

DoPI 2011/115 Review of Traffic and Transport
Planning Assessment

Cronulla Sharks Redevelopment Mixed Use
Masterplan

Assessment Report

22 December 2011

Prepared for

Department of Planning and Infrastructure

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1 Introduction

The NSW Department of Planning and Infrastructure (DoPI) has received a Concept Plan application for redevelopment of the Cronulla Sutherland Leagues Club at Captain Cook Drive, Woollooware in the Sutherland Shire.

DoPI is in the process of assessing the merits of the submission including a review of the traffic and transport implications of proposed developments.

To this end, Halcrow has been commissioned to conduct a review of the accompanying Traffic Management and Accessibility Plan (TMAP) report prepared by McLaren Traffic Engineering on behalf of the proponent and prepare an independent assessment of the traffic and transport implications of the proposal and the effectiveness of the proposed mitigation measures.

This report has been prepared to document the findings from the review and assessment.

As part of the review and assessment, consultation was undertaken with:

- Craig McLaren - McLaren Traffic Engineering
- Bruce Powe - Sutherland Shire Council

The review included site inspections during morning and afternoon commuter peak periods on a weekday and on Saturday at midday.

2 Existing Conditions

2.1 *Proposed Development Site*

It is understood from the Concept Plan application documentation that the proposed development site is located on the northern side of Captain Cook Drive generally between the intersections of Captain Cook Drive with Gannons Road and Woollooware Road.

The development site is described as including the following:

- Cronulla Sharks Leagues Club (Club);
- Solander playing fields;
- Existing car park associated with the Club; and
- Toyota Stadium and grandstands.

The location of the development sites are shown in Figure 1.

2.2 *Existing Road Network and Operation*

The existing road network in the vicinity of the site is described in the TMAP prepared by McLaren Engineering¹.

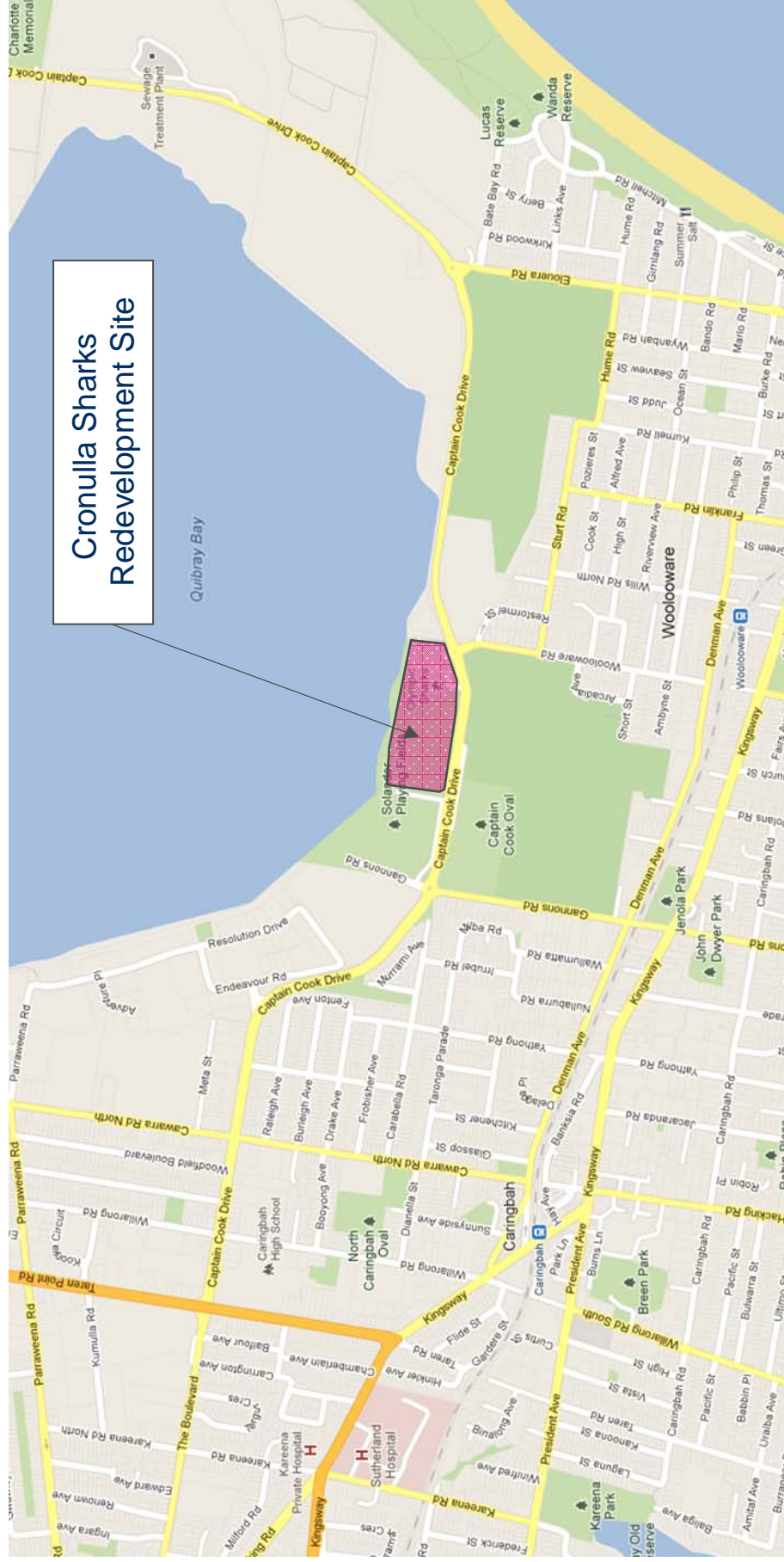
As reported in the TMAP, traffic surveys have been undertaken for the key intersections on the surrounding road network for the following periods:

- Friday PM: 4:00pm – 7:00pm
- Saturday Midday : 10:30am – 1:30pm

It is noted that no surveys or analysis of the Weekday Morning (AM Peak) conditions has been provided within the TMAP.

¹ *Cronulla Sharks Redevelopment Masterplan Traffic Management and Accessibility Plan* (September 2011) prepared by McLaren Engineering

Figure 1 – Cronulla Sharks Concept Plan Site Location



Source: www.maps.google.com.au

The intersection analysis (SIDRA) provided in the TMAP indicated that a number of surrounding intersections are currently experiencing capacity constraints in the Weekday PM and Saturday midday periods.

These intersections were identified to be:

- Captain Cook Drive / Gannons Road: PM weekday
- Kingsway / Gannons Road : Saturday Midday
- Gannons Road / Denman Street: Saturday Midday
- Captain Cook Drive / Boulevard / Taren Point Road:
PM weekday / Saturday Midday

The site observations confirmed that these intersections currently experience capacity constraints with observed vehicle congestion and queuing.

The site observations also indicated that existing intersection capacity constraints occur during the AM weekday peak periods at the following intersections:

- Captain Cook Drive / Gannons Road
- Captain Cook Drive / Boulevard / Taren Point Road
- Kingsway / Gannons Road

Of particular note was the operation of the Captain Cook Drive / Gannons Road intersection which was observed to experience vehicle queues along the westbound approach of Captain Cook Drive due to a heavy right turn at the roundabout from Captain Cook Drive (eastbound) to Denman Road.

This is of significance to the proposed Cronulla Sharks redevelopment as residential traffic leaving the development in the morning will utilise Captain Cook Drive (westbound) and thus potentially add to existing queue lengths.

2.3 Access to Public Transport Services

The proposed Concept Plan site is considered to be poorly serviced by public transport. The closest railway station (Woollooware) is located approximately 1.4 km walking

distance between the proposed residential buildings and the station. It is noted that the Woollooware Golf Club creates a significant barrier to direct access to the site.

As noted in the TMAP, previous bus services in the vicinity of the site have been discontinued. Currently, the closest public bus service is Route 969 Cronulla – Sutherland. The nearest marked bus stop is located on Sturt Street some 700 metres from the proposed residential buildings on the redevelopment site.

3 Overview of Concept Plan Redevelopment Proposal

With regard to traffic and transport, the key features of the proposed Cronulla Sharks Concept Plan are understood to include:

- Development Yields
 - Leagues Club = 3,900m2 GFA (reduced from 8500m2 GFA)
 - Residential Apartments = 700 apartments
 - Supermarket Retail = 7600m2 GFA
 - Mini / Major Retail = 3600m2 GFA
 - Specialty Retail = 2700m2 GFA
 - Commercial / Office = 740m2 GFA
 - Leisure Facilities = 3350m2 GFA
- Car Parking Provisions = 1534 on site spaces
 - 858 spaces for residential uses
 - 25 spaces for commercial uses
 - 651 spaces for club / retail / supermarket / leisure / medical uses with a dynamic parking guidance system
- Road Network Modifications
 - Traffic signals to replace roundabout at Woollooware Road / Captain Cook Drive intersection with new site access road
 - Traffic signals at new intersection on Captain cook Drive (170m west of Woollooware Road) and site access road.
 - Traffic signals at new intersection on Captain Cook Drive (300m west of Woollooware Road) and residential ONLY access road.
- Public Transport Improvements
 - Diversion of Route 477 to service the proposed redevelopment site; or
 - Diversion of Route 969 to service the proposed redevelopment site.

- Bicycle Network Improvements
 - The Concept Plan would improve connectivity for bicycles along the foreshore, connections to the existing Woollooware Bay cycleway and footpath improvements and crossing treatments of Captain Cook Drive.
- Game Day Traffic Management
 - Game Day shuttle buses from / to several railway stations
 - Identify location for Game Day satellite car parking area with shuttle bus connections
 - Implement local area traffic management (in consultation with Sutherland Shire Council)

It is understood that no other road network improvements are proposed as part of the Concept Plan nor are there envisaged by the applicant to be contributions made for any such improvements as referred to in the draft Statement of Commitments.

It is noted that the “Leisure Facilities” are not clearly defined as to the intended use of this 3350m² GFA. Both the TMAP and the EA reports describe this floor area as “ancillary”. The intended use of the “leisure facility” may have a significant impact on the level of traffic generation of the development, specifically if this use is a publically accessible gymnasium or child minding facility.

4 Review of TMAP Assessment

4.1 *TMAP Documents*

The review provided in this section of the report is based on the following documentation:

- Cronulla Sharks Redevelopment Mixed Use Master Plan TMAP (September 2011) prepared by McLaren Engineering
- Cronulla Sharks Redevelopment – Game Day Satellite Parking Plan (September 2011) prepared by McLaren Engineering
- SIDRA models prepared by McLaren Engineering (June 2011 and September 2011)
- Director General Requirements issued 25 March 2011
- Agency Submissions to the Concept Plan
 - SRDAC dated 22/11/2011
 - Transport for NSW dated 25/11/2011
- Sutherland Shire Council – Report to Council dated 28/11/2011

4.2 *Public Transport Services*

As noted above in Section 2 the site of the proposed redevelopment is considered to be poorly serviced by existing public transport services.

The development proposal seeks a reduction in the parking provisions compared with RTA parking rates² and Council's Development Control Plan rates in line with the intention that the redevelopment will be a "transit orientated" development.

The desire to create and develop a transit orientated development is supported as it is will reduce the overall potential traffic generation and associated impacts of development.

² *Guide to Traffic Generating Developments* (RTA, 2002)

However, the practicalities of overcoming the site's dislocation from existing public transport services needs to be considered when assessing the ability of the site to achieve a transit orientated development and the associated impacts.

It is noted that in their submission on the Concept Plan, Transport for NSW indicated that:

“TfNSW currently does not have any plans to provide a new bus service as suggested by the proponent. As advised in the letter of 18 August 2011, TfNSW cannot commit funding or resources to a new bus service to connect the proposed development to the nominated railway stations.

The proponent / club proprietor should consider the introduction of a temporary shuttle bus to link the site to the Woolloomooloo Station until such time when and if a public bus service is introduced for the benefit of its future residents, employees, visitors and club patrons.”

Thus provision of a bus service between the site and existing public transport facilities (i.e. rail station) with good levels of service frequency is an essential element of the proposed redevelopment.

Without such a bus service the traffic and parking assessment prepared as part of the TMAP would not be relevant to development proposal. For example the traffic generation and parking demands are likely to be higher without a bus service. Thus the implications to on site parking provision, site access arrangements and external road network intersections would need to be reconsidered.

4.3 Car Parking Provisions – Non Game Day

The assessment of on site car parking provisions has been prepared on the basis that a bus service between the site and a railway station is provided and maintained.

4.3.1 Residential Car Parking

A comparison of the parking requirements under Council's DCP and the RTA guidelines with the proposed parking provision is provided in Table 4-1.

Table 4-1 Comparison of Proposed Parking Provisions

Apartment Type	RTA High Density Rate	RTA High Density Requirement (Spaces)	RTA Medium Density Rate	RTA Medium Density Requirement (Spaces)	DCP Rate	DCP Requirement (Spaces)	Proposed Parking Rate	Proposed Spaces
223 x 1 bedroom	0.6 / unit	134	1.0	223	1.0 / unit	223	1.0 / unit	223
406 x 2 bedroom	0.9 / unit	365	1.2	487	1.5 / unit	609	1.0 / unit	406
71 x 3 bedroom	1.4 / unit	99	1.5	107	2.0 / unit	142	2.0 / unit	142
Visitor	1 / 5 units	140	1 / 5 units	140	1 / 4 units	176	1 / 8 units	88
Total	700 units	738		957		1150		858

As shown in Table 4-1 the proposed parking provision for the 700 residential units sits between the RTA guideline rates for medium density residential and high density residential developments.

With regard to Council's DCP requirements there is a deficiency of 292 on site parking spaces. The deficiency occurs due to a proposed reduced rate for 2 bedroom units and visitor parking.

The reduced provision for 2 bedroom units to 1 space / unit is considered to be acceptable and in line with the objectives of reducing traffic generation. However this is considered acceptable on the basis that there is a bus service provided to and from the site.

With regard to visitor car parking the proposal seeks to provide parking at a rate of 1 space / 8 units. Given the site's location away from public transport services, even with a future bus service, visitors to the site are likely to have a higher propensity to drive due to the "convenience" factor.

Therefore it is recommended that the RTA's high density rates for visitor parking be adopted, namely:

- Desirable Rate = 1 space / 5 units
- Minimum Rate = 1 space / 7 units

The implications of under provision of residential car parking will be an increased demand for on street (off site) car parking. The TMAP indicates that these implications can be addressed with the implementation of timed parking restrictions and / or gating of sporting field car parks.

At the concept plan stage of the development it is not considered appropriate to consider measures such as time restricted parking due to the requirement and costs associated with enforcement which would be borne by Council.

4.3.2 *Retail / Club / Medical / Leisure Facility Car Parking*

A total of 667 car parking spaces will be provided for the various retail, Club, medical centre and leisure facilities provided on the site.

From the information presented in the TMAP it is assumed that the 667 non residential parking spaces will be available to each of the non residential (excluding commercial) uses of the site. As such there will be opportunities for multi use of the available parking to accommodate the various peaks of parking demand for each of the individual uses.

The parking rates used in the TMAP to estimate parking provision for the retail elements of the development are considered to be appropriate for use at this site. It is noted that the Council's officers report indicates that the rates used are consistent with rates used for other similar developments in the Shire.

However, the rates used for the medical centre are significantly lower than the rates prescribed by RTA guidelines (4 spaces / 100m² GFA) which would require a provision of 60 spaces. A total of 13 spaces are proposed. It is likely that the medical centre parking demand will peak at the same time as the retail development. It is acknowledged that there will be some multi purpose trips associated with the medical centre and retail uses. However this is likely to extend the time a parking space is occupied rather than necessarily reducing total demand.

The TMAP indicates in Table 6 of the report that the average maximum demand for the Club is 180 parking spaces. This average maximum demand has been used on a pro rata basis to estimate the future demand.

The maximum average parking demand of the Club used in the analysis is not supported by the documentation of parking surveys or other forms of verification within the TMAP or EA. Therefore it is not known at what point in the Club's daily, weekly or monthly trading cycle this information is based upon.

Furthermore, a simple pro rata reduction based on total GFA is not considered appropriate. Consideration needs to be given to the reduction in publically accessible floor area (excludes back of house) and the uses of that particular floor area.

The TMAP also applies a discount to Club parking provision of 50 spaces on the basis that 10% of the retail spaces will be multi use spaces. This represents a provision of 32 spaces for the Club at peak retail trading periods. Based on the promotion of the Club as a recreational / dining destination the parking provision to the Club would appear inadequate. For example, it is unclear if it is proposed to operate daytime shows or events at the Club. If so then the demand for parking is likely to be significantly higher than the allowance of spaces within the total provision of 667 spaces.

It is suggested that further information be provided regarding the existing and future uses of the Club and the associated level of parking demand.

No parking has been allocated to the proposed “leisure facility”. This is considered acceptable on the basis that the use is ancillary to the main retail, medical, Club uses. As noted in Council officer report, should the leisure facility become a destination use in its own right then additional parking would be required.

It is acknowledged that a workplace travel plan will be prepared for the development at the Project Application or Development Application stage of development. This is supported and should be set as a condition of approval for the Concept Plan.

4.3.3 Summary

The provision of car parking is considered to be an important tool in developing a “transit orientated” development and discouraging the use of private vehicle modes of transport.

The proposed Concept Plan seeks to provide reduced parking provision for the residential development assuming that bus services can be provided (and maintained) which connect the site to the transport system. Provided that bus services are provided the reduce provision of car parking for residential tenants is supported.

However, it is recommended that the rate of visitor parking provisions be increased in line with the RTA guidelines for high density residential development.

Generally the provision of parking retail uses is considered appropriate for the site. However further clarification of the future uses and associated parking demands of the Club need to be provided to enable the adequacy of the proposed non residential parking provisions to accommodate peak parking demand for all non-residential uses.

As proposed it would appear that there is a deficiency of car parking for Club and medical centre uses during peak retail trading periods.

Notwithstanding the above, if bus services are not provided then the parking demands, parking provisions and associated traffic generation implications will need to be re-assessed.

4.4 *On site Car Parking – Game Day*

The management of car parking demand for Game Day conditions will need to be an ongoing requirement of the development to ensure that both the game and non game uses of the site can function simultaneously.

It is noted that the number of Rugby League games held at the site are limited and generally occur at night time, when the demand for retail uses is expected to be low.

A review of the *Game Day Satellite Parking Plan* (September 2011) prepared by McLaren Engineering has been undertaken and the following comments are provided:

- Some 511 existing Game Day parking spaces will be lost under the proposed Concept Plan.
- The use of the proposed retail / Club parking spaces for Game Day parking is supported. However for Day games on Saturday or Sunday additional off site parking locations may need to be considered as retail demands for parking will also be relatively high.
- The use of satellite parking areas is supported. It is recommended that the locations of satellite parking areas remain consistent such that patrons become familiar with the arrangements and thus more likely to use them.

It is envisaged that the Game Day Parking Plan will be further developed, implemented and maintained as part of the operation of the Stadium and the site.

4.5 *Traffic Generation*

4.5.1 *Overview*

The TMAP has provided traffic generation estimates for the proposed development for the following periods:

- Weekday PM peak hour
- Saturday Lunchtime peak hour

No traffic generation estimates or traffic impact assessment has been undertaken for the Weekday AM peak hour.

This is considered to be an inadequacy of the TMAP as the development will generate a significant volume of traffic during this period, in particular traffic generated by the residential uses, medical centre and to less of an extent the retail uses.

4.5.2 *Residential Uses*

The TMAP has utilised the RTA guideline traffic generation rate for high density residential development within a metropolitan sub regional centre (ie. 0.29 trips / peak hour). The application of this rate implies that the site is located with good access to public transport services such that there is a viable and attractive alternative to using a private motor vehicle.

As described in Section 4.3.1 the proposed parking provisions for residential uses are in excessive of the RTA guidelines for high density development but less than the RTA guideline for medium density development.

Given the site's lack of proximity to a railway station, the reliance on a bus service connection to transport and a parking provision which is above the RTA's high density guidelines, it is considered that the attractiveness of non-private vehicle modes will not

be as significant as envisaged by the RTA guideline traffic generation rates as used in the TMAP.

As shown in Table 4.1, the proposed development would provide residential tenants with 22% more parking spaces than the RTA guidelines (ie. 771 spaces versus 598 spaces). As such the peak hour traffic generation of the residential development is more realistically to be in the order of 0.35 trips / unit.

The implications of an increased traffic generation would be:

- TMAP - $700 \times 0.29 \text{ trips / hour} = 203 \text{ vehicle trips per peak hour}$
- Increased rate - $700 \times 0.35 \text{ trips / hour} = 245 \text{ vehicle trips per hour}$

Notwithstanding that the AM peak periods have not been considered in the TMAP, the generation of an additional 43 vehicle trips, while a significant proportional increase in the number of residential trips, would not alone lead to a significant increase to the implications of site generated traffic on the operation of the surrounding road network or site access arrangements. This increase would be offset by the conservative estimates for the retail components (see below).

4.5.3 *Retail / Medical Centre Uses*

The traffic generation rate used in the TMAP for the retail uses are based on an average rate of 10.5 trips / 100m² GFLA.

However the use of average rates doesn't account for the mix of retail uses. For example, supermarkets have a much higher attraction, and hence traffic generation, compared with specialty shops and department stores. Where the mix of uses is known it is preferable to use the RTA guideline disaggregated model (empirical formula) which assigns different rates for different retail types.

Under the RTA guideline disaggregated model, the proposed retail and medical uses are estimated to generate the following traffic movements:

- Friday PM peak: 1226 vph (TMAP used 1463 vph)
- Saturday Noon Peak: 1380 vph (TMAP used 1536 vph)

Thus the traffic generation rates used in the TMAP assessment are considered to be relatively conservative with regard to retail and medical centre uses and appropriate for assessment purposes.

4.5.4 *Club Uses*

The TMAP assessment of Club traffic generation is based on a peak hour surveys of the Club. However, details of this survey have not been included in the TMAP assessment, nor has the TMAP provided details regarding how the Club was operating at the time of the survey.

The traffic generation estimate for Club uses provided in the TMAP also assumes a pro rata reduction based on GFA. It is considered that a more appropriate measure to use is the reduction in public accessible area taking into account the type of activities that will occur during peak periods.

Therefore further details regarding the club's operation will be required to allow an assessment as to adequacy traffic generation assumptions used in the TMAP assessment.

Notwithstanding the above, further clarification is also required regarding the discount applied to dual use of the supermarket and the Club. For the Saturday peak hour period, the TMAP estimates that the Club would generate some 77 trips per hour. The discount applied to the Club appears to 132 vehicle trips. On this basis the Club would not generate any trips but rather reduce the number of trips associated with the other uses.

Therefore it is suggested that the discount applied to multi uses appears to be excessive and needs to be clarified.

4.5.5 *Summary*

In summary, subject to clarification of Club use traffic generation and the provision of bus services, the traffic generation estimates used in the TMAP are considered to be appropriate for assessment purposes of the weekday PM peak and Saturday peak hour periods.

However, it is recommended that the weekday AM Peak period also be assessed as part of the TMAP assessment.

4.6 *Traffic Implications*

The following assessment of the external traffic implications of the proposed development relate to the weekday PM peak hour and Saturday midday peak hour periods using the traffic estimates provided in the TMAP.

Comments provided in this section relating to the weekday AM peak period are based upon observations and would need to be reconsidered following a detailed assessment of the AM peak period impacts prepared by the proponent.

4.6.1 *Site Access Arrangements*

Based on the information provided in the TMAP it is concluded that 3 separate access roads / intersections as proposed are required to accommodate the traffic generation of the proposed development.

The separation of residential parking access from public accessible parking is supported.

The proposal includes the provision of two traffic signalised intersections on Captain Cook Drive. It is noted that western signals will replace the existing roundabout at Woollooware Road.

It is noted that Sydney Regional Development Advisory Committee (SRDAC) has indicated a preference for a signal set of traffic signals for non residential access. A review by Halcrow of the SIDRA models provided by McLaren Engineering indicated that there will be insufficient capacity to accommodate site generated traffic with a single traffic signal intersection. Furthermore, the provision of two sets of signal intersections will provide additional capacity to accommodate future growth (including development on the Kurnell peninsula).

Based on the SCATES analysis provided by McLaren Engineering, it is considered that co-ordination of the two sets of signalised site access intersections can be satisfactorily achieved.

It is understood that a right turn ban would be enforced for traffic approaching the residential access from the east along Captain Cook Drive (ie. from Woollooware Road). It is recommended that the design of this intersection include the potential provision of a right turn lane bay subject to potential upgrades to the Captain Cook Drive / Gannons Road intersection to traffic signals (see below).

4.6.2 *External Road Network*

As described in Section 2 of this report and in the TMAP, a number of surrounding road network intersections are currently operating at (or beyond) capacity. The additional traffic generation associated with the Cronulla Sharks redevelopment will increase the pressure on these already congested intersections.

The intersections which will be adversely affected by additional development traffic are identified to be:

- Captain Cook Drive / Gannons Road
- Kingsway / Gannons Road
- Captain Cook Drive / Boulevard / Taren Point Road

Each of these intersections form part of the State Road network and thus under the responsibility of the Roads and Maritime Services (RMS).

The TMAP has presented the results of an analysis for the potential upgrading of the Captain Cook Drive / Gannons Road intersection from a roundabout to traffic signals. The results indicate that improved intersection performance would be achieved with the installation of traffic signals at this location.

On this basis the signalisation of the Captain Cook Drive / Gannons Road intersection is supported. It is noted that the intersection is already operating at capacity and there would be benefits to network operation generally. However, it would be considered

appropriate for a significant proportion of the costs of upgrade works to be contributed by the proponent of the Cronulla Sharks redevelopment.

This contribution may be in lieu of works to other intersection improvements or to offset adverse impacts at other intersections, namely:

- Kingsway / Gannons Road; and
- Captain Cook Drive / Boulevard / Taren Point Road.

4.7 Other Issues

4.7.1 Bicycle and Pedestrian Provisions

On site bicycle parking shall be provided for both residential and non – residential uses on the site. The details of provisions and design should be provided as part of the project / development application for each uses.

Bicycle parking provisions should be in accordance with Council DCP requirement and set out in accordance with AS2890.3.

The proposed signalised intersection along Captain Cook Drive will significantly improve pedestrian safety for crossings of the road. These will improve both non-game day and game day operating conditions.

4.7.2 Car Parking Layouts

Car parking layouts should be designed in accordance with AS2890.1. Details regarding compliance shall be provided as part of the project / development application stage.

4.7.3 Service Vehicle Arrangements

The Concept Plan and associated TMAP provides only limited information regarding how the redevelopment would be serviced (ie. access to loading docks / waste collection etc).

It is acknowledged that these details should be provided as part of the development / project application stage and that there would appear to be sufficient manoeuvring area within the loading bays. However TMAP has not indicated the types of services to access the docks nor if these vehicles can be adequately accommodated on sit.

5 Summary and Recommendations

The following conclusions and recommendations have been made based upon Halcrow's review of the traffic and transport aspects of the proposed Cronulla Sharks redevelopment.

Adequacy of TMAP Documentation

Generally the traffic and parking assessment provided in the TMAP prepared by McLaren Engineering is considered to be acceptable and based on sound principles.

However a number of deficiencies have been identified, namely:

1. Need for Bus Connection to Railway Station

The estimated traffic generation and parking demands are based on achieving a "transit orientated" development. It is proposed that this would be achieved via the provision of a bus service between the site and a railway station.

However as indicated by TfNSW there is no guarantee that such a service can be provided.

If a bus service is not provided then the findings of the TMAP assessment would need to be revisited.

2. No Assessment of AM Peak Period Conditions

No assessment of the AM Peak period conditions have been provided in the TMAP. As the redevelopment will generate traffic in the AM periods (ie. residential traffic) it is considered that the implications of this period should be considered in the TMAP.

3. Clarification of Club Activities

The TMAP utilises pro rata assumptions based on GFA to estimate traffic and parking demands of the Club use. These assumptions do not consider the intended uses of the Club nor the relationship public accessible floor area. Further clarification of these uses is required to allow a full assessment of the traffic and parking implications of the Club to be prepared.

4. Parking Provisions

It is recommended that the provision of on site visitor parking for the residential uses be reconsidered in light of the site's locality.

Recommendations

Based on the findings of this review it is recommended that the following be considered:

- Signalisation of the Captain Cook Drive / Gannons Road from a roundabout to signals with a proportional contribution from the Cronulla Sharks redevelopment;
- Each of the three proposed site access intersections to be signalised including the upgrade of the Captain Cook Drive / Woolooware Road intersection from a roundabout to signals.
- As part of the development application stage the following shall be prepared:
 - Work Place Travel plan
 - Construction Traffic Management Plan
 - Updated Game-Day Satellite Parking Plan including identification of a consistent site for game day parking.