

Department of Planning and Environment

Our ref: DOC22/1132863

Your ref: SSD-14378717

Ms Minoshi Weerasinghe

Planning Group
Department of Planning and Environment
4 Parramatta Square
12 Darcy Street
PARRAMATTA NSW 2150

25 January 2023

Subject: EHG comments on Additional Response to Submissions for Telopea Concept Plan and Stage 1 (SSD-14378717)

Dear Ms Weerasinghe

Thank you for the email of 16 December 2022 requesting comments on the Additional Response to Submissions (ARtS) for this State significant development - SSD-14378717.

The Environment and Heritage Group (EHG) appreciates the Department providing it with an extension in which to provide its comments on the ARtS. EHG has reviewed the ARtS and provides its comments and recommendations at Attachment A.

If you have any queries regarding this matter, please do not hesitate to contact Janne Grose, Senior Conservation Planning Officer on 02 8837 6017 or at janne.grose@environment.nsw.gov.au.

Yours sincerely,



Susan Harrison

Senior Team Leader Planning
Greater Sydney Branch
Biodiversity and Conservation

Subject: EHG comments on the Additional Response to Submissions for Telopea Concept Plan and Stage 1A - SSD-14378717

The Environment and Heritage Group (EHG) has reviewed the following reports for this State Significant Development (SSD):

- Telopea Concept Plan and Stage 1A – Response to Request for Further Information – December 2022 (ARtS)
- Appendix AA – Arboricultural Impact Appraisal and Method Statement (Rev C) – Telopea Stage 1A - 26 October 2022
- Appendix BB – Arboricultural Impact Appraisal and Method Statement (Rev C) – Stage 2 and 3 works - 2 November 2022
- Appendix Y – BDAR - Concept Proposal
- Appendix Z -BDAR – Stage 1
- Appendix J – Stage 1A Landscape Plans

and provides its comments and recommendations below.

Telopea Concept Plan Area

The documents accompanying the ARtS include differing information on the Telopea Concept Plan Area (CPA), for example:

- Section 1.4 of Appendix Y states “the Telopea CPA site is approximately 13.4 (ha)” while Section 1.8 of Appendix Y states “The total area of the Telopea CPA development plan as depicted in Figure 4, equates to about 18.85ha” and Section 4.3.3 of Appendix Y refers to 18.85 ha as the construction footprint.
- Appendix AA states “The Telopea Estate site is approximately 13.4 (ha)” (section 2.2.2).
- Appendix BB states “The Telopea Estate site is approximately 13.4 (ha)” (section 2.2.2).

The applicant should clarify the total area of the Telopea CPA.

BDARs

EHG has reviewed the BDARs for the Concept Plan (CPA) and Stage 1A and provides the following comments on both BDARs:

- Section 1.8 of both BDARs discuss the use of BAM’s streamlined module for planted native vegetation but it is unclear if this module has been applied. As stated in section 1.8, if the module has been applied then the BDAR must include justification for why it was applied with reference to the decision-making key in Appendix D of the BAM. If remnant trees are to be impacted, the full BAM must be applied to the remnant areas and the streamlined module can be applied to the planted trees.
- Page iii states that Appendix A includes a checklist, but no Appendix A is included.
- The BDAR states that Sydney Turpentine Ironbark Forest (STIF) is listed as a threatened ecological community under the BC Act and a critically endangered ecological community (CEEC) under the EPBC Act. It should be noted that STIF is listed as a CEEC under both Acts.
- The Stage 1A BDAR should include a site description that is relevant for that BDAR. The site description that is provided is for the Concept Plan not Stage 1A.
- The area threshold triggers for the BOS and the Biodiversity Values Map (Figure 7) are not relevant to SSDs.
- The extent of native vegetation shown in Figure 10 is not clear. It is also not clear how the extent of STIF was calculated as 1.5 ha for the CPA and 0.946 ha for Stage 1A, these areas should be mapped in the BDAR.

- The BDARs state that only a few of the trees in the subject site are remnant and most native trees are planted. However, it is not clear whether due consideration has been given to the possibility that some of these native trees may have naturally regenerated. In fact, there is some mention in the CPA BDAR that this may have occurred, as shown in Figure 13. The BDAR should include more justification for the decision that the planted trees are planted. Where there is doubt, a precautionary approach should be taken.
- Once there is more clarity on whether the trees are remnant or planted, the BDARs should be specific about the impacts to remnant STIF and include a map showing where remnant and planted trees of STIF are located. It is not clear how many remnant trees are to be removed. For example, section 4.3.5.1 of the CPA BDAR states that “The impact would include the removal of 1.5ha of highly modified areas of representative elements of PCT 1281 on the subject site that have been largely been landscaped”. The BDAR should be clear on whether the PCT 1281 to be removed is remnant or not.
- It is not clear if targeted surveys were undertaken. Section 4.2 states that targeted searches are not required but Table 6 says targeted searches were undertaken.
- There is inadequate justification for not undertaking targeted surveys for flora. Table 6 states that surveys are not required as the vegetation on site is limited to planted trees, but the BAM plots indicate some shrubs are present. Also, Table 6 states that there is no structural integrity to the vegetation, but some of the species that may be present can occur in such disturbed environments (e.g., *Acacia pubescens*, *Pomaderris prunifolia*, *Wahlenbergia multicaulis*).
- Section 3.2.4 states that a few small and medium sized hollows are present and are suitable for parrots or microbats but the entries in Table 6 for parrots and microbats says there are no suitable hollows. Some threatened species, such as the Little Lorikeet, can utilise small hollows.
- In relation to the swift parrot, the BDARs should refer to the important habitat map for this species.
- The CPA BDAR states that during surveys there was a recording of the vulnerable species, Eastern Coastal Free-tailed Bat (*Micronomus norfolkensis*). In accordance with Appendix D.2 of the BAM, where there is evidence that threatened species are using the planted native vegetation as habitat, the assessor must apply section 8.4 of the BAM to mitigate and manage impacts on the species.
- Section 3.2 states that surveys of buildings for microbats can be undertaken prior to demolition but this is not an acceptable practice as the release of microbats during the day would likely result in their predation. The BDAR should detail appropriate measures that must be applied if microbats are found prior to demolition.
- Regarding prescribed impacts, the BDARs have not discussed vehicle strike, which is relevant to this proposal. It should also be noted that human-made structures include buildings, which is relevant to this proposal, not just drainage pipes.
- The BDARs include only one sentence on avoidance/minimisation, which is not sufficient. Greater detail should be provided with reference to Chapter 7 of the BAM.
- The BDARs should include a description of the nature, extent, frequency, duration and timing of indirect impacts.
- The BDARs should include a table of measures to be implemented before, during and after construction to avoid and minimise the impacts of the proposal, including action, outcome, timing and responsibility.
- The CPA BDAR includes a discussion (section 5.1) of whether the impacts constitute a serious and irreversible impact (SAII) on STIF, but this assessment has not addressed all the factors in section 9.1.1 of the BAM. Therefore, the conclusion that the proposal would not constitute a SAII is invalid.

Department of Planning and Environment

- The BDARs appear to include screenshots of the BAM-C. Reports from the BAM-C should be provided instead.
- If it is appropriate to apply the full BAM to all or part of the subject site, then more detail is required in several areas to meet the full BAM e.g., a site map, location map, details on the survey method and effort, timing, experience of personnel, limitations, justification for the vegetation identification, SAI assessment, identification of areas not requiring offset and not requiring assessment.
- Digital files of the report maps have not been provided to EHG

Avoid and Minimise the removal of local native trees

The EIS notes the Concept Plan has recognised the importance of preserving existing trees to support a mature tree canopy within the CPA (Table 2) but according to:

- Appendix AA which relates to Stage 1 and 1A indicates “**One hundred and ninety-five** high category trees and **one-hundred and forty-one** low category trees will be lost for the Stage 1 and 1A proposal” which amounts to **336** trees. The proposed changes may also adversely affect **fifty-six** high category trees if appropriate protective measures are not taken. This amounts to **392** trees in total that could be removed/potentially impacted for Stage 1 and 1A.
- Appendix BB which relates to Stages 2 and 3 of the Concept application states, “**Eighty-three** high category trees and **two-hundred and fifty-five** low category trees will be lost for reasonable building footprints to be established on each parcel in Stages 2 and 3”. This amounts to **338** trees to be removed. The proposed changes may also adversely affect a further **eighty** high category trees and **one-hundred and one** and **three** low category trees if appropriate protective measures are not taken. This amounts to **522** trees in total that could be removed/potentially impacted for Stages 2 and 3.

In total **914** trees within the CPA site could be removed/potentially impacted for Stage 1 and 1A and Stages 2 and 3

According to the ARTS the retention of total existing trees is as follows:

- 45 % of total trees across the North Precinct are to be retained (see pages 14 and 44)
- 53 % of total trees across the South Precinct are to be retained (see pages 17 and 45)
- 32% of total trees across the Core and East Precinct are to be retained (page 44)

which means a greater percentage of existing trees in the North Precinct and Core and East Precinct is to be removed.

Appendix AA and BB indicate a variety of locally indigenous trees are scattered throughout the site area and the site boundaries in addition to ornamental and coniferous species (section 2.2.2). It would be helpful if Appendix 2 in Appendices AA and BB identified which trees are locally indigenous trees at the CPA site and the number of these trees that could be removed/potentially impacted. EHG recommends the SSD avoids or minimises the removal of local native trees from the CPA site.

Appendix AA and BB indicate a comprehensive landscaping scheme to mitigate the tree losses is proposed that will include the planting of new trees. The ARTS proposes planting semi-mature trees. The removal of existing trees and the benefits that they provide, will take decades for a juvenile or semi-mature tree to grow and replace and may also remove the potential supply of future hollows that would be expected to form in time.

Department of Planning and Environment

DPE needs to be satisfied as to whether the potential removal of **914** trees from the CPA site is appropriate in terms of mitigating the urban heat island effect, and whether it is in accordance with the SEARs for this SSD which requires the Landscape Plan to demonstrate:

- how the proposal would protect and increase the urban tree canopy
- how the development maximises opportunities for green infrastructure

EHG considers the best way to achieve this would be for the SSD to be designed to retain existing trees, particularly local native trees.

Removal of Local Native Vegetation

Seed collection from local native plants to be removed

EHG recommends for any local native vegetation that is approved for removal, seed is collected, and the following condition of consent is included:

Prior to the removal of any local native vegetation from the site seed from native trees and shrubs approved for removal is collected and it is propagated by a suitably qualified bush regenerator and used in the site plantings.

Translocation of juvenile native plants

EHG recommends any juvenile local native plants that are to be removed by this SSD are replanted in the landscaped planting areas/parks etc. The juvenile plants must be translocated prior to any earthworks and clearing of native vegetation commencing. The plants should be relocated by a suitably qualified bush regenerator when plant growth conditions are ideal to give the native plants the best possible opportunity to survive and should be maintained until established. EHG recommends a condition of consent is included to this effect.

Pre-clearance fauna surveys and Relocation of native fauna

EHG recommends a condition of consent is included that a suitably qualified and experienced ecologist needs to be engaged by the proponent to undertake pre-clearance surveys and the following condition is included in the consent:

Prior to removing any vegetation or other habitat that has been approved for removal, the applicant must engage a qualified and experienced ecologist to:

- ***undertake a pre-clearing survey to delineate, map, and mark habitat-bearing trees and shrubs to be retained/removed and other fauna habitat features and determine the presence of any resident native fauna using nests, dreys, hollows etc***
- ***native fauna found during pre-clearing surveys including in tree hollows must be captured and relocated to appropriate nearby habitat***
- ***cover the tree hollows once checked for native fauna to ensure the hollows are not reoccupied prior to removal of the trees***
- ***supervise the clearance of trees and shrubs (native and exotic) and other habitat to capture, treat and/or relocate any displaced native fauna to an appropriate nearby location***
- ***remove sections of a tree containing a hollow or habitat prior to clearing and felling the tree and reuse as habitat on the site.***

The clearing of trees and shrubs should be avoided in late winter/spring during breeding/nesting period for birds

Evidence of the pre-clearing surveys and inspections for fauna and any relocation of fauna must be provided to the satisfaction of the Secretary of Planning

Replacement nest boxes

Section 2.1.4.5 of the EIS states “hollow bearing trees have been identified generally near riparian corridors which can provide habitat for fauna”. The EIS also indicates tree hollows have been

Department of Planning and Environment

observed in the larger mature canopy trees in the Core Precinct (section 6.8.1) and section 6.8.2 refers to “a few small and medium sized hollows for species of parrots and other birds or microbats (page 171). Details need to be provided on the total number of tree hollows that are located across the CPA site and how many tree hollows are proposed to be retained or removed..

The BDAR recommends

- hollow-bearing trees should be preserved as a priority as these provide valuable roosting and breeding habitat for common avian species, arboreal mammals and microbats (page 40)
- replacement habitat is provided as part of the proposal in the installation of small and medium sized nest boxes and bat boxes affixed to suitable retained trees occurring within the CPA Area (section 6.8.2, page 171).

EHG recommends the following is included as a condition of consent:

- ***Prior to felling trees approved for removal, a nest box management plan must be prepared which includes details on:***
 - ***the number, size, type and location of tree hollows to be removed***
 - ***the size, type, number and proposed location of replacement nest boxes and/or compensatory artificial hollows using a HollowHog tool (<https://www.hollowhog.com.au/>) should be based on the results of the pre-clearing survey.***
- ***Prior to felling the trees a suitably qualified ecologist must salvage and remove sections of a tree containing a hollow or other habitat features where possible for relocation and reuse by the project***
 - ***trees with hollows should 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***
 - ***where it is not possible to remove a tree hollow/habitat feature prior to felling the tree, native fauna should first be removed before tree felling and the hollow bearing trees may then be slowly pushed over to avoid damage to hollows.***
- ***Prior to removing any hollow-bearing trees, compensatory nest boxes and/or artificial hollows using a HollowHog tool (<https://www.hollowhog.com.au/>) should be installed on suitable retained trees on the site and prior to the release of the hollow dependent fauna unless the removed tree hollows can be relocated and installed on the same day they are removed***
 - ***The size of the nesting box/ artificial hollow is to reflect the size and dimension of the hollow removed***
 - ***Nest boxes should be monitored for any repair /maintenance /replacement requirements for a minimum of 5 years.***

Clearing of native vegetation

Reuse and removed trees and hollows

EHG recommends the project salvages and reuses any native trees that are approved for removal including hollows and tree trunks (greater than approximately 25-30cm in diameter and 2-3m in length) and root balls and these are placed within the CPA site that are to be replanted with local native species to enhance habitat.

If the SSD project is not able to reuse all removed native trees, a condition of consent is included that the proponent consults with the local community restoration/rehabilitation groups, Landcare groups, and relevant public authorities including local councils, and Greater Sydney Local Land Services prior to any clearing commencing to determine if the removed trees can be re-used by others in habitat enhancement and rehabilitation work. This detail including consultation with the community groups and their responses should be documented

Department of Planning and Environment

EHG recommends the project includes the following condition of consent:

The Applicant must where it is practicable reuse any of the native trees that are to be removed as part of this project, including tree hollows, tree trunks (greater than 25-30 centimetres in diameter and 2-3 metres in length), and root balls to enhance habitat:

- ***Any hollow sections of wood removed should be salvaged and re-located to appropriate locations to provide natural nest boxes prior to the release of any native fauna found using the tree hollows.***
- ***If removed native trees are not able to be entirely re-used by the project, the proponent should consult with local community restoration/rehabilitation groups, Landcare groups, and relevant public authorities, local councils, and Greater Sydney Local Land Services prior to removing any native trees to determine if the removed trees can be reused in habitat enhancement and rehabilitation work. This detail including consultation with the community groups and their responses must be documented.***

Revegetation and Landscaping

Tree replacement ratio

Details need to be provided on the total number of:

- existing trees across the CPA site that are proposed to be protected, or removed and whether the trees are exotic, native to the local area, or non-local native species.
- replacement trees that are proposed to be planted.

The ARtS states in the Core & East, North and South Precincts the following tree succession strategy is proposed for Category AA and Category A trees:

- Category AA Trees removed are proposed to be replaced at a ratio of 10:1
- Category A tree removed are proposed to be replaced at a ratio of 5:1 (see pages 45 -46)

EHG recommends this mitigation measure is included as a condition of consent.

For any other trees proposed to be removed that these are replaced at a ratio greater than 1:1 (for trees not covered by a biodiversity offset strategy) to mitigate the urban heat island effect and enhance habitat and a condition consent is included to this effect.

Use of local native provenance species

The EIS includes as a mitigation measure that the former habitat of Sydney Turpentine Ironbark Forest and possibly Blue Gum High Forest should be enhanced by the incorporation of landscape plantings including native species which are diagnostically positive for these ecological communities (page 172).

EHG recommends any planting/ landscaping, rehabilitation associated with the CPA should use a diversity of local provenance native trees, shrubs and groundcover species from the relevant native vegetation community (or communities) that once occurred on the site/ local area (rather than use exotic species or non-local native species).

The landscape plans and planting schedules for the site should be prepared by a qualified bush regenerator. The planting schedule/planting mix in the Landscape Plans should demonstrate that the plant species are from the local native vegetation community that once occurred on the site and are of local provenance.

The applicant needs to demonstrate that enough space is available with this SSD to allow the existing trees to be retained on the site and the trees proposed to be planted to grow to maturity to avoid the need to lop and trim branches and to allow for increased urban tree canopy cover. Street

Department of Planning and Environment

setbacks should provide adequate space to accommodate any proposed footpaths plus allow for street trees to grow to maturity.

It is noted that undergrounding of existing overhead electricity networks is proposed in nominated locations (Table 29 of EIS) and Section 6.14.3 of the EIS states “as part of the redevelopment, existing overhead electricity would be placed underground where possible (page 200 of EIS). Figure 74 in the EIS appears to indicate this is only proposed to occur within a small area of the entire CPA site. Where overhead electricity networks or undergrounding of existing overhead electricity networks are proposed within the CPA this should ensure street trees are still capable of growing to maturity.

EHG recommends the following conditions of consent are included:

- *Any planting/ landscaping, rehabilitation associated with the project will use a diversity of local provenance native trees, shrubs and groundcover species from the relevant native vegetation community (or communities) that once occurred on the site/ local area (rather than use exotic species or non-local native species).*
- *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 area/space is provided to allow the 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/ local area and the plan demonstrates that the proposed plant species are from the relevant vegetation community*
 - b. seed collection – the location of all native seed sources should be identified*
 - c. the type, species, size, quantity, and location of replacement trees*
 - d. the species, quantity and location of shrubs and groundcover plantings*
 - e. the plan demonstrates replacement trees plantings will deliver a net increase in trees for trees that are not covered by a biodiversity offset strategy*
 - f. the local provenance tree, shrub and groundcover species to be used*
 - g. the area/space required to allow the planted trees to grow to maturity*
 - h. plant maintenance regime. The planted vegetation must be regularly maintained and watered for 12 months following planting. Should any plant loss occur during the maintenance period the plants should be replaced by the same plant species.*
 - i. the replacement plantings will be with the same growth form (i.e., a tree with a tree, a shrub with a shrub etc). The replacement planting must not decrease species diversity.*

The applicant should then maintain the landscaping and vegetation on the site in accordance with the approved Landscape Plan for the life of the development.

Biodiversity Corridor

Section 1.3 of the EIS indicates the Concept Plan design aims to repair and reconnect the highly fragmented ecosystem using green infrastructure initiatives to create a biodiversity corridor between existing wildlife protection areas such as Vineyard Creek Reserve and Ponds Creek Reserve but no further details are provided in the EIS on this and it was not included as a mitigation measure in the updated mitigation measures in Appendix B of the RtS.

Pond Creek

Figure 6 in the EIS shows the South Precinct boundary is in proximity to the riparian corridor along The Ponds Creek but no assessment has been undertaken as to whether EEC or Threatened Species along the riparian corridor could potentially be impacted by the future development of the South

Department of Planning and Environment

Precinct including impact from overshadowing and an increase in use of this area by future residents.

The EIS notes there is a range of open space provided in the vicinity of the Telopea CPA including The Ponds Walk which is located along The Ponds Creek, and connects Carlingford to Rydalmere (section 2.1.4.1, page 28). The use of this pathway by future residents has the potential to increase impacts on native fauna/flora caused by proposed increase in residents and domestic dogs potentially using the path as 4700 dwellings are proposed in the Telopea CPA. The proponent needs to address this issue.

Biodiversity Rooftops

Appendix K1 of the RtS noted “a combination of accessible and inaccessible rooftop gardens are distributed across fifty percent of the new Telopea rooftops” (page 32). EHG supports the inclusion of green roofs into the design but it is unclear why only 50 % of the rooftops are to include rooftop gardens. EHG recommends that if the project is approved a condition of approval is included for the proposal to include green roofs and green walls into the design. The benefits of Green Roofs and green walls are outlined in the OEH (2015) Urban Green Cover in NSW Technical Guidelines which can be found at the following link:

<http://climatechange.environment.nsw.gov.au//Adapting-to-climate-change/Green-Cover>

Green roofs can have a strong regulating effect on the temperature of roofs and building interiors, reducing the energy needed for cooling and the impact of the Urban Heat Island effect. The provision of green roofs would increase habitat and biodiversity at the site, particularly if local native plant species are used from the relevant native vegetation community. The green walls will improve microclimate conditions and provide ecosystem services such as air quality improvements and noise dampening.

End of Submission