



Office of
Environment
& Heritage

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SSD 7534 MOD 1

Mr David Gibson
Team Leader Social Infrastructure
NSW Department of Planning and Environment
GPO Box 39
SYDNEY NSW 2001

Attention: Peter McManus

Dear Mr Gibson

Notification of Modification Application for Western Sydney Stadium (SSD 7534 MOD 1)

I refer to your letter received 9 February 2017 by the Office of Environment and Heritage (OEH) in relation to the proposed modification to the approved Western Sydney Stadium at 11-13 O'Connell Street, Parramatta.

OEH has reviewed the documentation on exhibition and provides comments in relation to impacts on Grey-headed Flying-fox and Aboriginal cultural heritage at Attachment 1.

If you have any further questions about this issue please contact Marnie Stewart on 9995 6868 or marnie.stewart@environment.nsw.gov.au.

Yours sincerely

S. Harrison 22/02/17

SUSAN HARRISON
Senior Team Leader Planning
Regional Operations

ATTACHMENT 1 – Office of Environment and Heritage comments on Modification to Western Sydney Stadium (SSD 7534 MOD 1)

1. Background

OEH notes that the modification proposes to expand the excavation works undertaken as part of Stage 1 to include bulk earthworks associated with site remediation and piling for the stadium construction. OEH notes that the modification is required as works to disturb the site below ground level (aside from the swimming pool demolition) were not approved under SSD 7534.

OEH has reviewed the modification plans and the following specific documents:

- Development consent for the Concept Proposal and Stage 1 demolition works for Western Sydney Stadium dated 7 December 2016 (Development Consent);
- Section 96(2) Modification Application SSD 16_7534 Western Sydney Stadium 11-13 O'Connell Street, Parramatta prepared by JBA dated 6 February 2017 (Modification Description);
- Demolition, Excavation & Construction Noise & Vibration Management Plan prepared by Acoustic Logic dated 17 January 2017 (Noise and Vibration Management Plan);
- Technical Working Paper: Noise and Vibration prepared by AECOM dated 13 July 2016 (AECOM assessment);
- Western Sydney Stadium – S96 Development Consent Modification (impacts of the proposed modification on terrestrial flora and fauna) prepared by AMBS Ecology and Heritage dated 3 February 2017 (Biodiversity Assessment);
- Biodiversity Assessment prepared by Eco Logical Australia dated 30 June 2016 (ELA assessment); and
- Aboriginal Archaeological Assessment for s96 Application to Modify Development Consent SSD 16_7534 Western Sydney Stadium 11-13 O'Connell Street, Parramatta prepared by Coomber Consultants dated February 2017 (Aboriginal Archaeological Assessment).

2. Grey-headed Flying-fox

OEH notes that the proposed modification may have impacts on fauna in the surrounding area through increased noise, vibration and lights. The Biodiversity Assessment prepared by AMBS Ecology and Heritage (AMBS 2017) states that there will be no impacts from lighting that have not been previously assessed, provided that the lighting and mitigation measures for lighting are the same as that proposed for the approved Stage 1 demolition. OEH considers this to be reasonable.

OEH notes that there may be greater noise and vibration impacts on the nearby Grey-headed Flying-fox (GHFF) maternity camp as a result of the additional works proposed by the modification. The Biodiversity Assessment notes that “there is potential for certain equipment or processes to exceed [noise] levels predicted in the [approved] EIS on a more frequent basis” (AMBS 2017, p4). Equipment to be used for the modification works which were not previously required include hydraulic hammers, piling rigs, remediation plant, concrete pumps and concrete trucks (Acoustic Logic 2017, p10). In addition, the Noise and Vibration Assessment states that the hours of work are proposed to be extended on Saturdays from 1pm to 5pm (p11). This is not mentioned in the Modification Description and OEH recommends the proposed construction hours be clarified.

OEH considers that based on the information provided, it is not possible to conclude that noise or vibration associated with the additional proposed works are “similar to that expected from the [approved] Stage 1 demolition works” (AMBS 2017, p4). In this regard OEH has the following comments.

Predicted noise levels

The modification Noise and Vibration Assessment did not estimate predicted noise levels at the same locations as the original AECOM assessment (2016). This makes it difficult to assess the noise impacts of the modification in general and specifically on the GHFF camp because the noise levels

have not been modelled at 1 Fleet Street, Parramatta which is the receiver closest to the camp in the AECOM assessment.

Nature of noise

The Biodiversity Assessment for the modification does not address possible changes to the nature of noise as a result of the additional activities to be undertaken and different plant and equipment required. ELA notes that “determining impacts to fauna, the nature of the noise (e.g. high or low pitch; sudden or continuous) needs to be considered as well as the ‘loudness’ (measured in dB(A))” (2016, p22). This is important given GHFF “are more sensitive to sudden loud noises (e.g. explosion or air horn) rather than continuous noise or noise that builds and fades away (e.g. aircraft or vehicle)” (ELA 2016, p23).

Noise mitigation measures

The recommendations of the Noise and Vibration Management Plan and Biodiversity Assessment for noise mitigation and monitoring are noted, however on their own do not adequately address potential impacts on the GHFF camp.

OEH considers that the mitigation measures from the 2016 ELA assessment should have been incorporated into the modification. In particular, emphasis should be given to the need to avoid and minimise noise at sensitive times for GHFF, i.e. during emergence and return to roosts at dusk and dawn and during breeding and lactation (October to January) because GHFF females have been known to abort or abandon dependent young when stressed (ELA 2016, p66). Accordingly, there is a need for an appropriately qualified ecologist to monitor stress of the GHFF camp particularly during breeding and lactation, “as evidenced by greater number of vocalisations, diurnal fly outs/emergence or negative social interactions” (ELA 2016, p25). In this regard, OEH recommends that the mitigation measures required by Condition B2 of the Development Consent also apply to the modification.

3. Aboriginal cultural heritage

OEH has considered the modification and supporting information, and notes that the Stage 1 modification works will be undertaken in locations that have the potential for Aboriginal and historic heritage archaeological deposits. OEH has the following comments in relation to Aboriginal cultural heritage:

- As the footprint of the ground disturbance works proposed by the modification is outside of the approved Stage 1 demolition/excavation works within Parramatta Swimming Centre in-ground swimming pools footprint, the modification may cause impact and harm to sub-surface Aboriginal archaeological deposits.
- Appropriate Aboriginal heritage management is required prior to the proposed modification works commencing. The recommended mitigation proposed by JBA in the Modification Description including archaeological test and salvage excavations which is based on the advice in the Aboriginal Archaeological Assessment (Comber 2017) is supported by OEH.
- Stage 2 approval would be too late for Aboriginal archaeological works to be undertaken as by this time harm to potential Aboriginal objects may have occurred if the Stage 1 modification is approved and works are undertaken without Aboriginal archaeological excavation requirements being conditioned and carried out.

Accordingly, OEH recommends that C27 of the Development Consent be deleted and the following alternative conditions imposed:

- An Archaeological Research Design and Aboriginal Archaeological Management Plan must be prepared to provide the methodology for test and salvage excavation appropriate to the study area and guide ongoing management of Aboriginal heritage associated with the project area.
- Consultation with the Registered Aboriginal Parties (RAP) for the project should be ongoing and the RAPs should be provided an opportunity to input and comment on the Aboriginal Archaeological Management Plan before implementation.

- Aboriginal archaeological test and salvage excavation must be undertaken prior to any bulk excavation, piling or redevelopment works on the site.

(END OF SUBMISSION)