

Our Ref: 121123\_LEO\_001

22 March 2021

The General Manager  
Moree Plains Shire Council  
PO Box 420  
MOREE NSW 2400

**Attention: Mr Murray Amos**

Dear Sir

**ADEQUACY REVIEW OF THE TRAFFIC IMPACT ASSESSMENT SUBMITTED IN SUPPORT OF THE DEVELOPMENT APPLICATION FOR THE MEPPM QUARRY**

Reference is made to your email dated 19 March 2021 advising that the development application for the Meppem Quarry is to be determined by the Regional Planning Panel and that an opinion is requested on the Council Engineering Department's requirements for the proposed access improvements for the quarry and the adequacy of such improvements.

Specifically, an opinion is required on the following provisions:

1. Manamoi Road – Council's proposal for a single lane road with passing bays rather than the 2 lane road recommended.
2. Boo Boo Road – Council's proposal that this be a gravelled surfaced road rather than the recommended sealed road.

With reference to our Report dated December 2020 titled *Review of a Traffic Impact Assessment Report Prepared by SMK Consultants*, the following information is provided in response to each issue.

Manamoi Road

The Council Engineering Department's proposal for the upgrading of Manamoi Road as stated by SMK and set out in our December 2020 Report indicates:

*The request from Moree Plains Shire Council for use of this road would involve:*

- *Complete rebuilding to Council standards (modify for the low volume of traffic).*
- *Construction of a single lane road with 3 or 4 "whale belly" pull over areas that will be managed through a traffic management plan – favouring the local farmer.*

*Moree Plains Shire Council has considered that this road can be single lane based on the frequency of truck traffic if pull over areas are established. Unloaded trucks returning to the quarry can therefore pull off the single road to allow loaded trucks, including am local farm traffic to continue toward Boo Boo Road.*

The proposed section of Manamoi Road to be upgraded is approximately 3.5km in length. If the 3 or 4 "whale belly" pull over areas are provided on the proposed single lane road as proposed, then the pull over areas would be spaced at approximately 0.9km to 1.0km intervals along the road.

The heavy vehicle operations on Manamoi Road are expected to range from 94 truck movements per day for average quarry production up to 264 truck movements per day for peak operation of the quarry. At peak operation of the quarry, this represents up to 24 truck movements per hour.

As stated in the December 2020 Report, under the average quarry operation generating 94 tuck movements per day, there would be a reasonable probability that loaded departing and empty returning trucks would meet along the roadway and not always adjacent to a pull over area. The reversing of trucks to return to a pull over area is not practical.

Despite that the proponent plans to implement a traffic management plan, a driver code of conduct and GPS locators for the monitoring of truck movements, it will be inevitable that trucks will still meet on the roadway where a pull over area is not available. This would be a particular problem where quarry trucks intermix with unmonitored local farm traffic using the road.

Our opinion outlined in the December 2020 Report remains unchanged and Moree Plains Shire Council should reconsider the requirements for upgrading Manamoi Road to reconstruct the road to a two-lane gravel surface road.

#### Boo Boo Road

Council's Engineering Department's proposal for the upgrading of Boo Boo Road as stated by SMK and set out in our December 2020 Report indicates:

*There is approximately 11.5km of Boo Boo Road between Manamoi Road and Gurley Creek Road which remains as a gravel road. Council has indicated that if this road is to be used as a haul road, the following works will be required:*

- *A minimum of 100mm of compacted gravel to be constructed as a road surface.*
- *Gravel is to be a selected material and Council approved.*
- *Minimum width of formation to be 7m.*
- *The southern 8.5km to be widened to an 8m formation.*
- *Table drains to be regraded as part of the formation.*
- *Widen the sealed section to a minimum of 7m width.*
- *Install a concrete causeway to replace the bitumen sealed floodway at approximately 3.8km south of Gurley Creek Road.*

*The proposal from Moree Plains Shire Council would provide a suitable formation for standard trucks on a local road network.*

Our December 2020 Report recommended that *Council should reconsider that Boo Boo Road should be further upgraded to a bitumen sealed road in accordance with Council's standards for a sealed rural road.*

However, following further consideration of the issue, it is agreed that based on the proposed formation widths and the provision of table drains, the road surface could comprise a minimum thickness of 100mm of compacted gravel.

It should be noted that due to the increase in the quarry's heavy vehicles using the gravel surfaced road (between 94 and 264 trucks per day), additional maintenance will need to be carried out to keep the road surface in a condition suitable for the use of all vehicles including passenger vehicles and local traffic.

We trust the provision this information in regards to the access improvement issues is satisfactory for Council's purposes, however, if any further information is required or any issue requires clarification, please do not hesitate to contact our Dubbo office.

Yours faithfully



**STEPHEN HOYNES**

Principal | Civil Engineer