

WST23/00048/02 | SF2023/077658

Cornelis Vlok
OMPS Pty Ltd
PO Box 1071
North Sydney 2059

Attention: Cornelis Vlok

24 July 2023

SSI:12422997: Review of Traffic Impact Assessment for Oven Mountain Pumped Hydro Energy Storage Project

Dear Cornelis,

Thank you for the email on 15 June 2023 requesting review of the Traffic Impact Assessment (TIA) for the Oven Mountain Pumped Hydro Energy Storage Project (SSI-12422997).

The proposed transportation route/s consist of the following classified (State) roads as defined under the *Roads Act 1993* (Roads Act), The New England Highway [HW9], Pacific Highway [HW10], and the Waterfall Way [MR76]. The local Councils are the roads authorities for all public roads (other than freeways or Crown roads) in the respective local government areas pursuant to Section 7 of the Roads Act. TfNSW is the roads authority for freeways and can exercise roads authority functions for classified roads in accordance with the Roads Act. Any proposed works on a classified (State) road will require the consent of TfNSW. Kempsey-Armidale Road to the south-east of the project forms part of a classified (Regional) road [MR75]. TfNSW's concurrence is required prior to Council's approval to works on these roads in accordance with s138 of the *Roads Act 1993*.

It is understood that Kempsey-Armidale Road was identified as a priority to be transferred to the State by the previous Government which has not progressed since the change of Government. The developer must note that in the event of reclassification of Kempsey-Armidale Road, any proposed works on the road will require the development consent pursuant to the *Environmental Planning and Assessment Act 1979* and concurrence of TfNSW in accordance with Section 138 of the *Road Act, 1993*.

The comments provided within this letter are preliminary and do not constitute TfNSW's official response to the development. TfNSW will provide a formal response as part of the EIS exhibition.

TfNSW has reviewed the TIA, prepared by EMM Consulting, dated 29 March 2023 and provides the following comments for consideration prior to lodging the application:

Access

- 1) Table 1.4 in the TIA (ARC comments and EMM responses) states that the three access points to the development will be in accordance with Austroads and Council standards and Section 2.4 states that the design of the three access road intersections adjoining Kempsey Armidale Road have been prepared in consultation with Councils and TfNSW. Section 6.7 also refers to the options for bridge crossings over the Macleay River to access the site. TfNSW has not reviewed any proposed designs for any access points servicing the development to date. These need to be submitted as part of the TIA.

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Route Assessment

- 2) Section 6.5 of the TIA states OSOM deliveries will be from the Newcastle or Brisbane port to the site via Kempsey. A route assessment is required from Brisbane to the site if deliveries are also to arrive from Brisbane. The route assessment is to include at a minimum the following:
 - a) Identify the OSOM route to be utilised and any indicative pinch points within the network vertically, horizontally and laterally and the potential civil works required to accommodate the OSOM vehicles.
 - b) The logistics assessment is to highlight each at-risk road structures that the haulage route crosses including bridges, traffic signals, signage, major culverts, and minor culverts that may not meet the desirable cover to cater for proposed axle loads.
 - c) Pull-over bay locations for the design vehicle and associated swept path analysis and identification of any long haulage segments of the route where overtaking cannot be achieved.
 - d) The design vehicle templates used with the swept path analysis software are also requested in order for TfNSW to review the performance within the software (e.g. Autodesk Vehicle Tracking or Transoft AutoTURN).
 - e) Provide the following measurements parameters of the OSOM components / materials to be moved:
 - Identify all the types of OSOM vehicles proposed to be used for the project.
 - Overall combination length, width, height and mass
 - Maximum component length
 - Maximum component widths
 - Maximum load heights (clearance to overhead obstructions such as structures, utilities and vegetation),
 - Wheelbase dimensions,
 - Maximum trailer articulation angle(s),
 - Minimum overhang heights above the road surface,
 - Axle loads and axle group loads in terms of both tonnes and Equivalent Standard Axles (refer to Austroads Guide to Pavement Technology).
- 3) Section 6.5 of the TIA refers to a concept design report for the necessary road upgrades to facilitate OSOM movements following the results of the OSOM route assessment, this needs to be submitted with the TIA for review in conjunction with the route assessment.
- 4) The OSOM route study report findings, Table 6.7 of the TIA refers to bridges, pipes and culverts which would need to be checked for capacity, such assessments need to form part of the TIA. To understand the capabilities of the bridges on the classified road network a route assessment is required that is supported by bridge assessments. For the classified road network the bridge assessment request would need to be submitted to spu@transport.nsw.gov.au with details of the vehicle combinations (including axle spacing, ground contact width, number of tyres and requested axle group mass) and identifying the bridges along the classified road network for the specified route(s).

Separate assessments for any other third-party bridge assets along the OSOM route would be required in addition to the above assessments. The process for the bridge assessments would need to be sought separately by the relevant third party (i.e local councils and Rail Infrastructure Managers).

- 5) Section 6.2 of the TIA suggests construction vehicles will travel to the site via Armidale, clarification is required on the number and type of vehicles proposed to use this route along with a route assessment determining if the largest vehicle proposed can utilise this route.
- 6) Section 6.2 of the TIA suggests all construction traffic will arrive from either Kempsey or Armidale, clarification is required if vehicles will be required to travel from any other locations (apart from OSOM vehicles).
- 7) Table 8.1 of the TIA identifies that the intersection of Waterfall Way and Kempsey-Armidale Road does not have SISD in accordance with Austroads. TfNSW does not support intensifying the use of an intersection without compliant SISD. The turn treatment at the intersection of Waterfall Way/Kempsey-Armidale Road is also not compliant due to a short deceleration lane and decreased storage due to the proximity of an existing bridge. This needs to be addressed.

Traffic Analysis

- 8) Section 1.9 of the TIA states that the estimated traffic volumes and timelines may change, following selection of the construction contractor and completion of the detailed design phase. A worst-case scenario is required within the TIA to ensure any works required along the proposed routes are considered within the scope of works to ensure that the development is constructable.
- 9) The TIA needs to include details of any proposed ancillary infrastructure to be provided on-site for example, concrete batching facilities, The TIA should identify the source for input materials and quantify the traffic generation associated with the haulage of the source materials. Where the location of source materials is not yet known, worst case scenarios for traffic distribution of those materials to and from the development site are to be addressed.
- 10) Section 5.5 of the TIA states considerable queuing was observed during the peak hours on the Macleay Valley Way bridge and along Lord Street and suggests it is unlikely the congestion will increase as a result of the project as the preferred route is via Macleay Valley Way, Frederickton. However, section 6.2 indicates light vehicles will pass through the township i.e. using Lord Street, Smith Street, Macleay Valley Way, Second Lane, North Street, River Street to access the development. Clarification is required on the following:
 - The proposed routes, traffic volumes utilising the routes and proposed measures to mitigate the impacts of intensifying the use of the key intersections along the route.
 - The proposed measures to ensure that vehicles use Macleay Valley Way, Frederickton instead of passing through the township?

11) The TIA states that shuttle bus size will be determined based on demand and pick up and drop off locations are still to be determined. Further details are required addressing the following points:

- How a commitment to the use of shuttle buses will be made and what measures will be in place to ensure the number of vehicle movements on the external road network does not exceed the proposed volumes.
- Pick up and drop off locations, size of buses to be used and the number of employees to use them.
- Identify if the shuttle buses will be located at the project area during the day or return to another location outside of the AM/PM peak hours.
- Details of the accommodation capacity, work schedules relevant to staff turnover and peak shift change/staff turn over details,
- How the commitment will be achieved through protocols, monitoring and breach to commitment procedures being developed.

12) The TIA states that the key intersections identified in Section 5.3 have been modelled using SIDRA. Electronic copies of the SIDRA files need to be submitted with the TIA for review.

If you wish to discuss this matter further, please contact the undersigned on on ph. 1300 019 680 or via development.west@transport.nsw.gov.au

Yours faithfully,



Team Leader Development Services (Renewable Resources)
West Region | Community and Place
Regional and Outer Metropolitan