

Native Vegetation Clearing Permit Application

Alkimos Beach Foreshore Area Batter – (Lot
9060) Leatherback Boulevard

Project No: EP18-012(15)

**Prepared for Stockland
May 2026**



Native Vegetation Clearing Permit Application

Alkimos Beach Foreshore Area Batter – (Lot 9060) Leatherback Boulevard



Document Control

| | |
|-----------|---|
| Doc name: | Native Vegetation Clearing Permit Application Alkimos Beach Foreshore Area Batter – (Lot 9060) Leatherback Boulevard |
| Doc no.: | EP18-012(15) --026 EA |
| | |

© 2026 Emerge Associates All Rights Reserved. Copyright in the whole and every part of this document belongs to Emerge Associates and may not be used, sold, transferred, copied or reproduced in whole or in part in any manner or form or in or on any media to any person without the prior written consent of Emerge Associates.

Native Vegetation Clearing Permit Application

Alkimos Beach Foreshore Area Batter – (Lot 9060) Leatherback Boulevard



Executive Summary

This Native Vegetation Clearing Permit (NVCP) application is required to construct Bathers Promenade and a shared path at Lot 9060 Leatherback Boulevard, Alkimos (the project). The project is consistent with Western Australian Planning Commission (WAPC) approval 201341. Up to 0.015 ha of clearing is required to extend a batter into the adjacent foreshore (Bush Forever Site 397).

The clearing involves:

- Removal of up to 0.015 ha of native vegetation comprising predominantly native coastal shrubland associated with Floristic Community Type (FCT) 26b: Acacia Shrublands on taller dunes, listed as a Priority Ecological Community (PEC).
- Removal of two individuals Priority 4 flora species (*Conostylis pauciflora* subsp. *euryhipis*).

There are no Threatened Ecological Communities (TECs) or breeding/roosting habitat for black cockatoo.

The clearing is unavoidable as alternative approaches (i.e. retaining wall) is not practical or sympathetic to the urban design and landscape framework. The batter will be rehabilitated consistent with other rehabilitation and restoration work outlined in the Bathers Promenade Revegetation Plan, Conservation Area Management Plan (CAMP) and Foreshore Management Plan (FMP).

The clearing is not at variance with any of the 10 clearing principle, as summarised in **Table 1**.

Native Vegetation Clearing Permit Application

Alkimos Beach Foreshore Area Batter – (Lot 9060) Leatherback Boulevard



Table 1: Assessment summary of clearing principles.

| Clearing principle | Summary of relevant response to clearing permit principle | Levels of variance |
|---|---|--------------------|
| Principle (a) Native vegetation should not be cleared if it comprises a high level of biological diversity. | The clearing area does not support high biological diversity values. | Not at variance |
| Principle (b) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a significant habitat for fauna indigenous to Western Australia. | The clearing area does not support significant fauna habitat. | Not at variance |
| Principle (c) Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, rare flora. | No rare flora were recorded within the clearing area. | Not at variance |
| Principle (d) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of a threatened ecological community. | No TEC occur within the clearing area. | Not at variance |
| Principle (e) Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared. | The Quindalup vegetation complex retains a substantial proportion of its regional extent, and the proposed clearing is minor and localised. | Not at variance |
| Principle (f) Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland. | The clearing area does not contain or support wetlands, watercourses or riparian vegetation. | Not at variance |
| Principle (g) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation. | Clearing will be managed through stabilisation and rehabilitation measures, minimising the risk of erosion or land degradation. | Not at variance |
| Principle (h) Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area. | Although located within a Bush Forever site, the small clearing and rehabilitation is not expected to significantly impact conservation values. | Not at variance |
| Principle (i) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water. | Shallow earthworks will not intersect groundwater, and the clearing is not expected to affect surface or groundwater quality. | Not at variance |
| Principle (j) Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding. | The clearing area is located on well drained coastal dunes and will not alter drainage patterns or increase flood risk. | Not at variance |

Native Vegetation Clearing Permit Application

Alkimos Beach Foreshore Area Batter – (Lot 9060) Leatherback Boulevard



Table of Contents

| | | |
|----------|---|-----------|
| 1 | Introduction | 1 |
| 1.1 | Purpose and Scope..... | 1 |
| 1.2 | Applicant and Clearing Area Details..... | 1 |
| 1.3 | Environmental Assessments | 2 |
| 1.4 | Proposed Clearing..... | 2 |
| 2 | Summary of Environmental Conditions | 3 |
| 2.1 | Historical Land Uses | 3 |
| 2.2 | Landform and Topography | 4 |
| 2.3 | Soils and Geology..... | 4 |
| 2.4 | Groundwater..... | 4 |
| 2.5 | Surface Water | 4 |
| 2.6 | Wetlands..... | 5 |
| 2.7 | Flora and Vegetation..... | 5 |
| 2.8 | Terrestrial Fauna..... | 6 |
| 3 | Application of Mitigation Hierarchy | 7 |
| 4 | Assessment against the 10 clearing principles | 9 |
| 4.1 | Principle (a) – Native vegetation should not be cleared if it comprises a high level of biological diversity..... | 9 |
| 4.2 | Principle (b) – Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a significant habitat for fauna indigenous to Western Australia. | 9 |
| 4.3 | Principle (c) – Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, rare flora..... | 9 |
| 4.4 | Principle (d) – Native vegetation should not be cleared if it comprises the whole or a part of or is necessary for the maintenance of a threatened ecological community. | 10 |
| 4.5 | Principle (e) – Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared. | 10 |
| 4.6 | Principle (f) – Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland. | 10 |
| 4.7 | Principle (g) – Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation..... | 10 |
| 4.8 | Principle (h) – Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area..... | 11 |
| 4.9 | Principle (i) – Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water. | 11 |
| 4.10 | Principle (j) – Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding..... | 11 |
| 5 | References | 12 |
| 5.1 | General references | 12 |
| | Figures | 1 |
| | Appendix A | 2 |

List of Tables

| | |
|---|-----|
| Table 1: Assessment summary of clearing principles..... | iii |
|---|-----|

Native Vegetation Clearing Permit Application

Alkimos Beach Foreshore Area Batter – (Lot 9060) Leatherback Boulevard



Table 2: Applicant and Site details 1
Table 3: Clearing area – native vegetation clearing summary and values 2
Table 4: Application of the Mitigation Hierarchy 7

Figures

- Figure 1: Site Location
- Figure 2: Environmental Considerations
- Figure 3: Plant Community and Priority Flora
- Figure 4: Fauna Habitat

Appendices

Appendix A

Batters Promenade Design

Native Vegetation Clearing Permit Application

Alkimos Beach Foreshore Area Batter – (Lot 9060) Leatherback Boulevard



Abbreviation Tables

Table A1: Abbreviations – Organisations

| Organisations | |
|---------------|--|
| DAWE | Department of Agriculture, Water and the Environment (now known as DCCEEW) |
| DBCA | Department of Biodiversity, Conservation and Attractions |
| DEMIRS | Department of Energy, Mines, Industry Regulation and Safety |
| DER | Department of Environment Regulation |
| DPIRD | Department of Primary Industries and Regional Development |
| DoW | Department of Water (now known as DWER) |
| DWER | Department of Water and Environmental Regulation |
| EPA | Environmental Protection Authority |
| WAPC | Western Australian Planning Commission |

Table A2: Abbreviations – General terms

| General terms | |
|---------------|---|
| ASP No. 72 | South Alkimos Local Structure Plan No. 72 |
| ASS | Acid Sulfate Soils |
| ACH | Aboriginal Cultural Heritage |
| CBC | Carnaby's Black-Cockatoo |
| CAM | Conservation Area Management Plan |
| CEMP | Construction Environmental Management Plan |
| Emerge | Emerge Associates |
| ESA | Environmentally Sensitive Area |
| FCT | Floristic community type |
| FMP | Foreshore Management Plan |
| LPS2 | City of Wanneroo District Planning Scheme No. 2 |
| NVCP | Native vegetation clearing permit |
| SCP | Swan Coastal Plain Floristic Community Type |
| P3 | Priority 3 |
| P4 | Priority 4 |
| PEC | Priority ecological community |
| TEC | Threatened ecological community |
| VFMP | Vegetation and Fauna Management Plan |

Native Vegetation Clearing Permit Application

Alkimos Beach Foreshore Area Batter – (Lot 9060) Leatherback Boulevard



Table A3: Abbreviations –Legislation

| Legislation | |
|-------------|--|
| EP Act | <i>Environmental Protection Act 1986</i> |
| RIWI Act | <i>Rights in Water and Irrigation Act 1914</i> |
| BC Act | <i>Biodiversity Conservation Act 2016</i> |
| BAM Act | <i>Biosecurity and Agriculture Management Act 2007</i> |

Table A4: Abbreviations – units of measurement

| Units of measurement | |
|----------------------|--|
| bgl | Below ground level |
| ha | Hectare |
| m | Metre |
| mAHD | m in relation to the Australian height datum |

Native Vegetation Clearing Permit Application

Alkimos Beach Foreshore Area Batter – (Lot 9060) Leatherback Boulevard



1 Introduction

Stockland (the applicant) proposes to construct Bathers Promenade and a shared path at Lot 9060 Leatherback Boulevard, Alkimos (the Project), associated with an approved subdivision by Stockland (WAPC reference 200341). The proposed works include the formation of a soil batter extending into the adjacent Alkimos foreshore reserve (**Appendix A**) and will require the clearing of up to 0.015 hectares (ha) of native vegetation, which constitutes the clearing area for the purposes of this application (**Figure 1**).

Previous determinations by the Department of Water and Environmental Regulation (DWER) for similar coastal foreshore works provide relevant context. For example:

- Clearing associated with boardwalk construction at Burns Beach (Clearing Permit reference CPS 10890/1) was determined by DWER to not require a clearing permit, noting the limited extent and nature of the disturbance (approximately 0.13 ha, including a construction buffer).
- DWER has also granted clearing permits for comparable coastal infrastructure projects (e.g. CPS 9620/1 and CPS 9918/2), where clearing was assessed as minor, localised, and being appropriately managed.

These precedents demonstrate that small scale clearing within foreshore reserves, where associated with approved development and supported by appropriate environmental management, can be considered acceptable under the framework for clearing permits.

1.1 Purpose and Scope

This report has been prepared to support an application for a native vegetation clearing permit (NVCP) under Part V of the *Environmental Protection Act 1986* (EP Act) and the *Environmental Protection (Clearing of Native Vegetation) Regulations 2004*. The proposed clearing area has been designed to represent the minimum extent necessary to achieve the approved engineering and design outcomes, with consideration given to the avoidance and minimisation of impacts to native vegetation within the Alkimos foreshore reserve.

1.2 Applicant and Clearing Area Details

Key applicant and land tenure details relevant to the Project are summarised in **Table 2**.

The proposed clearing area associated with mapped native vegetation comprises approximately 0.015 ha. While **Appendix A** depicts the broader proposed clearing associated with the Project, this includes non-native vegetation, the NVCP assessment and clearing extent apply only to the mapped native vegetation located within the northern portion of the site.

Table 2: Applicant and Site details

| Property | Description |
|------------------|--|
| Land description | Lot 9060 on Plan P409771 - Land ID 4287930 |
| Property Area | 62.683 ha |

Native Vegetation Clearing Permit Application

Alkimos Beach Foreshore Area Batter – (Lot 9060) Leatherback Boulevard



| Property | Description |
|------------------|--|
| Zoning | Parks & Recreation (Foreshore Reserve) City of Wanneroo District Planning Scheme No. 2 (LPS2) South Alkimos Local Structure Plan No. 72 (ASP No. 72) |
| Owner/ Applicant | Western Australian Planning Commission |

1.3 Environmental Assessments

Emerge Associates (Emerge) undertook a reconnaissance site inspection of flora, vegetation and fauna habitat across the application area on 22 April 2026 to support the NVCP application. A separate site inspection was also undertaken by Tranen on the same date to support the Bathers Revegetation Plan. In addition to the review of field assessments, a review of available desktop environmental data was undertaken, including relevant State and Commonwealth databases, aerial imagery, and mapped environmental constraints, to characterise the site context and identify potential ecological values.

1.4 Proposed Clearing

The application is for the clearing of up to 0.015 ha of native vegetation. A summary of the flora and fauna habitat values present within the proposed clearing area is provided in Table 3 and presented in Figure 2.

Table 3: Clearing area – native vegetation clearing summary and values

| Vegetation Value | NVCP Application Area |
|---|---|
| Native Vegetation | Up to 0.015 ha of vegetation unit SgLm in Very Good condition |
| Environmentally Sensitive Area (ESA): | Bush forever site 397. |
| TEC / PEC | Up to 0.015 ha of potential 'Acacia shrublands on taller dunes – Southern Swan Coastal Plain' PEC |
| Priority Flora (<i>Biodiversity Conservation Act 2016</i> BC Act') | Removal of two individuals Priority 4 flora species (<i>Conostylis pauciflora</i> subsp. <i>euryhipis</i>). |

Native Vegetation Clearing Permit Application

Alkimos Beach Foreshore Area Batter – (Lot 9060) Leatherback Boulevard

2 Summary of Environmental Conditions

2.1 Historical Land Uses

The site is located within a coastal foreshore reserve at Alkimos, adjacent to the approved residential subdivision (WAPC reference 200341). Historical land uses within the Alkimos foreshore reserve have been limited to informal recreational access and localised disturbance associated with adjacent urban development (**Plate 1**).

Parts of the Alkimos foreshore reserve have been subject to rehabilitation and active management undertaken in accordance with EPBC approval 2011/5902, including supplementary planting and weed control to protect and enhance Carnaby's Black-Cockatoo (CBC) foraging habitat.

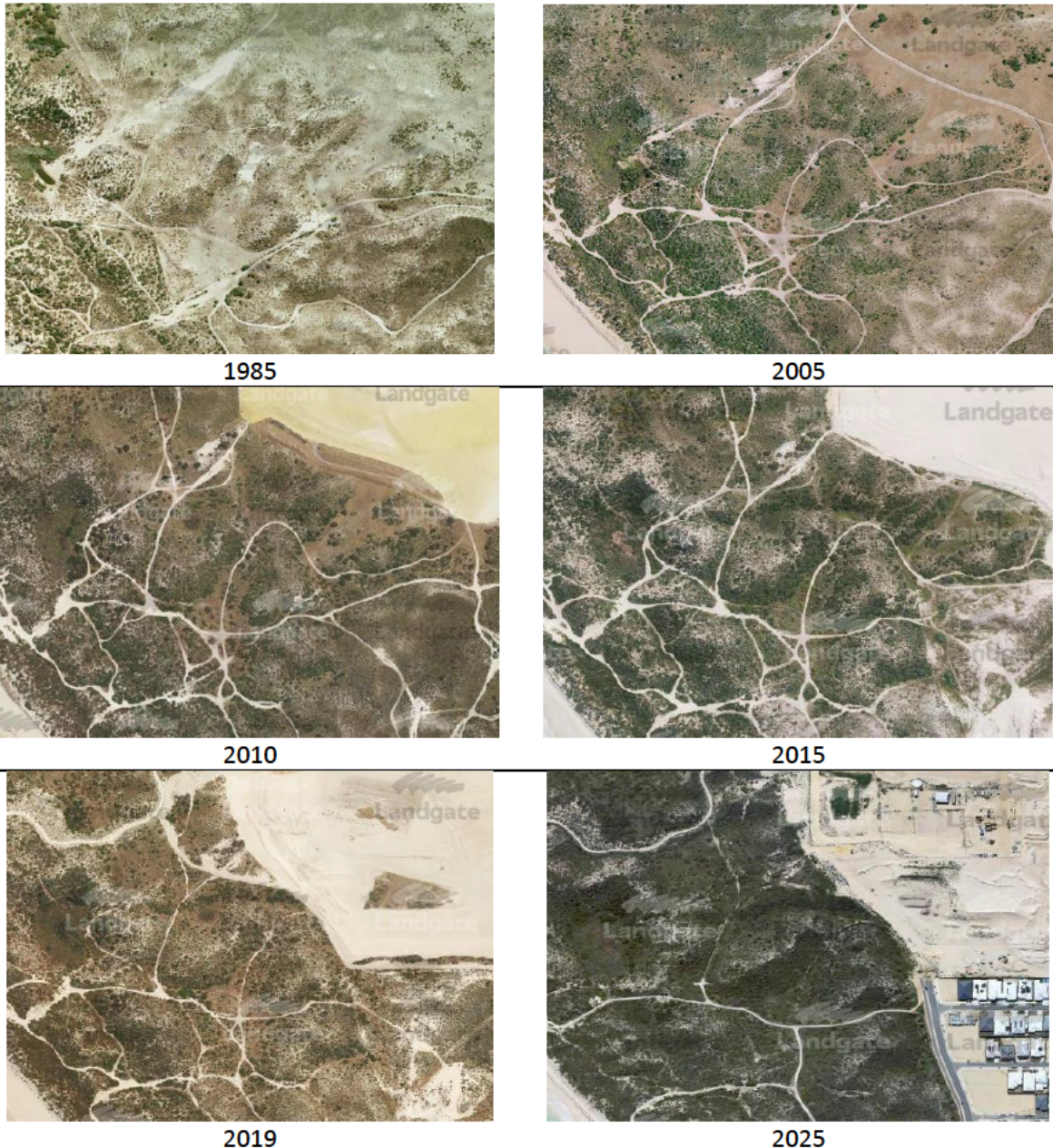


Plate 1: Aerial photograph from 1985 to 2025 - Alkimos foreshore reserve and adjacent development

Native Vegetation Clearing Permit Application

Alkimos Beach Foreshore Area Batter – (Lot 9060) Leatherback Boulevard



2.2 Landform and Topography

The site is located within a coastal dune system characteristic of the northern Swan Coastal Plain. Topographic mapping using Department of Primary Industries and Regional Development (DPIRD) 2 m wide contours indicates that the land slopes from east to west toward the Indian Ocean. Elevation begins at approximately 16 metres Australian Height Datum (mAHD) upslope of the proposed works, descending to approximately 11 mAHD at the base of the proposed soil batter, before rising again to approximately 15 mAHD further west (Figure 1).

2.3 Soils and Geology

Soils within the site are typical of coastal dune environments and are dominated by Quindalup Third Dune Phase, comprising predominantly loose calcareous sand with little surface organic staining and incipient cementation at depth (DPIRD 2025). These soils have low nutrient retention capacity and are highly permeable. The sandy nature of the soils makes them susceptible to wind erosion where vegetation cover is removed.

The site is not covered by the current DWER ASS risk mapping (DWER 2025a); however, given the elevated coastal dune landform and absence of low-lying estuarine or floodplain environments, the likelihood of ASS occurring within the site is expected to be low.

2.4 Groundwater

The site overlies the Superficial Aquifer of the Swan Coastal Plain, comprising unconfined sandy sediments. Depth to groundwater at the site is moderate to deep, generally between approximately 6 and greater than 10.5 m below ground level (bgl) (DWER 2026).

Groundwater mapping shows no shallow groundwater conditions or areas of groundwater emergence within the proposed clearing area.

The site is within the proclaimed Perth Groundwater Area / Gnangara Groundwater Allocation Plan area proclaimed under the *Rights in Water and Irrigation Act 1914* (RIWI Act).

2.5 Surface Water

No permanent or ephemeral surface water features occur within the site. The Project does not intersect any mapped drainage lines, creeks, or watercourses (DWER 2025b).

Surface water at the site is limited to short-duration rainfall runoff, which infiltrates rapidly into the sandy dune soils. Given the moderate to deep depth to groundwater in the area, surface water processes at the site are not influenced by groundwater interaction.

The site is not located within a Public Drinking Water Source Area.

Native Vegetation Clearing Permit Application

Alkimos Beach Foreshore Area Batter – (Lot 9060) Leatherback Boulevard



2.6 Wetlands

No mapped geomorphic wetlands, occur within or within 10 km of the proposed clearing area (DBCA 2024).

The site is located within a terrestrial coastal dune environment and does not support wetland landforms or wetland vegetation communities.

2.7 Flora and Vegetation

2.7.1 Regional Vegetation

The site is situated within the 'Quindalup Complex', which is described as 'a coastal dune system comprising vegetation of strand, foredune and stable dune landforms, typically characterised by low closed forest, closed scrub or shrubland' (Hedde *et al.* 1980). Vegetation commonly includes *Melaleuca lanceolata* and *Callitris preissii* forming low closed forest, closed scrub of *Acacia rostellifera*, and areas of coastal shrubland and heath, with localised occurrences of low *Agonis flexuosa* woodland on more stable dunes.

Approximately 60.5% of the original (pre-European) extent of the Quindalup vegetation complex remains on the Swan Coastal Plain, based on 2018 remnant vegetation mapping. Of this original extent, approximately 9.0% is contained within formal conservation reserves (Government of Western Australia 2019).

2.7.2 Vegetation Units and Condition

The site inspection conducted by Emerge identified one vegetation unit within the site (Figure 3). The condition of this vegetation was assessed 'Very Good' in accordance Keighery (1994) and is described below.

SgLm (0.015 ha): *Native shrubland of Spyridium globulosum, Exocarpos sparteus, Melaleuca systema, Olearia axillaris, Acacia lasiocarpa, Hardenbergia comptoniana, Leucopogon parviflorus, Leucopogon insularis, Over forbland Lomandra maritima, Acanthocarpus preissii and Desmocladius flexuosus and scattered grasses Austrostipa spp. Non-native Lagurus ovatus, Pelargonium capitatum, Romulea rosea and Euphorbia terracina.*

2.7.3 Threatened or Priority Flora

There are no threatened flora species within the proposed clearing area.

Two individuals displaying morphological characteristics consistent with the Priority 4 taxon *Conostylis pauciflora* subsp. *Euryhipis*, listed under the BC Act, were recorded within the SgLm vegetation unit. As the individuals were not flowering at the time of the survey, definitive identification could not be confirmed by Emerge. However, based on leaf morphology, it is considered likely that the individuals represent this taxon. The locations of these individuals are shown in Figure 3.

Native Vegetation Clearing Permit Application

Alkimos Beach Foreshore Area Batter – (Lot 9060) Leatherback Boulevard



2.7.4 Threatened Ecological Communities and Priority Ecological Communities

There are no Threatened Ecological Communities (TEC) within the proposed clearing area.

The SgLm vegetation unit has not been subject to a quantitative floristic analysis; however, based on vegetation structure, dominant species composition and landscape position, it is considered by Emerge likely to represent Floristic Community Type (FCT) 29b '*Acacia shrublands on taller dunes*'.

FCT 29b is synonymous with the Swan Coastal Plain Floristic Community Type (SCP) 29b '*Acacia shrublands on taller dunes – Southern Swan Coastal Plain*', which is listed as a Priority Ecological Community (PEC) (Priority 3) in Western Australia. Accordingly, the SgLm vegetation unit is considered likely to represent this PEC, as shown in **Figure 2**.

2.7.5 Environmental Sensitive Areas and Conservation Areas

The site is located within Bush Forever Site 397 (Government of WA 2000), which has been identified as a regionally significant remnant of coastal dune vegetation on the northern Swan Coastal Plain (DPLH 2019) (**Figure 2**). Vegetation within Bush Forever Site 397 is subject to planning and management measures that seek to retain and protect regional biodiversity values while allowing for compatible land uses, including controlled public access and foreshore infrastructure.

2.8 Terrestrial Fauna

2.8.1 Fauna Habitat

One broad fauna habitat was identified within the site, comprising approximately 0.015 ha of shrubland characterised by native shrubs over native herbs and grasses (**Figure 4**). This habitat provides opportunistic foraging and movement habitat for common and widespread fauna species and would be utilised in combination with adjacent coastal habitat on the Swan Coastal Plain.

2.8.2 Conservation Significant fauna

Tranen identified kangaroo scats occurring on site during the site inspection completed in 22 April 2026 (Tranen 2026).

No threatened, specially protected or priority fauna species were recorded on site. Additionally, there are no species listed declared pest under the *Biosecurity and Agriculture Management Act 2007* (BAM Act), that was identified on site.

Native Vegetation Clearing Permit Application

Alkimos Beach Foreshore Area Batter – (Lot 9060) Leatherback Boulevard



3 Application of Mitigation Hierarchy

The proposed soil batter has been selected in preference to a retaining wall to accommodate finished ground levels associated with Bathers Promenade and the shared path, where earthworks necessarily extend into the Alkimos foreshore reserve.

Advice prepared for the Alkimos Beach Foreshore Area indicates that a retaining wall in this location would be required to exceed 5 m in height due to the existing foreshore topography and the presence of an adjacent swale (Emerge Associates 2026). Construction of a retaining wall would result in a substantially larger construction footprint, reduced visual amenity, and the creation of a physical barrier to fauna movement within the foreshore reserve. In contrast, battering has been successfully implemented along adjoining sections of the foreshore reserve and is consistent with established design precedent within the Alkimos Beach development.

The proposed batter will be designed to a steeper profile where practicable to minimise its footprint within the reserve and will be stabilised and revegetated using appropriate native species in accordance with existing management frameworks. This approach is considered to better protect the integrity, function and environmental values of the foreshore reserve while meeting the engineering requirements of the approved subdivision.

The mitigation hierarchy of avoidance, minimise, and rehabilitation has been applied to the Project in accordance with the EP Act and the Environmental Protection (Clearing of Native Vegetation) Regulations 2004. This assessment has been undertaken in accordance with 'A guide to the assessment of applications to clear native vegetation' (DER 2014).

The proposed clearing within the Alkimos foreshore reserve has been confined to areas where disturbance is unavoidable in order to meet approved subdivision design and engineering requirements. Specific avoidance, minimisation and rehabilitation measures are summarised in Table 4.

Table 4: Application of the Mitigation Hierarchy

| Measure | Description |
|---------------------------|---|
| Avoidance | |
| Site selection | Areas of rehabilitated Carnaby's Black-Cockatoo foraging habitat established under EPBC Approval 2011/5902 have been avoided. |
| Detailed design | Detailed grading and stabilisation drawings have been prepared in accordance with the approved Vegetation Fauna Management Plan (VFMP) (RPS 2013) and Foreshore Management Plan (FMP) (RPS 2019). Design outcomes are consistent with the conservation objectives of Bush Forever Site 397, with disturbance limited to the minimum extent necessary to achieve engineering requirements. |
| Minimisation | |
| Project design refinement | While some clearing within Bush Forever Site 397 is unavoidable, batter layout and earthworks design have been refined to minimise clearing extent by accommodating established exclusion and restriction zones and limiting disturbance to sensitive environmental values where practicable. |

Native Vegetation Clearing Permit Application

Alkimos Beach Foreshore Area Batter – (Lot 9060) Leatherback Boulevard



| Measure | Description |
|--|--|
| Clearing controls | Clearing will be strictly limited to the approved clearing area (0.015 ha). Clearing boundaries and no-go areas will be clearly demarcated prior to works to prevent inadvertent disturbance to adjacent vegetation, landforms and sensitive areas. |
| Construction management | All works will be undertaken in accordance with the approved Construction Environmental Management Plan (CEMP) (Strategen 2019). Site personnel will receive environmental inductions covering clearing limits, environmental sensitivities and Aboriginal heritage obligations. |
| Landform stabilisation and erosion control | Earthworks and stabilisation will be undertaken in accordance with the VFMP and FMP. Temporary and permanent stabilisation and drainage measures will be implemented to minimise erosion risk and maintain coastal dune stability during and following construction. |
| Vegetation management | Existing rehabilitated areas will be retained and protected. Weed hygiene measures will be implemented to prevent the introduction or spread of weeds within the Bush Forever site and foreshore reserve. |
| Fauna management | Fauna management measures outlined in the CEMP will be implemented, including pre-clearing checks where practicable and procedures for safe fauna interactions. Clearing will be undertaken in a manner that allows fauna to disperse into adjacent retained habitat. |
| Rehabilitation | |
| Batter revegetation | Disturbed areas, including the soil batter, will be rehabilitated and revegetated in accordance with the <i>Bathers Promenade Revegetation Plan</i> (Tranen 2026). Revegetation will utilise locally appropriate native species and will contribute to landform stabilisation, visual integration and restoration of native vegetation within the foreshore reserve. |
| Post-construction management | Revegetation will be undertaken using tubestock planting at appropriate densities, with post-installation management, monitoring and maintenance implemented to ensure establishment and long-term success. |

Native Vegetation Clearing Permit Application

Alkimos Beach Foreshore Area Batter – (Lot 9060) Leatherback Boulevard



4 Assessment against the 10 clearing principles

Proposed clearing has been assessed against the 10 Clearing Principles in accordance with *A Guide to the Assessment of Applications to Clear Native Vegetation* (DER 2014) (the Guide).

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

The proposed clearing area supports native vegetation consistent with the Quindalup Complex on the northern Swan Coastal Plain. Vegetation is mapped as a single native shrubland unit (SgLm), with vegetation condition qualified as 'Very Good'.

While the SgLm vegetation unit is considered likely to represent FCT 29b 'Acacia shrublands on taller dunes', the proposed clearing area is limited in extent (approximately 0.015 ha of native vegetation) and is structurally uniform coastal shrubland typical of the local and regional environment.

The proposed clearing area does not contain a diversity of native vegetation units or vegetation associations, and does not exhibit significant variation in floristic composition, structure, or condition that would highlight a high botanical diversity at a local or regional scale. As such, the proposed clearing is not at variance with Principle (a).

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

The proposed clearing area comprises shrubland (SgLm) habitat. This area provides opportunistic foraging and movement habitat for common and widespread fauna species typically associated with coastal environments on the Swan Coastal Plain.

The vegetation within the proposed clearing area does not provide specialised habitat features such as tree hollows or other features required for breeding, roosting or long-term survival of fauna with restricted distributions or specialised habitat requirements.

No threatened, specially protected or priority fauna species were recorded during site inspections within the proposed clearing area. The vegetation does not contain fauna habitat trees (including hollow bearing trees) and does not provide breeding, roosting or significant foraging habitat for black cockatoo species. As such, the proposed clearing is therefore not at variance with Principle (b).

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

No Threatened flora listed under the BC Act were recorded within the proposed clearing area.

Two individuals potentially representing a Priority 4 flora species (*Conostylis pauciflora* subsp. *euryhipis*) were recorded during the site inspection.

Native Vegetation Clearing Permit Application

Alkimos Beach Foreshore Area Batter – (Lot 9060) Leatherback Boulevard



Given the absence of Threatened flora within the proposed clearing area, the native vegetation is not considered to include, or be necessary for the continued existence of, rare flora. As such, proposed clearing is not at variance with Principle (c).

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

No TECs listed under the BC Act are known to occur within the proposed clearing area, nor is the native vegetation considered necessary for the maintenance of any TEC. As such the proposed clearing is not at variance with Principle (d).

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

Regional mapping indicates that approximately 60.5% of the pre-European extent of the Quindalup Complex remains within the Swan Coastal Plain. This exceeds the 30% threshold applied by the Commonwealth and State policy frameworks as an indicator that a vegetation complex is not extensively cleared at a regional scale. As such, the proposed clearing is not at variance with Principle (e).

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

No watercourses, wetlands, riparian vegetation, or surface drainage features occur within the proposed clearing area. As such, the proposed clearing is not at variance with Principle (f).

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

The proposed clearing area is located on sandy coastal dune soils, which are naturally susceptible to erosion when exposed or disturbed. However, the extent of clearing (up to 0.015 ha of native vegetation) is small and limited and will be managed through the implementation of appropriate construction and post-construction controls.

Construction activities will be undertaken in accordance with the approved CEMP, which includes measures for erosion and sedimentation control, dust suppression, and surface stabilisation.

Following construction, disturbed areas will be stabilised and rehabilitated in accordance with the approved VFMP and FMP, including revegetation with locally appropriate native species to promote long-term soil stability. As such, the proposed clearing is not at variance with Principle (g).

Native Vegetation Clearing Permit Application

Alkimos Beach Foreshore Area Batter – (Lot 9060) Leatherback Boulevard



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

The proposed clearing area is located within Bush Forever Site 397, recognised for their environmental value in the local area.

The proposed clearing footprint is small (approximately 0.015 ha of native vegetation) and has been designed to avoid impacts to surrounding retained vegetation and rehabilitated areas.

Construction activities will be undertaken in accordance with the approved VFMP, FMP, and CEMP. These plans include measures to manage vegetation protection, erosion control, and construction boundaries to ensure adjacent conservation values are protected.

Given the limited extent of clearing, its localised nature, and the implementation of management measures to protect surrounding vegetation, the proposed works are not expected to result in a significant impact on the environmental values. As such, the proposed clearing is not at variance with Principle (h).

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

No surface water features occur within the proposed clearing area, and the site is not associated with any watercourse, wetland or visible drainage lines. The proposed clearing area is not located within a Public Drinking Water Source Area.

Given the small extent of clearing and implementation of erosion and sediment control measures in accordance with approved management plans, the proposed clearing is not expected to adversely affect surface or groundwater quality. As such, the proposed clearing is not at variance with Principle (i).

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

The proposed clearing area is located on well-drained coastal dune landforms characteristic of the Swan Coastal Plain. The site does not contain floodplains, defined drainage channels or low-lying areas subject to inundation. The sandy soils promote infiltration and do not facilitate surface water pooling. As such, the proposed clearing is not at variance with Principle (j).

Native Vegetation Clearing Permit Application

Alkimos Beach Foreshore Area Batter – (Lot 9060) Leatherback Boulevard



5 References

5.1 General references

Department of Biodiversity, Conservation and Attractions (DBCA) 2024, *Ramsar - Internationally Important Wetlands*

<<https://www.dbca.wa.gov.au/management/wetlands/wetland-mapping-datasets>>.

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

Department of Primary Industries and Regional Development (DPIRD) 2025, *Soil Landscape Mapping - Best Available (DPIRD-027)*, Perth, WA,

<<https://catalogue.data.wa.gov.au/dataset/soil-landscape-mapping-best-available>>.

Department of Planning, Lands and Heritage (DPLH) 2019, *Bush Forever Areas 2000 (DPLH-019)*, <<https://catalogue.data.wa.gov.au/org/departement-of-planning-lands-and-heritage>>.

Department of Water and Environmental Regulation (DWER) 2025a, *Acid Sulfate Soil Risk Map, Swan Coastal Plain (DWER-055)*, <<https://catalogue.data.wa.gov.au/dataset/acid-sulphate-soil-risk-map-swan-coastal-plain-dwer-055>>.

Department of Water and Environmental Regulation (DWER) 2025b, *Hydrography Linear (Heirarchy) (DWER-031)*.

Department of Water and Environmental Regulation (DWER) 2026, *Perth Groundwater Map*, <<https://maps.water.wa.gov.au/Groundwater/>>.

Emerge Associates 2026, *Alkimos beach foreshore area batter advice*, 1.

Government of WA 2000, *Bush Forever, Volume 2: Bush Forever Site Descriptions*, Perth.

Government of Western Australia 2019, *2018 South West Vegetation Complex Statistics. Current as of March 2019*, WA Department of Biodiversity, Conservation and Attractions, Perth.

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

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

RPS 2013, *Vegetation and Fauna Management Plan – South Alkimos Beach*, 1.

RPS 2019, *Alkimos Beach Foreshore Management Plan - EPBC 2011/5902, EEL12347.001*, 5.

Strategen 2019, *Alkimos City Centre and Central (EPBC 2015/7561) - Construction Environmental Management Plan LLC16557 01 R001*, 4.

Tranen 2026, *Alkimos Beach Bathers Prom Revegetation Plan Stockland - April 2026.*, 1.

Figures



Figure 1: Site Location

Figure 2: Environmental Considerations

Figure 3: Plant Community and Priority Flora

Figure 4: Fauna Habitat

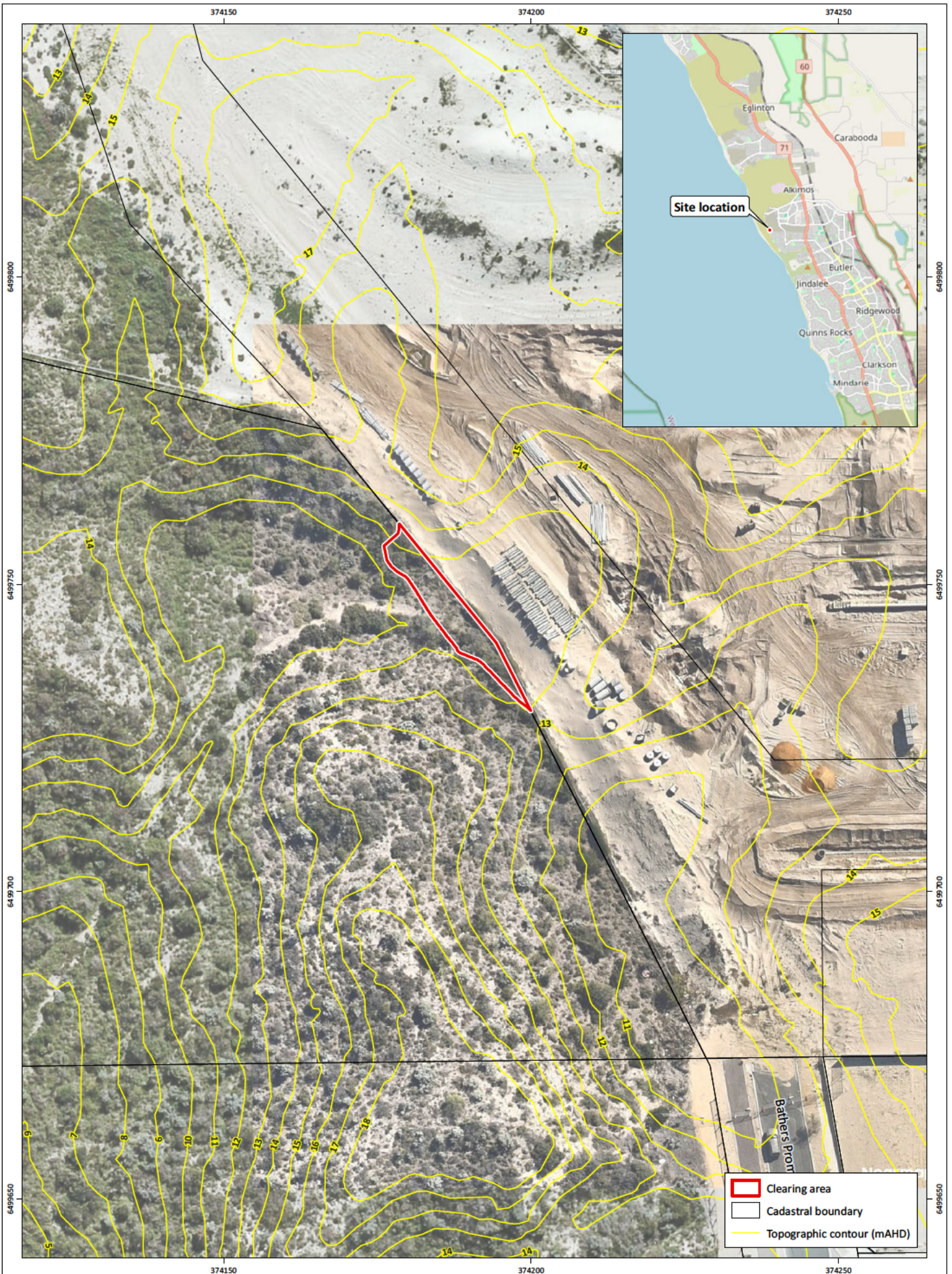


Figure 1: Site Location

Project: Clearing Permit - Alkimos Beach Foreshore Area Batter - (Lot 9060) Leatherback Boulevard
Client: WAPC

Plan Number: EP18-012(15)-F34
Drawn: WJC
Date: 04/05/2026
Checked: DRAFT
Approved: DRAFT
Date: -/-/-



0 10 20
 Metres
Scale: 1:800@A4
 GDA 1994 MGA Zone 50



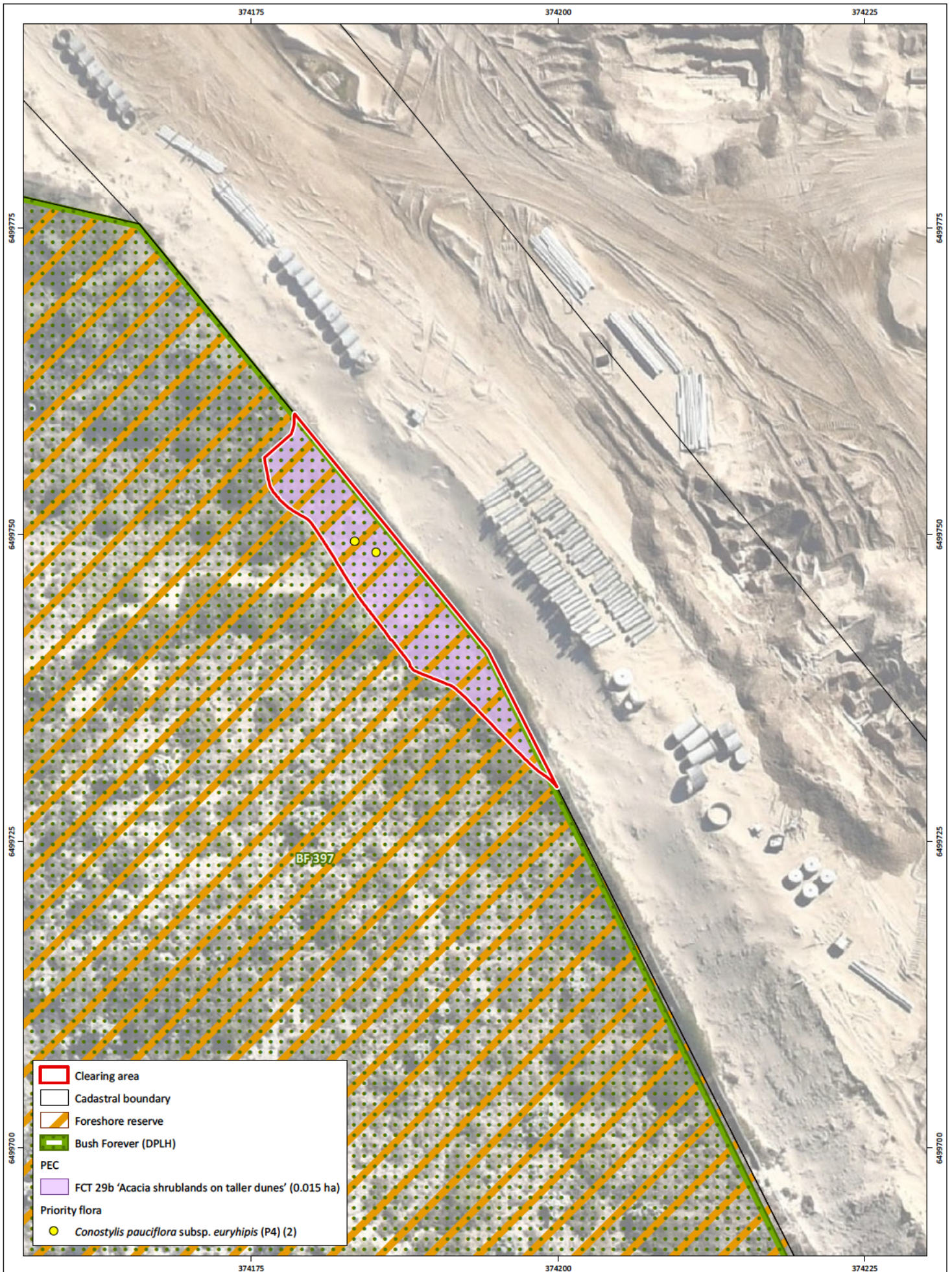


Figure 2: Environmental Considerations

Project: Clearing Permit - Alkimos Beach Foreshore Area Batter - (Lot 9060) Leatherback Boulevard
Client: WAPC

Plan Number: EP18-012(15)-F35
Drawn: WJC
Date: 04/05/2026
Checked: DRAFT
Approved: DRAFT
Date: -/-/-



0 5 10
 Metres
Scale: 1:400@A4
 GDA 1994 MGA Zone 50



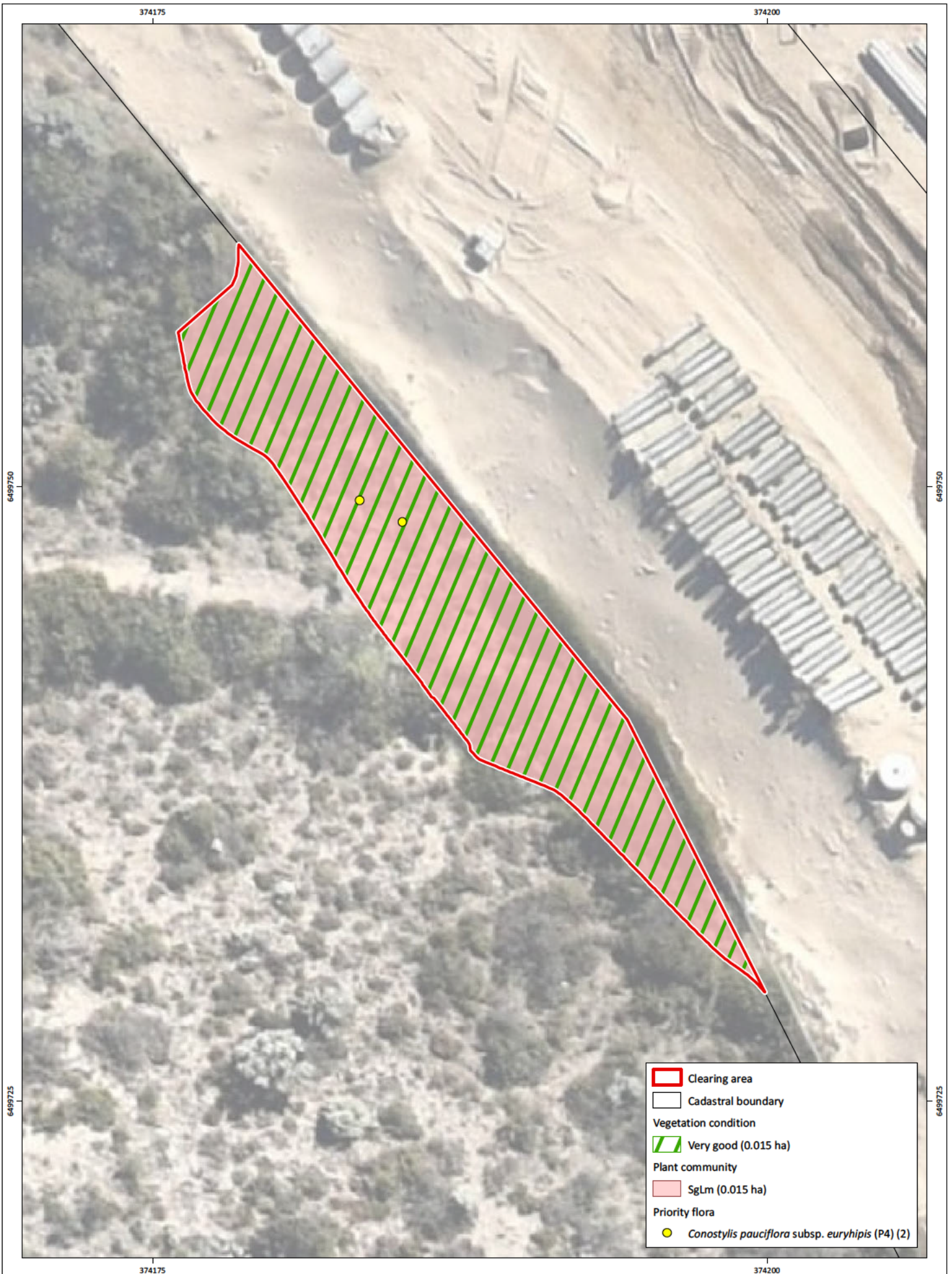


Figure 3: Plant Communities and Priority Flora

Project: Clearing Permit - Alkimos Beach Foreshore Area Batter - (Lot 9060) Leatherback Boulevard
Client: WAPC

Plan Number: EP18-012(15)-F36
Drawn: WJC
Date: 04/05/2026
Checked: DRAFT
Approved: DRAFT
Date: -/-/----



0 2.5 5
 Metres
Scale: 1:200@A4
 GDA 1994 MGA Zone 50





Figure 4: Fauna Habitat

Project: Clearing Permit - Alkimos Beach Foreshore Area Batter - (Lot 9060) Leatherback Boulevard
Client: WAPC

Plan Number: EP18-012(15)-F38
Drawn: WJC
Date: 04/05/2026
Checked: DRAFT
Approved: DRAFT
Date: --/------



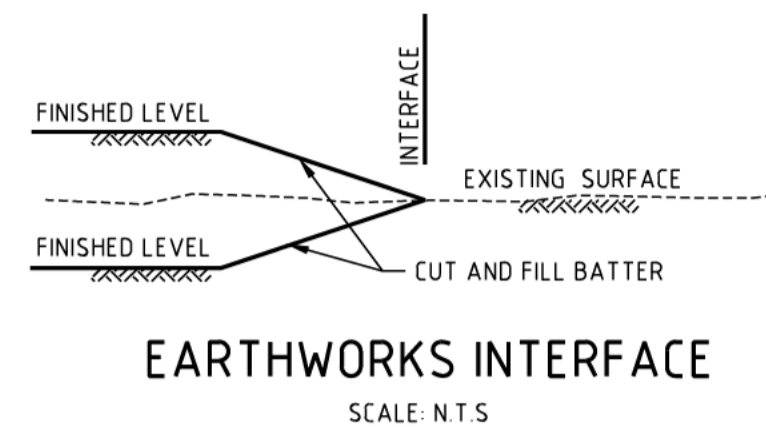
0 2.5 5
 Metres
Scale: 1:200@A4
 GDA 1994 MGA Zone 50



Appendix A

Batters Promenade Design





| LEGEND | |
|--------------------------------|------------------|
| DESCRIPTION | SYMBOL |
| FINISHED SURFACE CONTOUR MAJOR | — 25.0 — |
| FINISHED SURFACE CONTOUR MINOR | — 25.0 — |
| EXISTING SURFACE CONTOUR MAJOR | - - - 21.0 - - - |
| EXISTING SURFACE CONTOUR MINOR | - - - 21.0 - - - |
| FINISHED LOT PAD LEVEL | (25.00) |
| FINISHED LOT SPOT LEVEL | -25.00 |
| PROPOSED RETAINING WALL | — |
| BUILDING SETBACK LINE | - - - - - |

- NOTES**
- ALL LEVELS IN METRES TO AHD SURVEY BY MNG
 - BATTERS TO EXISTING SURFACE AT 1:3 (CUT) 1:4 (FILL) UNLESS NOTED OTHERWISE
 - BATTER POSITION FOR FUTURE WALLS TO ENSURE CUT TO FILL EARTHWORKS BALANCE
 - ALL UNSUITABLE MATERIAL TO BE REMOVED BY THE CONTRACTOR TO APPROVED TIPPING SITE PRIOR TO COMMENCEMENT OF CONSTRUCTION ALL FEES TO BE PAID BY CONTRACTOR
 - EXTENT OF CLEARING AND EARTHWORKS TO BE LIMITED TO THE STAGE CLEARING BOUNDARY UNLESS AGREED WITH THE SUPERINTENDENT
 - ALL CLEARED MATERIAL TO BE MULCHED AND STOCKPILED ON SITE AS DIRECTED BY THE SUPERINTENDENT
 - CONTRACTOR TO LOCATE ALL EXISTING SERVICES PRIOR TO COMMENCEMENT OF WORKS ON SITE
 - CONTRACTOR TO GRADE EVENLY BETWEEN DESIGN CONTOURS AND MATCH INTO EXISTING SURFACE AT LIMIT OF EARTHWORKS BOUNDARY WHERE APPROPRIATE
 - EXCESS CUT FROM EARTHWORKS SHALL BE PLACED ON SITE AS DIRECTED BY THE SUPERINTENDENT
 - WHERE LIMESTONE IS WITHIN 600mm OF THE FINAL SURFACE LEVEL THE CONTRACTOR SHALL TREAT THE SITE IN ACCORDANCE WITH THE SPECIFICATION
 - DESIGN LEVELS SHOWN SHALL BE ON THE FINISHED SURFACE INCLUDING TOPSOIL WHERE SPECIFIED
 - THE CONTRACTOR SHALL LIMIT THE MOVEMENT OF EQUIPMENT AND MANPOWER TO THE MINIMUM AREA NECESSARY AND PROTECT ALL VEGETATION AND EXISTING SERVICES ON SITE
 - ADJACENT RESIDENTS TO BE NOTIFIED OF THE WORKS AT LEAST TWO WEEKS IN ADVANCE CONTRACTOR TO PROVIDE MOBILE NUMBER FOR SUPERVISOR AS PART OF NOTIFICATION

WARNING TO CONTRACTOR UXO
THIS PROPERTY IS ON A SITE WHERE RECORDS CONFIRM THERE IS A HISTORY OF MILITARY ACTIVITIES THAT HAVE RESULTED IN RESIDUAL UXO. A POSSIBILITY EXISTS THAT DANGEROUS ITEMS OF UXO MAY STILL BE FOUND ON THIS SITE. CONTACT POLICE IF A SUSPICIOUS ITEM THAT MAY BE UXO IS FOUND. VISIT www.defence.gov.au/uxo FOR FURTHER INFORMATION.

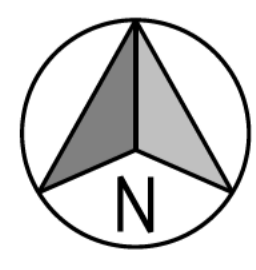
NOTICE TO CONTRACTOR
IT IS THE CONTRACTOR'S RESPONSIBILITY TO INVESTIGATE THE NATURE AND LOCATION OF ALL SERVICES WHICH MAY BE ENCOUNTERED AND TO CONSULT WITH THE RELEVANT SERVICE AUTHORITIES PRIOR TO COMMENCEMENT OF EXCAVATIONS. FAILURE TO DO SO OR TO TAKE DUE CARE SHALL NOT LIMIT THE CONTRACTOR'S LIABILITY FOR REPAIR OF ALL SERVICES DAMAGED BY HIM DURING CONSTRUCTION WORKS THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY FOR THE PROTECTION OF ALL EXISTING SERVICES.

NOTE:
STRICTLY NO CLEARING, EARTHWORKS, VEHICULAR MOVEMENT OR PLACEMENT OF PLANT OR MATERIALS PERMITTED OUTSIDE OF THE EXTENT OF EARTHWORKS BOUNDARY UNLESS DIRECTED BY THE SUPERINTENDENT

PLAN
1:1000

P:\6016 Alkimos Beach\6016-406-SK03.dwg, 16/04/2026 2:16:19 PM, emmal, Digital Signing PDF, p03, 1:1, CW Reference

| REV | DATE | DRN | CKD | APP | AMENDMENT |
|-----|----------|-----|-----|-----|------------------------|
| A | 16.04.26 | EL | | | ISSUED FOR INFORMATION |



COPYRIGHT
The concepts and information contained in this document are the Copyright of Cossill & Webley Pty Ltd. Use or copying of the document in whole or part without the written permission of Cossill & Webley Pty Ltd constitutes an infringement of copyright.
This plan shall only be printed in full colour. If this plan is printed in black and white or grey scale it is not to be used for construction.
This plan is not to be used for construction unless issued as revision 0 or higher.

CW COSSILL & WEBLEY
CONSULTING ENGINEERS
Mailing Address
PO Box 680
Subiaco WA 6904
T (08) 9422 5800
Street Address
Level 1, 502 Hay Street
Subiaco WA 6008
E perth.reception@cosweb.com.au

CLIENT
LEND LEASE COMMUNITIES
(ALKIMOS PTY LTD)
APPROVED
[Signature]
DESIGNED
EL
SCALE
1:1000

PROJECT
ALKIMOS BEACH - PRECINCT 4
TITLE
FORESHORE RESERVE BATTER PLAN
WAPC No.
200341
DRAWING No.
6016-P406-SK03
REVISION
A

ORIGINAL SIZE A1