



6 April 2018

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SF2017/258033
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The Manager
Department of Planning & Environment
GPO Box 39
SYDNEY NSW 2001

Attention: Tim Stuckey

SSD-8872 – PROPOSED SOLAR FARMS, STURT HIGHWAY, SANDIGO – LOTS 33, 35, 55, 108,109 DP754550, LOT 4 DP607982, LOTS 70, 71 DP754559 AND LOT 1 DP802754.

I refer to your correspondence regarding the subject Application which was referred to the Roads and Maritime Services for assessment and comment.

Roads and Maritime Services has reviewed the Environmental Impact Statement (EIS) dated February 2018 prepared by Accent Environmental and the Traffic Impact Assessment (TIA) prepared by Impact Traffic Engineering Pty Ltd for the Sandigo Solar Farm project. From the information provided it is understood that the proposal is for the establishment and operation of a 100 MW solar photovoltaic (PV) plant and associated infrastructure on the subject site. The subject site has frontage and access to Mitchells Road, which is classed as a local road, within a 100 km/h speed zone.

The subject site is located to the east of Narrandera and to the south of the Sturt Highway. The Sturt Highway is a classified road. From the information provided it is understood that delivery of components to the site will rely on access from the Sturt Highway via its intersection with Kywong Boree Creek Road. Mitchells Road is located along the western boundary of the development site and also intersects with the Sturt Highway however the TIA indicates that this road is not proposed to be used for access for heavy vehicles from the Sturt Highway. Access to the development site is proposed from local roads therefore any access driveway should be consistent with the requirements of Council.

It is understood that the construction period will be approximately 8 months. Due to the characteristics of such a development the significant proportion of traffic generation (for both light and heavy vehicles) occurs during the construction stage of the development with the operational phase generating limited traffic. The submitted documentation considers the heavy and light vehicle traffic generation for construction of the facility. The documentation does not finalise the preferred route for the delivery of components to the development site or the source of other products, such as the aggregate, water and sand, however it is noted that items such as solar panels and racking systems will be transported from either Sydney or Melbourne via the Newell and Sturt Highways. The submitted reports acknowledge that this development will require the preparation of an appropriate Construction Traffic Management Plan. As the proposal relies on access via the classified and local road network this plan should be finalised in consultation with the relevant road authorities, in this case being both the Roads and Maritime Services and Council.

The site does not have frontage to the Sturt Highway but will rely access via the intersection of Kywong Boree Creek Road with the Sturt Highway during both the construction and operational phases of the project. Due to the potential traffic generation, including light vehicles, as a minimum a Basic Right Turn (BAR) and Basic Left Turn (BAL) treatment is required at the intersection of the Sturt Highway and Kywong Boree Creek Road. From initial investigation it appears that a BAR/BAL intersection treatment may exist at the intersection however this is not addressed or acknowledge by the submitted reports. Any consent should be conditioned to require the intersection be upgraded to the required standard or details provided to certify that the required intersection treatment is currently constructed.

The development will comprise of a series of solar panels (up to 310,000) to be erected on the subject site. The documentation refers to various options being considered for the mounting of the solar panels however the anticipated solution will have a typical maximum height of 3 metres above ground level. Given the type and scale of the proposed development and its proximity to a public road it is considered appropriate that issues relating to potential for distraction of, and for glare impacts on, passing motorist be addressed. Glint and glare from the solar panels shall not cause a nuisance, disturbance or hazard to the travelling public on the public road network. In the event of glint or glare from the solar plant being evident from a public road, the proponent shall implement mitigation measures such as construction of a barrier (e.g. fence) or other approved device to remove any nuisance, distraction and/or hazard caused as a result of glare from the solar panels.

Roads and Maritime is mainly concerned with the impact of the development on the safety and efficiency of the road network. Roads and Maritime emphasises the need, particularly during the construction phase of this development, to minimise the impacts on the existing road network. As the subject site is to be accessed via an intersection with the Sturt Highway which is located within a 100 km/h speed zone the following conditions are proposed for road safety reasons.

Roads and Maritime Services has assessed the Development Application based on the documentation provided and would raise no objection to the development proposal subject to the Consent Authority ensuring that the development is undertaken in accordance with the information submitted as amended by the inclusion of the following as conditions of consent (if approved):-

1. A Traffic Management Plan shall be prepared in consultation with the relevant road authorities (Council and Roads and Maritime Services) to outline measures to manage traffic related issues associated with the development, particularly during the construction and decommission processes. The appointed transport contractor shall be involved in the preparation of this plan. The plan shall address all light and heavy traffic generation to the development site and detail the potential impacts associated with the development, the mitigation measures to be implemented, and the procedures to monitor and ensure compliance. This plan shall address, but not necessarily be limited to the following;
 - i) Require that all vehicular access to the site be via the approved access route.
 - ii) Details of traffic routes to be used by heavy and light vehicles, and any associated impacts and any road-specific mitigation measures.
 - iii) Details of measures to be employed to ensure safety of road users and minimise potential conflict with project generated traffic,
 - iv) Proposed hours for construction activities, as night time construction presents additional traffic related issues to be considered.
 - v) The management and coordination of the movement of vehicles for construction and worker related access to the site and to limit disruption to other motorists, emergency vehicles, school bus timetables and school zone operating times,
 - vi) loads, weights and lengths of haulage and construction related vehicles and the number of movements of such vehicles,
 - vii) procedures for informing the public where any road access will be restricted as a result of the project,
 - viii) any proposed precautionary measures such as signage to warn road users such as motorists about the construction activities for the project,

- ix) a Driver Code of Conduct to address such items as; appropriate driver behaviour including adherence to all traffic regulations and speed limits, safe overtaking and maintaining appropriate distances between vehicles, etc and appropriate penalties for infringements of the Code,
 - x) details of procedures for receiving and addressing complaints from the community concerning traffic issues associated with truck movements to and from the site,
 - xi) measures to address worker fatigue and transportation to the development site
2. The Proponent must engage an appropriately qualified person to prepare a Road Dilapidation Report for all road routes to be used during the construction (and decommissioning) activities, in consultation with the relevant road authority (Roads and Maritime Services and Council). This report is to address all road related infrastructure. Reports must be prepared prior commencement of, and after completion of, construction (and decommissioning). Any damage resulting from the construction (or decommissioning) traffic, except that resulting from normal wear and tear, must be repaired at the Proponent's cost. The applicant is accountable for this process, rather than the proposed haulage contractor. Such work shall be undertaken at a time as agreed upon between the Proponent and relevant road authorities.
 3. Prior to the commencement of construction on-site, the Proponent must undertake all works to upgrade any road, its associated road reserve and any public infrastructure in that road reserve, to a standard suitable for use by heavy vehicles to meet any reasonable requirements that may be specified by the relevant roads authority. The design and specifications, and construction, of these works must be completed and certified by an appropriately qualified person to be to a standard to accommodate the traffic generating requirements of the project. On Classified Roads the geometric road design and pavement design must be to the satisfaction of the Roads and Maritime Services.
 4. As a minimum the intersection of the Sturt Highway and Kywong Boree Creek Road is to be constructed and the roadside maintained to the satisfaction of Roads and Maritime Services to comply with the following:
 - a) Be constructed and the roadside maintained so as to provide the Sight distance requirements for a reaction time of 2.5 seconds in either direction along the Sturt Highway in accordance with the Austroads Publications as amended by the supplements adopted by Roads and Maritime Services for the posted speed limit. Compliance with this requirement is to be certified by an appropriately qualified person prior to construction of the vehicular access.
 - b) be constructed with a Basic Right Turn (BAR) and Basic Left Turn (BAL) intersection treatment on the Sturt Highway in accordance with the Austroads Guide to Road Design as amended by the supplements adopted by Roads and Maritime Services for the posted speed limit. The intersection is to be constructed to the standards required for an approved road train route. Details certifying the construction of the intersection to the required standard shall be provided to Roads and Maritime Services.
 - c) The construction of Kywong Boree Creek Road to provide for 2 travel lanes and be sealed for at least 50 metres from its intersection with the Sturt Highway. The intersection shall be designed and constructed so that vehicles turning between the Sturt Highway and Kywong Boree Creek Road are not required to cross to the opposing travel lane in order to perform a turn manoeuvre. The intersection shall be line marked in accordance with Australian standards.
 - d) be designed and constructed so as not to interfere with the capacity of the current roadside drainage network and to prevent water from proceeding onto, or ponding on, the carriageway of the Sturt Highway. If a culvert is to be installed and is to be located within the clear zone of the carriageway for the posted speed limit it shall be constructed with a traversable type headwall
 5. A management plan to provide measures to suppress dust generation from the development site and the transportation route shall be prepared and implemented to the satisfaction of Council and Roads and Maritime Services.
 6. Any damage or disturbance to the road reserve of the Sturt Highway or Conargo Road is to be restored to match surrounding landform in accordance with Council requirements.

7. As the Sturt Highway is part of the State Road network works on the carriageway of the highway will require the developer to enter into a Works Authorisation Deed (WAD) with Roads and Maritime Services before finalising the design or undertaking any construction work within or connecting to the road reserve. The Works Authorisation Deed documentation is to be submitted for each specific change to the state road network for assessment and approval by Roads and Maritime Services prior to commencement of any works within the road reserve. The applicant is to contact the Land Use Manager for the South West Region on Ph. 02 69236611 for further detail.
8. Glint and glare from the solar panels shall not cause a nuisance, disturbance or hazard to the travelling public on the public road network. In the event of glint or glare from the solar plant being evident from a public road, the proponent shall immediately implement glare mitigation measures such as construction of a barrier (e.g. fence) or other approved device to remove any nuisance, distraction and/or hazard caused as a result of glare from the solar panels.
9. Any works within the road reserve of a classified road requires approval under Section 138 of the Roads Act, 1993 from the road authority (Council) and concurrence from Roads and Maritime Services prior to commencement of any such works. The developer is responsible for all public utility adjustment/relocation works, necessitated by the development and as required by the various public utility authorities and/or their agents.
10. Works associated with the development shall be at no cost to Roads and Maritime Services.

Under the provisions of the Environmental Planning & Assessment Act the Consent Authority is responsible to consider any likely impacts on the natural or built environment. Depending on the level of environmental assessment undertaken to date and nature of the works it may be necessary for the developer to undertake further environmental assessment for any ancillary road works required as a condition on the development.

Any enquiries regarding this correspondence may be referred to the Manager, Land Use for Roads and Maritime Services (South West Region), Maurice Morgan, phone (02) 6923 6611.

Please forward a copy of the Notice of Determination for this Development Application to the Roads and Maritime Services at the same time as advising the applicant.

Yours faithfully



Per:
Jonathan Tasker
Acting Director
South West NSW