

24 November 2010

Our Ref: 6207 Your Ref: 2010NTH019 - DA 2010/336

Panel Secretariat Joint Regional Planning Panel GPO Box 3415 SYDNEY NSW 2001

Attn: Emily Dickson



Directors

MICHAEL S MOWLE B E Civ (Hons) Chartered Engineer

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GEOFFREY E HILL B Surv

Registered Land Surveyor
DANIEL J BAKER

B Surv Registered Land Surveyor

Dear Emily,

#### Re: <u>DA 2010/336 - 53 Lot subdivision</u> <u>11 John Fraser Place, Port Macquarie</u>

Thank you for taking my call on 10 November 2010 and your very prompt attention to providing the minutes the next day.

Firstly I would like to apologise for not being in attendance at the JRPP meeting of 9 November. I had been advised that the meeting was on 10 November at 12.00 noon and unfortunately had overlooked the change of date in the notice that arrived a few days before the meeting.

As discussed, this matter missed the October 2010 JRPP due to other commitments by Council staff and the proponents are very keen to have the matter considered at the December JRPP meeting, if at all possible.

I appreciate the opportunity to provide justification for consideration by the Panel, prior to the December meeting.

On 16 November, we met with 3 officers of Port Macquarie Hastings Council's Engineering Section: Mr Cliff Toms, Mr David Troemel and Mr Geoff Metcalfe. We discussed at length what opportunities there may be to provide a second roadway access point to John Fraser Close.

Five (5) alternative routes to reach the former Ocean Drive access were explored with Council officers. Mr Toms indicated a reluctance to see additional traffic directed onto the western intersection (former Ocean Drive renamed to John Fraser Place) due to the close proximity to the queue lane for the major signalised intersection. Alternatively Mr Toms put forward practical suggestions as to how safety at the Banksia Avenue intersection could be improved.



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Traffic Engineer, Mr Terry Keating of TPK has also been consulted and his professional advice regarding a second access west of Banksia Avenue and existing road environment at the intersection of Lake Road and Banksia Avenue provision is attached.

Investigations by Hopkins Consultants of a second road access west of Banksia are as follows:

## 1. Context

Enclosed is aerial imagery of the existing Banksia Avenue intersection and the existing John Fraser Place (former Ocean Drive) intersection with Lake Road. The road, John Fraser Place, is located on council land and is currently not within a public road reserve. The road reserve adjacent to the subject property on the western edge is not constructed as a public road with only informal dirt tracks as shown.

John Fraser Place provides access to a Landscape Supply centre and a Gas bullet storage tank, beyond that is the access to Council's Sewerage treatment works.

## 2. Lake Road/John Fraser Place Intersection

Attached is photo of the current intersections (Nearmap image)..

It shows the current intersection onto Lake Road in close proximity to the west bound Queue Lane for the link road (new Ocean Drive) signalised intersection (see also drawing 6207-0006-01).

In addition, east bound traffic from the signalised intersection merge from two lanes into one approximately 20 metres east of the break in the median.

Right hand traffic movements from Lake Road to John Fraser Place for east bound traffic have limited queuing available. There is queuing for a maximum of two vehicles which is only available when the vehicles queue across the intersection. This queuing restricts the traffic movements turning right from John Fraser Place into Lake Road. The right turn from John Fraser onto Lake Road does not have a shelter lane and is located where the two eastbound lanes merge into one.

Understandably, Mr Cliff Toms of Port Macquarie Hastings Council is reluctant to see additional traffic directed to this intersection.

Taking into account that Council would not support additional right turn movements from John Fraser Place onto Lake Road at this intersection, we then investigated whether the second access could be restricted to a left in left out, only intersection.



Application of a left in left out only limitation at this intersection would impact the existing users such as the landscape supply centre, the Elgas site and Council staff attending the Sewerage Treatment works.

Assuming this limitation were to be successfully negotiated, then the options for linking to the subdivision to the former Ocean Drive were explored as follows (see drawing 6207-0006-02 and drawing 6207-0006-03):

## 3. <u>Second Road access</u>

<u>Option 1:</u> Extend road through subdivision Lot 53 then south through the western end of Lot 103 DP 1115201 in order to connect to the formed access road for the Landscape Supply centre & the Elgas bullet facility.

**Comment:** Landscape supply centre appears to have recently installed more works in the potential road alignment and are unlikely to be amenable to removing it nor any adjustment in their lease area.

<u>Option 2:</u> Extend road through subdivision Lot 52 into John Fraser Close road reserve, immediately turn south to then connect to the existing access road for the Landscape Supply centre.

**Comment:** This would involve creating a new intersection onto the access road at a location too close to its own intersection with the former Ocean Drive. There is a substantial amount of Council infrastructure and services under the ground; some of which may need relocating to achieve acceptable access grades. Council is not supportive of this option.

One of the attached plans illustrates the extent of services & infrastructure in John Fraser Close road reserve and in the adjacent Council land.

This option also involves removal of mature eucalypt trees on the boundary.

<u>Option 3:</u> Extend road through subdivision Lots 45/51 directly to the former Ocean Drive link creating a new intersection onto it.

**Comment:** Council is not supportive of this option as there is a crest to the south at the existing access to the Landscape Supply centre and site distances are poor. This would place the intersection of the new access too close to the Lake Road/former Ocean Drive intersection as well.



As mentioned above, there are substantial services & infrastructure in the area the access road would cross and the change in levels between the subdivision and the former Ocean Drive road level would involve significant relocation of services including major water & sewer mains, to achieve compliant road grades and intersection safety.

The area between John Fraser Place and the former Ocean Drive access is an area designated for vegetation regeneration for enhancement of a Koala Corridor. The Option 3 road would conflict with the regeneration area and bi-sect the long term regeneration area.

Option 3 would result in the removal of significant mature local eucalypt trees along the western boundary of Lot 100 (the subdivision site). These trees provide essential amenity for the subdivision and include a number of SEPP 44 listed Koala Food Trees.

During the assessment of this development application, Council staff deemed these trees as essential and required to be kept, which has resulted in Arborist reports and amendments to our infrastructure strategy to ensure their retention.

Provision of a second access road through area would conflict with the retention of the mature Koala Tree species and would hinder the Link Road vegetation regeneration area adjoining them.

<u>Option 4:</u> Extend road through Lot 44 onto and construct John Fraser Place to connect directly onto Lake Road.

**Comment:** Council Engineering Section has advised that a new intersection onto Lake Road will not be considered and is unacceptable to them.

<u>Option 5</u>: Extend road directly off the end of the central internal subdivision road along the western edge of the proposed drainage reserve (adjacent lot 41) in the subdivision, linking straight onto Lake Road.

**Comment**: Council response to this option is the same as Option 4.



## 4. Conclusion

We have carefully explored all potential options for a second access road west of Banksia Avenue. In each case we have found significant barriers to an additional access link to the existing road network which improved traffic safety in any meaningful way.

If the right hand turn movement from Banksia Avenue onto Lake Road is the key safety consideration, then shifting it west to the former Ocean Drive intersection with Lake Road, does not successfully resolve the right hand turn issues. If anything, it potentially causes problems at one of Council's major signalised intersections (refer attached TPK Response Report).

Following our meeting with council and on the basis that a second access is not feasible we have proposed works at the existing Banksia/Lake Road Intersection to improve traffic safety.

The first step in determining what additional measures could be installed was to check the Safe Intersection Sight Distance. The checking showed that the intersection complies with 'AUSTROADS – Guide to Traffic Engineering Practice – Part 5: Intersections at Grade' requiring a minimum of 89 metres. The intersection and sight line long sections are shown on drawing 6207-0006-04.

The improvements which will increase the safety of the intersection are listed below:

- Install concrete median island in Banksia Avenue
- 'KEEP LEFT' signs
- Line marking

The turning paths for a 12.5 metre rigid vehicle are shown on drawing 6207-0006-05 along with the proposed improvements listed above.

We respectfully request that JRPP approve the development application, subject to an additional condition requiring completion of the proposed intersection improvement works in Banksia Avenue,

Yours faithfully,

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<u>Geoffrey E Hill</u> <u>Registered Surveyor/Director</u>





West of site – John Fraser Place access onto Lake Road near signals. Red dirt tracks in the vicinity of the Road Reserve (unformed) Area between John Fraser Place & the red dirt tracks is a Koala Habitat regeneration area as part of the Link Road vegetation offsets.



Banksia Avenue and Pappinbarra Parade intersections with Lake Road.

For residents in this location - Pappinbarra Parade links east to Granite Street – a collector road north to the town centre, Council chambers, town pool & town beach and south serving the majority of the town's residential areas. The connection east is also utilised by residents heading to the other beaches, eg Flynns, Shelley & Lighthouse Beach.









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ACQUARIE	

DRAWING NUMBER/REFERENCE 6207-0006-01		Rev.
DESIGNER	ORIGIN OF LEVELS	DATE 24/11/2010
SURVEYOR	НЕІСНТ	SHEET SIZE
DRAFTING	DATUM	SHEET NO.
GA	AHD	01
APPROVED	SCALE	TOTAL
G.E.HILL	1:400	05



- OPTION 1 : THROUGH COUNCIL LAND TO EXISTING ACCESS ROAD - LANDSCAPE SUPPLY LEASE AREA & STEEP GRADE
- OPTION 2 : THROUGH TREES SOUTH ON ROAD RESERVE - MULTIPLE SERVICES & INFRASTRUCTURE, DISTANCE TO INTERSECTION
- THROUGH TREES & LINK ROAD TO KOALA HABITAT REGEN AREA DISRUPT KOALA CORRIDOR, MAJOR SERVICES TO CROSS AND TO CLOSE TO NEXT INTERSECTION & STEEP GRADE OPTION 3 : OPTION 4 & 5 : DIRECT ACCESS ONTO LAKE ROAD - NOT SUPPORTED BY COUNCIL

No. DATE REVISIONS

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TRAFFIC ANALYSIS LOT 100, DP 110 DEVELOPMENT APPI LAKE ROAD, PORT MA

20		10	0	10	20	30	40
	1:	800	SCALE	BEFORE	REDUCTION	(METRES)	

Drawing Number/Reference 6207-0006-02		Rev.
DESIGNER	ORIGIN OF LEVELS	DATE 24/11/2010
SURVEYOR	Неіднт	SHEET SIZE
DRAFTING	DATUM	SHEET NO.
GA	AHD	02
Approved	SCALE	TOTAL
G.E.HILL	1:800	05



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EXISTING SERVI LOT 100, DP 110<sup>-</sup> DEVELOPMENT APPL LAKE ROAD, PORT MA

//050	Drawing Number/Reference 6207-0006-03		Rev.
/ICES	Designer	ORIGIN OF LEVELS	Date
04007			24/11/2010
01027	SURVEYOR	HEIGHT	SHEET SIZE
			A1
PLICATION	DRAFTING	DATUM	SHEET NO.
	GA	AHD	03
IACQUARIE	APPROVED	Scale	TOTAL
	G.E.HILL	1:400	05

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No	DATE	REVISIONS	BY

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# SAFE INTERSECTION SIGHT DISTANCE

BANKSIA AVENUE AND LAKE ROAD PORT MACQUARIE











DRAWING NUMBER/REFERENCE		Rev.
6207-0006	-04	
Designer	ORIGIN OF LEVELS	Date
		24/11/2010
SURVEYOR	HEIGHT	SHEET SIZE
DRAFTING	DATUM	SHEET NO.
GA	AHD	04
APPROVED	SCALE	TOTAL
G.E.HILL	1:250	05



12.5 METRE	
HICLE	
LAKE ROAD	
ARIE	

Drawing Number/Reference 6207-0006-05		Rev.
DESIGNER	ORIGIN OF LEVELS	DATE 24/11/2010
SURVEYOR	Height	SHEET SIZE
DRAFTING	DATUM	SHEET NO.
GA	AHD	05
APPROVED	SCALE	TOTAL
G.E.HILL	1:250	05