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Mark Cleveland
Development Manager
Frasers Property Australia
Level 2, 1C Homebush Bay Drive
Rhodes NSW 2138

Ref/Job No: **18SYD-9618**

22 March 2019

Dear Mark,

Re: OEH Submission to Eastern Creek Business Hub SSD 5175 Modification 4 - Biodiversity Impacts

Eco Logical Australia (ELA) were engaged by Frasers Property Australia to determine whether terrestrial biodiversity impacts associated with Modification 4 are different from the approved plans for the Eastern Creek Business Hub (ECBH).

The proposed modification included:

- Relocated road alignment and construct roundabout
- Relocate overland stormwater channel
- Delete bioretention basin so that stormwater flows to a single basin east of the gas easement

ELA described the differences in a report dated 26 September 2018. The Office of Environment and Heritage (OEH) provided comment on the modification by way of submission to the Department of Planning and Environment (DoPE) on 29 November 2018. The following provides a response to the OEH submission in terms of potential additional environmental impacts in relation to biodiversity.

Biodiversity 1.

OEH required clarification on whether the proposed changes would impact on an offset area.

ELA response: It should be first clarified that the Eastern Conservation Area (ECA) is not the approved offset for ECBH. This misinterpretation is potentially causing the modification to be assessed inappropriately. The Chandos West Biobank site was used to offset all the impacts resulting from ECBH, where 46.3 credits have been retired.

See below, relevant **Sections 6.3.1** and **6.3.3** from the original approved State Significant Development – Ecological Assessment (ELA 2012), which provide context in regard to the Eastern Conservation Area. It is also noted that, as conditioned, a Vegetation Management Plan (VMP) has been prepared and approved for the ECA under both State and Federal legislation.

6.3 FINAL OFFSET PACKAGE PROPOSED

6.3.1 Retirement of ecosystem credits

The preferred offset option to mitigate and counterbalance the loss of 1.93 ha of existing GB-FRG grassy woodland is to retire 46.3 ecosystem credits from the Chandos West Biobank Site (Biobank Site 70), which is currently owned and managed by Western Sydney Parklands Trust (WSPT) and identified in CHANDOS West Biobank Site (See Figure 19). This offsetting option would meet the requirements of a Tier 2 Offset Outcome.

6.3.3 Additional site specific measures

Whilst not included as part of this offset package, WSPT also intend to create a Biobank site adjacent to the impact area in the future, within the eastern portion of the subject site. Ideally, the credits created at the proposed Eastern Creek Biobank site would be utilised in this offset package, however when considered against the timeframes for this proposed development (likely to spread over 20 years) it has been considered as a more expedient outcome to retire credits already in the ownership of WSPT until such times as the proposed Eastern Creek Biobank site can come online. It is envisaged that the proposed Eastern Creek Biobank site will be made up as provided in **Table 13**.

Table 13: Area of proposed Biodiversity Offset Area and potential vegetation communities restored

VEGETATION TYPE	AREA (ha)
Grey Box - Forest Red Gum grassy woodland	3.24
Forest Red Gum - Rough-barked Apple grassy woodland	1.35
Revegetation – Woodland	9.25
Revegetation – DNG	1.85
Revegetation – Wetland	1.42
Total	**17.11**

Additionally, as per **Biodiversity 1,** OEH have noted that previous mapping was not clear in its intention/description of change to impacts.

<u>Stormwater Channel Redesign</u>

In response to the fact that the proposed modification involved minor additional impacts to vegetation within the ECA, being 0.002 hectare loss of Alluvial Woodland, Frasers Property Australia have redesigned the stormwater channel batters to remove said impact. This redesign means that the Modification now only involves a *reduction* in impacts to Shale Plains Woodland (SPW).

As requested, **Figures 1 and 2** below have been prepared to provide greater clarity around the change in impacts and clearly depict the updated design. Further, **Appendix 2** now provides previous mapping to give context to the current changes and proposed reduced impacts.

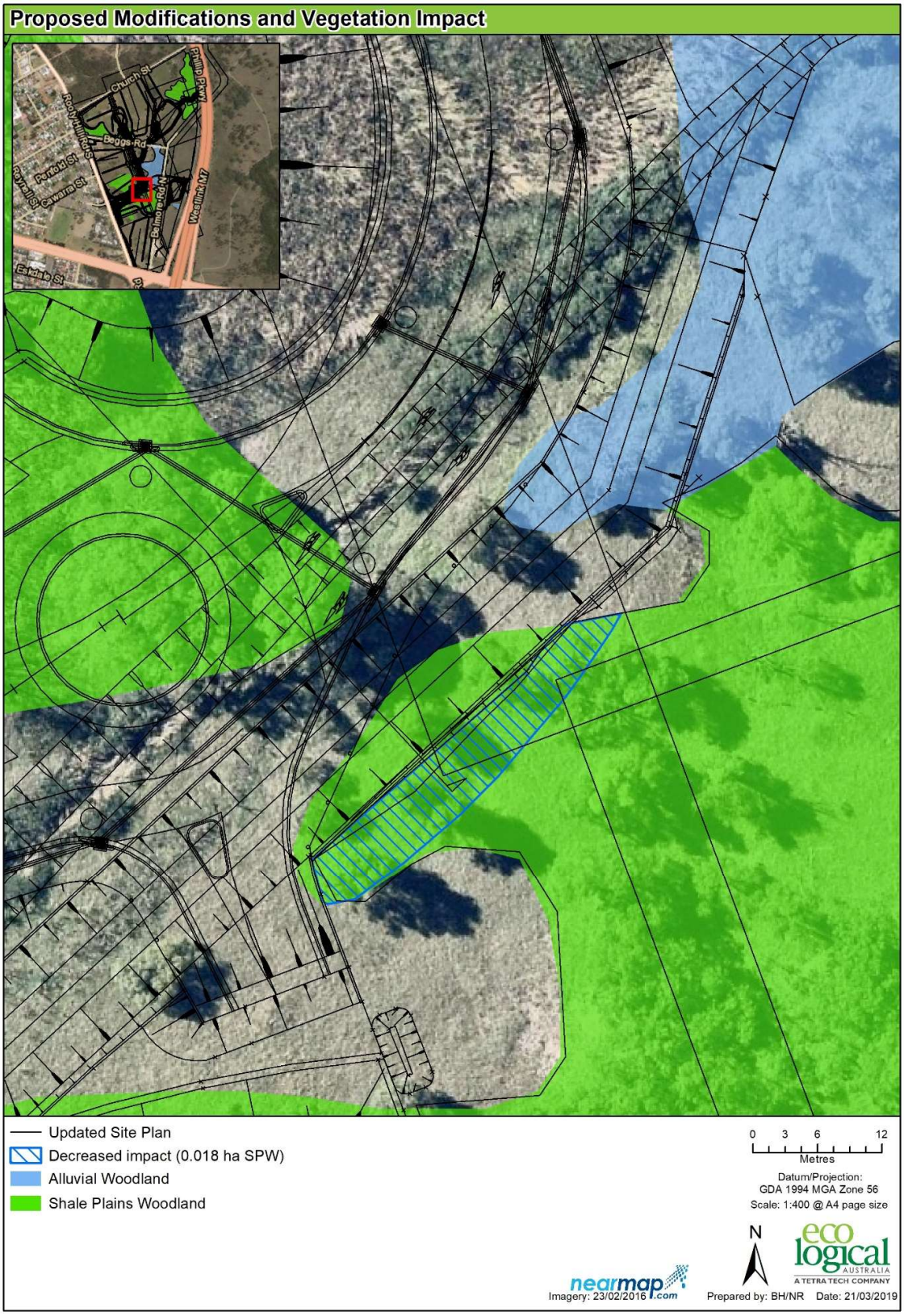


Figure 1 – Provides clarity around the decreased impact to Shale Plains Woodland (SPW) and the removal of any impacts on Alluvial Woodland (AW), providing decrease in impacts to native vegetation.

Figure 2 – As requested, provides context of the changes in relation to the ECA and the proposed VMP works.

Biodiversity 2.

With respect to (1) above the relevance of the proposed ECA and Offsets are relevant here also. While there are proposed changes to the holistic delivery of the overland flow channel and in turn changes to the proposed area of DNG restoration to occur, these area changes are minor in nature and do not form any part of the projects "offset" having always been marked as a "potential future Biobank".

We have assessed the approved drainage channel area (as per SSD report) vs the current Modification 4 design:

- Approved SSD Report design = 0.39 ha
- Modification 4 design = 0.32 ha

The swale is located on land that was approved for development. Therefore, change to the swale design does not increase or decrease impacts to biodiversity. The consequence is a slight decrease (0.07 ha) of swale area to be rehabilitated with native grasses in Lot 1. From a holistic ecological perspective this change is considered insignificant.

Biodiversity 3.

Retirement of Chandos West credits attached at **Appendix 1**

Conclusion

Given the *reduction* in impact to native vegetation as a result of greater detailed design; and the clarification that the area(s) in question (being the ECA) are not part of the offset for the project, we are of the belief the modification is a suitable ecological outcome in keeping with that which was originally approved.

Yours sincerely,

Brendan Dowd
Senior Approvals Consultant
Eco Logical Australia Pty Ltd

Appendix 1 – Chandos West Credit retirement report

BioBanking

BioBanking Information Management System

Credit retirement report

Effective date:	28-June-2018
Transaction number:	201806-RT-299
Credit owners' details	
Credit owner ID:	69
Name of credit holder:	Western Sydney Parklands Trust
Other owner(s):	
No other owners	
Reason for retirement:	Retirement for EPBC Act conditions EPBC 2012/6617

NSW GOVERNMENT | Office of Environment & Heritage

Key to vegetation formations

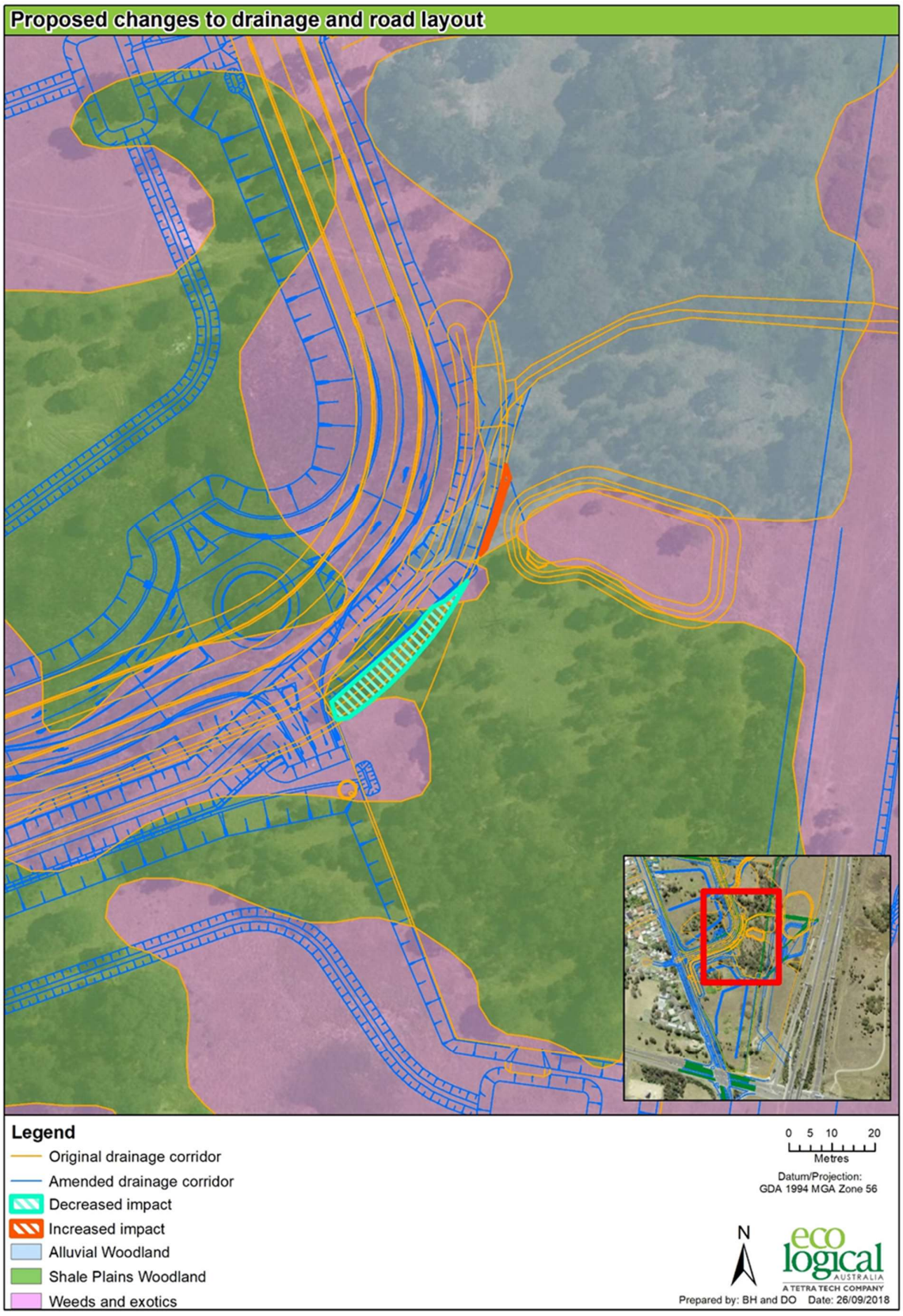
Code	Vegetation formation
ALP	Alpine complex
ASA	Arid shrublands (Acacia)
ASC	Arid shrublands (Chenopod)
DSG	Dry sclerophyll forests (shrub/grass)
DSS	Dry sclerophyll forests (shrubby)
FRW	Forested wetlands
FWW	Freshwater wetlands
GLD	Grasslands
GRW	Grassy woodlands
HLD	Heathlands
MES	Miscellaneous ecosystems
RFT	Rainforests
SAW	Saline wetlands
SWG	Semi-arid woodlands (grassy)
SWS	Semi-arid woodlands (shrubby)
WSG	Wet sclerophyll forests (grassy)
WSS	Wet sclerophyll forests (shrubby)

The credit register provides further information about credit holdings and reports about credit trading activity. To view this information, please visit the public register website at www.environment.nsw.gov.au/bimspr/index.htm

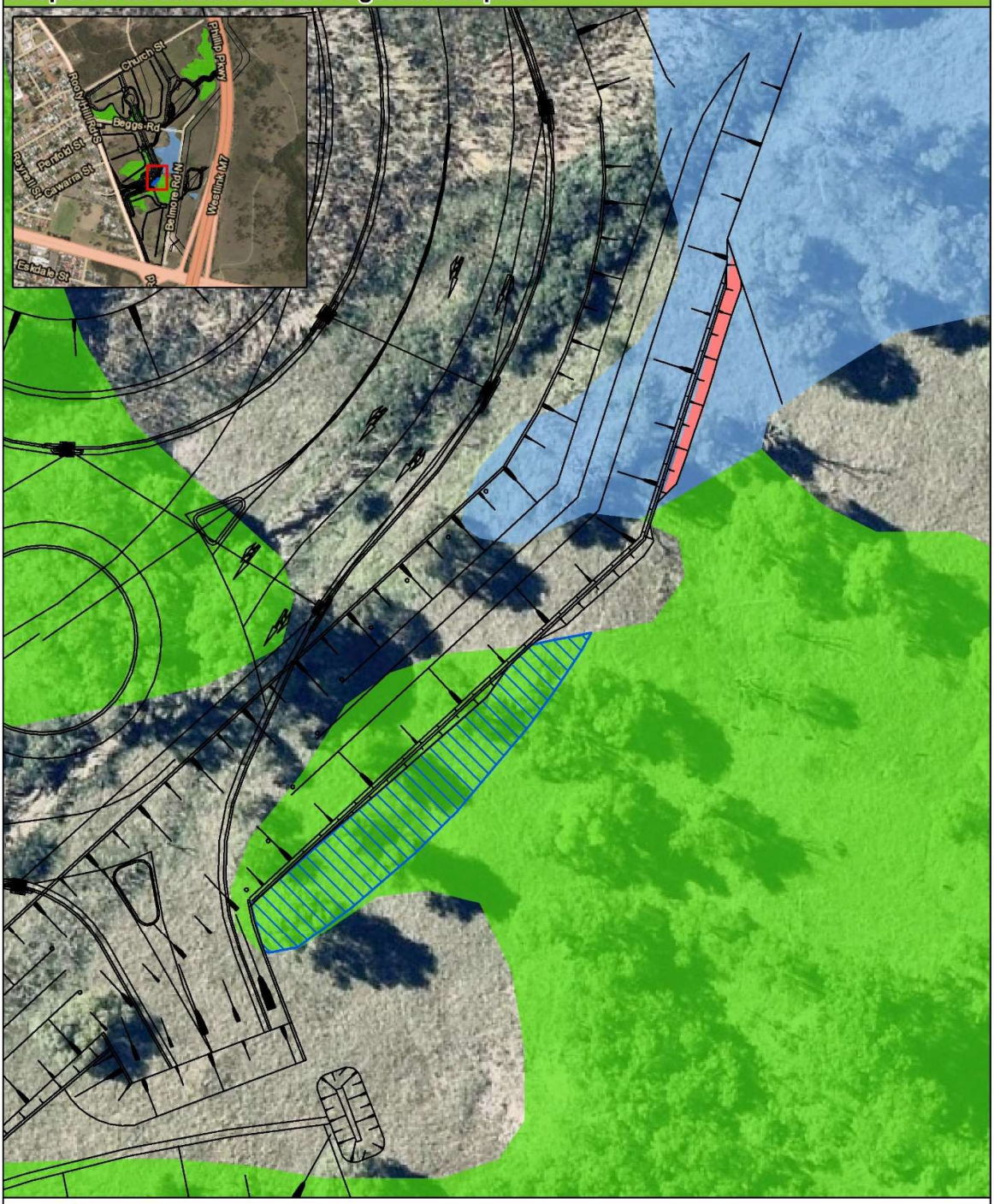
For more information, please contact the BioBanking Scheme Manager - phone (02) 9995 6753; email biobanking@environment.nsw.gov.au

Ecosystem credit(s) retired								
Number of credits	Credit profile ID	Agreement ID	Vegetation code	Vegetation type	CMA subregion	% surrounding vegetation	Patch size	Vegetation formation(see key)
49	254	70	HN528	HN528/Grey Box - Forest Red Gum grassy woodland on flats of the Cumberland Plain, Sydney Basin Bioregion	Cumberland - Hawkesbury/Nepean	11-30%	>25-100 h	GRW

Appendix 2 – Original mapping provided with Mod 4



Proposed Modifications and Vegetation Impact




VMP Management Zones
1b
1e
VMP Boundary
Eastern Conservation Area
Proposed Site Plan
Gas Pipeline Easement (revegetation with native grasses only)
Decreased impact (0.018 ha SPW)
Increased impact (0.002 ha AW)
Management Zone
Management Zone 1: Regeneration
Management Zone 2: Revegetation
Management Zone 3: Revegetation - wetland
0 10 20 40
Metres
GDA 1994 MGA Zone 56
N
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Prepared by: BH Date: 1/03/2019