

Our ref: DOC23/11195 Your Ref: SSD-45121248

Caleb Ball Planning Group Department of Planning and Environment 4 Parramatta Square, 12 Darcy Street Parramatta NSW 2150

13 March 2023

Subject: EHG Advice on the Environmental Impact Statement for the Neringah Senior Housing and Hospital (SSD-45121248)

Dear Mr Ball

Thank you for your e-mail received on 13 March 2023 requesting advice from the Environment and Heritage Group (EHG) on the Environmental Impact Statement (EIS) for the above project located at 4-12 Neringah Avenue South, Wahroonga.

EHG have reviewed the EIS and relevant appendices and provide comments pertaining to biodiversity, landscaping and flooding at Attachment 1. In summary EHG recommends that:

- A revised BDAR Waiver Request or BDAR is submitted with the SSD Application that considers all proposed impacts to trees proposed for retention.
- The development is redesigned so that no driveway/access is provided within the TPZ of Tree 32 during both the construction and operational phase of the development.
- That the majority of the TPZ of Tree 32 is reverted to a natural state without significant changes to existing ground levels.
- No major services, such as stormwater, are run from the building or along this boundary and out to the street within the TPZ of Tree 32.
- Regrading or excavation within the TPZ of Tree 32 is restricted.
- That all trees identified for retention are protected in accordance with the Australian Standard AS4790-2009 Protection of trees on development sites.
- That the submitted Aboricultural Impact Statement assesses all impacts including those associated with construction (placement of scaffolding etc), landscaping works (placement of soil, installation of plants, fencing, sandstone retaining walls) and in the case of Tree 23 impacts associated with land remediation works are also considered. Measures to reduce impacts associated with such works should also be specified.
- That root mapping is undertaken for Tree 1 to fully assess potential impacts and to further demonstrate that the Tree 1 will remain viable post development. Further details on required pruning works to Tree 1 should also be provided.



- The submitted Landscape Plan is amended to maximise the use of locally indigenous species, specify maintenance requirements, and to exclude the use of Olea europaea subsp. europea.
- That a preliminary flood risk assessment should be undertaken including hydrologic and hydraulic modelling to determine whether the site is affected by overland flooding for the full range of flooding up to and including the Probable Maximum Flood (PMF).
 Communication with Ku-ring-gai Council is recommended to ensure the adequacy of the preliminary assessment. If the site is impacted by flooding, the proponent would need to undertake a flood impact and risk assessment to address the requirements of Section 5.31 of the Ku-ring-gai LEP, Flood Planning.

If you have any queries please contact Angela Taylor, Senior Conservation Planning Officer via <u>angela.taylor@environment.nsw.gov.au</u> or 02 9585 6146.

Yours sincerely

S. Hannison

Susan Harrison Senior Team Leader Planning Greater Sydney Branch Biodiversity and Conservation



Attachment 1: EHG advice on the Environmental Impact Statement for the Neringah Senior Housing and Hospital (SSD-45121248)

Biodiversity

EHG notes that vegetation within the study area consists mostly of planted native and exotic vegetation. However, an isolated remnant Sydney Red Gum *Angophora costa* tree corresponding to PCT 1237 Sydney Blue Gum – Blackbutt – Smooth-barked Apple moist shrubby open forest on shale ridges of the Hornsby Plateau, Sydney Basin Bioregion occurs in the north-eastern corner of the site. This tree forms part of the Critically Endangered Ecological Community Blue Gum High Forest in the Sydney Basin Bioregion and appears to have adapted to existing site conditions.

On the 17 October 2022 EHG received a second request from the DPE Planning Group to waive the requirement for a biodiversity development assessment report (BDAR) to be submitted with the State Significant Development Application.

On 28 October 2023, EHG issued its determination to the DPE Planning Group that the proposed development is not likely to have a significant impact on biodiversity values and that the application does not need to be accompanied by a BDAR. This decision was made on the basis that the following recommendations were implemented on the site for the Sydney Red Gum (Angohora costata) identified as Tree 32 on the submitted Arboricultural Plans:

- That a Tree Protection Zone (TPZ) of 9m is established prior to the commencement of works
- There is no regrading or excavation along the existing proposed driveway within a 9m setback from the street boundary and for the reminder of the TPZ to the east of the building.
- There is only very minor reconfiguration of the current driveway width/extent.
- Tree sensitive construction measures are used for the new driveway, and are typically at, or above, the existing levels.
- The proposed general tree protection measures are strictly adhered to, during construction, in accordance with the Australian Standard AS4790-2009 Protection of trees on development sites.
- No major services, such as stormwater, are run from the building or along this boundary and out to the street in the vicinity of this tree.

In this regard, the BDAR Waiver Request Report specifically advised that provided the above recommendations are adhered to, impacts to native vegetation within the study area are considered unlikely to occur during or after construction works. In reviewing the submitted EIS documentation EHG notes that not all the above mitigation measures will in fact be implemented, further, EHG notes that there are additional proposed impacts to the TPZ of Tree 32 that were not assessed as part of the BDAR Waiver process. In this regard:

- a TPZ of 9m will not be established for the protection of Tree 32.
- an incursion of 8% to the TPZ of Tree 32 is proposed in association with the construction of the proposed northern building and its basements levels.
- The general tree protection measures are not being strictly adhered to, during construction, in accordance with Australian Standard AS4790-2009 Protection of Tree on development Sites (i.e., keeping construction activities out of TPZs). In this regard, EHG notes that the submitted Civil Plans and Aboricultural Plans indicate that access to the site during (and post) construction will be provided via the existing driveway that is located within the TPZ of Tree 32 with no other construction access currently being identified. Such an approach could



lead to significant root, trunk and crown damage to Tree 32 associated with vehicle/plant movements.

• A proposed stormwater pipe and pit are shown as impacting on the TPZ of Tree 32 on the Stormwater Management Plan – Lower Ground Drawing Number CI-DG-10-E3 Revision 1 prepared by Northrop Dated 15/11/22. Whilst it is noted that design measures on this drawing will be subject to detailed design at the construction certificate stage and may be subject to variation such plans should demonstrate that stormwater infrastructure can in fact be feasibly located outside of the TPZ of Tree 32.

Further to the above EHG notes that:

- Existing and cumulative incursions to the TPZ of Tree 32 do not appear to have been considered.
- Impacts associated with the construction footprint on the TPZ of Tree 32 (installation of scaffolding etc) do not appear to have been considered.
- The AIA report does not specify requirements for asphalt removal and the establishment of a landscape area within the TPZ to minimise impacts to Tree 32 associated with these works. Nor has the proposed timing of the removal of asphalt been specified other than to indicate that this will occur during construction.
- Recommendations for the proposed removal of three trees within the TPZ of Tree 32 have not been specified within the AIA to minimise the impacts of such works.
- Impacts associated with proposed fencing and the construction of proposed sandstone retaining wall and other landscaping works within the TPZ of Tree 32 and other trees have not been considered or specified within the AIA. Nor have any recommendations to minimise such impacts been specified within the AIA.
- The location of a site office and building material storage have not been identified, it is therefore unclear if additional impacts to the TPZ of Tree 32 will arise from the site office or stockpile locations.
- The Concept Erosion and Sediment Control Plan (CI-DG-03-EO Revision P1) prepared by Northrop dated 15/11/22) identifies two stormwater pits within the TPZ of Tree 32 that require pit protection. It is unclear of these are existing or proposed stormwater pits.
- No specific excavation or construction methods have been specified for proposed works within the TPZ of Tree 32. This is even though there is a high risk that such works could significantly sever tree roots.
- Pruning requirements for Tree 32 have not been specified.

Based on the above matters, EHG considers that it has not been demonstrated that Tree 32 can in fact be retained post development. In this regard, EHG advises that the proposed development should be redesigned to remove access to the site through the TPZ of Tree 32 during both the construction and operational phase of the development and that the TPZ of Tree 32 within the subject site should be reinstated to a naturalised state. Consideration should also be given to reducing the extent of the proposed 8% incursion to the TPZ of Tree 32 associated with the proposed northern building.

EHG is also of the opinion that the proposed development as submitted is not as described within Schedule 1 of the BDAR Waiver Determination issued by EHG. As such, EHG considers that the issued BDAR Waiver is no longer valid. The proponent will therefore either need to lodge a revised



BDAR Waiver Request or submit a BDAR with the SSD Application. Any amended BDAR Waiver Request should reflect the changes to the development layout recommended by EHG.

The following comments are provided in relation to other trees proposed for retention on the subject site:

- EHG notes that Tree 1 as identified in the AIA will be subject to a major encroachment of 17%. The AIA advises that the location of this incursion is in an area previously impacted by a building structure, that has since been demolished, and for previous construction site access. The AIA further advises that the species is also known to be reasonable tolerant of root disturbance therefore the incursion is considered acceptable and unlikely to adversely impact the long-term condition of the tree. The AIA also provides additional measures to minimise ensure the least disturbance from construction. Irrespective of this EHG recommends that root mapping is undertaken for this tree to fully assess potential impacts and to further justify that the tree will remain viable post development. Further details on required pruning works to Tree 1 should also be provided in an amended AIA.
- In relation to Tree 23 as identified in the AIA the impacts associated with land remediation works (cap and contain) do not appear to have been considered. In addition, it is unclear if additional impacts will arise from the proposed electrical substation and further clarification is required in this regard.
- Impacts associated with the installation of fencing and sandstone retaining walls and other landscaping works including the use of additional topsoil on trees identified for retention have not been considered. Nor have recommendations to reduce impacts associated with fencing and the retaining walls and landscaping works been provided for retained trees that will be impacted by such works. Further information on such matters such be provided in an amended AIA.

Landscaping

The following comments are made in relation to the Landscape Concept Plans prepared Arterra Design Pty Ltd dated 6 December 2022. EHG recommends that the Landscape Concept Plan is amended to:

- Maximise the use of locally endemic species particularly species from Plant Community Type 1237 Sydney Blue Gum Blackbutt Smooth-barked Apple moist shrubby open forest on shale ridges of the Hornsby Plateau, Sydney Basin Bioregion.
- Specify minimum maintenance requirements for landscaping works ideally a 2-year period.
- Exclude the use of Olea europaea subsp. europea (Common Olive). EHG notes that this species is a major environmental weed, is easily spread by birds and other animals and can outcompete native plants and dominate the understorey of forest and woodland understorey. The proposed use of this species in landscaping works is therefore not supported by EHG.

Flooding

The Ku-ring-gai LEP requires the proponent to address the requirements of Section 5.21 Flood planning. The Ku-ring-gai DCP Part A Section 4 item requires the proponent to undertake a site analysis to address risks that apply to the site including flood risk.

A Memorandum prepared by WMS dated 1 November 2022 has been provided to EHG as Appendix X 'Flood Risk Assessment'. The Memorandum concluded that the site is not subject to mainstream (riverine) or overland flow flood risk and accordingly, it considered the Ku-ring-gai LEP, Section 5.21, Flood Planning – Requirements not applicable.



EHG highlights that, no overland flood assessment has been undertaken by WMS to conclude the site is not impacted by overland flow. Rather, WMS has undertaken a desktop review of the local topography and catchment and a site visit and based on this review it delivers its conclusion.

From a flood risk management perspective, the proposed SSD is considered a sensitive development regarding the vulnerability of its users to the flood risks. The SSD includes but not limited to a palliative care, residential aged care facilities, community healthcare services and seniors' dwellings.

Accordingly, a preliminary flood risk assessment should be undertaken including hydrologic and hydraulic modelling to determine whether the site is affected by overland flooding for the full range of flooding up to and including the PMF. Communication with Ku-ring-gai Council is recommended to ensure the adequacy of the preliminary assessment.

Based on this preliminary flood risk assessment, if the site is impacted by flooding, the proponent would need to undertake a flood impact and risk assessment to address the requirements of Section 5.31 of the Ku-ring-gai LEP, Flood Planning.

End of Submission