

## Submission to: Roads & Maritime Services (RMS)

### Re: Pacific Highway Lisarow to Ourimbah Improvements

**To: Craig Leckie, RMS**

Hello Craig.

Firstly, we would like to thank you for this opportunity to comment on the proposed improvements to the Pacific Highway between Lisarow and Ourimbah. It is good to see that the RMS has included some cycling infrastructure into your plans/designs for road improvements, and that you are consulting with local cyclists who will be the key users of such facilities.

With respect to the information provided (design drawings RF101-RF116 dated 21.06.2013) we provide the following recommendations and specifications. We request a meeting with you in person at a mutually convenient time and location, preferably on site, to discuss our recommendations as part of this phase of the consultation, so that we can demonstrate the issues in context.

### Recommendations

In any new development we need to cater for the requirements of various types of cyclists, both on-road and off-road, by providing suitable facilities. We note with delight that you have included:

- On-road bicycle lanes in both directions
- Off-road shared path on the western side (heading north; shopping centre side)

However, there are some specific issues we have noted and hence the following are our recommendations.

### James Graham Lane (your refs RF109, 110 & 111)

As per several studies into accidents between motor vehicles and bicycles, of which about 70% are identified as the motor vehicles fault (refs 1, 2 & 3), T-intersections are the most common conflict zones. Your current design provides two such un-signalised zones, being an entry into James Graham Lane from the Pacific Hwy in design ref RF111 and an exit from James Graham Lane onto the Pacific Hwy in design ref RF109.

As

- James Graham Lane only services a small group of industrial developments,
- you are introducing traffic lights at the corner of Walmsley Rd and the Pacific Hwy, which also services James Graham Lane as per design RF110,
- many cyclists will be travelling at over 40kph in this area (as it is just after the downhill from the Chitaway Rd roundabout),

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We propose that all entry into and out of James Graham Lane from and to the Pacific Hwy is directed through the Walmsley Rd traffic lights. This will eliminate the two currently designed conflict zones.

## On-Road Cycle Lane Width

We note that varying widths of cycle lane is provided along the in-scope sections of work, with a minimum width of 1.5 metres in the east side lane in design ref RF105.

We believe 1.5 metres to be the minimum useable on-road cycle lane width in a 60kph zone, which is the speed limit noted in the designs. This is also consistent with the generally accepted minimum bicycle overtaking distance of 1 metre at or below 60kph (ref 4), and which has been legislated (or about to be) in several states of Australia. However, obstacles such as the red on-road reflectors (often mounted inside the cycle lane), drainage grates and guard posts or rails (or even sometimes sign posts) often intrude into the “designed lane width” to effectively reduce the usable width significantly.

We therefore propose the minimum on-road designed cycle lane width to be 2 metres to allow for such intrusions. If there is insufficient room within the total boundaries, please ensure that NO intrusions, such as that noted above, are present in the detailed design or occur in the build phase - hence providing a useable 1.5 metres bicycle lane.

## Traffic Light Sensors

At each of the traffic light controlled intersections where an on-road cycle lane is planned, we propose that in-road sensors designed for use with bicycles are installed to trigger the light sequence.

## Shared Paths

All curb ramps on and off the shared path to be designed for bicycle access, including the angle of design to the road and “lip free”. A great example which the RMS have already installed is on Wisemans Ferry Road near the corner of the Central Coast Highway, which is often used by cyclists travelling at reasonable speed and works very well.

## Specifications:

- All shared paths, on-road cycle lanes and all signage comply with AustRoads Guidelines (both in design and construction).
- Off-road shared paths should be at least 3 metres wide (useable space), with no power poles, bus shelters or other obstructions within this width.
- All traffic lights include bicycle crossing lights, ideally with automatic light triggering designed for bicycles, and/or manual buttons on the left-hand side of paths within approximately 0.5 metres of the kerb ramp. Also include “ballet bars” near intersections/lights primarily for cleared cyclists.

## References:

1. Centre for Automotive Safety Research – Injured Cyclist Profile, January 2013  
<http://casr.adelaide.edu.au/publications/list/?id=1346>
2. University of Toronto – Smart Cycling, August 2009  
<http://www.research.utoronto.ca/smart-cycling>

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3. Monash University Accident Research Centre – Monash Alfred Cyclist Crash Study, July 2012  
<http://www.monash.edu.au/miri/research/reports/muarc311.pdf>
4. Amy Gillet Foundation 1 Metre Matters campaign  
<http://www.amygillett.org.au/assets/PDFFileStore/AGF-Briefing-Paper-Minimum-Overtaking-Distance-Release-3-June-2013.pdf>

We hope you find our requests/recommendations useful and look forward to your positive response shortly.

Regards,

Alan Corven

President, Central Coast Bicycle User Group