## Department of Planning and Environment



Our ref: DOC22/667496 Your ref: SSI-663-Mod-6

Jonathan Kerr Planning Group Department of Planning and Environment 4 Parramatta Square, Parramatta NSW 2150

Subject: Advice on EIS - M7 Motorway (Mod 6 Widening) (SSI-663-Mod-6)

Dear Mr Kerr

I refer to your email dated 26 July 2022 requesting comment from the Environment and Heritage Group (EHG) on the Environmental Impact Statement for the proposed M7 Motorway (Modification 6 - Widening).

### **Biodiversity**

The biodiversity development assessment report (BDAR) prepared by Niche Environmental dated 31 July 2022 has been reviewed. Whilst the BDAR is generally adequate, EHG raises the following comments.

The BDAR acknowledges that the microbat surveys were not undertaken in the appropriate season as required by the EHG survey guidelines for species credit threatened bats and their habitats. The microbat surveys identify three bridges to be moderate potential habitat, and the BDAR recommends that if during construction, microbats are observed exiting the bridge, then works should be ceased. However, EHG considers this would put microbats at high risk of predation if they are present. EHG notes the BDAR recommends a Microbat Management Plan (MMP) is prepared. EHG recommends that to inform the preparation of the plan, additional surveys be undertaken in accordance with the survey guidelines, at the three bridges identified as having moderate potential habitat.

It is noted the BDAR recommends that field surveys in accordance with the bat survey guidelines and Threatened Biodiversity Data Collection be undertaken in spring to determine whether Southern Myotis is using the Subject Land for its foraging purposes. EHG recommends that this be undertaken this Spring and be reported on in the Response to Submissions.

The proposal will impact areas of PCT 724 and PCT 725 in moderate condition. Table 5 of the BDAR lists several threatened flora species that occur in these PCTs but the table states that these PCTs are too degraded to support suitable habitat for any of these species. EHG considers many of these species could occur in moderate condition vegetation, and as such, their exclusion is not adequately justified. However, EHG acknowledges that the areas of PCT 724 and PCT 725 in the subject land are small and restricted, and as no threatened flora species were observed during vegetation surveys, EHG considers they are unlikely to be present.

Opportunities to further avoid impact should be considered. Consideration should be given to the consolidation and or relocation of proposed temporary construction facilities to reduce the amount of vegetation clearing required to support these facilities.

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Further to the above, EHG has also reviewed the urban design, landscape, and visual impact assessment (the landscape assessment) prepared by Aecom, dated 28 June 2022. The landscape assessment proposes River-flat Eucalypt Forest revegetation below and adjacent to several bridges.

EHG supports this action however recommends these areas be subject to a vegetation management Plan (VMP) that is developed and implemented by a suitably qualified ecologist in consultation with a bushland regenerator. Plant species used in any regeneration works should be local provenance native species representative of the plant community type (PCT) present in each location (as identified in the BDAR). In addition to revegetation the VMP should address other management issues such as weed management, erosion and sediment control/bank stabilisation, rubbish removal and habitat supplementation.

The landscape assessment also identified opportunities for further tree planting. The species identified for use in these locations (table 8) should be representative of the existing PCTs present (if any) within the proposed planting area. EHG notes that two Acacia species are proposed for these areas however as these are generally short-lived species, from a management and safety perspective they may not be appropriate for use adjacent to the motorway.

### **Flooding**

EHG has reviewed Appendix G Surface Water and Flooding Impact Assessment. From EHG's perspective, the methodology utilised in the FIA prepared by Lyall & Associates appears to follow accepted floodplain risk management practice.

The flood impact assessment is adequately detailed. The consultants have developed a set of flood models including RAFTS and DRAINS hydrologic models for inputs into hydraulic models. TUFLOW hydraulic models have been developed in the vicinity of the project for Cabramatta Creek, Ropes Creek, Eastern Creek, and their relevant tributaries. The models have been utilised to determine existing flooding behaviour and post developed flood behaviour for the full range of flooding.

The assessment identifies potential impacts of the proposed modification on flood behaviour and provides measures for flood mitigation during construction and operation phases.

The potential impact of climate change has been addressed.

However, EHG provides the following comments regarding the validation of the base case models:

- The FIA utilises Cabramatta Creek Flood Study and Basin Strategy Review (Bewsher Consulting 2010) as the basis for the FIA base case scenario. EHG has previously informed the proponents that Liverpool Council is currently undertaking an update to the 2010 flood study and are willing to provide information to TfNSW. The base case model should be verified against council's updated flood study data.
- Ropes Creek is part of South Creek Catchment, the base case model should be verified against the Wianamatta South Creek flood Study existing condition (Revision I).
- The FIA utilises hydrological model based on WMAwater 2013 and hydraulic models
  Catchment Simulation Solution 2014 (CSS) as the basis to their assessment. It should be
  noted that the hydrology model undertaken by WMAwater has been updated by CSS. EHG is
  not sure if the updated XP-RAFTS hydrological model has been utilised.

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A simple verification exercise at relevant spots/hydraulic structures in the vicinity of the project would be sufficient.

Should you have any queries regarding this matter, please contact Shaun Hunt, Senior Conservation Planning Officer via <a href="mailto:shaun.hunt@environment.nsw.gov.au">shaun.hunt@environment.nsw.gov.au</a> or 02 8275 1617.

Yours sincerely

30/08/22

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

S. Harrison