
Colston Budd Hunt & Kafes Pty Ltd

as Trustee for C & B Unit Trust
ABN 27 623 918 759

Our Ref: TR/7728/jj

25 October, 2010

AA Crown Holdings Pty Ltd
c/- TPG NSW
PO Box 1612
NORTH SYDNEY NSW 2060

Transport Planning
Town Planning
Retail Studies

Attention: Marian Higgins
Email: marian.higgins@tpgnsw.com.au

Dear Madam,

RE: WOLLONGONG PRIVATE HOSPITAL
REVIEW OF TRAFFIC MATTERS

1. As requested, we have reviewed the traffic matters raised in submissions to the above development (including submissions by the RTA, Council and Transport NSW). Our response to the traffic matters raised in the submissions is set out below. We prepared the traffic report that accompanied the Project Application (Traffic Report for Proposed Wollongong Private Hospital, 360-364 Crown Street, Wollongong – March 2010).

Matters Raised by the RTA.

2. The RTA has requested that further justification is required for the proposed traffic signal controlled access on Crown Street (including satisfying RTA warrants and provision of additional traffic modelling). As noted in our traffic report a number of access options were investigated. To provide appropriate access to the site and to address matters raised by the RTA and Council, it is proposed to provide the main access to the site from Crown Street via traffic signals at the intersection of Staff Street and Crown Street. The access would form the fourth leg of the intersection.
3. The provision of access via traffic signals at this intersection would provide the following benefits:
 - improved pedestrian access across Crown Street (in an area where Council and RTA have indicated there is an existing problem);
 - provide safe and efficient access to a major new development;

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- not add additional traffic to New Dapto Road (southbound) where the Council and RTA have identified there is significant queuing in the PM peak;
 - provide improved access from Staff Street onto Crown Street (where the existing right turn experiences lengthy delays in the peak periods);
 - reduce distances travelled to and from the site compared to access only from Urunga Parade; and
 - minimise traffic in local roads (such as Urunga Parade and Dudley Street) by providing access directly to the arterial road network.
4. As noted by the RTA, Crown Street is a Classified Road. Thus Council and the RTA are required to give attention to Clauses 101 2(a) and 2(b) of State Environmental Planning Policy (Infrastructure) 2007. The proposed development satisfies Clause 101 2(a) by having access to Urunga Parade. The proposed development also satisfies Clause 101 2(b) as access to the Crown Street would be via a traffic signal controlled intersection which provides for safe and efficient access to and from the site. As noted above the new intersection would operate at good level of service in the AM and PM peak periods. Furthermore the provision of direct access to Crown Street would result in less traffic through the Crown Street/Old Dapto Road intersection, better performance of this intersection and no increase in queues on Old Dapto Road.
5. With regard warrants for traffic signals, the RTA has a number of warrants for installing signalised intersections, including:
- (a). for each of four one hour periods of an average day:
 - the major road flow exceeds 600 vehicles per hour in each directions; and
 - the minor road flow exceeds 200 vehicles per hour in one direction.

OR

- (b). for each of four one hour periods of an average day:
 - the major road flow exceeds 900 vehicles per hour in each direction; and
 - the minor road flow exceeds 100 vehicles per hour in one direction; and

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- the speed of traffic on the major road or limited sight distance from the minor road provides undue delay or hazard to the minor road vehicles; and
 - there is no other nearby traffic signal site easily accessible to the minor road vehicles.
6. Traffic flows along Crown Street satisfy the criteria for the warrant (being in excess of 700 vehicles per hour in each direction in the morning and afternoon peak periods). Traffic flows on the site access exceed 200 vehicles per hour in one direction in the morning and afternoon peak periods. Thus the warrant is satisfied. As noted above the provision of traffic signals would also provide a number of benefits including improving pedestrian access across Crown Street.
7. We have met with the RTA and Council and agreed on the extent of additional traffic modeling required. Parsons Brinkerhoff has been engaged to undertake the traffic modeling and when completed the results will be presented to RTA and Council for review.

Matters raised by Transport NSW

8. Transport NSW has raised a number of matters. These are summarised below along with our response:
- *Opportunities to provide improved pedestrian access through additional public pedestrian entrances; improvements to pedestrian links to the adjacent public hospital, bus stops and rail station; and redesign the main pedestrian entrance on Crown Street.*
9. In response to these matters we note the following:
- the main pedestrian access has been redesigned to front Crown Street;
 - it is not practical or desirable (for security reasons) to provide additional pedestrian entrances;
 - the proposed traffic signals on Crown Street improve pedestrian access to bus services by providing a safe and convenient path across Crown Street; and
 - there are adequate existing pedestrian links between the subject site and adjacent public hospital/rail station via existing footpaths and traffic signals.
 - *Opportunity for a dedicated taxi rank*

10. The proposed drop off/pick area located on Crown Street provides an area for taxis to drop off and collect visitors, patients and/or staff. Thus there is no requirement for a dedicated taxi rank.
- *Details of Proposed Courtesy Bus*
11. The courtesy bus would drop off/pick up passengers within the proposed drop off/pick up area located on Crown Street. The bus would generally operate as required and transfer passengers between the hospital and the train station/CBD. The service would be regularly reviewed and modified (increased catchment, more frequent services etc) once a demand profile is established.
- *Opportunities to improve bus stops on Crown Street and New Dapto Road.*
12. The applicant is willing to cooperate with service providers to improve facilities in the area. Please provide details of possible improvements.
- *Better provision of bicycle parking and facilities.*
13. As noted in the traffic report, bicycle parking and facilities will be provided in accordance with the requirements of DCP 2009. This could be included as a condition of approval.
- *Construction Management Plan to address impacts on pedestrians and cyclists.*
14. Noted. This could be included as a condition of approval.
- *Work Place Travel Plan and Sustainable Travel Plan should be replaced by a single Sustainable Travel Plan.*
15. Noted. This could be included as a condition of approval.

Traffic Matters raised by Wollongong Council

16. Wollongong Council has raised a number of traffic matters. We note that a number of these matters were discussed at our meeting with RTA and Council officers. These are summarised below along with our response:
- *Traffic distribution does not take into account proposed right turn ban at the site access on Crown Street.*

17. The traffic distribution takes into account the proposed right turn ban and the distribution of additional traffic as shown on Figures 2 and 3 and summarised in Table 3.1 are appropriate.
 - *Provision of SIDRA Files.*
18. SIDRA files have been provided to the RTA. These will be updated and resubmitted when the PARAMICS modeling completed.
 - *Proposed right turn ban and median in New Dapto Road will create a circuitous route to the site.*
19. The proposed access arrangements represent a balance between providing appropriate access to the site and not having a major impact on the operation of adjacent road network. Provision of a right turn into the site from Crown Street would require a separate right turn bay which cannot be provided. We note that the proposed access arrangements provide more direct ingress/egress than if access was only provided from Urunga Parade.
 - *Car park access off Urunga Parade does not comply with Figure 3.1 of AS2890.1-2004.*
20. Figure 3.1 of AS2890.1-2004 suggests that driveways should not be located directly opposite intersections. This is primarily to ensure that traffic movements to/from the driveway do not result in safety concerns. As the access is for entry only and the intersection of Urunga Parade and Dudley Street is not a busy intersection, there would be minimal impact on the operation and safety of traffic movements through the intersection with provision of the proposed car park entry. Thus the proposed car park entry is considered appropriate.
 - *Pedestrian access from Crown Street.*
21. As noted in the response to Transport NSW, the main pedestrian access has been redesigned to front Crown Street.
 - *Capacity of the drop off zone.*
22. The drop off/pick up zone comprises 7 parking spaces and an area for a mini bus/taxis to set down and pick up. The 7 parking spaces would be sign posted 5 minute parking, patient drop off/pick only. The provision of 7 spaces plus a pick up/drop off zone is considered appropriate.

- *Location of Staff Bicycle Parking.*
23. Staff bicycle parking is located on all parking levels and can be accessed via the lifts or via the access ramp between levels.
- *Visitor bicycle parking should be located on the ground floor.*
24. Noted. This could be provided in area between the coffee shop, drop off exit and Crown Street, or to the east of the drop off area parking spaces.
- *Pedestrian overbridge to GP centre at south western end of site appears to be redundant.*
25. Noted.
- *Car parking and Service Areas to comply with AS2890.1-2004 and AS2890.2-2002.*
26. Agreed. This requirement is typically included as a condition of approval
- *Provision of controlled parking suggested.*
27. As noted in our traffic report, parking within the basement car park will be controlled, with boom gates located on the entry and exit points on basement level 1. AS2890.1-2004 suggests that for a car park of between 300 and 400 spaces queuing for 7 cars is required prior to the entry boom gates. Queuing for 9 cars is provided on entry (7 cars at the Crown Street access and 2 cars at the Urunga Parade access). This provision complies with the requirements of AS2890.1-2004 the car park.
- *Short circulation aisle adjacent to disabled parking within the basement car park should be made two way to allow faster access to lower levels.*
28. Noted. The car park has been designed to provide for a slow circulation on entering in order to provide access to all parking spaces and an express exit. If required the car park could be modified as suggested.
- *Redundant driveways to be removed.*
29. Noted.

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- *Traffic signs or other facilities will require approval of Wollongong Traffic Committee.*
30. Noted. A requirement to prepare a car park signage and line marking plan to Council prior to the issue of a construction certificate could be included as a condition of approval.

Traffic Matters raised in Other Submissions

31. Traffic and Parking has been raised in submissions. Our traffic report that accompanied the Project Application has demonstrated that appropriate parking (based on surveys of other similar developments and RTA Guidelines) has been provided. We note that the site has good access to public transport and measures have been suggested to encourage travel to the site by means other than private car. With respect to traffic our assessment has found that the surrounding road network can cater for the traffic generated by the proposed development. We note that as requested by the RTA, further traffic modelling will be undertaken.
6. We trust the above provides the information you require. Finally, if you should have any queries, please do not hesitate to contact us.

Yours faithfully,

COLSTON BUDD HUNT & KAFES PTY LTD

A handwritten signature in black ink, appearing to read 'T. Rogers', with a large, stylized circular flourish at the end.

T. Rogers
Director