



Your ref: SSD-67588459
Our ref: DOC24/348280

Ms Annika Hather
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4 Parramatta Square, 12 Darcy Street
PARRAMATTA NSW 2150

4 June 2024

**Subject: BCS response on Environmental Impact Statement for Powerhouse Ultimo
Revitalisation – 500 Harris Street, Ultimo (SSD-67588459)**

Dear Ms Hather

Thank you for your email of 1 May 2024 requesting comments on the Environmental Impact Statement (EIS) for the above State Significant Development.

The Biodiversity, Conservation and Science (BCS) Group within the Department of Climate Change, Energy, Environment and Water has reviewed the EIS and other relevant reports and provides its comments and recommendations at Attachment A.

If you have any queries regarding this matter, please contact
rog.gsrplanning@environment.nsw.gov.au.

Yours sincerely

Susan Harrison
Senior Team Leader Planning
Greater Sydney
Biodiversity, Conservation and Science

BCS response on Environmental Impact Statement for Powerhouse Ultimo Revitalisation – 500 Harris Street, Ultimo (SSD-67588459)

BCS has reviewed the following documents in relation to the Environmental Impact Statement (EIS) for this SSD and provides comments below:

- Environmental Impact Statement (EIS), by Ethos Urban - dated 11 April 2024
- Appendix G Public Domain Report, by Tyrrell Studio – dated 22 March 2024
- Appendix G – Landscape Drawings
- Appendix O – Stormwater and Flooding Report, by Arup - dated 5 April 2024
- Appendix K - Arboricultural Impact Assessment (AIA) - Tree Protection Specification, by tree iQ - dated 22 March 2024.
- Appendix Y – BDAR waiver report, by wsp – dated March 2024

Flood

BCS considers that the EIS does not meet the Secretary's Environmental Assessment Requirements (SEARs) for flooding. In summary, BCS' key issues are as follows:

- flood modelling of potential flood impacts has not been undertaken
- further information is needed on flood planning levels.

The proposal includes demolition of existing buildings and construction of new museum spaces and public open spaces. The potential flood impact caused by these changes remains unclear in the absence of flood modelling. All changes such as topography, building footprints and any other potential obstructions to flooding should be presented on a plan to undertake an initial qualitative assessment of whether flood impact modelling is necessary. BCS raised concerns on the potential for flood impacts for a previous SSD proposal at this site (SSD-32927319). The EIS for SSD-32927319 did not provide a Flood Impact and Risk Assessment (FIRA) and the RtS provided an unsatisfactory FIRA. Please refer to previous EHG submissions on the EIS (DOC22/479653) and RtS (DOC22/878399) for this previous SSD.

The Stormwater and Flooding Report has used a stormwater model and other calculations to estimate flood levels and flood planning levels. Given the shallow depth of flow, this approach may not be unreasonable for Harris Street and Macarthur Street. However, further information is required. The cross-sections used should be presented. Using the Manning's equation is not able to take account of areas with varying terrain. Varying flood depths in the flood model results presented indicate that this approach may not be accurate. BCS raises particular concern that flood levels at the Gathering Terrace may not be properly represented in the stormwater model. BCS recommends further information be provided to address these concerns, including:

- A plan clearly showing the relevant building entrances together with "flood planning level check locations" shown on Figure 17.
- A description of each location in Tables 15 and 16.
- The water surface levels and depths used to determine flood planning levels should be reviewed against flood depths and levels from a flood model including scrutiny of flood levels adjacent to any new basement entries.

The approach to the basement entries needs further clarification. The following should be provided:

- A plan showing basement entry locations and whether these are existing or proposed.
- Clarification on which basement entries are above the Probable Maximum Flood (PMF) and how much freeboard to the 1% Annual Exceedance Probability (AEP) can be provided where 500mm cannot be reached. Preferably the existing tables would be amended to provide this information.
- Consideration of the flood risk should form part of the justification for a lower level, e.g., depth and duration of flooding. Where protection to the PMF level cannot be reached, calculations can be made to estimate the maximum volume of water likely to enter the basement. The resultant maximum depth can inform a risk assessment.

It may be preferable to revise Tables 15 and 16 or produce an alternate table to focus only on flood planning level compliance for the purpose of clarity.

Biodiversity

Section 7.1 of the EIS notes “as has been demonstrated in Appendix BB and throughout this EIS, the proposed development will not result in any significant effect on the biological and ecological integrity of the study area, subject to the implementation of the Mitigation Measures set out in Appendix D” (page 100). However, neither Appendix BB nor Appendix D appear to have been provided. Please note BCS granted a BDAR waiver for this SSD on 18 April 2024.

Landscaping

The EIS and accompanying reports include differing information on the proposed number of new trees to be planted, for example:

- the EIS states the removal of the 7 trees “will be offset through the planting of 41 new trees throughout the site, which will be endemic species more suited to the locality” (section 6.5, page 87)
- the AIA states “the supplied plans show that twenty-four (24) trees are to be planted to help off-set the loss of canopy cover and amenity resulting from the tree removal” (section 3.5.1)
- the Public Domain Report states “Overall, 31 new trees are proposed within the public domain to increase canopy cover and amenity, and to replace the 7 trees proposed to be removed” (section 2.10, page 32).

The RtS needs to clarify the total number of replacement trees to be planted. BCS supports the SSD planting 41 new endemic trees to replace 7 removed trees as this will assist to mitigate the urban heat island effect, enhance tree canopy and improve local biodiversity. The Trees Near Me NSW and The NSW State Vegetation Type Map (SVMP) (see <https://datasets.seed.nsw.gov.au/dataset/nsw-state-vegetation-type-map>) indicate the preclearing 1750 Plant Community Type (PCT) in this locality was PCT 3594 – Sydney Coastal Sandstone Foreshores Forest).

To provide certainty on the number of trees to be removed and the number of replacement trees to be planted BCS recommends a condition of consent is included which includes this detail.

The RtS should also clarify:

- the location of trees to be retained and offset on site allowing enough space needs to be provided on site to allow the new trees to grow to maturity without the need for pruning
- location and areas of landscaping
- mitigation measures to reduce impacts to the tree protection zones of the trees to be retained.

In addition to the above recommendations for conditions of approval, BCS recommends the following conditions are included in any approval:

- *Any planting/ landscaping uses a diversity of local provenance native trees, shrubs and groundcover species from the relevant native vegetation community that once occurred in this location.*
- *Tree planting shall use advanced and established local native trees for local native tree species which are commercially available. Other local native tree species which are not commercially available may be sourced as juvenile sized trees or pre-grown from provenance seed.*
- *Enough space is available to allow the existing trees which are to be retained and the new replacement trees to grow to maturity*
- *A Landscape Plan is to be prepared and implemented by an appropriately qualified bush regenerator and include details on:*
 - a. the native vegetation community (or communities) that once occurred on the site and the plan demonstrates that the proposed plant species are from the relevant vegetation community*
 - b. the type, species, size, quantity and location of trees*
 - c. the species, quantity and location of shrubs and groundcover plantings*
 - d. the pot size of the trees to be planted*
 - e. the area/space required to allow the planted trees to grow to maturity*

- f. plant maintenance regime. The planted vegetation must be regularly maintained and watered for 12 months following planting. Replacement plants for those that have failed during this period should be of the same type, size, quality and species as the plant that has failed.*

End of Submission