



Office of
Environment
& Heritage

Your reference:
Our reference:
Contact:

MP10_0240
DOC12/47347
Allison Treweek
62297082

Andrew Beattie
Senior Planner
Infrastructure Projects
Department of Planning and Infrastructure
GPO Box 39
Sydney NSW 2001

Dear Andrew

**RE: Exhibition of the Environmental Assessment for Princes Highway Upgrade –
Foxground and Berry Bypass (MP10_0240)**

I refer to your letter dated 9 November 2012 regarding the Environmental Assessment (EA) entitled *Foxground and Berry Bypass Princes Highway Upgrade - Environmental Assessment* prepared by AECOM, dated November 2012, and your request for comments, including recommended conditions of approval, for the above mentioned project.

The Office of Environment and Heritage (OEH) have conducted a detailed review of the Environmental Assessment and these comments are provided in the following attachments:

- Attachment A provides detailed comments on Biodiversity impacts of the development.
- Attachment B provides detailed comments on Aboriginal heritage matters.

Summary of comments on Biodiversity impacts:

OEH have reviewed *Volume 2 Appendix F Technical paper: Terrestrial Fauna and Flora*. In particular OEH are concerned that the entire biodiversity impacts of the development are not being taken into consideration in the calculation of the offset required for this development.

It appears that the offsetting approach proposed for this project is inconsistent with the Roads and Maritime Services (RMS) *Guideline for Biodiversity Offsets* Nov 2011 (the 'RMS Guideline') which states (Step1 - Table 1) that offsets for clearing will be considered where works involving more than 5 ha of native vegetation clearing, containing potential habitat for threatened species but not involving native vegetation of 'high conservation value'.

Table 4.1 of Appendix F to the Environmental Assessment demonstrates that the project involves the clearing of 30.4 ha of native vegetation, with indirect impacts on a further 26.7 ha. Of the 30.4 ha to be directly impacted (cleared) 2.9 ha is River Flat Eucalypt Forest Endangered Ecological Community (EEC) and is therefore consistent with Row 5 of Table 1 of the RMS Guideline. The balance of vegetation to be cleared – 27.5 ha - is consistent with Row 4 of Table 1 of the RMS Guideline. This vegetation provides roosting and foraging habitat for a number of threatened species identified within the project site, and OEH therefore considers that all 30.4 ha of native vegetation to be directly impacted by the development is required to be offset.

Therefore, an offset requirement that takes into account all direct impacts associated with the project should be calculated in accordance with Step 2 of the RMS Guideline. Indirect impacts should also be appropriately mitigated. OEH considers that indirect impacts should also be quantified, and factored into the offset requirement.

OEH's clear view is that the Biodiversity Offset package should be based on the Steps outlined in the RMS Guideline, and that Step 1 should take into account the direct impacts on 30 ha of vegetation, including vegetation that conforms to both Row 4 and Row 5 of Table 1 of the RMS Guideline.

This advice is consistent with previous advice provided by OEH at various stages of project development, including comments provided on the Biodiversity Offsets package in October 2011 and September 2012.

Summary of comments on Aboriginal Cultural Heritage impacts:

OEH notes that a number of Aboriginal heritage issues, which were raised in OEH's EA adequacy comments provided to Department of Planning and Infrastructure in October 2012, have been considered in the revised EA with the subsequent addition of various actions that may be taken in order to avoid, mitigate or offset impacts to various Aboriginal cultural heritage values.

Whilst OEH is still concerned about the potential placement of some temporary ancillary facilities on areas containing Aboriginal cultural heritage values, OEH notes the commitment to modify the proposed mitigation measures for these areas where possible.

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OEH is happy to discuss these comments further with the Department of Planning and Infrastructure and the proponent. Please contact Allison Treweek on (02) 6229 7002, for biodiversity and offset issues, and Jackie Taylor on (02) 6229 7089, for Aboriginal cultural heritage issues, if you have any queries in relation to this matter.

Yours sincerely

 18/12/2012

MARK SHEAHAN

**A / Manager, Landscape and Aboriginal Heritage Protection - South
Regional Operations Group
OFFICE OF ENVIRONMENT AND HERITAGE**

Enclosure:

Attachment A - Office of Environment and Heritage Biodiversity Comments on the Environmental Assessment for the Foxground and Berry Bypass Princes Highway Upgrade - Environmental Assessment.

Attachment B - Office of Environment and Heritage Aboriginal Cultural Heritage Comments on the Environmental Assessment for the Foxground and Berry Bypass Princes Highway Upgrade - Environmental Assessment.

ATTACHMENT A

OFFICE OF ENVIRONMENT AND HERITAGE (OEH) BIODIVERSITY COMMENTS ON THE FOXGROUND AND BERRY BYPASS PRINCES HIGHWAY UPGRADE – ENVIRONMENTAL ASSESSMENT (EA)

Biodiversity Assessment

OEH has reviewed the flora and fauna assessment, most of the assessment was undertaken in accordance with the Directors General requirements. The EA indicates, at table 4.1, that the project will remove 30.4 hectares of native vegetation in variable condition, from poor to moderate to good and potentially or indirectly impact on a further 26.7 ha.

OEH notes that of the 30.4 ha to be directly impacted (cleared), 2.9 ha is River Flat Euclaypt Forest EEC, and the balance of 27.5 ha comprises other vegetation types that provides either foraging roosting or breeding habitat for nine threatened species, of which seven species are considered to be hollow dependent. Some species (e.g. Green and Golden Bell Frog) will also rely on grassland and wetland habitats within the project footprint.

OEH understands from the EA that stag watching and a detailed hollow bearing tree survey has not been undertaken for the route, however vegetation including large trees with hollows will be cleared during the construction of the project. OEH also note that hollow dependent fauna were identified during the assessment. OEH have therefore concluded that threatened species habitat in the form of hollow bearing trees will be removed from the project and these areas will be required to be offset. OEH do not consider the placement of nest boxes to be an adequate offset for the loss of hollow bearing trees.

The EA indicates 26.7 ha of vegetation will be impacted by the indirect impacts of the project. It is unclear within the EA where these indirect impacts would occur and what type of indirect impacts are being considered. Section 4 is a section on the potential impacts however it is unclear if the indirect impacts are considered as part of this section. Some of these impacts within Section 4 could be considered direct impacts, whereas other impacts such as increased run off from the highway have not been considered within this section. Changes in hydrology has the potential to impact both directly and indirectly on a variety of vegetation types and this change in hydrology does not appear to have been considered as an impact on the terrestrial ecosystems occurring along the route.

Requirement to Offset

The EA indicates only the impacts on the Endangered Ecological Community River Flat Forest will be offset, as these impacts are the only impacts considered as residual impacts. OEH does not understand why the other areas of native vegetation – 27.5 ha - which provide habitat for threatened species are not being offset as part of the offset package. There is no justification provided in the report for these other residual impacts not to be offset.

OEH have referred to the RMS *Biodiversity Offsets Guideline* (Nov 2011), and in particular Table 1 titled *When should offsets be considered?*. This table indicates that offsets should be considered when "Works involving clearing of native vegetation containing potential habitat for threatened species but not involving native vegetation outlined in 5: Where clearing area > 5ha"

As the 27.5 ha of habitat conforms to Row 4 of Table 1 of the RMS Guideline, (as this includes hollow bearing trees and foraging habitat which according to the EA provides both roosting and foraging habitat for a number of threatened species), OEH considers this should be offset to be consistent with the RMS Biodiversity Offset Guidelines.

OEH therefore considers that the calculation of an offset requirement (as set out in Step 2 of the RMS Guideline) should include all the 30.4 ha of vegetation to be directly impacted. The indirect impacts on the 26.7 ha of native vegetation should also be quantified and included in an offset requirement.

Biodiversity Offset Strategy

OEH notes that, in terms of Offsets, the EA includes the following statement, repeated again in the Statement of Commitments.

Offsetting residual impacts

Submit a biodiversity offset package to the DP&I within 12 months of the approval. The package would be prepared in consultation with OEH and DTIRIS and would include details of the final suite of measures to be implemented based on the biodiversity offset strategy and addressing both terrestrial and aquatic biodiversity. The package would identify a timeline for implementation and the detail of measures, including arrangements for ongoing management of offset lands or other actions.

The area of restoration would be guided by a simulated assessment of the project impacts and potential offsets using the BioBanking Assessment Methodology with a minimum of 2:1 for riparian vegetation to meet DTIRIS requirements.

A simulated BioBanking assessment undertaken for the project determined that native vegetation removed would need to be offset at an average ratio of 5.3:1 in order to achieve the 'improve or maintain' standard.

OEH considers it important that some greater level of detail be included in the EA, and that this be specifically linked to the steps set out in the RMS Biodiversity Offsets Guideline.

In particular, the section "Offsetting Residual Impacts" (shown above) should:

1. Include a concise statement that clearly sets out that the direct "residual impacts" (i.e., unavoidable clearing that cannot be avoided or minimised) include 30.4 ha of native vegetation (including one EEC and 5 other vegetation types); and, that indirect impacts be quantified and also included in **Step 1**.
2. Include a commitment to calculating an offset requirement based on this loss of vegetation and habitat, consistent with **Step 2** of the RMS Guideline. This will necessitate use of the Biobanking Methodology (this is consistent with the commitment in the EA).
3. Include a commitment to meeting this offset requirement through the identification of appropriate offset sites, consistent with **Step 3** of the RMS Guideline. This should include a commitment to ensure that all offset areas are protected in perpetuity.
4. Identify the management actions required, consistent with **Step 4** of the RMS Guideline agreed with OEH as part of the Biodiversity Offset Package.
5. Identify the steps required to implement the agreed offset actions, consistent with **Step 5** of the RMS Guideline.
6. Include a commitment to a post construction review that confirms the extent of clearing was not greater than predicted. If clearing was greater, then the package shall demonstrate how the offset was modified and increased to the value of the actual habitat lost.

The EA should include a clear commitment to follow these steps as part of an agreed Biodiversity Offset Package, to be negotiated and agreed with OEH.

OEH has previously provided advice to the Roads and Maritime Service in October 2011 on a draft 'Biodiversity Offset Strategy', and whilst OEH generally supported the principles it contained, OEH considers this is unlikely to meet all of the offsetting requirements from the project, consistent with the RMS guideline. This strategy should now be developed in accordance with the steps set out above, and which are consistent with the RMS Biodiversity Offsets Guideline.

ATTACHMENT B

OFFICE OF ENVIRONMENT AND HERITAGE (OEH) ABORIGINAL CULTURAL HERITAGE COMMENTS ON THE FOXGROUND AND BERRY BYPASS PRINCES HIGHWAY UPGRADE – ENVIRONMENTAL ASSESSMENT (EA)

Aboriginal Heritage

OEH has conducted a review of the Aboriginal cultural heritage information contained within the revised Environmental Assessment (EA) for the *Foxground and Berry Bypass Princes Highway Upgrade* (dated November 2012) and the revised Aboriginal Cultural Heritage Assessment (ACHA) prepared by Navin Officer Heritage Consultants (dated November 2012) and a number of comments are provided below.

OEH notes that a number of Aboriginal heritage issues which were raised in OEH's adequacy comments provided to Department of Planning and Infrastructure in October 2012, specifically in relation to utility services, ancillary construction facilities, environmental management measures, and cumulative impact, have been considered and subsequently addressed in the revised EA and revised ACHA. OEH Aboriginal site recording forms for this Project have also been submitted to the Aboriginal Heritage Information Management System (AHIMS) database in early November 2012.

Whilst OEH is still concerned about the potential placement of some temporary ancillary facilities on areas containing Aboriginal cultural heritage values, OEH notes the subsequent addition of various actions in the revised EA that will be considered in order to manage and modify impacts to these areas. The specific inclusion and commitment to consider recent assessment work undertaken by RMS on the Woomargama Bypass, as part of the revised EA and revised ACHA, should also assist with refining the mitigation measures proposed for this current Project. Wherever possible however, OEH continues to advocate for the avoidance of impacts to areas containing Aboriginal cultural heritage values for all temporary facilities proposed.

Following the revision of the EA and ACHA, OEH supports the incorporation of those recommendations outlined under Section 11.2 (page 143) of the ACHA (revised version dated November 2012) into the EA's Statement of Commitments and the inclusion of them, as appropriate, within a project specific Construction Environmental Management Plan or relevant Aboriginal Heritage Management Plan.

With regard to any further archaeological investigations that may be required as part of this Project, OEH advises that copies of any subsequent survey assessments, test excavation results or salvage reports, and associated OEH Aboriginal site recording forms, must be submitted to the OEH for inclusion on the AHIMS database. Data from these reports and recording forms will contribute to the body of knowledge about Aboriginal site distribution patterns associated with Aboriginal use and development impacts within the local Shoalhaven area.

Suggested inclusions for conditions of approval:

OEH recommends the incorporation of, or reference to, those recommendations outlined under Section 11.2 (page 143) of the ACHA (revised version dated November 2012) be included within the Project Approval.

OEH also recommends the revised ACHA be used to prepare and implement an Aboriginal Heritage Management Plan (AHMP) as part of the overall Construction Environmental Management Plan (CEMP) for the Project and the requirement for an AHMP should be included as a condition of consent within the Project Approval. These plans should be prepared in consultation with the OEH and Registered Aboriginal Stakeholders and approved by Department of Planning and Infrastructure prior to the commencement of any development/ construction activities for the Project.

An AHMP should include, but not necessarily be limited to:

1. an outline of the protection measures that will be undertaken to avoid impacts to Aboriginal cultural heritage values along the project corridor;
2. specific measures to be applied to works undertaken in close proximity to identified Aboriginal objects and areas of Aboriginal cultural value to minimise and avoid impacts on these areas. This should include a component within the site induction program for construction workers on Aboriginal heritage along the project corridor;
3. an outline of any test excavation and/ or salvage collection/ excavation (by either surface collection or archaeological excavation) that is required to be undertaken prior to the commencement of construction works;
4. an outline of the procedure required if any development or any ancillary works are proposed for areas outside of those areas already surveyed as part of the current concept design and identified within the EA and ACHA;
5. an outline of the process that will be followed for continuing consultation with registered Aboriginal stakeholders and OEH, where required;
6. an outline of the process for how the AHMP procedures will be managed and adhered to during the operational life of the Project to ensure that there is no impact on heritage objects/ areas additional to that already permitted; and
7. procedures that would be followed should an auditing program detect an impact on any known and/or any previously unidentified heritage object/area is discovered during construction activities.