



24 April 2012

Our Ref: 12GCT0024

Your Ref:

Attention: Marek Holin

Department of Planning & Infrastructure  
GPO Box 39  
Sydney, NSW, 2001

Dear Marek,

**RE: Residential Subdivision Lot 1, Bayside Way, Brunswick Heads (MP05\_0091)**

I refer to the department's letter addressed to Jim Glazebrook of Jim Glazebrook & Associates Pty Ltd dated the 30<sup>th</sup> of January 2012, outlining issues raised by the department and submissions. This letter addresses a number of issues raised in Appendix 1, Item 3: *Traffic and Roads*.

**Item 3 a)** *The proposed road layout should allow for future bus access across the site and include bus shelters in accordance with the Draft Statement of Commitments T6 and Figure 15 of Appendix M.*

A revised road layout and proposed bus route has been devised to adequately cater for future bus access. Three new bus shelters have been proposed within the proposed residential subdivision in addition to new footpaths, as indicated in plan overleaf, to provide adequate accessibility to the proposed new bus route.

The proposed width of 8.0m is sufficient for a bus to stop and also to allow for two B85 cars to pass one another. The bus service that will access this development will only likely to run at a frequency of one per hour, therefore the likelihood of two vehicles passing each other when a bus is stationary at a bus stop if very infrequent and will not cause any safety issues.

**Item 3 b)** *The proposal does not adequately consider the existing crown public road reserve located along the eastern side of the subdivision layout. The proposed use and rehabilitation of land within the reserve is subject to permission from Crown Lands. The use of the reserve requires clarification as discussed by the submission of Crown Lands.*

TTM have not provided a response to this item. TTM understand this item has been addressed by another respondent.

**Item 3 c)** *Taking into consideration the additional traffic modelled to be generated by the development, the proponent needs to demonstrate how adverse parking and traffic impacts to the existing preschool can be avoided.*

The proposed development layout suggests that through shortest route choice, traffic from 45 residential lots (lots B103 to B147, representing approximately 27% of the site) would utilise the route through Kingsford Drive past the preschool. The remaining 121 residential lots within the development are expected to utilise Road 1 to Kingsford Drive in the west of the development or Roads 3 and 4 to Torakina Road in the east unless they are specifically visiting the Lillypilly Community Pre-school as a destination.



The provision of adequate parking for the preschool is not a concern of the developers. The preschool is solely responsible for providing parking for its visitors. The increase in surrounding residential lots does not necessitate an increase in children attending the preschool if it is not capable of providing sufficient parking.

TTM undertook a parking survey of the pre-school on the 23<sup>rd</sup> of March. The results of the survey is summarised in Table 1.

**Table 1: Lillypilly Community Pre-school Parking**

Time	On-street Spaces (7 total)	Off-Street Spaces (6 + 1 PWD)	Parking on Verge
8:40 am	0	3	0
8:50 am	1	3	0
9:00 am	6	6	2
9:10 am	4	8	2
9:20 am	2	6	0
9:30 am	2	4	0

It is also noted that no vehicles parking on blocking the road during the duration of the survey.

The preschool operates from 9:00 am to 3:00 pm which is outside the 8:00-9:00 am peak hour and 3:30-4:30 pm peak hour observed at the Old Pacific Highway / Bayside Way intersection. The preschool has limited parking utilisation prior to 9:00 am as revealed in the survey, and hence will have limited interaction with am peak hour traffic, and no interaction with pm peak hour traffic as the preschool closes prior to this period. The photos below indicate the parking available off and on street.



**Item 3 d)** *The proponent should consult with Council's traffic engineer regarding the intersection analysis at the Gulgán Road (Old Pacific Highway) and the suitability of the proposed intersection upgrades. Council's comments regarding the appropriateness of the proposed intersection upgrades should be included in any response to submissions.*

TTM has met with Byron Bay Council's traffic engineer, Simon Bennett, on the 17th of April 2012. During this meeting TTM discussed the Old Pacific Highway / Bayside Way intersection, providing Mr. Bennett with TTM's 2010 SIDRA Intersection outputs, revealing that the intersection has no performance issues up to 2022 with the inclusion of the development traffic. The extract from the TTM Traffic Impact Assessment report Nov 2010, as indicated below, was shown to Simon Bennett.

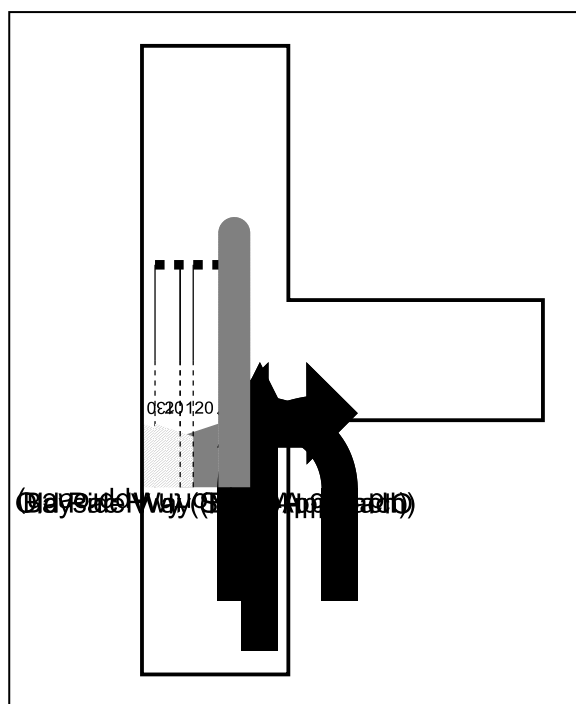
## 5.2 Key Findings

The existing intersection arrangement (refer to Figure 1) has been analysed for the following design scenarios:

- Scenario 1: Existing Traffic Volumes – AM and PM Peaks
- Scenario 2: Forecast (2022) Traffic Volumes without Development Case – AM and PM Peaks
- Scenario 3: Forecast (2022) Traffic Volumes with Development Case – AM and PM Peaks

Movement		Scenario	Demand Flow (veh/hr)	Deg. of Sat.	Avg. Delay (seconds)	LoS	95% Queue (m)
AM Peak							
Old Pacific Highway (south approach)	Through	1	141	0.076	0	A	0
		2	207	0.111	0	A	0
		3	207	0.111	0	A	0
	Right	1	19	0.015	8.9	A	1
		2	25	0.028	9.9	A	1
		3	57	0.066	10.1	B	3
Bayside Way (east approach)	Left	1	43	0.058	8.3	A	1
		2	56	0.080	12.0	B	2
		3	122	0.174	12.3	B	5
	Right	1	30	0.040	9.8	A	1
		2	39	0.121	19.9	C	4
		3	85	0.290	23.1	C	12
Old Pacific Highway (north approach)	Left	1	10	0.005	7.4	A	0
		2	13	0.007	7.4	A	0
		3	29	0.016	7.4	A	0
	Through	1	211	0.113	7.4	A	0
		2	333	0.178	0	A	0
		3	333	0.178	0	A	0
PM Peak							
Old Pacific Highway (south approach)	Through	1	303	0.160	0	A	0
		2	445	0.235	0	A	0
		3	445	0.235	0	A	0
	Right	1	23	0.016	8.4	A	1
		2	30	0.030	9.2	A	1
		3	64	0.067	9.5	A	3

Movement		Scenario	Demand Flow (veh/hr)	Deg. of Sat.	Avg. Delay (seconds)	LoS	95% Queue (m)
Bayside Way (east approach)	Left	1	21	0.033	9.0	A	1
		2	27	0.045	13.0	B	1
		3	57	0.094	13.2	B	3
	Right	1	35	0.053	10.5	A	2
		2	45	0.190	24.8	C	6
		3	95	0.448	32.8	D	17
Old Pacific Highway (north approach)	Left	1	32	0.017	7.4	A	0
		2	41	0.022	7.4	A	0
		3	87	0.047	7.4	A	0
	Through	1	215	0.113	0	A	0
		2	316	0.165	0	A	0
		3	316	0.165	0	A	0



**Figure 1: Existing Intersection Arrangement for Old Pacific Highway and Bayside Way**



Mr. Bennett agreed with TTM's conclusion that there were no future capacity issues at the intersection and hence no upgrades to the intersection would be required due to the development.

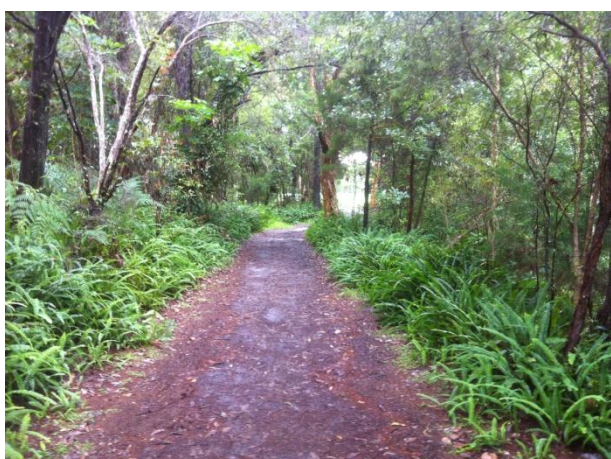
It was further discussed that 2005-2010 crash data revealed no crashes had occurred at the intersection and it was agreed that the intersection operates safely.

The original design of the Old Pacific Highway / Bayside Way intersection was based on a signed operating speed of 80km/h. The intersection is currently signed as 60km/h and consequently the existing design is conservative for the current speed limit, providing considerable acceleration, deceleration and turning bay lengths, increasing the safety and performance of the intersection.

**Item 3 e)** *The Council's Bike Strategy and Action Plan 2008 contained in Appendix M shows an unbuilt section, number 35 of a pedestrian/cycleway link that would connect Brunswick Heads commercial centre to the Bayside development. Current there is no linkage as shown in the plan. Although the proponent has proposed shared cycle and pedestrian ways within the site, the department considers it important to provide active travel alternatives to vehicle linkages as supported by the Premiers Council of Active Living and the Far North Coast Regional Strategy 2006 "Neighbourhood Planning Principles". It is requested that the proponent consult with Council regarding the feasibility of providing the linkage and the manner for its provision. The results of such consultation should be included within the submissions report.*

There is an existing path along route number 35, which is made from sub base material and is relatively level and flat along its length. This route also shares its path with the access to two residential dwellings, being 41 Old Pacific Highway and the rear access of 35 Old Pacific Highway. The construction upgrade of this cycle path would also require contributions from these land owners, as their vehicles using this route are far heavier than a cyclist, therefore, the construction will need to be built to a higher standard than that required for a shared cycle / pedestrian path.

The section of path that is not used by vehicles is in good condition, with adequate drainage and of a standard that would be sufficient for cyclists. The section that has other vehicles using it has areas of ponding during periods of rainfall, therefore deterring the use of the path by cyclists and walkers. The photos below indicate the extent of the good and poor sections mentioned above.



It was noted in TTM's meeting with Byron Bay Council's traffic engineer, Simon Bennett, on the 17th of April 2012 that Council had not raised this issue.

It is TTM's opinion that the section of route number 35 from the Old Pacific Highway and along the driveway to the residential properties of 35 and 41 Old Pacific Highway should be funded by the landowners and that the section between the driveway and Bayside Way be left as is. The existing nature of the path through the woodland does not advocate a hard concrete or bitumen surface, as this is not in keeping with the surrounding environment.

TTM recommends that the development be approved in relation to traffic and transport issues, taking note of the information and proposals contained within this letter.

If you have any queries in relation to the items discussed in this letter, please contact me.

Yours sincerely

A handwritten signature in black ink that reads 'R.V. Jones' with a small horizontal line at the end.

**Richard V Jones**  
Associate Director – Traffic  
TTM