Re:

Modification 2 to MP 10_0229 - Concept Plan - Mixed Use Development, Cronulla Sharks (Part3AMod)

and

MP 10_0230 MOD 6 - Modification to Cronulla Sharks Stage 1 - Retail/Club Precinct (Part3AMod)

This is my objection to the proposed increases to the already approved development.

When will it stop? Already Shire residents' concerns and objections have been ignored in the 2012 PAC/Dept of Planning approval of the scheme, and now that approval, with its reduction from that originally proposed, is being ignored by the proponent in seeking an increased number of units and building size, as well as the hotel.

BUILT FORM AND VISUAL IMPACT

I object to the vastly increased bulk and scale of the proposed eastern precinct which will aggressively impact on the immediate low density neighbourhood because of the increased height, non-separated the building envelope that will be opaque to views of the skyline, and because of its greatly increased proximity to the low density area with such an abrupt change in development density which breaks all the rules of proper planning.

The photo montages clearly show doubling of blocking the view of Botany Bay.

The Preferred Project report had reduced the height of some buildings and amended some building footprints, reducing the visual scale of the development and improving through-site views. Turner and Associates Architectural report included:

"The residential blocks are arranged to maximise a feeling of • open-ness embracing the surrounding natural environment. Closed more urban perimeter block forms were deemed unsuitable in this location."

These features formed part of the Director-General's report as a crucial part of justifying the Department's support of the Concept Plan, as stated in Section 5.6 Residential Amenity where the significant words are "improving the site views from the surrounding locality".

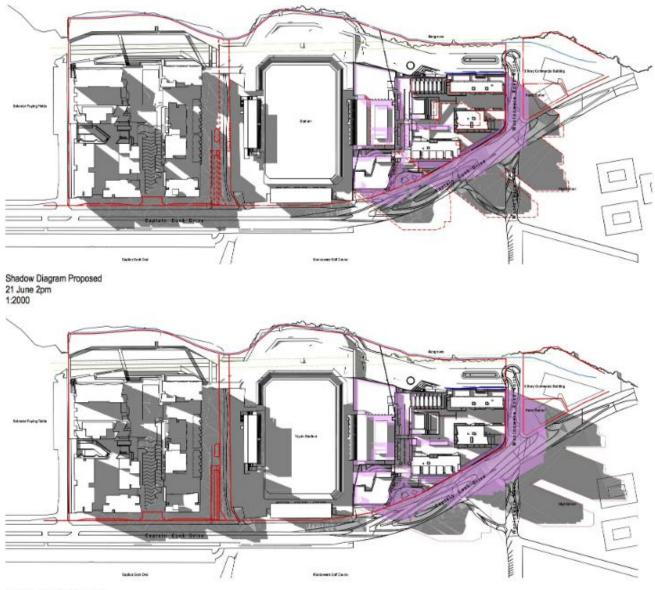
Even this moderate gain for the community will now be lost. It is totally unfair!

Only one of the letters of support specifically mentioned support for the high rise residential portion.

SHADOWS

The Section 75W report selectively omits the critical 3PM case, which could be found only among the architectural drawings, and which shows drastic overshadowing of Woolooware High School.

Following are the 2PM case which was shown in the Section 75W report, and the omitted 3PM case which is perhaps too graphic and might upset readers if it were included in the Section 75W report.



Shadow Diagram Proposed 21 June 3pm 1:2000

MISLEADING JUSTIFICATION TO STRENGTHEN "TOWN CENTRE"

As discussed also below for traffic assumptions, the reality of the remoteness from public transport, with only a limited single route bus service rather than being a transport hub rules it out from being a genuine town centre. It would take extreme imagination to visualise the internal spaces of a building or the podium on top of a car perk as a town centre.

The true intent of the Applicant to maximise use of space at the expense of a genuine sense of community is highlighted by Sutherland Shire Council submission criticising the following Mod 7 application:

Removal of the escalators at the front entrance to the building would reduce the overall quality of access to the development and the level of activity and interaction with the public domain. A single lift and stairs cannot facilitate the same flow of pedestrian movement or give the same sense of arrival and connectivity that escalators provide.

The council's following comments relating to proposals to ventilate the car park highlight the absurdity of a building complex with above ground parking intruding between ground level and usable space, let alone to attribute this aberration as being a town centre.

The PAC report for the Concept Plan approval stated "The Commission agrees that the proposal does not fit neatly into any of the centre types listed in the Metropolitan Plan and that the proposal may be better characterised as a village."

TRAFFIC IMPACT

I object to the increased traffic in our local streets and to the applicant's intention to deny responsibility for funding remedial works.

Underestimation of generated residential traffic, including from sought increased number of units

This traffic has been grossly underestimated because:

Assumed 0.29 vph rather than dwelling house rate.

A reasonable assumption is that the values RTA's Guide to Traffic Generating Developments are not fundamentally based on the shape of the dwelling but on the distance from a transport hub such as a railway station. The categories would be based on the hitherto reality that high density development would be within $\frac{1}{2}$ km of the station, and medium density within one km.

The western residential component of the Sharks development is 1½ km from the station, further away than the single dwelling houses in the Woolooware North area. Accordingly the relevant traffic generation figure should be as for single dwelling houses at 0.85 vph, not 0.29 vph, which must be discredited as being relevant.

It is inevitable, despite the new bus service that comes only once an hour, most of the complex's residents will commute by car, continuing the Shire- wide low patronage of bus services. A proportion will attempt to park as close as they can get to Woolooware Station, with its consequent impact on safety and amenity of local residents.

Regarding the 0.29 vph rate, the consultant in response to submissions for the Mod 3 application stated: "It is both standard and sound traffic engineering practice to utilise these rates throughout Sydney for developments of this nature and not the residential dwelling rates." I would think that most residents needing a quick trip to Cronulla or to take their children to sporting fields across the shire on the weekend would be unaware of this esoteric distinction about whether they live in a bungalow or a 16 storey building in the context of similar disadvantage from a transport hub which a single line bus serve at one hour interval s does not fulfil.

The Sharks development is not a "standard" development to justify a claim of using "standard... engineering practice" because the PAC report for the concept plan approval states "The Commission agrees that the proposal does not fit neatly into any of the centre types listed in the Metropolitan Plan and that the proposal may be better characterised as a village."

It's a matter of human nature and common sense rather than "standard engineering practice" that will determine the traffic generation, and if local variations from the standard are to be summarily so dismissed then "standard engineering practice" is a failure of engineering to be a servant of the people rather than a master of them.

<u>25% factoring of Saturday traffic generation rate down</u>

This ploy appears only once in the Traffic Report in Table 8 as follows:

25% of Friday (Previous TMAP)

with no further explanation and any attempt at its justification such as "standard and sound traffic engineering practice". This 25% factor also does not appear in the RMS Guide.

Previous traffic reports show more details of the claim:

"Assumes Saturday noon peak traffic generation for the residential component is 25% of the Friday PM peak traffic. Residents are more likely to leave the site earlier in the day and return later in the day."

<u>Rebuttal</u>

The RMS guide has published measured values with the Saturday peak extracted as follows:

Location	St Leonards	Chatswood	Cronulla	Rockdale	Parramatta	Liberty Grove	Strathfield	Pyrmont
Number of Units*	70	129	28	234	83	64	31	131
Saturday Peak Hour Vehicle Trips per Unit	0.31	0.21	0.18	0.23	0.22	0.31	0.32	0.19

These results from the real world make a mockery of the figure that the consultant would have us accept of 25% of 0.29vph =0.0725 vph. The locations of the RMS survey are not specifically known but would be reasonably expected to be less than the $1\frac{1}{2}$ km of the western residential Shark's precinct. The Liberty Grove high rise assumed to be the source of the results ranges between .0.97 km and 1.2 km from Rhodes Station, slightly less than the Sharks development that would therefore expect a higher traffic generation than at Liberty Grove.

The consultant in response to submissions for the Mod 3 application stated:

"Weekend reduction to 25% of the weekday peak was used in the TMAP for the concept application and not objected to by the RMS at that time nor for the current application."

There is a sense of entitlement that has replaced proper traffic planning.

Irrespectively, the consultant's traffic generated traffic figures for high density residential of 65 vph for Friday peak and 17 vph for Saturday peak are for only the 222 extra units and don't include the approximately 600 already approved. More traffic underestimation!

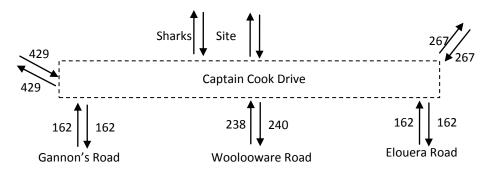
Captain Cook Drive – Gannon's Road- Toyota intersection

The proponent is maintaining a strategy to avoid responsively for signalising the intersection of Captain Cook Drive – Gannon's Road- Toyota intersection.

Despite extra residential traffic from the Kurnell peninsula, the retail component of Sharks is a major contributor, if not <u>the</u> major contributor, to traffic.

Traffic Impact on Woolooware North

Saturday morning increments in traffic figures from the traffic study for the Concept Plan to and from the section of Captain Cook Drive between Gannon's Rd and Elouera Rd are shown below derived from Sidra outputs. Although elsewhere in this submission I have claimed that the residential component is underestimated, they nevertheless show the relative increases in each contributing road.



Apart from Captain Cook Drive which also includes traffic to and from future Kurnell peninsula development, the largest traffic increment will occur in Woolooware Rd, and hence in local roads feeding into it, which have been ignored in all traffic studies to date. The 86% percentage increase in Woolooware Road is the largest of the feeder roads, compared to 23% in Captain Cook Drive west of Gannons Road, 19% in Gannons Road, 34% in Elouera Road, and 65% in Captain Cook Drive east of Elouera Road.

Omission of analysis of traffic in external local roads contrast with a report by the same McLaren consultants for Sutherland Council that criticised another traffic consultant for not considering similar external streets near the Kirrawee Brickpit development.

	component of the subject development and not due to the impact of the
	operating Bunnings development. The external traffic impact assessment needs to be extended to include the impacts on the northern Waratah Street precinct including its intersections with Oak Rd, Bath Rd & the Princes Hwy. In addition the junction of Hotham Road with both President Avenue and The Kingsway needs to be included.
B	There thus needs to be a lot more work on external traffic impacts. This should also include approved / operational development sites to the north off Oak Road, being Bunnings and the concrete plant. The analysis of Highway intersections should be undertaken using the SCATES program, taking into account signal co-ordination issues. Background growth along the highway will need to be included in consultation with the RTA.

The key statement: "There needs to be a lot more work on external traffic impacts" is ironic. Whilst Mclaren have (rightly) considered impacts as far away as Elouera Road, The Kingsway, and Taren Point Road, these already have large volumes of traffic so that the proportional impact would be less than the huge relative impact of increased traffic in the back streets of North Woolooware where there has been no consideration south of the intersection of Captain Cook Drive and Woolooware Road.

Because of traffic congestion in Cronulla, the principal shopping route from South Cronulla would be via Croydon St, Wilbar Ave, The Kingsway, and Franklin Rd, where traffic may then follow Franklin Rd and Sturt Road to Woolooware Rd or go via Denman Ave to Woolooware Rd. The Consultant has completely ignored this area and consequently probably underestimated (underguessed?) the proportion through Woolooware Rd. Much of Woolooware South would also turn from the Kingsway (from east or west) into Franklin Road.

Consideration of right hand turns in Kingsway from Cronulla into Franklin Rd and right-hand turns back from Franklin Rd into the Kingsway returning to Woolooware South, and of right -hand turns from Woolooware Road into the Kingsway would have identified dangers and delays at these unsignalised intersections. Many intermediate intersections in local streets will endure new unaccustomed traffic.

The PAC Determination Report for the Concept plan stated:

Traffic

The Commission is satisfied that the bus service will serve to minimise traffic impacts and that traffic from the site can be adequately accommodated and managed on the surrounding road network through the various upgrade and management measures to be implemented through the future development applications.

How could any problems in North Woolooware be "adequately accommodated and managed" if they haven't even got so far as being identified in any traffic report?

Residential Amenity Impact

The Modified concept Plan traffic report in Section 8.6 - Residential Amenity stated: "In terms of residential amenity consideration, it is evident that Woolooware Road North currently accommodates peak hour volumes in excess of the maximum level set by the RTA. However, it must be stressed that these limiting values (developed by the RTA) are for roads purely within residential precincts, typical of the new estates being planned in new urban release areas.

Woolooware Road North provides access to a nearby rail station and abuts a recreational area. Thus RTA limiting values should not be strictly applied in this instance, but gives a guide as to when existing roads may require some form of treatment (either directly or indirectly)."

This vague general statement is all that is said about Woolooware Rd itself. Apart from the intersection with Captain Cook Drive about which the consultant is self-congratulatory about providing traffic lights to accommodate the increased traffic, and the Captain Cook- Elouera Rd intersection, the consultant has chosen to ignore any study of traffic impact on the local streets in North Cronulla and North Woolooware. There is absolutely nothing quoted or described that would allow an assessor to make a clear assessment of the impact.

Escalation of these traffic issues that would result from the proposed increase in the development has not been adequately addressed by the applicant and will result in unjustifiable impact on the safety and amenity of local residents.

INADEQUATE NOISE IMPACT ASSESSMENT

Section 6.1 ADDITIONAL TRAFFIC NOISE ON LOCAL STREETS includes

"The predicted worst case noise increases on each of the streets surrounding the development are summarised in the following table. The assessment was conducted assuming up to a 75% renewal of car spaces during a worst case 1 hour during a peak morning or evening period within the future carpark areas.

The calculated potential noise from additional traffic movements from the site are displayed in the table below at the potentially worst affected residential receivers located at 1 Carabella Road to the west of the site."

Rather than "on each of the streets surrounding the development", the table lists only one street, Carabella St which is impacted by traffic noise from Captain Cook Drive so that the proportional, and hence decibel increase, would be minimal anyway.

None of the genuine surrounding Streets such as Woolooware Road, Restormel St, Sturt Road, or even Denman Ave is listed.

This approach is inconsistent with a previous study by the same Consultant for the Kirrawee brick pit where they dismissed any analysis of main road, The Princes Highway, as indicated by the statement:

"Any noise generated by vehicles using the Princes Highway driveway will be negligible compared to the traffic noise already on the highway."

which was reasonable but contrasts where the only presenting results for the Sharks development are for a similar situation (disguised by quoting from an adjacent street rather than Captain Cook Drive).

Furthermore, the Brick Pit analysis states:

"Traffic noise on Flora Street and Oak Road, however, should be assessed."

Similarly, side streets near the Sharks site such as Woolooware Road, Restormel St, and Sturt Road near would be directly impacted by extra traffic, and the northern end of Woolooware Road would be affected by reflected traffic noise in Captain cook Drive caused by mechanical plant room noise from the new buildings of the proposed development. Extra traffic light control will result in more stopping and starting of traffic, with its relatively large ratio of earth-moving trucks.

None of this has been addressed in the report.

More of a clue can be gleaned from their report for the Kirrawee Brickpit than from their Sharks report. The brickpit report states that "An increase in traffic flow of 40% will result in an increase noise level of approximately 1.5dB(A)

The increase in Woolooware Road traffic is 86% for the Saturday peak which could translate to a 2.8 dB increase, which exceeds the allowable 2dB DECC Road Traffic Noise Guidelines increase where existing noise levels are above 55dB. Correcting the traffic underestimations I have described above would result larger noise increases.

However we have no clue from the Sharks Acoustic report as to what existing noise levels exist in Woolooware Road or in the other local streets, let alone any modelling of noise from future traffic flows, which of course is hampered by the lack of the requisite detail of traffic modelling that I have described above.

ELECTROMAGNETIC RADIATION

My previous submissions have included concerns about the public health risks from electric and magnetic field from the nearby powerlines. These concerns would apply to increased number of occupants

Successive Magshield reports have watered down the precautionary principle, from initially attempting to show a time weighted average below 4 milligauss, to now merely stating that electric and magnetic fields are below "the recommended maximum levels".

The later reports contrast with the care taken in other projects to apply the precautionary principle by the same consultant: e.g. the Botany Bay Ausgrid link, North Sydney sub-station, and to the initial report of the Sharks development, which all attempted to keep magnetic fields as low as possible or site new powerlines away from sensitive areas.

Another example from a report by the consultant for residential redevelopment at 1 Lygon St Brunswick East Melbourne near powerlines recommends thus:

"Item 3" referred to replacing a section of overhead line with an underground line.

For the Sharks development, consultant is now content to self- congratulate about getting phase reversal in place:

Your company fully accepted the results of our electromagnetic field study that included recommendation for re-phasing of the power line. Following this your company proceeded to fully implement the electromagnetic field reduction measure recommended in our report and engaged Ausgrid to re-phase one out of the two circuits of the dual circuits 132kV power line (see our letter dated the 7/06/12 and entitled: "MAGNETIC FIELD MEASUREMENTS FROM 132 KV SUBTRANSMISSION LINES AND PRACTICAL ASSESSMENT OF EXPOSURE LEVEL FOR FUTURE OCCUPANTS OF RESIDENTIAL, COMMERCIAL AND RETAIL TENANCIES.

Following completion of this work we've carried out the electromagnetic field measurements across the power line and on the proposed construction site. Based on the results of our measurements we've concluded that the power frequency electric and magnetic fields produced by the modified 132kV power line within the proposed development site at any height above the natural ground are substantially smaller than the highest safe levels of exposure recommended for the general public by the national and international standards and guidelines.

As no part of any building within the proposed development, including any proposed modifications to building heights for Stage 4 of the development, will be encroaching onto the power line easement we are happy to conclude that none of the proposed modification to the Stage 4 of the development will alter our conclusion that *"The power frequency electric and magnetic fields produced by the modified 132kV power line within the proposed development site at any height above the natural ground are substantially smaller than the highest safe levels of exposure recommended for the general public by the national and international standards and guidelines."*

The statement relates only to present measurements and takes no account of future operating current increases to cater for increasing demand. As well as increased magnetic fields, increasing wire diameter and/or number of conductors will have a knock-on effect in increasing the electric fields.

The reference to the letter of 7/06/12, the consultant doesn't mention any electrical field measurements. In reference to "highest safe levels" it is not clear if it is for residential exposure or occupational exposure.

There is no consideration of exposure to magnetic and electric fields in the foreshore walking track.

BIRD STRIKE

The proposed increase in building bulk and joining of buildings in the Eastern Precinct will further add to the risk of bird strikes, despite mitigation measures which may reduce the danger but it is not known how significant a reduction will be achieved.

RIPARIAN ZONE

I object to the temporary carpark in the Riparian zone along the water frontage of the existing club carpark. I could find no mention of it in the Section 75W Report.

The proposed development makes assumption about reduced setbacks and landscaping of areas in the Riparian zone at the expense of maintaining a natural barrier, even if it would have to be regenerated.

The current application makes assumptions of concessions to intrude into the Riparian Zone which have not yet been resolved. The Department of Fisheries has made serious objections, and it would be premature to approve the current application before they are resolved.

James Maclachlan Jannali 7th April 2017