HughesTrueman

HUGHES TRUEMAN PTY LTD
AS TRUSTEE FOR HTL REINHOLD TRUST

ABN 53 831 529 091
QUALITY CERTIFIED AS 9001

www.hughestrueman.com.au

UNITS 11 & 12, FIRST FLOOR, BLOCK C
TREVOR PEARCEY HOUSE
28-30 TRAEGER COURT
BRUCE ACT 2617

T 02 6288 6103
F 02 6288 6151

canberra@hughestrueman.com.au

Our Ref: 10c015
24 June 2010

REVIEW OF AECOM TRAFFIC IMPACT ASSESSMENT REPORT DATED 08 JULY 2009 FOR SECTIONS 52 AND 57, BRADDON

SUMMARY

The proposed internal road network provides clear road hierarchy with the access lanes providing basement parking connections and service/waste vehicle movements with the extension of Scotts Crossing and Petrie Street providing access to Cooyong Street. The proposed internal road network also has the following advantages :

- Flexibility and choice of routes for both residents and visitors to the site
- Distribution of traffic throughout the network to assist in managing traffic volumes
- Provides alternate traffic routes in the event of vehicle accidents/breakdowns

The 2009 AECOM traffic report utilises Sidra analysis which indicates that there will be minimal traffic impact from the proposed Braddon development on the adjacent roads and intersections. The report made a number of conservative assumptions related to traffic generation and tidal split of traffic generated by the proposed Braddon development. Similarly, the report makes no allowance for balancing of this traffic movement volume via the possible future signalisation of the intersection of Donaldson Street with Cooyong Street. The 2009 traffic report was based on a development consisting of 1,000 units and 5,000m^2 of commercial space, however, the 2010 Concept Master Plan proposes approximately 1,250 units and 5,500m^2 commercial. Due to the conservative assumptions regarding traffic generation and tidal split that formed the basis of the 2009 traffic report that assessment remains valid for the proposed additional 250 units.

The proposed access lane will serve as the route for waste vehicles serving the Braddon site. The use of this lane will permit waste vehicles to enter and exit the development in a forward direction off and onto the existing adjacent public roads.

The adoption of 1 car parking space per residential unit and 1 car parking space per 100m2 GFA for the proposed site redevelopment is consistent with the sustainability initiatives of the ACT Parking Code, the ACT Sustainable Transport Plan and the ACT Draft Parking Strategy.

1.0 INTRODUCTION

The 2009 Braddon Traffic Impact Assessment was a supplementary and supporting document to the 2009 Braddon/Reid Concept Master Plan. The traffic assessment only related to the Braddon component of the redevelopment which accounts for approximately 85% of the total Braddon/Reid redevelopment. This review of the Braddon traffic assessment also takes into account the Reid redevelopment. The site redevelopment is proposed to be primarily residential with some ancillary commercial/retail land use confined to some ground floor areas for activation purposes.

2.0 INTERNAL ROAD NETWORK

The main features of the proposed road network to service the Braddon development as provided for in the 2010 Concept Master Plan is as follows :

- Extension of Petrie Street through to Currong Street. This road reserve to be 30m wide accommodating both kerbside and centre of road parking.
- Extension of Scotts Crossing through to an access lane. This road reserve to be 30m wide accommodating both kerbside and centre of road parking.
- Two left in left out arrangements off Cooyong Street at the existing signalised intersections of Petrie Street and Scotts Crossing
- Left in left out arrangement off Ainslie Avenue, similar to existing arrangement serving the site.
- An access lane (in a 20m wide road reserve) primarily for resident basement access and service vehicles. The lane will be parallel to Cooyong Street between Ainslie Avenue and Donaldson Street. This is similar to the access lane arrangement serving Section 52.
- An intersection with Donaldson Street with all traffic turning movements
- An intersection with Currong Street.

The main features of the proposed access arrangement to service the Reid development is as follows :

- Left in left out arrangement off Cooyong Street and opposite Akuna Street.
- Retention of existing driveway with all traffic movements off Boolee Street.
- New driveways with all traffic movements off Kogarah Lane

This proposed internal road network has the following advantages :

- Flexibility and choice of routes for both residents and visitors to the site
- Distribution of traffic throughout the network to assist in managing traffic volumes
- Provides alternate traffic routes in the event of vehicle accidents/breakdowns

The proposed internal road network provides clear road hierarchy with the access lanes providing basement parking connections and service/waste vehicle movements with the extension of Scotts

Crossing and Petrie Street providing access to Cooyong Street.

3.0 EXTERNAL ROAD NETWORK

The proposed development is conveniently located adjacent to Cooyong Street a major road on the eastern side of the city that provides a north south bypass around the city edge as well as providing access points to the city facilities. The traffic to/from the proposed Braddon / Reid development will also be able to readily access another nearby main road in Limestone Avenue via Ainslie Avenue.

4.0 TRAFFIC ASSESSMENT

4.1 TRAFFIC GENERATION RATE

A traffic generation rate of 0.4 vehicle movements per residential unit for the peak hour was used in the 2009 traffic report for a 1,000 dwelling units ie 400 vehicle movements. The report indicates this is considered a conservative figure and is more realistically in the order of 0.3 based on analysis of Bureau of Statistics journey to work data. Surveys of three separate residential developments in the city indicates a range of traffic generation rates between 0.24 - 0.33 vehicle movements per residential unit. On this basis the traffic generation rate is considered very conservative.

With the revised Master Plan yield of 1,250 dwelling units at a lower more realistic generation rate of say 0.33 vehicle movements per residential unit ie 410 vehicle movements the traffic generation is likely to be of the same order at the 2009 traffic report.

4.2 TIDAL SPLIT

The 2009 traffic report assumes 85%:15% tidal traffic direction in the peak hours eg 85% of traffic movements depart the site in the AM peak hour. Surveys of three separate residential developments in the city indicate that the traffic direction was more likely to be 60%:40%. This tidal split is likely to provide for more balanced traffic flows within and adjacent to the site than estimated in the 2009 traffic report.

4.3 TRAFFIC DIRECTION

The 2009 traffic plan report assumes approximately 60% of development generated traffic access and egress is via Cooyong Street. This is consistent with traffic surveys of another residential development in close proximity which indicates that 60% of peak hour traffic utilises Cooyong Street with the remainder of traffic utilise other roads including Ainslie Avenue to connect with Limestone Avenue.

4.4 FUTURE INTERSECTION UPGRADES

The 2009 traffic report assumes all northbound exiting traffic from the development which accesses Cooyong Street will do so from Ainslie Avenue. Currently there is no right turn permitted on Donaldson Street approach to Cooyong Street which is a priority controlled intersection. The 2009 traffic report makes no allowance for balancing of this traffic movement volume that may be achieved from the possible future signalisation of the intersection of Donaldson Street with Cooyong Street.

On this basis of 4.1, 4.2 and 4.4 above the traffic impact assessment of the proposed development, on adjacent roads and intersections, provided in the report is likely to be overestimated.

4.5 TRAFFIC ANALYSIS

4.5.1 Traffic Volumes

For a peak hour generation rate in the range of 0.3 - 0.4 vehicle movements per residential unit the proposed Braddon/Reid 1,250 residential apartment development will generate approximately 375 - 500 vehicle movements in the peak hour. On the basis that 60% of this traffic will utilise Cooyong Street then some 225 - 300 additional vehicles will be on this main road in peak hours. The existing traffic volumes on Cooyong Street intersections are approximately 2,300 – 2,700 vph in the AM and PM peak. The proposed development has the potential to add approximately 10% to the existing traffic volumes on the Cooyong Street intersections in the peak hour. It is estimated that this increase in traffic volumes on Cooyong Street will not significantly reduce the level of service of these intersections.

4.5.2 Cooyong Street Intersections

The traffic modelling forming part of the 2009 traffic report found that the existing signalised intersections on Cooyong Street are providing either Level of Service A (Excellent) or B (Very Good) with respect to vehicle delays. The report found with some improvements to the Cooyong Ave / Ainslie Ave intersection that the existing level of service can be maintained with the additional traffic generated from the Braddon development in peak hours. On this basis the Cooyong Street intersection have adequate capacity to cater for future increases in traffic volumes.

4.5.3 Cooyong Street Access Points

The proposed left in left out arrangement on Cooyong Street at the existing signalised intersections of Petrie Street and Scotts Crossing will assist in minimising the traffic impact from the Braddon development as no changes are require to the signal phasing on the existing signalised intersections on Cooyong Street. It is proposed that right turn traffic onto Cooyong Street from the Braddon development will make use of the existing facilities at the signalised intersection at Ainslie Avenue as well as the possible future signalised intersection at Donaldson Street with Cooyong Street.

4.5.4 Other Adjacent Roads and Intersections

Ainslie Avenue, Currong Street, Donaldson Street as well as Kogarah Lane, Boolee Street and associated intersections have considerable spare traffic capacity so that the increase in traffic generated by this development can be readily accommodated on these roads.

Traffic observations were taken on Batman Street during peak hours on the 23 & 24 June 2010.

Relatively light peak hour traffic volumes consisting of both local traffic and through traffic were observed along Batman Street. Traffic volumes were less than 50 vph total both directions on Batman Street between Limestone Avenue and Gooreen Street.

During these observations very few vehicles were using Batman Street in order to avoid the traffic lights at the intersection of Ainslie Avenue and Limestone Avenue.

Donaldson Street and Ainslie Avenue provide direct connections to Limestone Avenue with little friction – ie no roundabouts, no need to pass through give way signs etc. Batman Street which is parallel to Donaldson Street and Ainslie Avenue contains a number of give way intersections where vehicles on Batman Street have to yield between Limestone Avenue and Currong Street.

The future vehicle trips to/from the proposed development do not seem to have a lot of incentive to use Batman Street as there are more direct fee flowing routes available.

Similarly there does not seem to be a lot of incentive for through movement vehicles between Limestone Avenue and Cooyong Street to use Batman Street, the additional disincentive here is that the connections from the development are left in left out only on Cooyong Street.

4.5.5 Internal Intersections

The internal intersections to the development will be formed by the access lane, between Ainslie Avenue and Donaldson Street and the extension of both Scotts Crossing and Petrie Street. These intersections are expected to provide for 200-300 vph in peak periods based on traffic generated by the development. There is expected to be minimal through traffic utilising these internal streets because of the friction created by threshold treatments, parking and access to sites as well as the limited available turning movements with Cooyong Street. On this basis these intersections are expected to perform satisfactorily as priority controlled intersections.

5.0 SERVICE / WASTE VEHICLES

The proposed access lane will serve as the access route for waste vehicles serving the Braddon site. The use of this lane will permit waste vehicles to enter and exit the development in a forward direction off and onto the existing adjacent public roads.

The Development Control Code for Best Practice Waste Management in the ACT makes provision for the service of waste containers along the laneway for those sites that are being redeveloped with service lanes. Accordingly for the Braddon development it is proposed the waste be picked up from within the access lane from hoppers being wheeled out from the waste storage facilities of the adjacent developments.

The Reid redevelopment will not contain any internal public through road and waste will be collected on site as per the current practice.

6.0 PARKING

The Concept Master Plan of August 2009 indicated the following :

- *Site constraints – "Code parking requirements too onerous for inner city housing adjacent to city centre."*
- *ESD Initiatives and Site Planning Principles – "Provide basement parking for residents at a ratio of one space per unit, and on-street public parking for visitors."*
- *Active frontage to Cooyong Street. "Encourage retail commercial on Cooyong Street on ground and first floor levels to add a mixed use component to the development and remove residential uses from lower level traffic noise and pollution."*

The 2009 Traffic Impact Assessment a supporting report to the Concept Master Plan, however, provided for the following :

- *"Residential carparking is proposed to comply with the ACT code by providing 1 space per 1 bedroom unit and 1.5 spaces per unit with two or more bedrooms. There is an argument that this will be in excess of demand due to the very close proximity of the Central Business District.*
- *A strict interpretation of the ACT Parking Code would require a provision of 2.5 spaces per 100 m2 for commercial office GFA. Across Cooyong Street in City, the required provision for a CZ1 zone is 1 space per 100 m2 GFA. There exists a reasonable argument that the strict requirement could be reduced to 1 space per 100 m2 GFA due to the very close proximity to the City."*

Summary of Proposed Parking Supply (2009 Traffic Impact Assessment)

Category	Description	Parking Supply	Parking Supply Rate	Parking Code Requirement
Residential	842 units	1005	1.2 / unit	1 - 1.5 / unit
Residential Visitors	842 units	150	0.18 / unit	0.25 / unit
Commercial/Retail	5,000m2 GFA	50	1 /100m2 GFA	2.5 – 4 /100m2 GFA

6.1 VISITOR PARKING

On the basis that there is often some discretion that can be exercised in regard to calculating total peak parking numbers resulting from a range of different uses occurring at different times (ie commercial peak likely to differ from residential visitor peak) the parking code requirement is met for residential visitor parking taking into account the availability of commercial parking.

In addition the ACT Parking Code provides for residential visitor parking to be within 100m of the site and for commercial visitor parking to be within 200m of the site. There is a large existing parking supply on the other side of Cooyong Street as part of the Canberra Centre retail development which is currently under utilised which could assist in parking supply at busy times.

6.2 ACT PLANNING DOCUMENTS

This review of parking requirements for the proposed Braddon/Reid redevelopment considers the implications of relevant ACT planning documents.

The Concept Master Plan of June 2010 proposes that the Braddon / Reid residential development supply 1 car parking space per residential unit. The ACT Parking Code provides for 1 car space per single bedroom unit and 2 car spaces for units with 2+ bedrooms or 1.5 spaces with 0.5 space shared.

The Parking Code also provides for further flexibility in the supply of parking for developments in particular circumstances ie :

- *Section 1.3 - "In cases where the physical constraints of a site make on-site provision impracticable, or the Territory may consider it undesirable for efficiency, traffic operation, pedestrian amenity or other reasons for the specified parking to be provided totally on-site, special arrangements may be negotiated or requirements may be waived at the discretion of the Territory."*
- *Section 1.4 – "However the performance approach adopted in these Codes provides the flexibility to enable a proposal to be supported where the proponent can demonstrate to the satisfaction of the Territory that the objectives can be met either by provision of a lesser on-site rate or by utilising spare capacity in publicly available on-street or off-site parking."*
- *Section 2.1 – "Circumstances relating to the scale and location of a development, the traffic situation in the vicinity of the site, the practicality and desirability of consolidated parking and the achievement of transport policy objectives may dictate whether the required parking will only be permitted either on-site or off-site, or whether either location would be satisfactory."*

In addition the flexibility in relation to parking supply for developments is also referred to in the Sustainable Transport Plan for the ACT which indicates :

- *Page 23 – "Relaxation of on-site parking requirements in town centres, particularly in Civic, including in some cases, allowing the market to determine the need for on-site parking for residential and office development can encourage greater use of walking, cycling and public transport. This policy can also reduce the need for approvals and the cost of development and help provide more affordable housing in town centres. Consideration could also be given …….. a significant proportion of the parking supply in town centres is available to the whole community and able to be shared by the many users of town* *centres and is available throughout the day and night."*

- *Page 24 – "Achieving the patronage levels assumed in the Public Transport Futures Feasibility Study would require….reducing the supply of parking in Civic and the town centres"*
- *Contribution to Economic Goals (Goal 4) - "Revise parking guidelines to reduce development costs of parking, improve the management of community parking resources and support sustainable transport goals."*

Furthermore Part A of the Draft ACT Parking Strategy indicates :

- *"the ACT Planning and Land Authority to consider a more flexible range of parking allowances for City and the town centres so that the characteristics of particular locations, development concepts and buyer markets can be adequately accommodated."*
- *"Parking requirements for residential land uses are often lower in inner urban areas of large cities. Reasons for this include the availability of transit services, proximity to a mixture of land uses that provide a range of services and facilities within a single centre and lifestyle choices by innercity residents. In addition, the costs of providing parking in city areas with high land values significantly increases the costs for residential developments in inner-city areas."*
- *"However, a major objective of the Canberra Spatial Plan is to encourage residential activity and higher residential densities within City and the town centres, thus helping to create urban centres that are genuinely for people, and where opportunities to walk, cycle and use transit are expanded."*
- *"After consideration of whether residential parking provision requirements should be limited to a level appropriate to an inner-city style of living, reflecting the City and town centres' position in the transit network and the potential to benefit from other, non-automobile mobility options, it has been decided to retain the existing parking provision rates, which in much of City allow developers the discretion to provide no on-site parking at all for residential apartments."*

This section of the ACT Draft Parking Strategy concludes as follows :

"An alternative to the current policy would be to allow mandatory maximum parking provision the average maximum provision of on-site parking could be as follows:

Within 400 metres of a bus station or bus stop, the average maximum provision of on-site parking could be as follows:

Multiple dwellings

- *1 or 2 bedrooms 0.75 parking spaces*
- *more than 2 bedrooms 1.0 parking spaces"*

In summary the parking code allows for flexibility of the normal parking requirements in particular circumstances. The *Sustainable Transport Plan* indicates that consideration be given to relaxing on-site parking requirements in the City and Town Centres. The *ACT Draft Parking Strategy* takes this approach further into consideration by reducing the parking requirement on public transport routes for denser residential developments.

The adoption of 1 car space per residential unit and 1 car space per 100m2 GFA for the proposed Braddon / Reid residential development is consistent with the sustainability initiatives of these planning documents.

HUGHES TRUEMAN

MIKE BREEN
Director

ATTACHED
ROAD NETWORK PLAN