(34)

Andrew Beattie

From: [redacted]<campaigns@good.do>
Sent: Sunday, 7 August 2016 5:14 PM
To: DPE CSE Information Planning Mailbox
Subject: SIMTA MODIFICATION – SSD 5066 [Early Works]

I object to these modifications, on merit and on principle because the truck movements have only been examined only in a limited way.

The only analysis is for truck movements between the Intermodal and Moorebank Av.

There has been no examination of truck movements past Moorebank Av.

With the NSW Freight and Ports Strategy claiming that the M5 Bridge between Moorebank Av and the Hume Highway is at capacity in 2016, these additional trucks will present traffic problems. This has not been examined.

The MICL EIS report claims that this section of the M5 has an accident rate that is approximately 40 times higher than the RMS accident threshold. These additional trucks will contribute to an even higher accident rate.

The high accident rate is born out by the SIMTA EIS 1 and SIMTA EIS 2. These EIS reports state that the increase in truck accidents between these two EIS reports is 20%.

The traffic report is so limited that it should be referred to the Institution of Engineers for lack of professional ethics.

Yours sincerely,
[redacted]

[redacted]

Andrew Beattie

From: system@accelo.com on behalf of [redacted]
Sent: Monday, 15 August 2016 6:33 PM
To: Andrew Beattie
Subject: Submission Details for [redacted](object)
Attachments: [redacted]pdf

Confidentiality Requested: yes

Submitted by a Planner: no

Disclosable Political Donation: no

Name: [redacted]
Email: [redacted]

Address:
[redacted]

Content:
In summary, the traffic impact assessment is incomplete, I urge the reader to submit this document to the Institution of Engineers, and request for a formal assessment of its professional standards.

I believe it falls so far short of professional standards, that this is blight on the profession.

[redacted]
Submission: Online Submission from [redacted](object)
https://majorprojects.affinitylive.com/?action=view_activity&id=157535

Submission for Job: #7722 Moorebank Intermodal Terminal Stage 1 Early Works (SSD 5066 MOD 1)
https://majorprojects.affinitylive.com/?action=view_job&id=7722

Site: #2621 Moorebank Intermodal Terminal
https://majorprojects.affinitylive.com/?action=view_site&id=2621

I have submitted a very brief objection in the RAID submission. This is an explanatory document of my objection.

In summary, the traffic impact assessment is incomplete, I urge the reader to submit this document to the Institution of Engineers, and request a formal assessment of its professional standards.

I believe it falls so far short of professional standards, that this is blight on the profession.

Kind regards
[redacted]

What happens to the traffic once it is on Moorebank Avenue?

[redacted] objects to the Moorebank Precinct West, Intermodal Terminal Facility – Modification, based on the Construction Traffic Impact Assessment.

This objection is based on the examination of the SIMTA, Sydney Intermodal Terminal Alliance, report, Part 4, Division 4.1, State Significant Development, produced by ARCADIS, Design and Consultancy for natural and built assets, here referred to as "the report".

The report examines the traffic flows between the development and Moorebank Avenue.

The obvious question is not answered:
What happens to the traffic once it is on Moorebank Avenue, surely it must go somewhere?

Clearly, this shortcoming from a professional report does not reflect well on the profession.

I strongly suggest to the reader, that this matter be taken up with the Australian Institution of Engineers, and request an independent review the professional standards relating to the adequacy of this report.

This obvious shortcoming is surprising, because the NSW Government has continually stated that:

> "The Moorebank precinct is strategically located for intermodal terminal due to adjacent compatible land uses, the growth in nearby logistic businesses and proximity to the M5 Motorway, M31 Hume Motorway, Westlink M7 and the Southern Sydney Freight Line".

Surely, there are professional reasons on ensuring that the traffic impact assessment examines the traffic from Moorebank Avenue onto to the M5 Motorway, M31 Hume Highway and Westlink M5?

Why was this not done?

Could the reason be one, or all, of the following?

Road network capacity issue?

TfNSW: Travel demand on the section of the M5 Motorway between the Hume Highway at Casula and Moorebank Av is expected to **exceed capacity as early as 2016**.

NSW FREIGHT AND PORTS STRATEGY

November 2013

The new state of business

NSW

NSW FREIGHT AND PORTS STRATEGY

4 STRATEGIC ACTION PROGRAMS

CASE STUDY 16 SUPPORTING THE DEVELOPMENT OF THE MOOREBANK INTERMODAL PRECINCT

The Moorebank precinct has been identified by the Australian and NSW Governments as a key strategic location to increase intermodal capacity. Two intermodal terminals are planned in the precinct; the Moorebank Intermodal Terminal (MIT) has been proposed by the Australian Government for the western side of the precinct, and a privately funded Sydney Intermodal Terminal Alliance (SIMTA) has been proposed for the eastern side. Once complete, these two IMTs are expected to result in up to two million TEU of intermodal terminal capacity.

Transport for NSW expects the development of these two intermodal terminals in the Moorebank precinct to place significant strain on the surrounding local road network. While not all effects of terminal developments have been identified at this time, initial analysis suggests the following impacts to the local road network:

- Travel demand on the section of the M5 Motorway between the Hume Highway at Casula and Moorebank Ave is expected to exceed capacity as early as 2016.
- The absence of west facing ramps from the M5 to the Hume Highway results in a significant number of vehicles using Moorebank Avenue to access the Liverpool CBD.
- By 2026 growth in background traffic will result in peak spreading and traffic conditions similar to the existing peak period in the Liverpool area and on the M5, persisting for most of the day.
- Key intersections providing access to the Moorebank intermodal precinct will exceed capacity with volumes, especially of turning vehicles, resulting in extensive delays, with queuing sufficient to disrupt through movement.

To support the development of the Moorebank intermodal terminals and meet the challenges posed by impact on the local road network, Transport for NSW is seeking to provide road network upgrades. The specific goals of these upgrades include:

- Providing additional capacity and traffic reliability on key routes accessing the precinct.
- Ensuring full access to the precinct for High Productivity Vehicles (HPV), including Higher Mass Limit (HML) vehicles.
- Managing the needs of the precinct in terms of road access while addressing negative externalities for the surrounding community and environment.

Transport for NSW has made a Nation Building 2 submission to undertake modelling and economic analysis to determine the optimal road upgrade package to meet the needs of the developed Moorebank intermodal terminal precinct.

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Obviously, adding more truck traffic on an **"exceed capacity as early as 2016"** road link would cause issues.

Is that a sufficient reason not to examine it?
Is that an ethical approach?

Afraid to add truck traffic to worsen the RMS black spot?

MICL EIS states (ref: 013 Moorebank IMT Project_ Chapter 11_ Traffic, transport and access.pdf, Parsons Brinckerhoff **11-16)**

- The section of the M5 Motorway between the Hume Highway and Heathcote Road interchanges is approximately 2.7 km long and is generally three lanes in either direction at this location.
- The crash data supplied by RMS indicate that 66 casualty crashes have occurred over the last 5-year period between 2008 and 2013. This equates to 4.89 casualty crashes per kilometre a year, which is in excess of the 0.13 casualty crashes per kilometre a year.

In simple English: accident rate: 4.89/0.13 = nearly 40 times higher than the RMS guidelines

What may happen if all those trucks are added to this black spot?
Would that make the black spot "better" (fewer accidents) or "worse" (more accidents)?

As the lawyers say, do not ask the question, if you do not want to know the answer.

Clearly, if the trucks are not modelled on this section of the M5, then we will not know what the impacts will be on this black spot.

Is this ostrich approach professional?
Is it ethical?

Afraid to add truck traffic to worsen the accident statistics for the next TIS?

- EIS SIMTA (1) and EIS SIMTA (2) – 20% increase in truck accidents

Crash Data from SIMTA EIS – Old + New

- The original SIMTA EIS examined crash data from 2004 to 2009 (five years)
- The current SIMTA EIS examined crash data from 2009 to 2013 (five years)
- Ref:
  - Earlier EIS: 17. Appendix K_Transport and Traffic Assessment_Volume 1.pdf, page 16
  - Current EIS: Appendix L_SIMTA Stage 1_Traffic and Accessibility Impact Assessment.pdf, page 18

	Earlier EIS	Current EIS	
Years of data analysis	2004 - 2009	2009 – 2013	Note: 2012 M5 widening - more traffic
Number analysed	559	524	
Fatalities	3	0	
Injuries	240	284	Nearly 20% increase
Heavy vehicle crashes	59	71	Over 20% increase
Light Commercial vehicles	106	111	
Cars	520 (93%?)	487 (93%?)	
Total vehicles	685	669	

This table summarises the accident statistics from the two SIMTA EIS documents.
It shows that the truck accidents have increased 20% between the releases of these two EIS documents.

Logic dictates that if there are more trucks, there will be more accidents.

Afraid to unpack its own findings?

We read this in the EIS SIMTA (1) – Existing Network Operational Issues
Section 3.3.3 Existing Network Operational Issues

> Further network operational analysis indicated ten intersection-related issues within the "core" area. While some of these issues do not necessarily ***reflect an overcapacity situation*** for the entire intersection, any further increase on demand from both future background and SIMTA traffic of these intersections should be investigated thoroughly. The identified intersection operational issues are summarised in Figure 3_7.

Ref: Moorebank Intermodal Facility (MITF) – Traffic and Transport, page 50.

Given that SIMTA rang the warning bell about those intersections, here was a chance to unpack those issues.

Why was that not done?
If the trucks were modelled, could it be possible that some of those intersections would then ***reflect an overcapacity situation?***

Afraid to find that the trucks cannot enter the M5?

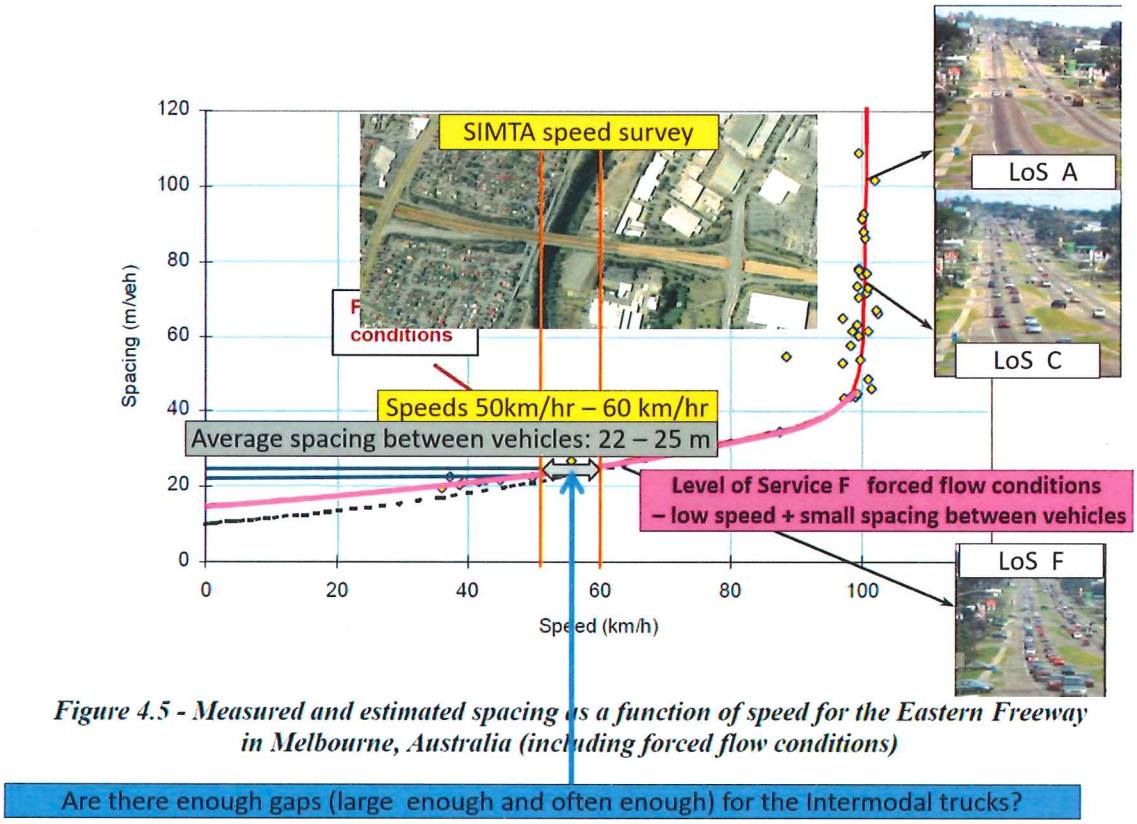

Figure 4.5 - Measured and estimated spacing as a function of speed for the Eastern Freeway in Melbourne, Australia (including forced flow conditions)

Are there enough gaps (large enough and often enough) for the Intermodal trucks?

What is this graph?

This graph shows the vehicle spacing and speeds on the Eastern Freeway in Melbourne. It provides great insight into the operation of all links (including the M5) operating like the Eastern Freeway: 100 km/hr speed limit, on and off ramps at major intersections and no traffic lights etc.

The X-axis shows the speed.

The Y-axis shows the spacing between vehicles.

Interpretation

If there are only a few cars on the road, the spacing is very large at the top of the graph (Level of Service A). If there are 1000 vehicles on the road, the spacing is smaller we move down the Y-axis (Level of Service C). As more cars enter the traffic stream, the spacing between the vehicles reduces even further, until eventually the spacing between vehicles is very small.

This is illustrated with those images showing Level of Service A, C.

The graph shows that the critical spacing is about 45 meters.

- If the spacing is larger than this, drivers drive at 100 km/hr.
- If the spacing is less than this, the drivers drive slower.

Once the speed reduces below, 90 km/hr-95km/hr, the "forced flow" conditions arise: known as Level of Service F – also illustrated with an image.

Theory

All the traffic and transportation engineers know that maximum throughput occurs just before the critical spacing.

More vehicles can be added to the system, but with the changed driver behaviour, the throughput of the system reduces. Drivers become more cautious, drive slower, and this impacts the "through put".

When we continue to add more vehicles, the spacing between the vehicles simply reduces, and drivers become even more cautious. Most drivers would have experienced the extreme case of this situation: when they are in a car traffic jam: lots of vehicles but speed = 0 and flow = 0.

Application of this knowledge

For the first EIS, SIMTA conducted a speed survey and found that the speed on the section between the Moorebank Av and Hume Highway was between 50km/hr and 60 km/hr. From this graph, we can see that the spacing between the vehicles would have been, between 22 and 25 meters.

It requires an extremely skilled truck operator to wedge the truck into such a small space – coming down the off-ramp "just in time" and "at the right speed" to fill a gap large enough for the fully loaded truck.

Naturally, the driver, on the M5, suddenly sit behind this truck, and wants to have a "safe" gap. Thus, the driver slows down to make that gap. Obviously, the driver behind it, also wants a safe gap, and slows down too. This chain reaction of 'wanting a safe gap' will move, as a wave, upstream.

Effectively, the net impact is that it will reduce the traffic flow speed.
From this graph, we can see that if the speed reduces, the spacing between the vehicles reduces.
The theory states that the traffic flow will reduce.

Since this is common knowledge for traffic and transportation engineers, is omitting the analysis an ethical option?