Your ref: MP06_0025-Mod-9
Our ref: DOC22/946471

Mr Chris Eldred
Senior Planning Officer
Department of Planning and Environment
4 Parramatta Square
PARRAMATTA NSW 2150

By email: christopher.eldred@planning.nsw.gov.au

Dear Mr Eldred

Major Projects – New Request for Advice – SSD Vincentia Coastal Village - Project Modification 9 and Concept Plan Mod 17 (MP06_0025-Mod-9) (Shoalhaven City)

Thank you for the opportunity to comment on the MOD 9 for the SSD Vincentia Coastal Village currently on exhibition. The Biodiversity Conservation Division (BCD) and National Parks and Wildlife (NPWS) have reviewed the main referral documents and several relevant appendices and provide comments and suggestions on the following aspects detailed in **Attachment 1**:

- NPWS
- Flooding
- Water Quality/Quantity and Wetland Health
- Biodiversity

It is also noted that on review of the original Environmental Impact Assessment (EIA) documentation circa 2006, that an extensive Species Impact Statement (SIS) was undertaken to consider the impacts on threatened flora and fauna of the entire proposed development footprint, across all Stages in the Concept Plan. In the process of landing on an agreed developmental footprint, an area of undeveloped high value land was transferred to NPWS that would in some ways parallel the current principle of avoidance. As an SSD, the MOD 9 proposal triggers the requirement a Biodiversity Development Assessment Report (BDAR) that addresses the proposed clearing of regrowth in a previously approved area of clearing on a section of the development footprint (identified as Stage 2). As such, the comments provided in **Attachment 1** address some of the deficits pertaining to the BDAR which can be easily rectified by the Accredited Assessor.

If you have any further questions about this issue, please contact Ms Tania Ashworth, Senior Conservation Planning Officer, South East Region, on 02 6229 7921 or at tania.ashworth@environment.nsw.gov.au.

Your sincerely

Chris Page 7 November 2022
Senior Team Leader, Planning (Illawarra)
Biodiversity and Conservation Division

Attachment 1:

The National Parks and Wildlife Service (NPWS)

NPWS seeks to confirm as part of this response that no works are directly proposed on land acquired under Part 11 of the *National Parks and Wildlife Act 1974* (NPW Act) for future reservation as Jervis Bay National Park ('NPWS lands'). The development site is immediately west of lands acquired under the NPW Act. Overall, NPWS seeks to ensure that all direct or indirect adverse impacts on land it manages and that land's values are avoided. This modification presents a significant shift of building bulk eastwards towards the park boundary. The below comments are made in addition to all prior correspondence/requirements from NPWS on previous versions of the proposal and should be read in conjunction with those responses.

No works, access or encroachments are permitted on NPWS lands
No access to or works on NPWS lands are to occur as part of this project unless authorisation is granted by NPWS under the NPW Act or National Parks and Wildlife Regulation 2019. In particular, NPWS land is not to be used to gain access to project works sites or for the storage of materials (including excavated material), equipment, workers' vehicles or machinery at any time, and any required fire management zones such as Asset Protection Zones are to be provided wholly on the development site and not from the NPWS lands.

Figure 8 (p. 23) of the BDAR shows an indirect impacts zone to Park and Table 18 (p. 24) of the BDAR outlines a range of indirect impacts. This is of significant concern to NPWS – particularly the indirect impacts zone encroaching onto NPWS managed lands as a result of the development and any impacts not authorised by NPWS under the NPW Act or NPW Regulation 2019 would be considered an offence under the NPW Act. It appears, however, that the indirect impacts could be better addressed through additional mitigation measures, which are currently listed in Table 19 (pp. 26-27) of the BDAR. The current list of mitigation measures appears incomplete (particularly given indirect impacts onto adjacent NPWS lands are anticipated).

To better ensure adequate mitigation measures are proposed to avoid indirect impacts to environmentally sensitive lands adjacent to the development site, it is recommended that at a minimum each indirect impact listed in Table 18 is also provided in Table 19 with appropriate associated mitigation measures for each (e.g. rubbish dumping/wood collection could be mitigated through appropriate access control – such as a fence developed in association with NPWS – see discussion below; and increase in pest animal populations could be mitigated through implementation of an appropriate pest management plan in place during construction and for the entirety of the operational phase).

Recommendations
- Ensure clear direction is provided as part of all operation documents that the Park is classified as a restricted area, and that environmental safeguards are in place to protect the interface between the Park and the project's works.
- Apply procedures to ensure demarcation of the Park boundary occurs before works commence and that such demarcation remains a visually obvious barrier during all operations. The Construction Management Plan should be updated to detail how sediment control fencing and access control (construction) fencing can be provided concurrently, entirely within the development site and so as to appropriately avoid any impacts such as unauthorised access or sediment and stormwater entering NPWS lands.
- Ensure staff and contractors are adequately briefed on boundary management protocols and procedures and restrictions applying to the protection of NPWS lands before commencement of works.
- Ensure all operational documentation contains clear procedures for incident management should issues arise on the interface or directly affecting Park. Procedures should include emergency reporting via the Environment Line on 131 555 and in writing to the Manager, NPWS Shoalhaven Area.

- No ancillary construction related facilities, utilities, storage/stockpiling or access are to be provided on Park.
- Indirect impacts anticipated as a result of the development (Table 18 of the BDAR) should be appropriately mitigated to avoid unauthorised impacts to adjacent NPWS estate.

Flooding and Sediment and erosion control

Section 7.5 (p. 21/24) of the Section 75W Application provides that "*any consequential or resultant impact on stormwater a result of the amendments to the concept approval will be of minimal environmental impact and would be as expected for a development of this size and scale*." It is considered that the size or scale of development should not factor into acceptable impacts to adjacent lands as a result of the development, particularly in cases where those adjacent lands are environmentally sensitive and noting that adjacent NPWS lands includes watercourses and mapped coastal wetlands in proximity to the development site. The consent authority should be satisfied that appropriate erosion and sedimentation control techniques are to be utilised to ensure the project works do not result in any increased risk of erosion on NPWS lands or increased movement of sediment entering NPWS estate due to nearby ground disturbance. Particularly, no works are undertaken proximate to NPWS estate during wet weather events to minimise the risk of erosion.

As discussed above, the Construction Management Plan should be updated to detail how sediment control fencing and access control (construction) fencing can be provided concurrently and so as to avoid impacts to adjacent NPWS lands including during earthworks.

The Water Cycle Management Study (Section 6.1.3, p. 12) finds, in terms of flooding impacts, that "*There are localised impacts located within the riparian corridor of 20 mm. Since the area within the riparian corridor is not subjected to residential and commercial activities these impacts are not considered as detrimental. As such, this development has no adverse impacts on adjoining properties and hence no hydraulic impact report would be required*." It appears the riparian corridor discussed would be at least partly on NPWS estate. The conclusion that flooding impacts only apply to lands developed for residential or commercial purposes should be revisited including an assessment of potential impacts of changed hydrology to the environmentally sensitive lands adjacent the site.

Recommendations

- Ensure application of adequate sediment and erosion control is utilised to limit the movement of sediment across the park interface in accordance with recognised standards such as the 'Blue Book'.
- Ensure adequate sediment and erosion controls are in place and operational throughout the project, to protect waterways, NPWS managed lands and its interface.
- No works are undertaken proximate to NPWS estate during wet weather events to minimise the risk of erosion into environmentally sensitive lands.
- Additional assessment is recommended to determine whether the development has adverse impacts on adjoining properties when environmentally sensitive lands are also considered (not just commercial and residential uses) and based on those findings, whether a hydraulic impact report would be required.

Hygiene protocols

Activities and works adjacent to NPWS lands have the potential to spread or introduce pathogens or invasive plant propagules into environmentally sensitive areas. NPWS recommends reducing the risk of this occurring on the interface of Park, to protect the values of NPWS lands.

Recommendations

- Hygiene protocols for machinery, vehicle and material are to be established and delivered throughout the project to limit propagule and pathogen transmission on the Park interface.
- Ensure hygiene protocols are established and implemented for machinery, vehicles, equipment and materials to limit the introduction of foreign soil, plant matter or pathogens.

- Use the Hygiene Guidelines for Wildlife (DPIE 2020) to assist in designing appropriate protocols for the project works.

Tree protection and felling techniques
Naturally vegetated areas adjoining NPWS lands provide protection from edge effects and amenity to the environmentally sensitive areas. Felling techniques for removal of any trees in the vicinity of NPWS lands should be selected in order to maximise the protection of areas of significant natural value, and to limit risk of damage to Park and the Park interface.

Recommendations
- Apply tree protection on the boundary interface with NPWS lands in accordance with *Australian Standard 4970-2009 Protection of Trees on Development Sites*, to prevent adverse long-term damage.
- Employ controlled directional, soft and sectional felling techniques on the interface with NPWS lands under the direction of a qualified arborist to avoid direct impacts to Park, reducing the risk of any tree (or partial tree) being felled into NPWS estate.

Bushfire protection
The Bushfire Report confirms that no APZ requirements will be required on NPWS land as a result of this development. Consistent with *Planning for Bushfire Protection*, land reserved or acquired under the NPW Act should not be considered available for APZs to protect new adjoining development, and so NPWS supports this approach.

Schedule 1 – Plan of Bushfire Measures in the Bushfire Report provides that a minimum 18m setback between the development and eastern boundary would be proposed and presumably findings of the Bushfire Report are based on that, however the Architectural Plans show a minimum 13.4m setback to that boundary. The inconsistency will need to be checked.

The consent authority will have to be satisfied that appropriate bushfire mitigation and safety measures can be applied entirely within the development site prior to any determination of this development application.

NPWS undertake prescribed burns on its land in this locality as part of ongoing bushfire management operations. Consideration of these operations including potential mitigation measures to sensitive receivers to smoke (including the childcare facility and hospital facilities provided as part of the proposed “medical centre”) do not appear to have been taken into account. Ongoing discussions will be required between NPWS and the applicant to ensure future tenants of the commercial sites (including the childcare and medical uses) are aware of NPWS obligations to undertake fire management to the adjacent land it manages and to ensure the Service can continue to undertake hazard reduction works on this land in accordance with the Bush Fire Environmental Assessment Code (NSW RFS 2021).

Recommendations
- Clarify minimum building setbacks assessed in the Bushfire Report and confirm that appropriate bushfire mitigation and safety measures can be applied entirely within the development site.
- Consultation between NPWS and the applicant to ensure NPWS can continue to undertake hazard reduction works on adjacent land in accordance with the Bush Fire Environmental Assessment Code (NSW RFS 2021).

Proposal design and fencing
The Architectural Plans show a chain mesh fence above the retaining wall and the BDAR provides that an existing metal fence is currently in place along the site boundary. NPWS supports the retention/installation of a security fence along the boundary with NPWS estate to define boundaries and minimise the potential for future encroachments onto NPWS land. NPWS would recommend fencing be designed in consultation with NPWS Shoalhaven Area and notes that if any encroachment to Park were required to erect fencing it would require authorisation under the NPW

Regulation 2019. The potential need for a control line on the eastern side of the fence would also need to be discussed with NPWS given this would potentially require vegetation management on NPWS estate depending on fence siting. Consideration will also need to be given as to asset management of the fence by the applicant during ongoing operation of the commercial site.

Recommendation

- Details of fencing and any other methods of deterring access from the development site into NPWS estate are to be confirmed in consultation with NPWS Shoalhaven Area.

Consultation with relevant LALC

Section 5.9 (p. 65/68) of the modification report notes that the extant consent includes a commitment to inform the Jerrinja Local Aboriginal Land Council of progress of the development but doesn't detail whether this has been undertaken for the current modification.

BCD Floodplains

In regard to flooding there are no concerns, and the below comments are in regard to water quality and wetland health only.

BCD Water Quality/Quantity and Wetland Health

The current Water Cycle Management Study (WCMS) (Cardno Sept 2021) outlines the proposed treatment train for managing offsite water quality impacts. The music modelling completed demonstrates pollutant reduction to meet Shoalhaven City Council DCP targets from the treatment train under optimum performance conditions, which assume regular and ongoing maintenance and cleaning. Evaluation of completed development treatment trains over time shows this rarely occurs to an optimal regime and therefore compliance with DCP targets over the long term if maintenance drops off is questionable. In this regard, the proposed treatment train should be reviewed to outline how pollutant reduction levels could be increased further to account for lower performance over time, particularly important for bioretention basis where the filter media will clog up and performance will decrease over time. In addition, the WCMS should be updated to outline how the treatment train units would be maintained including cleaning frequency, for how long, and by whom. We note that the bioretention basins will have a free 2-year maintenance of the filter media and planting, but no further details beyond this are specified.

It is also not clear if pollutant reduction could be increased through enhancement of the constructed pond and wetland adjacent to the development, and what role if any, these play for stormwater management of the modified proposal. The WCMS should be updated to outline if the pond/wetland will play a role in stormwater management from the site, including a plan for long term management and maintenance of these assets and who would have responsibility for doing this maintenance/management.

The WCMS does not outline any possible long-term indirect impacts on downstream wetlands from increased sediment and nutrients. Any increase in nutrients and sediments over time has the potential to increase weeds and cause elevation changes, impacting on wetland health. The WCMS should be updated to outline the appropriate management of these impacts.

BCD Biodiversity

The Biodiversity Conservation Division (BCD) understand that the streamlined assessment module for a small area following Appendix C of the Biodiversity Assessment Method (BAM) 2020 has been used.

There are some relevant areas of BAM 2020 that the Biodiversity Development Assessment Report (BDAR) has not completely addressed - and as a result affects other areas of the BDAR. This largely relates to association between the PCT978 and a threatened ecological community (TEC); please see detailed comments **Table 1**. In addition, and based on the wider review in conjunction with BCD Water Flood Coast (WFC) team, the current water cycle management study

(WCMS) (Cardno Sept 2021) should be updated to outline appropriate management of any long-term indirect impacts on downstream wetlands – and depending on the outcome of the updated WCMS, the BDAR may need to be updated to address associated impacts (whether being indirect or prescribed) on threatened entities; please see detailed comments **Table 2**.

BCD would also like to flag that the BDAR is to be certified within 14 days of the date the report is submitted as per section 6.15 of the *Biodiversity Conservation Act 2016*. We understand that the date in the BDAR is indicated as "Last saved on 12 July 2022". While the Biodiversity Credit Report shows: "Date Finalised 08/07/2022". Neither date is within 14 days of report submission – as we understand that it was uploaded to the Major Projects portal on 8 September 2022.

TABLE 1. DETAILED COMMENTS

Item	Section of BAM 2020	Section of BDAR	Comments	Recommendation
1	4.2.2	3.4	For small area streamlined assessments, the assessor is to identify if the PCT is associated with a TEC as required by section 4.2.2. Among other things, it states that BioNet Vegetation Classification indicates where a PCT may be associated with a TEC; and that an assessor must also consider information in the determination made by the Threatened Species Scientific Committee. Section 1.4 of BAM 2020 also outlines additional published databases assessors should refer to. It is unclear why the BDAR states that "in the Shoalhaven LGA, PCT 978 is not a listed TEC". BioNet Vegetation Classification (and BioNet Threatened Biodiversity Data Collection) recognises the (albeit now decommissioned) PCT978 as "Has associated TEC" and lists "Coastal Upland Swamp in the Sydney Basin Bioregion" (CUS). Whilst we recognise that the NSW TSSC Final Determinations for CUS do not specifically identify Shoalhaven LGA in the list of LGAs of known CUS occurrence - they do however, identify "but may occur elsewhere within the bioregion". Furthermore, point seven of the Final Determination places CUS in Shoalhaven LGA by way of Tozer *et al*. (2010) 'Coastal Upland Swamp' (map unit FrWp129). This map unit is described by Tozer *et al*. (2010): "its distribution extends from Brisbane Water to Bhewerre Peninsula,". We also recognise that BAM-C may not have provided the option to select a TEC for PCT978, however, in the Biodiversity Offsets Scheme Accredited Assessor Updates #46 (9 April 2021), point 2, there is guidance on using BioNet for BAM assessments. Of relevance, it states that Assessors also need to refer to BioNet as it contains information not included in the BAM-C and could provide more up to date data; and to review BioNet regularly while undertaking a BAM assessment. For a situation when differences between BioNet and BAM-C are identified, the Update #46 states that the assessor should discuss the divergence between the two systems in the Biodiversity Assessment Report.	Update BDAR as required as per section 4.2.2 of BAM 2020 and refer to section 1.4 BAM 2020 and guidance in point 2 of Biodiversity Offsets Scheme Accredited Assessor Updates #46.
2	7.1	5	For small area streamlined assessments, the assessor must follow section 7.1 including any relationship with a TEC.	Update BDAR as required as per section 7.1 of BAM 2020 with

			As there were no TEC identified (as per 4.2.2 BAM 2020) in the BDAR, there is no demonstration of "avoid or minimise" direct and indirect impacts on a TEC.	consideration of TEC and further reasonable demonstration of measures to avoid or minimise.
3	7.1	5	The current measures to 'locate the proposal' to avoid or minimise direct and indirect impacts (section 7.1.1 of BAM 2020) seems to rest on the mention of "the EP&A Act Part 3A assessment process" (approved in 2009) without referencing the relevant part/s of the document/s for us to understand how avoidance is being demonstrated. Also, the additional measures listed would normally be considered 'mitigate and manage impacts on biodiversity values' as per section 8.4 BAM 2020 e.g.: sediment barriers, dust management, and reduce impacts of light spill. These have even been listed in Table 19 of the BDAR as measures proposed to mitigate and manage impacts. Likewise, our abovementioned comments relate to the measures described for 'design the proposal' to avoid or minimise direct and indirect impacts (section 7.1.2 of BAM 2020).	Update BDAR as required as per section 7.1 of BAM 2020 with further reasonable demonstration of measures to avoid or minimise.
4	9.1	7.1	The assessor must address the impact assessment requirements set out in Subsection 9.1.2 of BAM 2020 for threatened species. Section 7.1 of the BDAR does comment on the Giant Dragonfly but does not clearly demonstrate how it address the specified information required. For example, the BDAR does not report on the current population of the species with reference to 9.1.2 2a – 2d; nor does it provide complete data on 9.1.2 4 from BAM 2020.	Update BDAR as required as per section 9.1 of BAM 2020.

TABLE 2. DETAILED COMMENTS - DEPENDING ON THE OUTCOME OF THE UPDATED WCMS

Item	Section of BAM 2020	Section of BDAR	Comments	Recommendation
5	6.1.4	4.4	Depending on the outcome of the updated WCMS, the following comments may apply: In the BDAR section 4.4. it states that the proposed development does not include any prescribed additional biodiversity impact entities. As identified in chapter 6 of BAM 2020, **prescribed impacts** are also impacts: that affect water quality, water bodies and hydrological processes that sustain threatened entities (including from subsidence or upsidence from underground mining).	Update BDAR if required as per section 6.1.4 of BAM 2020.

			Of concern are such impacts to CUS and Giant Dragonfly – and any other threatened entity likely to be affected by such impacts.	
6	8.2	6	Depending on the outcome of the updated WCMS, the following comments may apply: For small area streamlined assessments, it is required to assess all direct and indirect impacts on biodiversity values, including any prescribed impacts. Relevant indirect impacts listed in BAM 2020 include: inadvertent impacts on adjacent habitat or vegetation; loss of breeding habitat; and disturbance to specialist breeding and foraging habitat. Of concern are such impacts to CUS and Giant Dragonfly – and any other threatened entity likely to be affected by such impacts.	Update BDAR if required as per section 8.2 of BAM 2020.
7	9.1	7.1	Depending on the outcome of the updated WCMS, the following comments may apply: Relevant to indirect impacts and SAII entities, the described indirect impacts from the proposal on adjacent habitat of the Giant Dragonfly, is described in the BDAR as expected to be minimal with mitigation measures implemented. Of concern are such impacts to Giant Dragonfly – and any other SAII entity likely to be affected by such impacts.	Update BDAR if required as per section 9.1 of BAM 2020.

REFERENCES

NSW Threatened Species Scientific Committee (2012). Coastal Upland Swamp in the Sydney Basin Bioregion - endangered ecological community listing. Available from: https://www.environment.nsw.gov.au/Topics/Animals-and-plants/Threatened-species/NSW-Threatened-Species-Scientific-Committee/Determinations/Final-determinations/2011-2012/Coastal-Upland-Swamp-in-the-Sydney-Basin-Bioregion-endangered-ecological-community-listing

Tozer, M. G., Turner, K., Keith, D.A., Tindall, D., Pennay, C., Simpson, C., MacKenzie, B., Beukers, P., and Cox, S., (2010). Native vegetation of southeast NSW: a revised classification and map for the coast and eastern tablelands. Cunninghamia 11, 359–406.