

Jake Burgess
Sydney Zoo
Supplied via email

Ref/Job No: 2117
22 June 2016

Dear Jake,

RE: Ecological Matters – Sydney Zoo at Bungarribee South

This letter follows on from the letter dated 16 March 2016, with regards to modification to the carpark design, so as to remove car parking from the western portion of the site, within vegetation mapped as River-flat Eucalypt Forest (HN526). Subsequent to this letter written advice was received from Office of Environment and Heritage (OEH) clarifying that the Framework for Biodiversity Assessment (FBA) does not include a 0.25 ha vegetation zone threshold for when an offset is required (letter received 10/6/2016). This letter presents the result of revised calculations to determine the number of biodiversity credits required.

With the proposed modification to the carpark design to avoid the River-flat Eucalypt Forest (HN526) vegetation to the west, this results in the following impacts:

- Grey Box – Forest Red Gum grassy woodland on flats of the Cumberland Plain, Sydney Basin Bioregion (HN 528) – moderate to good (medium): 0.24 ha
- Grey Box – Forest Red Gum grassy woodland on flats of the Cumberland Plain, Sydney Basin Bioregion (HN528) – moderate to good (derived native grassland): 0.83 ha

The HN528 derived native grassland does not require offsets, as the site value is less than 17. The number of credits required for the HN528 in medium condition was recalculated using the major projects calculator. In the letter received on 10/6/2016, OEH advised that:

“Where there are dis-contiguous smaller polygons that combine to create the vegetation zone, the largest polygon should be surveyed. In this case, only the area of the polygon will contribute to the plot/transect and the site value condition score for the zone. Alternatively, plot/transect data that is collected on land outside the impact area but within the subject site are acceptable approaches.”

From review of the plot data collected, plot 1 and plot 7 were performed within the larger polygons (refer to Figure 5 from the Biodiversity Assessment Report, which is also attached as Figure 1 to this letter for convenience). Portions of both of these plots were conducted outside of the area impacted, but within the subject site, and are thus considered to be acceptable for use. Plots 5, 8 and 9 were also conducted within the vegetation zone, but portions of these plots were conducted outside of the zone, and thus this data was not utilised.

A data correction was made to the benchmarks for HN528, so that hollow bearing trees = 1, and length of fallen logs = 50. This data correction was confirmed by Sarah Burke, Regional Operations Group, on 22/6/2016. All other data attributes utilised were as per the original Biodiversity Assessment Report. The tool identified that the number of credits required is 5 credits for HN528. A copy of the credit report is attached below in Appendix 1.

Yours sincerely,

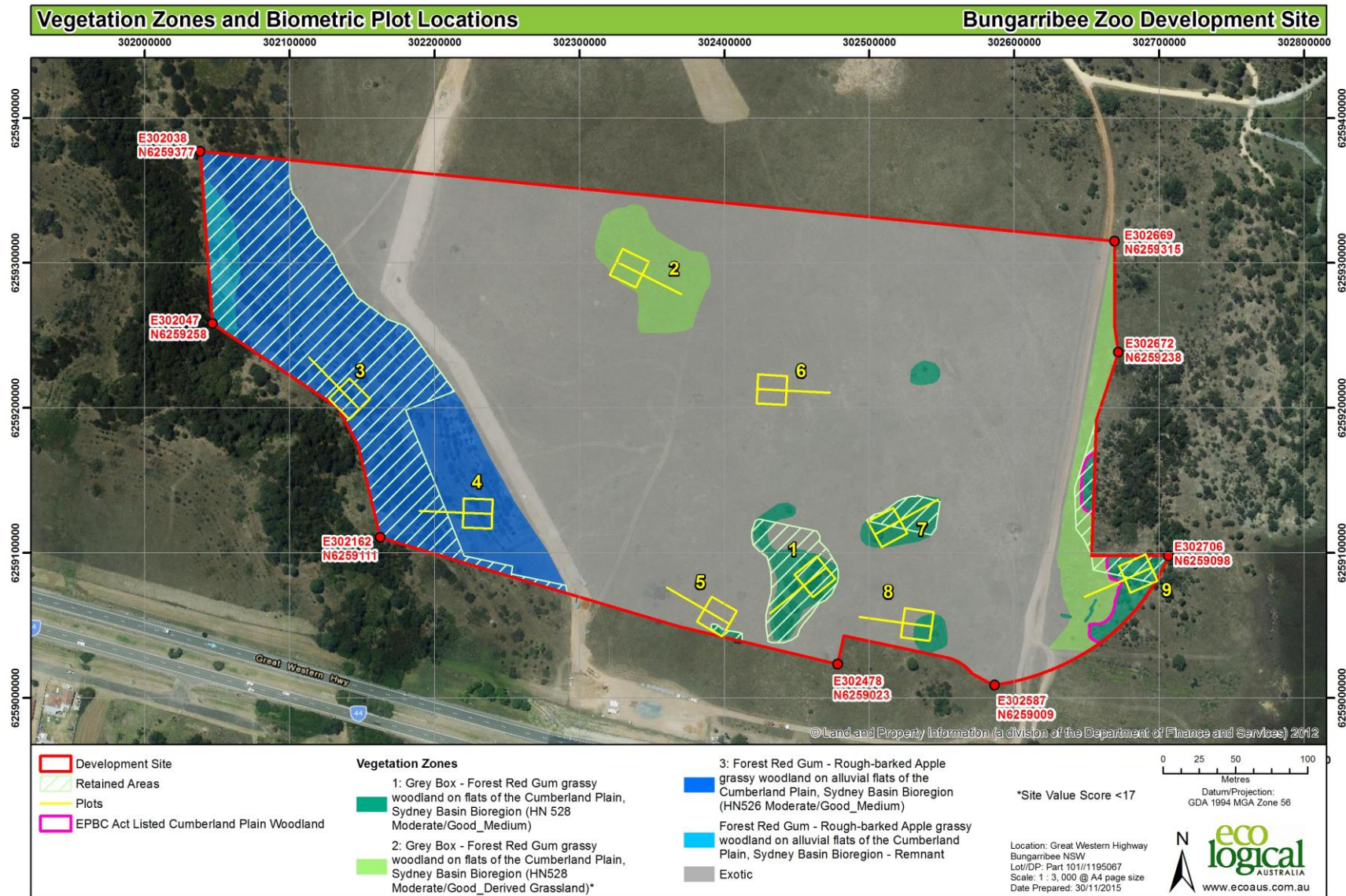


Figure 1: Native vegetation and PCTs within study area (note that the HN526 vegetation shown in the west around plot 4 is no longer being impacted).

Appendix 1: Credit Report

Biodiversity credit report



This report identifies the number and type of biodiversity credits required for a major project.

Date of report: 22/06/2016

Time: 3:30:07PM

Calculator version: v4.0

Major Project details

Proposal ID: 0039/2016/3733MP
Proposal name: Bungaribee Zoo_Reduced Footprint
Proposal address: Great Western Highway Bungaribee NSW 2767

Proponent name: Sydney Zoo
Proponent address: 3 Wills Avenue Waverley NSW 2041
Proponent phone: 0431473629

Assessor name: Steven Ward
Assessor address: Level 6 299 Sussex Street Sydney NSW 2000
Assessor phone: 9993 0566
Assessor accreditation: 0039

Summary of ecosystem credits required

Plant Community type	Area (ha)	Credits created
Grey Box - Forest Red Gum grassy woodland on flats of the Cumberland Plain, Sydney Basin Bioregion	1.07	5.00
Total	1.07	5

Credit profiles

1. Grey Box - Forest Red Gum grassy woodland on flats of the Cumberland Plain, Sydney Basin Bioregion, (HN528)

Number of ecosystem credits created

5

IBRA sub-region

Cumberland - Hawkesbury/Nepean

Offset options - Plant Community types	Offset options - IBRA sub-regions
Grey Box - Forest Red Gum grassy woodland on flats of the Cumberland Plain, Sydney Basin Bioregion, (HN528)	Cumberland - Hawkesbury/Nepean and any IBRA subregion that adjoins the IBRA subregion in which the development occurs