

# **Ecological Assessment Report**

4705-4715 and 4733-4743 Mount Lindesay Highway, North Maclean

Prepared for Roubaix Properties Pty Ltd

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# Acronyms and Glossary

Term	Definition	
ALA	Atlas of Living Australia	
DES	Department of Environment and Science (Qld)	
DOR	Department of Resources (Qld)	
DCCEEW	Department of Climate Change, Energy, the Environment and Water (Cwth)	
Development footprint	Refers to the area within which development, over- and under-ground services, access tracks and other associated infrastructure may be located	
DSDILGP	Department of State Development, Infrastructure, Local Government and Planning (Qld)	
ED Act	Economic Development Act 2012 (Qld)	
EDQ	Economic Development Queensland	
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999 (Cwth)	
EVNT	Endangered, vulnerable and near threatened	
GTRE	Ground-truthed regional ecosystem	
MLES	Matters of local environmental significance	
MNES	Matters of national environmental significance	
MSES	Matters of state environmental significance	
NC Act	Nature Conservation Act 1992 (Qld)	
RE	Regional ecosystem	
PDA	Priority Development Area	
PMST	Protected matters search tool	
Site boundary	The extent of the properties that the project is located within	
SARA	State assessment and referral agency	
SDAP	State development assessment provisions	
SPRAT	Species profile and threats database	
TEC	Threatened ecological community	
VM Act	Vegetation Management Act 1999 (Qld)	
WoNS	Weeds of national significance	



## I. Introduction

Green Tape Solutions was engaged by Roubaix Properties Pty Ltd to undertake an ecological assessment of a proposed development site located at 4705-4715 (Lot 4 on RP137101) and 4733-4743 Mount Lindesay Highway (Lot 6 on RP137101), North Maclean (also referred to as the 'site'). The site is located within the Greater Flagstone Priority Development Area (PDA) and this report has been prepared to form part of an application to Economic Development Queensland (EDQ) for a PDA Development Permit for Operational Works – Earthworks and Vegetation Clearing.

The approved Context Plan for the North Maclean Industry and Business Zone has a biodiversity corridor which extends adjacent to the subject site Lot 6 RP137101, however the final width of this biodiversity corridor is not delineated and could include significant vegetation on this site. This report will investigate and make recommendations to the context plan and biodiversity corridor.

For the scope of development being earthworks, off site impact due to earthworks filling have been assessed by Burchills Engineering to ensure no off-site impact to the watercourse and wetland which is most relevant for swamp tea-tree environment and habitat on adjoining properties.

This report identifies the ecological values associated with the site, the potential presence of threatened species and threatened ecological communities listed under Commonwealth, State and Local legislation, fauna and flora habitat values and landscape connectivity values. This report also assesses potential impacts associated within the proposed development and where required, provides mitigation measures to ensure that the proposal complies with relevant environmental legislation.



### 1.1 Site Description

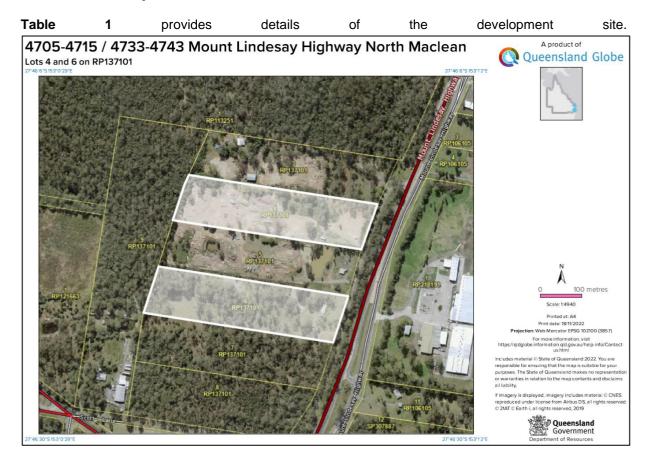


Figure 1 depicts the location of the site.

**Table 1: Property Information** 

Address	4705-4715 Mount Lindesay Highway North Maclean – Lot 4 on RP137101 4733-4743 Mount Lindesay Highway North Maclean – Lot 6 on RP 137101	
Total Survey Plan Area (m²)	80,290 m <sup>2</sup> (8.03 ha)	
Local Government Area (LGA)	Logan City Council	
Zoning under local planning scheme	Priority Development Area	
Priority development area (PDA)	Greater Flagstone	
PDA Precinct	Industry and Business Zone (North Maclean)	
Assessment Manager	Economic Development Queensland (EDQ)	

Lot 6 currently supports a dwelling and associated structures. This lot has road frontage to Mount Lindesay Highway and an unsealed access service road provides access to the existing properties for earthworks as well as residences on Lot 3 and 6 RP137101. It is envisaged that a future sealed service road and resumption along the property boundary frontage will be completed by others upon completion of the planned Mount Lindesay Highway Chambers Flat Road to Greenbank Road upgrade project planned for delivery 2024 – 2026..



Lot 4 has an existing earthworks approval in place (EDQ reference DEV2020/1144) and works are currently being undertaken in conjunction with approved works being undertaken on Lots 3 and 5 on RP137101. All of which have been filled by the previous and current owners.

Lot 4 has been extensively cleared of native vegetation with only very scattered native canopy trees and shrubs remaining. Whilst still somewhat disturbed and degraded, Lot 6 supports a more intact cover of native vegetation. Vegetation on site was initially cleared in the 1960's (Qlmagery, 2023) with regrowth vegetation onsite now meeting remnant status. Vegetation on site consists of two vegetation communities. A description of these communities is provided in **Section 4.0**. Dams and drainage lines/waterways are present on both lots.



Figure 1: Site location (Source: Queensland Globe)

#### 1.2 Proposed Development

The proposed development on the site comprises earthworks to facilitate the future construction of industrial warehouses and offices. The proposed bulk earthworks plan is provided in **Appendix 1**.

It is envisaged the property boundary frontage will be resumed for the planned Mount Lindesay Highway Chambers Flat Road to Greenbank Road upgrade project planned for delivery 2024 – 2026. This is consistent with approvals granted to the north and south of the site for future service road alignment along the highway frontage.

In its current format, the development will require the removal of swamp tea-tree (*Melaleuca irbyana*) individuals; listed as Endangered under the *Nature Conservation Act 1992* (Qld) (NC Act) and approximately 23,700m<sup>2</sup> (2.3 ha) of supporting habitat for swamp tea-tree i.e. remnant vegetation



containing the Regional Ecosystem (RE) 12.3.19 - Eucalyptus moluccana and/or Eucalyptus tereticornis and E. crebra open forest to woodland, with a sparse to mid-dense understorey of Melaleuca irbyana on alluvial plains. This RE is listed as Endangered under the Vegetation Management Act 1999 (Qld) (VM Act) and is also included within the listing for the Swamp Tea-tree (Melaleuca irbyana) Forest of South-east Queensland Threatened Ecological Community (TEC) under the Environment Protection and Biodiversity Conservation Act 1999 (Cth) (EPBC Act). The site also provides supporting habitat for Koala (Phascolarctos cinereus), listed as Endangered under the EPBC Act and NC Act. Further details are provided in this report.

### 1.3 Scope of Works

The scope of works for this report includes:

- A detailed desktop assessment, including review of relevant background, database and mapping information to identify applicable Commonwealth, State and Local government overlays/mapping triggers and potential constraints and development opportunities for the site.
- A site assessment to determine the extent and structural integrity of vegetation communities (including the presence of weed species) and fauna habitat values, and to identify and assess ecologically significant areas and features.
- Assessment of the site's conservation values with respect to its position within the local and broader landscape, including corridor linkages and riparian areas.
- A description of the ecological values (field survey results) of the site and confirmation of the likelihood of occurrence of flora and fauna species and ecological communities protected under Commonwealth, State and Local legislation.
- Identification of statutory considerations relevant to ecological aspects of the proposed development and assessment of the proposed development against the relevant Local and State legislation (including State Development codes and local planning scheme provisions; where applicable) with recommendations on how to meet the environmental overlay codes and protect environmental values.
- Evaluation of ecological constraints on the site and impacts and provision of management measures to mitigate such impacts.
- Preparation of maps relevant to the report, including vegetation community and clearing maps.



# 2 Methodology

#### 2.1 Desktop Assessment

A desktop assessment was undertaken prior to field investigations to review relevant environmental databases, technical reports, maps and legislation (Commonwealth, State and Local) to identify ecological values with the potential to occur within and surrounding the site. Recent and historical aerial imagery was also reviewed to assist with the verification of remnant and regrowth vegetation. The results of the desktop assessment were used to inform the field survey design.

Searches undertaken as part of the desktop assessment were based on the site's central coordinates (-27.7717, 153.0127) with a standard 10 km buffer or by lot and plan. The following resources were reviewed:

- Environmental Protection and Biodiversity Conservation Act 1999 (EPBC Act) Protected Matters Search Tool (PMST), Commonwealth Department of Climate Change, Energy, the Environment and Water (DCCEEW), accessed 18th November 2022 (Appendix 2).
- Department of Environment and Sciences (DES) WildNet database (Wildlife Online) records, accessed 18th November 2022 (Appendix 3);
- Department of Resources (DOR) Vegetation Management Report, accessed 18<sup>th</sup> November 2022 **(Appendix 4)** which includes the following:
  - Regulated vegetation management (RVM) map;
  - Vegetation management supporting map (VM Act Regional Ecosystems) including Essential Habitat;
  - Vegetation management pre-clear regional ecosystem map;
  - Vegetation management watercourse and drainage features map;
  - Protected plants flora survey trigger map (administered by the Department of Environment and Science DES); and
  - Koala priority area (KPA) and Koala habitat area (KHA) (SEQ Koala Conservation Plan Map; administered by DES).
- Watercourse Identification Map under the Water Act 2000, accessed 18th November 2022 via Queensland Globe;
- DES Biomaps online mapping portal (DES, 2020);
- Atlas of Living Australia (ALA) species search, accessed 18th November 2022 (ALA, 2014);
- Logan Planning Scheme 2015 overlay maps, accessed 18th November 2022 (Appendix 5); and
- Aerial imagery (Queensland Globe / Google Earth Pro / ESRI).



#### 2.2 Field Survey

A site assessment was conducted on 8<sup>th</sup> November 2022 by a qualified ecologist experienced in conducting flora and fauna surveys, wildlife ecology and/or environmental management.

The assessment involved the following:

- · Validation of desktop findings;
- Verification of the floristic structure and composition of vegetation communities present;
- Assessment and description of fauna habitat present and recording any incidental fauna sightings;
- Searches for potentially occurring significant species (and associated habitat) as listed under the EPBC Act and/or Nature Conservation Act 1992 (NC Act);
- Identification of weed species and documentation of vegetation disturbance;
- Assessment of the ecological values on site with respect to the mapped environmental values on the site.

#### 2.2.1 Flora Species Survey

General baseline botanical surveys were undertaken to describe the vegetation communities, dominant flora species and their extent. Fauna habitat values and opportunistic sightings of fauna were also recorded. The survey was undertaken in accordance with quaternary survey methods described in Neldner *et al.* (Version 6.0) (2019) by compiling a species inventory and assigning relative dominance of each flora species within the dominant structural layer.

Threatened species searches were undertaken using the random meander technique described by Cropper (1993), which involved traversing areas of suitable habitat in a non-standardised manner. Where identified, samples from each threatened flora species were sent to the Queensland Herbarium to confirm identification.

#### 2.2.2 Fauna Species and Habitat Survey

Fauna and habitat values were assessed at the same time as conducting the vegetation survey. The following characteristics were observed to determine fauna likely to occupy or utilise the site based on the type and quality of habitat present:

- Confirmation of habitat units and habitat structure including an analysis of habitat quality;
- Presence of Koala food and habitat trees;
- Targeted searches for Koalas and evidence of Koala presence (scats and scratches);
- Presence of hollow-bearing trees, their form and size;
- Presence of scratches on tree trunks and scats of wildlife;
- Presence of hollow logs/debris and areas of dense leaf litter cover;
- Level of disturbance (e.g. weed, litter); and



· Habitat connectivity.

No fauna trapping was undertaken for the site.

#### 2.2.3 Survey Limitations

The ability to detect plants and accurately identify them to species level can vary greatly with season, prevailing climatic conditions and the presence of reproductive material (e.g. flowers, fruit and seed capsules). The survey undertaken as part of this assessment only represents a 'snapshot' in time and therefore may not provide a true indication of plant presence at the site. For example, some cryptic flora species may only be detected during flowering periods that were not present during the current survey. Hence, this survey should not be regarded as conclusive evidence that certain protected plants do not occur at the site. However, every effort has been made to detect these species in their preferred habitat areas.

Tree locations depicted in this report have not been accurately surveyed with survey-grade equipment. Green Tape Solutions does not accept responsibility for any use of or reliance upon the contents of these drawings by any third party. All locations on site must be confirmed and any discrepancies clarified prior to commencement of site works.



# 3 Environmental Regulatory Framework

**Table 2** describes Commonwealth, State and Local Government legislative arrangements to manage potential environmental and ecological impacts arising from development. This table details the relevant Acts, Regulations, Policies, Code, Zoning Scheme and overlays for Matters of National Environmental Significance (MNES), Matters of State Environmental Significance (MSES) and Matters of Local Environmental Significance (MLES). Some matters are listed in all three jurisdictions while others are specific to a single authority.

**Table 2: Legislative Framework** 

Legislative Element	Description	Triggers	Database Search	Applicable to report		
Australian Go	Australian Government					
Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)	The EPBC Act protects the environment in relation to Matters of National Environmental Significance (MNES). Under the EPBC Act, if a development proposal involves an action that will or is likely to result in a significant impact on a MNES, the proposal must be referred to the DCCEEW (an EPBC Referral).	Action that will have, or is likely to have, a significant impact on any MNES.	EPBC Protected Matters Search Tool (PMST)	Yes – the site contains Swamp Tea-tree (Melaleuca irbyana) Forest of South-east Queensland TEC refer to Section 4		
Queensland 0	Sovernment					
Coastal Protection and Management Act 1995	The State Coastal Management Plan 2002 (Coastal Plan) describes how the coastal zone is to be managed and guides relevant decisions by the State and local governments for effective protection and management of the coastal zone. The State Coastal Plan applies to the coastal zone defined in section 11 of the Coastal Protection and Management Act 1995. The determination of the coastal zone depends on the existence of a clear link with the coast or coastal resources.	Proposed development within a coastal zone.	Coastal Management District (CMD) and Coastal Hazard Area maps	No. The site is not located within a CMD.		
Biosecurity Act 2014	The main purpose of the <i>Biosecurity Act 2014</i> is to provide for the risk-based management of biosecurity matters, including prohibited and restricted invasive animals and plants.	Presence of prohibited and/ or restricted invasive animals or plants on site.	Review of Schedule 2 of the Act and Weeds of National Significance (WoNS) database	Yes – this site contains weed listed under the Act. Refer to Section 4.		
Fisheries Act 1994	The Fisheries Act 1994 (Fisheries Act) provides for the use, conservation and enhancement of Queensland's fisheries resources and fish habitats.  Waterway barrier works are regulated under the Fisheries Act	Action resulting in interference with fish passage in a mapped watercourse defined under the Fisheries Act	Mapped waterway on the Queensland Waterways for Waterway Barrier Works Map.	Yes. The site contains mapped waterways identified on the Queensland Waterways for		



Legislative Element	Description	Triggers	Database Search	Applicable to report
	1994 and Planning Act 2016 when barriers to fish movement, including partial barriers, are installed across waterways. Any waterway barrier works within a mapped waterway defined under the Fisheries Act 1994 as shown on the Queensland Waterways for Waterway Barrier Works Map will require either a development application under the Planning Act 2016 or must achieve compliance with the Accepted development requirements for operational works that is constructing or raising waterway barrier works. Barrier works include construction, raising, replacement and some maintenance works on structures such as culvert crossings, bed level and low-level crossings, weirs and dams, both permanent and temporary. Where a waterway determination is questionable, it is the on-ground physical and hydrological attributes that ultimately determines whether a particular feature is a defined waterway that provides for fish passage and consultation with Fisheries Queensland is mandatory.  In addition, marine plants are protected under the Fisheries Act 1994. The destruction, damage or disturbance of marine plants without prior approval from Fisheries Queensland is prohibited	(waterway barrier work) or interference with marine plants/ mangroves.		Waterway Barrier Works Map.
Nature Conservation Act 1992 (NC Act)	The primary purpose of the <i>Nature Conservation Act 1992</i> (NC Act) is to conserve biodiversity by creating and managing protected areas, managing and protecting native wildlife, and managing the spread of non-native wildlife. Unless authorised, it is an offence under the NC Act to take, keep, use, or move protected flora and fauna for commercial, recreational or other purposes. Where a proposed development will result in such impacts to flora and/or fauna protected under the NC Act, authorisation from DES will be required.	Actions resulting in a significant impact upon NC Act listed matters and special least concern fauna and/or impacts to animal breeding places  Action occurring within a mapped high-risk area and will directly or indirectly impact (occurring 100 m of) threatened flora species listed under NC Act.	DES Protected Flora Survey Trigger Map – as part of the DOR Vegetation Management Report	Yes – the site contains habitat for koala. Refer to Section 4.  Yes. The site is mapped within a high-risk area on the Protected Flora Survey Trigger Map and contain <i>M. irbyana</i>
Vegetation Management	The clearing of native vegetation in Queensland is regulated by the VM Act, which protects the clearing of	Clearing of regulated vegetation	DOR Vegetation Management Report -	No. The site is mapped as supporting



Legislative Element	Description	Triggers	Database Search	Applicable to report
Act 1999 (VM Act) Vegetation Management and Other Legislation Amendment Bill 2018	remnant vegetation as shown by the DOR mapping. The VM Act works in conjunction with the <i>Planning Act</i> 2016 and Planning Regulation 2017 to ensure that where vegetation clearing is for a relevant purpose and constitutes assessable development.	communities, unless exempt under the Planning Act 2016 and/or Vegetation Management Regulation.	Regulated Vegetation Management (RVM) Map	regulated vegetation (Category C – High-value regrowth) and wetland area. However, clearing for development related to PDAs is exempt under the VM framework.
		Clearing of habitat that is mapped as essential habitat for endangered, vulnerable or near-threatened wildlife protected under the NC Act.	DOR Vegetation Management Report - Vegetation management supporting map	No. The site is mapped as supporting essential habitat; however clearing for development related to PDAs is exempt under the VM framework.
Water Act 2000	The Water Act 2000 provides for the sustainable management of water and other resources and establishes a framework for the operation of water authorities. The Act aims to provide and manage water resources through the principles of water sharing, cost sharing and pricing principles, planning and water source quality.	Action resulting in interference with overland flow, earthworks, significant disturbance.	Mapped Watercourse on the Watercourse identification map (WIM)	No. The site does not impact on any mapped watercourses identified on the WIM.
Economic Development Act 2012	The purpose of the ED Act is to facilitate economic growth and development in Queensland via a streamlined planning and development assessment framework that applies to declared PDAs. Environmental impacts for PDA-related development are considered under the ED Act.	Action within a Priority Development Area.	SPP Interactive Mapping System	Yes. The site is located within the Greater Flagstone PDA.
Planning Act 2016 and Planning Regulation 2017	The SEQ Koala Conversation Strategy 2020-2025 mapping identifies Koala Priority Areas (KPAs) and Koala Habitat Area (KHA) regulated under the Planning framework.	Action resulting in impact on mapped Koala habitat areas	SEQ Koala Conservation Plan map provided as part of the DOR Vegetation Management Report.	No. The site is mapped in a KPA and contains KHA; however, the koala habitat planning controls under the Planning Act do not apply as PDA-related development is exempted.
	State code 8: Coastal development and tidal works	Refer to Coastal Protection and Management Act 1995 section.		No. The site is not mapped within the Coastal Management District.



Legislative Element	Description	Triggers	Database Search	Applicable to report
	State code 9: Great Barrier Reef Wetland Protection Areas	Action resulting in interference with Great Barrier Reef wetland protection areas or wetland of high (HES) or general (GES) ecological significance.	Wetland maps under the Environmental Protection Act 1994 -	No. The site is not mapped as supporting a regulated wetland area under the EP Act.
	State code 10: Taking or interfering with water  The purpose of this code is to provide for the sustainable management of water by ensuring that development for taking or interfering with water.  SDAP Guideline 18: Waterway barrier works	Action resulting in interference with mapped watercourses, lakes, spring, underground water and overland flow water.	Mapped Watercourse on the Watercourse Identification Map (WIM)	No. The site is not mapped as supporting a mapped watercourse on the WIM.
	State code 11: Removal, destruction or damage of marine plants and State Code 12: Development in a declared fish habitat area	Refer to Fisheries Act 1994 section		No.
	State code 16: Native vegetation clearing	Refer to Vegetation Management Act 1999 section		No. The site is mapped in as having regulated vegetation; however, the planning regulation Planning Act do not apply as PDA-related development is exempted.
Logan City Co	ouncil			
Logan Planning Scheme 2015 (v8.1)	Biodiversity areas and Waterway corridor and wetland overlays	Development within mapped overlays that is assessable under the local planning scheme	Logan PD Hub Interactive mapping	No. Environmental impacts for PDA-related development are considered under the ED Act. EDQ is the assessment manager for the Greater Flagstone PD and the development does not require assessment against the local planning scheme.



# 4 Ecological Values Assessment

#### 4.1 Ground-truthed Vegetation Communities

The site assessment determined that the proposed development site supports two (2) vegetation communities.

#### 4.1.1 Vegetation Community 1: Eucalypt Woodland

Vegetation on Lot 6 corresponds to remnant eucalypt woodland. Canopy species present include Queensland blue gum (*Eucalyptus tereticornis*), pink bloodwood (*Corymbia intermedia*), narrow-leaved ironbark (*Eucalyptus crebra*), gum-topped box (*Eucalyptus moluccana*), broad-leaved paperbark (*Melaleuca quinquenervia*) and swamp box (*Lophostemon suaveolens*). The midstorey is predominantly sparse and contains swamp tea-tree (*Melaleuca irbyana*), wattle (*Acacia*) species, soap tree (*Alphitonia excelsa*) and juvenile canopy species. The ground layer comprises a mix of exotic pasture grass and native sedges and rushes. The canopy height is up to 20 m with an estimated canopy cover of 10-50%. Swamp tea-tree (*Melaleuca irbyana*) is present predominantly along the site boundaries and is likely to have historically occurred more extensively across the site for agriculture use (in the 1960s where most of the site was cleared) and the fish farm (constructed in the 1980s on lot 4).

The RVM map published by the DOR identifies vegetation within this lot as Category C (high-value regrowth) containing the regional ecosystems (REs) 12.3.18 and 12.3.19. The site assessment determined that this community corresponds to the RE 12.3.19 - *Eucalyptus moluccana* and/or *Eucalyptus tereticornis* and *E. crebra* open forest to woodland, with a sparse to mid-dense understorey of *Melaleuca irbyana* on alluvial plains (listed as Endangered under the *Vegetation Management Act* 1999) and meets remnant status (i.e. the predominant canopy height exceeds 70% of canopy height benchmark of 18 m, exceeds 50% of the canopy cover benchmark of 41% and is composed of species characteristics of the community's undisturbed predominant canopy).

Vegetation on adjacent lots to the south and west contain patches of swamp tea tree (*Melaleuca irbyana*) forest (**Figure 3**) that are contiguous with degraded eucalypt woodland within this lot. The understorey within this patch is significantly more intact on adjacent lots.

RE 12.3.19 corresponds to the Swamp Tea-tree (*Melaleuca irbyana*) Forest of South-east Queensland TEC, which is listed as Critically Endangered under the EPBC Act. The site is mapped as containing Essential Habitat for *Melaleuca irbyana* under the Vegetation Management supporting map (Qld) and locally significant vegetation - *Melaleuca irbyana* (swamp tea-tree) community under the Logan City Plan 2015. No other TECs listed under the EPBC Act were recorded on site during the site assessment.





Plate 1: Degraded Eucalypt woodland on Lot 6



Plate 2: Degraded Eucalypt woodland on Lot 6



Plate 3: Dam area on Lot 6



Plate 4: House area on Lot 6



Plate 5: More intact understorey on adjacent lot



Plate 6: Melaleuca irbyana on site

#### 4.1.2 Vegetation Community 2: Exotic Grassland

Vegetation across Lot 4 consists of a mostly exotic grassland with few canopy trees predominantly restricted to the boundary lines with a few scattered Queensland blue gum (*Eucalyptus tereticornis*) across the site that have died sometime in the past. Earthworks across the site has resulted in a high abundance of ruderal and weed species growing in the disturbed soil. Boundary vegetation on the eastern side of the lot contains swamp tea-tree (*Melaleuca irbyana*). Boundary vegetation consists of



Queensland blue gum (*Eucalyptus tereticornis*), swamp box (*Lophostemon suaveolens*) and broad-leaf paperbark (*Melaleuca quinquenervia*), as well as exotic landscape and weed species such as bamboo and Chinese elm (*Celtis sinensis*).

This community is mapped as Category X (non-remnant) under DOR mapping (Plates 7-8). The accuracy of this mapping was confirmed during the site assessment.





Plate 7: Degraded grassland on Lot 4

Plate 8: Melaleuca irbyana on Lot 4

#### 4.2 Weed Species

Many invasive plant species are present on site, including species listed as restricted under the *Biosecurity Act 2014* (Qld) and as Weeds of National Significance (WoNS), including:

- lantana (Lantana camera) Restricted: Category 3 and WoNS;
- ground asparagus (Asparagus aethiopicus) Restricted: Category 3 and WoNS;
- asparagus fern (Asparagus virgatus) Restricted: Category 3 and WoNS; and
- giant rat's tail grass (Sporobolus pyramidalis) Category 3.

A full list of weed species present on site is provided in **Appendix 6**.

#### 4.3 Flora Species Assessment

Swamp tea-tree (*Melaleuca irbyana*) (individually listed as Endangered under the NC Act) is present on Lot 4 and on lots adjacent to Lot 6, including individuals along the boundary of Lot 6.

The site is mapped within a mapped high-risk area (i.e. an area where endangered, vulnerable or near threatened native plants are present or are likely to be present) on the Protected plants flora survey trigger map. When clearing within a high-risk area is proposed (where exemptions do not apply), a flora survey of the clearing impact area must be undertaken by a suitably qualified person in accordance with the DES flora survey guideline. The survey must look for all endangered, vulnerable or near threatened plants that may occur in the clearing impact area, which is defined as area to be cleared and typically, a 100m buffer around that area. A flora survey report must be prepared and submitted to DES as part of either an exempt clearing notification (where no threatened plants are within the clearing impact area) or a protected plant clearing permit application; approval for which must be obtained from DES prior to commencement of clearing. Given the presence of *Melaleuca irbyana* within the site, a flora survey has



been undertaken in accordance with the Flora Survey Guidelines – Protected Plants (DES, 2019) has been undertaken. Based on the current bulk earthworks plan, the development shall require the removal of *M. irbyana* individuals and a protected plant clearing permit shall be required prior to commencement of any operational works. The results of the flora survey report shall be provided within a separate report to be prepared for submission to the DES for the permit.

The site supports suitable habitat for Bailey's cypress (*Callitris baileyii*) and *Lagenophora fimbriata*; however, these species were not recorded on site or within 100m of the buffer area during the protected plants flora survey. The site does not support suitable supporting or preferred habitat for any other species identified by desktop searches as potentially occurring within the surrounding area.

#### 4.4 Fauna Species Assessment

Fauna recorded on site include White-faced heron (*Egretta novaehollandiae*), Australian Wood Duck (*Chenonetta jubata*), Red-backed Fairywren (*Malurus melanocephalus*), Australian Magpie (*Cracticus tibicen*) and Blue-faced Honeyeater (*Entomyzon cyanotis*).

No threatened fauna species were recorded on site during the site assessment. Further discussion regarding the presence of suitable supporting habitat for threatened fauna species is provided in Section 4.5.

A full list of fauna occurring on site during the site assessment is provided in **Appendix 6.** 



#### 4.5 Habitat Assessment

Fauna habitat features of the site consist of resources (e.g., foraging, breeding, refuge, shelter and roosting opportunities) of varying quality and condition, including:

- Foraging resources associated with native flowering plants nectar, pollen and insect prey items;
- Coarse and fine woody debris;
- Dense areas of undergrowth vegetation;
- Dry grass, long grass and leaf litter;
- Arboreal termitaria and tree hollows; and,
- Permanent water sources (dams and creeks).

Overall, the site contains limited hollows and provides low habitat values. Small hollows are sparse though evident in mature trees on Lot 6.

**Table 3** provides a summary of rare and threatened species listed under the *Nature Conservation Act* 1992 that have been recorded within a 10 km radius of the site since 1980 (based on WildNet database records – refer to **Appendix 2**) and an assessment of the likelihood of occurrence of these species based on the habitat suitability and resources present within the site.

**Table 3: Habitat suitability** 

Species	Status	Habitat suitability
Tusked Frog (Adelotus brevis)	EPBC Act - Vulnerable NC Act - Vulnerable	Suitable Tusked frog may be present within the dam and waterway areas on site. This species has been found in urban and degraded areas and is thus somewhat resilient to human disturbance. It was also recorded nearby the site. No targeted amphibian survey has been undertaken on site.
Glossy Black-cockatoo (Calyptorhynchus lathami lathami)	EPBC Act – Vulnerable NC Act – Vulnerable	Not suitable The site does not contain suitable feed tree (she-oak Casuarina spp.) and preferred feed tree species (Allocasuarina spp.). This species requires large hollow-bearing trees for breeding but the site vegetation also does not currently provide suitable hollows for breeding.
Spotted-tailed Quoll (Dasyurus maculatus maculatus) (southern subspecies)	EPBC Act – Endangered NC Act – Endangered	Suitable This species requires suitable hollows for denning (rock shelters, small caves, hollow logs and tree hollows) as well as habitat with suitable prey species. Spotted-tailed Quolls usually prefer more intact eucalypt forest and woodlands; however, they are sometime observed in open country and grazed areas. This species is highly mobile and has large territories. The site does not support suitable resources for denning. Nearby patches of Eucalypt woodland and open forest may support suitable denning and foraging habitat and quolls may utilise the site during foraging



Species	Status	Habitat suitability
		forays ways from these patches. However, no sighting or record of this species occur on site or nearby.
White-throated Needletail ( <i>Hirundapus caudacutus</i> ) EPBC Act Status - Vulnerable NC Act Status - Vulnerable	EPBC Act - Vulnerable NC Act - Vulnerable	Suitable The White-throated Needletail is a migratory, non-breeding visitor to Australia during the austral summer. The site supports suitable foraging habitat for this migratory species and this species is likely to forage over the site under suitable conditions (e.g. ahead of storm fronts). This species would not utilise the site for breeding and given that they are almost exclusively aerial, are likely to utilise the site for roosting.
Southern Greater Glider (Petauroides volans)	EPBC Act - Vulnerable NC Act - Vulnerable	Not suitable The Southern Greater Glider ( <i>Petauroides volans</i> ) is predominantly restricted to eucalypt forests and woodlands of eastern Australia where it is typically found in highest abundance in taller, montane, moist eucalypt forests with relatively old trees and abundant hollows; however, it is also found in drier habitats in south-eastern QLD.
		The site does not contain enough mature /large trees (>46cm DBH; in accordance with the Guide to greater glider habitat in Queensland published by DES (2022)) to be considered habitat for large glider species.
Yellow-bellied Glider (Petaurus australis australis) (southern subspecies)	EPBC Act - Vulnerable NC Act - Vulnerable	Not suitable This species shows a preference for mature, old- growth forest containing suitable trees for shelter and foraging (Eyre, 2002) and strongly prefers forests with a high proportion of winter-flowering and smooth- barked eucalypts (Woinarski et al., 2014). The Yellow- bellied Glider has a large home range due to the dispersal of feed trees and the requirement for some level of floristic diversity to provide for year-round food supply. Due to these large home ranges, large areas of forest are required to maintain sub-population viability and the study by Eyre (2002) suggests that a minimum area of 320 km² is required for sub- population viability in southern Queensland.
		No glider feed-marks were noted during the site assessment. It is highly unlikely that Yellow-bellied Gliders would persist within the site – the site does not support suitable shelter/breeding resources or optimal foraging habitat for Yellow-bellied Gliders, the patch area in relation to the minimum area is less than that required for sub-population viability and the surrounding landscape context is likely to deter movement between patches.
Powerful Owl ( <i>Ninox</i> strenua)	EPBC Act – Not listed NC Act - Vulnerable	Not suitable The site supports suitable foraging habitat for this species, with suitable prey species (possum species) present. However, the site does not support preferred nesting and roosting habitat and does not provide suitably large hollows for breeding.



Species	Status	Habitat suitability
Koala (Phascolarctos cinereus)	EPBC Act - Endangered NC Act - Endangered	Suitable The WildNet database contains a total of 1055 Koala records within 10km of the site over a period of many years, including recent records from 2018 within the immediate surrounding area.  No signs of Koala presence (e.g. trunk scratches or scats) were noted during the site assessment; however the site supports Koala habitat trees, including preferred feed tree species (for example, Queensland blue gum <i>E. tereticornis</i> ). Given the presence of suitable habitat and the contiguity of site vegetation with larger and more intact patches of Koala habitat, it is likely that Koalas occupy or utilise the site for feeding, shelter and movement, at least periodically; particularly for foraging forays and during the breeding season and natal dispersal.

### 4.6 Corridors and Linkages

Vegetation within the site is contiguous with vegetation on adjacent lots to the south and west and thus forms part of larger patch of woody vegetation approximately 87 ha in area to the west, north-west south and north of the site. Linkages to the east are more limited due to historical clearing associated with agriculture, grazing and development (including road, residential and industrial development), with vegetation being restricted to paddock trees, trees along boundaries and within road reserve.

Under the Greater Flagstone PDA development scheme – Endorsed North Maclean Context Plan, the site and land to the immediate north, west and south is zoned as Industry and business. Vegetation patches may not be retained in their current form. The site itself is not located within a Biodiversity corridor or future indicative biodiversity corridor identified by the context plan. An identified future biodiversity corridor is located directly to the west of the site.

Ongoing development within the PDA shall result in increased habitat loss and fragmentation and stepping stone habitat is thus likely to become important in maintaining biodiversity corridors and wildlife movement throughout the area. Retention of vegetation within the site would contribute to linkages within the landscape by the provision of stepping stone habitat and refugia for threatened species.

#### 4.7 Summary of Ecological Values

**Table 4** details the findings of the desktop review, site assessment and analysis of these findings against relevant Commonwealth, state and local government environmental legislation, policies, codes and planning instruments. This analysis includes the following matters:

- Ground-truthed vegetation communities, including EPBC-listed TECs, state-listed vegetation communities, wetlands and essential habitat reported within a 10km buffer from the site;
- Invasive species on site and significance of the infestations;
- Listed threatened fauna and flora species recorded within a 10 km buffer and within the site;
- Habitat assessment to determine fauna habitat features of the site, including corridors and linkages that the site may form part of and the potential impact to landscape connectivity; and



Table 4: Summary of desktop and site assessment results.

Legislative / Compliance Element	Desktop Assessment Results	Field Survey Results and Assessment
Australian Legislation		
Australian Legislation  Environmental Protection and Biodiversity Conservation Act 1999 (EPBC Act)	<ul> <li>Refer to Appendix 2 - One (1) wetland of international importance:</li> <li>Moreton Bay</li> <li>Eight (8) listed TEC:</li> <li>Coastal Swamp Oak (<i>Casuarina glauca</i>) Forest of New South Wales and South East Queensland ecological community (Endangered);</li> <li>Coastal Swamp Sclerophyll Forest of New South Wales and South East Queensland (Endangered);</li> <li>Grey box-grey gum wet forest of subtropical eastern Australia (Endangered);</li> <li>Lowland Rainforest of Subtropical Australia (Critically Endangered);</li> <li>Poplar Box Grassy Woodland on Alluvial Plains (Endangered);</li> <li>Swamp Tea-tree (<i>Melaleuca irbyana</i>) Forest of Southeast Queensland (Critically Endangered);</li> <li>Subtropical eucalypt floodplain forest and woodland of</li> </ul>	The site assessment confirmed that whilst degraded, eucalypt woodland on Lot 6 conforms to RE 12.3.19, which corresponds to the Swamp Teatree ( <i>Melaleuca irbyana</i> ) Forest of South-east Queensland TEC. Swamp tea-tree ( <i>Melaleuca irbyana</i> ) individuals are located predominantly along the site boundaries and it is likely that this species historically occurred more extensively across the site. Based on the results of the site assessment, no other TECs listed under the EPBC Act are present on site. An assessment of the likelihood of occurrence was conducted for each of the threatened species identified by the PMST desktop assessment results. This assessment was based on the presence of suitable habitat within the site and database records for each threatened species. Based on this assessment, Koalas ( <i>Phascolarctos cinereus</i> ) are expected to occur on site.  Given that MNES have been confirmed or are highly likely to be present within the site, more detailed assessment is required to assess all direct and indirect impacts of the project against the Significant Impact Guidelines 1.1 – Matters of National Environmental Significance. If this assessment determines that the project will have, or is likely to have, a significant impact on any MNES, the project must be referred to the DCCEEW.
	<ul> <li>the New South Wales North Coast and South East Queensland bioregions (Endangered);</li> <li>White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (Critically Endangered).</li> </ul>	



Legislative / Compliance Element	Desktop Assessment Results	Field Survey Results and Assessment
	53 threatened species; and	
	17 migratory species.	
Queensland Legislation		
Biosecurity Act 2014	The DES WildNet database records multiple weed species to occur within two kilometres of the site, including Weeds of National Significance (WoNS).	The site assessment determined that Category 3 restricted species under the <i>Biosecurity Act 2014</i> (Qld) and WoNS species are present within the site. A full list of weed species present on site is provided in <b>Appendix 6.</b>
	The site is located within Fire Ant Biosecurity Zone 2 and there are known fire ant infestations within the surrounding area.	The Act imposes a General Biosecurity Obligation (GBO) on everyone to take all reasonable and practical steps to minimise the risks associated with invasive plants under their control. The Act requires that Category 3 restricted matter not be distributed into the environment. Category 3 restricted species within the site should be managed before construction commences to prevent further distribution and appropriate measures must be taken to ensure that transportation of any material to or from the site (e.g. fill) does not spread pests (including weed species) and diseases. Ongoing management of weed species following construction is also recommended to ensure weeds are controlled during post-construction phases (e.g. during operation).
		Fire ants are a Category 1 restricted pest under the Act. All reasonable steps must be taken to ensure that fire ants are not spread. The Biosecurity Regulation 2016 prescribes procedures that must be followed when moving or storing a fire ant carrier.
Nature Conservation Act 1992 - DES WildNet database	WildNet database shows records of 14 species within a 10 km buffer of the site (see <b>Appendix 2</b> )	Two (2) threatened species listed under the NC Act have been confirmed or likely to occur within or utilise site –
		Swamp tea-tree ( <i>Melaleuca irbyana</i> ) (Endangered) - Confirmed
		Koala ( <i>Phascolarctos cinereus</i> ) (Endangered) – Likely
		Tusked frog - possible



Legislative / Compliance Element	Desktop Assessment Results	Field Survey Results and Assessment
Nature Conservation Act 1992 - Protected Plants Flora Survey Trigger Map	The site is mapped within a mapped high-risk trigger area for protected plants.	Swamp tea-tree ( <i>Melaleuca irbyana</i> ) is present within the site. A flora survey has been undertaken in accordance with the Flora Survey Guidelines – Protected Plants (DES, 2019) has been undertaken. The results of the flora survey report shall be provided within a separate report to be prepared for submission to the Department of Environment and Science (DES). Depending on the extent of the disturbance footprint for the project, a protected plant clearing permit may be required.
Vegetation Management Act 1999 (VM Act) Regulated Vegetation Management Map	<ul> <li>The Vegetation Management Report maps the site as:</li> <li>Lot 4 - Category X (non-remnant); and</li> <li>Lot 6 - Category X and Category C (high-value regrowth) containing REs 12.3.18 (Endangered) and 12.3.19 (Endangered).</li> </ul>	The site assessment determined that vegetation on Lot 6 conforms to remnant status and is analogous to the RE 12.3.19. Lot 4 was confirmed as Category X.  Clearing for development related to PDAs is exempt under the VM framework.
Vegetation Management Act 1999 (VM Act) Vegetation management supporting map	Lot 6 is mapped as supporting Essential Habitat for endangered, vulnerable and near threatened wildlife listed under the NC Act – Koala ( <i>Phascolarctos cinereus</i> ) and swamp tea-tree ( <i>Melaleuca irbyana</i> ).  Lots 6 is also mapped as containing a wetland area on the Vegetation management wetlands map i.e. regulated wetlands under the VM Act). This wetland area is associated with vegetation mapped as Category C – RE 12.3.18.	The site assessment confirmed the presence of habitat for both Koala ( <i>Phascolarctos cinereus</i> ) and swamp tea-tree ( <i>Melaleuca irbyana</i> ).  The site assessment determined that vegetation of Lot 6 is analogous to the RE 12.3.19, which is not classified as a wetland under the VM Act. The site may have historically supported the wetland RE 12.3.18.
SEQ Koala Conservation Strategy 2020-2055 mapping	The site is mapped within a Koala priority area (KPA) and core Koala habitat area (KHA) is mapped on the site and adjacent land.	The development site contains Koala habitatand preferred feed tree species. Given the number of Koala records within the immediately surrounding area (including recent records), the presence of suitable habitat within the site and the contiguity of site vegetation with larger and more intact patches of Koala habitat, it is likely that Koalas occupy or utilise the site for feeding, shelter and movement, at least periodically; particularly



Legislative / Compliance Element	Desktop Assessment Results	Field Survey Results and Assessment
		for foraging forays and during the breeding season and natal dispersal.
		The Koala habitat planning controls do not apply as PDA-related development is exempted under Schedule 24 of the <i>Planning Regulation</i> 2017.
Environmental Protection Act 1994 and Environmental Protection (Water and Wetland Biodiversity) Policy 2019	No regulated wetlands are mapped on the site.	The site assessment confirmed that the site does not support a referrable wetland area.
Local Legislation		
Logan City Plan 2015	The site is mapped as the following: Biodiversity areas and Waterway corridor and wetland overlays –  • Vegetation Management Areas – Primary and Secondary VMA;  • Locally Significant Vegetation – Melaleuca irbyana (swamp tea-tree) community, 50m edge effect buffer zone and 100m hydrology protection zone; and  • Matters of local and state environmental significance – MLES and Both MSES and MLES.  Waterway corridor trigger:	The site contains values that are consistent with the mapped overlay designations.  Environmental impacts for PDA-related development are considered under the ED Act and EDQ is the assessment manager for the Greater Flagstone PDA. The PDA is exempt from formal assessment against the local planning scheme.
	<ul> <li>Waterway corridor trigger;</li> <li>Wetland buffer trigger;</li> <li>Waterway – Minor; and</li> <li>Wetland buffer.</li> </ul>	



# 5 Proposed Development Impact Assessment

### **5.1 Impact and Mitigation Measures**

Swamp tea-tree (*Melaleuca irbyana*) is individually listed as a threatened species under the NC Act (Qld). **Figure 2** provides the location of swamp tea-tree (*Melaleuca irbyana*) individuals and the ground-truthed extent of RE 12.3.19 within the site. The majority of the *M. Irbyana* on Lot 4 frontage is within the planned Transport and Main Road resumption and service road area. The clearing of the *M. Irbyana* will primarily be for the construction of the future state-controlled road infrastructure and is not directly related to the development.

The site assessment determined that two (2) MNES protected under the EPBC Act are present within the site and two (2) MSES protected under the NC Act—

- Koala (*Phascolarctos cinereus*) habitat Koala area listed as Endangered under the NC Act and EPBC Act on lots 4 and 6;
- Melaleuca irbyana listed as Endangered under the NC Act on lot 6; and,
- Swamp Tea-tree (*Melaleuca irbyana*) Forest of SEQ TEC Critically Endangered under the EPBC Act. Vegetation on Lot 6 with which *M. irbyana* individuals are associated conforms to a regional ecosystem (RE 12.3.19) that corresponds with the EPBC-listed TEC Swamp Tea-tree (*Melaleuca irbyana*) Forest of SEQ (listed as Critically Endangered).

Under the EPBC Act, if a development proposal involves an action that will or is likely to result in a significant impact on a MNES, the proposal must be referred to the DCCEEW (an EPBC Referral). Whilst it may be possible to retain and protect some *M. irbyana* individuals within the site, the EPBC Act requires consideration of all potential direct and indirect impacts upon the associated ecological community. The EPBC framework requires application of the 'avoid, mitigate and offset' hierarchy i.e., impacts to the TEC are either avoided or reduced as much as reasonably possibly and then mitigated and offset where there remains a significant impact. It is recommended that all options be investigated whereby as much of the supporting community as possible is retained in the first instance through refinement of the development location and design. The project should seek to retain and avoid indirect impacts to swamp tea-tree individuals (both within and adjacent to the site) and associated habitat to the greatest extent possible by avoiding clearing, disturbance and impacts to hydrology. Where retention is not possible, translocation should be undertaken (e.g., through revegetation).

Given that MNES have been confirmed more detailed assessment is required to assess all direct and indirect impacts of the project against the Significant Impact Guidelines 1.1 – Matters of National Environmental Significance. If this assessment determines that the project will have, or is likely to have, a significant impact on any MNES, the project must be referred to the DCCEEW. However, this section illustrates the mitigation measures that will be implemented on site to reduce any impacts to the MNES and MSES.

Based on the currently proposed earthworks plan, the project will require clearing of approximately 23,700 m<sup>2</sup> (2.31 ha) of RE12.3.19/TEC. The proponent will avoid the clearing of vegetation within the proposed corridor of 20 m western buffer on both lots and a 5 m buffer along the southern boundary of Lot 6. The proponent also proposes some significant mitigation measures including:



- compensatory planting within the buffers to replace individuals removed along the front (south eastern) boundary of Lot 4. The proposed vegetation retention and compensatory planting area on both lots comprises a total area of approximately 5, 976 m<sup>2</sup> (0.59 ha).
- The majority of the *M. irbyana* on Lot 4 frontage is located within the planned Transport and Main Roads resumption and service road area. Clearing of these trees is primarily required for the future state-controlled road infrastructure and is not directly linked to the development. Offset of this clearing is provided in Section 5.3 and appropriate permit will be sought from DES.
- Given that the site does not support a sufficient area to completely compensate for the loss of
  this vegetation, a formal offset is likely required to mitigate impacts to this species (e.g. as
  condition of approval under a protected plants clearing permit under the NC Act) and/or to
  mitigate a significant residual impact to the Swamp Tea-tree (*Melaleuca irbyana*) Forest of SEQ
  TEC (where conditioned under an EPBC approval).
- Pursuant to PDA Guideline No. 17 Remnant Vegetation and Koala Habitat Obligations in Greater Flagstone PDAs, dated May 2017, the proponent will provide financial compensation to EDQ Development Assessment for the loss of koala habitat tree. It is estimated that 72 nonjuveniles koala trees will be cleared for the development which equates to \$51,624.86.
- The stormwater assessment report (Burchills, 2022) details mitigation methods for stormwater discharge and overland flow, alleviating any impact on natural flows and thus impacts on surrounding EPBC vegetation and the landform on site.
- to mitigate potential impacts upon wildlife during site works to ensure duty of care obligations under the NC Act and Animal Care and Protection Act 2001 are met. The potential for injury, mortality and orphaning of fauna species will be minimised by implementing the fauna management and mitigation measures outlined in this plan. These measures include the engagement of an appropriately experienced and suitably qualified fauna spotter catcher with experience in Koala spotting to conduct a pre-clearing fauna survey and relocate any fauna present within vegetation to be cleared. Fauna spotters will also specifically search for koalas. If any Koalas are determined to be present, they will be managed on site in line with legislative requirements.

Figure 2: Location of swamp tea-tree (Melaleuca irbyana) individuals and swamp tea-tree TEC



Table 5: Summary of potential impacts and associated mitigation measures

	Potential Impacts		Mitigation measures
P	lanning and Design Phase		
•	Removal of vegetation shall, or is likely to result, in direct impacts to threatened species (swamp tea-tree and Koala) and threatened ecological communities, loss of ecological values including foraging and habitat resources and loss of landscape amenity values.  New weed species introduction, increase in	•	<ul> <li>Avoid the impact:</li> <li>The development seeks to avoid removal of and indirect impacts to listed threatened species (i.e. swamp tea-tree (<i>M. irbyana</i>) individuals) and supporting habitat (i.e. the Swamp Tea-tree (<i>Melaleuca irbyana</i>) Forest of SEQ TEC) (both within and adjacent to the site) to the greatest extent possible by avoiding clearing, disturbance and impacts to hydrology.</li> <li>20m corridor at the rea of the site will avoid the clearing of vegetation and provide buffer to the future development.</li> </ul>
•	existing weed infestations and spread of listed pest species into the environment.  Increased light pollution resulting in light spill, noise, erosion, etc and associated	•	<ul> <li>Native vegetation including non-juvenile Koala habitat trees will also be retain in these corridors.</li> <li>Mitigate the impact:</li> <li>Development design should incorporate the provision of fauna friendly/exclusion fencing to prevent native fauna from accessing the industrial area and traffic control measures (e.g., speed</li> </ul>
	impacts to adjacent residents and urban fauna.		<ul> <li>bumps) to ensure that wildlife that manage to enter can move safely across the site without an increased risk of vehicle strike.</li> <li>To improve driver awareness and reduce Koala vehicle strikes, static Koala signage should be installed as part of the development.</li> <li>The stormwater assessment report (Burchills, 2022) details mitigation methods for stormwater discharge and overland flow, alleviating any impact on natural flows and thus impacts on surrounding vegetation and landform on site.</li> </ul>



Potential Impacts	Mitigation measures
	<ul> <li>Fauna exclusion fencing will be erected between industrial uses and retained vegetation to prevent harm to wildlife. This will occur between lots 6 and 7 and between rehabilitation areas and the development to the west.</li> </ul>
	Where required, the landscaping plan should include provision for planting of M. irbyana within suitable areas. A formal offset may be required to mitigate impacts to this species (e.g. as condition of approval under a protected plants clearing permit under the NC Act) and/or any significant residual impact to the Swamp Tea-tree (Melaleuca irbyana) Forest of SEQ TEC (where conditioned under an EPBC approval).
	<ul> <li>Rehabilitation management plan to be provided wihtin the proposed corridor.</li> </ul>
	<ul> <li>Directional lighting guards should be installed to minimise light spill. Any lights will comply with the dark surrounds lighting levels in National Light Pollution Guidelines for Wildlife (DoEE, 2019).</li> </ul>
	<ul> <li>A weed management plan shall be prepared prior to commencement of any operational works.</li> </ul>
	<ul> <li>An Erosion and Sediment Control Plan shall be prepared and erosion and sediment control measures installed prior to commencement of any operational works.</li> </ul>
Clearing and Construction Phase	
Loss and degradation of food and shelter resources for urban fauna due to vegetation clearing.	The construction contractor shall take all reasonable and practicable management measures to avoid environmental harm and environmental nuisance to native fauna and known fauna habitat and breeding places.
<ul> <li>Potential injury and mortality of fauna due to vegetation clearing. This includes direct mortality, injury or orphaning of wildlife because of vegetation clearing and indirect impacts such as displacement and</li> </ul>	<ul> <li>Category 3 restricted species within the site should be managed before construction commences to prevent further distribution and appropriate measures must be taken to ensure that transportation of any material to or from the site (e.g. fill) does not spread pests (including weed species) and diseases.</li> </ul>



	Potential Impacts		Mitigation measures
	dispersal into adjacent habitats that may be at their carry-capacity.	•	Contractors will be supplied with a construction protocol regarding clearing requirements through a work site start-up and induction program.
•	Loss of potential breeding habitat and resources (e.g. hollows and nests), including future breeding habitat.	•	Prior to the commencement of any vegetation clearing on site, tree protection/exclusion fencing is to be installed around the tree protection zone/s (TPZ) of vegetation to be retained and trees to be removed shall be visibly marked and identified with flagging tape or similar. No disturbance should
•	Temporary disturbance (noise, light, etc.) to local fauna species.		occur outside the clearance zone or within exclusion zones without appropriate approvals and/or further assessments.
•	Introduction and spread of biosecurity matters such as invasive species e.g. from	•	Erosion and sediment control measures are to be implemented in line with the Erosion and Sediment control plan and maintained for the duration of the construction phase.
	fill material or machinery.	•	Construction activities will be restricted to daylight hours to minimise noise, dust and light impacts.
		•	No domestic animals will be allowed onto the construction site.
		•	Avoid high risk construction activities such as earthworks during severe wet weather.
		•	An appropriately experienced and suitably qualified fauna spotter catcher with experience in Koala spotting is to be engaged to conduct a pre-clearing fauna survey to identify fauna habitat and breeding places and remove fauna from vegetation to be cleared. Only a designated and trained person (fauna spotter catcher) can handle and remove fauna.
			The fauna spotter catcher shall be present during all vegetation clearing to supervise clearing.
			Injury or mortality of fauna species will be minimised by managing habitat clearing and by having a qualified fauna spotter supervising all clearing activities. If Koalas are found to be present, they will be managed on site in line with the Nature Conservation (Koala) Conservation Plan 2017. Clearing and post clearing activities (including fauna spotter activities) are detailed below.
		•	The <i>Biosecurity Act 2014</i> (Qld) imposes a general biosecurity obligation of landowners and managers to minimise biosecurity risks. This includes risks associated with invasive flora and fauna species.



Potential Impacts	Mitigation measures
	<ul> <li>Fire ants are a Category 1 restricted pest under the Act. All reasonable steps must be taken to ensure that fire ants are not spread. The Biosecurity Regulation 2016 prescribes procedures that must be followed when moving or storing a fire ant carrier. Fire ant movement controls shall be implemented to restrict and monitor the movement of materials that may carry fire ants. These controls may include obtaining a Biosecurity Instrument Permit to move soil and other landscaping materials where required. The site foreman/supervisor shall be responsible for ensuring all fire ant compliance requirements are met at all times. Further advice regarding fire ant compliance can be obtained on the Business Queensland website at <a href="https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/pests/fire-ants/advice-tool">https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/pests/fire-ants/advice-tool</a></li> <li>Monitoring shall be undertaken to detect new infestations of invasive flora species listed under the Biosecurity Act 2014 (Qld) and to ensure that listed invasive flora species do not spread beyond the site into the environment.</li> <li>Monitor the effectiveness of controls and establish triggers for corrective action where potential impacts are observed.</li> <li>Landscaping using locally indigenous plant species shall provide foraging and shelter resources and assist in compensating for these values.</li> </ul>
Operational Phase	
New weed species introduction and an increase in existing weed infestations.	Monitoring should be undertaken to detect new infestations and to ensure that existing infestations of species listed under <i>Biosecurity Act 2014</i> (Qld) do not spread into the environment.
Increased light pollution resulting in light spill and associated impacts to adjacent residents and urban fauna.	Light shall not be left all night in the effort to reduce light pollution. Any new outside lights shall be sensor lights.



	Potential Impacts		Mitigation measures
•	Increased heavy vehicle traffic	•	To improve awareness and reduce Koala kill from traffic accidents, signs will be installed across the development
		•	Barbed wire will be avoided to prevent harm to flying fox species. If barbed wire must be used it should include high visibility tags and be located away from any suitable flying fox feed trees Firefox feed trees e.g <i>Melalecua spp, palm spp</i> should not be planted adjacent to barbed wire fencing



### 5.2 Assessment of Compliance

#### 5.2.1 Logan City Plan 2015

Environmental impacts for PDA-related development are considered under the ED Act and EDQ is the assessment manager for the Greater Flagstone PDA. The PDA is exempt from formal assessment against the local planning scheme.

#### 5.2.2 State Legislation

#### SEQ Koala Conservation Plan 2020-2025

The Koala habitat planning controls do not apply as PDA-related development is exempted.

#### Vegetation Management Act 1999

Clearing for development related to PDAs is exempt under the VM framework.

#### Greater Flagstone Priority Development Area

**Table 6** provides an assessment against relevant environmental and ecological criteria in the Greater Flagstone PDA Development Scheme (8 October 2011). All development applications for this PDA are assessed against the development scheme by EDQ.

Table 6: Greater Flagstone PDA Development Scheme Land Use Plan Criteria

Land Use Plan: UDA-wide criteria	Response
3.3.6 - Community greenspace netw	ork
Development contributes to the provision that caters for a range of environmental	on of an integrated, high quality, regional community greenspace network al needs by:
retaining where possible locally significant wetlands, remnant vegetation and habitat for fauna	Whilst degraded, the site supports remnant vegetation that corresponds to a threatened ecological community and supports threatened flora and fauna species. Impacts to this vegetation should be either avoided or where avoidance is not possible, minimised and mitigated as much as reasonably possible through development design and siting i.e. retain and avoid indirect impacts to Koala habitat trees, swamp tea-tree ( <i>Melaleua irbyana</i> ) individuals (both within and adjacent to the site) and associated habitat to the greatest extent possible by avoiding clearing, disturbance and impacts to hydrology. Where retention is not possible, translocation should be undertaken (e.g., through revegetation/compensatory planting). Offsets are likely to be required under the NC Act and/or EPBC Act for significant residual impact to protected matters of state and national environmental significance.  No wetlands are present on site.



-	protecting important landscape and visual quality values including scenic amenity areas.	No scenic amenity areas are present within the site. The site is low-lying and there are no nearby vantage points.
-	enhancing wetland communities as part of the rehabilitation of biodiversity corridors	No wetland communities are present within the site.
-	providing biodiversity corridors and linkages including areas outside neighbourhood or community	Under the North Maclean context plan, the site is not located within a Biodiversity corridor or future indicative biodiversity corridor. An identified future biodiversity corridor is located directly to the west of the site. Retention of vegetation would contribute to linkages within the landscape by the provision of stepping-stone habitat and refugia for threatened species.
-	locating and designing fauna connectivity structures in road infrastructure that traverses an identified or potential fauna and flora corridor.	Fauna movement solutions will be implemented including fauna-friendly/exclusion fencing and signage to exclude native fauna from the industrial area and traffic control measures (e.g., speed bumps) to ensure that wildlife that manage to enter can move safely across the site. To improve driver awareness and reduce Koala vehicle strikes, static Koala signage should also be installed.
3.3	3.8 - Natural and cultural values	
De	evelopment responds to the constrain	nts of the land and delivers:
-	Protection of significant	The site supports matters of state and national environmental
	environmental and ecological values	significance – swamp tea-tree ( <i>M. irbyana</i> ) (listed as a threatened species under the Qld NC Act) (MSES) and its associated EPBC-listed TEC (MNES), Koala habitat and potentially, Koalas (MSES and MNES).  Impacts to these matters should be either protected through either
	_	significance – swamp tea-tree ( <i>M. irbyana</i> ) (listed as a threatened species under the Qld NC Act) (MSES) and its associated EPBC-listed TEC (MNES), Koala habitat and potentially, Koalas (MSES and MNES).  Impacts to these matters should be either protected through either avoidance of impacts to individuals and supporting habitat to or where avoidance is not possible, minimised and mitigated as much as reasonably possible through development design and siting i.e. retain and avoid indirect impacts to Koala habitat trees, swamp tea-tree ( <i>M. irbyana</i> ) individuals (both within and adjacent to the site) and associated habitat to the greatest extent possible by avoiding clearing, disturbance and impacts to hydrology. Where retention is not possible, appropriate mitigation measures shall be provided for example, translocation of M. irbyana (e.g., through revegetation/compensatory planting) and supervision of vegetation clearing by a Koala spotter. Offsets may be required under the NC Act and/or EPBC Act for any significant residual impact to protected matters of state and national environmental significance.



in area.

RE 12.3.19 is listed as Endangered under the *Vegetation Management Act 1999* and corresponds to the Swamp tea-tree (Melaleuca irbyana) Forest of South-east Queensland TEC, which is listed under the EPBC Act as Critically Endangered.

Impacts to these matters should be either protected through either avoidance of impacts to individuals and supporting habitat to or where avoidance is not possible, minimised and mitigated as much as reasonably possible through development design and siting i.e. retain and avoid indirect impacts to Koala habitat trees, swamp tea-tree (*M. irbyana*) individuals (both within and adjacent to the site) and associated habitat to the greatest extent possible by avoiding clearing, disturbance and impacts to hydrology. Where retention is not possible, appropriate mitigation measures shall be provided for example, translocation of M. irbyana (e.g., through revegetation/compensatory planting) and supervision of vegetation clearing by a Koala spotter. Subject to further assessment, the significant of impacts on these matters shall be required and offsets may be required under the NC Act and/or EPBC Act for any significant residual impacts.

The proponent intends to retain and protect swamp tea-tree (*Melaleuca irbyana*) individuals on/near the rear (western) boundaries by providing a 20m western buffer on both lots and a 5 m buffer along the southern boundary of Lot 6. The proponent also proposes compensatory planting within the buffers to replace individuals removed along the front (eastern) boundary of Lot 4. The proposed vegetation retention and compensatory planting area on both lots comprises a total area of approximately 5, 976 m² (0.59 ha) and is not of sufficient area to completely compensate for the loss of this vegetation, a formal offset is likely to be required to mitigate impacts to this species (e.g. as condition of approval under a protected plants clearing permit under the NC Act) and/or any significant residual impact to the Swamp Tea-tree (Melaleuca irbyana) Forest of SEQ TEC (where conditioned under an EPBC approval).

The design, siting and layout of development:

- Preserves and enhances important environmental values, and respects local landforms

The landform of the site has been significantly modified through historical and ongoing development and land use. Watercourses and features are minor and are also highly modified or man-made (e.g. dams).

 Avoids, minimises and offsets development impacts and areas of biodiversity values and Koala habitat values The development should seek to minimise and mitigate impacts to swamp tea-tree (*M. irbyana*) individuals and its supporting habitat and Koala habitat trees as much as reasonably possible through development design and siting. The significance of impacts on protected values shall require more detailed assessment and offsets may be formally required under the NC Act and/or EPBC Act for any significant residual impacts.

The proponent proposes compensatory planting within the proposed 20m-wide rear buffers along the western boundaries of both lots and the 5m buffer along the southern boundary of Lot 6. This planting is intended to replace swamp tea-tree (*M. irbyana*) individuals that are required to



	be removed elsewhere within the site e.g. along the front (eastern) boundary of Lot 4. However, retained areas within site do not provide sufficient area to completely accommodate the full offset obligation and an external offset area is likely to be required.
- Maintains or improves ecological connectivity in the local urban context	Vegetation within the site is contiguous with vegetation on adjacent lots to the south and west and thus forms part of larger patch of woody vegetation approximately 87 ha in area to the west, north-west south and north of the site.
	Under the Greater Flagstone PDA development scheme – Endorsed North Maclean Context Plan, the site and land to the immediate north, west and south is zoned as Industry and business and thus, vegetation patches are unlikely to be retained in their current form. Ongoing development within the PDA shall result in increased habitat loss and fragmentation and stepping stone habitat is thus likely to become important in maintaining biodiversity corridors and wildlife movement throughout the area. Retention of vegetation within the site would contribute to linkages and ecological connectivity within the landscape by the provision of stepping stone habitat and refugia for threatened species.
- Minimises adverse impacts on natural landforms and the visual amenity of the site	The natural landform of the site has already been significantly modified through historical and ongoing development and land use. The site itself has low visual amenity as it is low-lying and there are no significant vantage points in the immediate area.
	Earthworks are likely to only require minor fill (up to 1m), thereby minimising impacts on existing landform within the site. Stormwater shall be managed to ensure minimal or no adverse impacts on adjacent properties.
- Maintains or improves the ecological health and environmental values of surface and groundwater, including wetlands and waterways in and adjacent to the UDA	Drainage lines/waterways that traverse the site are minor and highly degraded. Site hydrology has been historically altered in the past. The development will be designed to reinstate appropriate hydrology for the site which will maintain the ecological health of adjacent water features and values associated with surface and groundwater.
- Maintains and improves the functioning and characteristics of the hydrological network (including surface and groundwater) and generally maintains the natural flow regime.	The development will be designed to reinstate appropriate hydrology for the site, which will contribute to maintenance of the function and characteristics of the hydrological network.
- Incorporates total water cycle management and water sensitive urban design principles to appropriately manage floodwater and stormwater	WSUD principles will be incorporated where possible into stormwater management of the site.
- Applies best practice sediment and erosion control techniques	Best-practice ESC methods will be implemented prior to commencement of any operational works and maintained during



-	giving particular regard to the ocal dispersive soils.	construction until the site is stable.
Koala	a conservation	
The	design, siting and layout of develo	pment:
i i i	ncorporates Koala conservation and habitat protection outcomes n a way that contributes to a net ncrease in Koala habitat and assists in the long term viability of Koala populations in SEQ	Lot 6 contains Koala habitat trees (including preferred Koala feed tree species). Removal of vegetation on this lot shall result in the loss of Koala habitat. Retention of vegetation on this lot to retain as much remnant vegetation and supporting habitat for swamp tea-tree ( <i>M. irbyana</i> ) would also contribute to Koala conservation and habitat protection outcomes; however, the site is unable to developed for industrial use in a way that contributes to a net gain in Koala habitat.
		Koala conservation measures to be implemented shall include supervision of a Koala spotter during vegetation clearing, installation of fauna friendly/exclusion fencing to prevent native fauna (including koalas) from accessing the industrial area, traffic control measures (e.g., speed bumps) to ensure that wildlife that manage to enter can move safely across the site without an increased risk of vehicle strike and Koala signage to improve driver awareness.
		Fencing shall designed in accordance with the Koala-sensitive Design Guideline (DES, 2022).
r c f i	avoids (to the greatest extent possible) the clearing of areas mapped as high value bushland on the relevant State Planning Policy 2/10: Koala Conservation in South East Queensland (SPP) Koala Habitat Values Map.	It is noted that mapping to support the SPP 2/10 is now superseded by Koala habitat mapping under the South East Queensland Koala Conservation Strategy 2020-2025. Vegetation ground-truthed as remnant on Lot 6 is identified as Koala Habitat Area (KHA) – Core. The development should be designed to minimise clearing of this vegetation to the greatest extent possible.
k	caters for Koala movement between conserved areas of bushland Koala habitat.	The development should be designed to conserve Koala habitat as much as possible. Where existing Koala habitat is retained, Koala movement solutions shall be provided to allow movement between conserved areas on the site and adjacent land. Fauna friendly/exclusion fencing shall be installed to prevent Koalas from accessing the industrial area.
i O	ensures impacts on Koala nabitat are offset though the delivery of a net benefit to koalas, ncluding through the expansion of habitat on lands as suitable for rehabilitation	The site is unable to developed for industrial use in a way that contributes to a net gain in Koala habitat. Subject to further assessment, any requirement for a Koala habitat offset would most likely need to be fulfilled via an external offset e.g. rehabilitation of an external site that is capable of permanently supporting koalas.
	ncorporates Koala sensitive urban design.	The development will incorporate principles and methods outlined in the Koala-sensitive Design Guideline (DES, 2022).



#### 5.3 Offsets

The Greater Flagstone PDA Development Scheme also specifies that offsets be provided for development impacts on areas of biodiversity values and Koala habitat values. The development scheme references the ULDA PDA Guideline 17 - Remnant vegetation and Koala habitat obligations in Greater Flagstone and Yarrabilba PDAs but the DSDILGP website notes that this guideline is now superseded. The site is mapped in a KPA and contains KHA; however, the Koala habitat planning controls do not apply as PDA-related development is exempted.

Further detailed assessment is required to assess the significance of impacts upon matters of state and national environmental significance and quantification of offset obligation. Offsets are likely to be required under the NC Act for the removal of protected plants (i.e. clearing of swamp tea-tree (*M. irbyana*) individuals) and/or EPBC Act (i.e. for a significant impact on the Swamp Tea-tree (*Melaleuca irbyana*) Forest of South East Queensland TEC, Koalas and/or Koala habitat).

Based on the currently proposed earthworks plan, the project will require clearing of approximately 23,700 m² (2.31 ha) of RE12.3.19/Swamp tea-tree TEC. The proponent intends to retain and protect swamp tea-tree (*Melaleuca irbyana*) individuals on/near the rear (western) boundaries by providing a 20 m western buffer on both lots and a 5 m buffer along the southern boundary of Lot 6. The proponent also proposes compensatory planting within the buffers to replace individuals removed along the front (south-eastern) boundary of Lot 4. The proposed vegetation retention and compensatory planting area on both lots comprises a total area of approximately 5, 976 m² (0.59 ha). Given that the site does not support a sufficient area to completely compensate for the loss of this vegetation, a formal offset is likely to be required to mitigate impacts to this species (e.g. as condition of approval under a protected plants clearing permit under the NC Act) and/or the Swamp Tea-tree (*Melaleuca irbyana*) Forest of SEQ TEC (where conditioned under an EPBC approval).

The majority of the *M. irbyana* on Lot 4 frontage is within the planned TMR resumption and service road area and the offset for the clearing will be dealt through DES permit application.



#### 6 Conclusion

This ecological assessment report identifies ecological values within and associated with the site. A site assessment undertaken in November 2022 determined that Lot 4 is of lower ecological value, having been predominantly cleared of native woody vegetation and subject to other disturbance (for example, earthworks).

The site assessment determined that two (2) MNES protected under the EPBC Act are present within the site and two (2) MSES protected under the NC Act—

- Koala (*Phascolarctos cinereus*) habitat Koala area listed as Endangered under the NC Act and EPBC Act on lots 4 and 6;
- Melaleuca irbyana listed as Endangered under the NC Act on lot 6; and,
- Swamp Tea-tree (*Melaleuca irbyana*) Forest of SEQ TEC Critically Endangered under the EPBC Act. Vegetation on Lot 6 with which *M. irbyana* individuals are associated conforms to a regional ecosystem (RE 12.3.19) that corresponds with the EPBC-listed TEC Swamp Tea-tree (*Melaleuca irbyana*) Forest of SEQ (listed as Critically Endangered).

Both lots support swamp tea-tree (*M.irbyana*), however individuals are located predominantly along the site boundaries and within the TMR resumption corridor at the frontage of lot 4. It is likely that this species historically occurred more extensively across the site.

Lot 6 supports remnant vegetation that conforms to RE12.3.19, which is listed as Endangered under the VM Act and is included within the EPBC-listed TEC, Swamp Tea-tree (*Melaleuca irbyana*) Forest of South-east Queensland.

The site contains Koala habitat trees (including preferred Koala feed tree species). Many Koala sightings have been recorded within 10km of the site over a period of many years, including recent records from 2018 noted within the immediate vicinity. No signs of Koala presence (e.g. trunk scratches or scats) were noted during the site assessment; however given the presence of suitable habitat and the contiguity of site vegetation with larger and more intact patches of Koala habitat, it is likely that Koalas occupy or utilise the site for feeding, shelter and movement, at least periodically.

Further detailed assessment is required to assess the significance of impacts upon MNES and MSES, the requirement for offsets and quantification of any offset obligation. Given that MNES have been confirmed on site, more detailed assessment is required to assess all direct and indirect impacts of the project against the Significant Impact Guidelines 1.1 – Matters of National Environmental Significance. If this assessment determines that the project will have, or is likely to have, a significant impact on any MNES, the project must be referred to the DCCEEW.

In accordance with the 'avoid, mitigate and offset' hierarchy, it is recommended that all options be investigated whereby as much remnant vegetation on Lot 6 as possible be retained in the first instance. The project should seek to retain and avoid indirect impacts to swamp tea-tree individuals (both within and adjacent to the site) and associated habitat to the greatest extent possible by avoiding clearing, disturbance and impacts to hydrology. Where retention is not possible, translocation should be undertaken (e.g., through revegetation).



Offsets may be required under the NC Act for the removal of protected plants (i.e. clearing of swamp tea-tree (*M. irbyana*) individuals) and/or EPBC Act (i.e. for a significant impact on the Swamp Tea-tree (*Melaleuca irbyana*) Forest of South East Queensland TEC, Koalas and/or Koala habitat). It is also recommended that further advice be sought from EDQ in relation to Koala habitat and offset obligations under the PDA Development Scheme.

By implementing the key recommendations designed to minimise impacts during the construction and operational phases, the proposed development will reduce its impact on the ecological values of the site and surrounding area. The report also provides mitigation measures to ensure that the development complies with the relevant environmental legislation.



#### 7 References

- ALA. 2014. *Atlas of Living Australia Database* [Online]. Available: Available online at: http://spatial.ala.org.au/ [Accessed].
- DES 2019. Flora Survey Guidelines Protected Plants Nature Conservation Act 1992. *In:* DEPARTMENT OF ENVIRONMENT AND SCIENCES (ed.). Brisbane.
- DES 2022. Koala-sensitive Design Guideline: A guide to koala-sensitive design measures for planning and development activities. *In:* DEPARTMENT OF ENVIRONMENT AND SCIENCE (ed.).
- DOEE 2019. National Light Pollution Guidelines for Wildlife, Including marine turtles, seabirds and migratory shorebirds. *In:* DEPARTMENT OF ENVIRONMENT AND ENERGY (ed.).
- NELDNER, V. J., WILSON, B. A., DILLEWAARD, H. A., RYAN, T. S., BUTLER, D. W., MCDONALD, W. J. F., ADDICOTT, E. P. A. & APPELMAN, C. N. 2019. Methodology for surveying and mapping of regional ecosystems and vegetation communities in Queensland. *In:* QUEENSLAND HERBARIUM, Q. D. O. E. A. S. (ed.). Brisbane.



# Appendix 1

# **Development Layout**

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#### LEGEND

— — -28.00— — EXISTING SURFACE CONTOURS —28.00— DESIGN SURFACE CONTOURS ---- EXISTING LOT BOUNDARY EXISTING EDGE OF BITUMEN E — EXISTING OVERHEAD ELECTRIC EXISTING BATTER

EXISTING ROAD CONTROL LINE EXISTING FENCE

• 28.00

EXISTING DRIVEWAY FINISHED SURFACE LEVEL PROPOSED LOT BOUNDARY

PROPOSED LEVEL SPREADER EARTHWORKS AREA OF FILL

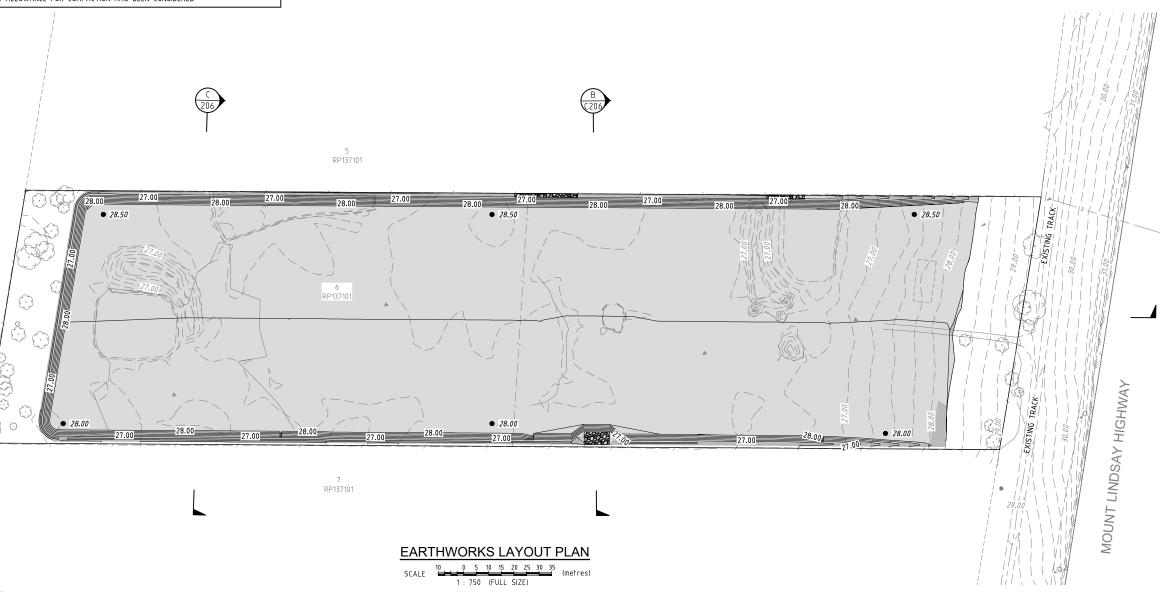
EARTHWORKS AREA OF CUT



#### **BULK EARTHWORKS SUMMARY** STRUCTURAL FILLING NETT SOLID FILL AREA OVERALL FILLING 49,642 cu.m. TOTAL FILL REQUIRED 49,642 cu.m. **EXCAVATION** AREA NETT CUT OVERALL EXCAVATION 150 cu.m. TOTAL CUT <u>150</u> cu.m. 49,642 cu.m - 150 cu.m. = 49,492 cu.m. IMPORTED MATERIAL

49,042 COMIN - 130 COMIN - 97,472 COMIN - NOTWORK - 100 COMIN - 97,472 COMIN - NO ALLOWANCE FOR BOXING HAS BEEN CONSIDERED

NO ALLOWANCE HAS BEEN MADE FOR TOPSOIL STRIP / REPLACEMENT
NO ALLOWANCE FOR COMPACTION HAS BEEN CONSIDERED



#### NOTE:

ALL DESIGN/SETOUT INFORMATION SHOWN ON THIS DRAWING IS AVAILABLE IN DIGITAL FORMAT FROM THE OFFICE OF THE SUPERINTENDENT UPON REQUEST BY THE CONTRACTOR.

#### WARNING: UNDERGROUND SERVICES

UNDERGROUND SERVICES EXIST IN THIS VICINITY. THE CONTRACTOR IS TO CONTACT THE RELEVANT AUTHORITIES TO CONFIRM EXACT LOCATION OF SERVICES ON SITE PRIOR TO ANY EXCAVATION OR CONSTRUCTION COMMENCING.

PROPOSED DEVELOPMENT AT
4733-4743 MOUNT LINDESAY HIGHWAY
FOR
ROUBAIX PROPERTIES

ORIGINAL SIZE BEFORE REDUCTION

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ı	В	ISSUED FOR APPROVAL	27-01-23
ı	Α	PRELIMINARY ISSUE	23-01-23
ı	VER.	DESCRIPTION	DATE

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PROPOSED BULK **EARTHWORKS** 

DRAWING TITLE :

**EARTHWORKS LAYOUT** PLAN

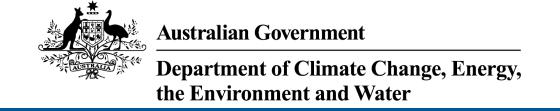
DEVEL. APPLIC. No. :		DATE: 27-01-2023
PROJECT LEADER : JACK SHAO	DESIGNER:	J.T.
DRAFTSPERSON : W.J.	CHECKED:	LUCAS FAULKNER
APPROVED FOR AND ON BEHALF OF BURCHILLS ENGINEERING SOLUTIONS	ABN 76 166 9	42 365

RPEQ No.: 8093 SCALE : DATUM: AHD FULL SIZE : A1 PROJECT No BE220566-00 C200



# Appendix 2

### **EPBC Act Protected Matters Search**



# **EPBC Act Protected Matters Report**

This report provides general guidance on matters of national environmental significance and other matters protected by the EPBC Act in the area you have selected. Please see the caveat for interpretation of information provided here.

Report created: 18-Nov-2022

**Summary** 

**Details** 

Matters of NES
Other Matters Protected by the EPBC Act
Extra Information

**Caveat** 

**Acknowledgements** 

# **Summary**

### Matters of National Environment Significance

This part of the report summarises the matters of national environmental significance that may occur in, or may relate to, the area you nominated. Further information is available in the detail part of the report, which can be accessed by scrolling or following the links below. If you are proposing to undertake an activity that may have a significant impact on one or more matters of national environmental significance then you should consider the <u>Administrative Guidelines on Significance</u>.

World Heritage Properties:	None
National Heritage Places:	None
Wetlands of International Importance (Ramsar	1
Great Barrier Reef Marine Park:	None
Commonwealth Marine Area:	None
Listed Threatened Ecological Communities:	8
Listed Threatened Species:	53
Listed Migratory Species:	17

### Other Matters Protected by the EPBC Act

This part of the report summarises other matters protected under the Act that may relate to the area you nominated. Approval may be required for a proposed activity that significantly affects the environment on Commonwealth land, when the action is outside the Commonwealth land, or the environment anywhere when the action is taken on Commonwealth land. Approval may also be required for the Commonwealth or Commonwealth agencies proposing to take an action that is likely to have a significant impact on the environment anywhere.

The EPBC Act protects the environment on Commonwealth land, the environment from the actions taken on Commonwealth land, and the environment from actions taken by Commonwealth agencies. As heritage values of a place are part of the 'environment', these aspects of the EPBC Act protect the Commonwealth Heritage values of a Commonwealth Heritage place. Information on the new heritage laws can be found at <a href="https://www.dcceew.gov.au/parks-heritage/heritage">https://www.dcceew.gov.au/parks-heritage/heritage</a>

A <u>permit</u> may be required for activities in or on a Commonwealth area that may affect a member of a listed threatened species or ecological community, a member of a listed migratory species, whales and other cetaceans, or a member of a listed marine species.

Commonwealth Lands:	7
Commonwealth Heritage Places:	1
Listed Marine Species:	22
Whales and Other Cetaceans:	None
Critical Habitats:	None
Commonwealth Reserves Terrestrial:	None
Australian Marine Parks:	None
Habitat Critical to the Survival of Marine Turtles:	None

### **Extra Information**

This part of the report provides information that may also be relevant to the area you have

State and Territory Reserves:	4
Regional Forest Agreements:	None
Nationally Important Wetlands:	1
EPBC Act Referrals:	42
Key Ecological Features (Marine):	None
Biologically Important Areas:	None
Bioregional Assessments:	1
Geological and Bioregional Assessments:	None

### **Details**

**Community Name** 

### Matters of National Environmental Significance

Wetlands of International Importance (Ramsar Wetlands)	[ <u>Re</u>	source Information ]
Ramsar Site Name	Proximity	Buffer Status
Moreton bay	10 - 20km upstream from Ramsar site	In feature area

### Listed Threatened Ecological Communities

[Resource Information]

**Buffer Status** 

For threatened ecological communities where the distribution is well known, maps are derived from recovery plans, State vegetation maps, remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.

Threatened Category

**Presence Text** 

Status of Vulnerable, Disallowed and Ineligible are not MNES under the EPBC Act.

Coastal Swamp Oak (Casuarina glauca) Forest of New South Wales and South East Queensland ecological community	Endangered	Community may occu within area	ırln feature area
Coastal Swamp Sclerophyll Forest of New South Wales and South East Queensland	Endangered	Community likely to occur within area	In feature area
Grey box-grey gum wet forest of subtropical eastern Australia	Endangered	Community likely to occur within area	In buffer area only
Lowland Rainforest of Subtropical Australia	Critically Endangered	Community may occu within area	ırln feature area
Poplar Box Grassy Woodland on Alluvial Plains	Endangered	Community may occu within area	rIn feature area
Subtropical eucalypt floodplain forest and woodland of the New South Wales North Coast and South East Queensland bioregions	Endangered	Community likely to occur within area	In feature area
Swamp Tea-tree (Melaleuca irbyana) Forest of South-east Queensland	Critically Endangered	Community likely to occur within area	In feature area
White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland	Critically Endangered	Community likely to occur within area	In feature area

### **Listed Threatened Species**

[ Resource Information ]

Status of Conservation Dependent and Extinct are not MNES under the EPBC Act. Number is the current name ID.

Scientific Name Threatened Category Presence Text Buffer Status

Scientific Name BIRD	Threatened Category	Presence Text	Buffer Status
Anthochaera phrygia Regent Honeyeater [82338]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Botaurus poiciloptilus Australasian Bittern [1001]	Endangered	Species or species habitat likely to occur within area	In feature area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area	In feature area
Calyptorhynchus lathami lathami South-eastern Glossy Black-Cockatoo [67036]	Vulnerable	Species or species habitat known to occur within area	In feature area
Charadrius leschenaultii Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Species or species habitat may occur within area	In feature area
Cyclopsitta diophthalma coxeni Coxen's Fig-Parrot [59714]	Endangered	Species or species habitat may occur within area	In feature area
Erythrotriorchis radiatus Red Goshawk [942]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Falco hypoleucos Grey Falcon [929]	Vulnerable	Species or species habitat known to occur within area	In feature area
Geophaps scripta scripta Squatter Pigeon (southern) [64440]	Vulnerable	Species or species habitat may occur within area	In feature area
Grantiella picta Painted Honeyeater [470]	Vulnerable	Species or species habitat may occur within area	In feature area
Hirundapus caudacutus White-throated Needletail [682]	Vulnerable	Species or species habitat known to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Lathamus discolor Swift Parrot [744]	Critically Endangered	Species or species habitat likely to occur within area	In feature area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area	In feature area
Rostratula australis Australian Painted Snipe [77037]	Endangered	Species or species habitat known to occur within area	In feature area
Turnix melanogaster Black-breasted Button-quail [923]	Vulnerable	Species or species habitat likely to occur within area	In feature area
FISH			
Maccullochella mariensis			
Mary River Cod [83806]	Endangered	Translocated population known to occur within area	In buffer area only
FROG			
FROG  Mixophyes fleayi Fleay's Frog [25960]	Endangered	Species or species habitat may occur within area	In buffer area only
Mixophyes fleayi Fleay's Frog [25960]	Endangered	habitat may occur	In buffer area only
Mixophyes fleayi	Endangered	habitat may occur	In buffer area only
Mixophyes fleayi Fleay's Frog [25960]  INSECT	Endangered  Critically Endangered	habitat may occur	In buffer area only In feature area
Mixophyes fleayi Fleay's Frog [25960]  INSECT Argynnis hyperbius inconstans		habitat may occur within area  Species or species habitat may occur	
Mixophyes fleayi Fleay's Frog [25960]  INSECT Argynnis hyperbius inconstans Australian Fritillary [88056]  Phyllodes imperialis smithersi	Critically Endangered	Species or species habitat may occur within area  Species or species habitat may occur within area  Species or species habitat may occur	In feature area
Mixophyes fleayi Fleay's Frog [25960]  INSECT Argynnis hyperbius inconstans Australian Fritillary [88056]  Phyllodes imperialis smithersi Pink Underwing Moth [86084]	Critically Endangered	Species or species habitat may occur within area  Species or species habitat may occur within area  Species or species habitat may occur	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Macroderma gigas Ghost Bat [174]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Petauroides volans Greater Glider (southern and central) [254]	Endangered	Species or species habitat known to occur within area	In feature area
Petaurus australis australis Yellow-bellied Glider (south-eastern) [87600]	Vulnerable	Species or species habitat known to occur within area	In feature area
Petrogale penicillata Brush-tailed Rock-wallaby [225]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Phascolarctos cinereus (combined popul Koala (combined populations of Queensland, New South Wales and the Australian Capital Territory) [85104]	ations of Qld, NSW and the Endangered	ne ACT) Species or species habitat known to occur within area	In feature area
Potorous tridactylus tridactylus Long-nosed Potoroo (northern) [66645]	Vulnerable	Species or species habitat may occur within area	In feature area
Pseudomys novaehollandiae New Holland Mouse, Pookila [96]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
Pteropus poliocephalus Grey-headed Flying-fox [186]	Vulnerable	Roosting known to occur within area	In feature area
PLANT			
Arthraxon hispidus Hairy-joint Grass [9338]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Bosistoa transversa Three-leaved Bosistoa, Yellow Satinheart [16091]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
Corchorus cunninghamii Native Jute [14659]	Endangered	Species or species habitat likely to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Cryptocarya foetida Stinking Cryptocarya, Stinking Laurel [11976]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Cryptostylis hunteriana Leafless Tongue-orchid [19533]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Cupaniopsis shirleyana Wedge-leaf Tuckeroo [3205]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Cupaniopsis tomentella Boonah Tuckeroo [3322]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
<u>Dichanthium setosum</u> bluegrass [14159]	Vulnerable	Species or species habitat likely to occur within area	
Diploglottis campbellii Small-leaved Tamarind [21484]	Endangered	Species or species habitat may occur within area	In buffer area only
Endiandra floydii Floyd's Walnut, Crystal Creek Walnut [52955]	Endangered	Species or species habitat may occur within area	In buffer area only
Fontainea venosa [24040]	Vulnerable	Species or species habitat may occur within area	In feature area
Macadamia integrifolia Macadamia Nut, Queensland Nut Tree, Smooth-shelled Macadamia, Bush Nut, Nut Oak [7326]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Macadamia tetraphylla Rough-shelled Bush Nut, Macadamia Nut, Rough-shelled Macadamia, Rough- leaved Queensland Nut [6581]	Vulnerable	Species or species habitat may occur within area	In feature area
Notelaea ipsviciensis Cooneana Olive [81858]	Critically Endangered	Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Notelaea Iloydii Lloyd's Olive [15002]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
Plectranthus habrophyllus [64589]	Endangered	Species or species habitat likely to occur within area	•
Rhodamnia rubescens Scrub Turpentine, Brown Malletwood [15763]	Critically Endangered	Species or species habitat likely to occur within area	In feature area
Rhodomyrtus psidioides Native Guava [19162]	Critically Endangered	Species or species habitat likely to occur within area	In feature area
Samadera bidwillii Quassia [29708]	Vulnerable	Species or species habitat likely to occur within area	
Thesium australe Austral Toadflax, Toadflax [15202]	Vulnerable	Species or species habitat likely to occur within area	In feature area
REPTILE			
Coeranoscincus reticulatus Three-toed Snake-tooth Skink [59628]	Vulnerable	Species or species habitat likely to occur within area	In feature area
<u>Delma torquata</u> Adorned Delma, Collared Delma [1656]	Vulnerable	Species or species habitat may occur within area	In feature area
Furina dunmalli Dunmall's Snake [59254]	Vulnerable	Species or species habitat may occur within area	In feature area
Hemiaspis damelii Grey Snake [1179]	Endangered	Species or species habitat likely to occur within area	In feature area
Lioted Migratory Chasins		I Do	course Information
Listed Migratory Species Scientific Name	Threatened Category		source Information ]
Scientific Name  Migratory Marine Birds	Threatened Category	Presence Text	Buffer Status
Migratory Marino Dirac			

Scientific Name	Threatened Category	Presence Text	Buffer Status
Apus pacificus	impatoriou patogory	1 10001100 10/1	
Fork-tailed Swift [678]		Species or species habitat likely to occur within area	In feature area
• ** · · · · · · · · · · · · · · · · · ·			
Migratory Terrestrial Species			
Cuculus optatus Oriental Cuckoo, Horsfield's Cuckoo [86651]		Species or species habitat may occur within area	In feature area
Hirundapus caudacutus			
White-throated Needletail [682]	Vulnerable	Species or species habitat known to occur within area	In feature area
Monarcha melanopsis			
Black-faced Monarch [609]		Species or species habitat known to occur within area	In feature area
Motacilla flava			
Yellow Wagtail [644]		Species or species habitat may occur within area	In feature area
Myiagra cyanoleuca			
Satin Flycatcher [612]		Species or species habitat known to occur within area	In feature area
Rhipidura rufifrons			
Rufous Fantail [592]		Species or species habitat known to occur within area	In feature area
Symposiachrus trivirgatus as Monarcha	trivirgatus		
Spectacled Monarch [83946]		Species or species habitat likely to occur within area	In feature area
Migratory Wetlands Species			
Actitis hypoleucos			
Common Sandpiper [59309]		Species or species habitat may occur within area	In feature area
Calidris acuminata			
Sharp-tailed Sandpiper [874]		Species or species habitat likely to occur within area	In feature area
Calidris ferruginea			
Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Calidris melanotos	Throatened editogery	1 10001100 TOXE	Danor Clarac
Pectoral Sandpiper [858]		Species or species habitat may occur within area	In feature area
Charadrius leschenaultii			
Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Species or species habitat may occur within area	In feature area
Gallinago hardwickii			
Latham's Snipe, Japanese Snipe [863]		Species or species habitat known to occur within area	In feature area
Numenius madagascariensis			
Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area	In feature area
Pandion haliaetus			
Osprey [952]		Species or species habitat known to occur within area	In buffer area only
Tringa nebularia			
Common Greenshank, Greenshank [832]		Species or species habitat likely to occur within area	In feature area

# Other Matters Protected by the EPBC Act

# Commonwealth Lands [Resource Information]

The Commonwealth area listed below may indicate the presence of Commonwealth land in this vicinity. Due to the unreliability of the data source, all proposals should be checked as to whether it impacts on a Commonwealth area, before making a definitive decision. Contact the State or Territory government land department for further information.

·		
Commonwealth Land Name	State	Buffer Status
Defence		
Defence - GREENBANK TRAINING AREA [31009]	QLD	In buffer area only
Defence - GREENBANK TRAINING AREA [31014]	QLD	In buffer area only
Defence - GREENBANK TRAINING AREA [31013]	QLD	In buffer area only
Defence - GREENBANK TRAINING AREA [31012]	QLD	In buffer area only
Defence - GREENBANK TRAINING AREA [31011]	QLD	In buffer area only
Defence - GREENBANK TRAINING AREA [31010]	QLD	In buffer area only
Defence - GREENBANK TRAINING AREA [31006]	QLD	In buffer area only

Commonwealth Heritage Places		[Res	source Information ]
Name	State	Status	Buffer Status
Natural			
Greenbank Military Training Area (part)	QLD	Listed place	In buffer area only
Listed Marine Species		[Res	source Information ]
Scientific Name	Threatened Category	Presence Text	Buffer Status
Bird			
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat may occur within area	In feature area
Anseranas semipalmata Magpie Goose [978]		Species or species habitat may occur within area overfly marine area	In feature area
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area overfly marine area	In feature area
Bubulcus ibis as Ardea ibis Cattle Egret [66521]		Species or species habitat may occur within area overfly marine area	In feature area
Calidris acuminata Sharp-tailed Sandpiper [874]		Species or species habitat likely to occur within area	In feature area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area overfly marine area	In feature area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat may occur within area overfly marine area	In feature area
Charadrius leschenaultii Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Gallinago hardwickii Latham's Snipe, Japanese Snipe [863]		Species or species habitat known to occur within area overfly marine area	In feature area
Haliaeetus leucogaster White-bellied Sea-Eagle [943]		Species or species habitat known to occur within area	In feature area
Hirundapus caudacutus White-throated Needletail [682]	Vulnerable	Species or species habitat known to occur within area overfly marine area	In feature area
Lathamus discolor Swift Parrot [744]	Critically Endangered	Species or species habitat likely to occur within area overfly marine area	In feature area
Merops ornatus Rainbow Bee-eater [670]		Species or species habitat may occur within area overfly marine area	In feature area
Monarcha melanopsis Black-faced Monarch [609]		Species or species habitat known to occur within area overfly marine area	In feature area
Motacilla flava Yellow Wagtail [644]		Species or species habitat may occur within area overfly marine area	In feature area
Myiagra cyanoleuca Satin Flycatcher [612]		Species or species habitat known to occur within area overfly marine area	In feature area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area	In feature area
Pandion haliaetus Osprey [952]		Species or species habitat known to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
	Threatened Category	FIESCHOE LEXT	Duller Status
Rhipidura rufifrons Rufous Fantail [592]		Species or species habitat known to occur within area overfly marine area	In feature area
Rostratula australis as Rostratula bengha	alensis (sensu lato)		
Australian Painted Snipe [77037]	Endangered	Species or species habitat known to occur within area overfly marine area	In feature area
Symposiachrus trivirgatus as Monarcha t	rivirgatus		
Spectacled Monarch [83946]		Species or species habitat likely to occur within area overfly marine area	In feature area
Tringa nebularia			
Common Greenshank, Greenshank [832]		Species or species habitat likely to occur within area overfly marine area	In feature area

# Extra Information

State and Territory Reserves

Protected Area Name	Reserve Type	State	Buffer Status
A and T Koala Billabong	Nature Refuge	QLD	In buffer area only
Henderson Reserve	Nature Refuge	QLD	In buffer area only
Koolena	Nature Refuge	QLD	In buffer area only
Van der Loos	Nature Refuge	QLD	In buffer area only
Nationally Important Wetlands			[ Resource Information ]
Wetland Name		State	Buffer Status
Greenbank Army Training Area C		QLD	In buffer area only

[ Resource Information ]

EPBC Act Referrals			[ Resou	rce Information
Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Edelsten Road Upgrade	2020/8858		Post-Approval	In buffer area only
Proposed Industrial Development at North Maclean	2022/09304		Assessment	In buffer area only
Controlled action				
130 Tully Road New Beith Residential Development v2	2021/8904	Controlled Action	Assessment Approach	In buffer area only

Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Controlled action				
Bushman Drive Residential Development, Jimboomba, Qld	2018/8376	Controlled Action	Further Information Request	In buffer area only
Casino Ipswich Pipeline	2007/3877	Controlled Action	Completed	In buffer area only
Cedar Grove Connector Pipeline	2011/6013	Controlled Action	Completed	In feature area
Crowson Lane Road Upgrade	2021/9084	Controlled Action	Assessment Approach	In buffer area only
Defence Training Facilities at the Greenbank Training Area	2011/5896	Controlled Action	Post-Approval	In buffer area only
Flagstone West Urban Development Project, QLD	2014/7206	Controlled Action	Post-Approval	In buffer area only
Greater Flagstone master planned residential development, Undullah, Qld	2015/7530	Controlled Action	Post-Approval	In buffer area only
Industrial Development in the Greater Flagstone Urban Development Area 4499-4651 Mount Lindesay Hwy,	2013/6941	Controlled Action	Post-Approval	In buffer area only
Mirvac Greater Flagstone Project - Master Planned Development, Greenbank, Qld	2016/7817	Controlled Action	Post-Approval	In buffer area only
Park Ridge residential, mixed use and medium impact industry precinct, Park Ridge, Queensland	2017/8090	Controlled Action	Post-Approval	In buffer area only
Recreation Fields and Ancillary Sporting Facilities for Emmaus College	2009/5187	Controlled Action	Post-Approval	In buffer area only
Residential Development, Lot 4 RP45728, New Beith, Qld	2019/8398	Controlled Action	Further Information Request	In buffer area only
Residential development, Teviot Road, north Beaudesert, Qld	2016/7724	Controlled Action	Post-Approval	In buffer area only
Residential Development (Lot30, SP309195) Mountain Ridge Rd, South Maclean, Qld	2019/8408	Controlled Action	Post-Approval	In buffer area only
Rosia Park Multisport Precinct	2021/9082	Controlled Action	Further Information Request	In buffer area only
Rural Residential Development & Associated Infrastructure	2009/4890	Controlled Action	Post-Approval	In buffer area only

Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status	
Controlled action					
Tarnbrae Greater Flagstone Residential Development, New Beith, QLD	2019/8412	Controlled Action	Further Information Request	In buffer area only	
Teviot Downs Residential Estate, Greenbank	2011/6106	Controlled Action	Post-Approval	In buffer area only	
Yarrabilba residential development and associated infrastructure	2013/6791	Controlled Action	Post-Approval	In buffer area only	
Not controlled action					
Access driveway - Power connection,  Qld	2017/8043	Not Controlled Action	Completed	In buffer area only	
Building of a secondary dwelling	2012/6549	Not Controlled Action	Completed	In buffer area only	
Cedar Grove Weir	2006/2731	Not Controlled Action	Completed	In buffer area only	
Construction and Operation of Sport and Recreation Fields Emmaus College	2012/6389	Not Controlled Action	Completed	In buffer area only	
Construction and upgrade of approximately 7km of external road corridor, Flagstone, Qld	2014/7319	Not Controlled Action	Completed	In buffer area only	
Construction of a new water main (pipeline), Jimboomba, QLD	2010/5576	Not Controlled Action	Completed	In buffer area only	
Flagstone Central to Cedar Grove WWTP Conveyance Pipeline	2018/8190	Not Controlled Action	Completed	In buffer area only	
GCCC Northern Wastewater Strategy and associated Reclaimed Water Scheme - Stage	2001/282	Not Controlled Action	Completed	In buffer area only	
Greenbank to Flagstone Central Conveyance Pipeline Project, Qld	2018/8344	Not Controlled Action	Completed	In buffer area only	
Improving rabbit biocontrol: releasing another strain of RHDV, sthrn two thirds of Australia	2015/7522	Not Controlled Action	Completed	In feature area	
Loganlea to Jimboomba 110kV network upgrade, SE Qld	2013/7035	Not Controlled Action	Completed	In buffer area only	
South West Pipeline and Wyaralong Tanks Project, Qld	2018/8320	Not Controlled Action	Completed	In buffer area only	
South West Transport Corridor	2006/2547	Not Controlled Action	Completed	In buffer area only	
Spring Mountain Park rural residential estate, stages 15-18, Greenbank/New Beith, Qld		Not Controlled Action	Completed	In buffer area only	

Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status				
Not controlled action								
Not controlled action (particular manner)								
Construction & Operation 275/330kV <u>Transmission Line</u>	2006/2820	Not Controlled Action (Particular Manner)	Post-Approval	In feature area				
Construction of a Private Dwelling	2011/6149	Not Controlled Action (Particular Manner)	Post-Approval	In buffer area only				
Residential subdivision 348-434 Cusack Lane, Jimboomba, Qld	2015/7617	Not Controlled Action (Particular Manner)	Post-Approval	In buffer area only				
Referral decision								
130 Tully Road, New Beith, Residential Development	2020/8848	Referral Decision	Referral Publication	In buffer area only				
Kagaru to Acacia Ridge and Bromelton Inland Rail Project	2021/8927	Referral Decision	Referral Publication	In buffer area only				
Rosia Park Multisport Precinct	2021/9016	Referral Decision	Completed	In buffer area only				
Bioregional Assessments	Bioregional Assessments							
SubRegion	BioRegion	Websit	e Bu	Buffer Status				
Clarence-Moreton	Clarence-Mo	reton <u>BA web</u>	eton <u>BA website</u> In feature are					

### Caveat

#### 1 PURPOSE

This report is designed to assist in identifying the location of matters of national environmental significance (MNES) and other matters protected by the Environment Protection and Biodiversity Conservation Act 1999 (Cth) (EPBC Act) which may be relevant in determining obligations and requirements under the EPBC Act.

The report contains the mapped locations of:

- World and National Heritage properties;
- Wetlands of International and National Importance;
- Commonwealth and State/Territory reserves;
- distribution of listed threatened, migratory and marine species;
- listed threatened ecological communities; and
- other information that may be useful as an indicator of potential habitat value.

#### 2 DISCLAIMER

This report is not intended to be exhaustive and should only be relied upon as a general guide as mapped data is not available for all species or ecological communities listed under the EPBC Act (see below). Persons seeking to use the information contained in this report to inform the referral of a proposed action under the EPBC Act should consider the limitations noted below and whether additional information is required to determine the existence and location of MNES and other protected matters.

Where data are available to inform the mapping of protected species, the presence type (e.g. known, likely or may occur) that can be determined from the data is indicated in general terms. It is the responsibility of any person using or relying on the information in this report to ensure that it is suitable for the circumstances of any proposed use. The Commonwealth cannot accept responsibility for the consequences of any use of the report or any part thereof. To the maximum extent allowed under governing law, the Commonwealth will not be liable for any loss or damage that may be occasioned directly or indirectly through the use of, or reliance

#### 3 DATA SOURCES

Threatened ecological communities

For threatened ecological communities where the distribution is well known, maps are generated based on information contained in recovery plans, State vegetation maps and remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.

Threatened, migratory and marine species

Threatened, migratory and marine species distributions have been discerned through a variety of methods. Where distributions are well known and if time permits, distributions are inferred from either thematic spatial data (i.e. vegetation, soils, geology, elevation, aspect, terrain, etc.) together with point locations and described habitat; or modelled (MAXENT or BIOCLIM habitat modelling) using

Where little information is available for a species or large number of maps are required in a short time-frame, maps are derived either from 0.04 or 0.02 decimal degree cells; by an automated process using polygon capture techniques (static two kilometre grid cells, alpha-hull and convex hull); or captured manually or by using topographic features (national park boundaries, islands, etc.).

In the early stages of the distribution mapping process (1999-early 2000s) distributions were defined by degree blocks, 100K or 250K map sheets to rapidly create distribution maps. More detailed distribution mapping methods are used to update these distributions

#### 4 LIMITATIONS

The following species and ecological communities have not been mapped and do not appear in this report:

- threatened species listed as extinct or considered vagrants;
- some recently listed species and ecological communities;
- some listed migratory and listed marine species, which are not listed as threatened species; and
- migratory species that are very widespread, vagrant, or only occur in Australia in small numbers.

The following groups have been mapped, but may not cover the complete distribution of the species:

- listed migratory and/or listed marine seabirds, which are not listed as threatened, have only been mapped for recorded
- seals which have only been mapped for breeding sites near the Australian continent

The breeding sites may be important for the protection of the Commonwealth Marine environment.

Refer to the metadata for the feature group (using the Resource Information link) for the currency of the information.

# Acknowledgements

This database has been compiled from a range of data sources. The department acknowledges the following custodians who have contributed valuable data and advice:

- -Office of Environment and Heritage, New South Wales
- -Department of Environment and Primary Industries, Victoria
- -Department of Primary Industries, Parks, Water and Environment, Tasmania
- -Department of Environment, Water and Natural Resources, South Australia
- -Department of Land and Resource Management, Northern Territory
- -Department of Environmental and Heritage Protection, Queensland
- -Department of Parks and Wildlife, Western Australia
- -Environment and Planning Directorate, ACT
- -Birdlife Australia
- -Australian Bird and Bat Banding Scheme
- -Australian National Wildlife Collection
- -Natural history museums of Australia
- -Museum Victoria
- -Australian Museum
- -South Australian Museum
- -Queensland Museum
- -Online Zoological Collections of Australian Museums
- -Queensland Herbarium
- -National Herbarium of NSW
- -Royal Botanic Gardens and National Herbarium of Victoria
- -Tasmanian Herbarium
- -State Herbarium of South Australia
- -Northern Territory Herbarium
- -Western Australian Herbarium
- -Australian National Herbarium, Canberra
- -University of New England
- -Ocean Biogeographic Information System
- -Australian Government, Department of Defence
- Forestry Corporation, NSW
- -Geoscience Australia
- -CSIRO
- -Australian Tropical Herbarium, Cairns
- -eBird Australia
- -Australian Government Australian Antarctic Data Centre
- -Museum and Art Gallery of the Northern Territory
- -Australian Government National Environmental Science Program
- -Australian Institute of Marine Science
- -Reef Life Survey Australia
- -American Museum of Natural History
- -Queen Victoria Museum and Art Gallery, Inveresk, Tasmania
- -Tasmanian Museum and Art Gallery, Hobart, Tasmania
- -Other groups and individuals

The Department is extremely grateful to the many organisations and individuals who provided expert advice and information on numerous draft distributions.

# Please feel free to provide feedback via the **Contact us** page.

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# Appendix 3

### Wildlife Online Database



#### WildNet species list

Search Criteria: Species List for a Specified Point

Species: All

Type: All

Queensland status: Rare and threatened species

Records: Confirmed

Date: Since 1980

Latitude: -27.7717

Longitude: 153.0127

Distance: 10

Email: carla.perkins@greentapesolutions.com.au

Date submitted: Thursday 26 Jan 2023 14:02:39

Date extracted: Thursday 26 Jan 2023 14:10:02

The number of records retrieved = 14

#### **Disclaimer**

Information presented on this product is distributed by the Queensland Government as an information source only. While every care is taken to ensure the accuracy of this data, the State of Queensland makes no statements, representations or warranties about the accuracy, reliability, completeness or suitability of any information contained in this product.

The State of Queensland disclaims all responsibility for information contained in this product and all liability (including liability in negligence) for all expenses, losses, damages and costs you may incur as a result of the information being inaccurate or incomplete in any way for any reason. Information about your Species lists request is logged for quality assurance, user support and product enhancement purposes only.

The information provided should be appropriately acknowledged as being derived from WildNet database when it is used. As the WildNet Program is still in a process of collating and vetting data, it is possible the information given is not complete. Go to the WildNet database webpage

(https://www.qld.gov.au/environment/plants-animals/species-information/wildnet) to find out more about WildNet and where to access other WildNet information products approved for publication. Feedback about WildNet species lists should be emailed to wildlife.online@des.gld.gov.au.

Kingdom	Class	Family	Scientific Name	Common Name	I	Q	Α	Records
animals	amphibians	Limnodynastidae	Adelotus brevis	tusked frog		V		1
animals	birds	Apodidae	Hirundapus caudacutus	white-throated needletail		V	V	1
animals	birds	Cacatuidae	Calyptorhynchus lathami lathami	glossy black-cockatoo (eastern)		V	V	2
animals	birds	Strigidae	Ninox strenua	powerful owl		V		34
animals	mammals	Dasyuridae	Dasyurus maculatus maculatus	spotted-tailed quoll (southern subspecies)		Е	Е	1
animals	mammals	Petauridae	Petaurus australis australis	yellow-bellied glider (southern subspecies)		V	V	4
animals	mammals	Phascolarctidae	Phascolarctos cinereus	koala		Е	Е	1055
animals	mammals	Pseudocheiridae	Petauroides armillatus	central greater glider		Е	Е	4/1
plants	land plants	Apocynaceae	Leichhardtia coronata	3 0		V		2/2
plants	land plants	Asteraceae	Lagenophora fimbriata			V		4/4
plants	land plants	Cupressaceae	Callitris baileyi	Bailey's cypress		NT		1/1
plants	land plants	Lamiaceae	Coleus habrophyllus	, ,,		Е	Е	1/1
plants	land plants	Myrtaceae	Melaleuca irbyana			Е		53/17
plants	land plants	Proteaceae	Macadamia integrifolia	macadamia nut		V	V	1

#### CODES

- Y indicates that the taxon is introduced to Queensland and has naturalised.
- Q Indicates the Queensland conservation status of each taxon under the *Nature Conservation Act 1992*.

  The codes are Extinct (EX), Extinct in the Wild (PE), Critically Endangered (CR), Endangered (E), Vulnerable (V), Near Threatened (NT), Special Least Concern (SL) and Least Concern (C).
- A Indicates the Australian conservation status of each taxon under the *Environment Protection and Biodiversity Conservation Act 1999*.

  The values of EPBC are Extinct (EX), Extinct in the Wild (XW), Critically Endangered (CE), Endangered (E), Vulnerable (V) and Conservation Dependent (CD).

Records - The first number indicates the total number of records of the taxon (wildlife records and species listings for selected areas).

This number is output as 99999 if it equals or exceeds this value. A second number located after a / indicates the number of specimen records for the taxon.

This number is output as 999 if it equals or exceeds this value.



# Appendix 4

# **DOR Vegetation Management Report**



# **Vegetation management report**

For Lot: 4 Plan: RP137101

02/11/2022



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#### **Recent changes**

#### **Updated mapping**

Updated vegetation mapping was released on 8 September 2022 and includes the most recent Queensland Herbarium scientific updates to the Regulated Vegetation Management Map, regional ecosystems, wetland, high-value regrowth and essential habitat mapping.

The Department of Environment and Science have also updated their protected plant and koala protection mapping to align with the Queensland Herbarium scientific updates.

#### **Overview**

Based on the lot on plan details you have supplied, this report provides the following detailed information:

**Property details** - information about the specified Lot on Plan, lot size, local government area, bioregion(s), subregion(s) and catchment(s);

**Vegetation management framework** - an explanation of the application of the framework and contact details for the Department of Resources who administer the framework;

#### Vegetation management framework details for the specified Lot on Plan including:

- the vegetation management categories on the property;
- the vegetation management regional ecosystems on the property;
- vegetation management watercourses or drainage features on the property;
- vegetation management wetlands on the property;
- vegetation management essential habitat on the property;
- · whether any area management plans are associated with the property;
- whether the property is coastal or non-coastal; and
- whether the property is mapped as Agricultural Land Class A or B;

**Protected plant framework** - an explanation of the application of the framework and contact details for the Department of Environment and Science who administer the framework, including:

• high risk areas on the protected plant flora survey trigger map for the property;

**Koala protection framework** - an explanation of the application of the framework and contact details for the Department of Environment and Science who administer the framework; and

#### Koala protection framework details for the specified Lot on Plan including:

- the koala district the property is located in;
- koala priority areas on the property;
- core and locally refined koala habitat areas on the property;
- whether the lot is located in an identified koala broad-hectare area; and
- koala habitat regional ecosystems on the property for core koala habitat areas.

This information will assist you to determine your options for managing vegetation under:

- the vegetation management framework, which may include:
  - · exempt clearing work;
  - accepted development vegetation clearing code;
  - an area management plan;
  - a development approval;
- the protected plant framework, which may include:
  - the need to undertake a flora survey:
  - · exempt clearing;
  - a protected plant clearing permit;
- the koala protection framework, which may include:
  - exempted development;
  - a development approval;
  - the need to undertake clearing sequentially and in the presence of a koala spotter.

#### Other laws

The clearing of native vegetation is regulated by both Queensland and Australian legislation, and some local governments also regulate native vegetation clearing. You may need to obtain an approval or permit under another Act, such as the Commonwealth Government's *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). Section 8 of this guide provides contact details of other agencies you should confirm requirements with, before commencing vegetation clearing.

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# 1. Property details

## 1.1 Tenure and title area

All of the lot, plan, tenure and title area information associated with property Lot: 4 Plan: RP137101, are listed in Table 1.

Table 1: Lot, plan, tenure and title area information for the property

Lot	Plan	Tenure	Property title area (sq metres)
4	RP137101	Freehold	39,820

The tenure of the land may affect whether clearing is considered exempt clearing work or may be carried out under an accepted development vegetation clearing code.

# 1.2 Property location

Table 2 provides a summary of the locations for property Lot: 4 Plan: RP137101, in relation to natural and administrative boundaries.

**Table 2: Property location details** 

Local Government(s)
Logan City

Bioregion(s)	Subregion(s)	
Southeast Queensland	Moreton Basin	

Catchment(s)
Logan-Albert

# 2. Vegetation management framework (administered by the Department of Resources)

The *Vegetation Management Act 1999* (VMA), the Vegetation Management Regulation 2012, the *Planning Act 2016* and the Planning Regulation 2017, in conjunction with associated policies and codes, form the Vegetation Management Framework.

The VMA does not apply to all land tenures or vegetation types. State forests, national parks, forest reserves and some tenures under the *Forestry Act 1959* and *Nature Conservation Act 1992* are not regulated by the VMA. Managing or clearing vegetation on these tenures may require approvals under these laws.

The following native vegetation is not regulated under the VMA but may require permit(s) under other laws:

- grass or non-woody herbage;
- a plant within a grassland regional ecosystem prescribed under Schedule 5 of the Vegetation Management Regulation 2012; and
- a mangrove.

## 2.1 Exempt clearing work

Exempt clearing work is an activity for which you do not need to notify the Department of Resources or obtain an approval under the vegetation management framework. Exempt clearing work was previously known as exemptions.

In areas that are mapped as Category X (white in colour) on the regulated vegetation management map (see section 4.1), and where the land tenure is freehold, indigenous land and leasehold land for agriculture and grazing purposes, the clearing of vegetation is considered exempt clearing work and does not require notification or development approval under the vegetation management framework. For all other land tenures, contact the Department of Resources before commencing clearing to ensure that the proposed activity is exempt clearing work.

A range of routine property management activities are considered exempt clearing work. A list of exempt clearing work is available at

https://www.qld.gov.au/environment/land/management/vegetation/clearing-approvals/exemptions.

Exempt clearing work may be affected if the proposed clearing area is subject to development approval conditions, a covenant, an environmental offset, an exchange area, a restoration notice, or an area mapped as Category A. Exempt clearing work may require approval under other Commonwealth, State or Local Government laws, or local government planning schemes. Contact the Department of Resources prior to clearing in any of these areas.

# 2.2 Accepted development vegetation clearing codes

Some clearing activities can be undertaken under an accepted development vegetation clearing code. The codes can be downloaded at

https://www.qld.gov.au/environment/land/management/vegetation/clearing-approvals/codes

If you intend to clear vegetation under an accepted development vegetation clearing code, you must notify the Department of Resources before commencing. The information in this report will assist you to complete the online notification form.

You can complete the online form at

https://apps.dnrm.gld.gov.au/vegetation/

## 2.3 Area management plans

Area Management Plans (AMP) provide an alternative approval system for vegetation clearing under the vegetation management framework. They list the purposes and clearing conditions that have been approved for the areas covered by the plan. It is not necessary to use an AMP, even when an AMP applies to your property.

On 8 March 2020, AMPs ended for fodder harvesting, managing thickened vegetation and managing encroachment. New notifications cannot be made for these AMPs. You will need to consider options for fodder harvesting, managing thickened vegetation or encroachment under a relevant accepted development vegetation clearing code or apply for a development approval.

New notifications can be made for all other AMPs. These will continue to apply until their nominated end date.

If an Area Management Plan applies to your property for which you can make a new notification, it will be listed in Section 3.6 of this report. Before clearing under one of these AMPs, you must first notify the Department of Resources and then follow the conditions and requirements listed in the AMP.

https://www.qld.gov.au/environment/land/management/vegetation/clearing-approvals/area-management-plans

## 2.4 Development approvals

If under the vegetation management framework your proposed clearing is not exempt clearing work, or is not permitted under an accepted development vegetation clearing code, or an AMP, you may be able to apply for a development approval. Information on how to apply for a development approval is available at

https://www.qld.gov.au/environment/land/management/vegetation/clearing-approvals/development

## 2.5. Contact information for the Department of Resources

For further information on the vegetation management framework:

Phone 135VEG (135 834)

Email vegetation@resources.qld.gov.au

Visit https://www.resources.gld.gov.au/?contact=vegetation to submit an online enquiry.

# 3. Vegetation management framework for Lot: 4 Plan: RP137101

# 3.1 Vegetation categories

The vegetation categories on your property are shown on the regulated vegetation management map in section 4.1 of this report. A summary of vegetation categories on the subject lot are listed in Table 3. Descriptions for these categories are shown in Table 4.

Table 3: Vegetation categories for subject property. Total area: 3.98ha

Vegetation category	Area (ha)
Category C	< 0.1
Category X	3.9

Table 4: Description of vegetation categories

Category	Colour on Map	Description	Requirements / options under the vegetation management framework
A	red	Compliance areas, environmental offset areas and voluntary declaration areas	Special conditions apply to Category A areas. Before clearing, contact the Department of Resources to confirm any requirements in a Category A area.
В	dark blue	Remnant vegetation areas	Exempt clearing work, or notification and compliance with accepted development vegetation clearing codes, area management plans or development approval.
С	light blue	High-value regrowth areas	Exempt clearing work, or notification and compliance with managing Category C regrowth vegetation accepted development vegetation clearing code.
R	yellow	Regrowth within 50m of a watercourse or drainage feature in the Great Barrier Reef catchment areas	Exempt clearing work, or notification and compliance with managing Category R regrowth accepted development vegetation clearing code or area management plans.
X	white	Clearing on freehold land, indigenous land and leasehold land for agriculture and grazing purposes is considered exempt clearing work under the vegetation management framework. Contact the Department of Resources to clarify whether a development approval is required for other State land tenures.	No permit or notification required on freehold land, indigenous land and leasehold land for agriculture and grazing. A development approval may be required for some State land tenures.

#### **Property Map of Assessable Vegetation (PMAV)**

There is no Property Map of Assessable Vegetation (PMAV) present on this property.

## 3.2 Regional ecosystems

The endangered, of concern and least concern regional ecosystems on your property are shown on the vegetation management supporting map in section 4.2 and are listed in Table 5.

A description of regional ecosystems can be accessed online at <a href="https://www.qld.gov.au/environment/plants-animals/plants/ecosystems/descriptions/">https://www.qld.gov.au/environment/plants-animals/plants/ecosystems/descriptions/</a>

Table 5: Regional ecosystems present on subject property

Regional Ecosystem	VMA Status	Category	Area (Ha)	Short Description	Structure Category
12.3.19	Endangered	С	0.04	Eucalyptus moluccana and/or Eucalyptus tereticornis and E. crebra open forest to woodland, with a sparse to mid-dense understorey of Melaleuca irbyana on alluvial plains	Mid-dense
non-rem	None	Х	3.94	None	None

#### Please note:

The VMA status of the regional ecosystem (whether it is endangered, of concern or least concern) also determines if any of the following are applicable:

- · exempt clearing work;
- accepted development vegetation clearing codes;
- performance outcomes in State Code 16 of the State Development Assessment Provisions (SDAP).

## 3.3 Watercourses

Vegetation management watercourses and drainage features for this property are shown on the vegetation management supporting map in section 4.2.

## 3.4 Wetlands

There are no vegetation management wetlands present on this property.

### 3.5 Essential habitat

Under the VMA, essential habitat for protected wildlife is native wildlife prescribed under the *Nature Conservation Act 1992* (NCA) as critically endangered, endangered, vulnerable or near-threatened wildlife.

Essential habitat for protected wildlife includes suitable habitat on the lot, or where a species has been known to occur up to 1.1 kilometres from a lot on which there is assessable vegetation. These important habitat areas are protected under the VMA.

Any essential habitat on this property will be shown as blue hatching on the vegetation supporting map in section 4.2.

If essential habitat is identified on the lot, information about the protected wildlife species is provided in Table 6 below. The numeric labels on the vegetation management supporting map can be cross referenced with Table 6 to outline the essential habitat factors for that particular species. There may be essential habitat for more than one species on each lot, and areas of Category A, Category B and Category C can be mapped as Essential Habitat.

Essential habitat is compiled from a combination of species habitat models and buffered species records. Regional ecosystem is a mandatory essential habitat factor, unless otherwise stated. Essential habitat, for protected wildlife, means an area of vegetation shown on the Regulated Vegetation Management Map -

<sup>1.</sup> All area and area derived figures included in this table have been calculated via reprojecting relevant spatial features to Albers equal-area conic projection (central meridian = 146, datum Geocentric Datum of Australia 1994). As a result, area figures may differ slightly if calculated for the same features using a different co-ordinate system.

<sup>2.</sup> If Table 5 contains a Category 'plant', please be aware that this refers to 'plantations' such as forestry, and these areas are considered non-remnant under the VMA.

- 1) that has at least 3 essential habitat factors for the protected wildlife that must include any essential habitat factors that are stated as mandatory for the protected wildlife in the essential habitat database. Essential habitat factors are comprised of regional ecosystem (mandatory for most species), vegetation community, altitude, soils, position in landscape; or
- 2) in which the protected wildlife, at any stage of its life cycle, is located.

If there is no essential habitat mapping shown on the vegetation management supporting map for this lot, and there is no table in the sections below, it confirms that there is no essential habitat on the lot.

## Category A and/or Category B and/or Category C

### Table 6: Essential habitat in Category A and/or Category B and/or Category C

Label	Scientific	Common Name	NCA Status	Vegetation Community	Altitude	Soils	Position in Landscape
	Name						
26403	Melaleuca	None	E	Belah scrub with Callitris sp. and Eucalyptus	0 to 600 m	sandy, clay	creek bank, poorly drained or seasonally flooded
	irbyana			melanophloia; woodland to open forest of Eucalyptus		loam, sandy	areas in undulating terrain, hill slope
				tereticornis, E. melanophloia, or Eucalyptus moluccana or		clay to clay soil	
				Eucalyptus siderophloia and Eucalyptus moluccana			
860	Phascolarctos	koala	E	Open forests and woodlands containing Eucalyptus,	Sea level to	None	Riparian areas, plains and hill/escarpment
	cinereus			Corymbia, Lophostemon or Melaleuca trees having a	1000m.		slopes.
				trunk of a diameter of more than 10cm at 1.3m above the			
				ground. Tree species used for food and habitat varies			
				across the state and can include: Corymbia citriodora,			
				Corymbia henryi, Corymbia intermedia, Eucalyptus			
				acmenoides, Eucalyptus bancroftii, Eucalyptus			
				biturbinata, Eucalyptus blakelyi, Eucalyptus brownii,			
				Eucalyptus camaldulensis, Eucalyptus carnea, Eucalyptus			
				chloroclada, Eucalyptus coolabah, Eucalyptus crebra,			
				Eucalyptus dealbata, Eucalyptus drepanophylla,			
				Eucalyptus dunnii, Eucalyptus eugenioides, Eucalyptus			
				exserta, Eucalyptus fibrosa, Eucalyptus grandis,			
				Eucalyptus helidonica, Eucalyptus latisinensis, Eucalyptus			
				longirostrata, Eucalyptus major, Eucalyptus melanophloia,			
				Eucalyptus melliodora, Eucalyptus microcarpa,			
				Eucalyptus microcorys, Eucalyptus microtheca,			
				Eucalyptus moluccana, Eucalyptus montivaga,			
				Eucalyptus orgadophila, Eucalyptus papuana, Eucalyptus			
				pilularis, Eucalyptus platyphylla, Eucalyptus populnea,			
				Eucalyptus portuensis, Eucalyptus propinqua, Eucalyptus			
				racemosa, Eucalyptus resinifera, Eucalyptus robusta,			
				Eucalyptus saligna, Eucalyptus seeana, Eucalyptus			
				siderophloia, Eucalyptus sideroxylon, Eucalyptus			
				tereticornis, Eucalyptus thozetiana, Eucalyptus tindaliae,			
				Eucalyptus umbra, Lophostemon confertus, Melaleuca			
				leucadendra, Melaleuca quinquenervia.			
	l						

Label	Regional Ecosystem (mandatory unless otherwise specified)
26403	11.10.1, 12.3.11, 12.3.18, 12.3.19, 12.5.2x1, 12.9-10.7, 12.9-10.11, 12.9-10.27, 12.11.5, 12.11.18

Label	Regional Ecosystem (mandatory unless otherwise specified)
860	4.31, 4.32, 4.33, 4.34, 4.35, 4.36, 4.38, 4.310, 4.3.11, 4.5.3, 4.5.5, 4.5.6, 4.5.8, 4.5.9, 4.7.1, 4.7.7, 4.7.8, 4.9.6, 4.9.10, 4.9.12, 4.9.17, 6.3.1, 6.3.2, 6.3.3, 6.3.4, 6.3.5, 6.3.7, 6.3.8, 6.3.9, 6.3.11, 6.3.12, 6.3.17, 6.3.18, 6.3.22,
	6.324, 6.3.25, 6.4.1, 6.4.2, 6.4.3, 6.4.4, 6.5.1, 6.5.2, 6.5.3, 6.5.5, 6.5.6, 6.5.7, 6.5.8, 6.5.9, 6.5.10, 6.5.11, 6.5.13, 6.5.14, 6.5.15, 6.5.16, 6.5.17, 6.5.18, 6.5.19, 6.6.2, 6.7.1, 6.7.2, 6.7.5, 6.7.6, 6.7.7, 6.7.9, 6.7.11, 6.7.12, 6.7.13,
	6.7.14, 6.7.17, 6.9.3, 7.2.3, 7.2.4, 7.2.7, 7.2.11, 7.3.7, 7.3.8, 7.3.9, 7.3.12, 7.3.13, 7.3.14, 7.3.16, 7.3.19, 7.3.20, 7.3.21, 7.3.25, 7.3.26, 7.3.39, 7.3.40, 7.3.42, 7.3.43, 7.3.44, 7.3.45, 7.3.47, 7.3.48, 7.3.50, 7.5.1, 7.5.2, 7.5.3,
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	11.11.13, 11.11.14, 11.11.15, 11.11.16, 11.11.17, 11.11.19, 11.11.20, 11.12.1, 11.12.2, 11.12.3, 11.12.5, 11.12.6, 11.12.7, 11.12.8, 11.12.9, 11.12.10, 11.12.13, 11.12.14, 11.12.15, 11.12.15, 11.12.16, 11.12.17, 11.12.20,
	1225, 1226, 1227, 1228, 12210, 1232, 1233, 1234, 1235, 1236, 1237, 1239, 12310, 12311, 12314, 12318, 12319, 12320, 1251, 1252, 1253, 1254, 1256, 1257, 12510, 12512, 1281, 1288,
	12.8.9, 12.8.11, 12.8.12, 12.8.14, 12.8.16, 12.8.17, 12.8.20, 12.8.24, 12.8.25, 12.9-10.1, 12.9-10.2, 12.9-10.3, 12.9-10.4, 12.9-10.5, 12.9-10.7, 12.9-10.8, 12.9-10.11, 12.9-10.12, 12.9-10.14, 12.9-10.17, 12.9-10.18, 12.9-10.19,
	12.9-10.21, 12.9-10.25, 12.9-10.26, 12.9-10.27, 12.9-10.28, 12.9-10.29, 12.11.2, 12.11.3, 12.11.5, 12.11.6, 12.11.7, 12.11.8, 12.11.9, 12.11.14, 12.11.15, 12.11.16, 12.11.17, 12.11.18, 12.11.24, 12.11.25,
	12.11.26, 12.11.27, 12.11.28, 12.12.2, 12.12.3, 12.12.4, 12.12.5, 12.12.6, 12.12.7, 12.12.8, 12.12.9, 12.12.11, 12.12.12, 12.12.14, 12.12.15, 12.12.23, 12.12.24, 12.12.25, 12.12.28, 13.3.1, 13.3.2, 13.3.3, 13.3.4, 13.3.5, 13.3.7,
	13.9.2, 13.11.1, 13.11.2, 13.11.3, 13.11.4, 13.11.5, 13.11.6, 13.11.8, 13.11.9, 13.12.1, 13.12.2, 13.12.3, 13.12.4, 13.12.5, 13.12.6, 13.12.8, 13.12.9, 13.12.9, 13.12.10.

# 3.6 Area Management Plan(s)

Nil

## 3.7 Coastal or non-coastal

For the purposes of the accepted development vegetation clearing codes and State Code 16 of the State Development Assessment Provisions (SDAP), this property is regarded as\*

Coastal

\*See also Map 4.3

# 3.8 Agricultural Land Class A or B

The following can be used to identify Agricultural Land Class A or B areas under the "Managing regulated regrowth vegetation" accepted development vegetation clearing code:

Does this lot contain land that is mapped as Agricultural Land Class A or B in the State Planning Interactive Mapping System?

Class A (with urban areas masked as per SPP): 0.05ha

Class B (with urban areas masked as per SPP): 3.87ha

Note - This confirms Agricultural Land Classes as per the State Planning Interactive Mapping System only. This response does not include Agricultural Land Classes identified under local government planning schemes. For further information, check the Planning Scheme for your local government area.

See Map 4.4 to identify the location and extent of Class A and/or Class B Agricultural land on Lot: 4 Plan: RP137101.

# 4. Vegetation management framework maps

Vegetation management maps included in this report may also be requested individually at: https://www.resources.gld.gov.au/gld/environment/land/vegetation/vegetation-map-request-form

### Regulated vegetation management map

The regulated vegetation management map shows vegetation categories needed to determine clearing requirements. These maps are updated monthly to show new <u>property maps of assessable vegetation (PMAV).</u>

#### Vegetation management supporting map

The vegetation management supporting map provides information on regional ecosystems, wetlands, watercourses and essential habitat.

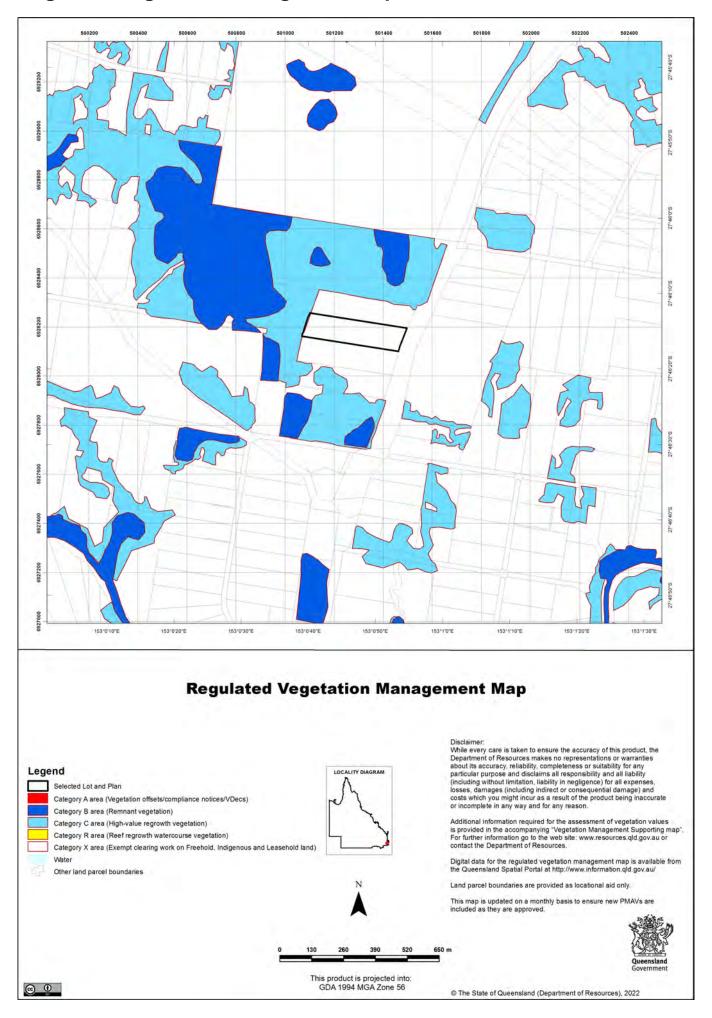
#### Coastal/non-coastal map

The coastal/non-coastal map confirms whether the lot, or which parts of the lot, are considered coastal or non-coastal for the purposes of the accepted development vegetation clearing codes and State Code 16 of the State Development Assessment Provisions (SDAP).

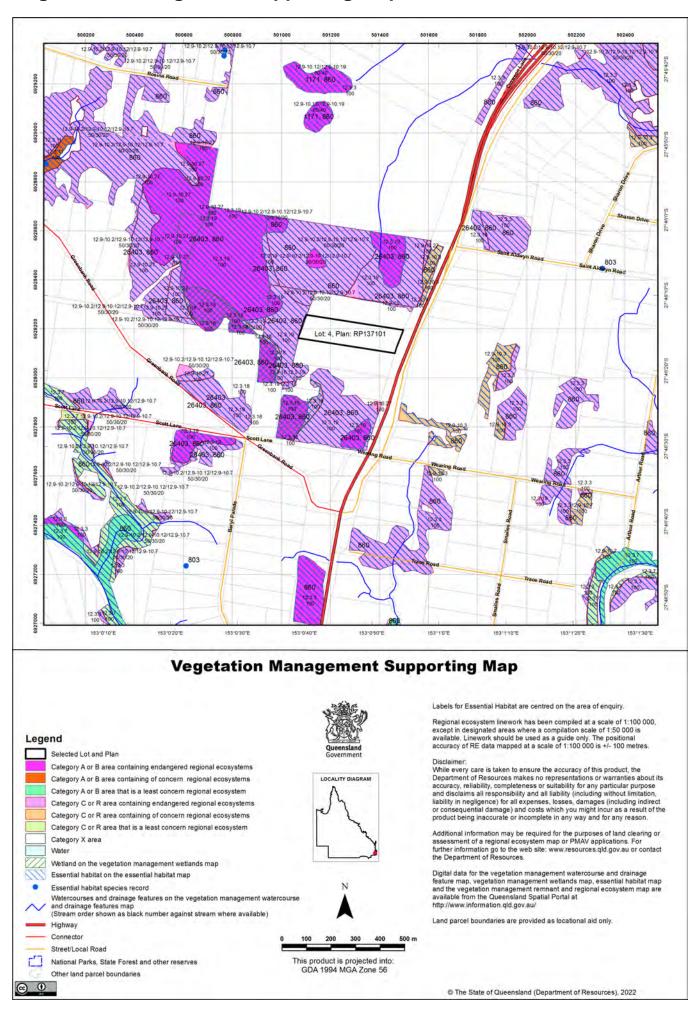
#### Agricultural Land Class A or B as per State Planning Policy: State Interest for Agriculture

The Agricultural Land Class map confirms the location and extent of land mapped as Agricultural Land Classes A or B as identified on the State Planning Interactive Mapping System. Please note that this map does not include areas identified as Agricultural Land Class A or B in local government planning schemes. This map can be used to identify Agricultural Land Class A or B areas under the "Managing regulated regrowth vegetation" accepted development vegetation clearing code.

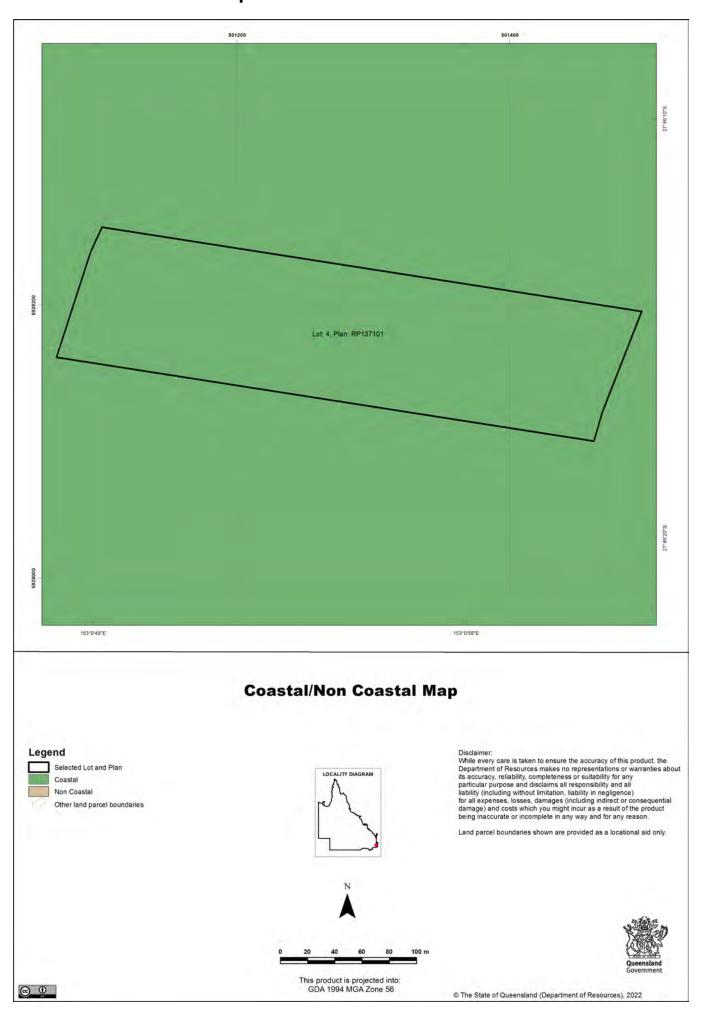
# 4.1 Regulated vegetation management map



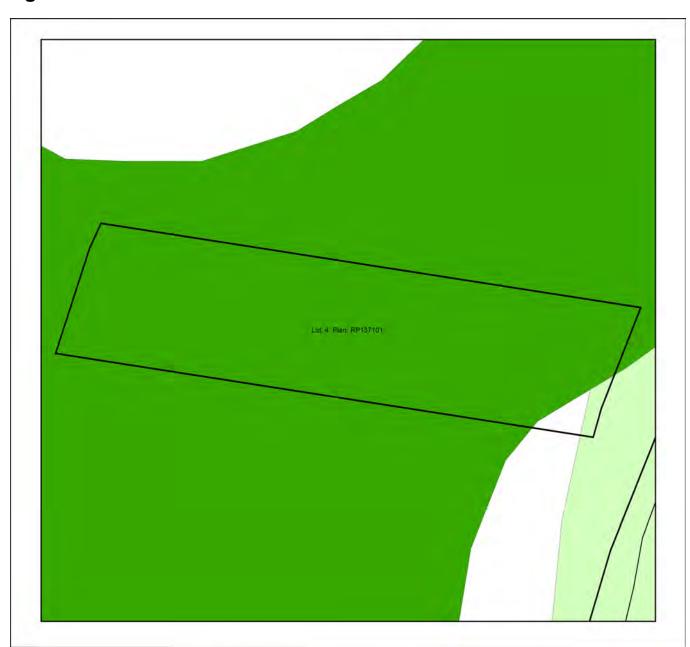
# 4.2 Vegetation management supporting map

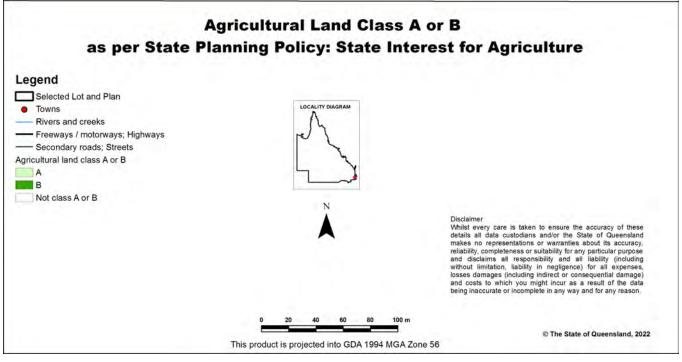


# 4.3 Coastal/non-coastal map



# 4.4 Agricultural Land Class A or B as per State Planning Policy: State Interest for Agriculture





# 5. Protected plants framework (administered by the Department of Environment and Science (DES))

In Queensland, all plants that are native to Australia are protected plants under the <u>Nature Conservation Act 1992</u> (NCA). The NCA regulates the clearing of protected plants 'in the wild' (see <u>Operational policy: When a protected plant in Queensland is considered to be 'in the wild'</u>) that are listed as critically endangered, endangered, vulnerable or near threatened under the Act.

Please note that the protected plant clearing framework applies irrespective of the classification of the vegetation under the *Vegetation Management Act 1999* and any approval or exemptions given under another Act, for example, the *Vegetation Management Act 1999* or *Planning Regulation 2017*.

## 5.1 Clearing in high risk areas on the flora survey trigger map

The flora survey trigger map identifies high-risk areas for threatened and near threatened plants. These are areas where threatened or near threatened plants are known to exist or are likely to exist based on the habitat present. The flora survey trigger map for this property is provided in section 5.5.

If you are proposing to clear an area shown as high risk on the flora survey trigger map, a flora survey of the clearing impact area must be undertaken by a suitably qualified person in accordance with the <u>Flora survey guidelines</u>. The main objective of a flora survey is to locate any threatened or near threatened plants that may be present in the clearing impact area.

If the flora survey identifies that threatened or near threatened plants are not present within the clearing impact area or clearing within 100m of a threatened or near threatened plant can be avoided, the clearing activity is exempt from a permit. An <u>exempt clearing notification form</u> must be submitted to the Department of Environment and Science, with a copy of the flora survey report, at least one week prior to clearing.

If the flora survey identifies that threatened or near threatened plants are present in, or within 100m of, the area to be cleared, a clearing permit is required before any clearing is undertaken. The flora survey report, as well as an impact management report, must be submitted with the <u>clearing permit application form</u>.

## 5.2 Clearing outside high risk areas on the flora survey trigger map

In an area other than a high risk area, a clearing permit is only required where a person is, or becomes aware that threatened or near threatened plants are present in, or within 100m of, the area to be cleared. You must keep a copy of the flora survey trigger map for the area subject to clearing for five years from the day the clearing starts. If you do not clear within the 12 month period that the flora survey trigger map was printed, you need to print and check a new flora survey trigger map.

# 5.3 Exemptions

Many activities are 'exempt' under the protected plant clearing framework, which means that clearing of native plants that are in the wild can be undertaken for these activities with no need for a flora survey or a protected plant clearing permit. The Information sheet - General exemptions for the take of protected plants provides some of these exemptions.

Some exemptions under the NCA are the same as exempt clearing work (formerly known as exemptions) under the *Vegetation Management Act 1999* (i.e. listed in Schedule 21 of the Planning Regulations 2017) while some are different.

## 5.4 Contact information for DES

For further information on the protected plants framework:

Phone 1300 130 372 (and select option four)

Email palm@des.qld.gov.au

Visit <a href="https://www.qld.gov.au/environment/plants-animals/plants/protected-plants">https://www.qld.gov.au/environment/plants-animals/plants/protected-plants</a>

## 5.5 Protected plants flora survey trigger map

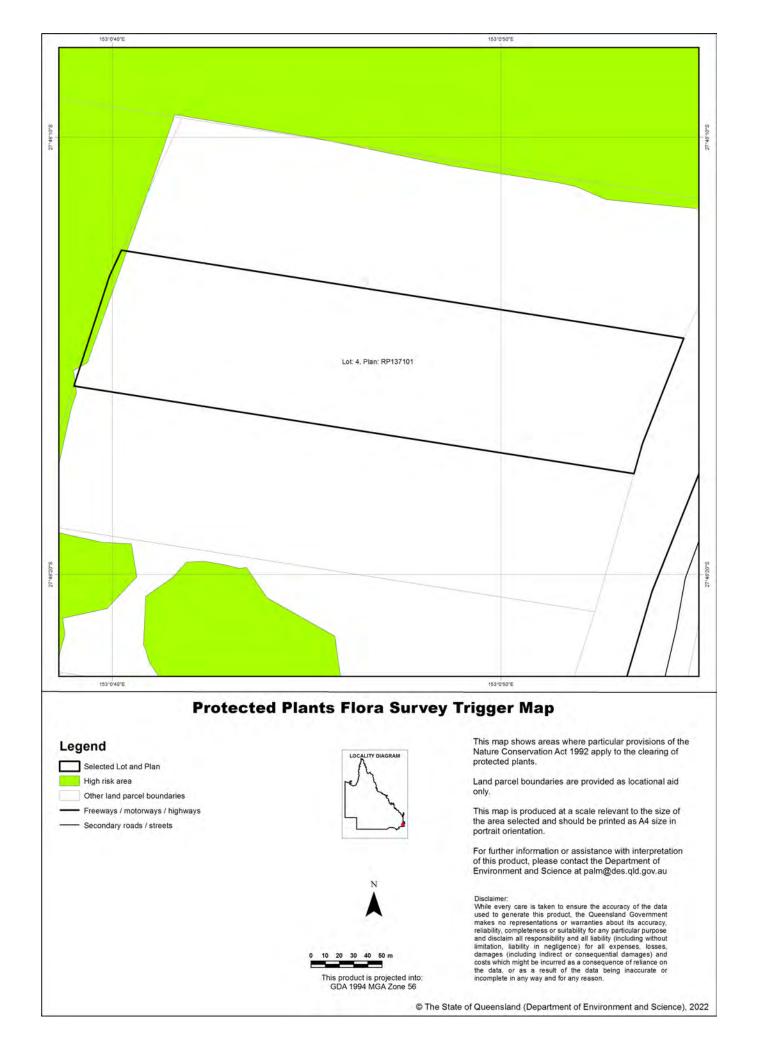
This map included may also be requested individually at: <a href="https://apps.des.qld.gov.au/map-request/flora-survey-trigger/">https://apps.des.qld.gov.au/map-request/flora-survey-trigger/</a>.

#### Updates to the data informing the flora survey trigger map

The flora survey trigger map will be reviewed, and updated if necessary, at least every 12 months to ensure the map reflects the most up-to-date and accurate data available.

#### **Species information**

Please note that flora survey trigger maps do not identify species associated with 'high risk areas'. While some species information may be publicly available, for example via the <u>Queensland Spatial Catalogue</u>, the Department of Environment and Science does not provide species information on request. Regardless of whether species information is available for a particular high risk area, clearing plants in a high risk area may require a flora survey and/or clearing permit. Please see the Department of Environment and Science webpage on the <u>clearing of protected plants</u> for more information.



# 6. Koala protection framework (administered by the Department of Environment and Science (DES))

The koala (*Phascolarctos cinereus*) is listed in Queensland as vulnerable by the Queensland Government under *Nature Conservation Act 1992* and by the Australian Government under the *Environment Protection and Biodiversity Conservation Act 1999*.

The Queensland Government's koala protection framework is comprised of the *Nature Conservation Act 1992*, the Nature Conservation (Animals) Regulation 2020, the Nature Conservation (Koala) Conservation Plan 2017, the *Planning Act 2016* and the Planning Regulation 2017.

## 6.1 Koala mapping

#### 6.1.1 Koala districts

The parts of Queensland where koalas are known to occur has been divided into three koala districts - koala district A, koala district B and koala district C. Each koala district is made up of areas with comparable koala populations (e.g. density, extent and significance of threatening processes affecting the population) which require similar management regimes.

Section 7.1 identifies which koala district your property is located in.

#### 6.1.2 Koala habitat areas

Koala habitat areas are areas of vegetation that have been determined to contain koala habitat that is essential for the conservation of a viable koala population in the wild based on the combination of habitat suitability and biophysical variables with known relationships to koala habitat (e.g. landcover, soil, terrain, climate and ground water). In order to protect this important koala habitat, clearing controls have been introduced into the Planning Regulation 2017 for development in koala habitat areas.

Please note that koala habitat areas only exist in koala district A which is the South East Queensland "Shaping SEQ" Regional Plan area. These areas include the local government areas of Brisbane, Gold Coast, Logan, Lockyer Valley, Ipswich, Moreton Bay, Noosa, Redland, Scenic Rim, Somerset, Sunshine Coast and Toowoomba (urban extent).

There are two different categories of koala habitat area (core koala habitat area and locally refined koala habitat), which have been determined using two different methodologies. These methodologies are described in the document <a href="Spatial modelling in South East Queensland">Spatial modelling in South East Queensland</a>.

Section 7.2 shows any koala habitat area that exists on your property.

Under the Nature Conservation (Koala) Conservation Plan 2017, an owner of land (or a person acting on the owner's behalf with written consent) can request to make, amend or revoke a koala habitat area determination if they believe, on reasonable grounds, that the existing determination for all or part of their property is incorrect.

More information on requests to make, amend or revoke a koala habitat area determination can be found in the document Guideline - Requests to make, amend or revoke a koala habitat area determination.

The koala habitat area map will be updated at least annually to include any koala habitat areas that have been made, amended or revoked.

Changes to the koala habitat area map which occur between annual updates because of a request to make, amend or revoke a koala habitat area determination can be viewed on the register of approved requests to make, amend or revoke a koala habitat area available at: <a href="https://environment.des.qld.gov.au/wildlife/animals/living-with/koalas/mapping/koalamaps">https://environment.des.qld.gov.au/wildlife/animals/living-with/koalas/mapping/koalamaps</a>. The register includes the lot on plan for the change, the date the decision was made and the map issued to the landholder that shows areas determined to be koala habitat areas.

#### 6.1.3 Koala priority areas

Koala priority areas are large, connected areas that have been determined to have the highest likelihood of achieving conservation outcomes for koalas based on the combination of habitat suitability, biophysical variables with known relationships to koala habitat (e.g. landcover, soil, terrain, climate and ground water) and a koala conservation cost benefit analysis.

Conservation efforts will be prioritised in these areas to ensure the conservation of viable koala populations in the wild including a focus on management (e.g. habitat protection, habitat restoration and threat mitigation) and monitoring. This includes a prohibition on clearing in koala habitat areas that are in koala priority areas under the Planning Regulation 2017 (subject to some exemptions).

Please note that koala priority areas only exist in koala district A which is the South East Queensland "Shaping SEQ" Regional Plan area. These areas include the local government areas of Brisbane, Gold Coast, Logan, Lockyer Valley,

Ipswich, Moreton Bay, Noosa, Redland, Scenic Rim, Somerset, Sunshine Coast and Toowoomba (urban extent).

Section 7.2 identifies if your property is in a koala priority area.

#### 6.1.4 Identified koala broad-hectare areas

There are seven identified koala broad-hectare areas in SEQ. These are areas of koala habitat that are located in areas committed to meet development targets in the SEQ Regional Plan to accommodate SEQ's growing population including bring-forward Greenfield sites under the Queensland Housing Affordability Strategy and declared master planned areas under the repealed *Sustainable Planning Act 2009* and the repealed *Integrated Planning Act 1997*.

Specific assessment benchmarks apply to development applications for development proposed in identified koala broad-hectare areas to ensure koala conservation measures are incorporated into the proposed development.

Section 7.2 identifies if your property is in an identified koala broad-hectare area.

## 6.2 Koala habitat planning controls

On 7 February 2020, the Queensland Government introduced new planning controls to the Planning Regulation 2017 to strengthen the protection of koala habitat in South East Queensland (i.e. koala district A).

More information on these planning controls can be found here: <a href="https://environment.des.gld.gov.au/wildlife/animals/living-with/koalas/mapping/legislation-policy">https://environment.des.gld.gov.au/wildlife/animals/living-with/koalas/mapping/legislation-policy</a>.

As a high-level summary, the koala habitat planning controls make:

- development that involves interfering with koala habitat (defined below) in an area that is both a koala priority area and a koala habitat area, prohibited development (i.e. development for which a development application cannot be made);
- development that involves interfering with koala habitat (defined below) in an area that is a koala habitat area but is not a koala priority area, assessable development (i.e. development for which development approval is required); and
- development that is for extractive industries where the development involves interfering with koala habitat (defined below) in an area that is both a koala habitat area and a key resource area, assessable development (i.e. development for which development approval is required).

#### Interfering with koala habitat means:

- 1) Removing, cutting down, ringbarking, pushing over, poisoning or destroying in anyway, including by burning, flooding or draining native vegetation in a koala habitat area; but
- 2) Does not include destroying standing vegetation by stock or lopping a tree.

However, these planning controls do not apply if the development is exempted development as defined in Schedule 24 of the <u>Planning Regulation 2017</u>. More information on exempted development can be found here: <a href="https://environment.des.gld.gov.au/wildlife/animals/living-with/koalas/mapping/legislation-policy">https://environment.des.gld.gov.au/wildlife/animals/living-with/koalas/mapping/legislation-policy</a>.

There are also assessment benchmarks that apply to development applications for:

- building works, operational works, material change of use or reconfiguration of a lot where:
  - the local government planning scheme makes the development assessable;
  - the premises includes an area that is both a koala priority area and a koala habitat area; and
  - the development does not involve interfering with koala habitat (defined above); and
- development in identified koala broad-hectare areas.

The <u>Guideline - Assessment Benchmarks in relation to Koala Habitat in South East Queensland assessment benchmarks</u> outlines these assessment benchmarks, the intent of these assessment benchmarks and advice on how proposed development may meet these assessment benchmarks.

## 6.3 Koala Conservation Plan clearing requirements

Section 10 and 11 of the <u>Nature Conservation (Koala) Conservation Plan 2017</u> prescribes requirements that must be met when clearing koala habitat in koala district A and koala district B.

These clearing requirements are independent to the koala habitat planning controls introduced into the Planning Regulation 2017, which means they must be complied with irrespective of any approvals or exemptions offered under other legislation.

Unlike the clearing controls prescribed in the Planning Regulation 2017 that are to protect koala habitat, the clearing requirements prescribed in the Nature Conservation (Koala) Conservation Plan 2017 are in place to prevent the injury or death of koalas when koala habitat is being cleared.

## 6.4 Contact information for DES

For further information on the koala protection framework:

Phone 13 QGOV (13 74 68)

Email koala.assessment@des.gld.gov.au

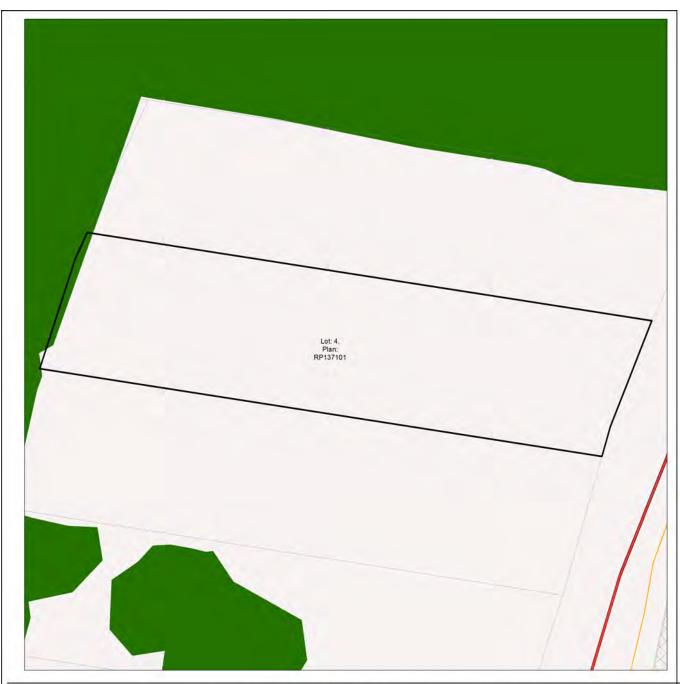
Visit https://environment.des.qld.gov.au/wildlife/animals/living-with/koalas/mapping

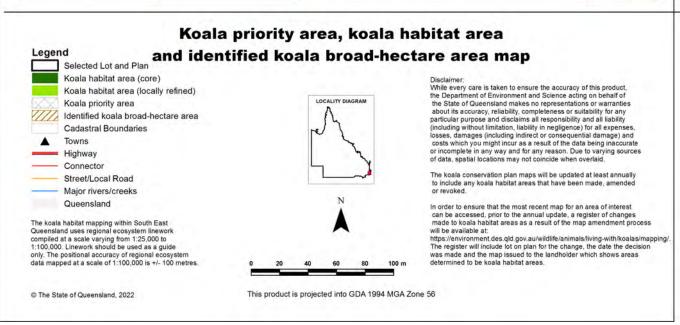
# 7. Koala protection framework details for Lot: 4 Plan: RP137101

## 7.1 Koala districts

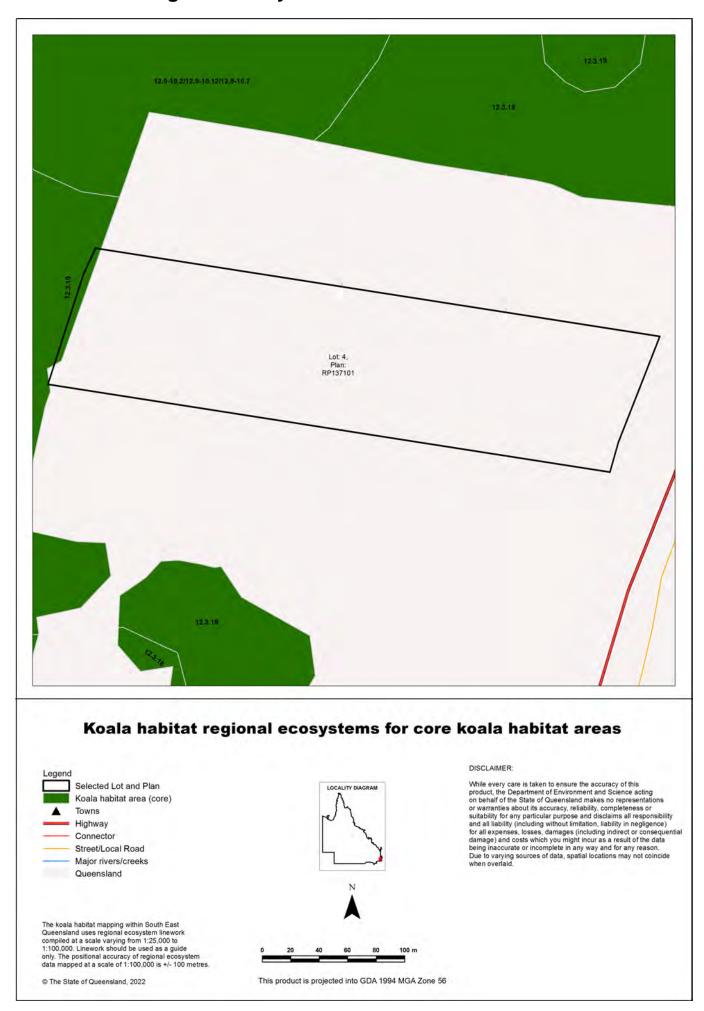
Koala District A

# 7.2 Koala priority area, koala habitat area and identified koala broad-hectare area map





# 7.3 Koala habitat regional ecosystems for core koala habitat areas



# 8. Other relevant legislation contacts list

Activity	Legislation	Agency	Contact details
Interference with overland flow     Earthworks, significant disturbance	Water Act 2000 Soil Conservation Act 1986	Department of Regional Development, Manufacturing and Water (Queensland Government) Department of Resources (Queensland Government)	Ph: 13 QGOV (13 74 68) www.rdmw.qld.gov.au www.resources.qld.gov.au
Indigenous Cultural Heritage	Aboriginal Cultural Heritage Act 2003 Torres Strait Islander Cultural Heritage Act 2003	Department of Seniors, Disability Services and Aboriginal and Torres Strait Islander Partnerships	Ph: 13 QGOV (13 74 68) www.datsip.qld.gov.au
<ul> <li>Mining and environmentally relevant activities</li> <li>Infrastructure development (coastal)</li> <li>Heritage issues</li> </ul>	Environmental Protection Act 1994 Coastal Protection and Management Act 1995 Queensland Heritage Act 1992	Department of Environment and Science (Queensland Government)	Ph: 13 QGOV (13 74 68) www.des.qld.gov.au
Protected plants and protected areas	Nature Conservation Act 1992	Department of Environment and Science (Queensland Government)	Ph: 1300 130 372 (option 4) palm@des.qld.gov.au www.des.qld.gov.au
Koala mapping and regulations	Nature Conservation Act 1992	Department of Environment and Science (Queensland Government)	Ph: 13 QGOV (13 74 68) Koala.assessment@des.qld.gov.au
<ul> <li>Interference with fish passage in a watercourse, mangroves</li> <li>Forestry activities on State land tenures</li> </ul>	Fisheries Act 1994 Forestry Act 1959	Department of Agriculture and Fisheries (Queensland Government)	Ph: 13 QGOV (13 74 68) www.daf.qld.gov.au
Matters of National Environmental Significance including listed threatened species and ecological communities	Environment Protection and Biodiversity Conservation Act 1999	Department of Agriculture, Water and the Environment (Australian Government)	Ph: 1800 803 772 www.environment.gov.au
Development and planning processes	Planning Act 2016 State Development and Public Works Organisation Act 1971	Department of State Development, Infrastructure, Local Government and Planning (Queensland Government)	Ph: 13 QGOV (13 74 68) www.dsdmip.qld.gov.au
Local government requirements	Local Government Act 2009 Planning Act 2016	Department of State Development, Infrastructure, Local Government and Planning (Queensland Government)	Ph: 13 QGOV (13 74 68) Your relevant local government office
Harvesting timber in the Wet     Tropics of Qld World Heritage area	Wet Tropics World Heritage Protection and Management Act 1993	Wet Tropics Management Authority	Ph: (07) 4241 0500 www.wettropics.gov.au



# **Vegetation management report**

For Lot: 6 Plan: RP137101

02/11/2022



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# **Recent changes**

#### **Updated mapping**

Updated vegetation mapping was released on 8 September 2022 and includes the most recent Queensland Herbarium scientific updates to the Regulated Vegetation Management Map, regional ecosystems, wetland, high-value regrowth and essential habitat mapping.

The Department of Environment and Science have also updated their protected plant and koala protection mapping to align with the Queensland Herbarium scientific updates.

## **Overview**

Based on the lot on plan details you have supplied, this report provides the following detailed information:

**Property details** - information about the specified Lot on Plan, lot size, local government area, bioregion(s), subregion(s) and catchment(s);

**Vegetation management framework** - an explanation of the application of the framework and contact details for the Department of Resources who administer the framework;

#### Vegetation management framework details for the specified Lot on Plan including:

- the vegetation management categories on the property;
- the vegetation management regional ecosystems on the property;
- vegetation management watercourses or drainage features on the property;
- vegetation management wetlands on the property;
- vegetation management essential habitat on the property;
- whether any area management plans are associated with the property;
- whether the property is coastal or non-coastal; and
- whether the property is mapped as Agricultural Land Class A or B;

**Protected plant framework** - an explanation of the application of the framework and contact details for the Department of Environment and Science who administer the framework, including:

• high risk areas on the protected plant flora survey trigger map for the property;

**Koala protection framework** - an explanation of the application of the framework and contact details for the Department of Environment and Science who administer the framework; and

#### Koala protection framework details for the specified Lot on Plan including:

- the koala district the property is located in;
- koala priority areas on the property;
- core and locally refined koala habitat areas on the property;
- whether the lot is located in an identified koala broad-hectare area; and
- koala habitat regional ecosystems on the property for core koala habitat areas.

This information will assist you to determine your options for managing vegetation under:

- the vegetation management framework, which may include:
  - · exempt clearing work;
  - accepted development vegetation clearing code;
  - an area management plan;
  - a development approval;
- the protected plant framework, which may include:
  - the need to undertake a flora survey:
  - · exempt clearing;
  - a protected plant clearing permit;
- the koala protection framework, which may include:
  - exempted development;
  - a development approval;
  - the need to undertake clearing sequentially and in the presence of a koala spotter.

## Other laws

The clearing of native vegetation is regulated by both Queensland and Australian legislation, and some local governments also regulate native vegetation clearing. You may need to obtain an approval or permit under another Act, such as the Commonwealth Government's *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). Section 8 of this guide provides contact details of other agencies you should confirm requirements with, before commencing vegetation clearing.

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# 1. Property details

## 1.1 Tenure and title area

All of the lot, plan, tenure and title area information associated with property Lot: 6 Plan: RP137101, are listed in Table 1.

Table 1: Lot, plan, tenure and title area information for the property

Lot	Plan	Tenure	Property title area (sq metres)
6	RP137101	Freehold	40,470

The tenure of the land may affect whether clearing is considered exempt clearing work or may be carried out under an accepted development vegetation clearing code.

# 1.2 Property location

Table 2 provides a summary of the locations for property Lot: 6 Plan: RP137101, in relation to natural and administrative boundaries.

**Table 2: Property location details** 

Local Government(s)
Logan City

Bioregion(s)	Subregion(s)
Southeast Queensland	Moreton Basin

Catchment(s)
Logan-Albert

# 2. Vegetation management framework (administered by the Department of Resources)

The *Vegetation Management Act 1999* (VMA), the Vegetation Management Regulation 2012, the *Planning Act 2016* and the Planning Regulation 2017, in conjunction with associated policies and codes, form the Vegetation Management Framework.

The VMA does not apply to all land tenures or vegetation types. State forests, national parks, forest reserves and some tenures under the *Forestry Act 1959* and *Nature Conservation Act 1992* are not regulated by the VMA. Managing or clearing vegetation on these tenures may require approvals under these laws.

The following native vegetation is not regulated under the VMA but may require permit(s) under other laws:

- grass or non-woody herbage;
- a plant within a grassland regional ecosystem prescribed under Schedule 5 of the Vegetation Management Regulation 2012; and
- a mangrove.

## 2.1 Exempt clearing work

Exempt clearing work is an activity for which you do not need to notify the Department of Resources or obtain an approval under the vegetation management framework. Exempt clearing work was previously known as exemptions.

In areas that are mapped as Category X (white in colour) on the regulated vegetation management map (see section 4.1), and where the land tenure is freehold, indigenous land and leasehold land for agriculture and grazing purposes, the clearing of vegetation is considered exempt clearing work and does not require notification or development approval under the vegetation management framework. For all other land tenures, contact the Department of Resources before commencing clearing to ensure that the proposed activity is exempt clearing work.

A range of routine property management activities are considered exempt clearing work. A list of exempt clearing work is available at

https://www.qld.gov.au/environment/land/management/vegetation/clearing-approvals/exemptions.

Exempt clearing work may be affected if the proposed clearing area is subject to development approval conditions, a covenant, an environmental offset, an exchange area, a restoration notice, or an area mapped as Category A. Exempt clearing work may require approval under other Commonwealth, State or Local Government laws, or local government planning schemes. Contact the Department of Resources prior to clearing in any of these areas.

# 2.2 Accepted development vegetation clearing codes

Some clearing activities can be undertaken under an accepted development vegetation clearing code. The codes can be downloaded at

https://www.qld.gov.au/environment/land/management/vegetation/clearing-approvals/codes

If you intend to clear vegetation under an accepted development vegetation clearing code, you must notify the Department of Resources before commencing. The information in this report will assist you to complete the online notification form.

You can complete the online form at

https://apps.dnrm.gld.gov.au/vegetation/

## 2.3 Area management plans

Area Management Plans (AMP) provide an alternative approval system for vegetation clearing under the vegetation management framework. They list the purposes and clearing conditions that have been approved for the areas covered by the plan. It is not necessary to use an AMP, even when an AMP applies to your property.

On 8 March 2020, AMPs ended for fodder harvesting, managing thickened vegetation and managing encroachment. New notifications cannot be made for these AMPs. You will need to consider options for fodder harvesting, managing thickened vegetation or encroachment under a relevant accepted development vegetation clearing code or apply for a development approval.

New notifications can be made for all other AMPs. These will continue to apply until their nominated end date.

If an Area Management Plan applies to your property for which you can make a new notification, it will be listed in Section 3.6 of this report. Before clearing under one of these AMPs, you must first notify the Department of Resources and then follow the conditions and requirements listed in the AMP.

https://www.gld.gov.au/environment/land/management/vegetation/clearing-approvals/area-management-plans

## 2.4 Development approvals

If under the vegetation management framework your proposed clearing is not exempt clearing work, or is not permitted under an accepted development vegetation clearing code, or an AMP, you may be able to apply for a development approval. Information on how to apply for a development approval is available at

https://www.qld.gov.au/environment/land/management/vegetation/clearing-approvals/development

## 2.5. Contact information for the Department of Resources

For further information on the vegetation management framework:

Phone 135VEG (135 834)

Email vegetation@resources.gld.gov.au

Visit https://www.resources.gld.gov.au/?contact=vegetation to submit an online enquiry.

# 3. Vegetation management framework for Lot: 6 Plan: RP137101

# 3.1 Vegetation categories

The vegetation categories on your property are shown on the regulated vegetation management map in section 4.1 of this report. A summary of vegetation categories on the subject lot are listed in Table 3. Descriptions for these categories are shown in Table 4.

Table 3: Vegetation categories for subject property. Total area: 4.05ha

Vegetation category	Area (ha)
Category C	1.6
Category X	2.4

Table 4: Description of vegetation categories

Category	Colour on Map	Description	Requirements / options under the vegetation management framework
A	red	Compliance areas, environmental offset areas and voluntary declaration areas	Special conditions apply to Category A areas. Before clearing, contact the Department of Resources to confirm any requirements in a Category A area.
В	dark blue	Remnant vegetation areas	Exempt clearing work, or notification and compliance with accepted development vegetation clearing codes, area management plans or development approval.
С	light blue	High-value regrowth areas	Exempt clearing work, or notification and compliance with managing Category C regrowth vegetation accepted development vegetation clearing code.
R	yellow	Regrowth within 50m of a watercourse or drainage feature in the Great Barrier Reef catchment areas	Exempt clearing work, or notification and compliance with managing Category R regrowth accepted development vegetation clearing code or area management plans.
X	white	Clearing on freehold land, indigenous land and leasehold land for agriculture and grazing purposes is considered exempt clearing work under the vegetation management framework. Contact the Department of Resources to clarify whether a development approval is required for other State land tenures.	No permit or notification required on freehold land, indigenous land and leasehold land for agriculture and grazing. A development approval may be required for some State land tenures.

#### Property Map of Assessable Vegetation (PMAV)

There is no Property Map of Assessable Vegetation (PMAV) present on this property.

## 3.2 Regional ecosystems

The endangered, of concern and least concern regional ecosystems on your property are shown on the vegetation management supporting map in section 4.2 and are listed in Table 5.

A description of regional ecosystems can be accessed online at <a href="https://www.qld.gov.au/environment/plants-animals/plants/ecosystems/descriptions/">https://www.qld.gov.au/environment/plants-animals/plants/ecosystems/descriptions/</a>

Table 5: Regional ecosystems present on subject property

Regional Ecosystem	VMA Status	Category	Area (Ha)	Short Description	Structure Category
12.3.18	Endangered	С	0.19	Melaleuca irbyana low open forest on alluvial plains	Mid-dense
12.3.19	Endangered	С	1.43	Eucalyptus moluccana and/or Eucalyptus tereticornis and E. crebra open forest to woodland, with a sparse to mid-dense understorey of Melaleuca irbyana on alluvial plains	Mid-dense
non-rem	None	Х	2.42	None	None

#### Please note:

The VMA status of the regional ecosystem (whether it is endangered, of concern or least concern) also determines if any of the following are applicable:

- · exempt clearing work;
- accepted development vegetation clearing codes;
- performance outcomes in State Code 16 of the State Development Assessment Provisions (SDAP).

## 3.3 Watercourses

Vegetation management watercourses and drainage features for this property are shown on the vegetation management supporting map in section 4.2.

#### 3.4 Wetlands

Vegetation management wetlands are present on this property and are shown on the vegetation management supporting map in section 4.2 of this report.

## 3.5 Essential habitat

Under the VMA, essential habitat for protected wildlife is native wildlife prescribed under the *Nature Conservation Act 1992* (NCA) as critically endangered, endangered, vulnerable or near-threatened wildlife.

Essential habitat for protected wildlife includes suitable habitat on the lot, or where a species has been known to occur up to 1.1 kilometres from a lot on which there is assessable vegetation. These important habitat areas are protected under the VMA.

Any essential habitat on this property will be shown as blue hatching on the vegetation supporting map in section 4.2.

If essential habitat is identified on the lot, information about the protected wildlife species is provided in Table 6 below. The numeric labels on the vegetation management supporting map can be cross referenced with Table 6 to outline the essential habitat factors for that particular species. There may be essential habitat for more than one species on each lot, and areas of Category A, Category B and Category C can be mapped as Essential Habitat.

<sup>1.</sup> All area and area derived figures included in this table have been calculated via reprojecting relevant spatial features to Albers equal-area conic projection (central meridian = 146, datum Geocentric Datum of Australia 1994). As a result, area figures may differ slightly if calculated for the same features using a different co-ordinate system.

<sup>2.</sup> If Table 5 contains a Category 'plant', please be aware that this refers to 'plantations' such as forestry, and these areas are considered non-remnant under the VMA.

Essential habitat is compiled from a combination of species habitat models and buffered species records. Regional ecosystem is a mandatory essential habitat factor, unless otherwise stated. Essential habitat, for protected wildlife, means an area of vegetation shown on the Regulated Vegetation Management Map -

- 1) that has at least 3 essential habitat factors for the protected wildlife that must include any essential habitat factors that are stated as mandatory for the protected wildlife in the essential habitat database. Essential habitat factors are comprised of regional ecosystem (mandatory for most species), vegetation community, altitude, soils, position in landscape; or
- 2) in which the protected wildlife, at any stage of its life cycle, is located.

If there is no essential habitat mapping shown on the vegetation management supporting map for this lot, and there is no table in the sections below, it confirms that there is no essential habitat on the lot.

#### Category A and/or Category B and/or Category C

Table 6: Essential habitat in Category A and/or Category B and/or Category C

Label	Scientific	Common Name	NCA Status	Vegetation Community	Altitude	Soils	Position in Landscape
	Name						
26403	Melaleuca	None	E	Belah scrub with Callitris sp. and Eucalyptus	0 to 600 m	sandy, clay	creek bank, poorly drained or seasonally flooded
	irbyana			melanophloia; woodland to open forest of Eucalyptus		loam, sandy	areas in undulating terrain, hill slope
				tereticornis, E. melanophloia, or Eucalyptus moluccana or		clay to clay soil	
				Eucalyptus siderophloia and Eucalyptus moluccana			
860	Phascolarctos	koala	E	Open forests and woodlands containing Eucalyptus,	Sea level to	None	Riparian areas, plains and hill/escarpment
	cinereus			Corymbia, Lophostemon or Melaleuca trees having a	1000m.		slopes.
				trunk of a diameter of more than 10cm at 1.3m above the			
				ground. Tree species used for food and habitat varies			
				across the state and can include: Corymbia citriodora,			
				Corymbia henryi, Corymbia intermedia, Eucalyptus			
				acmenoides, Eucalyptus bancroftii, Eucalyptus			
				biturbinata, Eucalyptus blakelyi, Eucalyptus brownii,			
				Eucalyptus camaldulensis, Eucalyptus carnea, Eucalyptus			
				chloroclada, Eucalyptus coolabah, Eucalyptus crebra,			
				Eucalyptus dealbata, Eucalyptus drepanophylla,			
				Eucalyptus dunnii, Eucalyptus eugenioides, Eucalyptus			
				exserta, Eucalyptus fibrosa, Eucalyptus grandis,			
				Eucalyptus helidonica, Eucalyptus latisinensis, Eucalyptus			
				longirostrata, Eucalyptus major, Eucalyptus melanophloia,			
				Eucalyptus melliodora, Eucalyptus microcarpa,			
				Eucalyptus microcorys, Eucalyptus microtheca,			
				Eucalyptus moluccana, Eucalyptus montivaga,			
				Eucalyptus orgadophila, Eucalyptus papuana, Eucalyptus			
				pilularis, Eucalyptus platyphylla, Eucalyptus populnea,			
				Eucalyptus portuensis, Eucalyptus propinqua, Eucalyptus			
				racemosa, Eucalyptus resinifera, Eucalyptus robusta,			
				Eucalyptus saligna, Eucalyptus seeana, Eucalyptus			
				siderophloia, Eucalyptus sideroxylon, Eucalyptus			
				tereticornis, Eucalyptus thozetiana, Eucalyptus tindaliae,			
				Eucalyptus umbra, Lophostemon confertus, Melaleuca			
				leucadendra, Melaleuca quinquenervia.			
803	Dasyurus	spotted-tailed	E	Rainforest, wet and dry structurally complex sclerophyll	Sea level to	None	None
505	maculatus	quoll (southern	_	forest (e.g. Eucalyptus andrewsii, E. saligna, E.	1000m.	NOTIC	Hone
	maculatus	subspecies)		tereticornis & Corymbia intermedia) on productive soils	1000III.		
	maculatus	Subspecies)		(gullies & flats) and in rocky areas (ridges), also open			
				woodland (E. alba, E. melliodora, Callitris glaucophylla),			
				coastal heathland (adjacent to forest) and riparian forest.			
				Dens in caves, rock crevices and hollow logs.			

Label	Regional Ecosystem (mandatory unless otherwise specified)
26403	11.10.1, 12.3.11, 12.3.18, 12.3.19, 12.5.2x1, 12.9-10.7, 12.9-10.27, 12.11.5, 12.11.18

Label	Regional Ecosystem (mandatory unless otherwise specified)
860	4.3.1, 4.3.2, 4.3.3, 4.3.4, 4.3.5, 4.3.6, 4.3.8, 4.3.10, 4.3.11, 4.5.3, 4.5.5, 4.5.6, 4.5.8, 4.5.9, 4.7.1, 4.7.7, 4.7.8, 4.9.6, 4.9.10, 4.9.12, 4.9.17, 6.3.1, 6.3.2, 6.3.3, 6.3.4, 6.3.5, 6.3.7, 6.3.8, 6.3.9, 6.3.11, 6.3.12, 6.3.17, 6.3.18, 6.3.22,
	6.3.24, 6.3.25, 6.4.1, 6.4.2, 6.4.3, 6.4.4, 6.5.1, 6.5.2, 6.5.3, 6.5.5, 6.5.6, 6.5.7, 6.5.8, 6.5.9, 6.5.10, 6.5.11, 6.5.13, 6.5.14, 6.5.15, 6.5.16, 6.5.17, 6.5.18, 6.5.19, 6.6.2, 6.7.1, 6.7.2, 6.7.5, 6.7.6, 6.7.7, 6.7.9, 6.7.11, 6.7.12, 6.7.13,
	6.7.14, 6.7.17, 6.9.3, 7.2.3, 7.2.4, 7.2.7, 7.2.11, 7.3.7, 7.3.8, 7.3.9, 7.3.12, 7.3.13, 7.3.14, 7.3.16, 7.3.19, 7.3.20, 7.3.21, 7.3.25, 7.3.26, 7.3.39, 7.3.40, 7.3.42, 7.3.43, 7.3.44, 7.3.45, 7.3.47, 7.3.48, 7.3.50, 7.5.1, 7.5.2, 7.5.3, 7.3.48, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49, 7.3.49
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	12.9-10.28, 12.9-10.29, 12.11.1, 12.11.2, 12.11.3, 12.11.4, 12.11.5, 12.11.6, 12.11.7, 12.11.8, 12.11.9, 12.11.10, 12.11.11, 12.11.12, 12.11.13, 12.11.14, 12.11.15, 12.11.16, 12.11.17, 12.11.18, 12.11.19, 12.11.21,
	12.11.22, 12.11.23, 12.11.24, 12.11.25, 12.11.26, 12.11.26, 12.11.27, 12.11.28, 12.12.1, 12.12.2, 12.12.3, 12.12.4, 12.12.5, 12.12.6, 12.12.7, 12.12.8, 12.12.9, 12.12.11, 12.12.12, 12.12.13, 12.12.14, 12.12.15, 12.12.16, 12.12.17,
	12.12.18, 12.12.20, 12.12.21, 12.12.22, 12.12.23, 12.12.24, 12.12.25, 12.12.26, 12.12.27, 12.12.28, 13.3.1, 13.3.2, 13.3.3, 13.3.4, 13.3.5, 13.9.2, 13.11.1, 13.11.2, 13.11.3, 13.11.4, 13.11.5, 13.11.6, 13.11.7, 13.11.8, 13.12.1,
	13.12.2, 13.12.3, 13.12.4, 13.12.5, 13.12.8, 13.12.9, 13.12.10, 13.12.11

# 3.6 Area Management Plan(s)

Nil

## 3.7 Coastal or non-coastal

For the purposes of the accepted development vegetation clearing codes and State Code 16 of the State Development Assessment Provisions (SDAP), this property is regarded as\*

Coastal

\*See also Map 4.3

# 3.8 Agricultural Land Class A or B

The following can be used to identify Agricultural Land Class A or B areas under the "Managing regulated regrowth vegetation" accepted development vegetation clearing code:

Does this lot contain land that is mapped as Agricultural Land Class A or B in the State Planning Interactive Mapping System?

#### No Class A

Class B (with urban areas masked as per SPP): 3.49ha

Note - This confirms Agricultural Land Classes as per the State Planning Interactive Mapping System only. This response does not include Agricultural Land Classes identified under local government planning schemes. For further information, check the Planning Scheme for your local government area.

See Map 4.4 to identify the location and extent of Class A and/or Class B Agricultural land on Lot: 6 Plan: RP137101.

# 4. Vegetation management framework maps

Vegetation management maps included in this report may also be requested individually at: https://www.resources.gld.gov.au/gld/environment/land/vegetation/vegetation-map-request-form

### Regulated vegetation management map

The regulated vegetation management map shows vegetation categories needed to determine clearing requirements. These maps are updated monthly to show new <u>property maps of assessable vegetation (PMAV).</u>

#### Vegetation management supporting map

The vegetation management supporting map provides information on regional ecosystems, wetlands, watercourses and essential habitat.

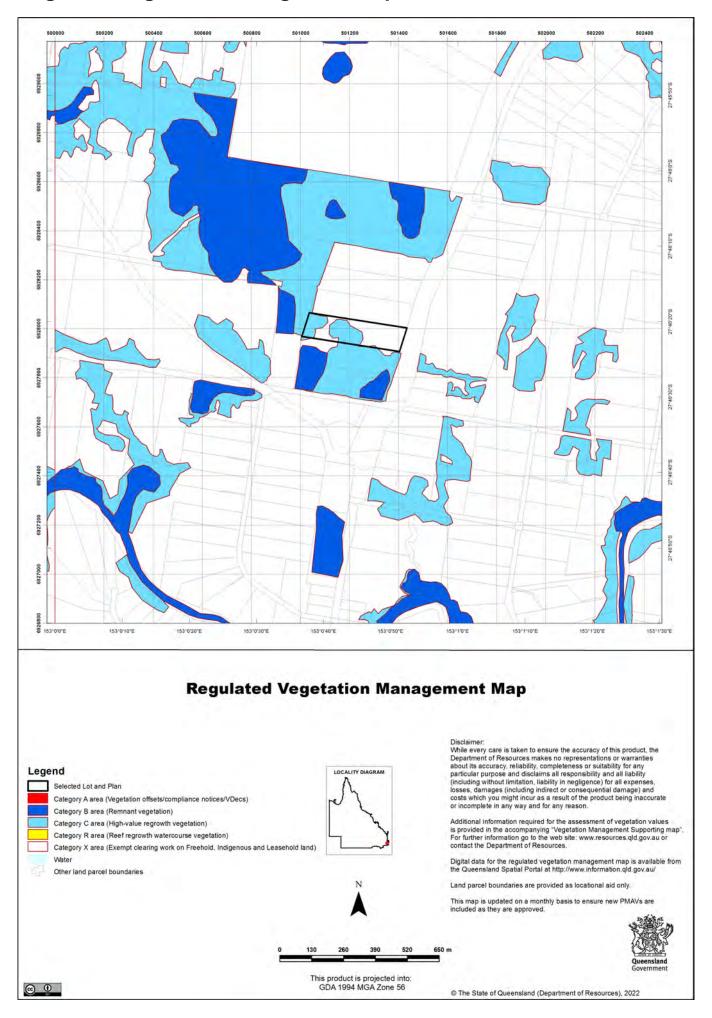
#### Coastal/non-coastal map

The coastal/non-coastal map confirms whether the lot, or which parts of the lot, are considered coastal or non-coastal for the purposes of the accepted development vegetation clearing codes and State Code 16 of the State Development Assessment Provisions (SDAP).

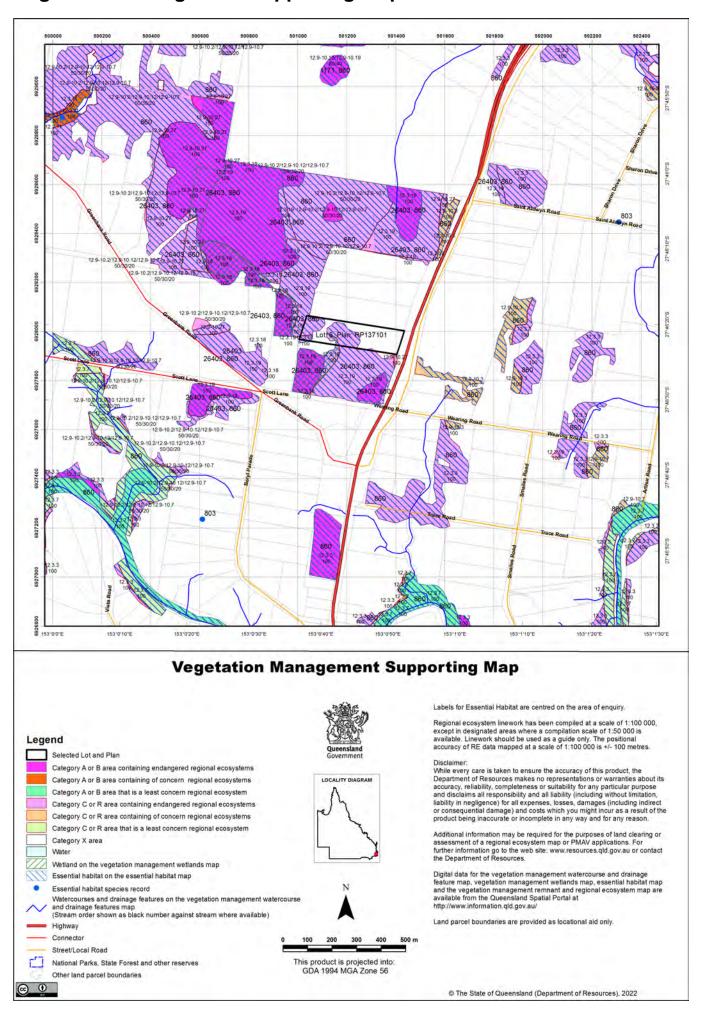
#### Agricultural Land Class A or B as per State Planning Policy: State Interest for Agriculture

The Agricultural Land Class map confirms the location and extent of land mapped as Agricultural Land Classes A or B as identified on the State Planning Interactive Mapping System. Please note that this map does not include areas identified as Agricultural Land Class A or B in local government planning schemes. This map can be used to identify Agricultural Land Class A or B areas under the "Managing regulated regrowth vegetation" accepted development vegetation clearing code.

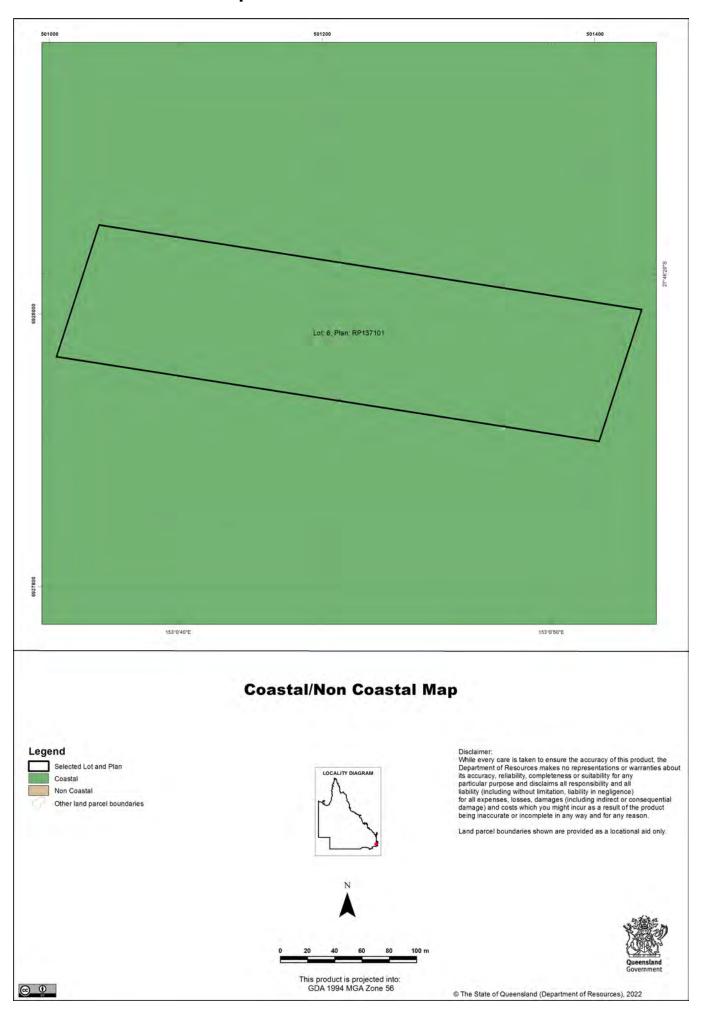
# 4.1 Regulated vegetation management map



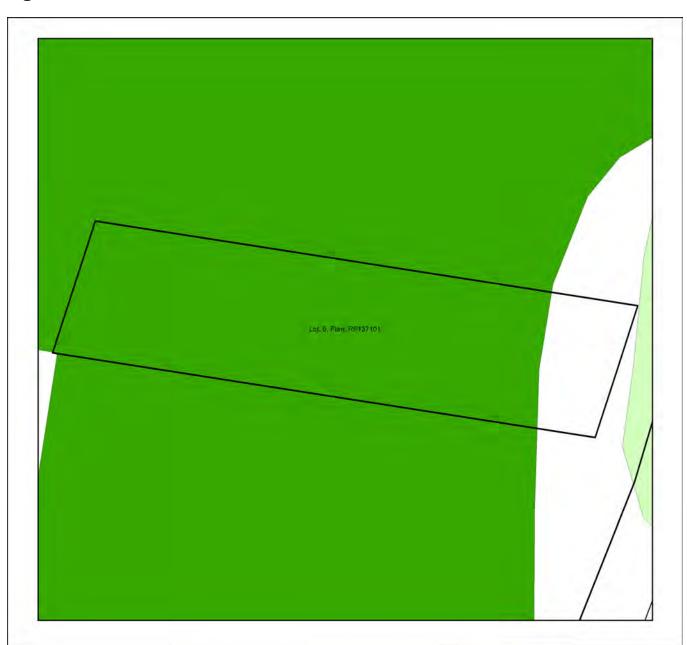
# 4.2 Vegetation management supporting map

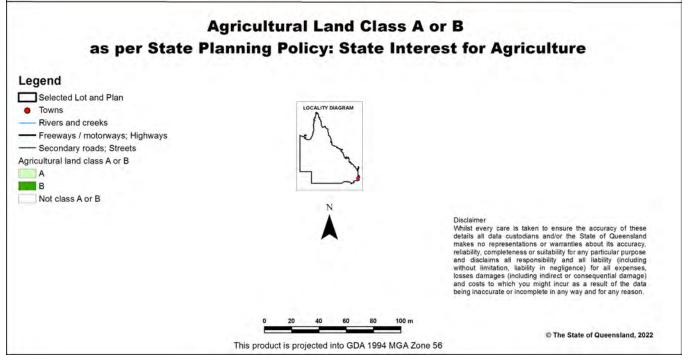


# 4.3 Coastal/non-coastal map



# 4.4 Agricultural Land Class A or B as per State Planning Policy: State Interest for Agriculture





# 5. Protected plants framework (administered by the Department of Environment and Science (DES))

In Queensland, all plants that are native to Australia are protected plants under the <u>Nature Conservation Act 1992</u> (NCA). The NCA regulates the clearing of protected plants 'in the wild' (see <u>Operational policy: When a protected plant in Queensland is considered to be 'in the wild'</u>) that are listed as critically endangered, endangered, vulnerable or near threatened under the Act.

Please note that the protected plant clearing framework applies irrespective of the classification of the vegetation under the *Vegetation Management Act 1999* and any approval or exemptions given under another Act, for example, the *Vegetation Management Act 1999* or *Planning Regulation 2017*.

### 5.1 Clearing in high risk areas on the flora survey trigger map

The flora survey trigger map identifies high-risk areas for threatened and near threatened plants. These are areas where threatened or near threatened plants are known to exist or are likely to exist based on the habitat present. The flora survey trigger map for this property is provided in section 5.5.

If you are proposing to clear an area shown as high risk on the flora survey trigger map, a flora survey of the clearing impact area must be undertaken by a suitably qualified person in accordance with the <u>Flora survey guidelines</u>. The main objective of a flora survey is to locate any threatened or near threatened plants that may be present in the clearing impact area.

If the flora survey identifies that threatened or near threatened plants are not present within the clearing impact area or clearing within 100m of a threatened or near threatened plant can be avoided, the clearing activity is exempt from a permit. An <u>exempt clearing notification form</u> must be submitted to the Department of Environment and Science, with a copy of the flora survey report, at least one week prior to clearing.

If the flora survey identifies that threatened or near threatened plants are present in, or within 100m of, the area to be cleared, a clearing permit is required before any clearing is undertaken. The flora survey report, as well as an impact management report, must be submitted with the <u>clearing permit application form</u>.

### 5.2 Clearing outside high risk areas on the flora survey trigger map

In an area other than a high risk area, a clearing permit is only required where a person is, or becomes aware that threatened or near threatened plants are present in, or within 100m of, the area to be cleared. You must keep a copy of the flora survey trigger map for the area subject to clearing for five years from the day the clearing starts. If you do not clear within the 12 month period that the flora survey trigger map was printed, you need to print and check a new flora survey trigger map.

# 5.3 Exemptions

Many activities are 'exempt' under the protected plant clearing framework, which means that clearing of native plants that are in the wild can be undertaken for these activities with no need for a flora survey or a protected plant clearing permit. The Information sheet - General exemptions for the take of protected plants provides some of these exemptions.

Some exemptions under the NCA are the same as exempt clearing work (formerly known as exemptions) under the *Vegetation Management Act 1999* (i.e. listed in Schedule 21 of the Planning Regulations 2017) while some are different.

### 5.4 Contact information for DES

For further information on the protected plants framework:

Phone 1300 130 372 (and select option four)

Email palm@des.qld.gov.au

Visit <a href="https://www.qld.gov.au/environment/plants-animals/plants/protected-plants">https://www.qld.gov.au/environment/plants-animals/plants/protected-plants</a>

### 5.5 Protected plants flora survey trigger map

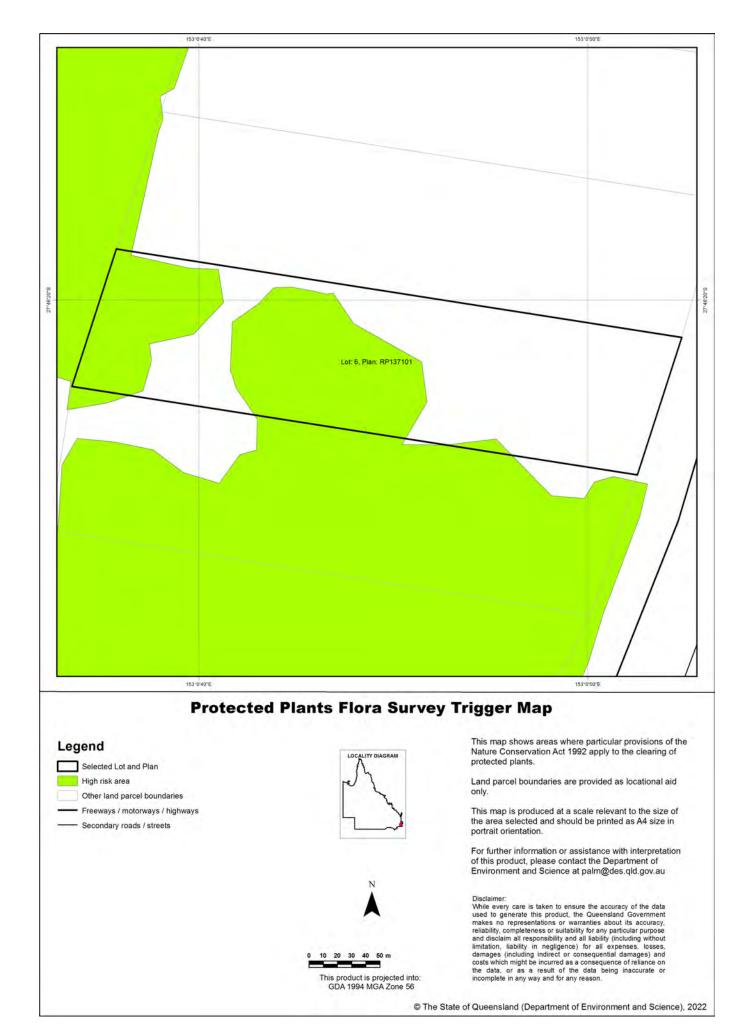
This map included may also be requested individually at: <a href="https://apps.des.qld.gov.au/map-request/flora-survey-trigger/">https://apps.des.qld.gov.au/map-request/flora-survey-trigger/</a>.

### Updates to the data informing the flora survey trigger map

The flora survey trigger map will be reviewed, and updated if necessary, at least every 12 months to ensure the map reflects the most up-to-date and accurate data available.

### **Species information**

Please note that flora survey trigger maps do not identify species associated with 'high risk areas'. While some species information may be publicly available, for example via the <u>Queensland Spatial Catalogue</u>, the Department of Environment and Science does not provide species information on request. Regardless of whether species information is available for a particular high risk area, clearing plants in a high risk area may require a flora survey and/or clearing permit. Please see the Department of Environment and Science webpage on the <u>clearing of protected plants</u> for more information.



# 6. Koala protection framework (administered by the Department of Environment and Science (DES))

The koala (*Phascolarctos cinereus*) is listed in Queensland as vulnerable by the Queensland Government under *Nature Conservation Act 1992* and by the Australian Government under the *Environment Protection and Biodiversity Conservation Act 1999*.

The Queensland Government's koala protection framework is comprised of the *Nature Conservation Act 1992*, the Nature Conservation (Animals) Regulation 2020, the Nature Conservation (Koala) Conservation Plan 2017, the *Planning Act 2016* and the Planning Regulation 2017.

### 6.1 Koala mapping

### 6.1.1 Koala districts

The parts of Queensland where koalas are known to occur has been divided into three koala districts - koala district A, koala district B and koala district C. Each koala district is made up of areas with comparable koala populations (e.g. density, extent and significance of threatening processes affecting the population) which require similar management regimes.

Section 7.1 identifies which koala district your property is located in.

### 6.1.2 Koala habitat areas

Koala habitat areas are areas of vegetation that have been determined to contain koala habitat that is essential for the conservation of a viable koala population in the wild based on the combination of habitat suitability and biophysical variables with known relationships to koala habitat (e.g. landcover, soil, terrain, climate and ground water). In order to protect this important koala habitat, clearing controls have been introduced into the Planning Regulation 2017 for development in koala habitat areas.

Please note that koala habitat areas only exist in koala district A which is the South East Queensland "Shaping SEQ" Regional Plan area. These areas include the local government areas of Brisbane, Gold Coast, Logan, Lockyer Valley, Ipswich, Moreton Bay, Noosa, Redland, Scenic Rim, Somerset, Sunshine Coast and Toowoomba (urban extent).

There are two different categories of koala habitat area (core koala habitat area and locally refined koala habitat), which have been determined using two different methodologies. These methodologies are described in the document <a href="Spatial modelling in South East Queensland">Spatial modelling in South East Queensland</a>.

Section 7.2 shows any koala habitat area that exists on your property.

Under the Nature Conservation (Koala) Conservation Plan 2017, an owner of land (or a person acting on the owner's behalf with written consent) can request to make, amend or revoke a koala habitat area determination if they believe, on reasonable grounds, that the existing determination for all or part of their property is incorrect.

More information on requests to make, amend or revoke a koala habitat area determination can be found in the document Guideline - Requests to make, amend or revoke a koala habitat area determination.

The koala habitat area map will be updated at least annually to include any koala habitat areas that have been made, amended or revoked.

Changes to the koala habitat area map which occur between annual updates because of a request to make, amend or revoke a koala habitat area determination can be viewed on the register of approved requests to make, amend or revoke a koala habitat area available at: <a href="https://environment.des.qld.gov.au/wildlife/animals/living-with/koalas/mapping/koalamaps">https://environment.des.qld.gov.au/wildlife/animals/living-with/koalas/mapping/koalamaps</a>. The register includes the lot on plan for the change, the date the decision was made and the map issued to the landholder that shows areas determined to be koala habitat areas.

### 6.1.3 Koala priority areas

Koala priority areas are large, connected areas that have been determined to have the highest likelihood of achieving conservation outcomes for koalas based on the combination of habitat suitability, biophysical variables with known relationships to koala habitat (e.g. landcover, soil, terrain, climate and ground water) and a koala conservation cost benefit analysis.

Conservation efforts will be prioritised in these areas to ensure the conservation of viable koala populations in the wild including a focus on management (e.g. habitat protection, habitat restoration and threat mitigation) and monitoring. This includes a prohibition on clearing in koala habitat areas that are in koala priority areas under the Planning Regulation 2017 (subject to some exemptions).

Please note that koala priority areas only exist in koala district A which is the South East Queensland "Shaping SEQ" Regional Plan area. These areas include the local government areas of Brisbane, Gold Coast, Logan, Lockyer Valley,

Ipswich, Moreton Bay, Noosa, Redland, Scenic Rim, Somerset, Sunshine Coast and Toowoomba (urban extent).

Section 7.2 identifies if your property is in a koala priority area.

### 6.1.4 Identified koala broad-hectare areas

There are seven identified koala broad-hectare areas in SEQ. These are areas of koala habitat that are located in areas committed to meet development targets in the SEQ Regional Plan to accommodate SEQ's growing population including bring-forward Greenfield sites under the Queensland Housing Affordability Strategy and declared master planned areas under the repealed *Sustainable Planning Act 2009* and the repealed *Integrated Planning Act 1997*.

Specific assessment benchmarks apply to development applications for development proposed in identified koala broad-hectare areas to ensure koala conservation measures are incorporated into the proposed development.

Section 7.2 identifies if your property is in an identified koala broad-hectare area.

## 6.2 Koala habitat planning controls

On 7 February 2020, the Queensland Government introduced new planning controls to the Planning Regulation 2017 to strengthen the protection of koala habitat in South East Queensland (i.e. koala district A).

More information on these planning controls can be found here: <a href="https://environment.des.gld.gov.au/wildlife/animals/living-with/koalas/mapping/legislation-policy">https://environment.des.gld.gov.au/wildlife/animals/living-with/koalas/mapping/legislation-policy</a>.

As a high-level summary, the koala habitat planning controls make:

- development that involves interfering with koala habitat (defined below) in an area that is both a koala priority area and a koala habitat area, prohibited development (i.e. development for which a development application cannot be made);
- development that involves interfering with koala habitat (defined below) in an area that is a koala habitat area but is not a koala priority area, assessable development (i.e. development for which development approval is required); and
- development that is for extractive industries where the development involves interfering with koala habitat (defined below) in an area that is both a koala habitat area and a key resource area, assessable development (i.e. development for which development approval is required).

### Interfering with koala habitat means:

- 1) Removing, cutting down, ringbarking, pushing over, poisoning or destroying in anyway, including by burning, flooding or draining native vegetation in a koala habitat area; but
- 2) Does not include destroying standing vegetation by stock or lopping a tree.

However, these planning controls do not apply if the development is exempted development as defined in Schedule 24 of the <u>Planning Regulation 2017</u>. More information on exempted development can be found here: <a href="https://environment.des.gld.gov.au/wildlife/animals/living-with/koalas/mapping/legislation-policy">https://environment.des.gld.gov.au/wildlife/animals/living-with/koalas/mapping/legislation-policy</a>.

There are also assessment benchmarks that apply to development applications for:

- building works, operational works, material change of use or reconfiguration of a lot where:
  - the local government planning scheme makes the development assessable;
  - the premises includes an area that is both a koala priority area and a koala habitat area; and
  - the development does not involve interfering with koala habitat (defined above); and
- development in identified koala broad-hectare areas.

The <u>Guideline - Assessment Benchmarks in relation to Koala Habitat in South East Queensland assessment benchmarks</u> outlines these assessment benchmarks, the intent of these assessment benchmarks and advice on how proposed development may meet these assessment benchmarks.

### 6.3 Koala Conservation Plan clearing requirements

Section 10 and 11 of the <u>Nature Conservation (Koala) Conservation Plan 2017</u> prescribes requirements that must be met when clearing koala habitat in koala district A and koala district B.

These clearing requirements are independent to the koala habitat planning controls introduced into the Planning Regulation 2017, which means they must be complied with irrespective of any approvals or exemptions offered under other legislation.

Unlike the clearing controls prescribed in the Planning Regulation 2017 that are to protect koala habitat, the clearing requirements prescribed in the Nature Conservation (Koala) Conservation Plan 2017 are in place to prevent the injury or death of koalas when koala habitat is being cleared.

### 6.4 Contact information for DES

For further information on the koala protection framework:

Phone 13 QGOV (13 74 68)

Email koala.assessment@des.gld.gov.au

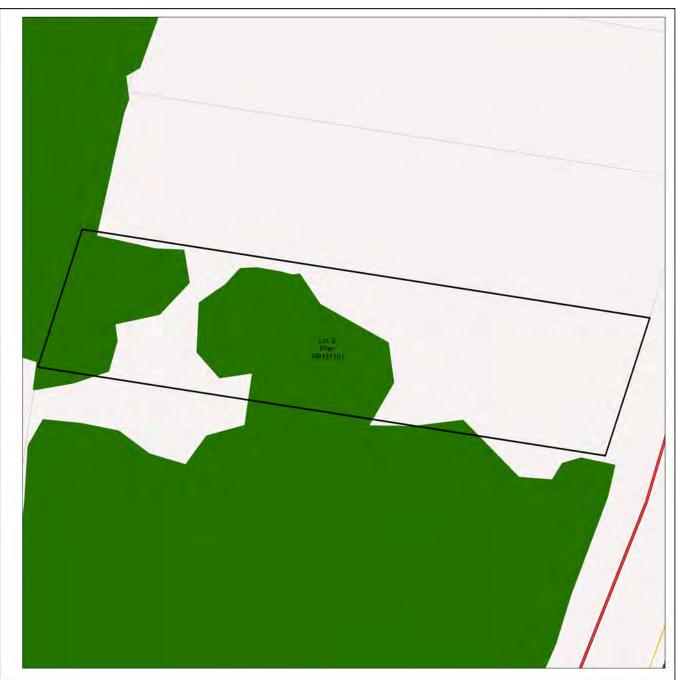
Visit https://environment.des.qld.gov.au/wildlife/animals/living-with/koalas/mapping

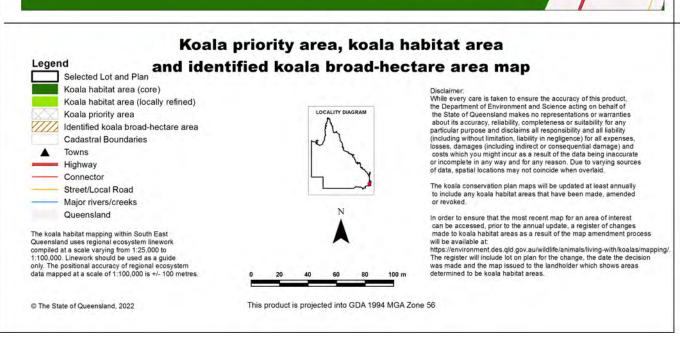
## 7. Koala protection framework details for Lot: 6 Plan: RP137101

### 7.1 Koala districts

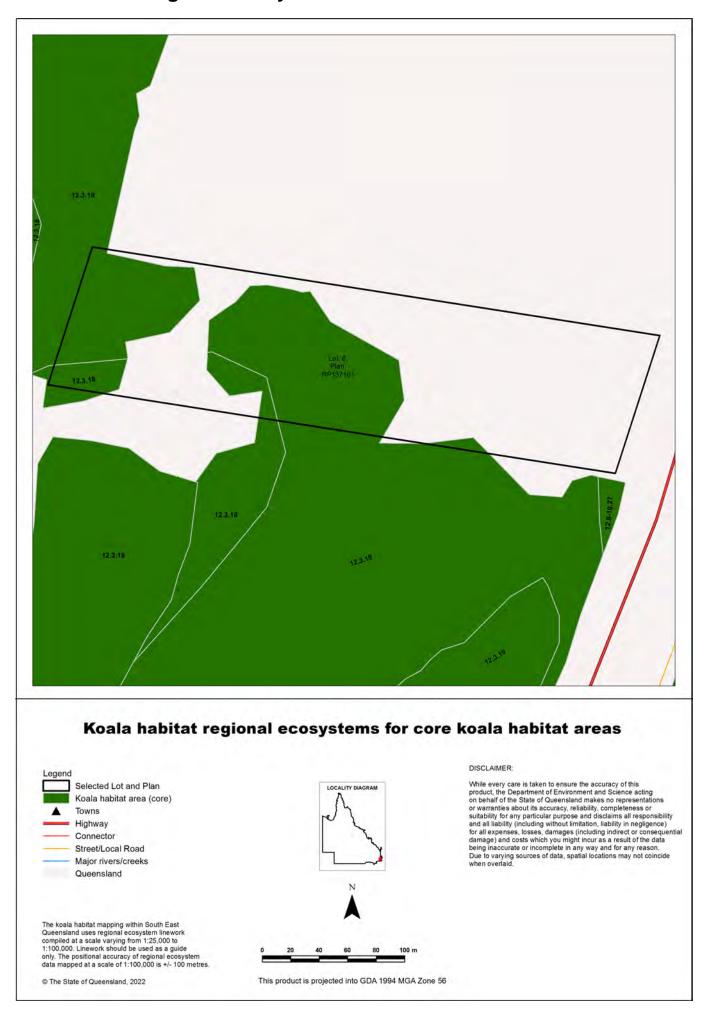
Koala District A

# 7.2 Koala priority area, koala habitat area and identified koala broad-hectare area map





# 7.3 Koala habitat regional ecosystems for core koala habitat areas



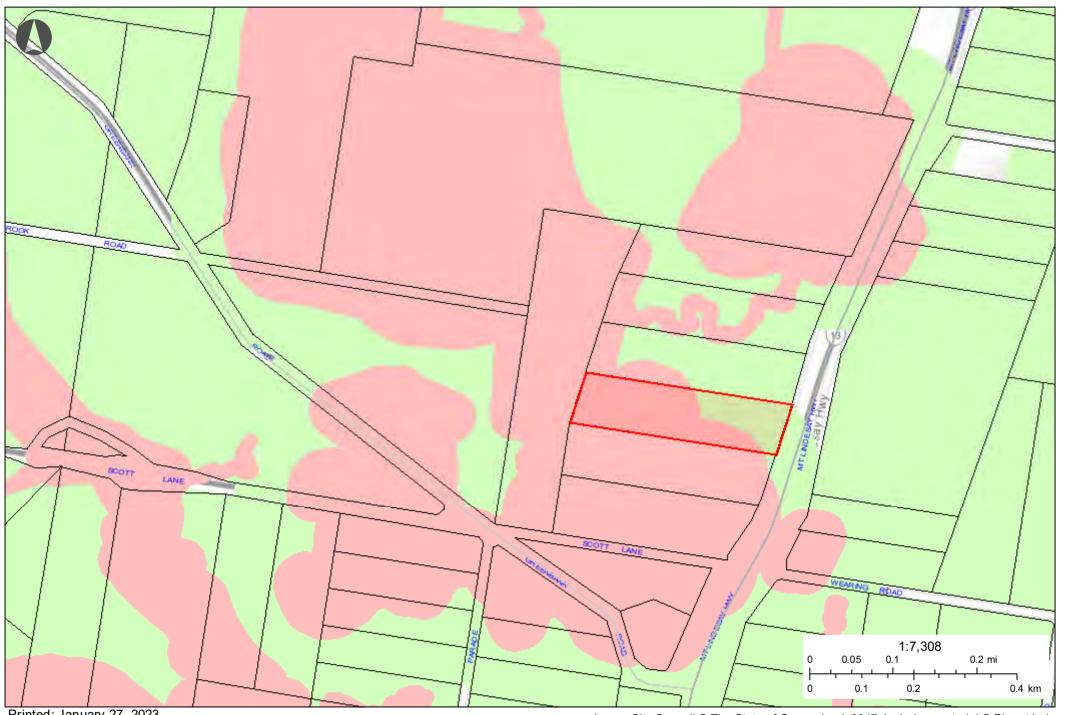
# 8. Other relevant legislation contacts list

Activity	Legislation	Agency	Contact details
Interference with overland flow     Earthworks, significant disturbance	Water Act 2000 Soil Conservation Act 1986	Department of Regional Development, Manufacturing and Water (Queensland Government) Department of Resources (Queensland Government)	Ph: 13 QGOV (13 74 68) www.rdmw.qld.gov.au www.resources.qld.gov.au
Indigenous Cultural Heritage	Aboriginal Cultural Heritage Act 2003 Torres Strait Islander Cultural Heritage Act 2003	Department of Seniors, Disability Services and Aboriginal and Torres Strait Islander Partnerships	Ph: 13 QGOV (13 74 68) www.datsip.qld.gov.au
Mining and environmentally relevant activities     Infrastructure development (coastal)     Heritage issues	Environmental Protection Act 1994 Coastal Protection and Management Act 1995 Queensland Heritage Act 1992	Department of Environment and Science (Queensland Government)	Ph: 13 QGOV (13 74 68) www.des.qld.gov.au
Protected plants and protected areas	Nature Conservation Act 1992	Department of Environment and Science (Queensland Government)	Ph: 1300 130 372 (option 4) palm@des.qld.gov.au www.des.qld.gov.au
Koala mapping and regulations	Nature Conservation Act 1992	Department of Environment and Science (Queensland Government)	Ph: 13 QGOV (13 74 68) Koala.assessment@des.qld.gov.au
Interference with fish passage in a watercourse, mangroves     Forestry activities on State land tenures	Fisheries Act 1994 Forestry Act 1959	Department of Agriculture and Fisheries (Queensland Government)	Ph: 13 QGOV (13 74 68) www.daf.qld.gov.au
Matters of National Environmental Significance including listed threatened species and ecological communities	Environment Protection and Biodiversity Conservation Act 1999	Department of Agriculture, Water and the Environment (Australian Government)	Ph: 1800 803 772 www.environment.gov.au
Development and planning processes	Planning Act 2016 State Development and Public Works Organisation Act 1971	Department of State Development, Infrastructure, Local Government and Planning (Queensland Government)	Ph: 13 QGOV (13 74 68) www.dsdmip.qld.gov.au
Local government requirements	Local Government Act 2009 Planning Act 2016	Department of State Development, Infrastructure, Local Government and Planning (Queensland Government)	Ph: 13 QGOV (13 74 68) Your relevant local government office
Harvesting timber in the Wet     Tropics of Qld World Heritage area	Wet Tropics World Heritage Protection and Management Act 1993	Wet Tropics Management Authority	Ph: (07) 4241 0500 www.wettropics.gov.au



# Appendix 5

# Council Planning Scheme Overlay Maps





.Printed: January 27, 2023

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# Logan Planning Scheme 2015 (v8.1) Symbology





#### OM-08 Landslide hazard and steep slope area overlay OM-12 Transport noise corridors overlay OM-08.00 Landslide hazard and steep slope area trigger Transport noise corridor - Local government road Cat 1: 58 dB(A) =< Noise Level < 63 dB(A) OM-08.01 Landslide hazard and steep slopes Cat 2: 63 dB(A) =< Noise Level < 68 dB(A) Historical landslide area Cat 3: 68 dB(A) =< Noise Level < 73 dB(A) 12 percent slope investigation area Cat 4: Noise Level >= 73 dB(A) Equal to or greater than 12 percent slope hazard area Transport noise corridor - State-controlled road (mandatory) Equal to or greater than 15 percent slope hazard area Cat 0: Noise Level < 58 dB(A) Cat 1: 58 dB(A) =< Noise Level < 63 dB(A) OM-09 Regional infrastructure corridors and substations overlay Cat 2: 63 dB(A) =< Noise Level < 68 dB(A) OM-09.00 Regional infrastructure corridors and substations trigger Cat 3: 68 dB(A) =< Noise Level < 73 dB(A) Regional infrastructure and buffer area Cat 4: Noise Level >= 73 dB(A) Regional infrastructure Transport noise corridor - Railway OM-09.01 Regional infrastructure corridors and facilities Cat 0: Noise Level < 70 dB(A) SEQWater facility Cat 1: 70 dB(A) =< Noise Level < 75 dB(A) Bulk water pump Cat 2: 75 dB(A) =< Noise Level < 80 dB(A) Bulk water reservoir Cat 3: 80 dB(A) =< Noise Level < 85 dB(A) Bulk water - water quality facility Cat 4: Noise Level >= 85 dB(A) SEQWater facility area OM-13 Water resource catchments overlay Substation OM-13.00 Water resource catchments trigger Powerline corridor and buffer Powerline corridor 110kv OM-13.01 Water resource catchment Powerline corridor 275kv Cedar Grove water storage catchment Powerline corridor 275kv buffer 40m Tingalpa water storage catchment Petroleum pipeline corridor Water pipeline corridor OM-14 Waterway corridors and wetlands overlay Wastewater facility and buffer OM-14.00 Waterway corridors and wetlands trigger Wastewater facility Erosion prone area trigger Wastewater facility - 500m buffer Waterway corridor trigger OM-10 Residential overlay Wetland area trigger OM-10.00 Residential overlay Wetland buffer trigger OM-14.01 Waterways Minor waterway OM-11 Strategic airport and environs overlay Medium waterway OM-11.00 Strategic airport and environs trigger Major waterway OM-11.01 Strategic airport and environs overlay River waterway Obstacle limitation surface area OM-14.02 Wetlands Wetlands Bird and bat strike area Major wetland Minor wetland Wetland buffer OM-14.03 Erosion prone areas



#### Zones and Precincts (Part 6) Local plan figures 7.2.1.4.1 to 7.2.10.4.4 ZM-02.00 Precinct map Local plan figures areas Local plan figure extent ZM-01.00 Zone map Local plan boundary Centre Local plan precinct Community facilities Town square **Emerging community** Park/Village green Environmental management and conservation School Low density residential Building Low impact industry Movement Low-medium density residential Main street Medium density residential New road Medium impact industry Road Mixed use Access laneway Priority development area Railway Recreation and open space Wembley Road urban boulevard Rural Shared zone Rural residential Pedestrian access only Special purpose Signalised pedestrian crossing Specialised centre Pedestrian link bridge Local plan figures building heights Local Plans (Part 7) Maximum building height - 8.5m Local plan boundary Maximum building height - 12m Precinct area Maximum building height - 15m Maximum building height - 20m Maximum building height - 25m Local plan figures 7.2.1.4.1 to 7.2.10.4.4 Maximum building height - 27m Local plan figures locations Landmark building Maximum building height - 30m Transit hub Maximum building height - 32m Maximum building height - 40m Plaza Maximum building height - 60m Indicative cycle centre location Or Streetscape section and plan view number Maximum building height - 90m Local plan figures lineage Zone and precinct figures Contours (5m) Figures 6.2.12.3.1-3 Active frontage street Agricultural land classification Streetscape section and plan view arrow Figures 6.2.10.3.1-2 and Figure 6.2.15.3.1 Zone bulding heights Streetscape section and plan view extent Maximum building height - 20m Movement Maximum building height - 25m · · · · Inner ring road Maximum building height - 40m --- Path for urban collector Maximum building height - 60m Access laneway Figure 6.2.10.3.3 Shared access area Berrinba Amentiy Wall occoo Pedestrian network Berrinba 5m landscaped buffer area Generous footpaths for pedestrians and cyclists Figures 6.2.15.3.1-2 --- SEQ principal cycle network Old Chatswood Road precinct layout --- District cycle network Old Chatswood Road precinct layout boundary --- Major cycle network Future road network Main street Park - flood plain management area Subject site External site

- Active street frontage

Pedestrian and cycle network

VVVV Limited access



#### Local Government Infrastructure Plan (Part 4) LGIP - 01.00 Priority infrastructure area and projection area LGIP - 03.00 Plan for trunk water supply infrastructure Priority infrastructure boundary Existing trunk infrastructure Water facilities Projection area Water mains Balance statistical local area Proposed trunk infrastructure Beenleigh Pump stations, flow meters, Bethania - Waterford water quality monitoring, resevoir, chlorine dosing and pressure management facilities Browns Plains Carbrook - Cornubia ··· Water mains Water service catchments Daisy Hill - Priestdale Kuraby Eagleby SRWP Edens Landing - Holmview Greater Flagstone Greenbank - Boronia Heights Jimboomba Local Plan Kingston LGIP - 04.00 Plan for trunk sewerage infrastructure Logan Village Local Plan Existing trunk infrastructure Sewerage facilities Loganholme Loganlea ··· Sewerage mains Proposed trunk infrastructure Marsden Pump systems, sewer Mount Warren Park optimisations, system upgrades, pump stations, gravity main upgrades, conveyance projects and water treatment plants Park Ridge - Logan Reserve Rochedale South Sewerage mains Rural Living Sewerage service catchments Shailer Park Beenleigh Slacks Creek Logan South Springwood Loganholme Tanah Merah Underwood Waterford West Wolffdene - Bahrs Scrub LGIP - 05.00 Plan for trunk stormwater infrastructure Woodridge Existing trunk infrastructure Yarrabilba Pits and headwalls ··· Pipes, culverts and drains Detention basins LGIP - 02.00 Net developable area and planned density area Proposed trunk infrastructure Residential development Land acquisition Non-residential development and mixed development Land acquisition and capital works Community Stormwater quantity areas Education LA1 LA2 Health LA3 LA4 LA5 1.A6 LA7 Jimboomba Logan Village Slacks-Scrubby Creek



#### LGIP - 06.00 Plan for trunk movement infrastructure LGIP - 07.00 Plan for trunk parks infrastructure Existing trunk infrastructure Existing trunk infrastructure Local government controlled road Parks Proposed trunk infrastructure State government controlled road Land acquisition only ..... Cycle network Land acquisition and capital works Proposed trunk infrastructure Park service catchments Intersections - Capital works only Beenleigh Intersections - Land acquisition and capital works Bethania - Waterford Proposed cycle paths Browns Plains Proposed roads - Capital works only Daisy Hill - Priestdale Proposed roads - Land acquisition and capital works Eagleby Proposed roads - Land acquisition only Edens Landing - Holmview Transport service catchments Flagstone Beenleigh Greenbank Browns Plains Jimboomba Carbrook - Cornubia Kingston - Loganlea Daisy Hill - Priestdale Logan Village Eagleby Loganholme East Flagstone Loganholme West Jimboomba Marsden - Waterford West Kingston Mount Warren Park Logan Central Park Ridge - Logan Reserve Logan Village Rochedale South - Springwood Loganholme Rural North Balance Loganlea Rural North East Balance Marsden - Waterford West Rural South Balance Mount Warren Park Rural South East Balance Park Ridge Rural West Balance Rural Balance Shailer Park Rural Living Underwood - Slacks Creek Shailer Park Wolffdene - Bahrs Scrub Springwood Woodridge Waterford - Holmview Yarrabilba Wolffdene - Bahrs Scrub

Yarrabilba



### LGIP - 08.00 Plan for land for community facilities infrastructure

### Existing trunk infrastructure

Community facilities

### Proposed trunk infrastructure

General community space, performing arts, library and community centre

### Community facility service catchments

Beenleigh

Bethania - Waterford

Browns Plains

Daisy Hill - Priestdale

Eagleby

Edens Landing - Holmview

Flagstone

Greenbank

Jimboomba

Kingston - Loganlea

Logan Village

Loganholme East

Loganholme West

Marsden - Waterford West

Mount Warren Park

Park Ridge - Logan Reserve

Rochedale South - Springwood

Rural North Balance

Rural North East Balance

Rural South Balance

Rural South East Balance

Rural West Balance

Shailer Park

Underwood - Slacks Creek

Wolffdene - Bahrs Scrub

Woodridge

Yarrabilba

LGIP - 09.00 Priority infrastructure area and planning scheme zone map

Projection areas



### Planning Scheme Policy Figures

### Planning Scheme Policy 3 - Environmental management Figure 3.1.10.1 Ecological significance

>0 and <=12

>12 and <=22

>22 and <=32

>32 and <=62

### Planning Scheme Policy 5 - Infrastructure

### Figure 3.1.1.2.1 Cycle network

Cycle network

Neighbourhood existing cycle network

Neighbourhood future cycle network

District existing cycle network

---- District future cycle network

- Major existing cycle network

---- Major future cycle network

---- SEQ principal network

#### Figure 3.4.1.3.1 Public transport network

Bus and railway stations

Existing railway station

Proposed railway station

E Existing bus station

Proposed bus station

Public transport - bus

Existing primary corridor bus route

Existing secondary corridor bus route

Existing tertiary corridor bus route

Existing long distance corridor bus route

- Railways

Transit hubs

Primary transit hub

Secondary transit hub

#### Figure 3.4.1.4.1 Road hierarchy

.... Multi modal transport

Railway transport

Future Park Ridge Connector

Priority development areas

Greater Flagstone priority development area

Yarrabilba priority development area

Road hierarchy

Pathway

Main street

Main road

Transit road

Highway

Urban access street

Urban access road

Urban collector single carriageway

Urban collector dual carriageway

Urban arterial single carriageway

Urban arterial dual carriageway

Rural access

Rural collector

Rural arterial single carriageway

Rural arterial dual carriageway

Industrial access road

Industrial collector

### Figures 3.6.1.3.1-2

### Loganholme stormwater management

- Marked easement location

Local plan boundary

Torres Street Catchment (Properties where flood detention is required)

Sites requiring a drainage easement

Sites requiring a lawful point of discharge

Waterway

### Figure 3.6.12.1 Parks planning regions

Urban

Growth

Rural

### Figures 7.2.1.1-9 General planning layouts

### General planning layout locations

Controlled intersection

O Left in left out intersection

Public transport access only

### General planning layout lineage

pedestrian and cycle network

WWW Indicative waterway alignment

WWW Future dwelling alignment

---- Emergency access bund

.... Electrical easement



	General Planning Layout Extent; Extent
	Park Ridge Structure Plan Area - Phase 1
111	Park Ridge Connector
	Future Road Design
	Waterway and Flooding
	Wetland
	Bioretention Basin
	Bridge
	Community Facilites
	Environmental Management and Conservation
	Existing School
	Existing and Proposed Parks
	Low Density Residential
	Mixed Use
	Neighbourhood Centre
88	Future LGIP Parks
	Fauna Movement Areas
	Locally Significant Melaleuca Irbyana
11	Locally Significant Melaleuca Irbyana Buffer
1111	Powerline 275kv Corridor Buffer Area
	Stormwater Detention
	Zone Precinct

	Highway
Ų.	Main Road
	Urban Arterial Dual Carriageway (Multi Modal)
	Urban Arterial Dual Carriageway
	Urban Arterial Single Carriageway
	Urban Collector Single Carriageway
	Urban Collector Single Carriageway (Multi Modal)
	Industrial Access Road
	Industrial Collector
	Industrial Collector (Multi Modal)
	Rural Access
	Rural Arterial Single Carriageway
	Rural Collector
	Urban Access Road
֡	Urban Access Road (Multi Modal)
	Urban Access Street
	Local Road Network
	Pathway
8	Indicative Industrial Collector
S	Indicative Urban Arterial Single Carriageway
Ž	💹 Indicative Urban Collector Single Carriageway
Š	Future Road Network (Industrial Access Road)
Ì	Future Road Network (Industrial Collector)
5	Future Road Network (Rural Collector)
3	Future Road Network (Transit Road - Multi Modal)
S	Future Road Network (Transit Road)
8	Future Road Network (Urban Access Road)
Ž	Future Road Network (Urban Access Street)
ζ	Future Road Network (Urban Collector Single Carriageway - Multi Modal)
3	Future Road Network (Urban Collector Single Carriageway)



# Appendix 6 Species List



Scientific Name	Common Name	Status		
Flora Species				
Acacia leiocalyx	Black wattle	LC		
Acacia disparrima	Southern salwood	LC		
Ageratum houstonianum*	Blue billygoat	Weed		
Alphitonia excelsa	Soap tree	LC		
Asparagus aethiopicus*	Basket asparagus	Weed		
Asparagus setaceus*	Asparagus fern	Weed		
Bidens pilosa*	Cobblers peg	Weed		
Corymbia intermedia	Pink bloodwood	LC		
Corymbia tesselaris	Moreton Bay Ash	LC		
Corymbia torelliana*	Cadaghi	Weed		
Eucalyptus tereticornis	Queensland blue gum	LC		
E. stricta	Wiry panic	LC		
Anagallis arvensis	Red pimpernel	Weed		
Aster subulatus	Wild aster	Weed		
Calyptocarpus vialis	Creeping Cinderella weed	Weed		
Catharanthus roseus	Pink periwinkle	Weed		
Crisium vulgar	Spear thistle	Weed		
Conyza spp	Fleabane	weed		
Crassocephalum crepidioides	Thickhead	Weed		
Crotolaria spp.	rattlepod	Weed		
Philydrum lanuginosum	Woolly frogmouth	LC		
Lomandra hystrix	Matrush	LC		
Juncus usitatus	Common rush	LC		



Scientific Name	Common Name	Status
Schoenoplectus tabernaemontani	River club-rush	LC
Carex apressa	Saw sedge	LC
Themeda traindra	Kangaroo grass	LC
Cuphea carthagenensis	Colombian waxweed	Weed
Eucalyptus siderophloia	Grey ironbark	LC
Melaleuca irbyana	Swamp tea tree	Vulnurable
Gomphocarpus physocarpus*	Balloon cotton	Weed
Lantana camara*	Lantana	Weed
Lophostemon suaveolens	Swamp Box	LC
Melaleuca quinquenervia	Broad-leaved paperbark	LC
Paspalum dilatatum*	Paspalum	Weed
Parsonsia straminea	Monkey rope vine	LC
Pinus elliottii*	Slash pine	Weed
Chloris gayana	Rhodes grass	Weed
Schefflera actinophylla*	Umbrella tree	Weed
Schinus terebinthifolius*	Broad leaved pepper tree	Weed
Senna pendula var. glabrata*	Easter cassia	Weed
Solanum mauritianum*	Tobacco tree	Weed
Solanum torvum*	Devils fig	Weed
Sphagneticola trilobata*	Singapore daisy	Weed
Sporobolus pyramidalis*	Giant rats tail grass	Weed
Syngonium podophyllum*	Arrow vine	Weed
Fauna Species		
Corvus orru	Torresian crow	LC



Scientific Name	Common Name	Status
Cracticus tibicen	Australian magpie	LC
Cracticus nigrogularis	Pied butcherbird	LC
Entomyzon cyanotis	Blue-faced honeyeater	LC
Manorina melanocephala	Noisy miner	LC
Malurus melanocephalus	Red-backed Fairywren	LC
Sphecotheres vieilloti	Australasian fig bird	LC
Egretta novaehollandiae	White-faced heron	LC
Chenonetta jubata	Australian Wood Duck	LC

<sup>\*</sup>Invasive species