Issues Raised by Council	Response	
Appropriateness of the Site for the Scale of Development Proposed		
A fundamental point made in Council's submission was that a project of this scale and density, in this isolated location, would be a poor strategic planning outcome and inconsistent with the State's Centres Policy 2009, the Metropolitan Strategy for Sydney 2036 and the draft South Subregional Strategy. These strategic planning documents do not support out of centre development nor do they support concentrated development that is not served by public transport.	 As demonstrated at Section 3.2 of the Preferred Project Report (PPR), the NSW Draft Centres Policy, the Metropolitan Plan for Sydney 2036 and the Draft South Subregional Strategy do not serve to limit the emergence of new centres in response to demand, and in fact encourage the emergence of new centres to meet community needs. The subject site will be served by public transport and an appropriate interim service funded by the proponent. This matter is detailed in the PPR. 	
Rather than modify the proposal in response, the proponent has attempted to further justify the proposal by describing it as a "new town centre" under the Metropolitan Plan typology. The PPR goes to considerable lengths to justify its claim; however, while the argument put forward is cleverly constructed it ignores the fundamental weaknesses of the proposal which are stated below:	 The proposal as exhibited has been refined considerably with a number of amendments which have taken into consideration the range of submissions from the general public, community organisations, NSW Government agencies and Sutherland Shire Council. 	
The development will not function as a town centre		
To be considered a town centre a place must have an urban character where a mix of commercial and residential uses interact with the public domain to produce a vibrant place. The form of a town centre follows its function and history as it evolves as an urban place. Town centres change over time because economic and social factors change the way businesses and dwellings interrelate with the public domain. Open space and public spaces are critical to the success of town centres because they provide opportunities for both casual and formal interaction by the community. These are fundamental qualities of a town centre that ensure they remain vibrant and relevant over time.	 Change in centres is not always directly in the best interests of the local population – economic and tourism has transformed Cronulla into a vibrant tourism oriented centre which does not however provide the essential supermarket, specialty retail and medical services which are needed by local residents. The Foreshore Park will be a high quality open space for casual and formal community interaction which provides a strong linkage within the centre with connections to regional pedestrian and cycle routes. This public open space provides for a range of recreational activities including the Livi's Place Inclusive Playground, community BBQ and seating areas, pontoons and the rebuilt mangrove boardwalk providing learning and discovery opportunities, and a high quality riparian zone with new native ecological communities. 	

The proposal fails in its claim that it would be a town centre. It is essentially a privately owned internalised shopping mall and a separate, stand-alone, high density residential development. The proposed development has no social infrastructure, no true public domain and no opportunity to grow and change over time.	 As demonstrated in the PPR, the proposal is not stand-alone and is instead fully integrated through the provision of high quality pedestrian linkages and public domain. The proposed Medical Centre which is to be located within the new centre will provide a much-needed facility for residents of the eastern area of Sutherland Shire.
The existence of Toyota Stadium in the centre of the site splits the proposed development into two very distinct and separate elements. The two components are only linked by the fact that they are put forward by the same proponent. The footpath along busy Captain Cook Drive and the foreshore board walk do not compensate for the lack of public domain. These are simply pedestrian links which are a basic expectation in all neighbourhoods.	 The proposal involves upgrades to the public domain and pedestrian facilities along the site's frontages to Woolooware Bay and Captain Cook Drive. Toyota Stadium's position between the residential and Club/retail precincts will not impede the functioning of the site as an integrated new centre. High quality pedestrian linkages form the basis for any successful centre, and residents and visitors to the centre will travel easily by foot within the centre to take advantage of the services, recreational, social and retail opportunities and strong pedestrian linkages to surrounding areas.
	 The proposed upgrade to the existing Leagues Club and Toyota Stadium and the provision of new community-based facilities within the leisure precinct draws on the important role of the Leagues Club in the social fabric of Sutherland Shire and seeks to embody this in the creation of an attractive and vibrant new town centre.

Response to Sutherland Shire Council Special Environment and Planning Committee Report – EAP185-12

Т

There is no street system or central public domain to integrate the two elements or to act as a focus for the future community. The planned food court would appear to be the only central spot where the community would be likely to gather. This is a poor excuse for a public place and a poor focus for a community. Similar relying on a licensed club as the only community focus is a poor basis on which to build a community.	-	The Foreshore Park provides a strong linear linkage within the northern portion of the site and includes numerous opportunities for the community to gather. This public open space provides for a range of recreational activities including the Livi's Place Inclusive Playground, community BBQ and seating areas, pontoons and the rebuilt mangrove boardwalk providing learning and discovery opportunities, and a high quality riparian zone with new native ecological communities. This high quality public domain will be a significant recreational asset for Sutherland Shire and will benefit all residents.
	-	The community park is a critical part of the development which opens the foreshore to the public. Foreshore parks in the Sutherland Shire play a major role in the social fabric of the community by providing common spaces for social interaction and promoting community wellbeing, and the proposed foreshore park's identification by the Touched by Olivia Foundation for a Livi's Place Inclusive Park further builds on this aspect of the development. The mix of uses within in proposed new centre with a mix of dwelling options and sizes encourages a mixed community and diversity of population.
	•	The Foreshore Park is complemented by three key north/south linkages, being the central spine road of the residential precinct, the pedestrian path to the west of Toyota Stadium and the plaza and through-site link which anchors the Medical Centre, Club and Retail precinct. These north-south connections will be complemented by upgrades to the public domain and pedestrian facilities along Captain Cook Drive and pedestrian facilities at nearby intersections.
	-	In light of the above, stating that the dining precinct or the Club will be the only community focus is incorrect and misleading.
Rather than having a true public domain and being an urban place, the proposal would be a privately owned internalised shopping mall. It provides little to activate the pedestrian links. Visitors to the shopping mall or club would rightly perceive the experience as a one dimensional experience; they would feel that they were visiting a shopping centre not a visiting a town centre.	•	See above.

Similarly, Toyota Stadium and the club do not substitute for centrally located urban space or true public domain. While they will be a focus on game days, these are few. The stadium does not contribute to the daily quality of life for those living in the development or the amenity of the shopping centre for visitors. It is a one dimensional space that would rarely activate the "centre".	See above.
The playground and BBQ area within the foreshore park is a good amenity for the residents of the residential flat buildings. Given that this facility has to serve the 600 households that comprise the development, it is considered to be essential and would benefit from facilities to serve more age groups. However, it should not be seen as a public park for the "new centre". It is not in a central location; it is isolated from the shopping mall and it is needed for the residential component alone. The foreshore park does not substitute for public domain in a town centre. It is an environmental buffer needed to help reduce impacts on the adjoining significant ecosystems.	 The Landscape Concept Plan prepared by Aspect Studios for the PPR clearly identifies areas of communal open space located between the apartment buildings for residents of this precinct. The Foreshore Park should not be considered the primary or sole area of open space for the residents of the proposed residential dwellings. The Foreshore Park is a public open space area for use by the entire community, and is linked to the eastern Club/Retail precinct and to the Solander Fields and Woolooware foreshore shared path by strong pedestrian and cycle links. As discussed above, it is evident that the Foreshore Park is well integrated in the proposed centre, and can simultaneously fulfil its public domain and environmental roles. Foreshore Parks play a significant role in the Sutherland Shire as community places which promote social interaction and community wellbeing.
In essence the proposed development does not reflect the intent and principles embodied in the Metropolitan Plan for Sydney that should be used to guide and direct the growth and renewal of urban centres. If approved as proposed the development may have a profitable shopping centre, but it will not be a successful town centre.	 As has been demonstrated in the EAR and PPR the proposal is entirely consistent with the provisions of the Metropolitan Plan for Sydney 2036 and will provide a much-needed high quality town centre that addresses the needs of the community.

The development cannot be integrated into a future urban centre	
A development of the scale proposed would only be appropriate if it was one part of a future strategy to create a high density community served by a high capacity public transport system. However, this is not the case at Woolooware. There is no opportunity to link the development into a greater future centre.	 The proposal will have a regular and reliable public transport linkage. This has been highlighted by the proponent's commitment to provide a dedicated free shuttle service to and from the residential and retail portion of the site which connects to the surrounding rail network. As works progress on the site this project serve to catalyse a dedicated public transport service which will benefit existing residents of the Northern Woolooware and Cronulla region, a benefit which has been highlighted in discussions with Transport for NSW.
This is an isolated site because it is a former wetland that was filled as a garbage dump and subsequently used for active recreation. It is at the edge of the urban area and adjoins significant wetlands to the north. It also adjoins the Toyota headquarters to the west which is a significant employer in Sutherland Shire, a key economic generator and considered to be strategic employment land. Opposite the site to the south and south east, the Woolooware Golf Club and Woolooware High School provide further barriers to any expansion of a centre.	 Rather than being an isolated site, Council's comments make clear that the site has extremely good accessibility to employment, educational and recreational facilities which will provide high amenity to visitors to and residents of the new centre. The site's connections to surrounding areas will be enhanced by the provision of new public transport services, upgraded pedestrian facilities at key local intersections, and the completion of a key section of the Woolooware Bay foreshore shared path. The new centre will provide key local amenities for existing residents of North Woolooware and North Caringbah including medical services, supermarket and specialty retail, dining leisure and recreation in a readily accessible location.

As such the proposed development is a one off standalone proposal. It would stand in stark contrast to the scale and density of surrounding land uses into the distant future. This outcome would be inconsistent with good urban planning.	 The Concept Plan scheme has been subject to rigorous built form analysis, including the Visual Impact Assessment, architectural design statements and shadow modelling submitted with the EAR and PPR. This analysis has found that the built form and scale will not adversely impact upon the amenity of surrounding residential areas, and is consistent with the actual and anticipated built form of other Town Centres within Sutherland Shire. The scale and density of development is consistent with that envisaged for new
	town centres by the <i>Sydney Metropolitan Plan 2036</i> and reflects the high amenity provided by the mix of recreational, entertainment, medical, retail, dining and public transport proposed within the integrated new centre under the Concept Plan.
	 Whilst the residential flat buildings proposed for the new centre under the Concept Plan are different to the built form of the immediately surrounding residential areas, this proposed dwelling type reflects a real demand for housing diversity within Sutherland Shire to meet the significant local challenges posed by shrinking household sizes, housing affordability and an ageing population.
The site does not have access to public transport	
A repeated principle of the Metropolitan Strategy for Sydney 2036 is the need to locate new centres, jobs and residential dwellings focused around public transport facilities. In fact the very definition of a centre contained in the strategy is:	 As detailed in the PPR, the proposed development will catalyse a new public bus service to the site upon occupation. In the interim, the proponent has committed to the provision of a shuttle bus service to Woolooware Station which would be enforced as a condition of any Concept Plan approval.
A centre is a place where varying concentrations and combinations of retail, commercial, civic, cultural and residential uses are focused around transport facilities .	 The Concept Plan proposes significant upgrades to bus bays and commuter facilities along Captain Cook Drive which will be highly accessible from within the site.

Clearly it is the State's intention that new centres and high density residential development utilise existing and planned public transport systems because this is the most efficient and sustainable way to accommodate future growth. Yet the subject site is beyond walking distance to Woolooware station and is not served by bus. In response to this fundamental weakness the proponent claims that the quantum of development proposed will act as a catalyst for the provision of a new public bus service. However, there is no guarantee that a future service will be provided. There are many localities across Sydney where public transport services have never eventuated. There is no proof that 600 dwellings will be sufficient to create a profitable public transport service. In response, the proponent has committed to fund an interim shuttle service to the station. However, this is no substitute for a public transport system because it is unlikely to be able to satisfy the various commuting patterns of residents and no guarantee that it will be provided in perpetuity.	 As noted by NSW Transport, planning and funding of public bus routes occurs on a four-year cycle. Delivery of full scale of development proposed under the Concept Plan will extend well beyond this point in time, by which point a new public bus service will have been planned and delivered. The proponent is committed to providing an interim shuttle service with connections to the local rail network in the interim. NSW Transport's submission during the public exhibition of the Concept Plan noted that they consider the site to be within walking distance of Woolooware Station. The 'claim' that the proposed development will catalyse a sustainable bus service is based on analysis by a qualified transport consultant and conversations with NSW Transport and Veolia Transport NSW (the local service provider). Council's report fails to note that, in addition to the proposed dwellings, the Retail and Medical Centre will also generate substantial new demand for public transport to the site. NSW Transport is not able to guarantee the provision of a new public bus service on the basis of a development proposal which has not been approved, and which in any case is outside of the Department's funding cycle. As such, the proponent has committed to provide an interim shuttle service, the details of which shall be revised and provided with each detailed application for development consent. This Statement of Commitment will be included as a condition of any approval of the Concept Plan.
Clearly this standard of access to public transport facilities inherent in this proposal falls well short of that expected by the Metropolitan Plan. In fact the Plan states: <i>Planning for the urban renewal of large sites outside walking catchments of</i> <i>existing centres should investigate the establishment of new centres within</i> <i>the urban renewal area. This will help ensure areas of new housing are better</i> <i>serviced by shops and services.</i>	 The Concept Plan achieves exactly the outcome identified in Action B3.1 of the Metropolitan Plan for Sydney 2036 as cited by Council. Rather than a one-off housing or retail proposal, the Concept Plan seeks to establish development parameters for the urban renewal of one of the largest privately held sites within Sutherland Shire to establish a new centre with integrated housing, shops, services, dining and entertainment, public open space and recreational facilities. The proposal will result in the establishment of a new public bus service which benefits not only the residents of the new centre but also the site's surrounds.

Instead of out of centre locations such as proposed, the Metropolitan Strategy favours the urban renewal of existing urban centres. It states: The urban renewal of existing centres will help extend the benefits of strong, vibrant centres to more neighbourhoods throughout the metropolitan area. Renewal can provide for a mixture of land uses and activities, boost local economies, create better public spaces, provide safe and attractive places for people to gather and help provide well–located housing.	 The PPR included an analysis regarding the capacity of existing centres to provide the required retail and medical services using the Sequential Test prescribed by the NSW Draft Centres Policy. This analysis found that existing constraints within Cronulla and Caringbah prevent the timely and economic remedy of the shortfall in supermarket retail floorspace identified by Pitney Bowes.
This is in fact the strategy being pursued by Council through it Centres Strategies for Sutherland, Caringbah and Cronulla Centres and Standard Instrument Centres LEP which are currently subject to community consultation.	 The DSCILEP as considered by Council makes provision for up to 900 of the 2,700 dwellings which are required to be provided within centres in Sutherland Shire under the <i>Draft South Subregional Strategy</i> 2007. However, this planning proposal fails to take into account the fact that under the <i>Metropolitan Plan for Sydney 2036</i> (released December 2010), the dwelling growth target for the South Subregion has increased from 1,400 dwellings per annum to 2031 to 2,320 dwellings per annum to 2036. This represents a 65% increase on the dwelling growth targets contained in the Subregional Strategy that has not been taken into account in Council's planning proposal. Assuming that the increases to subregional dwelling growth targets under the Metropolitan Plan are applied equally across all local government areas, an additional 6,600 dwellings, which have not yet been planned for, will be required to be provided within Sutherland Shire in additional to the 10,100 dwelling required under the <i>Draft South Subregional Strategy</i>. This Concept Plan application seeks to create a new Town Centre with approximately 600 dwellings which is able to account for some of this additional population growth whilst relieving capacity constraints and existing pressures on retail, medical, leisure and community facilities in existing Sutherland Shire centres.

Height and Density	
The height and density of the residential component of the proposed development has been reduced as detailed above. Essentially this consists of a redesign of the residential buildings so that height moves towards the centre of the site and building density is reduced overall. As a result the number of units is reduced from approximately 700 to 600 units.	 The refinement of the residential component of the proposal has been a direct result of issues raised in submissions.
These changes certainly improve the residential component of the development. There is more space between the residential buildings and the edges of the development are superior to the earlier concept. The fact that approximately 100 units have been removed highlights the intensity of the project and the shortcomings of the initial design.	 The original design adopted a slightly different building form, with towers allowing for a higher density of development. In response to submissions relating to visual impact and height, the scale of the buildings has been reduced, subsequently lowering the number of apartments. It is not considered that the initial design had significant shortcomings, rather there has been a focus on achieving a high quality built form, whilst satisfying the comments made during the exhibition period.
However, despite the fact that the amended concept is an improvement over the original, it remains an intensively developed site. It still contains three 14 storey buildings, three nine storey buildings, an eight storey building and a 3 storey building. Council's initial concerns were that the proposal has a dense urban form which is not consistent with the surrounding low density environment; the proposal has significant landscaping limitations because podium planting will not screen or soften 14 storey buildings, nor can the visual intrusion of buildings be screened by landscaping when viewed from Woolooware Bay or foreshore open space; and the proposal results in excessive height and adverse visual impacts particularly when viewed from Woolooware Bay and from Captain Cook Drive. These concerns remain with the refined concept.	 The Visual Impact Assessment Report submitted in the EAR demonstrated that the original proposal would have a minimal impact when viewed from Woolooware Bay and Captain Cook Drive. The refined proposal has proposed a reduction of heights between 1 and 6 storeys, further reducing the already minimal visual impact of the development.

Response to Sutherland Shire Council Special Environment and Planning Committee Report – EAP185-12

Essentially the proposal remains a high density residential development at the edge of Woolooware Bay. As a result it will stand as a group of towers visible from across the bay. This will fundamentally change the visual character of Woolooware Bay, yet it is being proposed without any broader strategic plan that sets the future direction for the bay. Should future buildings around the bay be at or around tree height (five or six storeys) so that the natural qualities of the bay and foreshore are the dominant visual element or should the land sky interface be punctuated with tower building forms? Lack of consideration of the wider strategic context of the development of this site at the density proposed falls short of what is considered to be good planning. As demonstrated in the Visual Impact Assessment Report prepared by Virtual Ideas, which includes photomontages of the proposed development when viewed from Dolls Point, Captain Cook Bridge and two views from boataccessible water locations within Woolooware Bay, the proposed development will not fundamentally change the visual character of Woolooware Bay or become the dominant visual element. The proposed development sits within a landscape that is characterised by a mixture of the built and natural environment, including tall and prominently sited residential towers in Cronulla, bulky industrial buildings in close proximity to the foreshore and contiguous low and medium density residential development along the natural ridgeline and surrounding areas.

Foreshore Setback and Riparian Zone

Demonstration of suitability of 30m buffer

The proponent notes that "The Concept Plan scheme has clearly demonstrated that mitigation of other potential land-use impacts (water quality, stormwater detention and flooding, human interference, light noise, etc) on adjoining aquatic habitat can readily be achieved within the proposed 30 metre setback". This is not the case. No quantitative data has been provided on any of these impacts, nor has there been a demonstration that reduction of the riparian buffer from 40m to 30m will achieve the same goals. No light or noise modelling has been undertaken as has been required on other major projects adjacent to sensitive sites. Modelling of the performance of stormwater proposals utilising industry standard packages such as MUSIC has also not been undertaken. Therefore there has been no demonstration that the proposed 30m buffer can adequately mitigate impacts from the proposal. On the contrary there have been numerous studies of edge effects of development which indicate edge effects of 40m or greater (Matlack 1994, Paton 1994, Rose 1997, Gardner 1998, Dostal 2000, Drinnan 2005 - See Appendix C for references).

- The NSW Office of Water's guidelines provide for a Core Riparian Zone of between 20 and 40 metres determined by a merit assessment of the site's existing riparian condition, the riparian function of the waterway and the riparian functioning of the proposed land use and a 10m vegetated buffer to prevent weed intrusion. It is not a matter of a reduction from 40m to 30m, but identifying the appropriate riparian zone within the 20-40m range that achieves the objectives of the control.
- There is currently no buffer provided to the Woolooware Bay wetlands. The northern boundary of the site is uncapped waste fill, weed infested embankments, playing fields and a bitumen carpark. The proposed foreshore setback represents a significant improvement to the current treatment of this edge and is superior to other edge treatments along the Woolooware Bay foreshore.

Historical development of Woolooware Bay and Precedents		
The proponent dedicates several pages of the response to submissions examining recent development approvals along Woolooware Bay. These have little relevance to the current proposal as they relate to sites that are currently zoned either industrial or public open space, based on zoning from the 1993 Sutherland Shire Local Environmental Plan, which established appropriate setback for the industrial development and provision of a public open space link and riparian buffer based on legislation and understanding of ecological requirements at that time. These sites were also Torrens Title subdivided prior to the gazettal of the Georges River REP and other legislation and guidelines requiring consideration of a 40m vegetated riparian zone. Opportunities to provide adequate buffers for subsequent building and strata subdivision have been restricted by these earlier planning decisions and instruments.	 The NSW Office of Water guidelines for riparian buffers require the merit assessment of the buffer distance to consider the riparian functionality of the waterway and the long-term land uses of the site and its surrounds. In this context the foreshore setbacks established by Council's planning decisions around Woolooware Bay are entirely relevant to the Concept Plan. The fact that sites around Woolooware Bay to the north-west were Torrens Title subdivided prior to gazettal of the Georges River REP does not affect the application of the provisions of the REP when applications for <u>development</u> of the sites are considered under Part 4 of the EP&A Act. The notion that planning controls should be applied on the basis of when a lot was created seems to contradict Council's argument – the Concept Plan lots in question were created several decades ago, long before the introduction of the Georges River REP of the NOW Guidelines for Riparian Corridors. 	
The Sharks site does not have such restrictions and hence provides an opportunity for environmental improvement not available on other sites along the Bay.	 The proposed foreshore setback will provide a significant environmental improvement on both the existing riparian condition of the site and other urban boundaries to Woolooware Bay. The proposed riparian buffers will be of significantly higher riparian value than any other riparian setbacks in the area. 	
Merit assessment of vegetated core riparian zone		
The proponent notes the recommended use of a merit assessment to determine the appropriate width of a core riparian zone to the wetlands of the site. Council largely agrees with the assessment, however, based on the assessment of the riparian functionality of the wetlands as moderate to high, it would suggest that a higher priority be given to this area and a larger 40m buffer provided. In such an instance the limited functionality of the existing terrestrial component does not negate the significance of the riparian functionality of the wetland, but rather reinforces the need to improve the situation.	 The distance of the riparian setback is determined on the riparian functionality of the estuary, the site and the long-term land use. It is not a merit assessment of the significance of the waterway but rather of a range of factors including the existing condition of the site and its surrounds. As acknowledged by Council in this report, the Concept Plan provides for a significant improvement in the riparian functionality of the site. 	

In addition to the above the proponent tends to ignore one key component of the NOW guidelines, the need to provide a vegetated buffer to the Core Riparian Zone (CRZ), which is recommended at 10m. Based on the proponent's assessment that a 30m CRZ is required for the site this should entail a 40m vegetated buffer comprising a 30m CRZ and a further 10m vegetated buffer. Despite this, the proponent still proposes a 30m buffer in total.	-	As described at Section 3.4.2 of the PPR, the Concept Plan foreshore setback has been determined with regards to both the Core Riparian Zone and Vegetated Buffer.
Proponent's Conclusion		
Based on the arguments above, the proponent concludes that "These purposes are clearly able to be achieved within the 30 to 60 metre foreshore zone detailed in the Concept Plan scheme". Once again though, the proponent has provided no quantifiable data to support this premise. The only valid conclusion that one can draw from the information provided by the applicant is that there will be a net benefit to the wetlands following the development compared to the current situation. Council would agree that this is the case. However, what the proponent has failed to do is demonstrate that the 30m buffer will deliver the same benefits to the environment that a 40m would.	•	The purpose of NOW's <i>Controlled Activities – Guidelines for riparian corridors</i> is to "ensure that no more than minimal harm will be done to waterfront land as a consequence of carrying out the controlled activity". It is noted that Council officers agree that the proposal will result in a net benefit to the wetlands as a result of the Concept Plan. The intent of the merit assessment of the buffer distance is to ensure that the proposal achieves the purpose and outcomes of the guidelines (being the avoidance of no more than minimal harm), which the Concept Plan has demonstrated are achieved, and not to measure all proposals against the upper value within the given range.

Response to Sutherland Shire Council Special Environment and Planning Committee Report – EAP185-12

Overall Assessment

While Council considers that the arguments presented by the proponent in	 Noted.
favour of the 30m vegetated buffer are flawed, the response to	
Submissions did contain some key additional information lacking in the	
original Concept Plan. Additional ecological surveys had been undertaken	
over the spring, summer period to provide evidence of usage of the	
mangrove wetland area by vertebrate species. This information was not	
provided with the Concept Plan and hence appropriate buffer sizes were	
recommended by Council based on conservative assumptions of potential	
species that may utilise the mangroves, based on surveys of surrounding	
areas. As the new studies have identified that there is only limited use of	
this area by migratory and significant species, the criticality of protection of	
this area is diminished for some potential impacts. For example, noise and	
light spill become less of an issue if bird roosting and breeding habitat is	
not located directly adjacent to the proposed development. The lack of need	
to manage these impacts may provide some justification for the reduction	
of riparian buffer widths, provided other impacts can be successfully	
managed within this reduced buffer.	

One of the key features that a vegetated riparian buffer also provides is the management of stormwater discharge and surface flows. The proponent intends to manage these impacts outside the riparian buffer, again providing some potential for reduction below 40m. Unfortunately the proponent has not provided any modelling to demonstrate that the proposed stormwater management for the site will not have an adverse impact on the adjoining wetlands, rather they have provided a commitment to ensure this happens. Documented design and modelling to demonstrate that this could be achieved would provide greater certainty in relation to this issue and potentially support a reduction in riparian buffer zone width, unfortunately this has not been provided.	-	Modelling will be conducted on the basis of the detailed design of future development of the site. This information is not available or appropriate at the Concept Plan stage and will be provided to the relevant consent authority as part of future detailed applications for development. The Stormwater, Flooding and Servicing Report prepared by AT+L confirms that detailed design of the proposal can be undertaken to no adverse environmental impacts within the development framework established by the Concept Plan.	
Changes to the original proposal			
The proponent has made several design changes to the original proposal in the preferred project. These changes are all a positive contribution to the functionality of the riparian zone and protection of the wetlands. Removal of hard surfaces and structures within the riparian zone is supported and provides greater opportunities for planting and ecological services. The proposal to plant this area with saltmarsh and swamp oak forest vegetation rather than turf and exotic species is also a significant benefit to the ecological functioning of the area. Thus the preferred project presents a significant improvement over the original proposal. However, in order to provide the broadest benefit for the functionality of the riparian zone it is suggested that the planting suite for this area also include species from the Swamp Sclerophyll Forest endangered ecological community.	•	Noted. The species list for the foreshore riparian area has been developed on the basis of information provided by Council officers during pre-lodgement consultation.	

Response to Sutherland Shire Council Special Environment and Planning Committee Report – EAP185-12

Further analysis required			
It is recommended that the proponent be required to provide an additional report addressing stormwater management on the site. Such a report would contain a more detailed concept for the management of stormwater on the site, along with modelling to demonstrate that water quality goals (the protection of the wetlands to the north of the site by compliance with ANZECC standards) can be achieved.	 Detailed modelling of stormwater management and quality should be undertaken as part of the relevant Project Application of Development Application, where detailed design specifications are available. 		
It is also recommended that any approval require the 30m riparian buffer to be planted exclusively with indigenous vegetation. The species list should also be expanded to include species from the Swamp Sclerophyll Forest endangered ecological community. Should such actions be undertaken then Council may be in a position to support a reduced riparian buffer of 30m.	 Noted. The 30m riparian buffer will be planted exclusively with indigenous vegetation with the exception of a small area of turf, which is required to provide a high quality public domain and will not result in any adverse impacts upon the riparian functioning of the foreshore setback. The species list for the foreshore riparian area has been developed on the basis of information provided by Council officers during pre-lodgement consultation. 		
Foreshore Setback and Riparian Zone			
Flooding			
Council's information indicates that the subject site is affected by both flooding from Woolooware Bay Catchment and the lower Georges River. The proponent relies on flood investigations carried out by Kozarovski & Partners for previous development applications at the site. These earlier studies should be reassessed in light of the Lower Georges River Flood Risk	 The Concept Flooding and Stormwater Quality Assessment included in the EAR (Appendix K) included an assessment of the Concept Plan scheme based on existing flood modelling for the site. This assessment concluded that the impacts of the proposed Concept Plan scheme on flooding could be effectively managed through the expansion of the culvert beneath Captain Cook Drive and the provision of an overland flow path adjacent to the existing tidal channel, 		

development.

Management Study & Plan. A flood study should be undertaken as part of this application as flooding needs to be considered at the earliest stages of the design process to ensure that any adverse effects are identified and easily rectified. The Office of Environment and Heritage (OEH) is of the same opinion that a detailed flood study should be undertaken at the conceptual stage.

will be prepared on the basis of detailed current flood modelling provided for assessment as part of the relevant future detailed applications for

subject to detailed design. The detailed design of these management works

Previous development consents for 461 Captain Cook Drive, Woolooware require the applicant to implement a range of flood mitigation works (refer to DA06/1007 & DA06/1008). This work has not been satisfactorily completed. In a site meeting with Council staff, the proponent's engineering consultant also confirmed that the flood mitigation measures had not been constructed in accordance with his recommendations. Council retains the bond monies and is pursuing the applicant for non-compliance with the consents. It is considered that no new development proposals should be approved in 461 Captain Cook Drive, Woolooware until all past development approvals have been fully complied with.	•	The consents in question refer to works for the Southern Grandstand and the clubhouse on the western training fields. These developments occurred prior to the current development partnership and should be seen in the overall context of the current Concept Plan, which will include comprehensive stormwater management works across the entire site. Whilst stormwater works for the clubhouse on the western training fields would likely be made redundant by the current proposal, appropriate stormwater management for the Southern Grandstand may be incorporated within the stormwater management plan for the overall site.
Sea Level Rise		
The Sea Level Rise Risk Assessment for Sutherland Shire commissioned by Council indicates that the subject property will be affected by sea level rise brought on by Climate Change. The proponent relies on sea level rise investigations carried out by Kozarovski & Partners for previous development applications at the site, recommending a sea level rise allowance of 0.41 metres. The proponent has indicated that it will now consider adoption of a 900mm rise by 2100, in light of Council's recommendations, but is yet to provide any modelling of this increase. Modelling of the impacts of increases in sea level rise should be undertaken as part of this application so that the impacts can be considered at the earliest stages of the design process to ensure that any adverse effects are identified and easily rectified.	-	The Concept Plan EAR was accompanied by a Concept Flooding and Stormwater Quality Assessment prepared by Martens Consulting which recommended an allowance for a 0.41m rise in sea levels by 2050 and 0.91m by 2100 (from 1990 levels). The Martens Consulting report recommends that modelling be undertaken at the Project Application stage.

Response to Sutherland Shire Council Special Environment and Planning Committee Report – EAP185-12

Stormwater Management

It is proposed to discharge stormwater to Council's drainage infrastructure, which consists of a constructed channel crossing the subject site. The development is therefore subject to On-Site Detention (OSD). The proponent contends that OSD is not warranted due to the location of the subject site at the bottom of the catchment and furthermore that this can be dealt with at the project application stage. The assertion that OSD is not warranted must be supported by a detailed hydrologic model of the catchment comparing pre and post developed conditions. It may well be that OSD is not beneficial in this instance, but this must be clearly demonstrated. The impacts of OSD or no OSD need to be considered at the earliest stages of the design process due to the location and nature of the site to ensure that any adverse effects are identified and easily rectified.	 Consideration of OSD requirements for the site are more appropriately considered at the Project Application and Development Application stage based on detailed design. Initial assessment indicates that OSD on sites near the outflow of the catchment area can contribute to or worsen flooding, and as such is not likely to be appropriate on this site.
The proponent proposes to utilise the existing constructed stormwater channel crossing the subject site. The drain is tidal and has been colonised by mangroves, which exacerbate flooding upstream. No further drainage connections to the channel or structures (eg. pedestrian crossings) which could potentially decrease the channel area should be permitted until such time as its conveyance has been restored. This may involve removing mangroves or augmenting the channel by some other means. Removal of mangroves from constructed stormwater channels for flood mitigation has been approved by the NSW State Government authorities in the past where compensation is provided.	 Detailed design of any stormwater connections or pedestrian overpasses at the Project Application and Development Application stages will fully consider the existing hydrological characteristics of this channel.

The proponent proposes it construct a trash rack in the existing stormwater channel at Captain Cook Drive. This device would presumably become a public asset. A trash rack may or may not be appropriate in this location. Council has constructed a number of these devices in recent years. The applicant should investigate and select a suitable gross pollutant trap capable of operating in tidal conditions. A detailed design should be carried out and submitted to Council for approval. All stormwater infrastructure that will become a public asset is subject to Council approval. The proponent proposes to construct the piped stormwater system over the landfill area to reduce infiltration. Details of the amount of fill required to provide sufficient grades for the stormwater system should be considered and detailed at concept stage.	-	This matter is more appropriately considered during the detailed design and assessment of the proposed development at the Project Application and Development Application stages.
The stormwater management concept is based on the philosophy of Water Sensitive Urban Design (WSUD). However, insufficient detail is provided to ascertain whether design objectives and performance criteria can actually be met. Further investigation, as stated in Section 3 above, is required and to be successful WSUD must be fully integrated into the overall design of the development. This requires the applicant to commission an interdisciplinary team of highly experienced professionals that includes, but is not limited to: planners, architects, environmental scientists and engineers.	-	The project team includes the personnel nominated, however it is not possible or appropriate to undertake the detailed design of WSUD measures prior to the detailed design of the actual development. The design objectives included in the Stormwater, Flooding and Servicing Report prepared by AT+L and the ESD Report prepared by Cundalls will form the basis for consideration of the detailed Project Applications and Development Applications.

Response to Sutherland Shire Council Special Environment and Planning Committee Report – EAP185-12

Sutherland Shire Council found that the initial concept for the redevelopment of the Cronulla Sutherland Leagues Club's site unacceptable. It formed this view because the scale and intensity of development in this location will result in unacceptable visual, environmental and traffic impacts. Further the location is considered to be unacceptable for a shopping mall and 600 dwellings because it is isolated from public transport and does not meet the strategic planning framework for the establishment of new centres. While the PPR addresses some of the weaknesses of the initial concept, it does not address the fundamental weakness that stems from the intensity and scale of the development being proposed. As such it is recommended that Council maintain its strong objection to the proposal.	 The proposed Concept Plan has been shown to meet the strategic planning framework for the establishment of a new town centre. It is not considered that the site is isolated from public transport due to its proximity to Woolooware Train Station. Despite this, the proposal will ultimately result in an additional bus service in the area, with an interim bus shuttle being proposed by the component as a Statement of Commitment. It is considered that the refined proposal has responded to the comments of Council and opposing submissions which raised issues regarding the density and size of the development.
---	--

1