Our ref: DOC21/867311
Senders ref: SSD-10272349

Bianca Thornton
Planning Officer
Energy Resource Assessments
Department of Planning, Industry and Environment
4 Parramatta Square, 12 Darcy Street
Parramatta NSW 2150

Dear Bianca

Subject: Exhibition of EIS - Yiribana Logistics Estate (SSD-10272349)

Thank you for your email received 6 October 2021 requesting comments from Environment, Energy and Science Group (EES) on the subject proposal which includes a concept plan and Stage 1 Development Application for an industrial estate.

EES has reviewed the relevant documentation and provides comment in relation to biodiversity impacts, floodplain risk management and waterway health objectives at Attachment A.

EES requests that it not be assigned a role in the conditions of consents for this project unless EES has agreed to the role and condition.

If you have any queries please contact Shaun Hunt, Senior Conservation Planning Officer via shaun.hunt@environment.nsw.gov.au or 02 8275 1617.

Yours sincerely

S. Harrison

29/10/21

Susan Harrison

Senior Team Leader Planning
Greater Sydney Branch
Biodiversity and Conservation

Attachment A – EES response to EIS for Yiribana Logistics Estate (SSD-10272349), 754-770 and 784-786 Mamre Road, Kemps Creek

Biodiversity

The Biodiversity Development Assessment Report prepared by Cumberland Ecology, dated 30 April 2021 (report 19200RP1) has been reviewed and the following comments are raised:

- The Biodiversity Assessment Method (BAM) credit report has not been finalised and no calculator data has been submitted in BAM-C.
- Plot field data sheets have not been supplied.
- The BDAR has not been certified as BAM compliant within 14 days of the submission date.
- GIS data files have not been provided.
- The mapping of native vegetation has been confined to tree canopies, or in the case of PCT 850, some linking vegetation. Given the presence of native species in the areas mapped as exotic vegetation, it may be that some of the patches of native vegetation should have been mapped as larger, to include adjacent areas that contain native species in the understorey but are currently mapped as exotic vegetation. There is insufficient information provided to confirm that the areas mapped as native vegetation have not been underestimated.
- Plot 2 (P2), as shown in Fig 5, is assessing PCT 850 but a significant proportion of the plot covers an area mapped as exotic vegetation. This is likely to have provided an inaccurate VIS and resulted in fewer ecosystem credits being required. There appears to be scope within the PCT 850 remnant to have repositioned the plot to incorporate more of the mapped native vegetation. Furthermore, a map should have been provided in the BDAR of the location of the plots relative to PCT boundaries (as is required in BAM 2020 Table 24).
- *Pultenaea pedunculata, Deyeuxia appressa* and *Caladenia tessellate* have been excluded from further assessment on the basis that microhabitats are too degraded. Excluding species simply by stating the habitat is degraded is not sufficient and needs further justification. The submission of data sheets may have assisted with this in supporting this claim further.
- The statement in Table 11 that *Pomaderris brunnea* excluded from further assessment (i.e. excluded from need to do targeted survey) because the species wasn't seen during surveys, doesn't make sense.
- Inadequate survey effort has been applied for *Pimelea spicata.* The Threatened Species Profile Database specifies that survey should be conducted 4 weeks after at least a 30mm rain event, and that multiple surveys may be required.
- Surveys were conducted outside the required survey period for two threatened plant species – *Marsdenia viridiflora* ssp. *viridiflora* and *Thesium australe*. The BDAR states that *M. viridiflora* ssp*. viridiflora* is easy to distinguish to genus level and was not present. However, the Threatened Biodiversity Data Collection states that the species may reduce to the tap root under adverse conditions (drought, intensive mowing). There are a number of sightings of the species in the locality. Further justification is required for exclusion of this species as an impacted species credit species.
- *Miniopterus orianae oceanensis* was excluded from assessment due to habitat constraints however this species can use human-made structures for breeding. Given the species was detected on site, a survey of structures should have been undertaken. Table 13 of the BDAR states that human-made structures provide potential habitat for microchiropteran bats.

- Inadequate survey effort has been applied for *Litoria aurea.* The BDAR states surveys were undertaken over three nights but the NSW Survey Guide for Threatened Frogs requires that surveys should be conducted over 4 nights
- It is noted that the Vegetation Management Plan states that the threatened Grey-headed Flying-fox (*Pteropus poliocephalus*) and Eastern Coastal Free-tailed Bat (*Micronomus norfolkensis*) were recorded on site, but there is no mention of these species being recorded on site in the BDAR.

In relation to the proposed watercourse and E2 zone realignments the following comments are raised.

- The proposal includes replacement and realignment of the existing 40m wide E2 zone with a 25m E2 zone within a 35m corridor. EES raises no concern with the proposed realignment of the E2 corridor, however the reduced corridor width is not supported. The corridor/E2 zone must maintain its existing width of 40m.
- A Vegetation Management Plan has been provided for the realignment and reconstruction of the watercourse through the site. How the reconstructed watercourse will integrate/transition into the existing stream on the adjoining property to the east will need to be confirmed. Direct and indirect impacts to native vegetation adjacent the stream within that site are likely from construction and changes in hydrological processes.

In relation to proposed landscaping:

- The Landscape Masterplan prepared by site image (dated June 2021) does not include planting of canopy trees along the northern and eastern setbacks of proposed warehouse 3. Whilst it is acknowledged the required retaining walls will limit planting space, opportunity may exist for the use of small native canopy trees such as *Elaeocarpus reticulatus, Elaeocarpus eumundi, Ceratopetalum apetalum, Tristaniopsis laurina*, etc. in these locations.

  In addition to mitigating the loss of biodiversity values from the site, increasing tree canopy in the proposed landscaping will assist in mitigating urban heat island effects.
- The planting schedules included in the landscape plan do not include essential details such as number of plants and proposed pot sizes. Detailed planting locations are also lacking from the plan. A detailed plant schedule and planting plan should be provided.
- In relation to Streetscape Planting, the landscape plan states *'Streetscape Frontages Mix of exotics say 30/70 with some turf areas seasonal variation in planting'.* EES preference is for the site landscaping to use local native plant species that once occurred on site rather than plant exotic or non-local natives except where additional benefits such as reduced heat island effects can be demonstrated from the use of these species. Priority weeds must not be used in any circumstances.
- The EIS identifies that a 10m landscape setback is proposed to Mamre road however It appears that that a substantial portion of this setback is occupied by proposed bio-retention basin which restricts the potential for replacement planting to mitigate the loss of trees from the proposed development. The actual extent of available landscape and planting space should be clarified along with a detailed planting plan and schedule for this area as mentioned above.

Floodplain risk management

No comments or concerns are raised in relation to flooding.

Waterway health objectives

The Civil Engineering Report and Water Cycle Management Strategy (WCMS) prepared by Costin Roe Consulting (dated 1 June 2021) states '*The SEI target of 2.0 has been adopted in response to the alternate MARV control of 1.9ML/Ha/Yr included in the DRAFT Mamre Road Precinct DCP Section 2.6. The adoption of the SEI over the MARV is considered a good balance between the desire from the DPIE to achieve acceptable waterway impact to South Creek with the ability to provide practical and economic measures to achieve the similar waterway health outcomes.'*

In regard to the applicant's approach, EES has undertaken a detailed technical study to assess whether the SEI is needed to achieve waterway health objectives. The study found the objectives will not be achieved without the appropriate flow duration percentiles as specified in the EES MUSIC toolkit (Table 3) which has been provided to the applicant. Please see below the flow duration curves for the following scenarios for example a 10 ha Large Format Industrial development:

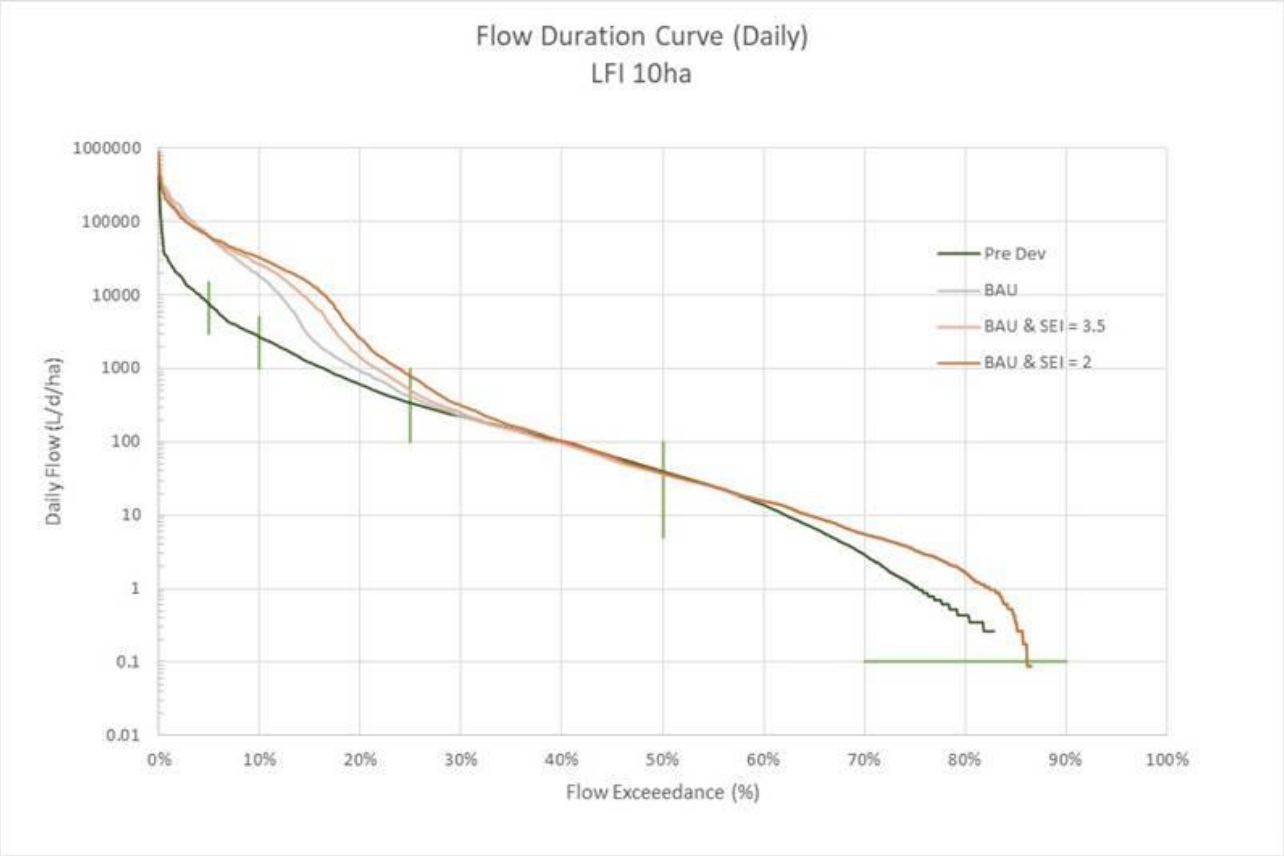
- Business as Usual (BAU) treatment using just post development load reduction targets (85%, 65% and 45%).
- BAU + Storage to achieve SEI of 3.5
- BAU + Storage to achieve SEI of 2

The SEI focusses on large events (i.e. 98%ile and upwards) and ignores the remainder of the flow duration curve. As shown in the curve below, BAU approaches to complying with the SEI (storage to attenuate flows) simply transfer flow from one part of the curve and places this in another part of the curve (65% to 90%ile). In fact, it makes 80-90%ile part of the curve worse which based on waterway objectives will impact on instream habitat. Based on these results, applying the stormwater quality targets and an SEI of 2, in lieu of the proposed flow duration and MARV targets, will not ensure the waterway objectives are achieved.

Given the above, it unclear to EES if the waterway objectives and target are achieved under the applicants proposed design. EES therefore recommends that the applicant provide the following information from the EES MUSIC toolkit for further review:

- Post processor Spreadsheet showing that both quality and quantity targets and achieved, and
- MUSIC model files showing the parameters in the MUSIC toolkit.

Where the targets are not achieved, appropriate amendments should be made the design.



End of Submission