

19 January 2023

TfNSW reference: WST22/00230

The Director
Department of Planning & Environment
NSW Major Projects Portal

Attention: Julia Green

SSD-52217961: Lot 3 DP1190816 – Dapper Road Dunedoo – Dapper Solar Farm

I refer to the request by the Department of Planning and Environment (DPE) dated 16 December 2022 seeking input from Transport for NSW (TfNSW) to the Secretary's Environmental Assessment Requirements (SEARs) for the abovementioned development proposal.

TfNSW key interests are the safety and efficiency of the transport network, the needs of our customers and the integration of land use and transport in accordance with the *Future Transport Strategy 2056*.

TfNSW requests that a Traffic Impact Assessment (TIA) be prepared by suitably qualified person/s in accordance with the *Austrroads Guide to Traffic Management Part 12*, the complementary TfNSW Supplement and *RTA Guide to Traffic Generating Developments*. The TIA is to include, but not necessarily be limited to, an assessment of the considerations outlined in **Attachment A**.

TfNSW highlights that in determining the application under the *Environmental Planning and Assessment Act 1979*, it is the Consent Authority's responsibility to consider the environmental impacts of any roadworks which are ancillary to the development. This includes any works which form part of the proposal and/or any works which are deemed necessary to include as requirements in the conditions of project approval.

If you have any questions, please contact Masa Kimura, on 0407 707 999 or email development.west@transport.nsw.gov.au.

Yours faithfully



Andrew McIntyre
Manager Development Services
Community and Place | Region West
Regional & Outer Metropolitan Division

OFFICIAL

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The purpose of the TIA is to address the impact of traffic generation on the public road network and measures employed to ensure traffic efficiency and road safety during construction, operation and decommissioning of the project. The TIA is to be tailored to the scope of the proposed development and include, but not be limited to, the following:

- Traffic volumes including:
 - Existing background traffic,
 - Project-related traffic for each phase or stage of the project, including ancillary infrastructure construction phases of the project.
 - Projected cumulative traffic at commencement of operation, and a 10-year horizon post-commencement.
- Traffic characteristics including:
 - Number and ratio of heavy to light vehicles,
 - Peak times for existing traffic,
 - Peak times for project-related traffic including commuter periods,
 - Proposed hours for transportation and haulage,
 - Interactions between existing and project-related traffic.
- Capacity analysis using SIDRA or other relevant application, to identify an acceptable Level of Service (LOS) at intersections with classified (State) road/s, and where relevant, analysis of any other intersections along the proposed transport route/s.
- Heavy vehicle and OSOM routes:
 - Identify the return routes for OSOM movements.
 - Details on the number of OSOM movements, the intended time for OSOM movements to occur and location of pull-over bays / rest areas along OSOM routes.
 - Undertake a logistics route analysis which includes:
 - Details of the road geometry and alignment along the identified transport route/s, including existing formations, crossings, intersection treatments and any identified hazards, including:
 - Available sight distances at the site access and nearby intersections and any constraint to achieving the required sight distance for the posted speed limit.
 - An assessment of turn treatment warrants in accordance with the *Austroads Guide to Traffic Management Part 6* and *Austroads Guide to Road Design Part 4A* for intersections along the identified transport route/s, identifying the existence of the minimum basic turn treatments and addressing the need for any warranted higher order treatments.

- Swept path analysis demonstrating the largest design vehicle entering and leaving the development, and moving in each direction through intersections along the proposed transport route/s.

Design vehicle templates used for the swept path analysis software are required in order for TfNSW to review the performance within the software (e.g. Autodesk Vehicle Tracking or Transoft AutoTURN).

- Highlighting 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.
 - National Heavy Vehicle Regulator (NHVR) approved routes identified on the Restricted Access Maps (RAV MAP) are to be utilised for the heavy vehicle routes for the proposed development.
- Identify and provide the following measurement parameters of the OSOM components / materials to be moved:
 - Types of OSOM vehicles proposed to be used for the project.
 - Overall combination load length, width, height and mass
 - Maximum component length, widths and heights
 - 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 *Austrroads Guide to Pavement Technology*).
 - Cumulative impacts:
 - Identify and assess the implications of any road and rail projects that will potentially be occurring simultaneously with the scheduling of the OSOM movements along the proposed OSOM routes.
 - An assessment is to be undertaken as a part of the EIS and TIA to identify the projects that will have overlapping construction periods and assess the cumulative traffic impacts with emphasis on the following:
 - The cumulative impacts from traffic generated from construction workforces in terms of origin-destination routes, access, AM/PM peaks where overlapping with other projects.
 - Cumulative impacts of heavy vehicle movements in terms of AM/PM peaks and routes where there is an overlap with other projects.
 - Cumulative impacts and consideration in relation to timing of movements of OSOM movements where other projects will be utilising the same routes as proposed for this development.
 - Identify accommodation (and transport) needs and facilities available within the local region, to service staff, in addition to understanding the cumulative impacts of concurrent accommodation (and transport) needs of staff from other projects. Methods to be employed to promote and manage safe commuter traffic movements to and from site are also to be provided.
 - Road safety assessment of haulage route/s.
 - Where road safety concerns are identified at a specific location along the proposed haulage routes, TfNSW suggests the TIA be supported by a targeted Road Safety Audit undertaken by suitably qualified persons in accordance with *Austrroads Guidelines*.

- A review of crash data along the identified transport route/s for the most recent 5 year reporting period and an assessment of road safety along the proposed transport route/s considering the safe systems principles adopted under Future Transport 2056.
- Project schedule:
 - Hours and days of work, number of shifts and start and end times,
 - Identify the approximate project’s targeted construction commencement date/s.
 - Identify the phases and stages of the project, including construction, operation and decommissioning.
- The origins, destinations and routes for:
 - Commuter (employee and contractor) light vehicles and pool vehicles (including shuttle buses),
 - Heavy (haulage) vehicles,
 - OSOM vehicles.
- Identify the necessary road network infrastructure upgrades that are required to cater for and mitigate the impact of project related traffic on both the local and classified road network for the development (for instance, road widening and/or intersection treatments).

In this regard, a strategic design drawing/s are to be submitted with the SSD application for any identified road infrastructure and access upgrades. Any identified road infrastructure upgrades will need to be to the satisfaction of TfNSW and the relevant Council. Works must be appropriately designed in accordance with *Austrroads Guide to Road Design* for the existing posted speed limit, including provision of Safe Intersection Sight Distance (SISD).

Note: The design needs to comply with *TfNSW Strategic design requirements for DAs*. To assist you in preparing the designs, please refer to link below:

<https://roads-waterways.transport.nsw.gov.au/business-industry/partners-suppliers/documents/planning-principles/strategic-design-fact-sheet-02-2022.pdf>

- The layout of the internal road network, parking facilities and infrastructure.
- Impact on rail corridors and level crossings along the transport route/s detailing any proposed interface treatments, where applicable.
- Impact on public transport (public and school bus routes) and consideration for alternative transport modes such as carpooling and shuttle buses during construction.
- Consideration of the local climate conditions that may affect road safety during the life of the project (e.g. fog, wet and dry weather, icy road conditions).
- Identification and assessment of potential environmental impacts of the project, such as blasting, lighting, visual, noise, dust and drainage on the function and integrity of all affected public roads.
- Controls for transport and use of any dangerous goods in accordance with *State Environmental Planning Policy No. 33 – Hazardous and Offensive Development*, the *Australian Dangerous Goods Code* and *AS4452 Storage and Handling of Toxic Substances*.

- A draft Traffic Management Plan (TMP) to be implemented following approval of the EIS, in consultation with relevant Councils and TfNSW. The TMP is to address the construction, operation and decommission phases of the proposed development and be prepared and implemented in accordance with *Australian Standard 1742.3* and the *Work Health and Safety Regulation 2017*.

The TMP will need to identify strategies to manage the impacts of project related traffic, and propose a Driver Code of Conduct for haulage operations which could include, but not be limited to:

- A map of the primary transport route/s highlighting critical locations.
- Identification of local bus operations, including maps of routes/bus stops, and consultation with local bus operators.
- Safety initiatives for haulage through residential areas and/or school zones.
- An induction process for vehicle operators and regular toolbox meetings.
- A public complaint resolution and disciplinary procedure.
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- Any proposed temporary measures such a Traffic Guidance Scheme (TGS)
- Community consultation measures for peak haulage periods

Ancillary Infrastructure

- Detailed plans identifying the proposed location of any:
 - Project-related infrastructure within and outside of the project boundary.
 - Transmission line infrastructure, or any other project-related structures, within a road reserve. The plans are to demarcate local and classified road reserves.
 - Permanent or temporary connection/access to classified roads.
 - Specific details of the development's ancillary infrastructure and whether any temporary facilities are to be provided on-site including (but not limited to) concrete batching facilities. The EIS and TIA must 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.