total earth care

Job No. J9507

Date: 14/04/2022 Rep: Alec Willows

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To	Job Name and Number
George Economy **CBRE Project Management**	Job Name: Stage 2 Redevelopment of Nepean Hospital BDAR Job No: J9507

Dear George,

Below outlines the responses made by Total Earth Care to issues raised by the Department of Planning and Environment (Environment, Energy and Science Group - EES) in relation to the Stage 2 Redevelopment of the Nepean Hospital BDAR.

Issue	Response
EES notes that this review was undertaken without access to the assessment in the BAM calculator as the case has not be submitted. The assessor must 'submit to consent authority' where the consent authority is 'Greater Sydney – Compliance & Regulation'.	Submitted to consent authority on 13/04/22 case 00028078
EES also notes that this review has been undertaken without access to GIS files, as these have not been provided to EES. While a photo of BAM Plot 1 has been provided, the location should be plotted on a map. No map of plot locations has been provided.	See amended figure 3-4 in attached final report
Table 4-1 includes candidate ecosystem credits species and table 4-2 candidate species credit species. The tables do not include the results of background searches, namely BioNet Atlas searches. In this regard, from a 10km BioNet Atlas search the following species were absent from the lists of Predicted Ecosystem Credit Species and Species Credit Species for assessment. The following species are to be included in table 4-1 and 4-2. **• Freckled Duck (Stictonetta naevosa)** **• Black-necked Stork (Ephippiorhynchus asiaticus)** **• Australasian Bittern (Botaurus poiciloptilus)** **• Black Bittern (Ixobrychus flavicollis)** **• Little Eagle (Hieraaetus morphnoides)** **• Square-tailed Kite (Lophoictinia isura)** **• Bush Stone-curlew (Burhinus grallarius)** **• Glossy Black-Cockatoo (Calyptorhynchus lathami)** **• Powerful Owl (Ninox strenua)** **• Masked Owl (Tyto novaehollandiae)** **• Sooty Owl (Tyto tenebricosa)** **• Varied Sittella (Daphoenositta chrysoptera)** **• Yellow-bellied Sheathtail-bat (Saccolaimus flaviventris)** **• Large-eared Pied Bat (Chalinolobus dwyeri)** **• Eastern False Pipistrelle (Falsistrellus tasmaniensis)** **• Greater Broad-nosed Bat (Scoteanax rueppellii)** **• Pultenaea parviflora** **• Syzygium paniculatum** **• Pterostylis saxicola** **• Persoonia nutans**	The internal BioNet search process conducted by Total Earth Care includes utilising mapping software such as ArcGIS or QGIS to clip the 10km BioNet Atlas species searches to a 5km buffer of site to increase the accuracy of the database search and therefore robustness of the species searches. The BAM methodology associates ecosystem and species credits with an identified PCT on site not with BioNet searches.
There is some potential for microbats to be using the buildings that are present, but no surveys for microbat roosting have been undertaken. As stated in DPIE's BDAR waiver guidance (https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Animals-and-plants/Biodiversity/apply-biodiversity-development-assessment-report-waiver-190593.pdf), human-made structures may provide habitat for threatened species, particularly microbats.	Microbat surveys were not conducted due to the lack of suitable habitat identified on site. There is potential for species such as the Eastern Coastal Free-tailed Bat to utilise the habitat periodically throughout the year, however there were no species records and upon further site inspection the nature of the buildings on site was deemed to be highly disruptive and unlikely to offer roosting habitat for this species.
Therefore, if the proposed development includes demolition of buildings and/or impacts to other human-made structures, the BDAR should include the details of potential habitat in human-made structures and demonstrate how surveys have been conducted for the presence of threatened species. There is no description in the BDAR of any surveys being undertaken of human-made structures to determine the presence of microbats.	The general fauna survey included the assessment of all suitable habitat for threatened species. This includes habitat such as human-made structures the assessment of the condition of the habitat led to the conclusion that the habitat on site was not suitable.
Therefore, further surveys should be conducted to determine their presence or otherwise, i.e. daytime roost searches should be carried out. A search is to be undertaken by looking for bats or signs of bats in suitable roost habitat during the daytime. All roost searches should use a torch to shine in holes, cracks and crevices, and carry a handheld bat detector to locate bats that may call. If bats are detected, observers must confirm the identity of the species and determine if the roost is a maternity roost. The BDAR should then be updated which includes a description of the searches undertaken and any results included in the impact assessment and offset requirement.	See response above.

Table 6-1 of the BDAR outlines mitigation and management measures required to be undertaken. We support the mitigation measures from the BDAR and if the application is approved, we recommend these measures are written into the conditions of consent.	No response required
Given the potential for the presence of protected fauna utilising trees for habitat, the following preclearance survey condition could be included in the consent.	See response below.
Tree Removal and Fauna Protection	
Pre-clearance survey: Within one week prior to any removal of vegetation a pre-clearance survey is required to be undertake by a qualified ecologist to identify, number and flag hollow-bearing trees and other habitat features such as nests or hollow logs proposed to be removed.	These pre-clearance conditions are reasonable and are consistent with the standard approach to clearing vegetation (unless outlined otherwise in a clearing and grubbing plan)
The results of the pre-clearance survey shall be submitted to the project manager to inform tree clearance protocols.	These pre-clearance conditions are reasonable and are consistent with the standard approach to clearing vegetation including the provision of a pre-clearing report or letter style report upon competition of the survey (unless outlined otherwise in a clearing and grubbing plan)
Tree Removal: During any tree removal, an experienced and qualified ecologist is to be present to re-locate any displaced fauna that may be disturbed during this activity.	These 'clearing supervision' conditions are reasonable and are consistent with the standard approach to clearing vegetation.
All non-habitat vegetation should be cleared first to allow appropriate space for the felling of habitat trees and retrieval of any fauna that may be present within habitat trees.	These conditions are reasonable and are consistent with the standard approach to clearing vegetation unless stipulated that an Ecologist is required on site to supervise the clearing of non-habitat vegetation.
Trees with hollows shall be lopped in such a way that the risk of injury or mortality to fauna is minimised, such as top-down lopping, with lopped sections gently lowered to the ground, or by lowering whole trees to the ground with the "grab" attachment of a machine.	These conditions are reasonable and are consistent with the standard approach to clearing vegetation.
Any injured fauna is to be appropriately cared for and released on site when re-habilitated. Injured fauna is to be placed into the hands of a wildlife carer (please note only appropriately vaccinated personnel are to handle bats).	These conditions are reasonable and are consistent with the standard response to the incursion of injured fauna and WHS practices when handling bats.

Please let me know if you have any further questions.

Kind Regards,

Alec Willows | Project Officer | Ecologist

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