



# EPBC Annual Compliance Report

18 November 2020 to 17 November 2021 – EPBC 2016/7817  
Mirvac Greater Flagstone Project, Greenbank, Queensland  
Mirvac Queensland Pty Ltd  
4 February 2022

Job No: 7598 E



# Document control

Document: EPBC Annual Compliance Report 18 November 2020 to 17 November 2021 EPBC 2016/7817 (Issue B), prepared by Saunders Havill Group for Mirvac Queensland Pty Ltd.

## Document Issue

Issue	Date	Prepared By	Checked By
A	27.01.2022	KH & LT	AD
B	04.02.2022	LT	AD

### Prepared by

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# 1. Introduction

Saunders Havill Group were engaged by Mirvac Queensland Pty Ltd to prepare an *Annual Compliance Report* for the Greater Flagstone Project – Master Planned Residential Community granted under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) (ref EPBC 2016/7817), as specifically required by Condition 13 of the approval granted on 11 October 2019 (**Appendix A**). The project is referred to in this report as *Everleigh* which is the residential estate name.

The site is located approximately 10 kilometres (km) west of Logan Village within the suburb of Greenbank (refer to **Figure 1**). The site is located within the Greater Flagstone Priority Development Area (PDA) where Economic Development Queensland (EDQ) is the administering authority. The referral allotment area in which the action occurs is approximately 482 hectares (ha), approximately 410 ha of which is subject to the EPBC Act approval. Within this area, an impact to 230 ha of Matters of National Environmental Significance (MNES) habitat, being Koala and Grey-headed Flying-fox (GHFF) habitat, was permitted under the approval conditions. The proposal includes the preservation and management of an on-site Conservation area located to the east of the action site. Management of the on-site Conservation area will eventually be transferred to Logan City Council.

This report delivers the second annual overview of the project’s progression and compliance with approval conditions under the EPBC Act. The project’s progress and notable events during the reporting period are detailed in **Section 3**. The assessment of compliance with the approval conditions is presented in **Section 4**. This report is the second Annual Compliance Report for the approved action.

## 1.1. Approval summary

<b>Department reference</b>	EPBC 2016/7817
<b>Approval holder</b>	Mirvac Queensland Pty Ltd
<b>ACN</b>	060 411 207
<b>Approval date</b>	11 October 2019
<b>Expiry date of approval</b>	31 July 2040
<b>Approved action</b>	Development of a master planned residential community, on Lot 1 on SP297192 (formerly Lot 205 on RP845844, Lot 434 on RP845844 (part) and Lot 9 on S312355), within the Greater Flagstone Priority Development Area, Greenbank, Queensland.
<b>Controlling provision</b>	Approved - listed threatened species and communities (sections 18 & 18A)
<b>Reporting period</b>	18 November 2020 to 17 November 2021
<b>Address</b>	138-168 Teviot Road, 456-522 Greenbank Road & 96-102 Brightwell Street, Greenbank QLD 4124
<b>Local government area</b>	Logan City Council

**Figure 1: Project area locality**



## 2. Declaration of accuracy

In making this declaration, I am aware that sections 490 and 491 of the EPBC Act make it an offence in certain circumstances to knowingly provide false or misleading information or documents. The offence is punishable on conviction by imprisonment or a fine, or both. I declare that all the information and documentation supporting this compliance report is true and correct in every particular. I am authorised to bind the approval holder to this declaration and that I have no knowledge of that authorisation being revoked at the time of making this declaration.

Signed



Full name

Andrew Davies

Position

Principal Environmental Scientist

Organisation

Saunders Havill Group (ABN 24 144 972 949)

Date

4 February 2021

### 3. Description of activities

Everleigh is a master planned residential community located in the suburb of Greenbank. The development encompasses a range of land uses including residential land parcels, neighbourhood centre, school, regional sport and recreational parks and conservation. The overarching vision for the development is to deliver:

*'a connected masterplanned community providing easy access to local and surrounding amenity. Affordable quality homes, green open spaces and genuine community values will make this a proud neighbourhood.'*

The action commenced on the 18 November 2019 with the clearing of Stage 1 School Site where construction of the State Primary School began in 2021 and opened to students in January 2022. Works external to the approval area and not part of the controlling action commenced prior to the approved action with the development of residential precincts.

On-site works have proceeded in accordance with the stage specific Vegetation Clearing and Management Plans (VC&MP) and Fauna Management Plans (FMP) under the supervision of a qualified fauna spotter catcher. Vegetation clearing was undertaken within the approval area during the reporting period for future residential precincts with the assistance of Australia Wide Environmental Consultants (AWEC). AWEC reported on the clearing activities and these reports are provided to the Department as part of this Annual Compliance Report (refer **Appendix B**).

During this reporting period, the COVID-19 pandemic did not have as heavily an impact on the project progress and associated activities as the previous reporting period. However, the workplace health and safety systems updated as a result of government enforced restrictions were continued to be implemented as necessary to mitigate the risk of infection and transmission. As such, the pandemic and resulting restrictions slowed and hampered works on-site and the opportunities for community activities and events.

The approval holder runs a vibrant community and event program, with fitness in the park, after school activities and weekly coffee groups enjoying strong support from local residents and businesses. Despite the disruptions resulting from the COVID-19 pandemic, the following activities were initiated and/or completed during the reporting period:

- Extensive engagement with the local community to raise the profile of Everleigh, Mirvac and generally foster the community spirit in and around Everleigh through;
  - Everleigh Nature Festival.
  - Easter Movie Night.
  - Everleigh Staycation Program to help entertain and educate the kids with virtual activities,
  - Paint a Dozer school holiday workshop
  - Mirvac's annual National Community Day Breakfast BBQ to raise funds for Greenbank RSL for ANZAC Day.



- Astronomy Night - Infinity & Beyond event
- NAIDOC week Indigenous Culture event.
- New community garden pet planters, built by Greenbank RSL Men's Shed.
- Everleigh Games event.
- Halloween Hunt in Everleigh park.
- Free weekly activities including;
  - Low Impact Fitness and O&M Health and Fitness at Everleigh Park.
  - Kids Touch Football at Everleigh Park
  - Seniors Coffee Group at Pub Lane Tavern.
  - Playgroup at Everleigh Park.
  - Little Athletics for kids at Leaf Park.
  - Sunset Yoga in Everleigh Park.
- Everleigh's first neighbours trivia night.
- Everleigh State School meet and greet with school staff and collection of student enrolment packs.
- Grateful Gardens competition.
- Awards:
  - Logan Urban Design Award for Master Planning
  - UDIA Queensland Awards for Excellence Finalist for Community Engagement and Parks and Recreation.
- Estate Area Works:
  - Completed civil works for Precinct 12;
  - Commenced vegetation clearing works for ROL6;
  - Sold out of the Everleigh's First Precinct.
  - Construction of roads and shared paths to new land releases.
  - Opening of Leaf Park.
  - Commenced construction of the New State Primary School
  - The Botanica Land Release
  - The Citrus Land Release
- EPBC Approval area works:
  - Commencement of Stage 2 works;
  - Pre-clearance surveys and reports;

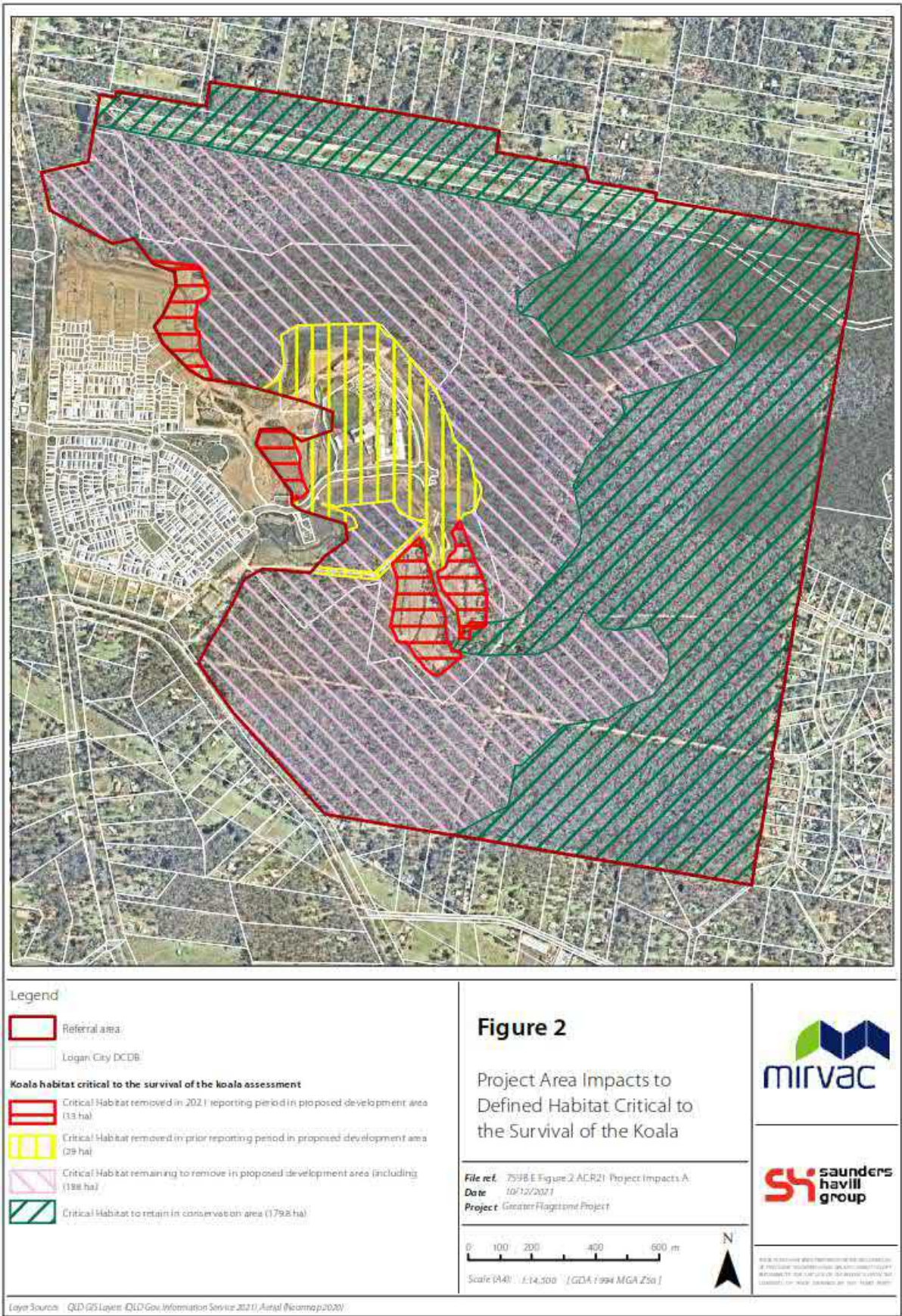
- Temporary management infrastructure (e.g. vegetation and fauna fencing, signage);
- vegetation clearing;
- earthworks;
- Infrastructure installation; and
- On-site Conservation area Works:
  - Ongoing management and monitoring of *Melaleuca irbyana* offset area including weed treatment, watering and replacement planting (as needed under State approvals).

**Table 1** summarises the current status of the project in conjunction with **Section 4.2** below. **Figure 2** illustrates the impacts to habitat critical to the survival of the Koala and Grey-headed Flying-fox foraging habitat as defined in the approval and listed in **Table 1**.

**Table 1: Development details**

<b>Total residential lots</b>	3450
<b>Dwellings under construction/constructed</b>	Approx. 360
<b>Total critical Koala habitat</b>	410 ha
<b>Approved total clearing of critical Koala habitat</b>	230 ha
<b>Total current clearing of critical Koala habitat</b>	42 ha
<b>Balance approved clearing not yet undertaken</b>	188 ha

**Figure 2: Project area impacts to defined critical habitat**



## 4. Management of Impacts

Approvals relating to impacts on ecological matters were collated from Commonwealth, State and Local governments for the project and included several overarching environmental management plans. Each contractor was provided a copy of the approval documents within the Pre-Start Package prior to any clearing commencing. The environmental plans provided stipulate environmental management requirements pertinent to each stage of construction and measures for vegetation management (clearing and protection), protection of MNES fauna (Koala and GHFF) and other native wildlife, maintenance of safe wildlife movement opportunities, fauna habitat rehabilitation, threatened flora management and pest management.

As part of managing the smaller work areas of the project, a second supporting document was developed: Everleigh — Environmental Pre-Start Checklist (refer **Appendix C**). This checklist was integral to ensuring construction proceeded within the demarcated limits, suitable fencing was installed across the work area and the necessary checks for threatened fauna were completed prior to the clearing of any vegetation.

Additional operational measures will be implemented in association with the clearing of each development stage as necessary, including:

- Installation of fauna habitat components within the Conservation area (i.e. nest boxes),
- Fauna awareness signage along the Conservation area and Lifestyle Guidelines to new residents,
- Roadway crossings over the Conservation area and eastern waterway corridors will be designed so as to be fauna friendly to promote continued fauna dispersal, and
- Building envelopes / vegetation protection / covenants where adjoining the conservation area.

### 4.1. Pre and Post-clearing Reporting

Stage 2 commenced during the reporting period with the removal of vegetation with Precinct 12. Towards the end of the reporting period the Sports and Recreational Park (referred to as ROL6) commenced, however this stage of clearing was not completed during the reporting period.

Pre and post-clearing surveys and reporting were undertaken by a qualified and experienced fauna spotter catcher (AWEC) for both stages to mitigate the potential for adverse impacts. To assist the detection of Koala, a detailed site assessment was conducted with a thermal sensor and Remotely Piloted Aircraft.

No Koalas were located within the clearing zones of either Precinct 12 or the Sports and Recreational Park. Three koalas in total were located within proximity to the clearing zones and were monitored by the fauna spotter catcher during clearing works. All other fauna identified during the clearing works by the fauna spotter catcher were managed as per standard protocols (refer **Appendix B**).

## 4.2. Annual Reporting Site Audit

An inspection and audit of the approval area and on-site conversation area was conducted by a Saunders Havill Group ecologist on 9 December 2021. To confirm the extent of works, the ecologist traversed the Precinct 12 and ROL6 clearing boundaries and inspected the maintained tree protection fencing (refer **Photo Set 1**). The audit confirmed the extent of works carried out within Stage 2 were within the demarcated limits inspected prior to commencement of works and provided in the Pre-start Packages.

In accordance with the ROL6 pre-start package, a small area of clearing occurred outside of Stage 2 for waterway stabilisation works. These works have been undertaken in accordance with the Natural Environment Site Strategy (NESS) as specified under Condition 3 of the EPBC Act Approval (refer to **Section 5.1** for NESS details). The detailed design process sought to minimise and mitigate this necessary clearing as much as practicable.

Following the completion of this stage of works, the area is to be rehabilitated, forming part of the conservation area, comprising of Koala and Grey-headed Flying-fox habitat. The potential impact is therefore considered only temporary and actions to rectify the impact will commence following the completion of works in this area. Rectification works will be detailed in subsequent annual compliance reports. The works are necessary, and the impact temporary, and therefore considered compliant with the approval conditions.



**Photo Set 1: Maintained tree protection fencing and retained vegetation along Precinct 12 boundary (left) and ROL06 boundary (right) observed during annual site inspection and audit.**

Stage 1 of the project was completed during the previous reporting period (2019-2020). The recent site inspection and audit determined that no activities associated with Stage 1 occurred outside of the Stage 1 area.

Additionally, the on-site conservation area was inspected to confirm retention and protection of significant biodiversity values and progress of rehabilitation works. This is discussed further in **Section 5** of the report.

## 5. Offset actions

### 5.1. On-site conservation area

The on-site conservation area adjacent the action site, part Lot 9003 SP317644, requires ongoing management and rehabilitation. The Natural Environment Site Strategy (NESS) has been developed and implemented to avoid degradation of the on-site conservation area as a result of the action. The on-site conservation area is considered to contribute to the protection of MNES including habitat for the Koala and foraging habitat for the GHFF. The primary objectives recommended for the Conservation Area include:

- Retain significant floral species and vegetation communities
- Retain and enhance fauna habitat values
- Remove and manage processes potentially threatening the viability of existing habitats
- Increase the extent of vegetation communities and potential fauna habitat over time.

Rehabilitation works within the Conservation area and waterway corridors will include weed management and replanting with native species consistent with mapped Regional Ecosystems to augment ecological values and enhance connectivity.

Overall, the preservation and rehabilitation of the on-site Conservation area under the proposal is considered to provide a noteworthy environmental outcome for MNES that may infrequently utilise the site as part of a broader home range.

#### 5.1.1 *Melaleuca irbyana* Revegetation

Protected Plants Flora Surveys undertaken over the site in 2018 and 2020 recorded five isolated patches of *Melaleuca irbyana*; four of which are located within the development area and none of which met the thresholds to be classified as a Threatened Ecological Community under the EPBC Act (as per referral documentation). The species is listed as Endangered under the *Nature Conservation Act 1992* (NCA).

An Impact Management Plan *Impact Management Plan Melaleuca irbyana 43-520 Greenbank Road, Greenbank prepared for Mirvac QLD Pty Ltd, dated 3 July 2018*' (IMP) then subsequent '*Impact Management Plan Melaleuca irbyana 43-520 Greenbank Road, Greenbank prepared for Mirvac QLD Pty Ltd, dated August 2020*' (IMP) were prepared to support Protected Plants Clearing Permit applications to the Department of Environment and Science (DES). A copy of the latest approved IMP is included at **Appendix D**.

A Protected Plants Clearing Permit was renewed on 23 August 2020 (Permit No. WA0026119) which allows for clearing of all *M. irbyana* over the entire Clearing Impact Area (i.e. 277 ha site). Conditions of the Permit (PPCM01) require all activities relating to the impact of EVNT plant species under the permit to be carried out in accordance with the procedures and actions in the approved IMP. This included rehabilitation planting of *M. irbyana* within future conservation land in the eastern portion of the site to ensure no significant residual impact on the species occurs as a result of the development.

In March 2019, rehabilitation planting by land care consultant, Evolve, commenced at the rehabilitation area in accordance with the IMP. This included weed treatment and tube-stock planting of *M. irbyana* within a 5,000 m<sup>2</sup> area within the on-site Conservation area. The establishment period for this specific location within the offset area is 24 months utilising adaptive management.

Works during the reporting period included:

- Site inspections and audits by contractor;
- Continuation of photo monitoring;
- Management of weed regrowth;
- Management and monitoring of *Melaleuca irbyana* of 625 specimens;
- Replacement planting with auger and water spike; and
- Implementation of adaptive management measures.

The site audit and photo monitoring report by Evolve Environmental issued in June 2021 identified that of the 625 specimens planted within the 5,000 m<sup>2</sup> area of the Conservation Area, 585 were considered in excellent health *M. irbyana* specimens, 33 of fair health and 7 dead. The success rate, as a result of adaptive management, is above the minimum survival rate of 560.

Photos are taken at the four photo monitoring points established within the *M. irbyana* offset area at each audit (refer **Appendix E**). While the growth rate of *M. irbyana* is slow an increased number of specimens are now visible protruding above their tree-guards.

## 5.2. Offset Area

Prior to the commencement of Stage 2 of the action, an offset site was required to be legally secured to compensate for the loss of 230 ha of Koala and GHFF habitat in accordance with Condition 4 of the EPBC Act Approval (EPBC 2016/7817).

The offset area is managed as part of a larger conservation property located on Alpers Road, Mount Mort, Queensland comprised of multiple lots; Part of lot 54 on CC1018, Part lots 44 and 45 on CC32, Part of Lot 6 on RP21558, Part of lot 13 on RP21558, Part of lot 31 on CH312311, Part lot 216/CH311631, Part of 218 on CH311734, Part lot 222/CH311798, Part lot 30/CH312310, and Part lot 64/CC552, totalling approximately 686.44 .

The offset area was secured through a Voluntary Declaration under the *Vegetation Management Act 1999* (Qld) by Queensland Trust for Nature on 8 December 2020. The Department confirmed that an offset for impacts on the Koala and Grey-headed Flying-fox had been secured on 8 February 2021.

The Offset Strategy included the Offset Management Plan (OMP) prepared by Queensland Trust for Nature (QTFN) (QTFN, September 2020). The OMP identifies outcomes focused management actions, which will fulfil

a statutory requirement, pursuant to the EPBC Act, for the provision of Koala and GHFF habitat offset. The outcomes sought by this plan will protect, restore, encourage the regeneration of habitat and conserve large, connected areas of koala and GHFF habitat, particularly populations that are genetically diverse and distinct and are free of disease or have very low incidence of disease.

Annual Offset Area Management Reports are prepared for the offset site. The Baseline - Year 1 Offset Area Management Report was issued prior to the finalising of the second Annual Compliance Report (refer **Appendix F**). The offset milestones have been summarised in the table below.

**Table 2: Offset Milestones**

<b>Milestone</b>	<b>Due Date</b>	<b>Completion</b>
<b>Approval of EPBC 2016/7817</b>	-	11 October 2019
<b>Commencement of Stage 1</b>	-	18 November 2019
<b>Approval of Offset Strategy</b>	-	8 October 2020
<b>Legally Secure Offset Site</b>	Prior to commencement of Stage 2	4 December 2020
<b>Commencement of Stage 2</b>	Following legally securing offset site	1 March 2021
<b>Year 1 – Baseline</b>	4 December + 3 months	January 2022

The Baseline – Year 1 Offset Area Management Report summarised the actions undertaken during the reporting period, including:

- Baseline surveys,
- Revegetation and habitat creation actions, including:
  - planting preparation (ecological burn, growing of tube stock and seed supply); and
  - direct planting of seedlings within Offset Management Unit 3 (cleared).
- Mapping of extent and coverage of weeds,
- Two fuel hazard reduction assessments,
- Cattle grazing management to reduce fuel loads,
- Installation of fauna friendly cattle exclusion fencing, and
- Introduced predator management and monitoring.

The baseline survey results and management actions undertaken during the reporting period are summarised below.

For the purposes of managing the offset, the land was categorised into three management units, remnant (OMU1), regrowth (OMU2) and cleared (OMU3). Broadly, condition and management actions required are similar for remnant, regrowth and cleared areas. As a result, it was decided to assess habitat quality and



potential improvements based on Operational Management Units (OMUs). OMUs are made up of assessment units relating to the regional ecosystems and vegetation classes within the offset area.

Management actions in OMU1 and OMU2 focussed on habitat quality improvement with the establishment of monitoring transects and rehabilitation actions conducted in accordance with the Aroona Weed Management Strategy and Fire Management Plan. Habitat creation and revegetation commenced in OMU3 (cleared areas). Growing of tube stock, seed supply and direct planting within OMU3 commenced in 2021. Photo monitoring points are established and will be presented in the year 2 annual report once all works are completed. Additionally, in preparation for direct seeding, an ecological burn was undertaken to provide an excellent ash bed for eucalyptus seeds. While, Acacia seeds were dispersed pre-fire to promote germination. Monitoring of germination and early stage establishment will be undertaken.

The presence of Grey-headed Flying-fox were recorded in March 2021 and were observed feeding in a fig tree. Flowering grey-headed flying fox forage trees were GPS located and recorded throughout the reporting period. *Corymbia intermedia* and *Eucalyptus tereticornis* were the most dominant flowering forage tree. This provides year round coverage as they are a summer and winter forage species respectively.

The species stocking rate of the koala is an estimate of species carrying capacity of the site at the time of undertaking the survey. This metric is used to represent the sites capacity to support koala populations and the species occupancy. Species stocking rate is calculated using the following parameters:

- Species presence on or adjacent to the site
- Species usage of the site
- Approximate density of the species on the site
- Role/importance of species population on site

Baseline data was collected from 2016 to 2019 across the offset site using SAT surveys and intensive population surveys. These surveys will be carried out across the offset area though the lifetime of the offset to report on the effectiveness of management actions and the increase in koala abundance and activity.

Koala data was collected in 2016 by OWAD Environmental using a koala detection dog. The data collected by OWAD examined occupancy of koalas, showing how much of the property searched contained scats. Of sites searched, 27% contained scats in the northern parcel, and 35% in the southern parcel. Scats were found in both remnant and mature regrowth vegetation. Additional SAT surveys were conducted in July 2019, showing percentage of trees within single sites where scats were found. Fourteen SATs were conducted at Aroona, across all assessment units, six contained koala scat. Of those that did contain scat, the highest activity was recorded at a single site was 16% (i.e. of the 30 trees surveyed at each site, 16% contained scat). The highest activity was recorded in the remnant vegetation and alluvial systems, with limited use across mature regrowth areas. Opportunistic scat surveys were conducted across the reporting period. Koala scat was observed through all of the offset management units, including individual large trees on cleared land.

The target weed species identified during assessments as a threatening process to koalas are lantana (*Lantana camara*), broad-leaved pepper (*Schinus terebinthifolius*) and Chinese elm (*Celtis sinensis*). Lantana is the

predominant threat within the offset area, occurring in all transects with coverage up to 100%. Broadleaved pepper was recorded at over 50% of the transects, with those in riparian environments reaching coverage of 100%. Chinese elm was recorded at 30% of transects but remained low in coverage, below 20%.

The Weed Strategy 2020-2025 outlines the principles and approach to weed management at a property wide scale. Results from this survey have informed the approach for the next five years. A contractor has been engaged to complete weed control in high priority areas targeting lantana and broad leaved pepper the endangered blue gum alluvial flats (RE12.3.3), and into the foothills.

Cattle grazing for the purpose of fuel hazard management was conducted in line with the decision matrix provided in the Offset Management Plan. Fuel hazard assessments demonstrated that the near surface (grasses) fuel layer contributed the greatest to the high, very high and extreme overall ratings. The biomass in this layer is a significant food source for cattle, before it cures and contributes further to fuel loads. When managed correctly, it can be reduced without impact on native recruitment

Fauna friendly stock exclusion fencing has been installed around OMU3 areas where existing fences did not sufficiently exclude cattle. An ecological burn was planned in the mountain paddock; however, due to weather conditions the burn was unable to be conducted. Cattle were introduced to reduce fuel loads as per the flowchart.

The threats to koalas from fire was addressed in accordance with OMP by referring to the 'Aroona Station Fire Management Plan'. The Aroona Station Fire Management Plan divides the property into Fire Management Zones: Land Management Zones, Exclusion Zones and Asset Protection Zones. Within the Land Management Zones, the landscape is broken up into subzones or Fire Management Areas (FMAs) according to practicable containment lines. The Fire Management plan details burning intervals recommended for these FMAs.

Dingoes (*Canis lupus*), foxes (*Vulpes vulpes*), and cats (*Felis catus*) have all been recorded on-site in camera trapping, from visual sightings or from the collection of scats. Camera trapping is performed biannually to account for seasonal variation in predator behaviour. Refer **Appendix F** for further details.

## 6. EPBC approval conditions compliance table

The EPBC approval conditions for the project are replicated in **Table 3** with a designation on compliance or non-compliance if the condition was applicable during the reporting period, and evidence and comments as necessary. A copy of the EPBC approval and conditions is provided in **Appendix A**.

**Table 3: EPBC approval conditions compliance table.**

Condition number / reference	Condition	Is the project compliant with this condition?	Evidence/comments
1	The approval holder must ensure that no clearing of Koala or Grey-headed Flying-fox habitat for stage 1 occurs outside the stage 1 site.	Compliant	Clearing of Stage 1 has been completed. No clearing of Koala or Grey-headed Flying-fox habitat associated with Stage 1 works has occurred outside of the Stage 1 Area. A total of approximately 29 ha has been cleared within Stage 1 (refer to <b>Figure 2</b> ).
2	The approval holder must ensure that no clearing of Koala or Grey-headed Flying-fox habitat for stage 2 occurs outside of stage 2.	Compliant	<p>Clearing of Stage 2 commenced during the reporting period. A total of approximately 13 ha of Koala and Grey-headed Flying-fox habitat occurred during this reporting period (refer to <b>Figure 2</b>).</p> <p>During the reporting period approximately 0.2 ha of clearing occurred outside of Stage 2. This unavoidable clearing was undertaken in accordance with the NESS for essential waterway stabilisation works and permissible under Condition 3 of the EPBC Act approval. The detailed design process sought to minimise and mitigate this clearing as much as practicable. Following the completion of this stage of works, the area is to be rehabilitated, forming part of the conservation area, comprising of Koala and Grey-</p>

Condition number / reference	Condition	Is the project compliant with this condition?	Evidence/comments
3	For the protection of the Koala and Grey-headed Flying-fox habitat, the approval holder must implement the Natural Environment Site Strategy to avoid degradation of the on-site Conservation area as a result of the action, until such time that Logan City Council has accepted management of the on-site Conservation area in writing, and the approval holder has provided evidence of this to the Department.	Compliant	<p>headed Flying-fox habitat. The potential impact is therefore considered only temporary and actions to rectify the impact will commence following the completion of works in this area. Rectification works will be detailed in subsequent annual compliance reports. The works are necessary, and the impact temporary, and therefore considered compliant with the approval conditions.</p> <p>The approval holder has implemented the NESS to avoid degradation of the on-site Conservation area retaining significant biodiversity values. 180 ha of critical habitat within the on-site conservation area is to be retained.</p> <p>As noted within Condition 2 response, a small amount of clearing occurred within the on-site conservation area during the reporting period. The clearing has been undertaken in accordance with the NESS for essential waterway stabilisation works and permissible under Condition 3 of the EPBC Act approval. The detailed design process sought to minimise and mitigate this necessary clearing as much as practicable. Following the completion of this stage of works, the area is to be rehabilitated, forming part of the conservation area, comprising of Koala and Grey-headed Flying-fox habitat. The potential impact is therefore considered only temporary and actions to rectify the impact will commence following the completion of works in this area. Rectification works will be detailed in subsequent annual compliance reports. The works are necessary, and the impact</p>

Condition number / reference	Condition	Is the project compliant with this condition?	Evidence/comments
			<p>temporary, and therefore considered compliant with the approval conditions.</p> <p>Rehabilitation planting by land care consultant Evolve commenced at the State <i>M. irbyana</i> offset area within the on-site Conservation area in accordance with the approved IMP. Works included weed treatment and tube-stock planting of <i>M. irbyana</i> across a 5,000 m2 area within the previous reporting period.</p> <p>The approval holder will continue to manage and monitor the on-site Conservation area until such time that Logan City Council has accepted management of the area.</p>
4	<p>Within three (3) months of the commencement of stage 1 of the action, the approval holder must submit, for approval by the Minister, an Offset Strategy to compensate for the loss of 230 ha of Koala and Grey-headed Flying-fox habitat. The approval holder must not commence stage 2 of the action until the Offset Strategy has been approved by the Minister in writing. The approved Offset Strategy must be implemented. The approved Offset Strategy must:</p> <ol style="list-style-type: none"> <li>a. be prepared by a suitably qualified person</li> <li>b. be prepared in accordance with relevant approved conservation advices, recovery plans and threat abatement plans</li> <li>c. demonstrate that the proposed offset area(s) meets the principles of the EPBC Act Environmental Offsets Policy and Environmental Management Plan Guidelines</li> </ol>	Compliant	<p>The Offset Strategy was submitted within three (3) months of the commencement of the action and approved by the Department on 8 October 2020. The offset strategy contained an OMP prepared by QTFN. The approval confirmed the Offset Strategy and OMP met the requirements of Condition 4.</p> <p>Implementation of the OMP is described in section 7 of this report and <b>Table 5</b>.</p>

Condition number / reference	Condition	Is the project compliant with this condition?	Evidence/comments
	<ul style="list-style-type: none"> <li>d. include timelines and mechanisms for legally securing the offset area(s)</li> <li>e. provide a written description and map that clearly defines the location and boundaries of the proposed offset area(s) for Koala and Grey-headed Flying-fox habitat (must be accompanied by the offset attributes and shapefiles)</li> <li>f. demonstrate that there is a real potential for Koala and Grey-headed Flying-fox to utilise the offset area(s), including through (but not limited to):                             <ul style="list-style-type: none"> <li>i. habitat suitability</li> <li>ii. connectivity with other habitats including biodiversity corridors that contain Koala</li> <li>iii. proximity to known Grey-headed Flying-fox camps.</li> </ul> </li> <li>g. describe relevant baseline information regarding the offset area(s), based on surveys undertaken (prior to offset management commencing), including (but not limited to) quantification of the existing extent and quality of habitat for the Koala and Grey-headed Flying-fox present within the offset area(s) (the baseline condition)</li> <li>h. include time bound commitments to ecological outcomes and offset performance and completion criteria (including milestones) for achieving ecological outcomes for the Koala and Grey-headed Flying-fox</li> </ul>		

Condition number / reference	Condition	Is the project compliant with this condition?	Evidence/comments
	<ul style="list-style-type: none"> <li>i. detail the management actions and regeneration and revegetation strategies to be undertaken at the offset area(s) to achieve the ecological outcomes and offset performance and completion criteria, including:                             <ul style="list-style-type: none"> <li>i. the timing and frequency of these measures, and person(s) responsible</li> <li>ii. a program to monitor and report on the effectiveness of these measures, including monitoring and reporting progress against the ecological outcomes and offset performance and completion criteria at an appropriate time and frequency</li> <li>iii. criteria for triggering adaptive management actions, contingency measures and corrective actions if the ecological outcomes and offset performance and completion criteria are not achieved, and the timing and frequency and person(s) responsible</li> <li>iv. details of the potential risks to the successful implementation of the plan and measures that will be implemented to mitigate against these risks, and</li> <li>v. the person(s) responsible for monitoring, reviewing and implementing the Offset Management Plan.</li> </ul> </li> </ul>		
<b>5</b>	For the protection of the Koala, the approval holder must ensure that any offset area(s) will provide and/or establish a robust and diverse ecosystem that:	Compliant	The Offset Strategy was approved by the Department on 8 October 2020. The offset strategy contained an OMP prepared by QTFN. The approval confirmed the Offset Strategy and OMP met the requirements of Condition 5.

Condition number / reference	Condition	Is the project compliant with this condition?	Evidence/comments
	<p>a. contains habitat that provides both shelter and food resources relevant to the Koala, and</p> <p>b. has a real potential to promote Koala breeding.</p>		Implementation of the OMP is described in section 7 of this report and <b>Table 5</b> .
6	The approval holder must ensure that the revegetation of Koala food trees at the offset area(s) will utilise seeds collected from Koala food trees found within the offset area(s), or directly adjacent to the offset area(s), and preferably that also have evidence of Koala utilising them for feeding.	Compliant	<p>The Offset Strategy was approved by the Department on 8 October 2020. The offset strategy contained an OMP prepared by QTFN. The offset land was legally secured during the reporting period on 4/12/2020 and confirmed by DAWE on 08/02/2021. OMP actions were implemented during this reporting period (2020-2021).</p> <p>Revegetation and habitat creation actions have commenced with planting preparation (ecological burn, growing of tube stock and seed supply) and direct planting of seedlings within Offset Management Unit 3 (cleared).</p>
<b>Notification of date of commencement of the action</b>			
7	The approval holder must notify the Department in writing of the date of commencement of stage 1 and stage 2 of the action, within 10 business days after the date of commencement of stage 1 and stage 2 of the action	Compliant	<p>The Stage 1 of the action commenced on 18 November 2019. The department was notified in writing on the 19 November 2019 of commencement of the action.</p> <p>Stage 2 of the Action commenced on 1 March 2021, with the commencement of Precinct 12 clearing works. The department was notified in writing on the 12 March 2021 of the commencement of Stage 2 of the Action, within the prescribed 10 business days.</p>



Condition number / reference	Condition	Is the project compliant with this condition?	Evidence/comments
8	If the commencement of stage 1 or stage 2 does not occur within two (2) years from the date of this approval, then the approval holder must not commence the action without the prior written agreement of the Minister.	Compliant	The Stage 1 of the action commenced on 18 November 2019 and Stage 2 of the Action commenced on 1 March 2021 within the 2 years from the date of approval (11 October 2019).

**Compliance Records**

9	The approval holder must maintain accurate and complete compliance records.	Compliant	The Saunders Havill Group records and holds all relevant information for this EPBC approval on behalf of the approval holder. Electronic records of all material are held collectively by the Saunders Havill Group and approval holder and will be made available upon request in accordance with section 458 of the EPBC Act, or if required to verify compliance with the conditions of approval.
10	If the Department makes a request in writing, the approval holder must provide electronic copies of compliance records to the Department within the timeframe specified in the request.	Not applicable	The department has not requested to provide electronic copies of compliance records.

**Preparation and publication of plans**

11	<p>The approval holder must:</p> <ul style="list-style-type: none"> <li>a. submit plans electronically to the Department for approval by the Minister;</li> <li>b. publish each plan on the website within 20 business days of the date the plan is approved by the Minister or of the date a revised action management plan is submitted to the Minister or the Department, unless otherwise agreed to in writing by the Minister;</li> </ul>	Compliant	The approval holder submitted the Offset Strategy and Offset Management Plan electronically to the Department. The Offset Strategy was approved by the Department on 8 October 2020. The EPBC Decision Notice, Approved Offset Strategy and Offset Strategy Approval have been published on the website.
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Condition number / reference	Condition	Is the project compliant with this condition?	Evidence/comments
	<ul style="list-style-type: none"> <li>c. exclude or redact sensitive ecological data from plans published on the website or provided to a member of the public; and</li> <li>d. keep plans published on the website until the end date of this approval.</li> </ul>		
<b>12</b>	<p>The approval holder must ensure that any monitoring data (including sensitive ecological data), surveys, maps, and other spatial and metadata required under a plan, is prepared in accordance with the Department's Guidelines for biological survey and mapped data (2018) and submitted electronically to the Department in accordance with the requirements of the plan.</p>	Compliant	<p>This reporting period marks the first offset monitoring period for the offset site. The offset provider, QTFN, have prepared an Offset Management Report - Baseline Year 1 (refer <b>Appendix F</b>) for the first year of monitoring data. Monitoring data collected within the report has been prepared in accordance with the Department's Guidelines.</p>

**Annual compliance reporting**

<b>13</b>	<p>The approval holder must prepare a compliance report for each 12 month period following the date of commencement of the action, or otherwise in accordance with an annual date that has been agreed to in writing by the Minister. The approval holder must:</p> <ul style="list-style-type: none"> <li>a. publish each compliance report on the website within 60 business days following the relevant 12 month period;</li> <li>b. notify the Department by email that a compliance report has been published on the website and provide the weblink for the compliance report within five business days of the date of publication;</li> <li>c. keep all compliance reports publicly available on the website until this approval expires;</li> </ul>	Compliant	<p>The anniversary of the commencement of the action is 18 November. The annual deadline for publishing the report addressing compliance with each of the conditions of the approval (i.e. this Annual Compliance Report) is 10 February 2022. Documentary evidence providing proof of the date of publication will be provided to the Department when the report is published. Where the annual deadline is not a business day in Brisbane, the following business day is taken to be the due date.</p>
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Condition number / reference	Condition	Is the project compliant with this condition?	Evidence/comments
	<ul style="list-style-type: none"> <li>d. exclude or redact sensitive ecological data from compliance reports published on the website; and</li> <li>e. where any sensitive ecological data has been excluded from the version published, submit the full compliance report to the Department within 5 business days of publication.</li> </ul>		
<b>14</b>	<p>The approval holder must notify the Department in writing of any: incident; non-compliance with the conditions; or non-compliance with the commitments made in plans. The notification must be given as soon as practicable, and no later than two business days after becoming aware of the incident or non-compliance. The notification must specify:</p> <ul style="list-style-type: none"> <li>a. any condition which is or may be in breach;</li> <li>b. a short description of the incident and/or non-compliance; and</li> <li>c. the location (including co-ordinates), date, and time of the incident and/or non-compliance. In the event the exact information cannot be provided, provide the best information available.</li> </ul>	Not Applicable	<p>No non-compliances have been recorded during the reporting period.</p> <p>Although, a small amount of clearing occurred within the on-site conservation area during the reporting period, the clearing has been undertaken in accordance with the NESS for essential waterway stabilisation works and permissible under Condition 3 of the EPBC Act approval. Following the completion of this stage of works, the area is to be rehabilitated, forming part of the conservation area, comprising of Koala and Grey-headed Flying-fox habitat. The potential impact is therefore considered only temporary and actions to rectify the impact will commence following the completion of works in this area. The works are necessary, and the impact temporary, and therefore considered compliant with the approval conditions.</p>
<b>15</b>	<p>The approval holder must provide to the Department the details of any incident or non-compliance with the conditions or commitments made in plans as soon as practicable and no later than 10 business days after becoming aware of the incident or non-compliance, specifying:</p>	Not Applicable	<p>As discussed within condition 14 response above, no non-compliances have been recorded during the reporting period.</p> <p>A small amount of clearing occurred within the on-site conservation area during the reporting period. The impact is considered only</p>

Condition number / reference	Condition	Is the project compliant with this condition?	Evidence/comments
	<ul style="list-style-type: none"> <li>a. any corrective action or investigation which the approval holder has already taken or intends to take in the immediate future;</li> <li>b. the potential impacts of the incident or non-compliance; and</li> <li>c. the method and timing of any remedial action that will be undertaken by the approval holder.</li> </ul>		temporary and actions to rectify the impact will commence following the completion of works in this area and will be detailed in subsequent annual compliance reports.
<b>Independent audit</b>			
<b>16</b>	The approval holder must ensure that independent audits of compliance with the conditions are conducted every five (5) years following the date of the commencement of the action, or as otherwise requested in writing by the Minister.	Not Applicable	Independent audit is conducted every (5) years following the date of commencement, due 18 November 2024. The Minister has not directed the approval holder to conduct an independent audit of compliance with the conditions of the approval.
<b>17</b>	<p>For each independent audit, the approval holder must:</p> <ul style="list-style-type: none"> <li>a. provide the name and qualifications of the independent auditor and the draft audit criteria to the Department;</li> <li>b. only commence the independent audit once the audit criteria have been approved in writing by the Department; and</li> <li>c. submit an audit report to the Department within the timeframe specified in the approved audit criteria.</li> </ul>	Not Applicable	Independent audit is conducted every (5) years following the date of commencement, due 18 November 2024. The Minister has not directed the approval holder to conduct an independent audit of compliance with the conditions of the approval.
<b>18</b>	The approval holder must publish the audit report on the website within 10 business days of receiving the Department's approval of the audit report and keep the audit report published on the website until the end date of this approval.	Not Applicable	Independent audit is conducted every (5) years following the date of commencement and scheduled for 18 November 2024. The Minister has not directed the approval holder to conduct an independent audit of compliance with the conditions of the approval.

<b>Condition number / reference</b>	<b>Condition</b>	<b>Is the project compliant with this condition?</b>	<b>Evidence/comments</b>
<b>Completion of the action</b>			
<b>19</b>	Within 30 days after the completion of the action, the approval holder must notify the Department in writing and provide completion data.	Not Applicable	The action has not been completed.

## 7. Natural Environment Site Strategy

A review of the NESS commitments and implementation is provided in **Table 4**.

**Table 4: Natural Environment Site Strategy implementation**

No.	Commitment	Evidence/comments/status
<b>NESS-1</b>	Identify Significant Biodiversity Values within and adjoining the Development Land.	Significant Biodiversity Values within and adjoining the development land were identified during the EPBC Referral and Approval process. This included the identification of Threatened Ecological Communities (TECs), remnant vegetation, habitat for threatened flora and fauna, waterways and permanent ponds.
<b>NESS-2</b>	Retain and protect confirmed areas of remnant vegetation containing Endangered Regional Ecosystems.	<p>During the reporting period, 13 ha of the vegetation was cleared, consisting predominantly of non-remnant vegetation. No endangered remnant vegetation was cleared.</p> <p>Areas of remnant vegetation have been retained through the masterplan design and individual staging process of the development. Endangered regional ecosystems have not been cleared during the reporting period.</p> <p>Weed management and rehabilitation within the On-site Conservation area seeks to achieve a net increase in the area of Confirmed Areas of Remnant Vegetation Containing Endangered Regional Ecosystems.</p>
<b>NESS-3</b>	Development protects and minimises impacts on native vegetation within and supporting Significant Biodiversity Values.	During the reporting period, a total of 13 ha of clearing activities were undertaken. AWEC supervised all vegetation clearing activities which included inspecting the demarcated boundary of the works area and ensuring clear paths for fauna to reach safe havens were provided. Their services reports are provided in <b>Appendix B</b> .

The action has to the greatest extent possible avoided the clearing of non-endangered remnant, regrowth and other native vegetation through design. A significant portion of the approval area includes non-juvenile koala habitat trees which is land designated for the on-site Conservation area. Activities within the on-site conservation area were undertaken in accordance with the NESS and permissible under Condition 3 of the EPBC Act approval. Essential waterway stabilisation works were undertaken within the on-site Conservation area resulting in limited clearing (approximately 0.2 ha). This area will ultimately be rehabilitated and remain habitat for the Koala and Grey-headed Flying-fox. The works are necessary, and the impact temporary, and therefore considered compliant with the approval conditions.

The action has staged the clearing of trees and ensures pre and post clearing assessments are undertaken for areas designated under the plan of development as schools, future park, drainage and buffer until preliminary concepts for these areas have been prepared and clearing extents identified.

Management and rehabilitation works within the on-site Conservation area have continued from the previous reporting period.

**NESS-4** Minimise clearing of Non-juvenile Koala Habitat Trees (NJKHT) and provide obligations in accordance with IG17 to achieve a net gain in koala habitat for the region.

The action has minimised clearing of NJKHT through design and designated conservation land. Management and rehabilitation of the on-site Conservation area seeks to increase volume of NJKHT.

Clearing within the approval area has been staged and is undertaken sequentially to minimise impacts and avoid fragmenting or creating islands of NJKHT within clearing zones.

Activities within the on-site conservation area were undertaken in accordance with the NESS and permissible under Condition 3 of the EPBC Act approval. Works for waterway stabilisation was completed within the on-site Conservation area resulting in the unavoidable removal of some NJKHTs. Their removal was minimised as much as practicable through multiple engineering designs and impacts were mitigated through the implementation of pre and

post clearing reporting. This area will ultimately be rehabilitated and remain habitat for the Koala and Grey-headed Flying-fox. The works are necessary, and the impact temporary, and therefore considered compliant with the approval conditions.

<p><b>NESS-5</b></p>	<p>Minimise threats to existing local koala populations by avoiding conflicts with roads and dogs.</p>	<p>Design provides for minimal conflict with roads and vehicles, concentrating development within modified environments or adjacent developed areas and reducing roadways bisecting the on-site Conservation area. The staged development and sequential clearing ensure koalas can disperse and find refuge within the on-site Conservation area.</p> <p>Koala sensitive design measures have also been included (i.e. signage and landscape design). The design provides for dog off-leash facilities in recreation parkland and on lead control measures through the on-site Conservation area.</p>
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<p><b>NESS-6</b></p>	<p>Identify and avoid (to the greatest extent possible) any impacts on EVNT species.</p>	<p>As discussed within Section 5, <i>M. irbyana</i> was identified within the clearing zone through Protected Plants Surveys.</p> <p>A Protected Plants Clearing Permit (Permit No. WA0009354) was issued by the DES on 24 August 2018 (and subsequently renewed) which allows for clearing of all <i>M. irbyana</i> over the entire Clearing Impact Area). Conditions of the Permit (PPCM01) require all activities relating to the impact of EVNT plant species under the permit to be carried out in accordance with the procedures and actions in the IMP. This included rehabilitation planting of <i>M. irbyana</i> within future conservation land in the eastern portion of the site to ensure no significant residual impact on the species occurs as a result of the development.</p> <p>Evolve commenced rehabilitation and offset works in accordance with the IMP in March 2019. This included weed treatment and tube-stock planting of <i>M. irbyana</i> within a 5,000 m<sup>2</sup> area within the on-site Conservation area. The initial managing and monitoring period for this specific location within the on-site Conservation area is 24 months utilising adaptive management.</p>
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<p><b>NESS-7</b></p>	<p>Minimise impacts on native fauna (not scheduled as Threatened).</p>	<p>To avoid impacts where possible, all retained habitat for native fauna has been consolidated into non development portions of the site (i.e. the on-site Conservation area). Impacts have been minimised through the development land through staging and sequential clearing. Clearing has been undertaken in accordance with individual, site specific management plans.</p> <p>AWEC supervised all vegetation clearing activities which included inspecting the demarcated boundary of the works area and ensuring clear paths for fauna to reach safe havens were provided. Where specific habitat features have been identified (i.e. fallen logs, hollows, etc.), these are to be distributed within the on-site Conservation area. AWEC Post-clearing reports are provided in <b>Appendix B.</b></p>
<p><b>NESS-8</b></p>	<p>Retain, protect and buffer site watercourses forming part of the projects Significant Biodiversity Values.</p>	<p>The design largely avoids mapped waterways and associated vegetation. Waterways within the on-site Conservation area are to be retained and managed.</p> <p>Further rehabilitation works are proposed to protect and buffer site watercourses and improve the quality of significant biodiversity values including planting of endemic species and weed management within the bed and banks of retained or modified watercourses and drainage features.</p>
<p><b>NESS-9</b></p>	<p>Avoid and manage land degradation impacts caused through works within areas of dispersive and sodic soils.</p>	<p>The design avoids clearing on steep terrain and (to the largest extent possible) within identified waterways forming part of the site’s significant biodiversity values within the development land. The land designated within the on-site Conservation area is to be retained.</p> <p>A small amount of clearing occurred within the on-site conservation area during the reporting period. This clearing was necessary for waterway stabilisation works and managed in accordance with the NESS and permissible under Condition 3 of the EPBC Act approval. Rectification works will commence following the completion of construction activities within this area. Rectification works will be detailed in subsequent annual compliance reports.</p>

The works are necessary, and the impact temporary, and therefore considered compliant with the approval conditions.

Where possible, natural drainage features within the Development Land have been included as part of open space, drainage channels, etc. Detailed erosion and sediment control plans are prepared for each development stage to mitigate the impacts.

**NESS-10** Expand and improve the quality of Significant Biodiversity Values and other retained natural features.

Revegetation works within the on-site conservation area have commenced through the State *M. irbyana* offset. Planting has been undertaken over 5,000 m<sup>2</sup>. Actions within this zone include weed treatment and the ongoing management and monitoring of revegetation works. This area continues to be managed by regeneration consultants, Evolve. Refer to **Appendix E** for consultant reports.

Further rehabilitation works are proposed for the on-site conservation area to expand and improve the quality of significant biodiversity values and retained natural features including:

- Planting of koala habitat trees;
- Targeted weed management; and
- planting of endemic species and weed management within the bed and banks of retained or modified watercourses and drainage features.

Rehabilitation works within the on-site conservation area are ongoing and progress will be discussed within subsequent annual compliance reports.

**NESS-11** Decrease in the volume and diversity of site weed and pest species.

The on-site conservation area is largely undisturbed and buffered from adjacent incompatible land uses. As such, the volume and diversity of site weed and pest species is relatively low. Given the extent of the on-site conservation area, the rehabilitation will be staged.

During the reporting period, rehabilitation works remained concentrated within the 5,000 m<sup>2</sup> area for *M. irbyana*. Works have included planting, watering, monitoring and weed management.

Rehabilitation works within the on-site conservation area are ongoing and progress will be discussed within subsequent annual compliance reports.

<b>NESS-12</b>	Ensure monitoring, management and reporting collect adequate information to contribute towards the avoid, minimise, restore and offset principles of the NESS.	Monitoring and reporting processes are implemented during each stage of development and rehabilitation/offset works in accordance with relevant management plans (VMP, FMP, IMP, OMP, etc.) including pre and post clearing assessments, photo monitoring, tree health, rehabilitation/offset work audits. Refer to <b>Appendix B</b> for post clearing reports and <b>Appendix C</b> for pre-clearing reports prepared during the reporting period.
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## 8. Offset Management Plan

A review of the OMP management actions and implementation is provided in **Table 5**.

**Table 5: Offset Management Plan implementation**

No.	Management Action	Actions	Status/comments
MA-1	Selective chemical / mechanical weed management	<ul style="list-style-type: none"> <li>Develop and implement a weed strategy, with a particular focus on weeds with particularly ability to impact on koala movement and structural vegetation composition (mainly <i>Lantana camara</i> and <i>Schinus terebinthifolius</i>), and under the Biosecurity Act 2014, to reduce weed cover to target thresholds.</li> <li>Undertake weed management according principles outlined in section 7.1 of OMP.</li> </ul>	<p>The Offset Management Plan actions commenced during the 2021-2022 reporting period.</p> <p>Baseline weed assessments were conducted in 2021 and will be conducted annually for the duration of the OMP. Permanently marked transects were surveyed and photo points were recorded at each transect to ensure that the progress of the site could be monitored.</p> <p>The target weed species identified as a threatening process to koalas are lantana (<i>Lantana camara</i>), broad-leaved pepper (<i>Schinus terebinthifolius</i>) and Chinese elm (<i>Celtis sinensis</i>). Lantana is the predominant threat within the offset area, occurring in all transects with coverage up to 100%. Broadleaved pepper was recorded at over 50% of the transects, with those in riparian environments reaching coverage of 100%. Chinese elm was recorded at 30% of transects, but remained in low coverage below 20%.</p>

<p><b>MA-2</b></p>	<p>Ecological Burns</p>	<ul style="list-style-type: none"> <li>Develop and implement a Fire Management Strategy with particular focus on Regional Ecosystem burning intervals and property fire history. Undertake ecological burns in accordance with principles outlined in this section.</li> </ul>	<p>The threats to koalas from fire was addressed in accordance with OMP by referring to the 'Aroona Station Fire Management Plan'.</p> <p>Two ecological burns were conducted across the offset property, one within the offset area. The burn conducted within the offset area was undertaken with the direct seeding revegetation.</p>
<p><b>MA-3</b></p>	<p>Wildfire hazard reduction</p>	<ul style="list-style-type: none"> <li>Incorporate the offset area into the property Fire Management Plan within six (6) months of the offset being legally secured, for the purpose of protecting the offset area from high intensity wildfires as well as for conducting ecological burns with the aim to enhance biodiversity in line with the Regional Ecosystem Description Database fire management guideline. The property Fire Management Plan will be prepared by a suitably qualified professional and will detail: current vegetation condition and fire risk, locations of current and required firebreaks and fire control lines, current fuel loads, recommended actions and timeframes for maintenance of bushfire risk within the context of the adapted Regional Ecosystem Description Database guidelines and biodiversity outcomes sought for the offset area.</li> <li>Hazard reduction action will take place to reduce fuel loads based on Overall Fuel Hazard Assessment (Hines et al 2010). Hazard reduction action to follow flowchart outlined in Section 7.3</li> <li>Install firebreaks and fire trails (access tracks).</li> <li>Prescribed burning will be undertaken in consultation with, and under the guidance of the Queensland Rural Fire Brigade and in compliance with the Fire and Emergency Services Act 1990.</li> <li>Inspect firebreaks and access tracks, undertake any maintenance required to achieve compliance with Fire Management Plan.</li> </ul>	<p>Two fuel hazard assessments were undertaken during the reporting period. Two ecological burns were conducted across the offset property, one within the offset area. The burn conducted within the offset area was undertaken with the direct seeding revegetation.</p> <p>The burn conducted outside the offset area was a cultural burn conducted by Firesticks Alliance and was characteristic of a cool, mosaic burn. Additionally, fire break trails were inspected and maintained at regular intervals.</p> <p>No mortalities have been recorded as a result of wildfire.</p>

<b>MA-4</b>	Direct seeding where natural regeneration is lacking	<ul style="list-style-type: none"> <li>• Conduct direct seeding of native species in areas where natural regeneration not occurring.</li> <li>• Species mix to be representative of Preclear Regional Ecosystem</li> </ul>	Revegetation and habitat creation actions have commenced with planting preparation (ecological burn, growing of tube stock and seed supply) and direct planting of seedlings within Offset Management Unit 3 (cleared).
<b>MA-5</b>	Legal protection from incompatible land uses	<ul style="list-style-type: none"> <li>• Legally secure the offset area by way of voluntary declaration under the Vegetation Management Act 1999 prior to commencement of Stage 2 of the action.</li> <li>• The voluntary declaration will be in place for the duration of the impact, or until such time as another enduring protection mechanism (such as a Nature Refuge under the Nature Conservation Act 1992) has been formally registered on title and evidence of this has been provided to the Department. Note that this commitment should also be clearly stated in the legal security documentation.</li> <li>• Note that any legal security mechanism must be in place for the duration of the impact and legal security documentation should include the following:             <ul style="list-style-type: none"> <li>○ commitments that legal security of the offset area will be in place for the duration of the impact</li> <li>○ details of management activities to be undertaken to achieve and maintain the outcomes prescribed within the Offset Strategy for the koala and GHFF.</li> </ul> </li> </ul>	The offset area has been legally secured under the VMA within this reporting period on 4/12/2020 (confirmed by DAWE 08/02/2021). Stage 2 of the Action commenced on 1 March 2021, with the commencement of Precinct 12 clearing works.
<b>MA-6</b>	Monitoring control and of introduced predators	<ul style="list-style-type: none"> <li>• Conduct a baseline survey to establish introduced predator abundance and location on the property. This can be undertaken through the use of remote motion-activated cameras and/or identification of scats.</li> <li>• Establish a Relative Abundance Index and confidence intervals around associated population trends.</li> <li>• Implement introduced predator control program. The control program and techniques (trapping, baiting, shooting) will be informed based on the results of</li> </ul>	As part of the management program, baseline monitoring will be undertaken on the property and a relative abundance index (RAI) calculated for wild dogs and foxes. Where post control surveys indicate that there has been a recurrence of wild dogs and/or foxes on the site, control measures will be actioned using methods (e.g. controlled shooting and/or trapping) as

			<p>the abundance surveys. Where practical, and to increase the effectiveness of a control program, the landholder will seek to coordinate control programs with comparable activities being undertaken by neighbouring landholders.</p> <ul style="list-style-type: none"> <li>• Conduct follow-up monitoring and implement further control efforts if feral animals recur. Implement adaptive management techniques if initial control techniques are not working effectively.</li> <li>• Install appropriate hazard signage informing that the offset area is under introduced predator control.</li> <li>• Set-up a community engagement program including but not limited to interpretive signs, fact sheets and community presentations with the aim to raise community awareness and encourage responsible pet ownership.</li> <li>• Directly input into the Little Liverpool Range Strategy for controlling introduced predators across the Range.</li> </ul>	<p>determined by a pest control professional in consideration of these monitoring results.</p> <p>Introduced predators have been monitored and controlled on the wider property since 2018. Since monitoring commenced decreased in RAI have been recorded in wild dogs, foxes and cats. There has been a recent increase in feral pigs.</p> <p>No koala mortalities caused by non-native predators was recorded in the last monitoring season.</p>
<b>MA-7</b>	Revegetation		<ul style="list-style-type: none"> <li>• Implement a revegetation program in cleared areas using best practice techniques with tree and shrub species representative of the pre-clearance Regional Ecosystem including koala and GHFF food and shelter trees.</li> <li>• Exclude livestock from areas undergoing revegetation activities</li> <li>• Legally secure the offset area</li> </ul>	<p>Revegetation and habitat creation actions have commenced with planting preparation (ecological burn, growing of tube stock and seed supply) and direct planting of seedlings within Offset Management Unit 3 (cleared).</p> <p>Fauna friendly cattle exclusion fencing has been installed across the offset area.</p> <p>The offset area has been legally secured via voluntary declaration under the VMA on 4/12/2020.</p>
<b>MA-8</b>	Koala stocking survey	species rate	<ul style="list-style-type: none"> <li>• Undertake koala density/occurrence surveys using SAT methodology (Phillips and Callaghan 2011) within the offset area</li> <li>• Repeated surveys to be undertaken at 5-year intervals.</li> </ul>	<p>SAT surveys were conducted in July 2019, showing percentage of trees within single sites where scats were found. Fourteen SATs were conducted at Aroona Station, across all assessment units.</p>

- Koala SAT surveys to be undertaken by a suitably qualified ecologist with extensive experience with koala surveys.

Of the surveyed sites, only six contained any koala scat. Of those that did contain scat, the highest activity was recorded at a single site was 16%. The highest activity was recorded in the remnant vegetation and alluvial systems (land zone 3, RE 12.3.3/12.3.7), with limited use across mature regrowth areas.

Opportunistic scat surveys were conducted across the reporting period. Koala scat was observed through all of the offset management units, including individual large trees on cleared land.

<p><b>MA-9</b></p>	<p>Cattle grazing management</p>	<ul style="list-style-type: none"> <li>• Cattle grazing to be used only as a wildfire hazard fuel reduction tool in accordance with Management Action 3 – Wildfire hazard reduction.</li> <li>• Exclude cattle from revegetation areas (e.g. by fencing) until, in the opinion of an environmental management specialist, cattle grazing is assessed as unlikely to negatively affect vegetation composition.</li> <li>• Only permit grazing at the Aroona Offset Site for the purposes of bushfire hazard reduction.</li> <li>• Ensure that all livestock are excluded from planting/revegetation area for a minimum of 5 years, or until a suitably qualified independent expert has determined that planted koala and grey-headed flying-fox feed trees are of sufficient size to withstand impact from cattle.</li> <li>• Provide the Department with a report from the suitably qualified independent expert verifying that planted koala and grey-headed flying-fox feed trees are of sufficient size to withstand impact from cattle.</li> <li>• Ensure that any grazing is managed so as to prevent the risk of injury or mortality of Koalas</li> </ul>	<p>Cattle grazing for the purpose of fuel hazard management was conducted in line with the decision matrix provided in the Offset Management Plan.</p> <p>Fuel hazard assessments demonstrated that the near surface (grasses) fuel layer contributed the greatest to the high, very high and extreme overall ratings. The biomass in this layer is a significant food source for cattle, before it cures and contributes further to fuel loads. When managed correctly, it can be reduced without impact on native recruitment.</p> <p>Fauna friendly stock exclusion fencing has been installed around the offset area.</p>
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## 9. Summary

Saunders Havill Group were engaged by Mirvac Queensland Pty Ltd to prepare an *Annual Compliance Report* for the Greater Flagstone Project – Master Planned Residential Community granted under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) (ref EPBC 2016/7817), as specifically required by Condition 13 of the approval granted on 11 October 2019.

The action commenced on the 18 November 2019 with the clearing of Stage 1 School Site where construction of the State Primary School began in 2021. Stage 2 commenced during the reporting period with the removal of vegetation with Precinct 12. On-site works have proceeded in accordance with the stage specific management plans (i.e. VCFMP) under the supervision of a qualified fauna spotter catcher, AWEC. To assist the detection of Koala, a detailed site assessment was conducted with a thermal sensor and Remotely Piloted Aircraft.

An inspection and audit of the approval area and on-site conservation area confirmed the extent of works in accordance with the stage specific management plans, the NESS and Condition 3 of the EPBC Act approval. Although, a small amount of clearing occurred within the on-site conservation area during the reporting period, the clearing has been undertaken in accordance with the NESS for essential waterway stabilisation works and permissible under Condition 3 of the EPBC Act approval. Following the completion of this stage of works, the area is to be rehabilitation, forming part of the conservation area, comprising of Koala and Grey-headed Flying-fox habitat. The potential impact is therefore considered only temporary and actions to rectify the impact will commence following the completion of works in this area. The works are necessary, and the impact temporary, and therefore considered compliant with the approval conditions.

The *M. irbyana* conservation area continues to be managed in accordance with the IMP under the NCA to enhance significant biodiversity values within the on-site conservation area. The approval holder will continue to manage and monitor the on-site conservation area until such time that Logan City Council has accepted management of the area. Further, the offset area located at Aroona Station was legally secured via voluntary declaration under the VMA during the reporting period. As such, management action have commenced across the offset area including revegetation of cleared offset management units, creating Koala and Grey-headed Flying-fox habitat.

Reviewing of the above, the works carried out by the approval holder as part of the Greater Flagstone Project-Master Planned Residential Community are considered to be compliant with the approval granted under the EPBC Act (ref EPBC2016/7817).

# 10. Appendices

## Appendix A

EPBC approval and conditions granted 11 October 2019

## Appendix B

Post Clearing Fauna Spotter Catcher Reports

## Appendix C

Precinct 12 and ROL6 Environmental Pre-Start Package

## Appendix D

*Melaleuca irbyana* Impact Management Plan (July 2020)

## Appendix E

Evolve Environmental *Melaleuca irbyana* Assessment Audit Reports

## Appendix F

Offset Area Management Report

Baseline – Year 1

# Appendix A

EPBC approval and conditions granted  
11 October 2019



**APPROVAL**

**Mirvac Greater Flagstone Project, Greenbank, Queensland (EPBC 2016/7817)**

This decision is made under sections 130(1) and 133(1) of the *Environment Protection and Biodiversity Conservation Act 1999 (Cth)*. Note that section 134(1A) of the **EPBC Act** applies to this approval, which provides in general terms that if the approval holder authorises another person to undertake any part of the action, the approval holder must take all reasonable steps to ensure that the other person is informed of any conditions attached to this approval, and that the other person complies with any such condition.

**Details**

<b>Person to whom the approval is granted (approval holder)</b>	Mirvac Queensland Pty Limited
<b>ACN of approval holder</b>	060 411 207
<b>Action</b>	Development of a master planned residential community, on Lot 1 on SP297192 (formerly Lot 205 on RP845844, Lot 434 on RP845844 (part) and Lot 9 on S312355), within the Greater Flagstone Priority Development Area, Greenbank, Queensland.

**Approval decision**

My decision on whether or not to approve the taking of the action for the purposes of the controlling provision for the action is as follows.

**Controlling Provisions**

Listed Threatened Species and Communities	
Section 18	Approve
Section 18A	Approve

**Period for which the approval has effect**

This approval has effect until 31 July 2040.

**Decision-maker**

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**Name and position** Nathan Hanna  
Acting Assistant Secretary, Assessments and Governance Branch  
Department of the Environment and Energy

**Signature**

**Date of decision**

11/10/2019

**Conditions of approval**

This approval is subject to the conditions under the EPBC Act as set out in ANNEXURE A.



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## ANNEXURE A – CONDITIONS OF APPROVAL

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### Part A – Conditions specific to the action

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1. The approval holder must ensure that no **clearing of Koala or Grey-headed Flying-fox habitat** for **stage 1** occurs outside the **stage 1 site**.
2. The approval holder must ensure that no **clearing of Koala or Grey-headed Flying-fox habitat** for **stage 2** occurs outside the **stage 2 site**.
3. For the protection of the **Koala and Grey-headed Flying-fox habitat**, the approval holder must implement the **Natural Environment Site Strategy** to avoid **degradation** of the **on-site conservation area** as a result of the action, until such time that **Logan City Council** has accepted management of the **on-site conservation area** in writing, and the approval holder has provided evidence of this to the **Department**.
4. Within three (3) months of the **commencement** of **stage 1** of the action, the approval holder must submit, for approval by the **Minister**, an Offset Strategy to compensate for the loss of 230 ha of **Koala and Grey-headed Flying-fox habitat**. The approval holder must not **commence stage 2** of the action until the Offset Strategy has been approved by the **Minister** in writing. The approved Offset Strategy must be implemented. The approved Offset Strategy must:
  - a. be prepared by a **suitably qualified person**
  - b. be prepared in accordance with relevant approved **conservation advices, recovery plans and threat abatement plans**
  - c. demonstrate that the proposed offset area(s) meets the principles of the **EPBC Act Environmental Offsets Policy and Environmental Management Plan Guidelines**
  - d. include timelines and mechanisms for **legally securing** the offset area(s)
  - e. provide a written description and map that clearly defines the location and boundaries of the proposed offset area(s) for **Koala and Grey-headed Flying-fox habitat** (must be accompanied by the **offset attributes and shapefiles**)
  - f. demonstrate that there is a real potential for **Koala and Grey-headed Flying-fox** to utilise the offset area(s), including through (but not limited to):
    - i. **habitat** suitability
    - ii. connectivity with other **habitats** including **biodiversity corridors** that contain **Koala**
    - iii. proximity to known **Grey-headed Flying-fox** camps.
  - g. describe relevant baseline information regarding the offset area(s), based on surveys undertaken (prior to offset management commencing), including (but not limited to) quantification of the existing extent and quality of **habitat** for the **Koala and Grey-headed Flying-fox** present within the offset area(s) (the baseline condition)
  - h. include time bound commitments to ecological outcomes and offset performance and completion criteria (including milestones) for achieving ecological outcomes for the **Koala and Grey-headed Flying-fox**
  - i. detail the management actions and regeneration and revegetation strategies to be undertaken at the offset area(s) to achieve the ecological outcomes and offset performance and completion criteria, including:
    - i. the timing and frequency of these measures, and person(s) responsible
    - ii. a program to monitor and report on the effectiveness of these measures, including monitoring and reporting progress against the ecological outcomes and offset performance and completion criteria at an appropriate time and frequency



- iii. criteria for triggering adaptive management actions, contingency measures and corrective actions if the ecological outcomes and offset performance and completion criteria are not achieved, and the timing and frequency and person(s) responsible
  - iv. details of the potential risks to the successful implementation of the plan and measures that will be implemented to mitigate against these risks, and
  - v. the person(s) responsible for monitoring, reviewing and implementing the Offset Management Plan.
5. For the protection of the **Koala**, the approval holder must ensure that any offset area(s) will provide and/or establish a robust and diverse ecosystem that:
- a. contains **habitat** that provides both shelter and food resources relevant to the **Koala**, and
  - b. has a real potential to promote **Koala** breeding.
6. The approval holder must ensure that the revegetation of **Koala food trees** at the offset area(s) will utilise seeds collected from **Koala food trees** found within the offset area(s), or directly adjacent to the offset area(s), and preferably that also have evidence of **Koala** utilising them for feeding.

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## Part B – Standard administrative conditions

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### Notification of date of commencement of the action

7. The approval holder must notify the **Department** in writing of the date of **commencement of stage 1** and **stage 2** of the action, within **10 business days** after the date of **commencement of stage 1** and **stage 2** of the action.
8. If the **commencement of stage 1** or **stage 2** does not occur within two (2) years from the date of this approval, then the approval holder must not **commence the action** without the prior written agreement of the **Minister**.

### Compliance records

9. The approval holder must maintain accurate and complete **compliance records**.
10. If the **Department** makes a request in writing, the approval holder must provide electronic copies of **compliance records** to the **Department** within the timeframe specified in the request.

**Note:** **Compliance records** may be subject to audit by the **Department** or an independent auditor in accordance with section 458 of the **EPBC Act**, and or used to verify compliance with the conditions. Summaries of the result of an audit may be published on the **Department's** website or through the general media.

### Preparation and publication of plans

11. The approval holder must:
  - a. submit **plans** electronically to the **Department** for approval by the **Minister**;
  - b. publish each **plan** on the **website** within **20 business days** of the date the **plan** is approved by the **Minister** or of the date a revised action management plan is submitted to the **Minister** or the **Department**, unless otherwise agreed to in writing by the **Minister**;
  - c. exclude or redact **sensitive ecological data** from **plans** published on the **website** or provided to a member of the public; and
  - d. keep **plans** published on the **website** until the end date of this approval.
12. The approval holder must ensure that any **monitoring data** (including **sensitive ecological data**), surveys, maps, and other spatial and metadata required under a **plan**, is prepared in accordance with the **Department's Guidelines for biological survey and mapped data (2018)** and submitted electronically to the **Department** in accordance with the requirements of the **plan**.



### Annual compliance reporting

13. The approval holder must prepare a **compliance report** for each 12 month period following the date of **commencement of the action**, or otherwise in accordance with an annual date that has been agreed to in writing by the **Minister**. The approval holder must:
- publish each **compliance report** on the **website** within 60 **business days** following the relevant 12 month period;
  - notify the **Department** by email that a **compliance report** has been published on the **website** and provide the weblink for the **compliance report** within five **business days** of the date of publication;
  - keep all **compliance reports** publicly available on the **website** until this approval expires;
  - exclude or redact **sensitive ecological data** from **compliance reports** published on the **website**; and
  - where any **sensitive ecological data** has been excluded from the version published, submit the full **compliance report** to the **Department** within 5 **business days** of publication.

**Note:** Compliance reports may be published on the **Department's** website.

### Reporting non-compliance

14. The approval holder must notify the **Department** in writing of any: **incident**; non-compliance with the conditions; or non-compliance with the commitments made in **plans**. The notification must be given as soon as practicable, and no later than two **business days** after becoming aware of the **incident** or non-compliance. The notification must specify:
- any condition which is or may be in breach;
  - a short description of the **incident** and/or non-compliance; and
  - the location (including co-ordinates), date, and time of the **incident** and/or non-compliance. In the event the exact information cannot be provided, provide the best information available.
15. The approval holder must provide to the **Department** the details of any **incident** or non-compliance with the conditions or commitments made in **plans** as soon as practicable and no later than 10 **business days** after becoming aware of the **incident** or non-compliance, specifying:
- any corrective action or investigation which the approval holder has already taken or intends to take in the immediate future;
  - the potential impacts of the **incident** or non-compliance; and
  - the method and timing of any remedial action that will be undertaken by the approval holder.

### Independent audit

16. The approval holder must ensure that **independent audits** of compliance with the conditions are conducted every five (5) years following the date of the **commencement of the action**, or as otherwise requested in writing by the **Minister**.
17. For each **independent audit**, the approval holder must:
- provide the name and qualifications of the independent auditor and the draft audit criteria to the **Department**;
  - only commence the **independent audit** once the audit criteria have been approved in writing by the **Department**; and
  - submit an audit report to the **Department** within the timeframe specified in the approved audit criteria.



18. The approval holder must publish the audit report on the **website** within 10 **business days** of receiving the **Department's** approval of the audit report and keep the audit report published on the **website** until the end date of this approval.

#### Completion of the action

19. Within 30 days after the **completion of the action**, the approval holder must notify the **Department** in writing and provide **completion data**.

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### Part C - Definitions

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In these conditions, except where contrary intention is expressed, the following definitions are used:

**Biodiversity corridor** means areas of vegetation that allow **protected matter(s)** to travel from one area of **habitat** to another.

**Business day** means a day that is not a Saturday, a Sunday or a public holiday in the state or territory of the action.

**Clear/Clearing/Clearance** means the cutting down, felling, thinning, logging, removing, killing, destroying, poisoning, ringbarking, uprooting or burning of vegetation (but not including weeds – see the *Australian weeds strategy 2017 to 2027* for further guidance).

**Commencement/Commence/Commenced** means the first instance of any specified activity associated with **stage 1** of the action, including **clearing** of vegetation and **construction** of any infrastructure. **Commencement/Commence /Commenced** does not include minor physical disturbance necessary to:

- i. undertake pre-clearance surveys or monitoring programs;
- ii. install signage and /or temporary fencing to prevent unapproved use of the project area;
- iii. protect environmental and property assets from fire, weeds and pests; and
- iv. install temporary site facilities for persons undertaking pre-commencement activities so long as these are located where they have no impact on the **protected matters**.

**Completion data** means an environmental report and spatial data clearly detailing how the conditions of this approval have been met, including (but not limited to) information detailing the date, location, approved **impact site** (including **stage 1** and **stage 2**), actual total area of **habitat** (including type and quality) for **Koala** and **Grey-headed Flying-fox** that was **cleared** within the **impact site** (including within both **stage 1** and **stage 2**), and actual total area of **habitat** (including type and quality) for **Koala** and **Grey-headed Flying-fox** within the **offset area(s)**. The **Department's** preferred spatial data format is **shapefile**.

**Completion of the action** means all specified activities associated with the action have permanently ceased.

**Compliance records** means all documentation or other material in whatever form required to demonstrate compliance with the conditions of approval in the approval holder's possession or that are within the approval holder's power to obtain lawfully.

**Compliance reports** means written reports:

- i. providing accurate and complete details of compliance, **incidents**, and non-compliance with the conditions and the **plans**;
- ii. consistent with the **Department's Annual Compliance Report Guidelines (2014)**;
- iii. include a **shapefile** of any clearance of any **protected matters**, or their **habitat**, undertaken within the relevant 12 month period; and





- iv. annexing a schedule of all **plans** prepared and in existence in relation to the conditions during the relevant 12 month period.

**Conservation advices** means a conservation advice approved by the **Minister** under the **EPBC Act**.

**Construction** means the erection of a building or structure that is or is to be fixed to the ground and wholly or partially fabricated on-site; the alteration, maintenance, repair or demolition of any building or structure; preliminary site preparation work which involves breaking of the ground (including pile driving); the laying of pipes and other prefabricated materials in the ground, and any associated excavation work; but excluding the installation of temporary fences and signage.

**Degradation** means any deterioration of the extent or quality of **habitat**, including from (but not limited to): **clearing**, weed introduction or increase, dumping, domestic and feral animals, startling noises, vehicle entry, erosion, pollution and altered water flow.

**Department** means the Australian Government agency responsible for administering the **EPBC Act**.

**Environmental Management Plan Guidelines** means the Department's *Environmental Management Plan Guidelines (2014)*.

**EPBC Act** means the *Environment Protection and Biodiversity Conservation Act 1999 (Cth)*.

**EPBC Act Environmental Offsets Policy** means the *Environment Protection and Biodiversity Conservation Act 1999 Environmental Offsets Policy (October 2012)*.

**Grey-headed Flying-fox** means the Grey-headed Flying-fox (*Pteropus poliocephalus*) listed as a threatened species under the **EPBC Act**.

**Habitat** means the natural environment in which the relevant **protected matter(s)** has been identified to occur or is suitable for the **protected matter** to occur in, based upon field surveys and guidance contained in the relevant species or ecological communities' *listing advice, conservation advice, recovery plan* or *SPRAT profile*.

**Impact site** means the area designated as 'Impact Site' bounded by the solid red line on the map at [Appendix A](#).

**Incident** means any event which has the potential to, or does, impact on one or more **protected matter(s)**.

**Independent audit** means an audit conducted by an independent and **suitably qualified person** as detailed in the *Environment Protection and Biodiversity Conservation Act 1999 Independent Audit and Audit Report Guidelines (2015)*.

**Koala** means the Koala (combined populations of Queensland, New South Wales and the Australian Capital Territory) (*Phascolarctos cinereus* (combined populations of Qld, NSW and the ACT) listed as a threatened species under the **EPBC Act**.

**Koala food tree(s)** means a species of tree of genus *Angophora*, *Corymbia*, *Eucalyptus*, *Lophostemon* or *Melaleuca*, with a height of more than 4 metres or with a trunk circumference more than 31.5 centimetres at 1.3 metres above the ground, the leaves of which are known to be consumed by the **Koala**.

**Legally securing** means protect for conservation under a voluntary declaration under the *Vegetation Management Act 1999 (Qld)* or as a nature refuge under the *Nature Conservation Act 1992 (Qld)* or another enduring protection mechanism agreed to in writing by the **Department**.

**Logan City Council** means '*Logan City Council*', the local government authority for the city of Logan in Queensland, Australia.

**Monitoring data** means the data required to be recorded under the conditions of this approval.



**Minister** means the Australian Government Minister administering the **EPBC Act** including any delegate thereof.

**Natural Environment Site Strategy** means the document with the title *Mirvac Greater Flagstone Project: Natural Environment Site Strategy* (18 April 2017), as approved by Economic Development Queensland on 2 June 2017.

**Offset attributes** means an '.xls' file capturing relevant attributes of the offset site, including the EPBC reference ID number, the physical address of the offset site, coordinates of the boundary points in decimal degrees, the **protected matters** that the offset compensates for, and any additional **protected matters** that are benefiting from the offset, and the size of the offset in hectares.

**On-site conservation area** means the area designated as 'On-site Conservation Area' and shaded dark green within the **referral site** on the map at [Appendix A](#).

**Plan(s)** means any of the documents required to be prepared, approved by the **Minister**, and/or implemented by the approval holder and published on the **website** in accordance with these conditions (includes action management plans and/or strategies).

**Protected matter(s)** means a matter protected under a controlling provision in Part 3 of the **EPBC Act** for which this approval has effect.

**Recovery plans** means a recovery plan made or adopted by the **Minister** under the **EPBC Act**.

**Referral site** means the area designated as 'Referral Site' and bounded by the solid black line on the map at [Appendix A](#).

**Sensitive ecological data** means data as defined in the Australian Government Department of the Environment (2016) *Sensitive Ecological Data – Access and Management Policy V1.0*.

**Shapefiles** means location and attribute information of the action provided in an Esri shapefile format. Shapefiles must contain '.shp', '.shx', '.dbf' files and a '.prj' file that specifies the projection/geographic coordinate system used. Shapefiles must also include an '.xml' metadata file that describes the shapefile for discovery and identification purposes.

**Stage 1** means any activity associated with the action that is approved to occur within the **stage 1 site**, specifically **construction** and **clearing** works required for the development of a new State Primary School.

**Stage 1 site** means the area designated as 'Stage 1 Site' within the yellow shading and bounded by the solid yellow line on the map at [Appendix A](#).

**Stage 2** means any activity associated with the action that is approved to occur within the **stage 2 site**, including **construction** and **clearing** works.

**Stage 2 site** means the area designated as 'Stage 2 Site' within the light green shading and bounded by the solid green line on the map at [Appendix A](#).

**Suitably qualified person** means a person who has professional qualifications, training, skills and/or experience related to the nominated subject matter and can give authoritative independent assessment, advice and analysis on performance relative to the subject matter using the relevant protocols, standards, methods and/or literature.

**Threat abatement plan** means a threat abatement plan made or adopted by the **Minister** under the **EPBC Act**.

**Website** means a set of related web pages located under a single domain name attributed to the approval holder and available to the public.

# APPENDIX A - Map of Impact Area, Stage 1 & Stage 2 of the Action



# Appendix B

## Post Clearing Fauna Spotter Catcher Reports

# Wildlife Management Report

SHADFORTH CIVIL CONTRACTORS

EVERLEIGH PRECINCT 12.1

Teviot Road

Greenbank, Queensland

Disturbance Activities 1<sup>st</sup>, 3-5<sup>th</sup>, 8-9<sup>th</sup> March 2021

## Document prepared by:


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## Revision History

Rev No	Issue Date	Revision Details	Prepared By	Reviewed By	Approved By
0	March 2021	Post Works	Steven Keady	Yolande Venter	Joel Keady
1					
2					

## Document Approval

<b>Approved:</b> <i>Company Director</i>	<b>Name</b> <i>Joel Keady</i>	<b>Signature</b> 	<b>Date</b> <i>March 2021</i>
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## 1. Introduction

### 1.1. Background

Australia Wide Environmental Consultants were commissioned by SHADFORTHS CIVIL CONTRACTORS to manage fauna during the clearing and mulching works for EVERLEIGH PRECINCT 12.1 subdivision development of Teviot Road in Greenbank, Queensland (**See Figure 1**).

The project is a master planned residential development located on allotments at the corner of Teviot Road and Greenbank Road. Precinct 12.1 is located on Lot 9003 on SP317644 and is predominately cleared and regularly maintained for cattle grazing.

### 1.2. Ecologist and Qualifications

The AWEC nominated Ecologist is Yolande Venter who is a degree qualified ecologist/environmental coordinator with over 15 years of field experience within the ecology and environmental sectors.

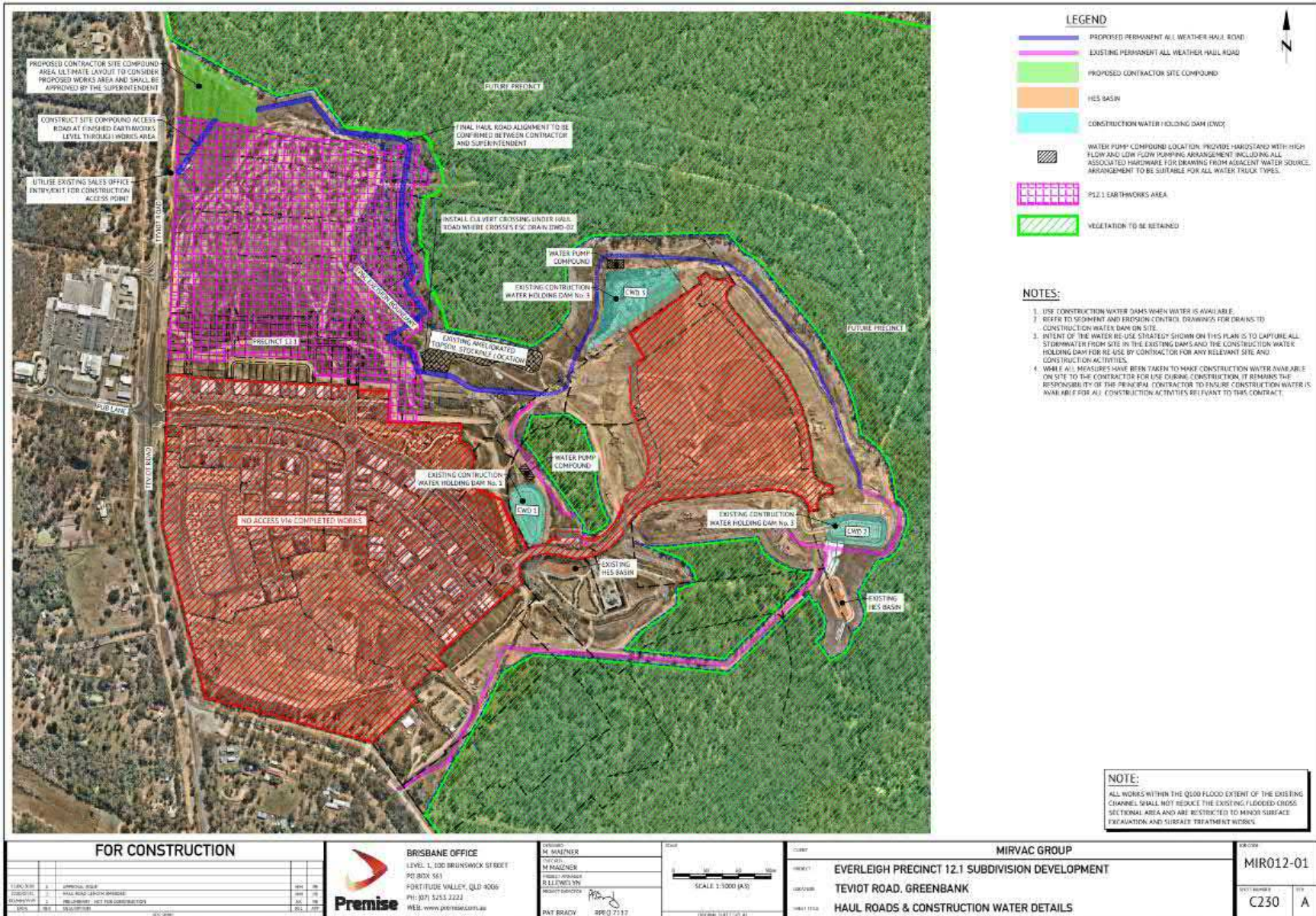
### 1.3. Scope

This report will summarise how fauna was managed during the clearing and mulching stage of this project, any fauna encounters and how fauna is proposed to be managed for the remainder of the project. This report will consist of three main sections.

1. Wildlife Capture and Disposal Plan;
2. Animal Injury and Euthanasia Report; and
3. Wildlife Habitat Management Plan.



Figure 1- Extent of Disturbance



## 2. Statutory Requirements and Guidelines

Table 1- Statutory Requirements and Guidelines

<b>LEGISLATION</b>	<b>PURPOSE OF LEGISLATION</b>	<b>IMPACT ON PROJECT PERSONNEL</b>
<b><i>Environmental Protection Regulation 2019</i></b>	Gives legislative support to various national guidelines, plans and Australian Standards. This regulation also outlines requirements for the management of fauna and flora.	To abide by the regulations within the DES.
<b><i>Environmental Protection and Biodiversity Conservation Act 1999</i></b>	The EPBC Act focuses Australian Government interests on the protection of matters of national environmental significance, with the states and territories having responsibility for matters of state and local significance.	To comply with the relevant sections of the Act that relate to matters of national significance which are present in the vicinity of the project works.
<b><i>Nature Conservation Act 1992</i></b>	The Act provides for the legislative protection of Queensland's threatened biota. It is aligned with the IUCN redlist which categorises biota into their current status in the wild.	To comply with the relevant sections of the Act and regulations and the Environmental Authority administered by the DES.
<b><i>Nature Conservation (Wildlife) Regulation 2006</i></b>	This Regulation lists the plants and animals considered presumed extinct, endangered, vulnerable, rare, common, international, and prohibited. It discusses their significance and states the declared management intent and the principles to be observed in any taking and use for each group.	List those animals that may be potentially found on sites being developed as part of the project and limitations for management.
<b><i>Nature Conservation (Wildlife Management) Regulation 2006</i></b>	This Regulation provides for the management of wildlife (including taking, keeping and using wildlife including protected plants).	Provides guidance for the management of wildlife on site, particularly in relation to the interference with native wildlife during the clearing process.
<b><i>Nature Conservation and Other Legislation (Koala Protection) Amendment Regulation 2020</i></b>	<ul style="list-style-type: none"> <li>Guideline for identifying koala habitat</li> <li>Managing koala habitat</li> </ul>	Provides guidance on where spotter/catcher's are legally required and how they are to manage koala habitat
<b><i>Animal Care and Protection Act 2001</i></b>	<ul style="list-style-type: none"> <li>Animal Welfare</li> </ul>	Outlines that animal ethics approval is needed for research, survey and/or monitoring involving vertebrates, where activities such as trapping, census leading to disturbance of animals (such as spotlighting or call play-back), abnormal interruption of behaviour or marking/tagging are involved.
<b><i>Australian code for the care and use of animals for scientific purposes 8<sup>th</sup> edition (2013)</i></b>	<ul style="list-style-type: none"> <li>Ethical framework for animals used for scientific purposes</li> </ul>	Governing principles set out in the Code provide guidance for investigators, teachers, institutions, animal ethics committees and all the people involved in the care and use of animals for scientific purposes.
<b><i>Terrestrial Vertebrate Fauna Survey Guidelines for Queensland (2018)</i></b>	<ul style="list-style-type: none"> <li>Guidelines for Fauna Surveys</li> </ul>	Detailed guidelines on designing a survey, the different survey methodologies and the ethical considerations that need to be made for each methodology.
<b><i>Queensland Hygiene protocol for handling amphibians</i></b>	<ul style="list-style-type: none"> <li>Protocol for handling amphibian species</li> </ul>	Outlines how to handle and manage amphibian species to prevent the spread of diseases among specimens and colonies.
<b><i>Code of Practice- Care and rehabilitation of orphaned, sick or injured protected</i></b>	<ul style="list-style-type: none"> <li>Provides guidelines on the rehabilitation and care of wildlife</li> </ul>	Detailed guidelines, in regards to hygiene, housing, capture and release, euthanasia and relevant legislation

<i>animals by wildlife carers(2013)</i>		
<b>Seqwater-Guideline- Fish Stranding and Salvage</b>	<ul style="list-style-type: none"> <li>The purpose of this guidance document is to ensure native fish recovery operations are conducted in a timely and safe manner to minimise or eliminate loss of fish from stranding.</li> </ul>	Guideline on managing aquatic fauna during dewatering works.
<b>Fisheries Act 1994</b>	<ul style="list-style-type: none"> <li>The main purpose of the <i>Fisheries Act 1994</i> is to provide for the use, conservation and enhancement of the community's fisheries resources and fish habitats in a way that seeks to apply the principles of ecologically sustainable development.</li> </ul>	Outlines fish habitats and fish movement and migration (regulation of waterway barriers). Guidelines on commercial, recreational and indigenous fishing.
<b>Biosecurity Act 2014</b>	<ul style="list-style-type: none"> <li>The <i>Biosecurity Act 2014</i> provides a framework for an effective biosecurity system for Queensland, to ensure the safety and quality of agricultural inputs, and to align responses to biosecurity risks in the state with national and international obligations.</li> </ul>	Under the <i>Biosecurity Act 2014</i> , pest species must not be kept, fed, given away, sold, or released into the environment without a permit. Under the <i>Biosecurity Act</i> , everyone has a general biosecurity obligation to take reasonable and practical steps to minimise the risks associated with restricted plants and animals.
<b>DAF Guidelines for Fish Salvage, 2018</b>	<ul style="list-style-type: none"> <li>Purpose of these guidelines is to minimise the risk to aquatic fauna during dewatering works.</li> </ul>	These guidelines provide detailed instructions for dewatering waterbodies and salvaging aquatic fauna.

Australia Wide Environmental Consultants holds a current DEHP rehabilitation permit (**Permit #WA0027769**), with an extended authority issued by the Department of Environment and Heritage Protection specifying that the holder may take, keep or use an animal whose habitat is about to be destroyed by human activity.

### 3. Wildlife Capture and Disposal Plan

Table 2- Relocated Fauna

Date	Common Name	Scientific Name	Capture Location	Release Location	Number Caught	Notes
1/3	Koala	Phascolarctos cinereus	-27.440559, 152.592913	-	-	Animal Located by Saunders Havill Thermal imaging UAV and communicated location with onsite FSC. Onsite Fauna Spotter located the Koala onsite and confirmed the individual was healthy and outside the required exclusion zone. The Koala was monitored throughout the day.
1/3	Eastern bearded dragon	Pogona barbata	-27.73439, 152.98942	-27.73685, 153.00671	1	
1/3	Carpet Python	Morelia spilota	-27.73553, 152.98940	-27.73455, 153.00514	1	
1/3	dubious Dtella	Gehyra dubia	-27.44935, 152.59226	-27.73880, 153.00739	4	

1/3	Golden crowned snake	Cacophis squamulosus	-27.44100, 152.59200	-27.73455, 153.00514	1	
4/3	Green tree snake	Dendrelaphis punctuates	-27.44110, 152.59200	-27.73685, 153.00671	1	

**Table 2- Sighted Fauna**

COMMON NAME	SCIENTIFIC NAME	CONSERVATION STATUS
<b>Avian</b>		
Australian Magpie	<i>Cracticus tibicen</i>	Least Concern
Australian Wood Duck	<i>Chenonetta jubata</i>	Least Concern
Black-faced cuckoo-shrike	<i>Coracina novaehollandiae</i>	Least Concern
Black-shouldered Kite	<i>Elanus axillaris</i>	Least Concern
Blue-faced Honeyeater	<i>Entomyzon cyanotis</i>	Least Concern
Brown Honeyeater	<i>Lichmera indistincta</i>	Least Concern
Crested Pigeon	<i>Ocyphaps lophotes</i>	Least Concern
Galah	<i>Cacatua roseicapilla</i>	Least Concern
Great Egret	<i>Ardea alba</i>	Least Concern
Grey Teal	<i>Anas gracilis</i>	Least Concern
Laughing Kookaburra	<i>Dacelo novaeguineae</i>	Least Concern
Little Black Cormorant	<i>Phalacrocorax sulcirostris</i>	Least Concern
Little corella	<i>Cacatua sanguinea</i>	Least Concern
Magpie-lark	<i>Grallina cyanoleuca</i>	Least Concern
Masked Lapwing	<i>Vanellus miles</i>	Least Concern
Noisy Friarbird	<i>Philemon corniculatus</i>	Least Concern
Noisy miner	<i>Manorina melanocephala</i>	Least Concern
Pacific Black Duck	<i>Anas superciliosa</i>	Least Concern
Pale-headed Rosella	<i>Platycercus adscitus</i>	Least Concern
Pied Butcherbird	<i>Cracticus nigrogularis</i>	Least Concern
Purple Swamphen	<i>Porphyrio porphyrio</i>	Least Concern
Rainbow Lorikeet	<i>Trichoglossus haematodus</i>	Least Concern
Sacred Kingfisher	<i>Todiramphus sanctus</i>	Least Concern
Scaly-breasted Lorikeet	<i>Trichoglossus chlorolepidotus</i>	Least Concern
Spangled Drongo	<i>Dicrurus bracteatus</i>	Least Concern
Spotted Quail-thrush	<i>Cinlosoma punctatum</i>	Least Concern
Straw-necked Ibis	<i>Threskiornis spinicollis</i>	Least Concern
Sulphur-crested Cockatoo	<i>Cacatua galerita</i>	Least Concern
Torresian Crow	<i>Corvus orru</i>	Least Concern
Welcome Swallow	<i>Hirundo neoxena</i>	Least Concern
White-faced Heron	<i>Ardea novaehollandiae</i>	Least Concern
White-necked Heron	<i>Ardea pacifica</i>	Least Concern
Willy Wagtail	<i>Rhipidura leucophrys</i>	Least Concern
<b>Mammal</b>		
Brown Hare	<i>Lepus europaeus</i>	Declared Pest

COMMON NAME	SCIENTIFIC NAME	CONSERVATION STATUS
Eastern grey kangaroo	<i>Macropus giganteus</i>	Least Concern
<b>Amphibian</b>		
Cane Toad	<i>Rhinella marina</i>	Declared Pest
<b>Reptile</b>		
Wall Skink	<i>Cryptoblepharus virgatus</i>	Least Concern

### 3.1. Wildlife Capture and Disposal Summary

A suitable qualified Fauna Spotter/catcher was on site for the duration of clearing works and ensured that all the management measures in the Wildlife and Habitat Impact Mitigation Plan were adhered to. All the significant habitat features in the Wildlife Protection and Management Plan were clearly marked prior to clearing works commencing.

During the clearing phase of works eight reptile species were successfully relocated out of the site. No fauna breeding sites were disturbed, one significant fauna species (koala) was encountered, (See Table 2). The koala was located and monitored throughout the day.

A suitably qualified fauna spotter/catcher was present for the duration of snipping and mulching works, however no fauna required relocation during this phase of works.

## 4. Animal Injury and Euthanasia Report

### 4.1. Animal Injury and Euthanasia Summary

No fauna fatalities or injuries occurred because of the works within Precinct 12.1 of this development.

## 5. Wildlife Habitat Management Plan

All the fauna management measures for the Earthworks and Construction Phase of the project in listed in the Wildlife and Habitat Impact Mitigation Plan still need to be adhered to. There are no further activities on site that pose a high risk to native fauna. Tasks such as the excavation of the main services trench line poses a low risk to native fauna and during its construction, to manage this risk all the management measures in the Habitat Impact Mitigation Plan will be adhered to.

A fauna/spotter catcher will be on call for the duration of works on site, if any fauna is encountered within the site, they will be called out to manage the fauna interaction.

## 6. Conclusion

Australia Wide Environmental Consultants were commissioned by SHADFORTH'S CIVIL CONTRACTORS to manage fauna during the clearing and mulching works for EVERLEIGH PRECINCT 12.1 subdivision development of Teviot Road in Greenbank, Queensland (See **Figure 1 & 2**).

During the clearing phase of works eight reptile species required relocation out of the site. No fauna breeding sites were disturbed, and one significant fauna species (koala) was encountered, (See **Table 2**). No fauna fatalities or injuries occurred as a result of the works within Precinct 12.1 of this development.

## References

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- Nature Conservation Act 1992 (Qld)*, [http://www.legislation.qld.gov.au/Acts\\_SL\\_N.htm](http://www.legislation.qld.gov.au/Acts_SL_N.htm)
- Nature Conservation (Koala) Conservation Plan 2017 (Qld)*, <https://www.legislation.qld.gov.au/view/pdf/inforce/current/sl-2017-0152>
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- Ryan M, 2007, Wildlife of the Greater Brisbane, Queensland Museum, South Brisbane
- Ryan M, 2007, Wild plants of the Greater Brisbane, Queensland Museum, South Brisbane
- Triggs, B., 2004. Tracks, Scats, And Other Traces. 2nd ed. South Melbourne, Vic.: Oxford University Press.
- Wilson S, 2005, A Field Guide to Reptiles of Queensland, Reed New Holland, Sydney

# Appendix C

## Precinct 12 and ROL6 Environmental Pre-Start Package

# Environmental Pre-Start Checklist

<b>Project Area:</b> Precinct 12	<b>Date:</b> 19 February 2021
<b>Contractor:</b> Shadforth's	<b>Scope of Works:</b> Vegetation clearing associated with Precinct 12 (DEV2016/768) and commencement of EPBC Stage 2 (EPBC2016/7817). Refer Attachment 1 for clearing extent and Attachment 2 for EPBC Stage context.
<b>Date work is to start:</b> 22 February 2021	
<b>Date work is to cease:</b> 8 March 2021	

		Compliance (✓ × N/A)					
#	Control Measure	Client	Superintendent	Contractor	Fauna Spotter Catcher	Environmental Coordinator	Details
1a	Has the <b>environmental coordinator</b> obtained approval for works located inside the <i>Environment Protection and Biodiversity Conservation Act 1999</i> referral area (EPBC 2016/7817)?					✓	<p>Yes. Refer Attachment 2 – for a copy of the EPBC Approval (EPBC2016/7817). Attachment 2 shows the extent of works within the EPBC Stages and is the commencement of Stage 2.</p> <p>As per condition 7 of the approval (ref. EPBC2016/7817) the approval holder is to notify the Department within 10 business days after the commencement of Stage 2. This is the responsibility of the <b>environmental coordinator</b>.</p> <p>As per EPBC conditions, all works must occur in accordance with the <i>Mirvac Greater Flagstone Project: Natural Environmental</i></p>



# Environmental Pre-Start Checklist

#	Control Measure	Client	Superintendent	Contractor	Fauna Spotter Catcher	Environmental Coordinator	Details
							<i>Strategy (18 April 2017), as approved by Economic Development Queensland on 2 June 2017 [NESS] (Refer Appendix C).</i>
1b	Has the <b>environmental coordinator</b> obtained approval for an Offset Strategy to compensate for the loss of 230ha of Koala and Grey-headed Flying-fox habitat in order to commence Stage 2 works in accordance with approval conditions 4 to 6 (EPBC 2016/7817)?					✓	Refer to Offset Strategy Approval Letter (Attachment 3), which determined the 'Offset Strategy – Mirvac Greater Flagstone Project, Greenbank, Queensland prepared by Saunders Havill Group, dated 23 September 2020' met the requirements of approval condition 4 to 6 of EPBC 2016/7817.
<b>MANAGEMENT PLANS</b>							
1b	Has a Vegetation Clearing Management Plan (VMP) been prepared, reviewed by the <b>environmental coordinator</b> and approved by Economic Development Queensland (EDQ)?					✓	Refer to Attachment 4 - 'Vegetation Clearing and Fauna Management Plan, Precinct 12, Everleigh Greenbank prepared by Saunders Havill Group, dated 30 July 2020 [VCFMP]'.
1c	Has Fauna Management Plan (FMP) been prepared, reviewed by the <b>environmental coordinator</b> and approved by EDQ?					✓	
1c	Has the <b>environmental coordinator</b> undertaken a Protected Plants flora survey for the clearing impact area and obtained an exemption / permit to clear from the Department of Environment and Science (DES) for protected species under the <i>Nature Conservation Act 1992</i> ?					✓	Refer to Attachment 5 for a copy of the DES Wildlife Authority Permit for clearing of protected plants (WA0026119) granted 22 August 2020 and approved clearing impact area.

# Environmental Pre-Start Checklist

#	Control Measure	Client	Superintendent	Contractor	Fauna Spotter Catcher	Environmental Coordinator	Details
							<p>No <i>M. irbyana</i> specimens are to be cleared under the VMP.</p> <p>All works must be undertaken in accordance with 'Impact Management Plan Melaleuca irbyana 432-520 Greenbank Road, Greenbank prepared for Mirvac QLD Pty Ltd 10 July 2020' [IMP], and associated appendices and supporting documentation.</p>
<b>CONTRACTOR RESPONSIBILITIES</b>							
2a	Has the <b>contractor</b> issued copies of the NESS and EDQ Approved VCFMP been issued to all site contractors and sub-construction and made these management plans available in the site construction office?			✓			Copies of the VCFMP have been provided to the contractor as attachments to this environmental pre-clearance package. Refer to Attachment 4.
2b	Have clearing extents provided by the <b>site superintendent</b> to the site <b>contractor</b> and <b>environmental coordinator</b> ?		✓	✓		✓	Clearing extents were provided to the environmental coordinator in preparation of the VCFMP. Tree protection fencing lines as shown on the VCFMP were provided to the contractor prior to the installation of tree protection fencing. Refer Attachment 4.

# Environmental Pre-Start Checklist

#	Control Measure	Client	Superintendent	Contractor	Fauna Spotter Catcher	Environmental Coordinator	Details
2c	Have clearing extents been marked out and fenced as per VCFMP requirements by the <b>contractor</b> and demarcation fencing signed off by the <b>environmental coordinator</b> ?					✓	Clearing extents were checked by the environmental coordinator on 10 February 2021. Refer to Attachment 6 for sign off by the environmental coordinator of demarcation fencing.
2d	Has the <b>contractor</b> appointed a <b>fauna spotter catcher</b> holding required DES permits (approved by the <b>environmental coordinator</b> ) to be present during all clearing activities and made aware of their responsibilities under the FMP and VMP?					✓	Refer Attachments 7 & 8 for references of AWEC Environmental Consultants current licenses and operating permits as the appointed fauna spotter catcher in Section 3 of the <i>Wildlife Protection Management Plan Everleigh Precinct 12.1, prepared by AWEC (WPMP)</i> and Section 2 of the <i>Wildlife and Habitat Impact Mitigation Plan, Everleigh Precinct 12.1, Prepared by AWEC (WHIMP)</i> .
2e	Has the appointed <b>fauna spotter catcher</b> completed pre-clearance surveys and reports and have these been reviewed by the <b>environmental coordinator</b> ?					✓	Preclearance surveys were undertaken on the 8 January 2021 and 9 February 2021. Refer Attachment 7 for a copy of the WPMP and Attachment 8 for a copy of the WHIMP. Review of the WPMP and WHIMP was undertaken by the environmental coordinator on 16 February 2021. In addition to the preclearance surveys a Thermal Survey for Koalas was undertaken

# Environmental Pre-Start Checklist

#	Control Measure	Client	Superintendent	Contractor	Fauna Spotter Catcher	Environmental Coordinator	Details
							prior to works commencing (Refer Attachment 7).
2f	If any threatened fauna species or habitat/breeding places have been identified by the <b>fauna spotter catcher</b> , have appropriate controls been implemented and discussed with the key personnel?			✓	✓	✓	Refer to Section 4.2 of WPMP (Attachment 7) for the location of significant habitat features identified by pre-clearance surveys. Appropriate mitigation measures have been provided in the WHIMP (Attachment 8). Appropriate controls will be discussed with key personnel at the pre-start meeting.
2g	Has an Erosion and Sediment Control Plan been prepared and self-certified by a RPEQ or accredited CPESC professional / <b>site superintendent</b> and supplied to the <b>contractor</b> ?		✓	✓			Refer to Attachment 9 for the construction issue Erosion and Sediment Control (ESC) Plans prepared by the site superintendent.
2h	Has the <b>contractor</b> put in place appropriate induction and management controls to ensure all contractors, subcontractors and associated personnel been instructed on environmental procedures and controls, including timing of clearing, stop-works procedures and non-compliance reporting requirements?			✓		✓	Refer to Attachment 10 for project/site induction supplied by the contractor demonstrating environmental awareness.
<b>BIODIVERSITY VALUES</b>							
3a	Will the works occur in an area of significant biodiversity values as shown by the NESS?		NA	NA		NA	No.

## Environmental Pre-Start Checklist

#	Control Measure	Client	Superintendent	Contractor	Fauna Spotter Catcher	Environmental Coordinator	Details
3b	Will the works occur in an area of other biodiversity values as shown by the NESS?		✓	✓		✓	Works will occur within areas of mapped remnant vegetation (Of Concern Regional Ecosystem) and identified juvenile native vegetation.
3c	Will the works occur in a Department of Agriculture and Fisheries (DAF) mapped waterway?		✓	✓		✓	No.
3d	Will the works involve the clearing of Koala Habitat as mapped by Koala Habitat Values mapping and do offsets apply to the clearing?	✓		✓		✓	In accordance with the NESS offsets for the clearing of Koala habitat will be addressed through EPBC approval conditions, which take precedence over any State Government Offset or obligations for the same prescribed matter. In addition to the preclearance surveys a Thermal Survey for Koalas was undertaken prior to works commencing (Refer Attachment 7).
3e	Has a Bushfire Hazard Assessment and Management Plan been prepared for the stage of works and endorsed by EDQ?	✓	✓	✓		✓	Refer to Attachment 11 for a copy of the <i>Bushfire Hazard Management Plan prepared by Rob Friend and Associates, dated November 2016.</i>
<b>PRESTART MEETING</b>							
4	Has a pre-start been completed with all relevant parties?	✓	✓	✓	✓	✓	A pre-start meeting will be held with all relevant parties 19 February 2021.

# Environmental Pre-Start Checklist



**NOTE: if the answer to any question above is NO then the clearing activity will not proceed.**

# Environmental Pre-Start Checklist

## Additional Notes

Three listed threatened species occur on site, as protected under Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC) and State *Nature Conservation Act 1992* (NCA) legislation, which include:

- Koala
- Grey-headed Flying-fox
- *Melaleuca irbyana*

Specific approval conditions relating to protected species and their habitat are applicable to works within the clearing area, including:

EPBC 2016/7818 approval conditions (Attachment 2):

- The approval holder must ensure that **no** clearing of Koala or Grey-headed Flying-fox habitat for Stage 2 occurs outside the Stage 2 site (refer Attachment 2).
- The approval holder must implement the *Mirvac Greater Flagstone Project: Natural Environmental Strategy (18 April 2017)*, as approved by Economic Development Queensland on 2 June 2017 to avoid degradation of the onsite conservation area until such time as handover is accepted by Logan City Council.

DES Wildlife Authority Permit conditions (Attachment 5):

- All works must be undertaken in accordance with "*Impact Management Plan Melaleuca irbyana 432-520 Greenbank Road, Greenbank prepared for Mirvac QLD Pty Ltd 10 July 2020*", and associated appendices and supporting documentation.

All works must be undertaken in accordance with the following management plans:

- NESS - *Mirvac Greater Flagstone Project: Natural Environmental Strategy (18 April 2017)*, as approved by Economic Development Queensland on 2 June 2017
- IMP - *Impact Management Plan Melaleuca irbyana 432-520 Greenbank Road, Greenbank prepared for Mirvac QLD Pty Ltd 10 July 2020*
- VCFMP – *Vegetation Clearing and Fauna Management Plan, Precinct 12, Everleigh, Greenbank, prepared by Saunders Havill Group, dated 30 July 2020*

Copies of these management plans has been supplied to all signatory parties as part of the Environmental Pre-clearance Package.



## Environmental Pre-Start Checklist

### Compliance Awareness

Signing below demonstrates acknowledgement of the environmental pre-start procedures and requirements listed in the checklist above and associated attachments.

Name	Company	Position	Signature	Date
Jason Augustine	Mirvac Queensland Pty Limited	Client Representative		23/2/21
Nick Somerville	Prerriise	Site Superintendent		23/02/21
Callum Watts	Shadforths Civil CONTRACTOR	Site Contractor		23/02/21
Joel Keady	AWEC Environmental Consultants	Fauna Spotter Catcher		24/2/21
Mark Vary	QLD Mulching	Project Arborist		24-2-2021
Laura Thorley	Saunders Havill Group	Environmental Coordinator		19.02.2021



Everleigh



Environmental Pre-Start Checklist

# Appendix A

Environmental Awareness Acknowledgement

## ENVIRONMENTAL AWARENESS

### **CONTRACTOR ACKNOWLEDGEMENT**

I CALLUM WATTS the Contractor (or the Contractor Representative), appointed by Mirvac Queensland Pty Ltd, acknowledge receipt and acceptance of the Mirvac Queensland rules and policies in the **Precinct 12 Environmental Pre-Clearance Package** which includes the **Precinct 12 Vegetation Clearing and Fauna Management Plan (VCFMP)**, prepared by SHG (July 2020) and the **V14 Environmental Pre-clearance Checklist** and attachments. By signing below, I acknowledge that there are mechanisms in place to ensure all material provided within the **Precinct 12 VCFMP** will be read and understood by all site contractors and sub-contractors prior to commencing works on-site.

SWADEORTH

Company Name (Please print)

[Signature]

Signature (Contractor / Contractor Representative)

CALLUM WATTS

Name (Please print)

PROJECT ENGINEER

Title / Position

25/02/21

Date

Everleigh



Environmental Pre-Start Checklist

# Appendix B

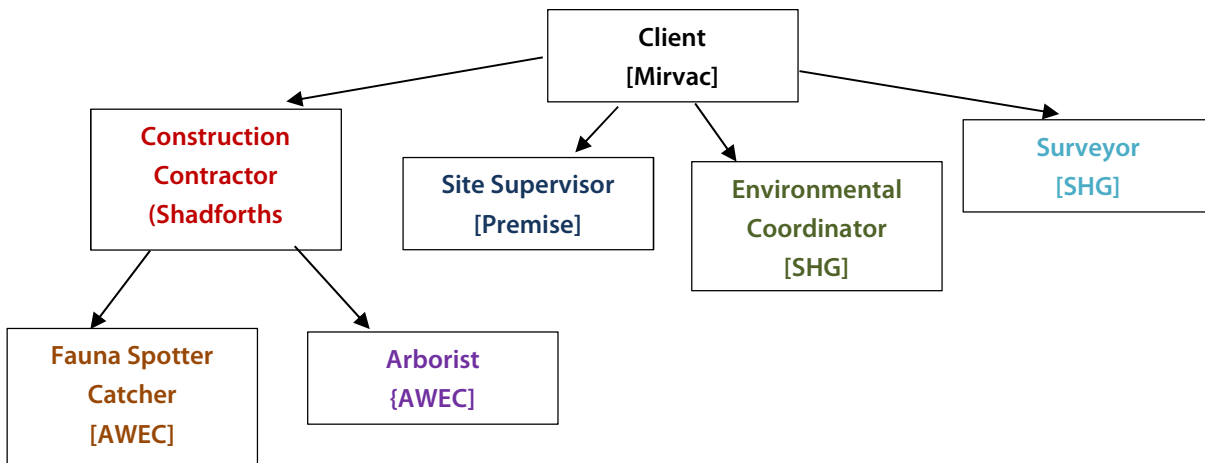
Environmental Responsibilities

# Mirvac's Everleigh Project

## Environmental Responsibilities

This document sets out the environmental responsibilities for relevant parties appointed by Mirvac for the Everleigh project at Greenbank.

For the Everleigh Project, the following management structure will be adopted:



## Abbreviations

The following abbreviations have been adopted in this document:

- AQF Australian Qualifications Framework
- BHMP Bushfire Hazard Mitigation Plan
- DES Department of Environment and Science (Qld)
- NESS Natural Environment Site Strategy
- TSMP Threatened Species Management Plan
- VCFMP Vegetation Clearing and Fauna Management Plan

## 1.1. Construction Contractor Responsibilities

The **Construction Contractor** is responsible for the following environmental controls on the project:

- Ensuring construction works (including pre-clearance checks (see Section 1.1.1), erosion and sediment control measures, clearing processes and post clearing requirements (see Section 1.1.2)) are undertaken in accordance with the Environmental Pre-Start Package for the Stage of Works and approved management plans (e.g. Vegetation Clearing and Fauna Management Plan (VCFMP) / Natural Environment Site Strategy (NESS) / Erosion and Sediment Control Plan (ESCP) / Bushfire Hazard Assessment Management Plan (BHAMP) / Wildlife Protection and Management Plan (WMPM) / Wildlife and Habitat Impact Mitigation Plan (WHIMP)).
  - In the event of a non-compliance, all works are halted immediately and non-compliances are reported to the **site supervisor** and **environmental coordinator**.
  - Weekly review and reporting on compliance with approved management plans (N.B. this can be shown as an item in a weekly review / report / checklist).
  - Monthly environmental compliance reports to the **environmental coordinator**.
- Engagement and management of an EHP approved **fauna spotter catcher** to undertake pre and post clearance checks, attend pre-start meetings and be present on site during all clearing activities.
  - The appointed **fauna spotter catcher** must hold a Rehabilitation Permit for native wildlife, including Koala, issued by the Department of Environment and Science (DES).
- Engagement and management of an **arborist** to attend pre-start meetings and be present on site during all clearing activities.
  - The appointed **arborist** must hold a Level 5 AFQ qualification
- Installation and maintenance of erosion and sediment controls as per approved management plans prepared by the **site supervisor**.
- Installation of demarcation fencing in associated with the appointed **surveyor**.
  - Fencing must be maintained during works and reinstated immediately if damaged or knocked down.
  - Temporary star picket fencing must be installed around the Stage of Works site, any open space areas and / or individual trees to be retained on the Stage of works VCFMP.
  - Fencing must be fauna friendly and provide a least a 30cm gap between the bottom of the fence and the ground.
  - Fencing must remain in place until completion of bulk earthworks and removed prior to on maintenance or as required as subsequent stages of the development occurs.
- Ensuring daily limits and volumes of vegetation clearing occur in accordance with approval allowances (e.g. EPBC Act Approval, EDQ Approval).
- Ensuring stockpiles and cleared vegetation is managed in accordance with approved management plans.
- Ensuring clearing occurs between the hours of 6am – 6pm.
- Ensuring clearing occurs in accordance with the direction of clearing plan as detailed in the VCFMP or as prepared by the **fauna spotter catcher**.
- Ensuring all contractors, subcontractors and associated personnel been instructed on environmental procedures and controls.
  - Environmental procedures and controls must form part of induction material (and evidence should be able to be provided to the **environmental coordinator** on request).

- o Copies of approved management plans are made available at the site office at all times and evidence should be able to be provided to the **environmental coordinator** on request).

### 1.1.1 Construction Contractor Pre-Clearance Procedure (for each Stage of Works)

This procedure is to be followed by the **contractor** prior to clearing for each Stage of Works.

1. Have all **contractors**, subcontractors and associated personnel been instructed on environmental procedures and controls as part of their site induction?
2. Do you have a copy of the approved management plans?
3. Have copies of the approved management plans been made available to all site **contractors** and subcontractors?
4. Has a copy of the approved management plans been made available in the site construction office?
5. Have clearing extents as per approved management plans been flagged by the **contractor** in association with the appointed **surveyor** and checked by the **environmental coordinator**? N.B Fencing must be installed prior to the pre-start meeting for the Stage of Works.
6. Have erosion and sediment controls been installed as per approved plans prepared by the **site supervisor**?
7. Have you engaged an EHP approved **fauna spotter catcher** to undertake necessary reporting requirements and be present during all clearing activities?
8. Has the appointed **fauna spotter catcher** undertaken pre-clearance checks and reporting, no more than 2 weeks prior to when clearing is to occur?
9. If any threatened fauna species or habitat/breeding places have been identified by the **fauna spotter catcher**, have appropriate controls been implemented and this information provided to the **environmental coordinator**?
10. Have you engaged an AQF Level 5 **arborist** to be present at the pre-start meeting and during all clearing activities?
11. Has a pre-start been completed with all relevant parties?
12. Have the requirements of the approved management plans been discussed a pre-start meeting?
13. Have all relevant parties reviewed the Environmental Pre-Start Package and signed the Environmental Pre-Start Checklist?

### 1.1.2 Construction Contractor During & Post-Clearance Checklist (for each Stage of Works)

This procedure is to be followed by the **contractor** during and post clearing for each Stage of Works.

1. Has the clearing occurred in accordance approved management plans? If not, have any non-compliances been reported to the **site supervisor** and **environmental coordinator**?
2. Have erosion and sediment controls been maintained as per approved plans prepared by the **site supervisor**?
3. Has compliance with environmental procedures and controls been reported on within the weekly site compliance checklist?
4. Has cleared vegetation been processed through an on or off-site wood-chipper and disposed of as firewood or landscape mulch or otherwise reused / relocated for future use or as per the approved VCFMP?
5. If vegetation has been stockpiled, has the **fauna spotter catcher** checked the stockpile prior to its removal?

6. Once clearing has ceased, has a post-clearance report been prepared by the **fauna spotter catcher** and provided to the **environmental coordinator**?
7. Once clearing has ceased, has a post-clearance report been prepared by the **arborist** and provided to the **environmental coordinator**?
8. Has a monthly environmental compliance report been prepared and provided to the **environmental coordinator**?

## 1.2. Fauna Spotter Catcher Responsibilities

The appointed fauna spotter catcher must hold a Rehabilitation Permit issued by EHP and is responsible for the following environmental controls on the project:

- Ensuring works are undertaken in accordance with the Environmental Pre-Start Package for the Stage of Works and approved management plans (e.g. VCFMP / NESS / ESCP / BHAMP / WMPM / WHIMP).
- Undertaking pre-clearance checks for the Stage of Works no more than 2 weeks prior to clearing.
- Preparing a Wildlife Protection Management Plan (WPMP) and Wildlife Habitat Impact Mitigation Plan (WHIMP) (as per the Draft Code for Fauna Spotter Catchers) for each stage of works. This includes identifying fauna habitat values, potential risks to fauna, and appropriate mitigation measures as well as identifying the direction and sequencing of clearing activities to ensure safe flushing of fauna. These are to be provided to the **contractor** and **environmental coordinator** for review.
- Attending the pre-start for each Stage of Works.
- Being present during all clearing activities.
- Implementing controls and procedures and controls in the WPMP and WHIMP.
- Preparing a post-clearing report to be provided to the **contractor** and **environmental coordinator**.
- Inspecting stockpiled vegetation for fauna prior to its removal.

## 1.3. Arborist Responsibilities

The appointed arborist must hold a Level 5 AFQ qualification and is responsible for the following environmental controls on the project:

- Attending pre-start meetings.
- Ground-truthing Koala Habitat mapping and endorsing koala habitat clearing / offset plans prepared by the **environmental coordinator**.
- Being present during all clearing activities.
- Preparing any necessary reports for trees marked 'subject to arborist assessment' on an approved VCFMP which have been removed during clearing works.

## 1.4. Site Supervisor Responsibilities

The Site Coordinator (Engineer) is responsible for the following environmental controls on the project:

- Ensuring construction works are undertaken in accordance with the Environmental Pre-Start Package for the Stage of Works and approved management plans (e.g. VCFMP / NESS / ESCP / BHAMP / WMPM / WHIMP).
- Ensuring the **contractor** receives copies of approved management plans for the Stage of Works.

- Ensuring required surveys and pre-clearance checks from the **fauna spotter catcher** and **environmental coordinator** have been conducted. (N.B. this includes any surveys i.e. tree plots, required to inform design stages or required for preparation of management plans and development applications).
- Providing the **environmental coordinator** with CAD copies of works extents (including clearing extents for bulk earthworks, access tracks, crossing etc.).
- Coordinating clearing extents to be demarcated with the **surveyor** and **contractor**, and checked by the **environmental coordinator**.
- Confirming works within waterways comply with *Water Act 2000* requirements for riverine protection and proceed under an applicable exemption or a riverine protection permit
- Confirming works within waterways comply with *Fisheries Act 1994* requirements for waterway barrier works and proceed under accepted development outcomes or a permit.
- Ensuring erosion and sediment controls have been installed and maintained as per approved ESCPs prepared by the **site supervisor**?
- Coordination of any pre-start meetings and signing of the Environmental Pre-Start Checklist.
- Ensuring no clearing occurs until sign off is received from the **environmental coordinator**.

## 1.5. Environmental Coordinator Responsibilities

The Environmental Coordinator is responsible for the following environmental controls on the project:

- Ensuring all Commonwealth and State environmental approvals are obtained for the Stage of Works.
  - Ensuring all notifications government authorities in accordance with approvals have been issued (i.e. notification to Department of Agriculture, Water and Environment of commencement of Stage 2 under the EPBC Approval (EPBC2016/7817)).
- Ensuring all required management plans have been prepared for the Stage of Works.
- Ensuring all required management plans have been approved / self-certified for the Stage of Works.
- Ensuring all relevant parties receive copies of approved / self-certified management plans for the Stage of Works.
- Preparing, managing and compiling the Environmental Pre-Start Package for the Stage of Works, including the Environmental Pre-Start Checklist.
- Undertaking checks of demarcation flagging installed by the **contractor** and **surveyor**.
- Reviewing **fauna spotter catcher** pre-clearance and post-clearance reporting.
- Ensuring works are undertaken in accordance with the Environmental Pre-Start Package for the Stage of Works and approved management plans (e.g. VCFMP / NESS / ESCP / BHAMP / WMPM / WHIMP).



## Acknowledgement

No clearing works can occur until the Environmental Pre-Start Package, for the specific works site, is distributed by the Environmental Coordinator and written instruction is given by the Site Coordinator (Engineer).

By signing I agree that I have read and understood the Environmental Pre-Start Check Procedure and will comply with the procedure for all clearing works.

Name	Company	Position	Signature	Date
Jason Augustine	Mirvac	Client Representative		27/2/21
Callum Watts	Shadforths	Contractor Coordinator		23/02/21
Nick Somerville	Premise	Site Superintendent		23/02/21
Laura Thorley	SHG	Environmental Coordinator		19.02.2021
Joel Keady	AWEC	Fauna Spotter Coordinator		24/2/21
Mark Vary	QLD Mulching	Project Arborist		21-2-21

Everleigh



Environmental Pre-Start Checklist

# Appendix C

Natural Environment Site Strategy

environmental management



**AMENDED IN RED**

**By:** Brandon Bouda

**Date:** 27 April 2017



# Mirvac

## Greater Flagstone Project



### Natural Environment Site Strategy

**PLANS AND DOCUMENTS  
referred to in the PDA  
DEVELOPMENT APPROVAL**

**Approval no:** DEV2016/768

**Date:** 2 June 2017



**Mirvac**

Greenbank project

18 April 2017

7598



## Document Control

<b>Title</b>	Natural Environment Site Strategy
<b>Job Number</b>	7598
<b>Client</b>	Mirvac

### Document Issue

Issue	Date	Prepared By	Checked By
Draft	29.02.2016	Keira Grundy	Murray Saunders
Client Draft	07.03.2016	Keira Grundy	Murray Saunders
Client Draft V2	17-03-2016	Keira Grundy	Murray Saunders
Client Draft V3	23-03-2016	Keira Grundy	Murray Saunders
EDQ Submission	01-04-2016	Keira Grundy	Murray Saunders
POST RFI Client Issue	02-11-2016	Murray Saunders / Keira Grundy	Murray Saunders
For Endorsement V1	08-11-2016	Keira Grundy	Murray Saunders
Post App	18-04-2017	Angela Little	Murray Saunders

### Disclaimer

This report has been prepared for **Mirvac. Saunders Havill Group** cannot accept responsibility for any use of or reliance upon the contents of this report by any third party.

### Reports and/or Plans by Others

Reports and/or plans by others may be included within this Natural Environment Site Strategy to support the document.



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# Appendices

## Appendix I

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<b>Plan 2:</b>	Certified Property Map of Assessable Vegetation
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<b>Plan 4:</b>	SEQ Koala Habitat Values Mapping
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<b>Plan 6:</b>	Indicative Development Interface to Retained Vegetation – Section AA
<b>Plan 7:</b>	Indicative Development Interface to Retained Vegetation – Section BB
<b>Plan 8:</b>	Natural Environment Site Strategy – Site Constraints Plan



# I. Introduction

## 1.1. Requirements of site strategy

This Natural Environment Site Strategy (NESS) has been lodged with the initial application for **Mirvac's** Greenbank Project. While not in response to approval conditions (no approvals in place), this NESS has been prepared based on anticipated requirements with reference to a number of approvals issued in the area and based on feedback from **Economic Development Queensland**. The following components are included within this NESS:

- i. outline measures to conserve and enhance the site's biodiversity values (areas of ecological significance, waterways and vegetation management);
- ii. identify strategies to avoid, minimise and mitigate the clearing of remnant vegetation containing endangered regional ecosystems where proven by ground truthing to be viable;
- iii. identify management plans to be provided to address the clearing of non-viable remnant vegetation containing endangered regional ecosystems;
- iv. identify rehabilitation strategies for any corridors of native vegetation to improve habitat extent and wildlife movement;
- v. identify any buffering to areas of Significant Biodiversity Values and which have associated conservation, biodiversity, habitat or scenic amenity values;
- vi. identify strategies for fauna and flora management of the site, and determine corridors, proposed road crossing designs for expected fauna utilisation and rehabilitation areas (such as for koala habitat);
- vii. Detail the measures outlining how and when Koala habitat obligations for the Greater Flagstone PDA as detailed in the PDA Guideline No. 17 Remnant Vegetation and Koala Habitat Obligation in Greater Flagstone and Yarrabilba PDAs will be delivered;
- viii. identify strategies to prevent land degradation and the management of dispersive/sodic soils;
- ix. identify strategies to rehabilitate major watercourses;
- x. identify strategies for bushfire management;
- xi. identify strategies for pest and weed management;
- xii. identify strategies for monitoring vegetation rehabilitation; and
- xiii. identify strategies for rehabilitation of stream banks of major watercourse areas to create riparian stability for major corridors through the Potential Eco-Lot residential and Conservation Parkland Precincts.

1.2. This overarching site strategy, as amended from time to time, is intended to guide future development decisions in relation to the **Mirvac** Greenbank Site.



## Administration Definitions

### 1.3. In this site strategy:

<b>Developer</b>	means an entity with effective control of the development of a parcel of land within the Application Area.
<b>Application Area</b>	Refer to <b>Plan 1</b> in <b>Appendix 1</b> .
<b>Guideline 14</b>	means PDA Guideline no. 14 for Environmental values and sustainable resource use (May 2015)
<b>Guideline 17</b>	means PDA Guideline no. 17 for Remnant vegetation and koala habitat obligations in Greater Flagstone and Yarrabilba PDAs (August 2014)
<b>ICOP</b>	means the Infrastructure Charging Offset Plan Greater Flagstone Urban Development Area (July 2013).
<b>EDQ</b>	means the Minister for Economic Development Queensland established under the Economic Development Act 2012, which supersedes the Urban Land Development Authority and repeals the Urban Land Development Authority Act 2007 (Qld)
<b>PDA Development Scheme</b>	means the Greater Flagstone Urban Development Area Development Scheme (October 2011)



## 2. Structure

2.1. This site strategy is to be read in conjunction with the reports, Whole of Site Strategies and Infrastructure Master Plans referenced in the Context Plan(s) over the relevant parts of the Application Area (and subsequent revisions and addendums to the same).

2.2. This Overarching Site Strategy for the management of the Natural Environment is set out in the following structure:







## 3. Guidelines and Relevant Information

3.1. This Natural Environment Site Strategy (NESS) is prepared within the parameters of Guideline 14 and Guideline 17. Site specific alterations or legislative departures from the above are outlined in **Section 3** and **Section 4** of this NESS.

3.2. The Application Area contains ground-truthed endangered regional ecosystems along the eastern portion of the land holdings. Refer to **Plan 2 (Appendix 1)** for the certified Property Map of Assessable Vegetation (PMAV) that shows the regional ecosystems rectified on-site. **Plan 3 (Appendix 1)** shows rectification of regional ecosystems mapping for a second PMAV which has been lodged with **NRM**.

3.3. The Application Area contains koala habitat areas, defined in Guideline 17 as:

*An area mapped on State Planning Policy 2/10: Koala Conservation in South East Queensland, SEQ Koala Protection Area Koala Habitat Values maps as:*

- *bushland habitat; or*
- *having high and medium value suitable for rehabilitation habitat types.*

Refer to **Plan 4 (Appendix 1)** for the current Koala Habitat Values Mapping.

3.4. It is noted that the Koala Habitat Values Mapping covering the Application Area was completed at the GIS level. **Section 7** of this NESS includes a process and method for amendment of Koala Habitat Values Mapping that is generally consistent with the process and method for amendments to mapping under Division 9 of the South East Queensland Koala Conservation State Planning Regulatory Provisions (Queensland Government, May 2010) (Koala SPRP).

3.5. References (including references in Guideline 14 and Guideline 17) to an Act, policy, mapping or other document shall be applied as the Act, policy, mapping or document as at 17 March 2016 or as specified herein.

3.6. At the time of submission of the NESS an *Environment Protection & Biodiversity Conservation Act 1999* (EPBC Act) Controlled Action Status Referral was underway. If, through this proposal, an alternative offset outcome is conditioned for a prescribed matter of National Environmental Significance, this is considered to take



precedence over any State Government offset or obligation for the same prescribed matter (i.e. the State Government will not require an offset or obligation for the same prescribed matter).

- 3.7. No offsets are required for matters of local environmental significance.
- 3.8. Site and project specific Bushfire Hazard Assessments and Management Plans will be prepared and submitted for endorsement / approval. The outcomes and requirements of these plans will consider the strategies adopted in this NESS.
- 3.9. Notwithstanding any of the requirements of this NESS, the Developer will not be required to perform any rectification works to parts of the site which have been transferred / dedicated to other parties and accepted off maintenance.



## 4. Strategies

### 4.3 Natural Environment Site Strategies – Conservation Parkland and Development Land

Site strategies have been developed to manage environmental and development outcomes for all land included within this application area, excluding the Future Investigation Area which is subject to further assessment in future. It is intended that the NESS will be amended to include the Future Investigation Area in future (if required). The site strategies include 6 columns listed as Element, Overall Outcomes, Strategies / Actions, Design Standards / Resources, Timing (Indicative) and Achievement Criteria. Mirvac is responsible for the implementation, monitoring and reporting for all site strategies. For some elements (e.g. confirmed viable endangered remnant vegetation), strategy outcomes are identical for both land use areas. For other elements, strategies vary significantly.

For each element, the avoid, minimise, mitigate and restore or offset hierarchy has been adopted. It is noted that the Mirvac Greater Flagstone Project NESS is not preceded by a higher level approval and thus does not link each strategy back to an approval condition as per the majority of NESS operated in the PDA.

#### **Conservation Parkland**

The following Overall Outcomes and Design Standards apply to works within and adjoining the Conservation Parkland:

- Secure and dedicate/transfer to Council a robust and sustainable portion of the site retaining the highest quality ecological values for conservation parkland purposes.
- Consolidate the environmental area into Council's surrounding conservation assets.
- Undertake ecological restoration and waterway stability measures prior to dedication to Council.
- Allow for controlled passive nature based recreational uses as occurring and permissible within adjoining Council conservation parklands

#### **Development Land**

The Development Land is defined as the balance site area which is not included in the Conservation Parkland or Future Investigation Area. The majority of this area will be developed to a minimum net residential density of 15dw/ha, however there may be opportunities to retain environmental values in open space subject to earthworks and servicing requirements. It is noted that development at this density is generally prohibitive of the retention of major or functional areas of environmental values. Note, this whole of site strategy seeks to retain the highest ecological values in Conservation Parkland and the Future Investigation Area. The latter does not form part of this NESS or application.

The following Overall Outcomes and Design Standards apply to the Development Land:

- Ensure systems and processes for assessment, reporting, protection and management are based on leading practice ecological guidelines and relevant legislative frameworks.
- Explore and detail specific opportunities to retain ecological features throughout the site by incorporating detailed environmental data into the site design process.
- Outlines the legislative requirements for all potential or actual threatened plants and animals as scheduled at the State Government and Commonwealth Government Level.

#### **Natural Environment Site Strategies**



Element	Overall Outcomes	Strategies / Actions	Design Standards / Resources	Timing (Indicative)	Achievement Criteria
Survey, Identification & Reporting	1. Identify Significant Biodiversity Values within and adjoining the Development Land	<ul style="list-style-type: none"> <li>Robust field surveys (appropriately timed and conducted for expected biodiversity).</li> <li>Desktop assessments using local, state and commonwealth environment databases and mapping.</li> <li>Use the information surveyed and identified in the Significant Biodiversity Values assessment to prioritise environmental features.</li> </ul>	<p>Where suitable, parts of the following documents and standards will assist in measuring the Overall Outcome:</p> <ul style="list-style-type: none"> <li>Guideline 14</li> <li>PDA Development Scheme</li> <li>State and Commonwealth survey guidelines including: <ul style="list-style-type: none"> <li>EPBC Significant Impact Guidelines, including specific guidelines for expected species</li> <li>DSITIA Terrestrial Vertebrate Fauna Survey Guidelines</li> <li>NCA Protected Plants Flora Survey Guidelines</li> </ul> </li> <li>Database and mapping references including: <ul style="list-style-type: none"> <li>EPBC PMST Database</li> <li>EHP Wildlife Online Database</li> <li>EHP NCA Protected Plants Mapping</li> <li>NRM Regulated Vegetation Management Mapping</li> <li>Koala SPRP Mapping</li> <li>SARA Mapping</li> <li>SPP Biodiversity Values Mapping</li> </ul> </li> </ul>	Context Plan or RoL application	Context Plan and RoL applications are accompanied by Significant Biodiversity Values Assessment Reports
Confirmed Areas of Remnant Vegetation Containing Endangered Regional Ecosystems	1. Retain and protect Confirmed Areas of Remnant Vegetation Containing Endangered Regional Ecosystems	<ul style="list-style-type: none"> <li>Development and infrastructure avoids the clearing of Confirmed Areas of Remnant Vegetation Containing Endangered Regional Ecosystems.</li> <li>Development minimises impacts on Confirmed Areas of Remnant Vegetation Containing Endangered Regional Ecosystems by providing buffers, ideally inclusive of road, between the Development Areas and any retained Confirmed Areas of Remnant Vegetation containing Endangered Regional Ecosystems.</li> <li>Development enhances areas of Confirmed Areas of Remnant Vegetation Containing Endangered Regional Ecosystems by providing for weed management and rehabilitation within the Conservation Parkland.</li> </ul>	<p>Where suitable, parts of the following documents and standards will assist in measuring the Overall Outcome:</p> <ul style="list-style-type: none"> <li>Guideline 14</li> <li>Guideline 17</li> <li>SDAP Module 8</li> <li>DSDIP Significant Residual Impact Guideline</li> <li>Approved Site Property Map of Assessable Vegetation (PMAV)</li> <li>EOP</li> <li>EPBC Act permit</li> <li>NRM Self Assessable Guidelines for land management and exemption checklist</li> <li><b>Plans 6 &amp; 7 (Appendix 1)</b> – indicative buffer/setback cross sections</li> </ul>	Site design and continuing through stages of approved construction.	Areas of Confirmed Areas of Remnant Vegetation Containing Endangered Regional Ecosystems are retained or increased at the completion of the project.



Element	Overall Outcomes	Strategies / Actions	Design Standards / Resources	Timing (Indicative)	Achievement Criteria
		<p><b>Stretch Target:</b></p> <p>Use weed management and rehabilitation of cleared and modified areas to achieve a net increase in the area of Confirmed Areas of Remnant Vegetation Containing Endangered Regional Ecosystems within the Conservation Parkland.</p>			
Other Vegetation	1. Development protects and minimises impacts on native vegetation within and supporting Significant Biodiversity Values.	<ul style="list-style-type: none"> <li>▪ Avoid (to the greatest extent possible) the clearing of non-endangered remnant, regrowth and other native vegetation, including non-juvenile koala habitat trees within the land designated Conservation Parkland.</li> <li>▪ Unavoidable clearing can only occur for essential community infrastructure within the Conservation Parkland, where this infrastructure cannot be reasonably located elsewhere.</li> <li>▪ Where unavoidable clearing for essential community infrastructure is required within the Conservation Parkland rehabilitate impacted areas in accordance with SEQ restoration guidelines.</li> <li>▪ Through site and earthworks, maximise the retention of non-endangered remnant vegetation, regrowth and healthy isolated native tree species within waterway corridors and future recreation / open space areas (where not in conflict with the purpose and use of the open space or other required infrastructure) within the development land.</li> <li>• Stage and minimise the clearing of trees for areas designated under the plan of development as schools, future park, drainage and buffer until preliminary concepts for these areas have been prepared and clearing extents identified.</li> </ul>	<p>Where suitable, parts of the following documents and standards will assist in measuring the Overall Outcome:</p> <ul style="list-style-type: none"> <li>▪ Guideline 14</li> <li>▪ Guideline 17</li> <li>▪ EPBC Act permit</li> <li>▪ DSDIP Significant Residual Impact Guideline</li> <li>▪ Approved Site Property Map of Assessable Vegetation (PMAV)</li> <li>▪ NRM Self Assessable Guidelines for land management and exemption checklist.</li> <li>▪ SDAP Module 8</li> <li>▪ Easement rights</li> <li>▪ Site Bushfire Management Plan.</li> <li>▪ <b>Plan 4 (Appendix 1)</b></li> <li>▪ Draft Code of Practice for the Welfare of Wild Animals affected by Land Clearing</li> <li>▪ SEQ Ecological Restoration Framework Code</li> <li>▪ SEQ Ecological Restoration Framework Guide</li> <li>▪ SEQ Ecological Restoration Framework Manual</li> </ul>	<p>Site design and continuing through stages of approved construction.</p> <p>Annual Report</p>	<p>An increase in the volume of vegetation to be included in the site's Significant Biodiversity Values at completion of the project.</p> <p>An increase in the Projective Foliage Cover (PFC) of canopy trees and quality condition of shrub and ground cover layers within the Conservation parkland by completion of the project (when measured against pre-commencement baseline surveys – reported on annually)</p>



Element	Overall Outcomes	Strategies / Actions	Design Standards / Resources	Timing (Indicative)	Achievement Criteria
		<ul style="list-style-type: none"> <li>Prepare Management Plans in accordance with the Reporting and Management Section of this NESS to stage and manage the impacts of clearing.</li> </ul>			
Koala	<ol style="list-style-type: none"> <li>Minimise clearing of Non-Juvenile Koala Habitat Trees (NJKHT) and provide obligations in accordance with IG17 to achieve a net gain in koala habitat for the region.</li> <li>Minimise threats to existing local koala populations by avoiding conflicts with roads and dogs.</li> </ol>	<ul style="list-style-type: none"> <li>Avoid (to the greatest extent possible) the removal of NJKHT within the Conservation Parkland. <small>Unavoidable clearing of NJKHT within the Conservation Parkland can only occur for essential community infrastructure, where this infrastructure cannot be reasonably located elsewhere.</small></li> <li>Where unavoidable clearing for essential community infrastructure is necessary within the Conservation Parkland, all works are managed in accordance with the Reporting and Management Section of this NESS.</li> <li>Ensure site design of open space and retained waterway areas within the Development Land minimises the clearing of NJKHT where they can be connected to the Conservation Parkland.</li> <li>Minimise impacts of the clearing of NJKHT through the Development Land by staging and sequencing works commencing in the western disturbed areas and flushing towards the eastern retained areas.</li> <li>Stage and manage the impacts of clearing NJKHT in accordance with the Reporting and Management Section of this NESS.</li> <li>Provide obligations in accordance with IG17 to achieve a net gain in koala habitat for the region for any removed NJKHT from the High and Medium Value – Suitable for Rehabilitation and all Bushland Habitat Mapping categories (or deliver any Approved Environmental Offsets conditioned by the Commonwealth Department of Environment under the EPBC Act)</li> <li>Ensure site design provides for safe koala linkage opportunities to surrounding off-site</li> </ul>	<p>Where suitable, parts of the following documents and standards will assist in measuring the Overall Outcome:</p> <ul style="list-style-type: none"> <li>EPBC Koala Referral Guidelines</li> <li>Nature Conservation (Koala) Conservation Plan 2006 and Management Program 2006-2016 (koala plan)</li> <li>EHP Koala Sensitive Design Guideline</li> <li>Main Roads Fauna Sensitive Design Manual Vol.2</li> <li>Draft Code of Practice for the Welfare of Wild Animals affected by Land Clearing</li> <li>EPBC Act permit</li> </ul>	<p>Site design and continuing through stages of approved construction.</p> <p>Annual Report</p>	<p>Increase in the volume of NJKHT within the Conservation Parkland (Measured at the 5 and 10 year interval)</p> <p>No temporary fragments or islands of koala NJKHT within clearing zones for the life of the project (reported annually)</p>



Element	Overall Outcomes	Strategies / Actions	Design Standards / Resources	Timing (Indicative)	Achievement Criteria
		<p>habitat by discouraging Koala movement into built up areas through a range of Koala sensitive design measures (fencing, signage, road and landscape design).</p> <ul style="list-style-type: none"> <li>▪ Incorporate dog off-leash facilities in recreation parkland and on lead control measures through the Conservation Parkland.</li> </ul>			
EVNT Species	1. Identify and avoid (to the greatest extent possible) any impacts on EVNT species.	<ul style="list-style-type: none"> <li>• Avoid clearing of EVNT plant species.</li> <li>• Ensure appropriate pre-clearance checks and fauna spotter reporting provides a contemporary and more detailed review of EVNT Species or potential habitat within each stage of clearing.</li> </ul> <p><b>Stretch Target</b></p> <ul style="list-style-type: none"> <li>• Where suitable within and adjoining the Conservation Parkland, waterway corridors or open space areas incorporate areas of <i>Melaleuca irbyana</i> and or other habitat reinstatement for EVNT Species.</li> </ul>	<p>Where suitable, parts of the following documents and standards will assist in measuring the Overall Outcome:</p> <ul style="list-style-type: none"> <li>▪ NCA Protected Plants Exemption Process.</li> <li>▪ Fauna Spotter Pre-Clearance and Post Works Reporting</li> <li>▪ SEQ Ecological Restoration Framework Code</li> <li>▪ SEQ Ecological Restoration Framework Guide</li> <li>▪ SEQ Ecological Restoration Framework Manual</li> </ul>	<p>Site design and continuing through stages of approved construction.</p> <p>Annual reporting</p>	<p>Increase in volume of EVNT species within the Conservation Parkland at completion of the project.</p> <p>Increase in the availability of habitat and usage of the Conservation Parkland by fauna when compared with benchmark pre-commencement surveys.</p>
Native Fauna (non EVNT Species)	1. Minimise impacts on native fauna (not scheduled as Threatened)	<ul style="list-style-type: none"> <li>▪ Avoid negative impacts on native fauna species in areas designated Conservation Parkland.</li> <li>▪ Consolidate habitat for all native fauna into non development portions of the site (i.e. Conservation Parkland and supporting areas).</li> <li>▪ Minimise impacts of the clearing through the Development Land through staging and sequencing and Management Plans prepared in accordance with the Reporting and Management Section of this NESS to stage and manage the impacts of clearing.</li> <li>▪ Where specific habitat features (such as mature habitat trees retaining hollows) need to be removed, complete an audit of lost</li> </ul>	<p>Where suitable, parts of the following documents and standards will assist in measuring the Overall Outcome:</p> <ul style="list-style-type: none"> <li>▪ Fauna Management Plan prepared in accordance with the Draft Code of Practice for the Welfare of Wild Animals affected by Land Clearing</li> <li>▪ SEQ Ecological Restoration Framework Code</li> <li>▪ SEQ Ecological Restoration Framework Guide</li> <li>▪ SEQ Ecological Restoration Framework Manual</li> </ul>	<p>Site design and continuing through stages of approved construction.</p> <p>Summarised through Annual Reporting</p>	<p>Fauna Spotter / Catcher pre, during and post clearing reports completed for each stage of clearing works.</p> <p>Evidence within the NESS annual report of adaptive management procedural change within Fauna Spotter / Catcher Reports for each stage of the project.</p>



Element	Overall Outcomes	Strategies / Actions	Design Standards / Resources	Timing (Indicative)	Achievement Criteria
		<p>habitat features. Use the audit to determine a strategy to harvest habitat features and/or design and implement a species specific nest box implementation plan as part of the FMP.</p> <ul style="list-style-type: none"> <li>▪ Engage a registered fauna spotter for a pre-clearance report and advice on clearing and sequencing methods within the Development Land. Stage and manage the impacts of clearing in accordance with the Reporting and Management Section of this NESS.</li> </ul>			
Waterways & drainage Features	1. Retain, protect and buffer site watercourses forming part of the projects Significant Biodiversity Values	<ul style="list-style-type: none"> <li>▪ Avoid (to the greatest extent possible) any clearing within mapped watercourses, drainage features, overland flow paths or other natural hydrological features within the Conservation Parkland Area.</li> <li>▪ Avoid (to the greatest extent possible) any clearing within identified waterways forming part of the site's Significant Biodiversity Values within or adjoining the Development Land. <b>(Plan 8)</b></li> <li>▪ Where unavoidable clearing (e.g. access where no other alternative exists, essential community infrastructure and/or approved waterway stability measures) is required within: <ul style="list-style-type: none"> <li>○ mapped watercourses, drainage features, overland flow paths or other natural hydrological features within the Conservation Parkland; or</li> <li>○ identified waterways forming part of the site's Significant Biodiversity Values within or adjoining the Development Land;</li> </ul> </li> </ul> <p>minimise the clearing footprint, mitigate impacts and compensate through ecological restoration measures.</p>	<p>Where suitable, parts of the following documents and standards will assist in measuring the Overall Outcome:</p> <ul style="list-style-type: none"> <li>▪ SDAP Module 8</li> <li>▪ DAF Mapping</li> <li>▪ DAF WWBW Self Assessable Codes</li> <li>▪ SEQ Ecological Restoration Framework Code</li> <li>▪ SEQ Ecological Restoration Framework Guide</li> <li>▪ SEQ Ecological Restoration Framework Manual</li> <li>▪ CPTED Guidelines for Queensland</li> </ul>	<p>Site design and continuing through stages of approved construction.</p> <p>Within each specific Management Plan (Vegetation, Fauna and Weed)</p>	<p>Watercourses identified as Significant Biodiversity Values are retained through site design.</p> <p>Bio-condition of site watercourses retained as part of Significant Biodiversity Values are increased at completion of the project.</p>





Element	Overall Outcomes	Strategies / Actions	Design Standards / Resources	Timing (Indicative)	Achievement Criteria
		<ul style="list-style-type: none"> <li>▪ Where unavoidable clearing is necessary within:                             <ul style="list-style-type: none"> <li>○ mapped watercourses, drainage features, overland flow paths or other natural hydrological features within the Conservation Parkland; or</li> <li>○ identified waterways forming part of the site's Significant Biodiversity Values within or adjoining the Development Land;</li> </ul>                             ensure that all works are managed in accordance with the Reporting and Management Section of this NESS.                         </li> <li>▪ Minimise impacts on identified waterways forming part of the site's Significant Biodiversity Values (Plan 7) through appropriately designed and located buffers.</li> <li>▪ Explore infrastructure designed to incorporate existing vegetation with storm water solutions through modified drainage features throughout the development portions and recreational parklands.</li> </ul>			
Land Degradation	1. Avoid and manage land degradation impacts caused through works within areas of dispersive and sodic soils.	<ul style="list-style-type: none"> <li>▪ Avoid (to the greatest extent possible) any clearing within identified waterways forming part of the site's Significant Biodiversity Values within or adjoining the Development Land. <b>(Plan 8)</b></li> <li>▪ Avoid (to the greatest extent possible) clearing on steep terrain greater than 20%. Where clearing on steep terrain is unavoidable, employ machinery and clearing techniques which minimise disturbance to soils.</li> <li>▪ Minimise clearing of any natural drainage features within the Development Land where</li> </ul>	Where suitable, parts of the following documents and standards will assist in measuring the Overall Outcome: <ul style="list-style-type: none"> <li>▪ SDAP Module 8</li> <li>▪ DAF WWBW Self Assessable Codes</li> <li>▪ SEQ Ecological Restoration Framework Code</li> <li>▪ SEQ Ecological Restoration Framework Guide</li> <li>▪ SEQ Ecological Restoration Framework Manual</li> <li>▪ CPTED Guidelines for Queensland</li> <li>▪ Endorsed / approved site strategies and infrastructure master plans for:                             <ul style="list-style-type: none"> <li>○ Earthworks</li> <li>○ Stormwater</li> </ul> </li> </ul>	Site design and continuing through stages of approved construction.	No indirect impacts from soil deposition or erosion in the downstream Significant Biodiversity Values areas.



Element	Overall Outcomes	Strategies / Actions	Design Standards / Resources	Timing (Indicative)	Achievement Criteria
		<p>included as part of open space, drainage channels, or the future school.</p> <ul style="list-style-type: none"> <li>▪ Mitigate the impacts of clearing of any drainage features, overland flow paths or other natural hydrological features through inclusion of detailed erosion and sediment control plan for each stage of self-certified operational works submissions.</li> <li>▪ Dispersive soil mitigation measures are to be implemented during detailed design if required (such as vegetation or protection of batters, minimising velocity of stormwater flows, flattening of grades, stormwater detention, stormwater discharge into erosion resistant areas, soil re-compaction, soil stabilisers (chemical polymers) and use of sandstone/barriers).</li> <li>▪ Carry out water testing of site watercourses (where there are flows at the time). Testing will be for turbidity and total suspension solids to monitor any sediment deposits in the waterways.</li> </ul>			
Rehabilitation / Restoration	1. Expand and improve the quality of Significant Biodiversity Values and other retained natural features.	<ul style="list-style-type: none"> <li>▪ Revegetate and restore to remnant status all cleared, degraded and modified areas within the Conservation Parkland, where not in conflict with bushfire management requirements or passive based nature recreation infrastructure.</li> <li>▪ Undertake rehabilitation (including planting of endemic species and weed management) within the bed and banks of retained or modified watercourses and drainage features. This rehabilitation may be utilised as part of the total site storm water management strategies, particularly with regard to stormwater quality and waterway stability.</li> </ul>	<p>Where suitable, parts of the following documents and standards will assist in measuring the Overall Outcome:</p> <ul style="list-style-type: none"> <li>▪ SEQ Ecological Restoration Framework Code</li> <li>▪ SEQ Ecological Restoration Framework Guide</li> <li>▪ SEQ Ecological Restoration Framework Manual</li> <li>▪ Endorsed / approved site strategies and infrastructure master plans for: <ul style="list-style-type: none"> <li>○ Open space</li> <li>○ Stormwater</li> </ul> </li> </ul>	Site design and continuing through stages of approved construction.	Increased quality in the condition of retained areas when measured against pre-commencement benchmarks.



Element	Overall Outcomes	Strategies / Actions	Design Standards / Resources	Timing (Indicative)	Achievement Criteria
		<ul style="list-style-type: none"> <li>Reuse cleared native vegetation (e.g. as site mulch in future revegetation works in and adjoining the Conservation Parkland).</li> <li>Explore the harvesting of the A-horizon of healthy bushland areas within the development precinct for assisted natural regeneration within degraded land through and surrounding the Conservation Parkland.</li> </ul> <p><b>Stretch Target:</b></p> <ul style="list-style-type: none"> <li>Wherever practical, research and incorporate EVNT Species (plants) and TECs into site revegetation.</li> </ul>			
Weed and Pest Species	1. Decrease in the volume and diversity of site weed and pest species.	<ul style="list-style-type: none"> <li>Identify and map major infestations of environmental and declared weeds which will be targeted for removal through the Conservation Parkland.</li> <li>Prepare detailed weed management and rehabilitation plans for areas of Conservation Parkland (including re-vegetation using existing native species and pre-clear regional ecosystem communities) to strengthen the riparian vegetation cover and diversity through retained creek tributaries and gully lines.</li> <li>Manage weeds and pests in accordance with the requirements of the LPA.</li> <li>Prepare detailed weed management and rehabilitation plans for all portions of open space and waterways relative to the stage in which they are proposed to be created.</li> <li>Explore methods to minimise impacts of domestic animals on core environmental features surrounding the community (such as by implementing educational and control measures for areas of the project adjoining or</li> </ul>	<p>Where suitable, parts of the following documents and standards will assist in measuring the Overall Outcome:</p> <ul style="list-style-type: none"> <li>Guideline 14</li> <li>LPA declared weeds and pests</li> <li>SEQ Ecological Restoration Framework Code</li> <li>SEQ Ecological Restoration Framework Guide</li> <li>SEQ Ecological Restoration Framework Manual</li> </ul>	<p>Pre-Construction Certification and / or Self Certification.</p> <p>Reporting as per purpose specific management or rehabilitation plan.</p> <p>Summary reporting as part of annual report.</p>	Decrease in the extent and diversity of site weed species on-site (measured annually for the life of the project)



Element	Overall Outcomes	Strategies / Actions	Design Standards / Resources	Timing (Indicative)	Achievement Criteria
		<p>with the potential to influence the Conservation Parkland).</p>			
<p>Monitoring, Management Plans &amp; Reporting</p>	<ul style="list-style-type: none"> <li>▪ Ensure monitoring, management and reporting collect adequate information to contribute towards the avoid, minimise, restore and offset principles of this NESS.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Monitoring/reporting to occur as per requirements of each VMP (e.g. photo monitoring, tree health, assessment post works).</li> <li>▪ Monitoring and reporting to occur as per the requirements of each specific weed management and rehabilitation plan (e.g. photo monitoring, quadrant and transect surveys etc.) showing reductions in site weed cover and expanded vegetation area.</li> <li>▪ Monitoring and reporting to occur as per the requirement of each specific FMP, incorporating the reporting requirements of the engaged fauna spotter.</li> <li>▪ Prepare Vegetation Management Plans (VMPs) for each phase of clearing works incorporating requirements of AS 4970-2009.</li> <li>▪ VMPs are to be approved by:               <ol style="list-style-type: none"> <li>1. self-certification where prepared in accordance with AS 4970 -2009 and external to Significant Biodiversity Values areas; or</li> <li>2. compliance assessment for unavoidable clearing within Significant Biodiversity Values areas.</li> </ol> </li> <li>▪ Prepare Fauna Management Plans (FMPs) for each stage of development involving vegetation clearing works. FMPs are to mandate the use of EHP registered fauna spotters.</li> <li>▪ FMPs are to be approved by self-certification where prepared in accordance with the Draft Code of Practice for the Welfare of Wild Animals affected by Land-Clearing.</li> </ul>	<p>Where suitable, parts of the following documents and standards will assist in measuring the Overall Outcome:</p> <ul style="list-style-type: none"> <li>▪ Guideline 14</li> <li>▪ Regulated Vegetation Management Mapping, PMAV and Pre-Clear Mapping</li> <li>▪ Management plan specific monitoring and reporting requirements.</li> <li>▪ Draft Code of Practice for the Welfare of Wild Animals affected by Land Clearing</li> <li>▪ Australian Standard (AS) 4970 -2009 Protection of trees on development sites.</li> <li>▪ DSDIP Significant Residual Impact Guideline</li> <li>▪ EOP</li> <li>▪ EPBC Act permit.</li> <li>▪ SEQ Ecological Restoration Framework Code</li> <li>▪ SEQ Ecological Restoration Framework Guide</li> <li>▪ SEQ Ecological Restoration Framework Manual</li> </ul>	<p>All stages – reported annually (until project completion)</p>	<p>Annual evidence monitoring, management and reporting measures have used findings to contribute to the adaptive management of all other NESS site procedures.</p>



Element	Overall Outcomes	Strategies / Actions	Design Standards / Resources	Timing (Indicative)	Achievement Criteria
		<ul style="list-style-type: none"> <li>▪ Prepare and implement Weed Management and Rehabilitation Plans for retained vegetation areas, drainage tributaries and other existing or reinstated vegetation areas.</li> <li>▪ Create a data repository of all environmental surveys, reports, management plans and monitoring data to inform future government and non-government decision making in the Greater Flagstone and broader areas.</li> </ul>			



## 5. Natural Environmental Features

5.1. At the whole of site scale, core natural environment features include:

- Confirmed Remnant Vegetation Containing Endangered Regional Ecosystems
- Low Order Remnant Vegetation
- Confirmed Waterway Areas
- Other Drainage Features and Watercourses
- Waterway buffer areas
- Site farm dams
- Areas of juvenile native vegetation

5.2. Each of these core features is detailed on **Plan 8 (Appendix 1)** and briefly described below.

- a) Confirmed Areas of Remnant Vegetation Containing Endangered Regional Ecosystems

A certified Property Map of Vegetation (PMAV) has been provided from the **Queensland Department of Natural Resources and Mines (NRM)** which substantially alters the previous Remnant Regional Ecosystem Mapping for the site.

- b) Low Order Remnant Vegetation

As part of the PMAV process, areas of Of Concern and Least Concern (Non Endangered) Remnant Vegetation have been expanded on site. These areas primarily occur within the development zone with the exception of areas in the eastern third of the property. While not being protected specifically by Guideline 14 and Guideline 17 these vegetated areas escalate in importance when combined with other constraints (e.g. – on a Confirmed Waterway Area).

- c) Confirmed Waterway Areas

Confirmed Waterway Areas reflect drainage features on-site which recorded consistent features and values to be defined as a waterway under the *Fisheries Act 1994*. These areas displayed more evidence of conveying run-off and areas of greater diversity through mesic variants to the broader habitats in which they are contained.

- d) Waterway Buffer Area

A 25m nominal buffer has been applied to Confirmed Waterway Areas identified during site survey. **This is measured as 25m either side of the centreline of the Confirmed Waterway Area.**

- e) Site Farm Dams

Two large and a number of smaller farm dams have been constructed over the site. Generally, site dams occur in the western and more disturbed and active portions of the project site.



f) Areas of Juvenile Native Regeneration

A number of Category X areas retain dense immature native regrowth. These areas vary diversely in health and value.

## 6. Ongoing Monitoring and Reporting

- 6.1 Ongoing monitoring of achievement of the Natural Environment Site Strategies will occur in accordance with specific management plans (e.g. as specified in VMPs, FMPs, Rehabilitation Plans, etc.).
- 6.2 The Developer undertakes to complete monitoring and reporting in accordance with each approved management plan.
- 6.3 Further specific methods for monitoring and reporting will be developed where required in conjunction with Context Plans, Plans of Development, and Compliance Submissions.
- 6.4 This document has been prepared with consideration of adaptive management principles being adopted into each report and management plan prepared over the project. This NESS sets the overarching outcome and achievement metric for measurement in stage or works specific documents.



## 7. Koala Habitat Values Mapping

7.1 Koala Habitat Values Mapping can be amended through the use of the following methods which are generally consistent with the Koala SPRP and the accompanying Koala SPRP Guideline:

### Determination of koala habitat type for certain land

1. As part of or prior to the lodgement of a development application, an applicant may request the assessment manager to make a determination that land, which is part of that development application, is of a different koala habitat type than the koala habitat type shown for the land on the Map of Assessable Development Area Koala Habitat Values.
2. An applicant who makes a request must provide sufficient information, and (if requested) as part of the response to the information request, for the assessment manager to make the determination.
3. Sufficient information includes, but is not limited to, a report by a suitably-qualified and experienced professional in respect of the habitat located on, and in connection with, the land for which the determination is requested.
4. An assessment manager who receives a request may determine, as part of its decision, that any part of the land the subject of the request is:
  - a. of a koala habitat type different to that shown on a Map of Assessable Development Area Koala Habitat Values; or
  - b. an area where koalas are generally not present.
5. The assessment manager may only make the determination where it is reasonably satisfied that the koala habitat type associated with the relevant land is identified on the Map of Assessable Development Area Koala Habitat Values incorrectly.
6. A determination is determinative of the koala habitat type, which applies to the land the subject of the determination for the purpose of applying any rules, guidelines, offsets or other considerations relating to the koala species.
7. Further guidance on the technical information and considerations to be incorporated into an application for a redetermination of the koala habitat values maps can be drawn from the Koala SPRP Guideline.





## 8. Definitions / References / Acronyms

Term / Acronym		Definition	Date	Author / Organisation
Application Area	means	the land parcels identified in <b>Plan 1 (Appendix 1)</b>		
AS 4970-2009	means	<i>Australian Standard AS4970-2009 Protection of trees on development sites (incorporating Amendment No. 1)</i>	Mar 2010	Standards Australia
AS	means	Australian Standards		
ASRIS	means	Australian Soil Resource Information System		
Category B Vegetation	means	as defined by the <i>Vegetation Management Act 1999</i> , section 20A.		
Category X Vegetation	means	as defined by the <i>Vegetation Management Act 1999</i> , section 20A.		
Confirmed Areas of Remnant Vegetation Containing Endangered Regional Ecosystems	means	Remnant Vegetation containing Endangered Regional Ecosystems mapped and as annotated on <b>Plan 8 (Appendix 1)</b> and as defined in Guideline 14 (Appendix 1) as areas of viable remnant vegetation containing endangered regional ecosystems as shown on the regional ecosystem map prepared under the <i>Vegetation Management Act 1999</i> and confirmed by on-site investigations using a methodology accepted by the MEDQ.		
Confirmed Waterway Areas	means	Confirmed Waterway Areas as shown on <b>Plan 8 (Appendix 1)</b>		
Conservation Parkland	means	land designated as Conservation Parkland on an endorsed / approved Context Plan for the Application Area		



<b>Context Plan</b>	means	a context plan as contemplated under Section 3.2.8 of the PDA Development Scheme		
<b>CPTED</b>	means	Crime Prevention through Environmental Design		
<b>CPTED Guidelines for Queensland</b>	means	Crime Prevention through Environmental Design- Guidelines for Queensland - Part B: Implementation Guide	Oct 2007	State of Queensland
<b>DAF</b>	means	Department of Agriculture and Fisheries (Qld)		
<b>DAF Mapping</b>	means	<i>Fisheries Act 1994</i> Queensland waterways for waterway barrier works spatial layer (QSpatial)	15 Jan 2013	State of Queensland
<b>DAF WWBW Self Assessable Codes</b>	means	Self- assessable codes for waterway barrier works by DAF including: WWBW01-P1: Construction of minor dams and weirs, WWBW01-P2: Replacement of existing floodgates, WWBW01-P3: Construction and maintenance of culverts, WWBW01-P4: Construction and maintenance of bed level crossings, WWBW02: Temporary waterway barrier works, WWBW03: Regularly constructed temporary waterway barrier works		State of Queensland (Department of Agriculture and Fisheries)
<b>Defining Bank</b>	means	as defined in State Development Assessment Provisions Module 8: Native Vegetation Clearing (version 1.7) as meaning: the bank which confines seasonal flows by may be inundated by flooding from time to time. This can be either: 1. The bank of terrace that confines the water before the point of flooding, or 2. Where there is no bank the seasonal high water line which represents the point of flooding."		
<b>Development Land</b>	means	The part of the Application Area occupied by land uses other than Conservation Parkland and the <del>Potential Residential – Eco Lot precinct</del> <b>Future Investigation Area.</b>		



<b>DILGP</b>	means	Department of Infrastructure, Local Government and Planning (Qld)		
<b>DoE</b>	means	Department of the Environment (Cth)		
<b>Draft Code of Practice for the Welfare of Wild Animals affected by Land-Clearing</b>	means	Queensland Code of Practice for the welfare of wild animals affected by land-clearing and other habitat impacts and wildlife spotter / catchers (Draft)	2009	Jon Hanger & Ben Nottidge - Australian Wildlife Hospital
<b>Drainage feature</b>	means	<p>as defined in State Development Assessment Provisions Module 8: Native Vegetation Clearing (version 1.7) as meaning:</p> <p>“is a natural landscape feature, including a gully, drain, drainage depression or other erosion feature that –</p> <p>9 Is formed by the concentration of, or operates to confine or concentrate, overland flow during water and immediately after rainfall events; and</p> <p>10 Flows for only a short duration after a rainfall event, regardless of the frequency of flow events; and</p> <p>11 Commonly does not have enough continuing flow to create a riverine environment, and</p> <p>12 Is shown on the vegetation management watercourse and drainage feature map</p> <p>12.1 At a scale of 1:25000 on the vegetation management watercourse and drainage feature map for the local government areas of Brisbane, Moreton Bay, Gold Coast, Sunshine Coast, Logan and Redlands, excluding applications to clear vegetation for extractive industries.”</p>		
<b>DSDIP</b>	means	Department of State Development Infrastructure and Planning (Qld) (now Department of Local Government, Infrastructure and Planning)		
<b>DSDIP Significant Residual Impact Guideline</b>	means	Significant Residual Impact Guideline - For matters of state environmental significance and prescribed activities assessable under the Sustainable Planning Act 2009 - Queensland Environmental Offsets Policy	Dec 2014	State of Queensland (Department of State Development,



				Infrastructure and Planning)
<b>DSITIA</b>	means	Department of Science, Information Technology, Innovation and the Arts (Qld)		
<b>DSITIA Terrestrial Vertebrate Fauna Survey Guidelines</b>	means	Terrestrial Vertebrate Fauna Survey Guidelines for Queensland (v 2.0)	Nov 2014	State of Queensland (Department of Science, Information Technology, Innovation and the Arts)
<b>EDQ</b>	means	the Minister for Economic Development Queensland established under the <i>Economic Development Act 2012</i> , which supersedes the <i>Urban Land Development Authority and repeals the Urban Land Development Authority Act 2007</i> (Qld)		
<b>EHP</b>	means	Department of Environment and Heritage Protection (Qld)		
<b>EHP Koala Sensitive Design Guideline</b>	means	Koala-sensitive Design Guideline- A guide to koala-sensitive design measures for planning and development activities	Nov 2012	State of Queensland (Department of Environment and Heritage Protection)
<b>EHP NCA Protected Plants Mapping</b>	means	<i>Nature Conservation Act 1992</i> protected plants flora survey trigger map spatial layer (QSpatial)		State of Queensland (Department of Environment and Heritage Protection)
<b>EHP Wildlife Online Database</b>	means	Queensland Government's WildNet data species profile search (version 1.0) database		State of Queensland (Department of Environment and Heritage Protection)
<b>Endangered Vegetation</b>	means	as mapped by Regulated Vegetation Management Mapping under the <i>Vegetation Management Act 1999</i> or by a certified Property Map of Assessable Vegetation.		



<b>EOA</b>	means	<i>Environmental Offsets Act 2014 (Qld)</i>	02 July 2015	State of Queensland
<b>Environmental Offsets Act 2014</b>	means	<i>Environmental Offsets Act 2014 (Qld)</i>	02 July 2015	State of Queensland
<b>Environmental Offsets Policy 2014</b>	means	<i>Queensland Environmental Offsets Policy (Version 1.1)</i>	December 2014	State of Queensland
<b>EOP</b>	means	<i>Queensland Environmental Offsets Policy (Version 1.1)</i>	December 2014	State of Queensland
<b>EPBC</b>	means	<i>Environment Protection and Biodiversity Conservation Act 1999 (Cth)</i>	01 July 2015	Commonwealth of Australia
<b>EPBC Act</b>	means	<i>Environment Protection and Biodiversity Conservation Act 1999 (Cth)</i>	01 July 2015	Commonwealth of Australia
<b>EPBC Koala Referral Guidelines</b>	means	EPBC Act referral guidelines for the vulnerable koala (combined populations of Queensland, New South Wales and the Australian Capital Territory)	2014	Commonwealth of Australia
<b>EPBC PMST Database</b>	means	<i>Environment Protection and Biodiversity Conservation Act 1999 (Cth)</i> Protected Matters Search Tool database interactive mapping	2015	Commonwealth of Australia
<b>EPBC Significant Impact Guidelines</b>	means	Matters of National Environmental Significance: Significant Impact Guidelines 1.1 <i>Environment Protection and Biodiversity Conservation Act 1999</i>	2013	Commonwealth of Australia
<b>ESCP</b>	means	Erosion and Sediment Control Plan		
<b>Essential Habitat</b>	means	as defined in the <i>Vegetation Management Act 1999</i> , section 20AC.		
<b>Essential Management</b>	means	as defined in the <i>Sustainable Planning Regulation 2000</i> , schedule 26.		



<b>EVNT Species</b>	means	Endangered, Vulnerable, Near Threatened and presumed Extinct species listed by name in schedules 1-5 of the <i>Nature Conservation Wildlife Regulation 2006</i> and least concern wildlife, not listed by name but identified as indigenous to Australia listed in Schedule 6.		
<b>FMP</b>	means	Fauna Management Plan		
<b>GFPDA</b>	means	Greater Flagstone Priority Development Area (formerly Greater Flagstone UDA)		
<b>Guideline 14</b>	means	PDA guideline no. 14 - Environmental values and sustainable resource use	May 2015	State of Queensland
<b>Guideline 17</b>	means	PDA guideline no. 17 - Remnant vegetation and koala habitat obligations in Greater Flagstone and Yarrabilba PDAs	Aug 2014	State of Queensland (Department of State Development, Infrastructure and Planning)
<b>ICOP</b>	means	Infrastructure Charging Offset Plan - Greater Flagstone Priority Development Area	Jul 2013	State of Queensland
<b>Koala Habitat Areas</b>	means	as defined in Guideline 17, an area mapped on State Planning Policy 2/10: Koala Conservation in South East Queensland, SEQ Koala Protection Area Koala Habitat Values maps as: - bushland habitat - having high and medium value suitable for rehabilitation habitat types.		
<b>Koala Habitat Values Mapping</b>	means	the plan of Koala Habitat Areas enclosed at <b>Plan 4 (Appendix 1)</b> , or as amended in accordance with Section 7 of the NESS.		
<b>Koala SPRP</b>	means	South East Queensland Koala Conservation State Planning Regulatory Provisions	May 2010	State of Queensland
<b>Koala SPRP Guideline</b>	means	Guideline- South East Queensland Koala Conservation - State Planning Regulatory Provisions	Jul 2014	State of Queensland (Department of



				Environment and Heritage Protection)
<b>Koala SPRP Mapping</b>	means	South East Queensland Koala Conservation State Planning Regulatory Provisions - Koala planning area version 1-2 spatial layer (QSpatial)	2 Jun 2010	State of Queensland
<b>LCC</b>	means	Logan City Council		
<b>LPA</b>	means	<i>Land Protection (Pest and Stock Route Management) Act 2002</i>	01 Oct2014	State of Queensland
<b>Main Roads Fauna Sensitive Design Manual Vol.2</b>	means	Fauna Sensitive Road Design Manual - Volume 2: Preferred Practices (Chapter 6 - Measures to achieve fauna sensitive roads, and Chapter 7 - Target Species Design Considerations)	Jun 2010	State of Queensland (Department of Transport and Main Roads)
<b>MNES</b>	means	Matters of National Environmental Significance		
<b>MSES</b>	means	Matters of State Environmental Significance		
<b>MLES</b>	means	Matters of Local Environmental Significance		
<b>Nature Conservation (Koala) Conservation Plan 2006 and Management Program 2006-2016 (koala plan)</b>	means	<i>Nature Conservation (Koala) Conservation Plan 2006</i>	27 Sep 2013	State of Queensland (Department of Environment and Heritage Protection)
<b>NCA</b>	means	<i>Nature Conservation Act 1992</i>	02 Jul 2015	State of Queensland (Department of Natural Resources and Mines)



<b>NCA Protected Plants Exemption Process</b>	means	where clearing is to be undertaken within a High Risk Area, as mapped by EHP Protected Plants Flora Survey Trigger Map, a flora survey will be undertaken in accordance with the Protected Plants Flora Survey Trigger Guidelines - Nature Conservation Act 1992 and where applicable, an Exempt Clearing Notification Form will be issued to EHP		State of Queensland (Department of Natural Resources and Mines)
<b>NCA Protected Plants Flora Survey Guidelines</b>	means	Flora Survey Guidelines - Protected Plants - Nature Conservation Act 1992	2014	State of Queensland (Department of Natural Resources and Mines)
<b>NCWR</b>	means	<i>Nature Conservation (Wildlife) Regulation 1994 (Reprint No. 2A)</i>	22 Dec 1999	State of Queensland (Department of Natural Resources and Mines)
<b>NESS</b>	means	Natural Environment Site Strategy		
<b>NJKHT</b>	means	Non-Juvenile Koala Habitat Trees		
<b>NRM</b>	means	Department of Natural Resources and Mines (Qld)		
<b>NRM Covenant Control measures and Guidelines</b>	means	as defined within the NRM Land Title Practice Manual (Qld), specifically Part 31 - Covenants, and NRM policy 'Covenants providing for non separate transfers PUX/952/066 version 4.05'	Apr 2009	State of Queensland (Department of Natural Resources and Mines)
<b>NRM Regulated Vegetation Management Mapping</b>	means	<i>Vegetation Management Act 1999</i> Regulated Vegetation Management Map - version 1.27 spatial layer (QSpatial)	7 Mar 2016	
<b>NRM Self Assessable Guidelines for land management and exemption checklist</b>	means	NRM self assessable clearing codes, specifically for Managing Encroachment, Managing Fodder Harvesting, Necessary Environmental Clearing, Property Infrastructure and Weed Control	02 Dec 2013	State of Queensland





<b>OSS</b>	means	Overarching Site Strategy		
<b>PDA</b>	means	Priority Development Area (formerly UDA)		
<b>PDA Development Scheme</b>	means	the <i>Greater Flagstone Urban Development Area Development Scheme</i>	Oct 2011	State of Queensland
<b>PMAV</b>	means	Property Map of Assessable Vegetation		
<b>Future Investigation Area</b>	means	land designated as Future Investigation Area on an endorsed / approved Context Plan for the Application Area		
<b>Pre-clear Mapping</b>	means	Draft pre-clearing regional ecosystems mapping data spatial layer (QSpatial)	8 May 2015	State of Queensland
<b>Prescribed Matter</b>	means	as defined by the <i>Environmental Offsets Act 2014</i>		
<b>Property Map of Assessable Vegetation (PMAV)</b>	means	as defined by the <i>Vegetation Management Act 1999</i>		
<b>RE</b>	means	Regional Ecosystems		
<b>Regional Ecosystems</b>	means	as defined by the <i>Vegetation Management Act 1999</i> .		
<b>SARA</b>	means	State Assessment Referral Agency (Qld)		
<b>SARA Mapping</b>	means	QSpatial layers applicable under SARA DA mapping tool		
<b>SAT</b>	means	Spot Assessment Technique Survey		
<b>SDAP</b>	means	State Development Assessment Provisions		
<b>SDAP Module 8</b>	means	Module 8 of the State Development Assessment Provisions (version 1.7)	23 Nov 2015	State of Queensland



<b>SEQ Ecological Restoration Framework Code</b>	means	South East Queensland Ecological Restoration Framework: Code of Practice	2012	Chenoweth EPLA and Bushland Restoration Services. Prepared on behalf of SEQ Catchments and South East Queensland Local Governments, Brisbane.
<b>SEQ Ecological Restoration Framework Guide</b>	means	South East Queensland Ecological Restoration Framework: Guideline	2012	Chenoweth EPLA and Bushland Restoration Services. Prepared on behalf of SEQ Catchments and South East Queensland Local Governments, Brisbane.
<b>SEQ Ecological Restoration Framework Manual</b>	means	South East Queensland Ecological Restoration Framework: Manual	2012	Chenoweth EPLA and Bushland Restoration Services. Prepared on behalf of SEQ Catchments and South East Queensland Local Governments, Brisbane.
<b>SEQRP</b>	means	South East Queensland Regional Plan 2009-2031		
<b>WWTP</b>	means	wastewater treatment plant		



<b>Significant Biodiversity Values</b>	means	Significant Biodiversity Values are as mapped and annotated on <b>Plan 8 (Appendix 1)</b> , or as otherwise defined as: <ul style="list-style-type: none"> <li>- Confirmed Areas of Remnant Vegetation Containing Endangered Regional Ecosystems</li> <li>- Confirmed Waterway Areas</li> </ul>		
<b>Significant Residual Impact</b>	means	as defined by the Environmental Offsets Act 2014, as meaning: “an adverse impact, whether direct or indirect, of a prescribed activity on all or part of a prescribed environmental matter that – <ol style="list-style-type: none"> <li>1. Remains, or will or is likely to remain, (whether temporarily or permanently) despite onsite mitigation measures of the prescribed activity; and</li> <li>2. Is, or will or is likely to be, significant.</li> </ol>		
<b>SPA</b>	means	<i>Sustainable Planning Act 2009</i>	20 Nov 2015	State of Queensland
<b>SPP</b>	means	State Planning Policy		
<b>SPP Biodiversity Values Mapping</b>	means	<i>State Planning Policy 2014 Matters of State Environmental Significance spatial layer series, specifically for MSES Biodiversity</i>	17 Dec 2013	State of Queensland
<b>SPP 07/14</b>	means	<i>State Planning Policy July 2014</i>	July 2014	State of Queensland (Department of State Development, Infrastructure and Planning)
<b>SPRP</b>	means	State Regulatory Planning Provisions		
<b>SRI</b>	means	Significant Residual Impact		
<b>TEC</b>	means	Threatened Ecological Community		



<b>TMR</b>	means	Department of Transport and Main Roads (Qld)		
<b>UDA</b>	means	Urban Development Area (now known as PDA)		
<b>ULDA</b>	means	Urban Land Development Authority (now known as EDQ)		
<b>VMA</b>	means	<i>Vegetation Management Act 1999</i>	11 Sep 2015	Queensland Government
<b>VMP</b>	means	Vegetation Management Plan		
<b>Watercourse</b>	means	is a watercourse as defined under the <i>Water Act 2000</i> , as meaning: “a river, creek or other stream, including a stream in the form of an anabrach or tributary, in which water flows permanently or intermittently, regardless of the frequency of flow events – a. In a natural channel, whether artificially modified or not, or  b. In an artificial channel that has changed the course of the stream”.		
<b>Waterway</b>	means	as defined by DAF Mapping for WWBW and ground-truthed by field survey		
<b>Waterway Barrier Works (WWBW)</b>	means	as defined in the <i>Fisheries Act 1994</i>		
<b>WWBW</b>	means	Waterway Barrier Works		



## Legislation and Guidelines referenced within this strategy

The following legislation (i.e. Acts, Guidelines and Polices) are referenced within this strategy and remain in effect for the purpose of this NESS:

Act / Policy /Guideline	Date of Publication	Author/Organisation
<i>Australian Standard AS4970-2009 Protection of trees on development sites (incorporating Amendment No. 1)</i>	Mar 2010	Standards Australia
<i>Code for Self-assessable development, Minor Waterway Barrier Works, Part 1: Low Impact Dams and Weirs (WWBW01)</i>	Apr 2013	State of Queensland (Department of Agriculture and Fisheries)
<i>Code for Self-assessable development, Minor Waterway Barrier Works, Part 2: Replacement of Existing Floodgates (WWBW01)</i>	Oct 2011	State of Queensland (Department of Agriculture and Fisheries)
<i>Code for Self-assessable development, Minor Waterway Barrier Works, Part 3: Culvert Crossings (WWBW01)</i>	Apr 2013	State of Queensland (Department of Agriculture and Fisheries)
<i>Code for Self-assessable development, Minor Waterway Barrier Works, Part 4: Construction and Maintenance of Bed Level Crossings (WWBW01)</i>	Apr 2013	State of Queensland (Department of Agriculture and Fisheries)
<i>Code for Self-assessable development, Temporary Waterway Barrier Works (WWBW02)</i>	Apr 2013	State of Queensland (Department of Agriculture and Fisheries)
<i>Code for Self-assessable development, Regularly Constructed Waterway Barrier Works (WWBW03)</i>	Oct 2011	State of Queensland (Department of Agriculture and Fisheries)
<i>Crime Prevention through Environmental Design- Guidelines for Queensland - Part B: Implementation Guide</i>	Oct 2007	State of Queensland
<i>Environment Protection and Biodiversity Conservation Act 1999 (Cth)</i>	Jul 2015	Commonwealth of Australia
<i>Environmental Offsets Act 2014</i>	Jul 2015	State of Queensland
<i>EPBC Act Administrative Guidelines on Significance – Supplement for the Grey-headed Flying-fox</i>	2003	Commonwealth of Australia



<i>EPBC Act referral guidelines for the vulnerable koala (combined populations of Queensland, New South Wales and the Australian Capital Territory)</i>	2014	Commonwealth of Australia
<i>Fauna Sensitive Road Design Manual - Volume 2: Preferred Practices</i>	Jun 2010	State of Queensland (Department of Transport and Main Roads)
<i>Flora Survey Guidelines - Protected Plants - Nature Conservation Act 1992</i>	2014	State of Queensland (Department of Environment and Heritage Protection)
<i>Greater Flagstone Urban Development Area Development Scheme</i>	Oct 2011	State of Queensland
<i>Guideline- South East Queensland Koala Conservation - State Planning Regulatory Provisions</i>	Jul 2014	State of Queensland (Department of Environment and Heritage Protection)
<i>Infrastructure Charging Offset Plan - Greater Flagstone Priority Development Area</i>	Jul 2013	State of Queensland
<i>Koala-sensitive Design Guideline- A guide to koala-sensitive design measures for planning and development activities</i>	Nov 2012	State of Queensland (Department of Environment and Heritage Protection)
<i>Land Protection (Pest and Stock Route Management) Act 2002</i>	01 Oct 2014	State of Queensland
<i>List of Vegetation Clearing Exemptions</i>	2013	State of Queensland (Department of Natural Resources and Mines)
<i>Matters of National Environmental Significance: Significant Impact Guidelines 1.1 Environment Protection and Biodiversity Conservation Act 1999</i>	2013	Commonwealth of Australia
<i>Nature Conservation (Koala) Conservation Plan 2006</i>	27 Sep 2013	State of Queensland (Department of Environment and Heritage Protection)
<i>Nature Conservation (Wildlife) Regulation 1994 (Reprint No. 2A)</i>	22 Dec 1999	State of Queensland
<i>Nature Conservation Act 1992</i>	02 Jul 2015	Queensland Government
<i>PDA guideline no. 14 - Environmental values and sustainable resource use</i>	May 2015	State of Queensland
<i>PDA guideline no. 17 - Remnant vegetation and koala habitat obligations in Greater Flagstone and Yarrabilba PDAs</i>	Aug 2014	State of Queensland, Department of State Development, Infrastructure and Planning
<i>Queensland Code of Practice for the welfare of wild animals affected by land-clearing and other habitat impacts and wildlife spotter / catchers (Draft)</i>	2009	Jon Hanger & Ben Nottidge - Australian Wildlife Hospital



<i>Queensland Environmental Offsets Policy (Version 1.1)</i>	Dec 2014	State of Queensland
<i>Significant Residual Impact Guideline - For matters of state environmental significance and prescribed activities assessable under the Sustainable Planning Act 2009 - Queensland Environmental Offsets Policy</i>	Dec 2014	State of Queensland, Department of State Development, Infrastructure and Planning
<i>South East Queensland Ecological Restoration Framework: Code of Practice</i>	2012	Chenoweth EPLA and Bushland Restoration Services. Prepared on behalf of SEQ Catchments and South East Queensland Local Governments, Brisbane.
<i>South East Queensland Ecological Restoration Framework: Guideline</i>	2012	Chenoweth EPLA and Bushland Restoration Services. Prepared on behalf of SEQ Catchments and South East Queensland Local Governments, Brisbane.
<i>South East Queensland Ecological Restoration Framework: Manual</i>	2012	Chenoweth EPLA and Bushland Restoration Services. Prepared on behalf of SEQ Catchments and South East Queensland Local Governments, Brisbane.
<i>South East Queensland Koala Conservation State Planning Regulatory Provisions</i>	May 2010	Queensland Government
<i>State Planning Policy July 2014</i>	Jul 2014	State of Queensland (Department of State Development, Infrastructure and Planning)
<i>Sustainable Planning Act 2009</i>	Nov 2015	State of Queensland
<i>Terrestrial Vertebrate Fauna Survey Guidelines for Queensland (v 2.0)</i>	Nov 2014	The State of Queensland (Department of Science, Information Technology, Innovation and the Arts)
<i>Vegetation Management Act 1999</i>	Sep 2015	State of Queensland
<i>Water Act 2000</i>	Oct 2015	State of Queensland

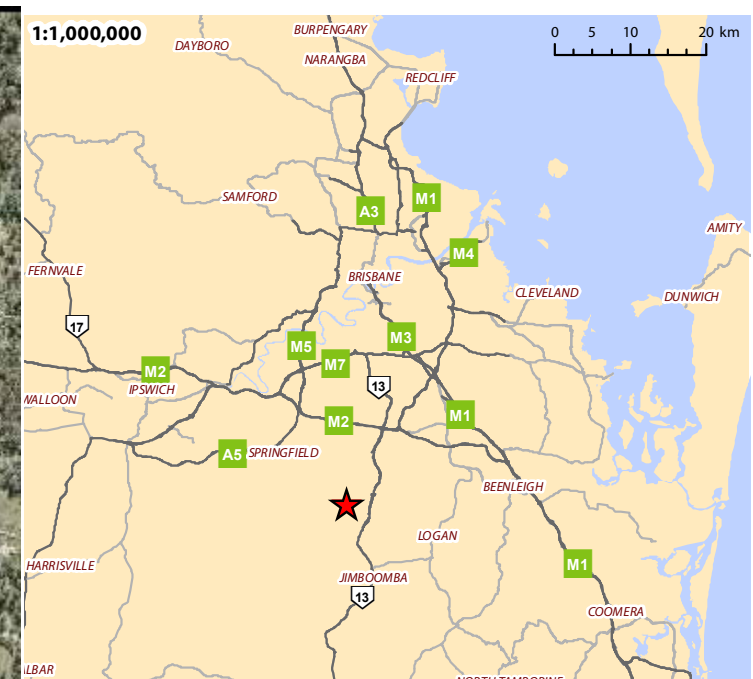


# Appendix I



## Plans

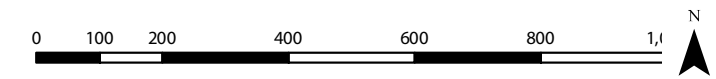
- Plan 1:** Site Aerial
- Plan 2:** Certified Property Map of Assessable Vegetation
- Plan 3:** Property Map of Assessable Vegetation Awaiting Certification
- Plan 4:** SEQ Koala Habitat Values Mapping
- Plan 5:** Fisheries – Waterways for Waterway Barrier Works
- Plan 6:** Indicative Development Interface to Retained Vegetation – Section AA
- Plan 7:** Indicative Development Interface to Retained Vegetation – Section BB
- Plan 8:** Natural Environment Site Strategy – Site Constraints Plan





**Legend**

-  Project site DCDB
-  Easement



**SH saunders havill group**

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PRIOR TO ANY DEMOLITION, EXCAVATION OR CONSTRUCTION ON SITE, THE RELEVANT AUTHORITY SHOULD BE CONTACTED FOR FURTHER UNDER-GROUND SERVICES AND DETAILED LOCATIONS OF ALL SERVICES.

**mirvac**

Issue	Date	Description	Drawn	Checked
A	8/03/2016	Prelim Draft	TC	MS

**APPROVED COMPANY**

ISO 9001  
Quality Management Systems

**QMS**

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**APPROVED COMPANY**

ISO 14001  
Environmental Management Systems

**QMS**

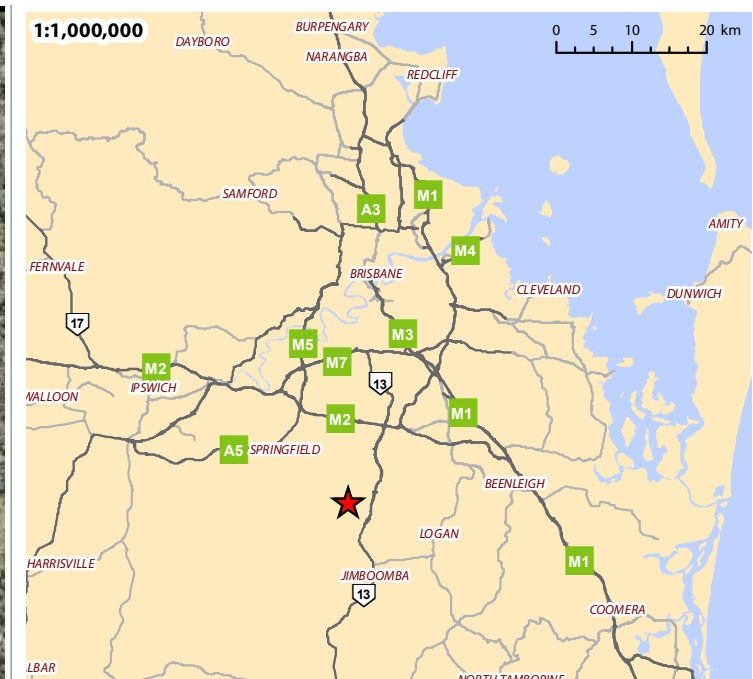
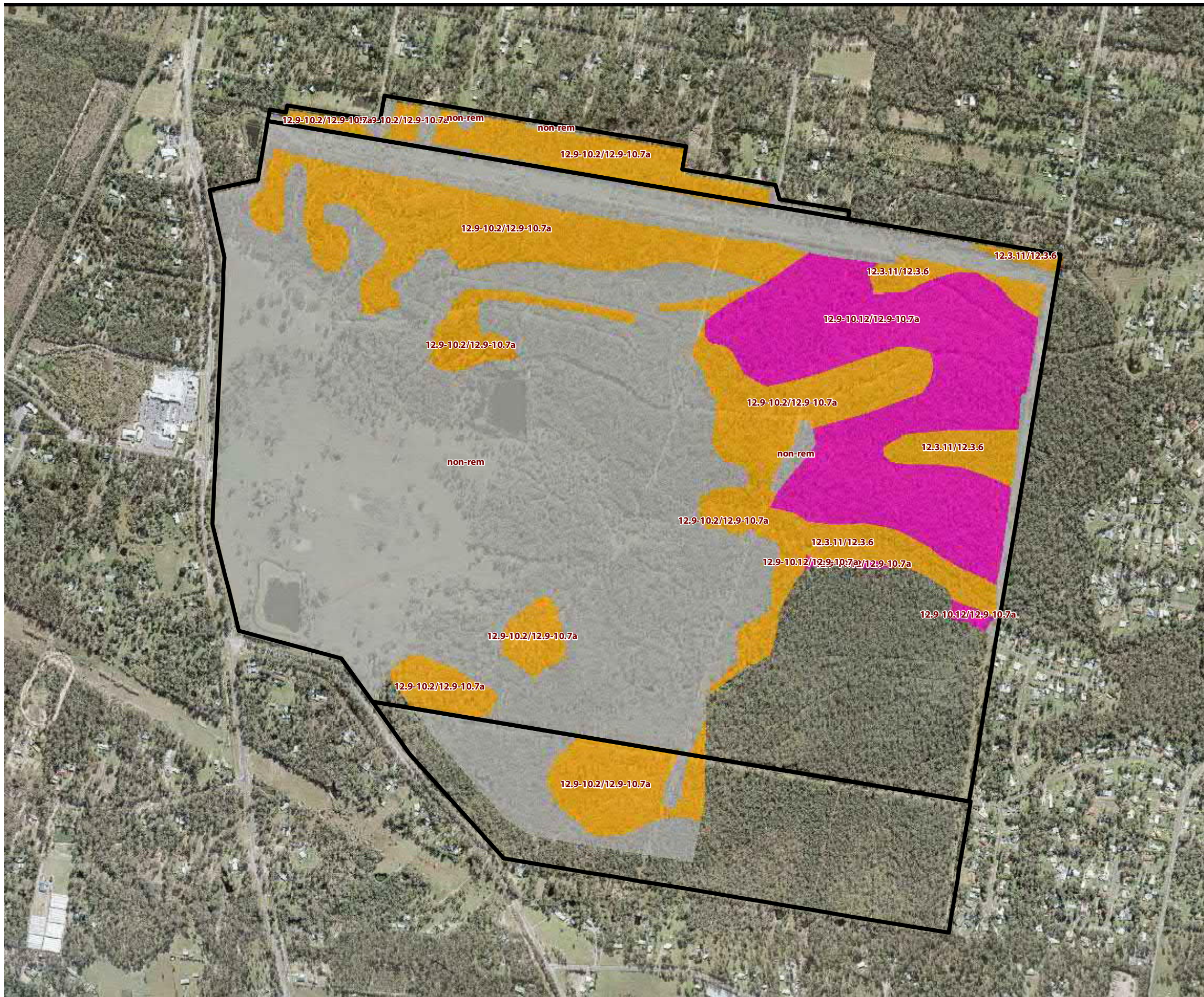
# Greenbank Natural Environment Site Strategy

## Site Aerial

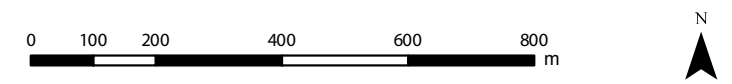
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 Coordinate System | GDA 1994 MGA Zone 56  
 Projection | Transverse Mercator  
 Client | MIRVAC  
 Project | Greenbank  
 Address/RPD | Lot 434 on RP845844  
 Sources | QLD GIS Layers (QLD Gov. Info Services 2015),  
 Structure Plan (URBIS, 2015)

# Plan 1

**SHG File**  
7598 E 01 Site Aerial A



- Legend**
- Project site DCDB
  - Certified PMAV 2015/004538**
  - Category B - Containing Endangered REs
  - Category B - Containing Of Concern REs
  - Category X - Non-remnant



**SH saunders havill group**

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**mirvac**

Issue	Date	Description	Drawn	Checked
A	8/03/2016	Prelim Draft	TC	MS

**APPROVED COMPANY**

ISO 9001  
Quality Management Systems

**QMS**

---

**APPROVED COMPANY**

ISO 14001  
Environmental Management Systems

**QMS**

# Greenbank

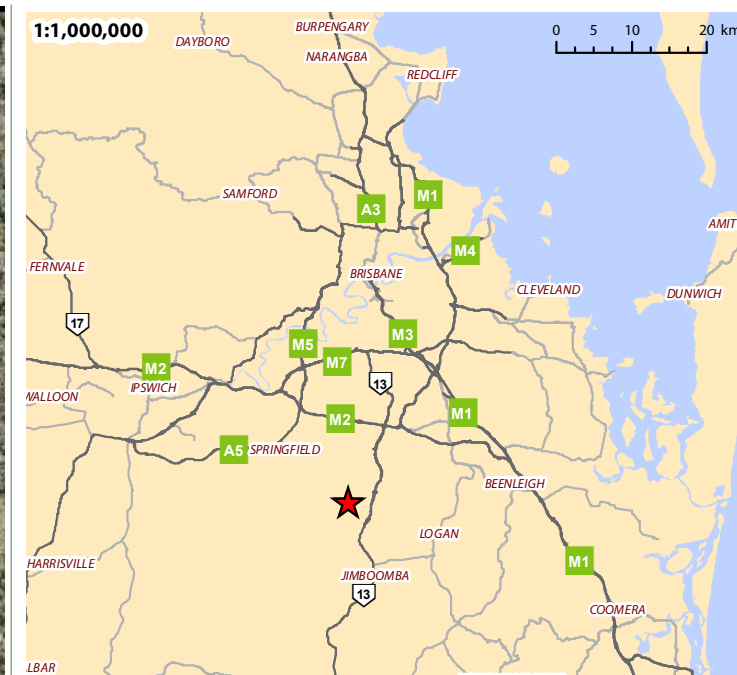
## Natural Environment Site Strategy

### Certified Property Map of Assessable Vegetation

Date | 8/03/2016  
 Scale | 1:12,000 @ A3  
 Coordinate System | GDA 1994 MGA Zone 56  
 Projection | Transverse Mercator  
 Client | MIRVAC  
 Project | Greenbank  
 Address/RPD | Lot 434 on RP845844  
 Sources | QLD GIS Layers (QLD Gov. Info Services 2015), Structure Plan (URBIS, 2015)

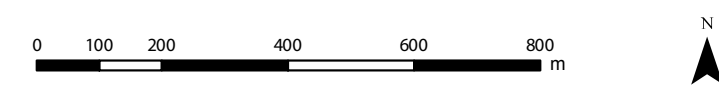
# Plan 2

**SHG File**  
7598 E 02 Certified PMAV A



**Legend**

- Project site DCDB
- Extent of PMAV area for lodgement
- PMAV area for Lodgement**
- Category B - Containing Endangered REs
- Category B - Containing Of Concern REs
- Category X - Non-remnant
- Certified PMAV 2015/004538**
- Category B - Containing Endangered REs
- Category B - Containing Of Concern REs
- Category X - Non-remnant



# Greenbank Natural Environment Site Strategy

## Property Map of Assessable Vegetation For Lodgement

ISSUES:

Issue	Date	Description	Drawn	Checked
A	18/03/2016	Prelim Draft	TC	MS

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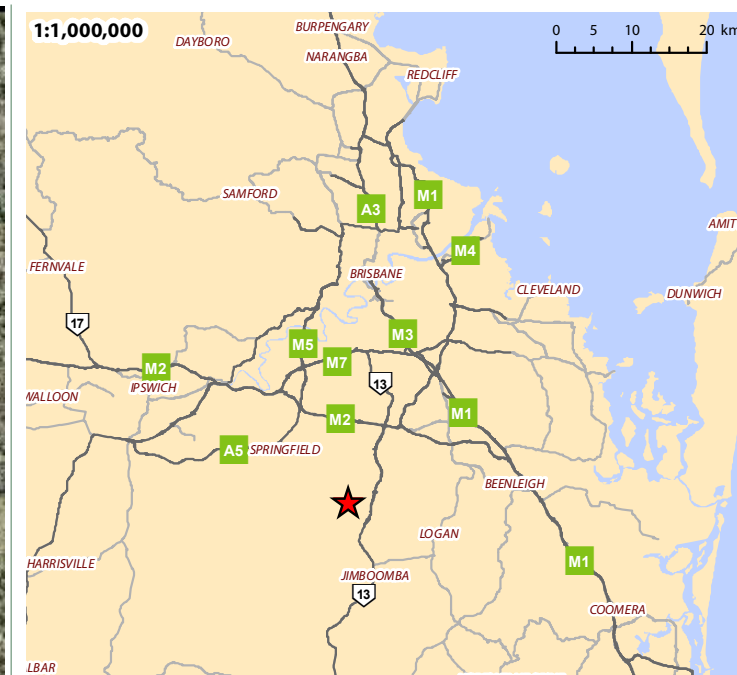
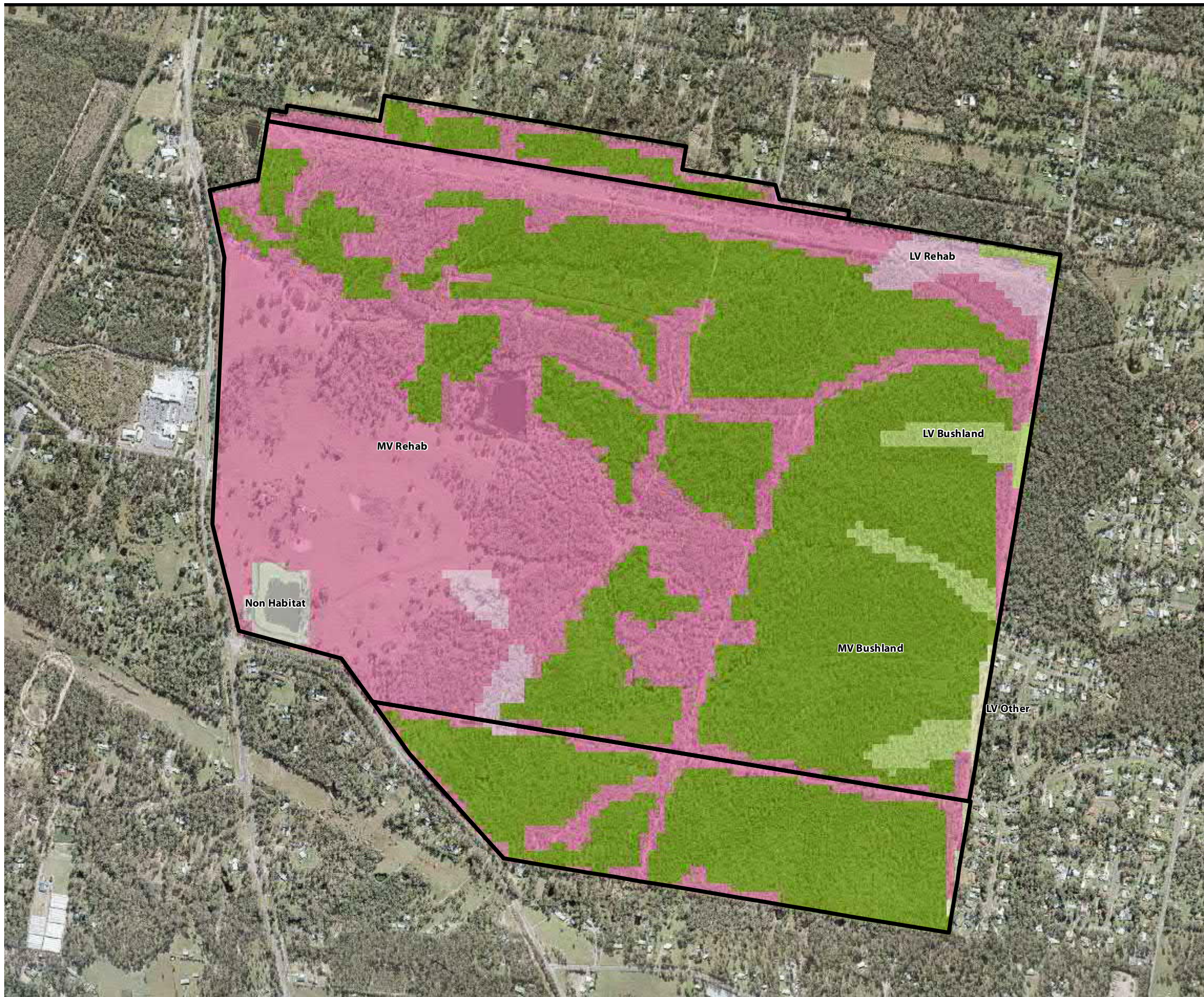
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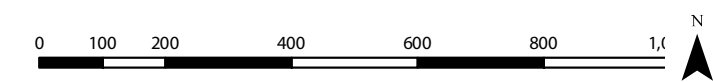
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 Coordinate System | GDA 1994 MGA Zone 56  
 Projection | Transverse Mercator  
 Client | MIRVAC  
 Project | Greenbank  
 Address/RPD | Lot 434 on RP845844  
 Sources | QLD GIS Layers (QLD Gov. Info Services 2015), Structure Plan (URBIS, 2015)

# Plan 3

SHG File  
7598 E 03 Lodgement PMAV A\_



- Legend**
- Project site DCDB
  - Koala Habitat Values Mapping**
  - Bushland Habitat*
  - High Value Bushland
  - Medium Value Bushland
  - Low Value Bushland
  - Suitable for Rehabilitation*
  - High Value Rehabilitation
  - Medium Value Rehabilitation
  - Low Value Rehabilitation
  - Other Areas of Value*
  - High Value Other
  - Medium Value Other
  - Low Value Other
  - Non-habitat
  - Water



# Greenbank Natural Environment Site Strategy

## SEQ Koala Habitat Values Mapping

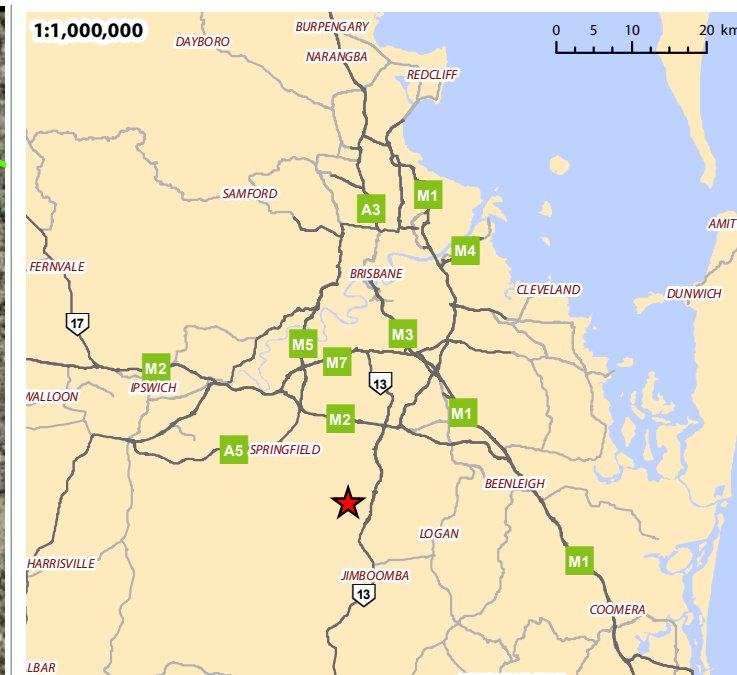
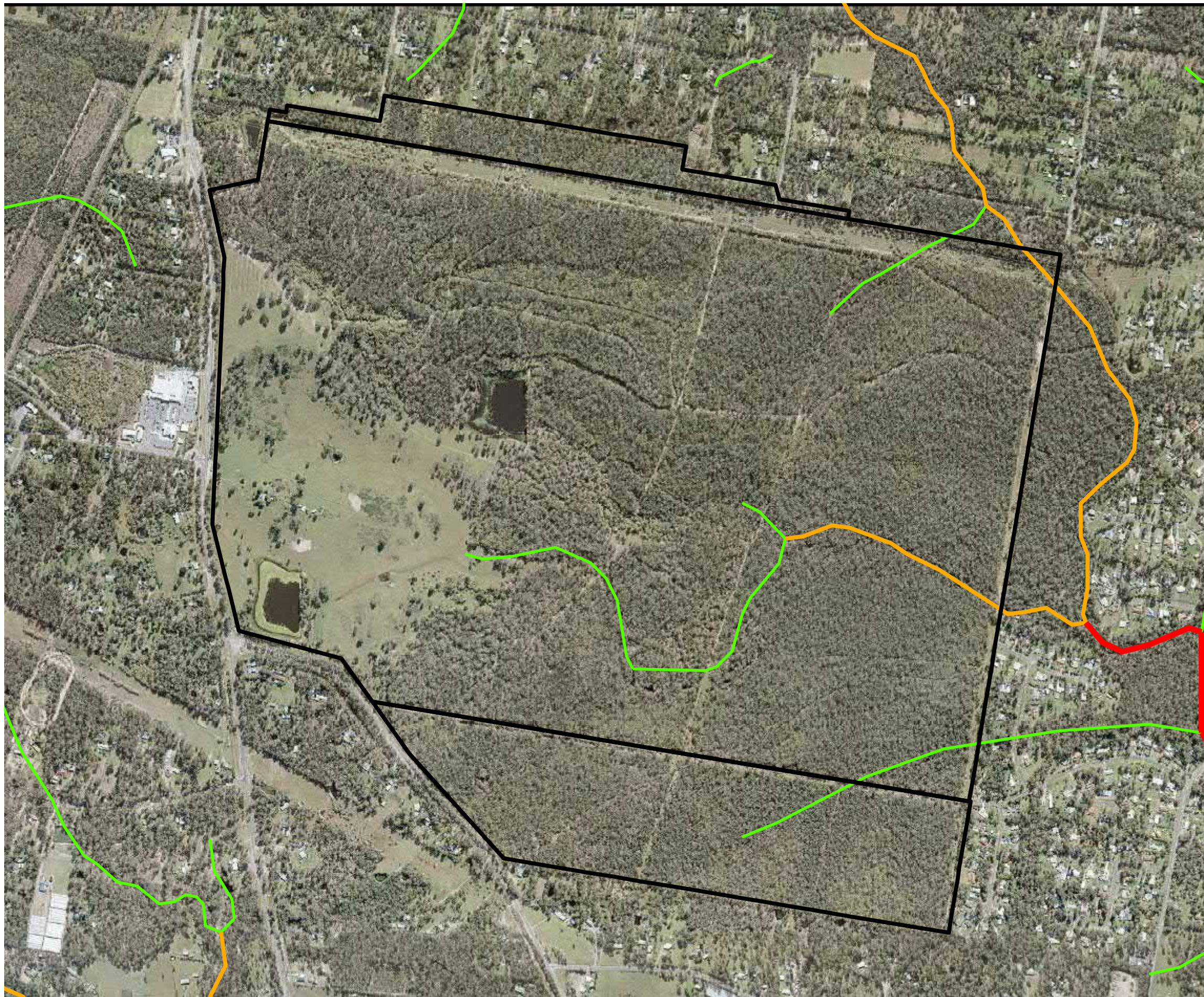
Date | 18/03/2016  
 Scale | 1:1,200 @ A3  
 Coordinate System | GDA 1994 MGA Zone 56  
 Projection | Transverse Mercator  
 Client | MIRVAC  
 Project | Greenbank  
 Address/RPD | Lot 434 on RP845844  
 Sources | QLD GIS Layers (QLD Gov. Info Services 2015),  
 Structure Plan (URBIS, 2015)

# Plan 4

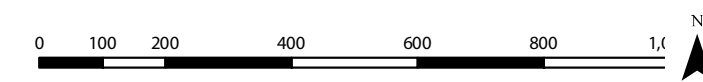
SHG File  
7598 E 04 Koala Habitat Values A

Issue	Date	Description	Drawn	Checked
A	18/03/2016	Prelim Draft	TC	MS

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- Legend**
- Project site DCDB
  - Waterways**
  - Risk of Impact*
  - 1 - Low
  - 2 - Moderate
  - 3 - High
  - 4 - Major



# Greenbank

## Natural Environment Site Strategy

### Fisheries - Waterways for Waterway Barrier Works

Date | 18/03/2016  
 Scale | 1:1,200 @ A3  
 Coordinate System | GDA 1994 MGA Zone 56  
 Projection | Transverse Mercator  
 Client | MIRVAC  
 Project | Greenbank  
 Address/RPD | Lot 434 on RP845844  
 Sources | QLD GIS Layers (QLD Gov. Info Services 2015),  
 Structure Plan (URBIS, 2015)

# Plan 5

**SHG File**  
7598 E 05 Fisheries A

**ISSUES:**

Issue	Date	Description	Drawn	Checked
A	18/03/2016	Prelim Draft	TC	MS

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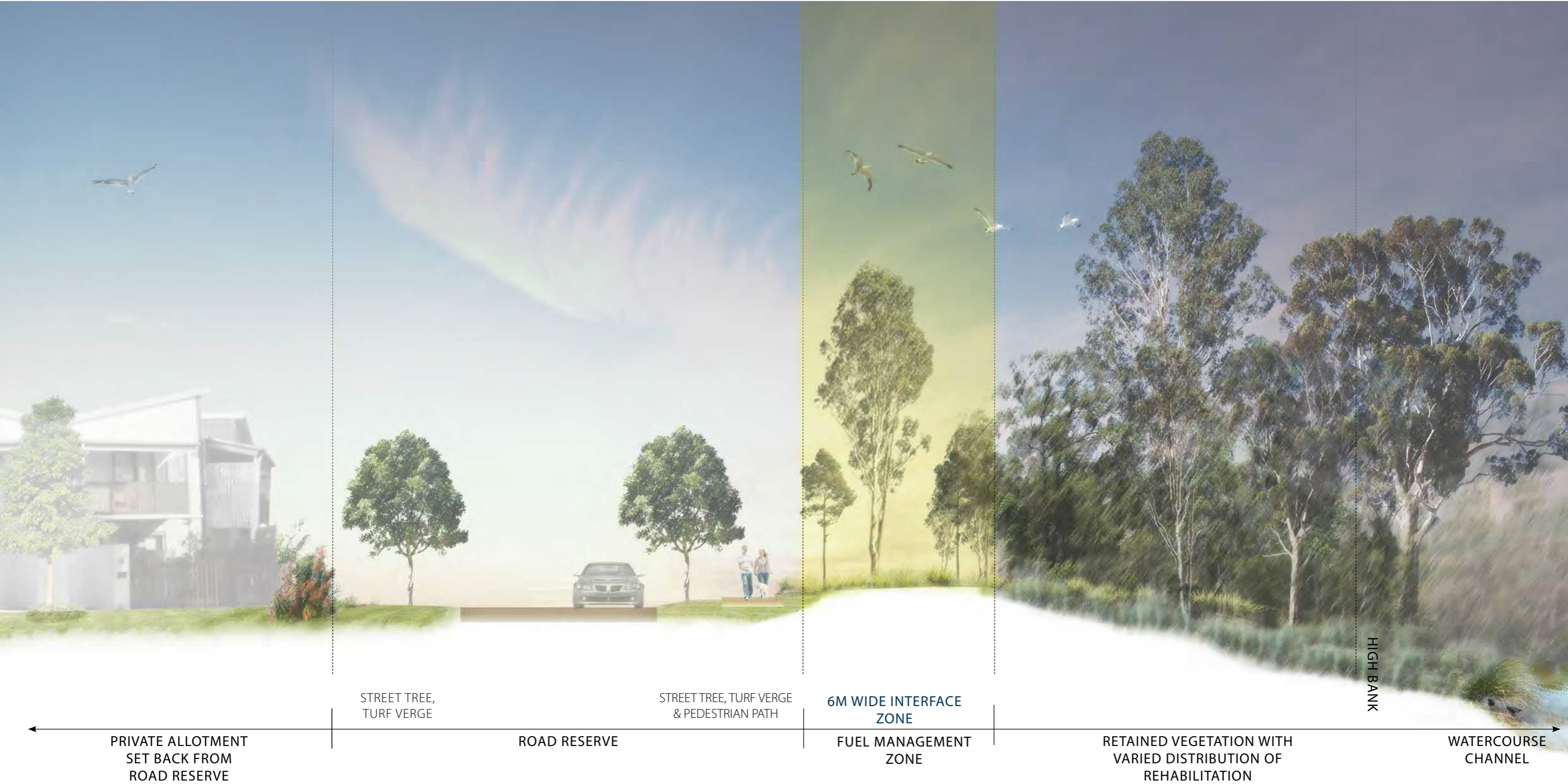
# GREENBANK ROAD - TECHNICAL ECOLOGICAL ASSESSMENT REPORT

## INDICATIVE DEVELOPMENT INTERFACE TO RETAINED VEGETATION - SECTION AA



# GREENBANK ROAD - TECHNICAL ECOLOGICAL ASSESSMENT REPORT

## INDICATIVE DEVELOPMENT INTERFACE TO RETAINED VEGETATION - SECTION BB





**Legend**

Project site boundary

**Significant Biodiversity Values**

**Confirmed Areas of Remnant Vegetation Containing Endangered Regional Ecosystems**

Areas proposed and confirmed through Property Map of Assessable Vegetation application as retaining remnant vegetation of an Endangered Regional Ecosystem type

**Confirmed Waterway Areas**

Areas confirmed through field survey. As retaining features consistent with a watercourse within the extent of the Project Site

**Other Biodiversity Values**

**Low Order Remnant Vegetation**

Of Concern and Least Concern Regional Ecosystem type areas

**Waterway Buffer Areas**

Areas of preferred buffer extent to Project Site watercourses

**Other Drainage Features & Watercourses**

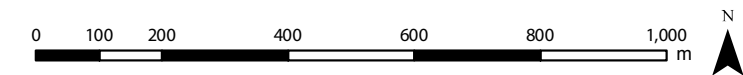
Areas within the site conveying current hydrology flow paths – *varying quality*.

**Project Site Farm Dams**

Locations of artificially created farm dams

**Areas of Juvenile Native Vegetation**

Areas of Project Site retaining varying degrees of native regeneration vegetation



**Greenbank  
Natural Environment Site Strategy  
Site Constraints Plan**

Date | 31/03/2016  
Scale | 1:12,000 @ A3  
Coordinate System | GDA 1994 MGA Zone 56  
Projection | Transverse Mercator  
Client | MIRVAC  
Project | Greenbank  
Address/RPD | Lot 434 on RP845844  
Sources | QLD GIS Layers (QLD Gov. Info Services 2015), Structure Plan (URBIS, 2015)

**Plan 8**

SHG File  
7598 E 08 Site Constraints C

ISSUES:

Issue	Date	Description	Drawn	Checked
A	18/03/2016	Prelim Draft	TC	MS
B	23/03/2016	Client Amendments	TC	KG
C	31/03/2016	Internal Amendments	TC	KG

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