

SAMSA CONSULTING

TRANSPORT PLANNING & TRAFFIC ENGINEERING

11th February 2008

Catherine Hill Bay Progress Association
c/o Ian Richmond
1/1 Manly Road
SEAFORTH NSW 2092

Our Ref: *Catherine Hill Bay_traffic advice 3b*
Direct line: 0414 971 956

Attention: Ian Richmond

Dear Ian,

PROPOSED CATHERINE HILL BAY DEVELOPMENTS **Updated Traffic Assessment Advice**

As requested by the Catherine Hill Bay Progress Association (under instruction from Ian Richmond), *Samsa Consulting* has undertaken a traffic assessment review of the impacts of two proposed residential village developments at Catherine Hill Bay (CHB), located on the NSW Central Coast.

Two major development areas have been proposed. The first development area is a Rose Group project and is located largely within the sites of Moonee Colliery, Wallarah Colliery and their associated land. The second development area is a Coal & Allied project located in the Middle Camp area, to the north of CHB.

The focus of this review is on the Catherine Hill Bay area in general and the potential impacts on it from the proposed Rose Group and Coal & Allied developments. The main objectives of the review are to:

- Critically assess the traffic assessment reports prepared as part of Rose Group and Coal & Allied development applications.
- Identify any additional traffic-related impacts and/or issues that may occur due to either or the combination of the proposed developments.
- Provide potential conceptual road and traffic-related measures to mitigate any impacts.

Previous reviews by *Samsa Consulting* were undertaken in February and October 2007, which assessed the initial traffic assessment report prepared as part of the Rose Group development application. Ongoing discussions have been held with a number of members of the Catherine Hill Bay Progress Association and local Catherine Hill Bay residents. This review has been carried out with reference to the following documents:

- Asquith & deWitt "*Environmental Assessment Report – Catherine Hill Bay/Gwandalan Concept Plan*", August 2007
- Coal & Allied "*Coal & Allied Lower Hunter Lands: Conservation and Development – Southern Estates Charette Report*", 30 August 2007

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- Conybeare Morrison International “*Environmental Assessment Accompanying Project Application for The Moonee Hamlets, Catherine Hill Bay, NSW: Hamlet 1 – Proposed Residential Houses, Shop-Top Residences and Retail Accommodation*”, 28/08/2007
- Conybeare Morrison International “*Environmental Assessment Accompanying Project Application for The Moonee Hamlets, Catherine Hill Bay, NSW: Hamlet 2 – Proposed Residential Houses*”, 28/08/2007
- Conybeare Morrison International + Context Landscape Design “*Catherine Hill Bay and Gwandalan Concept Plan*”, August 2007
- Hunter Regional Development Committee “*Meeting minutes from 24th October 2007*”, letter dated 13th December 2007
- Masson Wilson Twiney (MWT) “*Proposed Moonee Hamlets Development, Catherine Hill Bay: Transport Report*”, 6 August 2007
- MWT “*Catherine Hill Bay Access Options: Traffic Report (Appendix B of Proposed Moonee Hamlets Development, Catherine Hill Bay: Transport Report)*”, 8 December 2006
- Parsons Brinckerhoff “*Lower Hunter Land Development: Southern Estate – Catherine Hill Bay (Middle Camp), Traffic and Transport*”, November 2007
- Parsons Brinckerhoff “*Environmental Assessment Accompanying Project Application for Proposed Civil and Site Preparation Works, Community and Landscape Works: The Moonee Hamlets*”, undated
- Urbis “*Catherine Hill Bay: Concept Plan*”, November 2007

The conclusions of this traffic assessment review are as follows:

Cumulative Impacts

1. There has been inadequate cumulative impact assessment undertaken to take into account the effects of both the Rose Group and Coal & Allied developments. Only separate traffic reports have been prepared for the Rose Group and Coal & Allied development proposals, but an overall assessment should include both development proposals (covering Catherine Hill Bay and Middle Camp villages) so that a comprehensive and inclusive traffic assessment can be made of the whole CHB area, not just the regional impacts at Pacific Highway access points. While both developments, in isolation, would create their own traffic impacts, collectively, the impacts would be magnified and are likely to require different infrastructure and mitigation measures. This is considered to be a critical first step in a comprehensive transport assessment of the CHB area.
2. There has been no cumulative impact assessment undertaken with respect to additional traffic that may be attracted to CHB from nearby areas, eg. Nords Wharf, Gwandalan, Murrays Beach, Warnervale, Munmorah, etc. The traffic reports take into account some background traffic growth along Pacific Highway but are silent on potential additional traffic generation into the CHB area from nearby developments. In this respect, likely traffic attractors in the CHB area include the following:
 - Rose Group’s shopping precinct within its proposed development;
 - southern end of CHB beach, which is the only patrolled surf beach in the vicinity; and
 - northern end of CHB beach, which is a highly regarded and renowned surfing beach.

Pacific Highway Access

3. The treatment for access into the CHB area has not yet been resolved and/or agreed with RTA. The preferred treatment from both developments is the signalisation of the Montefiore Street/Pacific Highway intersection, making Montefiore Street the primary access into the CHB area. Consequently, Montefiore Street would need to be upgraded to a suitable collector road standard and it would be prudent to 'downgrade' the Flowers Drive/Pacific Highway intersection by restricting movements, eg. creating a 'left-in/left-out' arrangement.

Hunter Regional Development Committee has indicated that a "Traffic Management and Access Plan (TMAP)" needs to be prepared and submitted to RTA and Council. An option of using Awabakal Drive to provide the major connection to Pacific Highway has been considered.

Intersection control and access onto Pacific Highway should also consider the option of a grade-separated interchange, similar to nearby highway interchanges used for development areas to the north of CHB.

Development should not be considered until road network and associated traffic management issues have been resolved. This includes the timing of Pacific Highway intersection upgrades and when they would occur with respect to the staging of proposed development in the area.

Local Road Network

4. There is some uncertainty in regard to the status of Rose Group's proposed access road running south off Montefiore Street to a parking area serving Moonee Beach. It is understood that the proposed road alignment runs through National Parks & Wildlife Service (NPWS) land and the use of NPWS land still needs to be fully negotiated. This uncertainty raises the issues of where an access road would be located if NPWS land could not be used, and if an access road could not be provided to Moonee Beach at all, there is likely to be increased traffic impacts on CHB beach areas. If the proposed access road was to be located on Rose Group property, certainty of Moonee Beach access would be achieved.
5. Given the size of the proposed Rose Group and Coal & Allied developments and the associated traffic impacts either of them would cause, the developments should not proceed without suitable traffic mitigation measures.

As a minimum, the future road network needs to protect the existing local villages. A potential impact mitigation measure would be to provide a road network that is independent of the existing Middle Camp and Main Camp areas. This would allow Flowers Drive to serve as an alternative local road route only. However, great care would need to be taken when designing such a network to avoid any environmental impacts (refer to Environmental and Heritage Reports).

Access to the beach has also not been adequately addressed in a manner that mitigates negative impacts on Flowers Drive and Northwood Road.

Local Environmental Road Capacity

6. The MWT traffic report has focussed on higher level access to Pacific Highway from the CHB area, and not on the lower level access (local street network) within CHB itself. It is considered the local street network would have significant impacts from the proposed developments, particularly with respect to exceeding local road environmental capacity. Environmental capacity is partly subjective in that the environmental expectations of residents often vary significantly. To paraphrase from RTA's "*Guide to Traffic Generating Developments*", "*environmental capacity is best estimated by considering a range of differing perceptions*

and attitudes to traffic impacts in a particular area". For a quiet village area such as Middle Camp with normally very low traffic volumes, environmental capacity expectations are likely to be significantly less than for a suburban Sydney street for example, where traffic volumes are higher and more sustained.

Traffic Generation

7. In *Section 3.2* of the MWT traffic report (August 2007), an average trip generation rate of 0.65 vehicle trips per dwelling was used for weekday peak hour traffic generation, when the guideline rate from RTA's "*Guide to Traffic Generating Developments*" is 0.85 vehicle trips per dwelling for 'dwelling houses'. The lower traffic generation rate has the effect of reducing traffic generation numbers and hence, potential traffic-related impacts derived by the MWT report, eg. for the proposed 600 dwellings, the MWT report calculated that the trip generation would be 390 vehicles per hour (vph) during the peak period, however, the trip generation would be 510 vph if the 0.85 trip generation rate was used. The report justified the lower traffic generation rate because it "*reflects an expectation that because of the location of the site, a significant number of trips generated by the dwellings will be purpose ones made away from the area. The absence of major shops or similar facilities in the area would encourage residents to be more efficient in the travel habits*". This justification is subjective and needs to be substantiated with traffic generation survey data from a comparable development for the lower traffic generation rate to be legitimate and applicable to the subject development.

Moreover, the PB report for the Coal & Allied development also used RTA traffic generation rates. It should be noted that these RTA rates are general in nature and the surveys upon which they are based are typically "*conducted in areas where new residential subdivisions are being built. . . . With new subdivisions, where standard lots are given, some additional allowance may be made for dual occupancy and group homes, where there are sufficient numbers of these types of residences*". There has not been any sensitivity or 'worst-case' scenario provided for traffic generation from each of the developments with the result that traffic generation may have been under-estimated and traffic-related impacts reduced.

8. As mentioned previously, this assessment assumes that there would be no development within Coal & Allied's proposed development Area D because it is understood that there are strong objections to development in this area. However, if it is decided to allow development within Area D to proceed, clarification is required of the type of development that is being proposed. It is understood that in the future, this could range from typical residential housing (adopted by PB in their traffic report) to higher density development permissible under the R1 zoning provisions as proposed for the State Significant Site planning instrument. Consequently, if the development type changes to a higher density arrangement, the traffic generation would increase and may cause different impacts to what is currently being predicted.

Parking

9. There have been 92 public parking spaces proposed in the Hamlet 1 development in addition to on-street parking in both the Hamlet 1 & 2 developments. Additional public parking for the remaining hamlet developments and the Coal & Allied Middle Camp developments is unknown. The MWT traffic report is unclear as to what effects this additional parking would have on traffic generation to the CHB area. It is likely that there would be additional traffic generation, and consequently greater traffic impacts, from the provision of public parking spaces.
10. The issue of beach parking and access at both ends of the beach have not been suitably addressed. There has been no resolution of parking space numbers and the potential

effects that this additional public parking may have on traffic generation to/from beach areas and through the existing villages of CHB and Middle Camp. The effects due to the increased demand from a larger residential population and visitors to the area are considered to be significant. In particular, for the Middle Camp area, beach parking and access would affect Northwood Road, which is currently an extremely low volume local access street.

Public Transport

11. There is insufficient resolution of public transport (bus) services that are proposed to cater for the new developments, with only basic detail on the permeability and circulation of public transport (buses), particularly for the Coal & Allied Middle Camp development.

Street Frontage

12. Street frontage setbacks are predominantly narrow in the existing CHB and Middle Camp village areas, eg. Clarke Street, Hale Street, Flowers Drive, Northwood Road. When traffic volumes increase, this has the potential to significantly increase impacts pertaining to road safety, amenity and noise, especially if the road network does not bypass these sensitive areas.

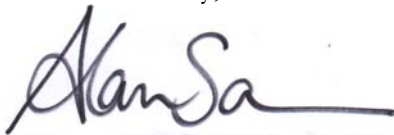
Summary

In summary, the following pertinent issues have arisen from this updated traffic assessment review:

- There has been inadequate cumulative impact assessment undertaken to take into account the effects of both the Rose Group and Coal & Allied developments.
- The impacts with respect to additional traffic that may be attracted to CHB from nearby areas have not been suitably considered.
- The road network and access points have not yet been fully resolved, eg. Pacific Highway access treatment into the CHB area, uncertainty in regard to Rose Group's proposed access road serving Moonee Beach.
- There has been a focus on the higher level road network at the expense of the local road network. As a minimum, the future road network needs to protect the existing local villages to protect local streets, such as Flowers Drive and Northwood Road, by quarantining them from the proposed developments' through traffic wishing to access the beach, Main Camp or Montefiore Street.
- The use of a lower trip generation rate for the proposed Rose Group development needs to be substantiated for it to be legitimate and applicable for the traffic assessment.
- If development within Coal & Allied's Area D proceeds, clarification is required of the type of development that is being proposed so that traffic generation and related impacts may be properly assessed.
- The extent and impact of public parking for the proposed developments and the beach areas has not been fully addressed.
- There is insufficient resolution of public transport services that are proposed to cater for the new developments.
- Because of narrow street frontage setbacks in the existing village areas, increased traffic is likely to have a detrimental impact on road safety, amenity and noise impacts, especially if the new road network does not bypass these sensitive areas.

I trust the above brief review will suffice at this stage. If you have any queries, please contact the undersigned on 9583 2225 or 0414 971 956.

Yours faithfully,



ALAN SAMSA