



13 May 2019

Department of Planning & Environment  
Resource Assessments  
GPO Box 39  
SYDNEY NSW 2001

**Attention: Anthony Barnes**

**MANDALONG SOUTHERN EXTENSION PROJECT – NOTICE OF EXHIBITION - SSD 5144 MOD 8**

Reference is made to the Department's email dated 30 April 2019, regarding the abovementioned application which was referred to Roads and Maritime Services (Roads and Maritime) for comment.

Roads and Maritime understand the proposal to be for the following:

- increasing the number of full-time equivalent personnel at the Mandalong Mine Access Site (MMAS) across all weekday and weekend shifts at the mine, from the currently approved 470 to 815 (an increase of 345, 294 additional for the weekdays and 51 additional for the weekends);
- upgrading the MMAS's existing electrical substation; and
- clearing vegetation to facilitate upgrading of the substation and expansion of existing car parking facilities.

Roads and Maritime Response

Transport for NSW and Roads and Maritime's primary interests are in the road network, traffic and broader transport issues. In particular, the efficiency and safety of the classified road network, the security of property assets and the integration of land use and transport.

The Pacific Motorway (M1) is a classified State road and Roads and Maritime is the roads authority for the Pacific Motorway. Crooks Road, Old Maitland Road and Mandalong Road are local roads. Council is the roads authority for these and all other public roads in the area, in accordance with Section 7 of the *Roads Act 1993*. Roads and Maritime has reviewed the referred Statement of Environmental Effects (SEE) and Traffic Impact Assessment (TIA), both by EMM Consulting dated 3 April 2019 information and provides the following comments to assist the consent authority in making a determination:

- Roads and Maritime note that the personnel increase is attributed to additional workers required to mine an alternate area concurrently with the existing mined area. It is understood that due to geological constraints, mining has been interrupted and the coal production rate has declined. The SEE states that

the mining of the supplementary coal supply will not increase overall annual production from the mine, which will remain within the maximum extraction limit of 6.5 million tonnes per annum (Mtpa) as approved by SSD-5144.

- It is estimated that there will be a maximum additional 588 daily trips. These trips will be distributed throughout the network approaching the site.
- Roads and Maritime's interest is the safe and efficient operation of the road network, in particular the M1 motorway access ramps to Mandalong Road. It is noted that the completion of the night shift coincides with the AM peak, and the completion of the day shift coincides with the PM peak.
- The TIA appears to provide different results between Table 4.3, which is a summary of the Sidra analysis, and Appendix D & E which shows the Sidra output results. Table 4.3 shows that the DOS in the PM peak exceeds 0.9 for the eastern interchange ramp, which is considered unstable flow. This is not shown within the Sidra appendices. This has been attached in Annexure A.
- The operation of the eastern interchange ramp is to be confirmed. The eastern ramp contains the critical movement, which is the right turn from the ramp onto Mandalong Road.
- The intersection of Mandalong Road and Kerry Anderson Drive is a matter for Lake Macquarie City Council to consider.

Should you require further information please contact Marc Desmond on 0475 825 820 or by emailing [development.hunter@rms.nsw.gov.au](mailto:development.hunter@rms.nsw.gov.au).

Yours sincerely



Peter Marler  
**Manager Land Use Assessment**  
**Hunter Region**

*Attach: Annexure A – differing sidra results from Table 4.3*

**Table 4.3 Summary of existing and predicted site access intersection operations**

Intersection	Peak hour	Existing baseline traffic			With project-related traffic		
		LOS	DOS	DEL	LOS	DOS	DEL
Site access intersection (Kerry Anderson Drive/Mandalong Road)	Early morning peak hour (5:30 am–6:00 am)	A	0.073	9.3	A	0.289	13.3
	Morning peak hour (7:30 am–8:30 am)	A	0.110	10.0	A	0.110	10.0
	Afternoon peak hour (3:30 pm–4:30 pm)	A	0.097	9.9	A	0.156	10.0
Mandalong Road/M1 Pacific Motorway (western ramps)	Early morning peak hour (5:30 am–6:00 am)	A	0.169	12.8	B	0.685	25.2
	Morning peak hour (7:30 am–8:30 am)	B	0.257	20.8	B	0.257	21.3
	Afternoon peak hour (3:30 pm–4:30 pm)	B	0.229	25.0	C	0.267	29.4
Mandalong Road/M1 Pacific Motorway (eastern ramps)	Early morning peak hour (5:30 am–6:00 am)	A	0.204	13.0	B	0.374	23.7
	Morning peak hour (7:00 am–8:00 am)	B	0.665	27.3	C	0.688	28.9
	Afternoon peak hour (3:30 pm–4:30 pm)	B	0.802	28.4	D	0.922	47.3

Note: LOS – level of service, DOS – degree of saturation, DEL – vehicle delay (seconds).

## MOVEMENT SUMMARY

### Site: 103 [Future Motorway Access Intersection East Side PM Peak]

Existing Four Way Ramps Intersection

Site Category: (None)

Stop (Two-Way)

Movement Performance - Vehicles												
Mov ID	Turn	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: Mandalong Road												
4	L2	244	4.7	0.136	5.7	LOS A	0.0	0.0	0.00	0.53	0.00	54.8
5	T1	355	3.6	0.186	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	60.0
Approach		599	4.0	0.186	2.3	NA	0.0	0.0	0.00	0.21	0.00	57.7
North: Motorway Exit Ramp												
7	L2	411	3.8	0.227	5.7	LOS A	0.0	0.0	0.00	0.53	0.00	54.8
9	R2	15	14.3	0.090	29.4	LOS C	0.3	2.3	0.83	1.00	0.83	41.2
Approach		425	4.2	0.227	6.5	LOS A	0.3	2.3	0.03	0.54	0.03	54.2
West: Mandalong Road												
11	T1	508	2.7	0.267	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
12	R2	78	2.7	0.062	7.0	LOS A	0.3	1.9	0.43	0.65	0.43	51.6
Approach		586	2.7	0.267	1.0	NA	0.3	1.9	0.06	0.09	0.06	58.7
All Vehicles		1611	3.6	0.267	2.9	NA	0.3	2.3	0.03	0.25	0.03	57.1