

4 June 2026

TfNSW reference: REN25/00172/002

Your reference: SSD-60598738 (PAE-112216988)

Department of Planning, Housing and Infrastructure
Locked Bag 5022
PARRAMATTA NSW 2124

Attention: Jess Watson

**SSD-60598738, Lake Lyell Pumped Hydro Energy Storage, Sir Thomas Mitchell Drive, South Bowenfels;
Response to Environmental Impact Statement**

Dear Jess,

Transport for NSW (TfNSW) is responding to Lake Lyell Pumped Hydro Energy Storage, exhibited from 30 March 2026 and referred via the Major Projects Portal.

TfNSW has reviewed the Environmental Impact Statement (EIS) and Traffic Impact Assessment (TIA), both prepared by EMM Consulting, dated 25 February 2026 and 24 February 2026, respectively, as key documents for preparing this response.

The EIS does not show Lake Lyell Pumped Hydro Energy Storage has addressed traffic safety and efficiency risks to TfNSW assets on the road network. TfNSW requests more details on key issues listed below and in Attachments A and B for a revised TIA and EIS, to include in the RtS.

Key issues:

1. SISD and signalization rationale.
2. OSOM Route: Victoria Pass closure, infrastructure, swept paths, planning, bridge, rail crossings.
3. Traffic review: peak hours, swept paths for HVs.
4. Pre-construction activities evaluation.
5. Strategies to reduce impact on public transport.

On request, TfNSW can meet with DPHI and the Applicant to discuss the information in **Attachment A** and **Attachment B**. If you have any questions, please contact Development Services Renewables at 1300 019 680 or email development.renewables@transport.nsw.gov.au

Yours sincerely,



Alexandra Power

A/ Manager Development Services - West
Transport Planning
Planning, Integration and Passenger

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**SSD-60598738, Lake Lyell Pumped Hydro Energy Storage, Sir Thomas Mitchell Drive, South Bowenfels;
Response to Environmental Impact Statement**

This attachment relates to TfNSW's response dated 4 June 2026 reference REN25/00172/002.

TfNSW additional information requested | TfNSW comments

TfNSW requests the additional information of the key issues identified and as detailed below to be included in a revised TIA and EIS (where applicable) and submitted with the Response to Submissions (RtS). It must be clear where changes have been made in the revised TIA, either as a document with tracked changes or as a table in the updated TIA detailing where and what changes have been made.

1. Key issue 1: Signalisation and Safe Intersection Sight Distance (SISD)-Magpie Hollow Road/Great Western Highway

TfNSW notes that the justification for the proposed traffic control signals at Magpie Hollow Road/Great Western Highway has not been adequately demonstrated.

The Applicant has identified Safe Intersection Sight Distance (SISD) deficiencies and proposed signalisation as the preferred upgrade. However, the supporting documentation does **not** provide the level of evidence required to justify traffic signals when considering:

- the function and hierarchy of the intersection
- existing and future traffic demands
- safety performance and crash risk
- network-wide operational impacts
- the suitability of alternative intersection treatments
- Absence of an SISD assessment to confirm the SISD non-compliance and identify road upgrades or alternative mitigation measures to address the non-compliance.

As a result, the proposal does not meet the signal warrant assessment requirements in accordance with Austroads Guide to Traffic Management, Part 6, and TfNSW Traffic Signal Design – Part 1: Planning and Approvals (TS 02670.1).

An assessment of the suitability of the existing intersection treatments to manage the existing, proposed and coinciding through and turning traffic and an assessment of the Safe Intersection Sight Distance in accordance with *Austroads Part 4A* (inclusive of longitudinal sections) must be prepared and included as part of the revised TIA.

Strategic concept designs must be prepared based on the outcome of this assessment to confirm the required adjustments to the intersection to achieve SISD compliance and to identify any scope of road upgrades required to the existing intersection treatments, ensuring that the project and existing traffic can mitigate any safety or capacity concerns identified as an outcome of this assessment.

- Revised Turn Warrants Assessment prepared for the worst-case scenario peak project traffic at the AM/PM project peak hour overlain on the existing network AM/PM peak hour inclusive of growth and cumulative traffic volumes of approved and operational developments.
- Revised SIDRA analysis inclusive of the SIDRA files that align with the revised turn warrant assessment,

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- Inclusion of the raw traffic count data from the traffic count survey.

2. Key issue 2: OSOM route

a. Route 1: Victoria Pass closure

Route 1 is *not* a feasible OSOM route option due to the Great Western Highway Victoria Pass Road closure.

For more information on the Victoria Pass closure, please visit <https://www.transport.nsw.gov.au/projects/current-projects/great-western-highway-road-closure-at-victoria-pass> and existing restrictions associated with this route.

TfNSW advises reconsideration of the suitability of this route for the proposed high risk OSOM movements.

b. Route 2: Port Kembla via Cowra

Confirm which high risk OSOM laden loads will travel via this route and include assessments of the Cowra bypass/detour identified within the ARES link to the route.

The route assessments must include an assessment of how travel restrictions and constraints (i.e widths, AM/PM network peak hours, indicative timing and management to negotiate significant pinch points, rail crossings and avoiding seasonal traffic peaks associated with Lake Lyell_ along this route will be managed and mitigated to along the route. A list of mitigation measures, road upgrades and modifications must be identified and strategic concept designs provided as part of the revised TIA package.

c. Infrastructure traversal

The swept paths provided indicate that the OSOM will traverse medians, kerbs and shoulders on State roads. Strategic designs for median / pavement strengthening are to be provided within a revised TIA or identify alternate mitigation measures such as a change to routes, contraflow or a change to the laden high-risk vehicle configuration.

Review of the high risk OSOM movements through the townships and broadly on the route 1 (if proceeding) and route 2 must be undertaken to confirm the extent of the road works required to facilitate the high risk OSOM movements from a width, weight, height and mass perspective (the widest, longest and heaviest high risk OSOM must be used as the design vehicle, noting that the high risk OSOM with the greatest width may be different to longest or heaviest high risk OSOM).

A comprehensive list of all road furniture/infrastructure to be traversed on the state road network from Port Kembla to the site must be provided to enable TfNSW to conduct a check to confirm the suitability of the infrastructure for traversing by the high-risk OSOM loads.

The overhead structures, such as signs, traffic signals, bridges, and power lines, must be identified, and it must be confirmed that the required clearances to the structures will be maintained.

If lowering and raising to achieve clearances to overhead structures is required, then the location of where the lowering or raising will occur pre and post the structure will occur outside of through lanes if the load will be managed by police or escort vehicles and what other mitigations may be proposed i.e avoidance of network peak hours to minimise efficiency and safety impacts to road users.

Swept path analysis must be provided for all pinch points and must be prepared in accordance with *Austraods Design Vehicle and Turning Path Templates*. The swept path analysis must identify, from start to completion, the pinch point, articulation points, width of the laden load, wheel path, and clearances to structures.

Strategic concept designs must be prepared and included as part of the revised TIA, the strategic concept designs must demonstrate the required footprint (inclusive of drainage requirements),

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demonstrate compliance with Austroads and TfNSW supplements and technical directions and provide dimensions.

Refer to TfNSW Strategic Concept Design Fact Sheet for further guidance.

<https://www.transport.nsw.gov.au/system/files/media/documents/2024/Strategic-Design-requirements-for-DA-Factsheet.pdf>

Please refer to the Figures below for examples of where infrastructure has been traversed. Note that these examples do not encompass all such instances and it is the Applicant's responsibility to ensure all traversals have been addressed.

d. Rest area and pull overs swept paths

Swept paths are to be provided in the revised TIA for all rest areas to ensure sufficient storage space for the high risk OSOM within the rest area or pull over location.

e. Strategic designs

Strategic designs must be provided for any works required on the State road network route, including hardstands and roundabout modifications. Please refer to the advisory notes for more information.

f. Bridge assessment

Insufficient information has been provided to determine whether a bridge assessment is required for the largest OSOM utilised by the project. As such, an NHVR Route ID is to be provided in the revised TIA.

The applicant is encouraged to contact spu@transport.nsw.gov.au to request a bridge assessment of TfNSW assets.

g. Rail crossing impacts

The proposed Route 1 will cross CRN rail infrastructure (i.e., level crossing, overbridge, underbridge) at one (1) location:

- Hume Motorway route crossing F5 North/South Freeway CRN overbridge at Glenlee Junction NSW

The proposed Route 2 will cross the CRN rail infrastructure at thirteen (13) locations, which are as follows:

- Great Western Highway route crossing CRN overbridge at Bowenfels NSW
- Great Western Highway route crossing CRN overbridge at Marrangaroo NSW
- Great Western Highway route crossing CRN overbridge at Rydal NSW
- Mid-Western Highway (Adelaide Street) route crossing CRN public vehicle and pedestrian level crossing at Blayney NSW
- Mid-Western Highway route crossing CRN public vehicle level crossing at Holmwood NSW
- Mid-Western Highway route crossing the CRN public vehicle level crossing at Cowra NSW
- Lachlan Valley Way route crossing CRN overbridge at Yass Junction NSW
- Hume Highway crossing F5 North/South CRN overbridge at Yass Junction NSW
- Hume Highway route crossing CRN North/South overbridge at Joppa Junction NSW
- Hume Highway route crossing CRN F5 South/North Freeway CRN overbridge at Goulbourn
- Hume Highway route crossing CRN F5 South/North Freeway CRN overbridge at Marulan NSW

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- Hume Motorway route crossing F5 South/North Freeway CRN overbridge at Yerrinbool NSW
- Hume Motorway route crossing F5 South/North Freeway CRN overbridge at Bargo NSW

Should the applicant intend to use UGLRL-managed CRN assets or infrastructure, including level crossings, overbridges, and underbridges, for OSOM/heavy-vehicle movements, a permit request must be submitted to the National Heavy Vehicle Regulator (NHVR).

It is noted that the proposed transport routes may intersect rail corridors managed by agencies other than Transport for NSW (TfNSW), such as the Australian Rail Track Corporation (ARTC) and Sydney Trains. It is recommended that the applicant undertake appropriate consultation and obtain necessary approvals from the relevant rail infrastructure managers for any such crossings.

h. High risk OSOM configurations, weights and dimensions

The Google Maps link provided by ARES Route Analysis identifies a route for stay ring high risk OSOM movements; however, the ARES Route Analysis does not provide a schematic of the laden dimensions and weights of the stay ring OSOM. TfNSW requests clarification on the dimensions and number of intended stay-ring high-risk OSOM deliveries.

3. Key issue 3: Traffic assessment

a. Clarify peak hour of project-related traffic

The peak hour of project-related traffic, considering any overlaps of shifts, is currently unclear in the TIA. Please clarify this in the revised TIA.

Traffic assessments, such as SIDRA and turn warrants assessments, should be done with the assumption of the worst-case scenario of the project-related peak hour volumes overlaid on the background peak hour volumes, annualised growth rate applied to peak of the project and cumulative traffic associated with existing or approved projects. The background network traffic volumes must be informed by traffic count data and SCATs for signalised intersections.

Revised SIDRA Analysis and turn warrants assessments must be provided as part of the revised TIA.

The SIDRA files and raw data from the traffic count surveys must be provided as part of the revised TIA package for TfNSW to continue the review of the traffic analysis, before informed advice can be provided on the suitability of the existing intersections.

b. Turn warrant assessment for Great Western Highway / Magpie Hollow Road

Turn warrant assessments are to be completed for the Great Western Highway / Magpie Hollow Road intersection within a revised TIA

c. Swept path of design heavy vehicle concurrent movements

A swept path assessment demonstrating concurrent movements (i.e. simultaneous left-in and left-out, and right-in and right-out movements) of the design heavy vehicle, 25m B-doubles, is to be provided within the revised TIA.

4. Key issue 4: Pre-construction works

Further details and assessments of traffic generation for the Project's pre-construction works are required in a revised TIA. Please see Attachment B for further information.

TfNSW notes that extensive road upgrades are required prior to commencing construction, and that enabling works must be completed prior to commencing construction. The EMM TIA does not provide traffic analysis to confirm the interim mitigation measures to be implemented for any intersections with the state road network.

5. Key issue 5: Impacts on public transport

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The revised TIA should be updated to include measures to prevent impacts from the project to the local bus network. This includes consultation with bus operators and commitments to schedule heavy vehicle movements outside of school bus times.

Advisory notes

Strategic Concept Designs must be provided for any works required along the state road network route. [Strategic-Design-requirements-for-DA-Factsheet.pdf](#)

Attachment B

Figures from the high risk OSOM Analysis prepared by ARES



Figure 1: Vehicle chassis on shoulder (indicated with red oval) at Lachlan Valley Way / Hume Highway. Source: Pinch Point 9, OSOM Route Study

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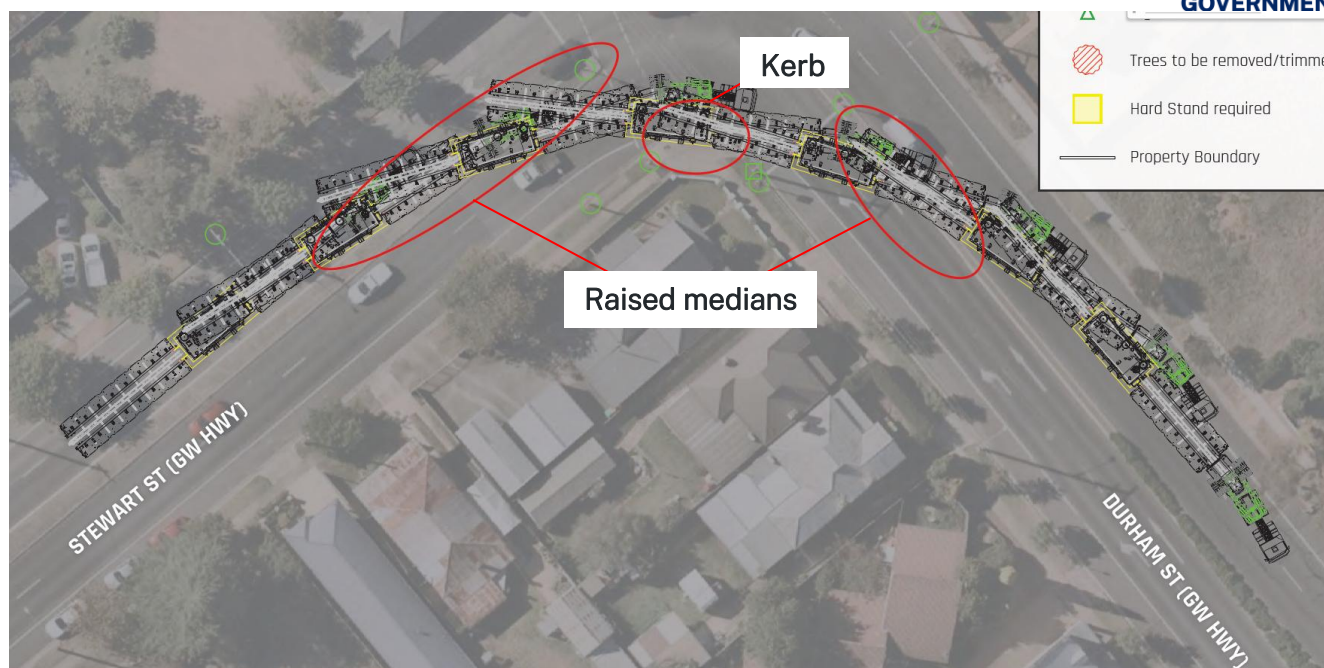


Figure 2: Vehicle chassis on raised medians and kerb (indicated with red ovals) at Stewart St / Durham St. Source: Pinch Point 12, OSOM Route Study

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Pre-construction minor works assessment (prior to construction of intersection upgrade):

- a. Identify the traffic volumes.
- b. Traffic types, inclusive of the largest design vehicle.
- c. Provide a swept path analysis of the existing intersection for the largest heavy vehicle, prepared following *Austroads Design Vehicles and Turning Path Templates*. The swept path analysis must demonstrate that the largest heavy vehicle can turn within the existing pavement and concurrently.

If the design vehicle cannot turn, concurrently enforceable mitigation measures or additional temporary works will need to be implemented to manage and mitigate the impacts.
- d. Provide an assessment of the existing SISD and measures that will be implemented to achieve a compliant SISD, i.e. prohibition of turning movements, left in left out or vegetation removal.
- e. Identify the AM/PM peak hour and proposed traffic volumes during this period.
- f. Identify measures to reduce the project traffic and impacts during this period i.e. carpooling, shuttle buses, staggering of traffic.
- g. Identify mitigation measures to monitor and enforce the traffic volumes during this period.
- h. Provide a schedule of the proposed pre-construction minor works and program of works.
- i. The AM/PM peak hour must be consistent with the traffic volumes that would be generated during this period by the existing land use. Avoid network peak hours where possible.
- j. Include measures to inform the community and key stakeholders of the increased traffic during this period.
- k. Identify the hours for pre-construction minor works.
- l. Identify the traffic volumes for any temporary workforce accommodation that will be occupied during this period.
- m. Identify any temporary widening or works that may be required to accommodate swept paths for the design vehicle during this period within a strategic concept design.
- n. Any overlap of construction and pre-construction minor works periods must be included in the traffic assessment for this stage, prior to completion of the intersection upgrade.
- o. No OSOM will be permitted during this period, unless swept paths are provided that demonstrate that the intersection or access will be able to accommodate the turn of the OSOM movement within the existing pavement.
- p. The sealing of the throat of the intersection (if unsealed) or access point may be required before the commencement of use of the intersection or access point for this stage.

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- q. Temporary traffic controls will not be permitted to be used at the intersection or access point for pre-construction minor works that is occurring before commencing the required road upgrades.

Note: Consultation should occur with the relevant roads authority (Council) for any use of local or regional roads for pre-construction minor works.

Note: The use of the intersections where the road upgrades are under construction will be dependent on the Traffic Guidance Schemes prepared per AS1742.3 and the Austroads Guide to Temporary Traffic Management. Generally, this will involve implementing reduced speed zones, installing signage, and using stop/go traffic control, among other measures. During this period, the use of the intersections will only be permitted while stop/go traffic control is in place and during daylight construction hours.