas	Proponent/civil contractor	To be reviewed daily during clearing activities.
		<b>3F.</b> Trees that have been identified as supporting WRP dreys (or other suitable daytime refuge) that are not being retained will be 'bumped gently' with a machine prior to felling. The operator and zoologist will wait and observe the tree for a short time. If no possum appears to be present then the tree shall be pushed over slowly to minimise risk of injury to the animal.	All areas	Proponent/civil contractor/zoologist	To be reviewed daily during clearing activities.
		<b>3G.</b> Undertaking of a post-clearing assessment of any potential nesting trees.	All areas	Fauna specialist	To be reviewed after clearing activities.
		<b>3H.</b> Fallen trees that contained possum dreys shall be mulched the day they are fallen, or moved at least 50 m from where they were fallen to prevent animals re-entering	All areas	Proponent/civil contractor	To be reviewed daily during clearing activities.

# Construction Environmental Management Plan

Lots 100 and 256 Clarke Road, Margaret River



Table 1: Management actions and responsibilities to support clearing and construction (continued)

No.	Timing	Management action	Location	Responsibility	Status/Monitoring
4	After clearing	<b>4A.</b> On completion of the pre-clearing fauna spotting program, a report summarising the number of fauna spotted will be prepared and submitted to DBCA outlining species and number of any fauna individuals that will need to disperse.	Not applicable	Fauna specialist	To be prepared upon completion of relocation program.
		<b>4B.</b> Prepare licence return reports summarising the number fauna captured and/or relocated to nearby habitat and a licence return will be prepared and submitted to DBCA (if required).	Not applicable	Fauna specialist	To be prepared upon completion of relocation program.
5	During construction	<b>5A.</b> Areas of retained trees and vegetation to be avoided. Machinery is not to be parked under retained trees to prevent compaction off soil and tree roots.	All areas	Proponent/civil contractor	To be checked daily.
		<b>5B.</b> Allow all observed fauna during construction to move to areas of adjacent vegetation, if appropriate. If fauna is required to be removed or if injured fauna is encountered, engage an appropriate fauna specialist or call DBCA WildCare Helpline (08 9474 9055).	All areas	Civil/ landscape contractor/fauna specialist	To be reviewed daily during construction activities.
		<b>5C.</b> Wooden boundary fencing (which provide better grip) will be installed along the northern, southern and eastern boundary of the site in accordance with approved engineering drawings. This is to facilitate movement of WRP between vegetation corridors	As per construction drawings	Proponent/civil contractor	To be reviewed upon completion of works.
6	Post clearing and construction	<b>6A.</b> Maintain landscaped areas, including retention of identified vegetation. Any removal of vegetation (e.g. vegetation is unsafe) will need to be approved by the Shire of Augusta Margaret River.	All areas	Proponent/tenants	To be adhered to throughout the life of the development
		<b>6B.</b> Fauna awareness signs will be installed across the site in public areas to highlight to businesses and visitors the potential for fauna to occur and care to be taken. The Shire of Augusta Margaret River have a number of standard signs that can be used, and will form part of the development approval	As per construction drawings	Proponent/tenants	To be adhered to throughout the life of the development
		<b>6C.</b> Wooden fencing will be maintained in good working order to facilitate movement of fauna, particularly WRP, across the site.	As per construction drawings	Proponent/tenants	To be adhered to throughout the life of the development
		<b>6D.</b> If fauna is required to be removed or if injured fauna is encountered, engage an appropriate fauna specialist or call DBCA WildCare Helpline (08 9474 9055).	All areas	Proponent/tenant	To be adhered to throughout the life of the development

# Construction Environmental Management Plan

Lots 100 and 256 Clarke Road, Margaret River



## 5 References

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# Construction Environmental Management Plan

Lots 100 and 256 Clarke Road, Margaret River



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# Construction Environmental Management Plan

Lots 100 and 256 Clarke Road, Margaret River



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# Figures



*Figure 1: Site Location*

*Figure 2: Disturbance Area*

*Figure 3: Fauna Habitat Values*

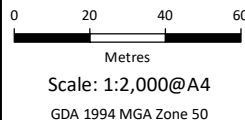


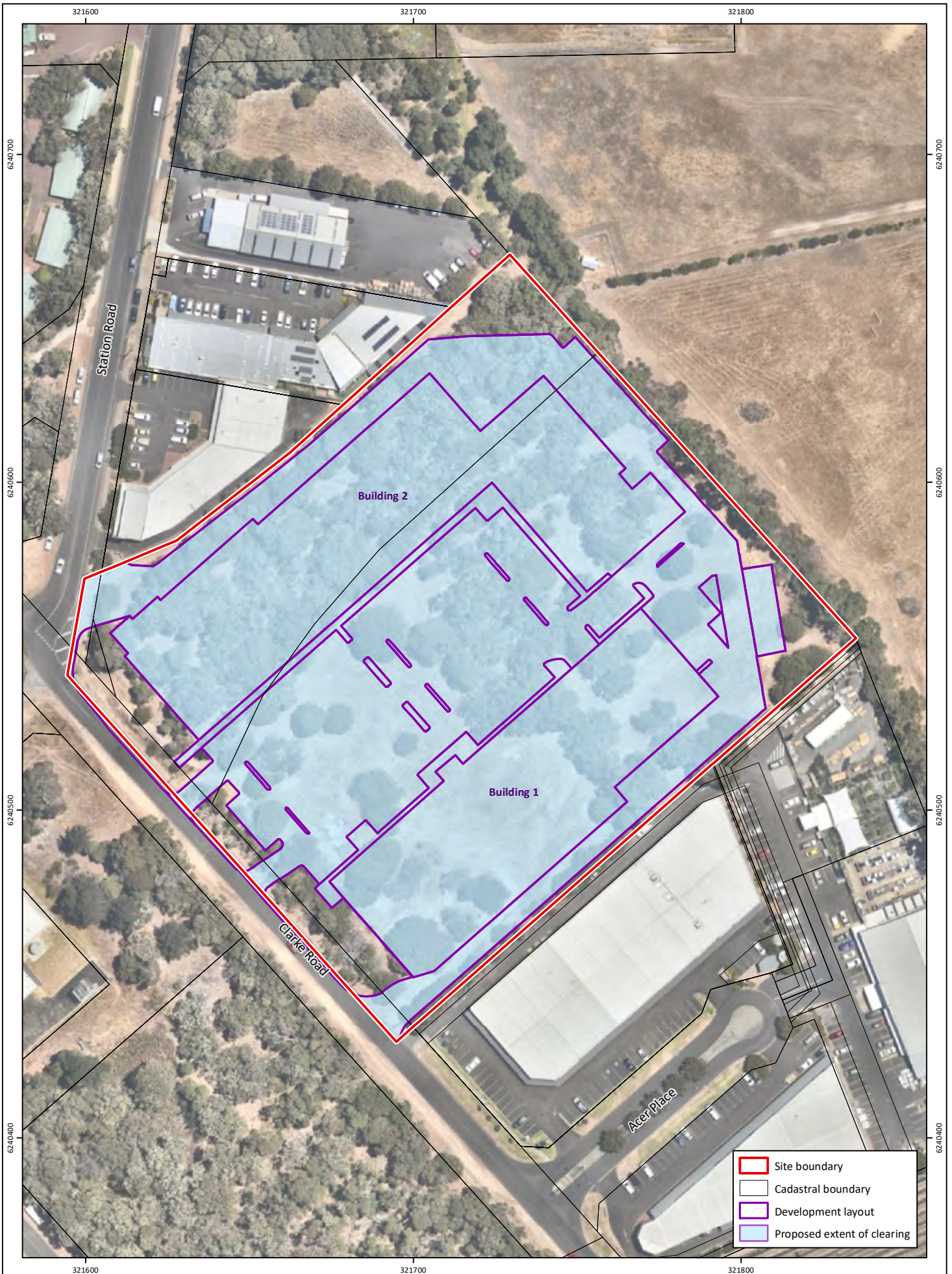


**Figure 1: Site Location**

**Project:** Construction Environmental Management Plan  
 Lots 100 and 256 Clarke Road, Margaret River  
**Client:** Colchester Pty Ltd

**Plan Number:**  
 EP22-096(08)--F43  
**Drawn:** AS  
**Date:** 26/04/2024  
**Checked:** DTA  
**Approved:** KK  
**Date:** 17/05/2024





**Figure 2: Disturbance Footprint**

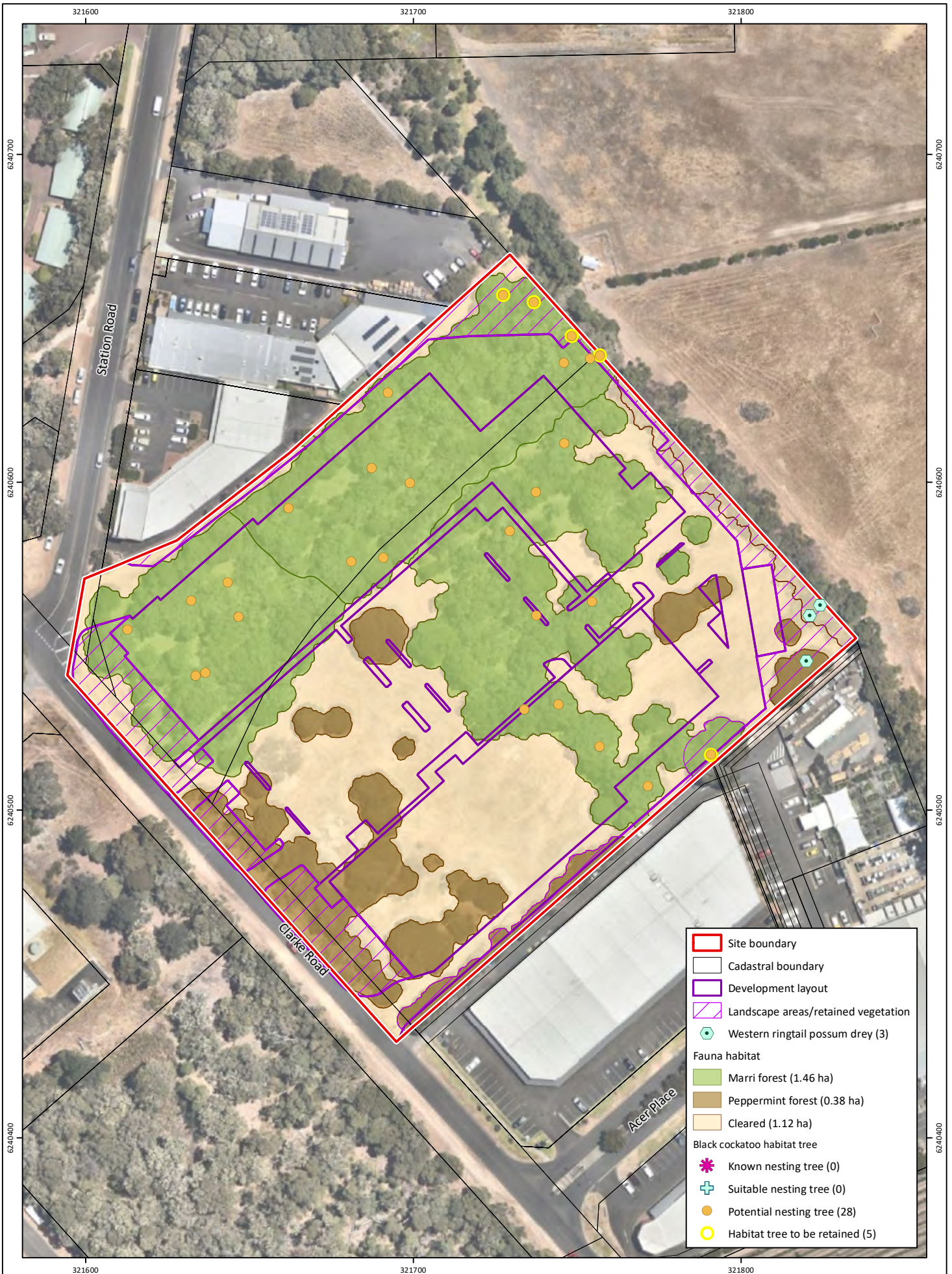
**Project:** Construction Environmental Management Plan  
 Lots 100 and 256 Clarke Road, Margaret River  
**Client:** Colchester Pty Ltd

**Plan Number:** EP22-096(08)--F49  
**Drawn:** AS  
**Date:** 26/04/2024  
**Checked:** DTA  
**Approved:** KK  
**Date:** 17/05/2024



0 20 40  
 Metres  
 Scale: 1:1,500@A4  
 GDA 1994 MGA Zone 50





**Figure 3: Fauna Habitat Values**

**Project:** Construction Environmental Management Plan  
Lots 100 and 256 Clarke Road, Margaret River  
**Client:** Colchester Pty Ltd

**Plan Number:** EP22-096(08)--F44  
**Drawn:** AS  
**Date:** 26/04/2024  
**Checked:** DTA  
**Approved:** KK  
**Date:** 17/05/2024



0 20 40  
Metres  
Scale: 1:1,500@A4  
GDA 1994 MGA Zone 50



# Appendix A

Development Layout







**SITE CRITERIA**

<b>1. Site Area (LOT 100 + LOT 256)</b>	<b>28,366m<sup>2</sup></b>
<b>2. Landscaping</b>	<b>1,418m<sup>2</sup></b>
a. Required 5% of Site Area	1,461m <sup>2</sup>
b. Provided	1,375m <sup>2</sup>
New Soft Landscaping	1,375m <sup>2</sup>
Retained Bushland	4.0
<b>Total</b>	<b>2,836m<sup>2</sup> (9.9%)</b>
Hard	928m <sup>2</sup>
<b>Total</b>	<b>3,764m<sup>2</sup></b>
<b>3. Floor Area (GFA)</b>	<b>5,056m<sup>2</sup></b>
a. Hardware	5,056m <sup>2</sup>
b. Showroom (80%)	5,480m <sup>2</sup>
c. Warehouse (20%)	1,374m <sup>2</sup>
<b>Total</b>	<b>11,910m<sup>2</sup> (42.0%)</b>
<b>4. Carparking</b>	<b>Carbays</b>
a. Cars Required	
By Local Authority Carparking Requirements	
i. Hardware	101.3
ii. Showroom	109.6
iii. Warehouse	4.0
<b>Total</b>	<b>214.9</b>
By Hardware Tenant Requirements	
i. GFA 11,900m <sup>2</sup> @ 1/40m <sup>2</sup>	297.5
b. Provided	
i. Carpark + Trailer Bays	220
ii. Staff Parking	32
<b>Total</b>	<b>258</b>

**Landscaping**

A. Hard Landscaping  
Defined as paved walkways either open or covered.

B. Soft Landscaping  
Defined as vegetative landscaping.

**Gross Floor Area : GFA**

A. All Floor Areas on this plan are shown as GROSS FLOOR AREA.  
Unless otherwise noted as Nett Floor Area.

B. Definition of Gross Floor Area is defined as:  
i/ GROSS FLOOR AREA OF TENANCY:  
Gross Floor Area of an individual Tenancy is defined as the area contained between the centre line of common tenancy walls and the outside edge of external walls.  
ii/ GROSS FLOOR AREA OF A BUILDING:  
Gross Floor Area of a Building is defined as the total area contained between the outside edge of external walls.

**Nett Floor Area : NFA**

A. Nett Floor Area of a Tenancy on this plan is defined as the area between external or tenancy dividing walls.  
B. This area is inclusive of toilets if the toilets are exclusive to the Tenancy.

**Note:**

1. This Site Plan will require reassessment BAL.

2. This revised Site Plan will require Bunnings approval

**SITE PLAN**  
SCALE: 1 : 500

