



Annual Compliance Report

10 June 2018 to 9 June 2019 EPBC 2014/7206
Flagstone West Urban Development Project,
Flagstone, Queensland
Peet Flagstone City Pty Ltd
06 September 2019

PEET

Job No: 6779 E

Document control

Document: Annual Compliance Report 10 June 2018 to 9 June 2019 EPBC 2014/7206 (Issue A), prepared by Saunders Havill Group for Peet Flagstone City Pty Ltd, dated 06 September 2019.

Document Issue

Issue	Date	Prepared By	Checked By
A	06 September 2019	HS	JB

Prepared by

© Saunders Havill Group Pty Ltd 2019.

ABN 24 144 972 949

www.saundershavill.com

SHG has prepared this document for the sole use of the Client and for a specific purpose, as expressly stated in the document. No other party should rely on this document without the prior consent of SHG. SHG undertakes no duty, nor accepts any responsibility, to any third party who may rely upon or use this document. This document has been prepared based on the Client's description of their requirements and SHG's experience, having regard to assumptions that SHG can reasonably be expected to make in accordance with sound professional principles. SHG may have also relied upon information provided by the Client and other third parties to prepare this document, some of which may not have been verified. Subject to the above conditions, this document may be transmitted, reproduced or disseminated only in its entirety.

Table of contents

1. Introduction	4
1.1. Approval summary	4
2. Declaration of accuracy	6
3. Description of activities	7
3.1. Stability works	12
3.2. Rehabilitation works	16
3.3. Koala habitat	21
4. EPBC approval conditions compliance table	22
5. Appendices	26

Figures

Figure 1: Project area locality	5
Figure 2: Site aerial	9

Tables

Table 1: EPBC approval conditions compliance table	22
--	----

1. Introduction

The Environmental Management Division of Saunders Havill Group was engaged by Peet Flagstone City Pty Ltd (Peet) to prepare this Annual Compliance Report for the Flagstone West Urban Development Project at Flagstone, Queensland. This report provides an assessment of the project’s compliance with the approval granted under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act) (ref EPBC 2014/7206), and is specifically required by condition 8 of the approval granted on 30 October 2014. The approval was granted by the Australian Government Department of the Environment and is currently administered by the Australian Government Department of the Environment and Energy (the Department).

The project area is located approximately 18 kilometres (km) by road from Logan City (refer to project area locality map at **Figure 1**) and is within the Logan City local government area.

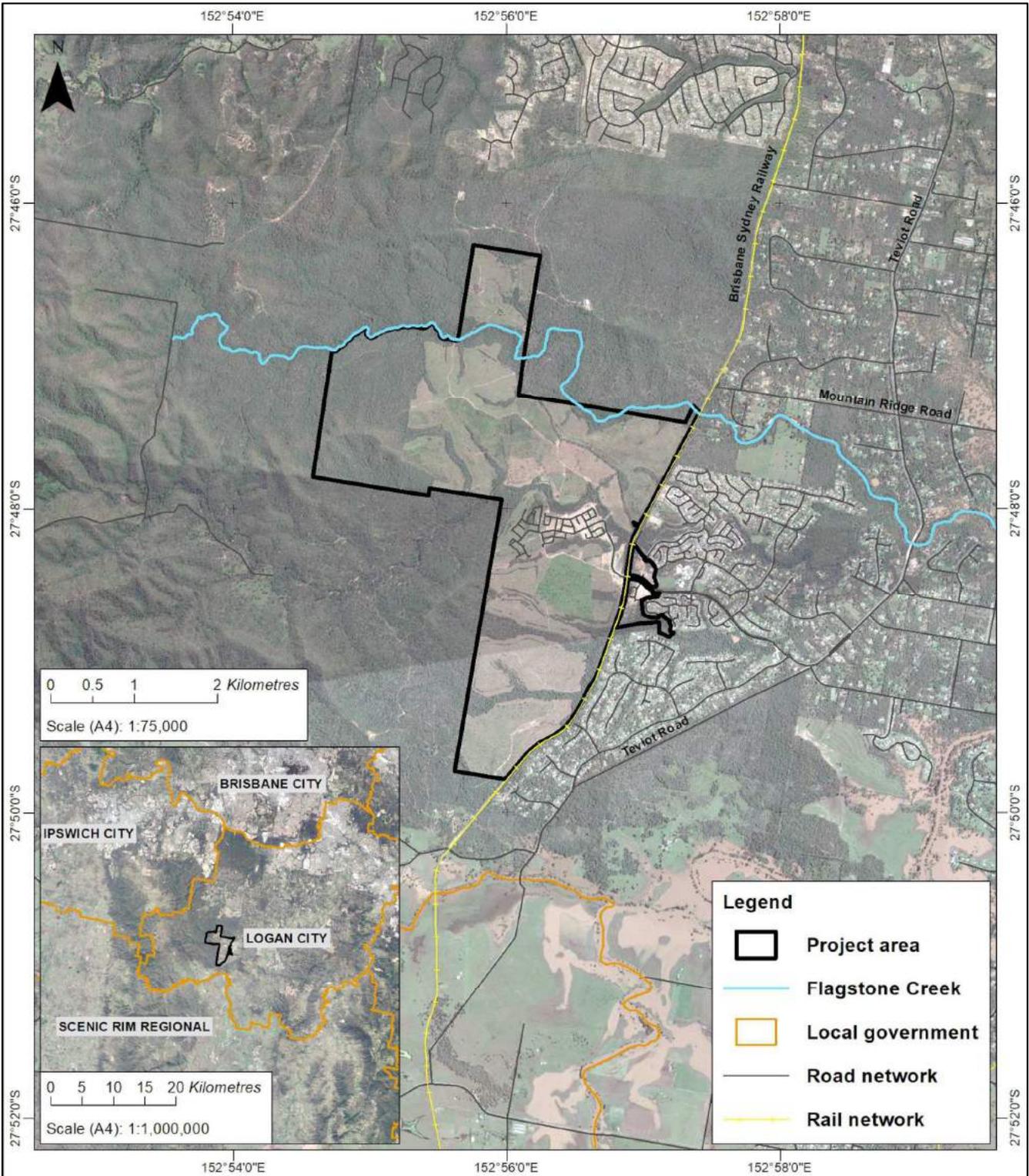
Since the approval was granted, the real property description of the project area has been modified as a consequence of updates to the cadastral database (i.e. property boundaries) administered by the Queensland Government Department of Natural Resources, Mines and Energy (DNRME). These updates effect several parcel boundaries and the Flagstone Creek alignment in the northern portion of the project, however they are considered minor overall and likely reflect ground-truthing work in the area. The area that pertains to the approval now totals approximately 1,258 hectares (ha), which is an increase of 13 ha. Many koala habitat areas for retention about property and creek boundaries and as a result of the DNRME updates to the cadastral database, there has been a net increase to the critical koala habitat area for retention of 1.9 ha. The area of clearing approved under condition 5 is 148 ha and there are nil changes proposed as a consequence of the updates to the cadastral database.

1.1. Approval summary

Department reference	EPBC 2014/7206
Approval holder	Peet Flagstone City Pty Ltd
ACN	151 187 594
Approval date	30 October 2014
Expiry date of approval	31 December 2035
Approved action	To construct a mixed use development (including residential, commercial and community developments and associated infrastructure) on a 1,245.26 ha* site at Flagstone, Queensland
Controlling provision	Approved - listed threatened species and communities (sections 18 & 18A)
Reporting period	10 June 2018 to 9 June 2019
Address	Homestead Drive, Flagstone (and Jimboomba), Queensland 4280
Local government area	Logan City

* The project area is now approximately 1,258 ha as a result of updates to the digital cadastral database administered by DNRME. These updates affected the alignment of property boundaries and Flagstone Creek.

Figure 1: Project area locality



File ref: 6779 E01 Project area locality

Coordinate System: GDA 1994 MGA Zone 56
 Projection: Transverse Mercator Datum: GDA 1994
 Data sources: © State of Queensland (Department of Natural Resources, Mines and Energy) 2019. © State of Queensland (Department of Transport and Main Roads) 2019. Imagery: Google Earth Pro 2017
 © State of Queensland, Includes material © Airbus DS 2013-17, all rights reserved

**Flagstone West Urban Development Project
 EPBC 2014/7206**

**Figure 1 - Project area locality
 Prepared on 28 August 2019**

Prepared by **SH** saunders havill group

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

Murray Saunders

Position

Director

Organisation

Saunders Havill Group (ABN 24 144 972 949)

Date

06 September 2019

3. Description of activities

The Flagstone West Urban Development Project is a masterplan community situated in the Greater Flagstone Priority Development Area. It is estimated 30,000 people will reside in the project area by year 2045, and supporting infrastructure within a 10 km radius will include:

- central business district;
- open space amenities;
- primary school;
- medical amenities;
- shopping and general amenities;
- sport amenities;
- community centre; and
- tertiary education services (e.g. TAFE or university).

In addition, the Brisbane-Sydney Railway dissects part of the site and a passenger train station is planned to service the locality.

During the reporting period, the following activities were under construction or established in the project area (refer photos):

- road infrastructure;
- bridge infrastructure;
- residential land parcels; and
- open space amenities.

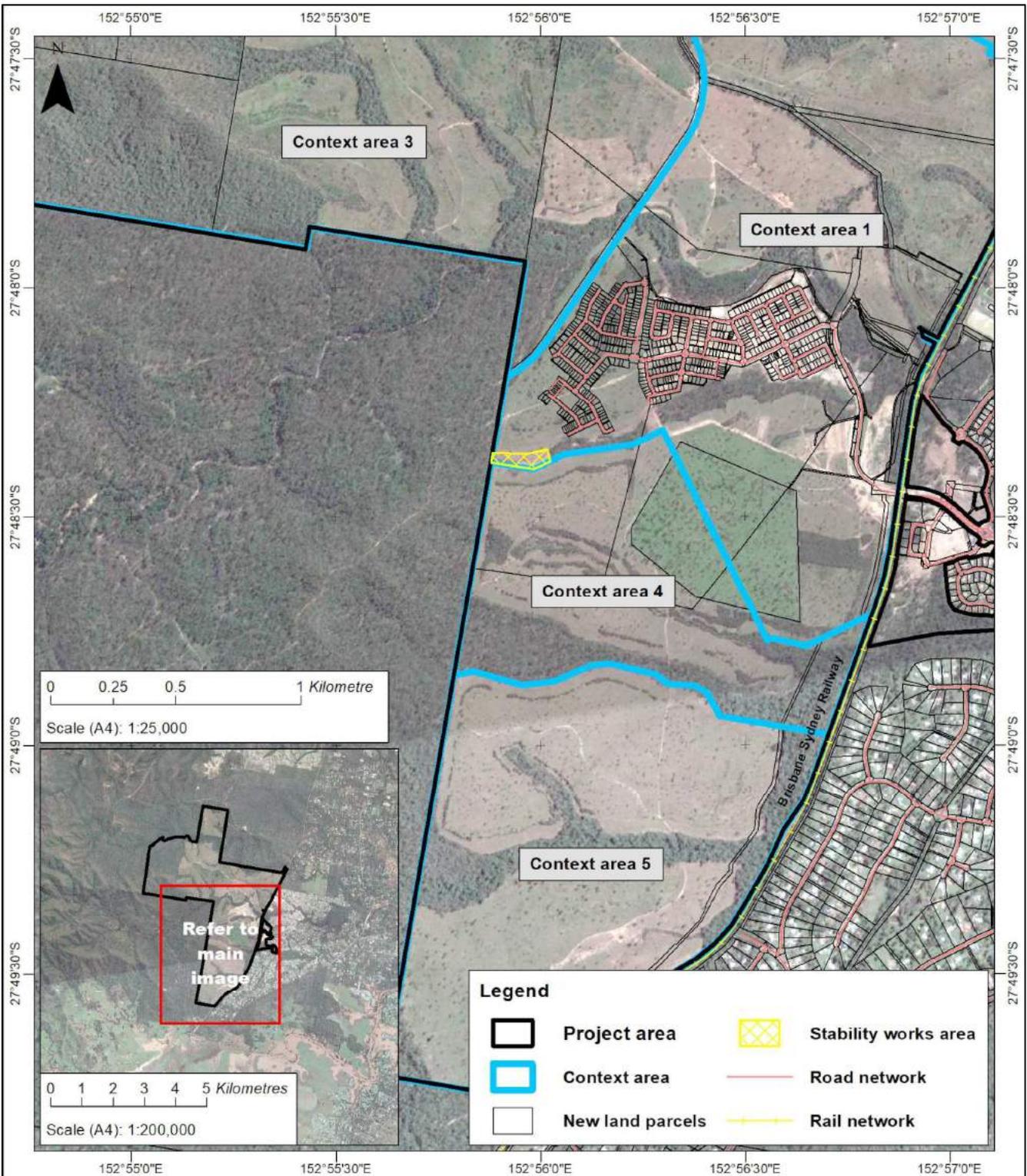
As part of constructing these land uses, earthworks and minor vegetation clearing in context area 1 occurred during the reporting period (refer **Figure 2**). These activities were completed with permits from state and local administering authorities in place.

Other notable events during the third year of activities include:

- Opening of the Adventure Playground on 14 December 2018.
 - Multi-million dollar playground includes flying foxes, slides, swings, in-ground trampolines, and a climbing tower, skybridge and cabins – sitting up to three-storeys high.
 - Parking spaces are available and the playground is accessible to the public.
- Opening of Pirate Ship Park in February 2019 (refer **Photo set 1**).

- Flagstone's first neighbourhood park, offering picnic facilities and an orienteering course for beginners. The pirate ship offers upper and lower decks, stairs, climbing nets, bannister bars and a slide leading to a viewing port, to name a few.
- Development expanded to the west and east of existing development (refer **Photo set 2** and **Photo set 3**):
 - Creation of residential lots, roads and public facilities, including a neighbourhood park.
 - Continued earthworks and construction activities currently being completed and not accessible to the public at this time.
 - Bridge crossing over Sandy Creek tributary has been completed to join the new development area in the east, and rehabilitation works have commenced in association with the creek. No public access is permitted at this time (refer **Photo set 3**).
- Issuing of community grants by Peet Flagstone.
 - These grants support clubs and volunteer organisations to deliver outcomes that benefit the community, and included the following during the reporting period:
 - Flagstone State Community College – Opti-Minds.
 - Flagstone State Community College – Pedal Prix.
 - Flagstone State Primary School – Recycling Program.
 - Flagstone Community Association – Twilight Markets.
 - KK Bodyworx – Fitness Bootcamp.
 - Quota International – Community Art Show.
 - Jimboomba Blue Light Association – Community Disco.
 - Flagstone Community Association – Movie Night.
- The following events occurred during the reporting period with support from Peet Flagstone:
 - Active Family Fun Day.
 - Krank School Holiday Program.
 - YMCA Playgroup and Activities.
 - Skate Titans Event.

Figure 2: Site aerial



File ref: 6779 E02 Stability works

Coordinate System: GDA 1994 MGA Zone 56
 Projection: Transverse Mercator Datum: GDA 1994
 Data sources: © State of Queensland (Department of Natural Resources, Mines and Energy) 2019. © State of Queensland (Department of Transport and Main Roads) 2019. Imagery: Google Earth Pro 2017
 © State of Queensland, Includes material © Airbus DS 2013-17, all rights reserved

Flagstone West Urban Development Project
EPBC 2014/7206
Figure 2 - Stability works
Prepared on 28 August 2019

Prepared by **SH** saunders havill group



Photo set 1: Continued development within the western extent of the site, including a local park.



Photo set 2: Continued earthworks within the western extent of context area 1.



Photo set 3: Continued earthworks within the eastern extent of context area 1; bridge crossing established across Sandy Creek.



Photo 4: Land parcel setbacks from retained vegetation, with bank rehabilitation works and transition area landscape works.



Photo set 5: Transition between retained vegetation associated with the creek and established land parcels.

3.1. Stability works

During November and December 2016, an existing drainage gully in context area 1 required remedial works to address ongoing degradation, stability and integrity issues. The completed remedial works were essential to rectify these issues and undertaken along an approximate 250 metre (m) section of the drainage line inside the impact area approved by the Department. The stability works include the temporary removal of portions of vegetation to enable the remediation of unstable erosion channels. Within the drainage feature this includes the fixing of dispersive soils, the profiling of undercuts and rilling prior to the complete revegetation of the remediation area with native species. Importantly, the stability works do not result in an increase in development footprint or an alteration of environmental and recreational open spaces.

As part of undertaking these stability works, the approval holder liaised with state and local government stakeholders to ensure the required permits and approvals were in place. A copy of the detailed rehabilitation plan for the stability works was included in the Annual Compliance Report for the reporting period 10 June 2016 to 9 June 2017. Photos outlining the current state of these works are presented within this subsection.

Initial stabilisation works were observed, although some were observed to require maintenance. The sediment basin located adjacent to the dog park established during the previous reporting period contained a small amount of vegetation, where damage was observable to the mesh layer (**Photo 6**). Erosion of dispersive soils beneath the matting has occurred where water has likely become trapped following rainfall events (refer **Photo set 7**).

Previously installed logs providing habitat and slowing potential velocity of water flow were observed throughout the creek corridor (refer **Photo set 8**). Natural regeneration of wattle regrowth was also observed along the northern bank of the creek, providing some stability for surface soils during rainfall events and slowing water velocity. Vegetation within Sandy Creek tributary has increased in density since the previous reporting period (**Photo set 9**, **Photo set 10** and **Photo 11**). Some weed removal is required, however, vegetation re-establishment has continued.

During site inspections, it was noted that in-stream matting to provide bank stabilisation particularly within creek bends requires maintenance. It is anticipated that following high rainfall events, water flow has broken through the matting and slowly eroded the dispersive soils (**Photo 12**). This was observed in a minimal number of isolated areas and damage is considered negligible at this stage. Further, some sediment build-up was noted within drainage entry/exit points (**Photo set 13**).

In response to the observed maintenance issues, Peet are liaising with the landscape contractor to rectify the issues.



Photo 6: Existing condition of detention basin.



Photo set 7: Erosion damage to rehabilitation matting within detention basin.



Photo set 8: Habitat features (logs) installed during previous reporting period (left); regrowth vegetation along northern edge of creek (right).



Photo set 9: Rock wall bunding where thick layer of bark has been placed (left); In-stream vegetation present with rocky substrate and surrounded by bushland (right).



Photo set 10: Installed rock substrate within water holding area adjacent to culvert, and surrounding vegetation characteristics.



Photo 11: Weed species regrowth within ground layer adjacent to bridge crossing.



Photo 12: Matting requires attention in sections along Sandy Creek tributary.



Photo set 13: Bund (left) and sediment build-up within drainage area north of Sandy Creek tributary (right).

3.2. Rehabilitation works

An assessment of rehabilitation works was conducted by two Ecologists from Saunders Havill Group. The site visit included assessing maintenance of rehabilitation works and new rehabilitation measures implemented during the reporting period. The following new rehabilitation works were observed:

- Revegetation and bank stabilisation works are evident on the eastern side of the bridge on Flagstonian Drive situated at the entrance to the estate. This has included planting of Lomandra species and installation of rocks where run-off is anticipated to occur and within the gully line (refer **Photo set 14** and **Photo 15**). No specific evidence (e.g. scats or tracks) of fauna utilising the culverts beneath the bridge was noted during the brief inspection. However, it is assumed that fauna usage occurs throughout the site due to the observed presence of larger mammals during field survey. Mammals observed were a single European Hare (*Lepus europaeus*) and Eastern Grey Kangaroo (*Macropus giganteus*). In addition, a number of bird species were noted utilising vegetation associated with the creek.
- Additional and pre-existing fauna management measures were observed along the banks of the creek – consisting largely of the placement of logs. The European Hare was identified proximal to a combination of natural fallen logs and those placed as a result of the project. This area was identified as functioning fauna habitat, where shelter and protection from weather and potential predators was abundant.
- Continued evidence of rehabilitation works along both the southern and northern banks of the creek was noted during site visit. The section of the creek immediately to the west of the bridge was observed to have highly eroded areas along the creek line and banks. Scattered rubbish items were also observed in-stream (refer **Photo set 16**). Regrowth vegetation is sparse proximal to the bridge.
- Rehabilitation efforts further downstream were observed to have become well-established. The density of instream vegetation (*i.e.*, Lomandra species) was noted and a more natural state was reflected (refer **Photos 17-19**).
- Areas within the transition zone between the riparian vegetation and adjacent residential dwellings along the northern creek line was observed to be dominated by mulch. Minimal evidence of natural regeneration was noted, and was potentially attributable to the density of mulch laid reducing the capacity for vegetation shoots to re-establish (refer **Photo 20** and **Photo 21**).
- Bank stabilisation and rehabilitation efforts were mostly observed to be in good condition (**Photo set 22**). Sections within Sandy Creek tributary were observed to have some sediment build-up, which will require attention during the following reporting period (**Photo set 23**).



Photo set 14: Rehabilitation works on eastern side of bridge crossing.



Photo 15: Bank revegetation and installation of larger rock substrate providing habitat features.



Photo set 16: Deposited rubbish proximal to bridge crossing (left); eroded banks from high flows (right).



Photo set 17: Bank stabilisation works and in-stream rehabilitation and stabilisation works.



Photo set 18: Bank stabilisation efforts.



Photo set 19: Rehabilitation works along creek.



Photo 20: Natural vegetation regeneration absent, bark layered quite thickly where Nut Grass and similar flora were observed to be present.



Photo 21: Bank rehabilitation and stabilisation works.



Photo set 22: Bank stabilisation and rehabilitation works.



Photo set 23: Sediment build-up in-stream.

3.3. Koala habitat

The Flagstone City project was deemed a controlled action based on impacts to the vulnerable-listed Koala species. Site surveys completed during the referral process determined that Koalas occur infrequently and at a low density at the project site. This finding is supported by subsequent fauna spotter catcher reports (2016, 2017 and 2018) provided in previous Annual Compliance Reports which showed Koalas were not observed during pre-clearance surveys or during clearing works. For information, a copy of the most recent fauna spotter catcher assessments for this reporting period are included as **Appendix A** to this report. These inspections also failed to locate any Koalas in the active portion of the site during the pre-clearance survey or while clearing works were underway.

4. EPBC approval conditions compliance table

The EPBC approval conditions for the Flagstone West Urban Development Project are replicated in **Table 1** 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 B**.

Table 1: EPBC approval conditions compliance table

Condition number / reference	Condition	Is the project compliant with this condition?	Evidence / comments
1	<p>For the purpose of protecting koala habitat the approval holder must provide the minimum offset payment listed in Appendix 1 of these conditions, for each of the Context Plan areas. Payment must be provided to the Queensland State Government for the entire Context Plan offset payment within 12 months of receiving Context Plan area approval or in accordance with the following sunset dates to each Context Plan area (Appendix 1), whichever is sooner:</p> <ul style="list-style-type: none"> Context Plan Area 1 - by 31 October 2015 Context Plan Area 3 - by 31 October 2029 Context Plan Area 4 - by 31 October 2020 Context Plan Area 5 - by 31 October 2024 	Compliant	<p>The minimum offset payment of \$303, 661.70 for context area 1 was paid to the Queensland State Government on 14 April 2015. In response, Economic Development Queensland (part of the Queensland Government Department of Infrastructure, Local Government and Planning) issued a letter confirming the payment was received. Information on how the offset payment was invested in koala matters was provided in the Annual Compliance Report dated 8 September 2017.</p> <p>No other context areas were approved by the Queensland State Government nor did a sunset date pass during the reporting period. Subsequently, no context area payments were made to the Queensland State Government during the reporting period.</p>
2	Notwithstanding the above, within 15 years of the Commonwealth approval of the action all outstanding financial contributions must be paid to the Queensland State Government.	Not applicable	All financial contributions are payable by 29 October 2029.

Condition number / reference	Condition	Is the project compliant with this condition?	Evidence / comments
3	Within 30 days of payment being made, the approval holder must provide written evidence to the Minister that the offset contribution for each Context Plan area has been paid to the Queensland State Government. Actions must not commence within an approved Context Plan area until the offset contribution has been paid.	Not applicable	During the reporting period an offset payment was not required as work was limited to context area 1 where the payment was made prior to commencement of the action.
4	Within 6 months of each offset payment made to the Queensland State Government, the approval holder must provide the Department written evidence on the actions that have been taken with the offset payment.	Not applicable	During the reporting period, an offset payment was not made nor did the 6 month deadline for a previous payment occur.
5	Clearing of up to a maximum of 148 ha must be within the project area shown in Appendix 1.	Compliant	Clearing within the project area has not exceeded the approved 148 ha. Works for the project commenced in context area 1 which is the least vegetated portion of the site.
6	Within ten days after the commencement of the action, the approval holder must advise the Department in writing of the actual date of commencement.	Compliant	The action commenced on 10 June 2017. A letter stating the action commenced was provided to the Department on 17 June 2016.
7	The approval holder must maintain accurate records substantiating all activities associated with or relevant to the conditions of approval, including measures taken to implement the plans required by this approval, and make them available upon request to the Department or an independent auditor in accordance with section 458 of the EPBC Act, or used to verify compliance with the conditions of approval. Summaries of audits will be posted on the Department's website. The results of audits may also be publicised through the general media.	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.

Condition number / reference	Condition	Is the project compliant with this condition?	Evidence / comments
8	Any potential or suspected non-compliance with these conditions of approval must be reported to the department in writing within 48 hours of the approval holder becoming aware of the potential or suspected non-compliance. Within three months of every 12 month anniversary of the commencement of the action, the approval holder must publish a report on their website addressing compliance with each of the conditions of this approval, including implementation of any plans as specified in the conditions. Documentary evidence providing proof of the date of publication must be provided to the Department at the same time as the compliance report is published.	Compliant	<p>The approval holder and Saunders Havill Group have not become aware of a potential or suspected non-compliance with the conditions during the reporting period.</p> <p>The anniversary of the commencement of the action is 10 June. The annual deadline for publishing the report addressing compliance with each of the conditions of the approval (i.e. this Compliance Report) is 9 September. When this deadline is a non-business day in Brisbane, the next business day is taken to be the deadline. Documentary evidence providing proof of the date of publication will be provided to the Department when the report is published.</p> <p>The Annual Compliance Report for the 12 month period ending 9 June 2018 was published on the Peet website on 10 September 2018 as 9 September 2018 occurred on a weekend. The Department was notified of the report publication and provided with evidence on the 10 September 2018.</p>
9	Upon the direction of the Minister, the approval holder must ensure that an independent audit of compliance with conditions of approval is conducted and a report submitted to the Minister. The independent auditor must be approved by the Minister prior to the commencement of the audit. Audit criteria must be agreed to by the Minister and the audit report must address the criteria to the satisfaction of the Minister.	Not applicable	The Minister has not provided a direction to complete an independent audit of compliance.
10	If the approval holder wishes to carry out any activity otherwise than in accordance with a plan as specified in the conditions, the approval holder must submit to the Department for the Minister's written approval a revised version of that plan. The varied activity	Not applicable	The approval holder has not sought to carry out any activity that is not in accordance with a plan as specified in the conditions.

Condition number / reference	Condition	Is the project compliant with this condition?	Evidence / comments
	shall not commence until the Minister has approved the revised plan, that plan must be implemented in place of the plan originally approved.		
11	If the Minister believes that it is necessary or convenient for the better protection of Koala to do so, the Minister may request that the approval holder make specified revisions to a plan specified in the conditions and submit the revised plan for the Minister's written approval. The approval holder must comply with any such request. The revised approved plan must be implemented. Unless the Minister has approved the revised plan, then the approval holder must continue to implement the plan originally approved, as specified in the conditions.	Not applicable	The approval holder has not received a request from the Minister to revise a plan specified in the conditions.
12	If, at any time after five years from the date of this approval, the approval holder has not commenced the action, then the approval holder must not commence the action without written agreement of the Minister.	Not applicable	The action commenced on 10 June 2016.

5. Appendices

Appendix A

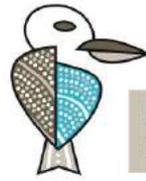
Fauna management and spotter catcher services reports

Appendix B

EPBC approval and conditions granted 30 October 2014

Appendix A

Fauna management and spotter catcher services reports



Biodiversity
AUSTRALIA

Post Clearing Fauna Management Report

Project:

Flagstone School

Client:

SEE Civil

September 2018



Document Status

Version	Purpose	Author	Reviewed By	Approved By	Date
Rev 0.1	DRAFT	Kurtis Kemp	Carla Meers		05/09/2018
Rev 1.0	FINAL	Kurtis Kemp		Carla Meers	07/09/2018

Document Control

Copy No.	Date	Type/Via	Issued to	Name	Purpose
1.	07/09/2018	Electronic	Biodiversity Australia	Clare Fitch	File Copy
2.	07/09/2018	Electronic	SEE Civil	Nicholas Philp	Client Copy

Project Number: FQ3072

Our Document Reference: FQ3072-BFQ-REP-SEECivilFlagstoneSchoolFullPostClrRpt –rev1.0

This document has been prepared to the requirements of the client identified on the cover page and no representation is made to any third party. It may be cited for the purposes of scientific research or other fair use, but it may not be reproduced or distributed to any third party by any physical or electronic means without the express permission of the client for whom it was prepared or Biodiversity Australia Pty Ltd.



Table of Contents

1.0	Introduction	1
1.1.	Background	1
1.2.	Site Location and Description	1
1.3.	Legislation and Permits	1
	Figure 1: Animal interactions for Flagstone School (cleared extent - red area).	2
2.0	Methodology.....	3
2.1.	Vegetation/Habitat Clearing	3
2.2.	General Provisions	3
3.0	Results.....	5
3.1.	Fauna Interactions.....	7
	Table 1: Fauna interactions recorded during the clearing event.	7
	Photo Plate 1: Lace Monitor, captured and released into adjacent habitat.	8
	Photo Plate 2: Sugar Glider, captured and nocturnally released into adjacent habitat.	8
3.1.	Hollow Bearing Trees Removed.....	9
4.0	Summary.....	9
5.0	References.....	10



1.0 Introduction

1.1. Background

Biodiversity Australia Pty Ltd was commissioned by SEE Civil (“the client”) to produce a Post Clearing Fauna Management Report as part of the clearing works at Flagstone School (“the site”). Approximately 13 hectares was cleared to allow construction of a new school.

1.2. Site Location and Description

The clearing site is situated over Lot 908 (RP819216) and Lot 911 (RP857870), located off Homestead Drive, Jimboomba. This site is located within the developing Logan district, with non-remnant vegetation to the north and west, Flagstone City housing development to the east, and a vegetated ephemeral creek line to the south.

Vegetation cleared was dominated by large mature *Eucalyptus* and *Corymbia* species, as well as she-oak (*Casuarina* sp.). The midstory was comprised predominantly of red ash (*Alphitonia excelsa*), brush box (*Lophostemon* sp.), poison peach (*Trema tormentosa*), and various wattles. Ground cover consisted of dense leaf-litter, grasses and rushes, including rough saw-sedge (*Gahnia aspera*), blue flax-lily (*Dianella caerulea*), and spiny-headed mat-rush (*Lomandra longifolia*).

1.3. Legislation and Permits

Relevant legislation applicable to land clearing and vegetation removal is governed by Local, State and Federal authorities. This includes:

- *Environmental Protection and Biodiversity Conservation Act 1999 (EPBC Act)*;
- *Nature Conservation Act 1992 (NC Act)* and associated regulations;
- *Environmental Protection Act 1994*;
- *Animal Care and Protection Act 2011*; and
- *Nature Conservation (Koala) Conservation Plan 2017 (Koala Plan)*.

Biodiversity Australia also holds a current Department of Environment and Heritage Protection (EHP) Rehabilitation Permit (Permit No. WIRP16958416), allowing for the handling and relocation of native fauna and a Scientific users registration enabling the use of animals for scientific purpose.



Figure 1: Animal interactions recorded at Flagstone School



2.0 Methodology

2.1. Vegetation/Habitat Clearing

Vegetation clearing was undertaken over a period of 4 days, Tuesday 21st August, Wednesday 22nd of August, Wednesday 29th of August and Friday 31st August 2018. One on-site fauna/koala spotter was present to monitor and manage all fauna interactions during the first day of under brushing, and an additional koala spotter was present thereafter for clearing of larger trees that may inhabit Koalas as per the *Nature Conservation (Koala) Conservation Plan 2017* (Koala Plan). An excavator was primarily used for clearing works, which allowed for the thorough examination of all habitat features once they were felled and/or moved. Vegetation clearing was undertaken in accordance with Biodiversity Australia's internal Fauna Management Procedures.

2.2. General Provisions

- All potential habitat features were flagged where possible prior to felling to enable positive identification to machinery operators.
- It was deduced that the most effective method to manage clearing of habitat trees was to clear them one at a time with a Fauna Spotter present conducting pre and post checks of each tree that was felled.
- Any branches and debris on the ground were checked pre and post clearing by the Fauna Spotter.
- All decorticating bark was checked/removed by spotter before felling if possible, or inspected after felling.
- When fauna was detected, works were immediately halted in that section of the site to allow the fauna spotter safe ingress to capture the fauna

2.2.1. Directional Clearing

Capturing all fauna present in the clearing area was the fauna spotters' priority for the works. Where applicable to minimise fauna interactions (especially cryptic fauna) and incidents such as fauna mortality the Fauna Spotter implemented directional clearing, allowing fauna to move easily into surrounding bushland.

2.2.2. Hollow-bearing Trees

With the assistance of the operator, the fauna spotter ensured enough disturbance prior to felling to encourage mature nesting birds and ringtail possums to disperse away from the tree. Where possible, trees supporting arboreal hollows were felled in a manner where the least amount of disturbance was sustained as possible. Once felled, each tree was thoroughly inspected by the Fauna Spotter for the presence of any fauna.



Nocturnal fauna was captured and held in clean calico catch bags in a cool quiet location away from clearing works until after dark when they were released by the Fauna Spotter into a nearby area which supported suitable habitat. Juvenile birds removed from nest hollows will be transported to a wildlife carer to be raised.

2.2.3. Notable Dense Vegetation

Where possible, dense vegetation was removed in a manner where the least amount of disturbance was sustained by the foliage and once grounded was thoroughly checked by the Fauna Spotter.

2.2.4. Bird Nests

Nests were inspected prior to vegetation disturbance wherever possible. The Fauna Spotter directed the clearing operator to fell relevant trees in such a manner to cause minimal disturbance to the nests. Once each tree was felled, as soon as it was safe to do so, the Fauna Spotter inspected the nest.

2.2.5. Termitaria

Trees supporting active mounds were felled in a manner where the termite mounds would not directly impact the ground or another object and sustain damage. Once felled the Fauna Spotter carefully broke open the mound to inspect the nesting/shelter chamber for any fauna. Any terrestrial mounds were excavated by hand where possible or broken open gently by machinery and investigated by the fauna spotter before proceeding.

2.2.6. Ground Cover

Thick ground cover, leaf litter, naturally felled trees, anthropogenic and construction debris stockpiles were inspected by a fauna spotter immediately prior to their removal or modification, so as to avoid fauna being injured as a result of stockpile movement.

2.2.7. Decorticating Bark

Loose bark was removed by the Fauna Spotter to a practical height before tree felling, and the remainder removed once the tree has been felled.

2.2.8. Other Fauna Indicators

The Fauna Spotter monitored the site closely whilst clearing was undertaken, ensuring no larger fauna were present and dispersing any towards suitable habitat prior to commencement of works.



3.0 Results

Fauna interactions and the approximate area cleared of vegetation is illustrated in Figure 1, below:

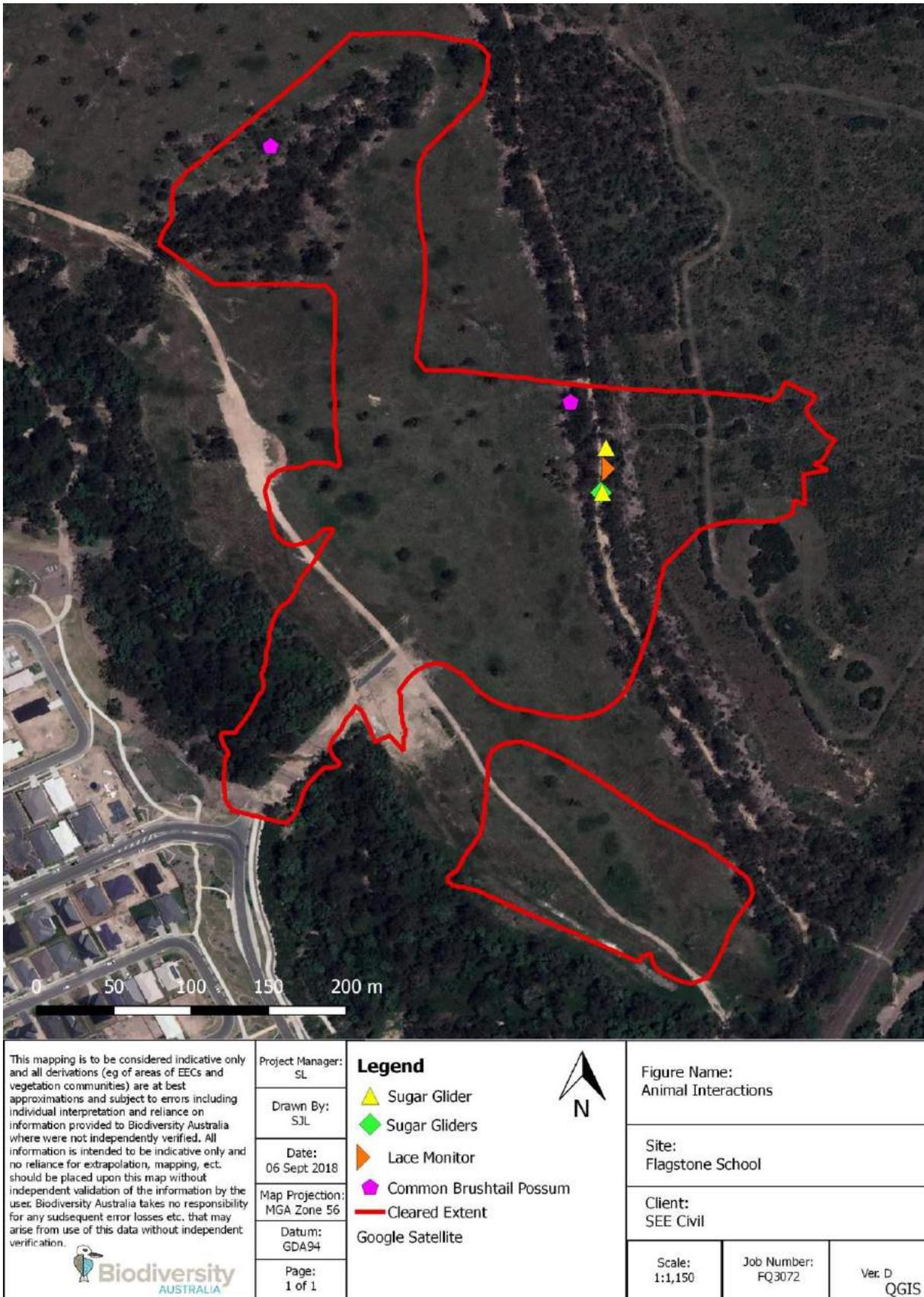


Figure 2: Animal interactions recorded at Flagstone School Site



Fauna Interactions

Due to the presence of habitat features within the site extent, the management of Koalas and other arboreal fauna were of primary concern to the fauna spotter during clearing works.

Due to the active vigilance of the on-site fauna spotter, a total of eight fauna interactions were successfully managed over the four day clearing period (**Photo Plate 1 & 2**).

Table 1 identifies the species, number and details of all fauna caught on site.

Table 1: Fauna interactions recorded during the clearing event.

Common Name	Total Number	Capture & Release	Self-dispersed	Fatal Field Injury	Euthanised in Field	Taken to Vet / Carer	†NC Act Status
Mammals							
Sugar Glider <i>Petaurus breviceps</i>	5	2		3			C
Common Brushtail Possum <i>Trichosurus vulpecula</i>	2	2					C
Reptiles							
Lace Monitor <i>Varanus varius</i>	1	1					C
Total	8	5		3			
†Nature Conservation Act 1992 Value Codes: Conservation Dependent (CD), Critically Endangered (CE), Endangered (E), Vulnerable (V), Near Threatened (NT), Least Concern (C), or Introduced but Naturalised (Y).							

All fauna released were in optimal health. One family of four gliders were present within one hollow of a large stag. All care was taken and the excavator operator followed the fauna spotter's directions during felling, however three gliders were fatally injured on impact.



Photo Plate 1: Lace Monitor, captured and released into adjacent habitat.



Photo Plate 2: Sugar Glider, captured and nocturnally released into adjacent habitat.



3.1. Hollow Bearing Trees Removed

The site specific Fauna Management Plan states that offsets are required where there is loss of habitat as a result of clearing activities, therefore, all hollows removed during clearing were recorded. A total of 17 trees containing 27 hollows were removed during clearing. These hollows provided potential suitable habitat for fauna such as micro bats, small and large parrots, and arboreal mammals such as possums, gliders, and phascogales.

4.0 Summary

Vegetation clearing at Flagstone School site was undertaken over a 4 day period between Tuesday 21st of August and Friday 31st of August 2018. During clearing works, one to two on-site fauna/koala spotters were required to monitor and manage all fauna interactions. Due to the constant fauna management across the site:

- 5 interactions resulted in successful capture and subsequent release; and
- 3 interactions resulted in injury and subsequent death

All released individuals were in optimal health and were released outside of the clearing area into suitable habitat located off Parkside Drive, south of Sandy Creek. A total of 17 trees containing 27 hollows were removed during clearing activities.



5.0 References

- Cogger, H. G. (2014). *Reptiles and Amphibians of Australia* (7th ed.). Collingwood, Australia: CSIRO Publishing.
- Environmental Protection Agency (2001). *Key to Eucalypts of Greater Brisbane*. Queensland Herbarium, Brisbane.
- Environmental Protection Agency (2006). *Nature Conservation (Koala) Conservation Plan 2017*. Queensland Government, Brisbane.
- Leiper, G., Glazebrook, J., Cox, D. & Rathie, K. (2008). *Mangroves to Mountains* (revised ed.). Queensland, Australia: Logan River Branch – Society for Growing Australian Plants (Queensland Region) Inc.
- Morcombe, M. (2003). *Field Guide to Australian Birds* (Second Edition: Revised and Updated). Brisbane, Australia: Steve Parish Publishing Pty Ltd.
- Quantum GIS Development Team (2016). *Quantum GIS Geographic Information System*. Open Source Geospatial Foundation Project. <http://qgis.osgeo.org>
- Queensland Museum. (2007). *Wildlife of Greater Brisbane: A Queensland Museum Wild Guide* (2nd ed.). South Brisbane, Australia: Queensland Museum.
- Van Dyck, S., Gynther, I. and Baker, A. (2013). *Field Companion to the Mammals of Australia*. Brisbane, Australia: New Holland Publishers.
- Van Dyck, S. and Strahan, R. (2008). *The Mammals of Australia*. Sydney Australia: New Holland Publishers.

1 November 2018

SEE Civil
Attention: Nicholas Philp

Delivery via: Email <nicholas.philp@seecivil.com.au>

ABN 81 127 154 787

Building D, Level 2A /
19 Harbour Village Parade
Coomera QLD 4209
PO Box 721, Upper Coomera,
QLD 4209

Phone 1300 319 954

info@biodiversityaust.com.au

www.biodiversityaust.com.au

File Reference: FQ3072-BFQ-REP-SEECivilFlagstoneSchoolSummaryPostClrRpt-rev1.0

RE: FQ3072 – Flagstone School – Flagstonian Drive, Undullah

Dear Nick,

The following is a summary of the Post Clearing Survey conducted at Flagstonian Drive, Undullah. This includes: a general site description, licensing and permit requirements, methodologies, results, and a summary of the clearing works.

1.0 SITE DESCRIPTION

This site incorporated Lot 906 (RP819216), an open eucalypt woodland in a suburban area. This area was cleared to allow for the construction of a school.

The vegetation within the section near Trailblazer Drive at Sandy creek was cleared on the 10th of September. It was dominated by large mature *Eucalyptus* and *Corymbia* and *Casuarina* species. The midstorey was comprised predominantly of red ash (*Alphitonia excelsa*), brush box (*Lophostemon confertus*), poison peach (*Trema tormentosa*), and various wattles (*Acacia* spp). Ground cover consisted of dense leaf-litter, grasses and rushes, including rough saw-sedge (*Gahnia aspera*), blue flax-lily (*Dianella caerulea*), and spiny-headed mat-rush (*Lomandra longifolia*).

Clearing occurred on the western border of the Flagstone Residential development on the 4th and the 30th of October. The clearing extent was comprised of a mixed mosaic of regrowth *Eucalyptus* and *Corymbia* species, including but not limited to, spotted gum (*C. citriodora* subsp. *variegata*), Moreton Bay ash (*C. tessellaris*) and narrow-leaved ironbark (*E. crebra*). Native wattles (*Acacia leiocalyx*), soap trees (*Alphitonia excelsa*), and introduced Lantana (*Lantana camara*) dominated the mid-storey. A mix of native and weedy species created a dense undergrowth including native kangaroo grass (*Themeda triandra*), blue flax-lily (*Dianella caerulea*), cobblers' pegs (*Bidens pilosa*), balloon cotton bush (*Gomphocarpus physocarpus*) and blue billygoat weed (*Ageratum houstonianum*).

2.0 LEGISLATION AND PERMITS

Relevant legislation applicable to land clearing and vegetation removal is governed by Local, State and Federal authorities. Biodiversity Australia (hereafter referred to as 'Bio Aus') also holds a current Department of Environment and Heritage Protection (EHP) Rehabilitation Permit (Permit No. WIRP16958416), allowing for the handling and relocation of native fauna and a Scientific users registration enabling the use of animals for scientific purpose.

3.0 METHODOLOGIES

Vegetation clearing was undertaken in accordance with Bio Aus' internal Fauna Management Procedures. The vegetation was removed by a professional operator working in conjunction with a fauna manager, which adhered to all relevant legislation and permits. The fauna manager conducted an assessment of the vegetation immediately prior to the commencement of clearing to assess the vegetation for the presence of arboreal mammals and other fauna, as well as immediately after the trees have been felled.

4.0 RESULTS

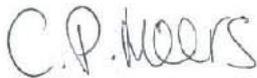
One on-site fauna spotter was present to monitor and manage all fauna interactions over three separate days of clearing which occurred on the 10th of September, and the 4th and 30th of October, 2018. Once felled and safe to do so, the vegetation was thoroughly inspected for the presence of hidden fauna. Under brushing and removal of lantana was monitored for reptile movement, small bird nests and large hidden fauna. Each hollow was inspected thoroughly and bark was removed to check for arboreal reptiles. All branches were also thoroughly inspected for arboreal snake and frog presence, as their cryptic nature and highly useful camouflaged colouring requires close inspection to enable detection. Due to constant successful fauna management onsite no fauna interactions were made on this day of clearing.

5.0 SUMMARY

Clearing works undertaken at Flagstonian Drive, Undullah, were performed over three separate days which occurred on the 10th of September, the 4th and 30th of October, 2018. During clearing works, one on-site fauna spotter was required to monitor and manage all fauna interactions. Due to the constant fauna management across the site, no animal interactions were encountered.

Yours sincerely,

Biodiversity Australia



Carla Meers

Fauna Operations Manager
Fauna Management Division

Appendix B

EPBC approval and conditions granted
30 October 2014



Approval

Flagstone West Urban Development Project, QLD (EPBC 2014/7206)

This decision is made under sections 130(1) and 133 of the *Environment Protection and Biodiversity Conservation Act 1999*.

Proposed action

person to whom the approval is granted Peet Flagstone City Pty Ltd

proponent's ACN ACN: 151187594

proposed action To construct a mixed use development (including residential, commercial and community developments and associated infrastructure) on a 1,245.26 ha site at Flagstone, Queensland [See EPBC Act referral 2014/7206]

Approval decision

Controlling Provision	Decision
Listed threatened species and communities (sections 18 & 18A)	Approved

conditions of approval

This approval is subject to the conditions specified below.

expiry date of approval

This approval has effect until 31 December 2035

Decision-maker

name and position Deb Callister
Queensland and Sea Dumping Assessment Branch

signature

date of decision 30 October 2014

Conditions attached to the approval

Conditions
Offsets <ol style="list-style-type: none">1. For the purpose of protecting koala habitat the approval holder must provide the minimum offset payment listed in Appendix 1 of these conditions, for each of the Context Plan areas. Payment must be provided to the Queensland State Government for the entire Context Plan offset payment within 12 months of receiving Context Plan area approval or in accordance with the following sunset dates to each Context Plan area (Appendix 1), whichever is sooner:<ul style="list-style-type: none">• Context Plan Area 1 – by 31 October 2015• Context Plan Area 3 – by 31 October 2029• Context Plan Area 4 – by 31 October 2020• Context Plan Area 5 – by 31 October 20242. Notwithstanding the above, within 15 years of the Commonwealth approval of the action all outstanding financial contributions must be paid to the Queensland State Government.3. Within 30 days of payment being made, the approval holder must provide written evidence to the Minister that the offset contribution for each Context Plan area has been paid to the Queensland State Government. Actions must not commence within an approved Context Plan area until the offset contribution has been paid.4. Within 6 months of each offset payment made to the Queensland State Government, the approval holder must provide the Department written evidence on the actions that have been taken with the offset payment.
Clearing <ol style="list-style-type: none">5. Clearing of up to a maximum of 148 ha must be within the project area shown in Appendix 1.
Standard Conditions <ol style="list-style-type: none">6. Within ten days after the commencement of the action, the approval holder must advise the Department in writing of the actual date of commencement.7. The approval holder must maintain accurate records substantiating all activities associated with or relevant to the conditions of approval, including measures taken to implement the plans required by this approval, and make them available upon request to the Department. Such records may be subject to audit by the Department or an independent auditor in accordance with section 458 of the EPBC Act, or used to verify compliance with the conditions of approval. Summaries of audits will be posted on the Department's website. The results of audits may also be publicised through the general media.8. Any potential or suspected non-compliance with these conditions of approval must be reported to the Department in writing within 48 hours of the approval holder becoming aware of the potential or suspected non-compliance. Within three months of every 12 month anniversary of the commencement of the action, the approval holder must publish a report on their website addressing compliance with each of the conditions of this approval. Documentary evidence providing proof of the date of publication must be provided to the Department at the same time as the compliance report is published. The compliance report must remain on the website for the life of the approval.9. Upon the direction of the Minister, the approval holder must ensure that an independent audit of compliance with the conditions of approval is conducted and a report submitted to

<p>the Minister. The independent auditor must be approved by the Minister prior to the commencement of the audit. Audit criteria must be agreed to by the Minister and the audit report must address the criteria to the satisfaction of the Minister.</p>
<p>10. If the approval holder wishes to carry out any activity otherwise than in accordance with a plan, the approval holder must submit to the Department for the Minister's written approval a revised version of that plan. The varied activity shall not commence until the Minister has approved the varied plan in writing. If the Minister approves the revised plan, that plan must be implemented in place of the plan originally approved.</p>
<p>11. If the Minister believes that it is necessary or convenient for the better protection of the listed koala to do so, the Minister may request that the approval holder make specified revisions and submit the revised plan for the Minister's written approval. The approval holder must comply with any such request. The revised approved plan must be implemented. Unless the Minister has approved the revised plan, then the approval holder must continue to implement the plan originally approved, as specified in the conditions.</p>
<p>12. If, at any time after five years from the date of this approval, the approval holder has not commenced the action, then the approval holder must not commence the action without the written agreement of the Minister.</p>

Definitions

Approval holder: means the person to whom the approval is granted.

Clearing: means the cutting down, felling, thinning, logging, removing, killing, destroying, poisoning, ringbarking, uprooting or burning of native vegetation.

Commencement of the action: means any works involved in the construction phase of the project, including **clearing** vegetation, the erection of any onsite temporary structures and the use of heavy duty equipment for the purpose of breaking the ground for buildings or infrastructure. This excludes the erection of signage, fences, barriers or bunting for the purposes of excluding areas containing listed threatened species.

Context Plan area: means the area defined by the proponent for development (refer to Appendix 1 for map)

Department: the Australian Government Department responsible for the *Environment Protection and Biodiversity Conservation Act 1999*.

EPBC Act: means the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*.

EPBC Act Offsets Policy: means the *Environment Protection and Biodiversity Conservation Act 1999 environmental offsets policy* (October 2012) or any subsequent revisions.

Koala food trees: means species of tree whose leaves are consumed by koalas. See lists of known koala food trees prepared by state and local government and non-government organisations. Note that food trees may vary spatially and temporally and information specific to the local area is likely to be most accurate.

Koala habitat: means areas of vegetation containing **Koala food trees**.

Listed Koala: Koala (*Phascolarctos cinereus* - combined populations of Queensland, New South Wales and the Australian Capital Territory) listed as vulnerable under the **EPBC Act**.

Minister: is the Minister administering the *Environment Protection and Biodiversity Conservation Act 1999* and includes a delegate of the **Minister**.

Project area: area defined as Flagstone West Boundary on map at Appendix 1.

Queensland State Government: means the relevant Queensland State Government Department responsible for administering the offset.

Appendix 1 Map of Context Plan areas 1, 3, 4 & 5 and related offset payments

