



Office of
Environment
& Heritage

DOC18/407557
SSI 8256

Ms Naomi Moss
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NSW Planning and Environment
GPO Box 39
SYDNEY NSW 2001

Preferred Infrastructure Report - Sydney Metro Sydenham to Bankstown - SSI 8256

Dear Ms Moss,

I refer to your email dated 13 June 2018, requesting input from the Office of Environment and Heritage (OEH) on the Preferred Infrastructure Report (the report) for the Sydney Metro Sydenham to Bankstown project. This report is in response to the exhibition of the Environmental Impact Statement (EIS) which OEH previously provided comments on the 6 November 2017.

Please find attached OEH comments regarding Aboriginal cultural heritage, biodiversity and flooding in Attachment 1.

Please note that a separate response may be provided on heritage matters by the Heritage Division of OEH as delegate of the Heritage Council of NSW. Should you have any queries regarding this matter, please contact Svetlana Kotevska, Senior Conservation Planning Officer on 8837 6040 or at Svetlana.kotevska@environment.nsw.gov.au.

Yours sincerely

S. Harrison 12/07/18

SUSAN HARRISON
Senior Team Leader Planning
Greater Sydney
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Attachment 1 – Office of Environment and Heritage (OEH) comments Sydney Metro Sydenham to Bankstown - SSI 8256 - Preferred Infrastructure Report

Aboriginal Cultural Heritage

The construction of the project may disturb a potential Aboriginal archaeological deposit of moderate significance that has been identified as having low to moderate potential for intact archaeological deposits known as S2B PAD 02 located adjacent to Punchbowl Station. Given this and the need to minimise the potential impacts of the project on Aboriginal heritage, the following mitigation measures and conditions should be imposed on the project approval:-

- The project must be undertaken in accordance *Aboriginal Cultural Heritage Assessment Report* prepared by Artefact Heritage Services dated June 2018 to guide the approach to managing Aboriginal heritage including the methodology for archaeological management, including test excavation and salvage where required and procedures for unexpected finds.
- In accordance with the ACHAR, key heritage management plans/documentation relating to Aboriginal heritage that are required prior to construction which relate to the ACHAR include a:
 - Construction Environmental Management Plan (CEMP)
 - Construction Heritage Management Plan (CHMP) (Heritage sub-plan).
 - a CHMP should be prepared for the project that outlines the methodology discussed in this ACHAR and include an unexpected finds procedure. Details of registered Aboriginal parties (RAPs) and circumstances where additional consultation with the RAPs would be required must be included.
 - Archaeological Method Statement for excavation at S2B PAD02.
- Implement mitigation measure AH3:
 - minimise potential impacts on S2B PAD02 and, if impacts cannot be avoided, undertake archaeological test excavation (and salvage when required) in accordance with the Aboriginal Cultural Heritage Assessment Report.
- Implement mitigation measure AH5:
 - if potential Aboriginal items are uncovered, works within 10 metres of the item would cease, and the unexpected finds procedure included in the construction heritage management plan would be implemented
 - during pre-work briefings, employees would be made aware of the unexpected finds procedures and obligations under the *National Parks and Wildlife Act 1974*.
- If suspected human skeletal remains are uncovered the Unexpected Finds Procedure prepared by the delivery contractor and Sydney Metro Exhumation Management Procedure is to be followed.

Biodiversity

OEH notes the significant reduction in the scope of construction works in the preferred infrastructure report and associated reduced impacts to native vegetation. As a result, the potential impacts on nesting and foraging habitat for threatened fauna species known to occur in the study area including Grey-headed Flying-fox, Eastern Bentwing Bat are also reduced.

The preferred infrastructure report states that vegetation clearing for the exhibited project as detailed in the EIS was calculated on a conservative basis, assuming that all vegetation within the project area would be cleared (approximately 29.8 hectares of vegetation, the majority of which comprises exotic plants (about 21.5 hectares) or planted non-indigenous and native species on fill material (about 7.3 hectares)).

The report states that Transport for NSW has developed a design solution that has reduced the amount of vegetation requiring removal. Accordingly, impacts to one hectare of native plant

community types in the rail corridor would be avoided during construction of the preferred project including impacts on about 0.6 hectares of threatened ecological communities listed under the *Threatened Species Conservation Act 1995*. However, this is subject to the detailed design of the proposed works, including fencing and the communications services route.

Please note OEH recommends the following conditions are incorporated into the project approval.

- Implement mitigation measure B1 that commits to avoiding direct impacts to vegetation mapped as threatened ecological communities and native plant communities.
- Implement mitigation measure B3 that requires areas of biodiversity value outside the project area would be marked on plans, and fenced or signposted where practicable, to prevent unnecessary disturbance during construction.
- Undertake rehabilitation in accordance with the tree management strategy (mitigation measures LV4), which includes replacing two trees for every one removed. Where there is disturbance of existing trees and vegetation replanting is to occur as close as possible to where they were originally removed to ensure that any benefits of the existing tree/vegetation (e.g. screening or shade) are maintained.

Flooding

The RTS Section 7.4.3 the last paragraph states *'However, as discussed in Section 1.3 of this report, the exhibited project has been revised to minimise environmental impacts and address issues raised during exhibition. As a result, the preferred project would be operated within the current hydrological environment and the inclusion of additional drainage infrastructure does not form part of the preferred project'*.

Section 1.3 of the RTS report (volume 1 attached) states *'Retaining existing track along the alignment means that track drainage would not need to be modified or augmented for the project'*.

OEH does not support the above two statements as they may misguide decisions on this project and would result in jeopardising the adopted design criteria for the project's drainage system as previously identified in the EIS report.

The EIS flood assessment report acknowledges that the existing track immunity is low due to flooding from surrounding catchments and therefore, it proposed major changes to drainage for multiple purposes that are not merely to cater to the realigned track but to ensure the required design criteria as set in the EIS report can be achieved. Section 4.2 of the EIS flood assessment report identifies the following purposes that highlight the requirements for modification and augmentation of existing drainage:

- Replace assets in poor condition
- Provide new track drainage to cater to the realigned track
- Provide new track drainage to improve existing capacity issues
- Provide new cross drainage to manage overland flooding issues
- Mitigate increases in flow rates by provision of detention basins

Therefore, OEH recommends the proponent review the floodplain risk assessment and associated drainage infrastructure in light of changes from the exhibited project to 'the preferred project'. The proponent has a duty of care to ensure that the revised exhibited project has accounted for the following floodplain risk management issues. These issues are separate and additional to local stormwater drainage.

- Consider the impact from overland flooding and any mainstream flooding (if applicable) for the full range of floods up to the probable maximum flood.
- Consider the flood risk to property and infrastructure damage and the risk to life. This includes the potential damage to the proposed infrastructure.
- Consider impacts from the abovementioned flooding during the construction phase.

- Provision of flood modification works, such as detention basins, is reasonable but should be subject to further consultation with stakeholders and the community.
- Consultation with the NSW State Emergency Service (Regional or Deputy Regional Controller) is recommended to ensure their requirements are satisfied. A Flood Emergency Plan for this project may be necessary. The plan should consider any evacuation concerns due to isolation of access roads and exit points, particularly during intense short duration storms.
- Consider the likely adverse impacts from increased rainfall and sea level rise due to climate change.
- Consider compensatory measures to negate any adverse impacts so the existing flood conditions are not worsened.
- Consider any impacts from the revised project to the surrounding areas, particularly upstream and downstream of overland flow paths and mainstream corridors.

(END OF SUBMISSION)