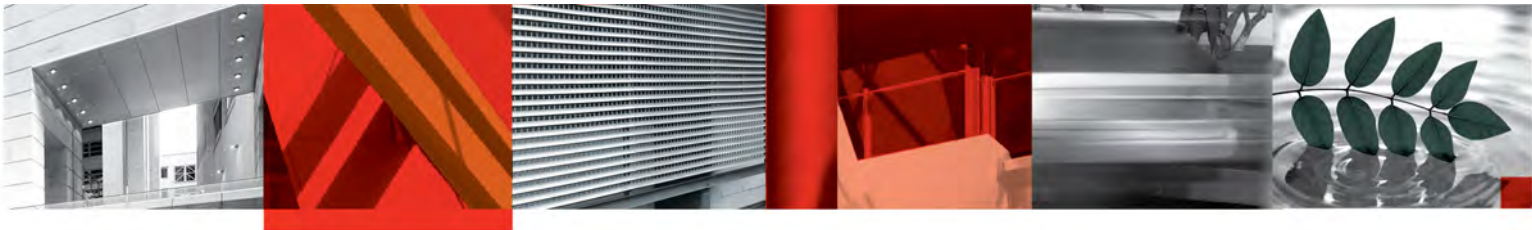




Environmental Assessment Report

Project Application for New Town Centre (MP10_0230)



461 Captain Cook Drive, Woollooware

Woollooware Bay Town Centre Stage 1 - Retail/Club Precinct

Submitted to NSW Department of Planning and Infrastructure

On Behalf of Bluestone Capital Ventures No.1 Pty Ltd

Volume 1 of 2

March 2013 ■ 11214

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This report has been prepared by:

Michael Oliver



Date 04/03/13

This report has been reviewed by:

Gordon Kirkby



Date 04/03/13

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Under Separate Cover

Architectural Drawings, Perspectives, Shadow Diagrams, Montages,
Signage Strategy, Schedule of Materials

Scott Carver Associates

Statement of Validity

Prepared under Part 3A of the Environmental Planning and Assessment Act, 1979
(as amended)

Environmental Assessment prepared by

Name	Michael Oliver
Qualifications	BPlan (Hons) MPIA
Address	Level 7, 77 Berry Street, North Sydney
In respect of	Project Application for Woollooware Bay Town Centre Stage 1 – Development of Retail/Club Precinct

Concept Plan

Applicant name	Bluestone Capital Ventures No.1 Pty Ltd
Applicant address	c/- JBA Planning, PO Box 375, North Sydney 2059
Land to be developed	461 Captain Cook Drive, Woollooware <ul style="list-style-type: none">– Lot 1 DP 501920– Lot 21 DP 529644– Lot 11 DP526492
Proposed development	Site preparation, including partial demolition of existing Leagues Club building, construction of a new four-storey building with retail, medical, leisure and dining uses and above-ground car parking, public domain and foreshore landscaping and upgrades to local road and utility infrastructure.

Environmental Assessment

Certificate	<p>An Environmental Assessment (EA) is attached.</p> <p>I certify that I have prepared the content of this Environmental Assessment and to the best of my knowledge:</p> <ul style="list-style-type: none">■ It is in accordance with the Environmental Planning and Assessment Act and Regulation.■ It is true in all material particulars and does not, by its presentation or omission of information, materially mislead.
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Signature



Name	Michael Oliver
Date	4 March 2013

Executive Summary

Introduction

This submission to the Department of Planning comprises an Environmental Assessment for a Project Application under Part 3A of the Environmental Planning and Assessment Act (EP& A Act). It relates to the development of Woollooware Bay Town Centre in accordance with Concept Plan Approval MP10_0229.

A request for consideration of the proposal as a Major Project under Part 3A was made to the Department on 8 December 2010. The Director General's Requirements were provided to the proponent, Bluestone Capital Ventures No. 1, on 25 March 2011.

This submission is in accordance with the Department's guidelines for Concept Plan applications lodged under Part 3A, and addresses the issues raised in the Director General's Requirements and the Concept Plan approval.

The site

The Cronulla Sutherland Leagues Club site is legally described as Lot 11 DP 526492 and Lot 20 DP 529644 and is known as 461 Captain Cook Drive, Woollooware. Three lots owned by Sutherland Shire Council (being Lot 21 DP 529644, Lot 1 DP 711486 and Lot 1 DP 501920) are also included within the proposed scheme.

The site is located on the northern side of Captain Cook Drive approximately 1 kilometre from Woollooware (to the south) and 2 kilometres from Cronulla (to the south east).

Concept Approval

On 27 August 2012 the NSW Planning Assessment Commission (PAC) approved Concept Plan MP10_0229 for a mixed use development of the Cronulla Sutherland Leagues Club including:

- staging of proposal into three stages;
- use of the site for a mixed use development with associated public open space;
- indicative building envelopes for the residential and retail/club precinct;
- ground and above ground parking;
- road works to support the development;
- public pedestrian and cycle paths/boardwalks;
- landscaping areas throughout the site;
- sales and marketing facilities including display units, etc; and
- subdivision of Lot 11 DP 526492 into two allotments.

This Concept Plan approves the development of a new Town Centre with new retail and leisure facilities, an upgraded club tenancy, approximately 600 residential dwellings, landscaping, infrastructure and road upgrades .

This Project Application relates to the development of the new town centre and retail building and is generally consistent with the approved Concept Plan.

Proposed Development

This Project Application is for the development of the Retail/Club Precinct of the Woollooware Bay Town Centre, which is comprised of a new four storey building:

- new retail centre with a full-line supermarket, food retail, mini-major tenancies, specialty retail, dining tenancies and medical and leisure uses;
- public domain works including new foreshore buffer to Woollooware Bay;
- upgrade and signalisation of the intersection of Captain Cook Drive, Woollooware Road and Woollooware Road North;
- signalisation of new vehicular site access point to Captain Cook Drive;
- a maximum gross floor area 26,495m²; and
- 770 car parking spaces.

The fitout and specific use of future tenancies within the centre, including the Cronulla Sutherland Leagues Club facility, shall be subject to separate future Development Applications to Sutherland Shire Council for assessment and determination under Part 4 of the *Environmental Planning and Assessment Act 1979*.

Environmental Assessment

A large number of potential environmental impacts relating to the Woollooware Bay Town Centre Club/Retail precinct, including the land use, building massing (height, bulk, envelope), public transport provision, vehicular parking and access, foreshore landscaping/environmental buffers and economic and social impacts were assessed and approved as part of the overall Concept Plan approval.

This Project Application therefore seeks to address the fine-grain design and environmental issues which will contribute to the development of a successful, integrated and functional new town centre. Key issues considered in the Environmental Assessment at Section 6.0 include:

- Architectural treatments and detailed design;
- Vehicular Access, Parking and Transport;
- Site Contamination and Remediation;
- Flooding, Water Quality and Stormwater Management;
- Flora and Fauna;
- Indigenous Archaeology;
- Accessibility;
- Infrastructure and Servicing; and
- Crime Prevention and Safety.

Conclusion

The Draft Statement of Commitments has been prepared to inform the ongoing management of the centre throughout the detailed design, construction phase and operational phase. The environmental assessment addresses the Director General's Requirements and demonstrates that the impacts of the proposal can be satisfactorily managed and therefore the project should be approved.

1.0 Introduction

This Project Application and Environmental Assessment Report (EAR) is submitted to the Minister for Planning pursuant to Part 3A of the Environmental Planning and Assessment Act 1979 (EP&A Act). This is to fulfil the Environmental Assessment Requirements issued by the Director General for the preparation of an Environmental Assessment of a Project Application for the construction of a “retail centre and redevelopment of the existing Cronulla Sharks Leagues Club facilities”.

The planning and design concept for the Scheme includes:

- new retail centre with a full-line supermarket, food retail, mini-major tenancies, specialty retail, dining tenancies and medical and leisure uses;
- public domain works including new foreshore buffer to Woollooware Bay;
- upgrade and signalisation of the intersection of Captain Cook Drive, Woollooware Road and Woollooware Road North;
- signalisation of new vehicular site access point to Captain Cook Drive;
- a maximum gross floor area 26,495m²; and
- 770 car parking spaces.

The report has been prepared by JBA Urban Planning Consultants Pty Ltd, for the proponent, Bluestone Capital Ventures No.1 Pty Ltd, and is based on design information provided by Scott Carver and supporting technical documents provided by the expert consultant team (**Section 1.2**).

This EAR describes the site, its environs and the proposed development, and includes an assessment of the proposal in accordance with the Director-General’s Environmental Assessment Requirements under Part 3A of the EP&A Act. It should be read in conjunction with the information contained within and appended to this report.

1.1 Background

1.1.1 Concept Plan Approval MP10_0129

On 27 August 2012 the NSW Planning Assessment Commission (PAC) approved Concept Plan Application MP10_0129 for the redevelopment of the Cronulla Sutherland Leagues Club site at 461 Captain Cook Drive, Woollooware and associated land for:

- use of the site for a mixed use development with associated public open space;
- indicative building envelopes for the residential and retail / club precinct;
- ground and above ground car parking;
- road works to support the development;
- public pedestrian and cycle paths / boardwalks;
- landscaping areas throughout the site;
- sales and marketing facilities including display units, etc; and
- subdivision of Lot 11 DP 526492 into two allotments.

The Concept Plan establishes the site as a new ‘Town Centre’ under the centres hierarchy detailed in the *Metropolitan Plan for Sydney 2036*. Woollooware Bay Town Centre will provide a unique offering of food and grocery retail, leisure, community, medical, dining and recreational uses and approximately 600

apartments. The precinct will include strong new pedestrian and cyclist linkages within the site, including a rehabilitated foreshore park along the Woollooware Bay frontage and through-site linkages drawing people from Captain Cook Drive to the waterfront.

The PAC made two key design changes to the retail/club component of the Concept Plan at the time of their determination, being:

- provision of an increased 40 metre setback to the Woollooware Bay Mean High Water Mark (MHW), with a reduced setback of 35 metres along the length of the loading dock; and
- provision of an 77 additional parking spaces within the retail/club precinct in addition to the number shown in the approved plans, to achieve a minimum total parking provision of 770 spaces within the Club/Retail precinct.

These changes, as well as the detailed design development which has followed from the conceptual design, have been reflected in the project as described at **Section 4.0**.

Approvals Framework

This Project Application is subject to assessment in accordance with the Transitional Part 3A provisions included in Schedule 6A of the *Environmental Planning and Assessment Act 1979* (EP&A Act) as the environmental assessment requirements for the Stage 1 Retail Project were notified within 2 years before the Part 3A repeal date.

Planning applications for all other components of the Woollooware Bay Town Centre development, including the residential development within the western precinct, are subject to approval under Part 4 of the EP&A Act in accordance with the Part 3A transitional provisions. This includes the fitout and first use of each retail, leisure, medical, flood and registered club tenancy within the new Retail/Club Precinct development, which will require the lodgement of a Development Application(s) with Sutherland Shire Council for assessment and determination.

Summary of Key Events

A summary of the key dates and events for the Cronulla Sutherland Leagues Club redevelopment is included at **Table 1** below.

Table 1 – Summary of Woollooware Bay Town Centre project milestones

Date	Event
9 December 2010	Preliminary Environmental Assessment submitted to NSW Department of Planning and Infrastructure
21 February 2011	Concept Plan and Stage 1 Retail Centre project deemed to be projects to which Part 3A applies.
25 March 2011	Director General's Requirements for the environmental assessment issued to proponent
13 May 2011	Repeal of Part 3A and introduction of provisions for Transitional Part 3A Projects
5 October 2011 to 5 December 2011	Concept Plan application publicly exhibited and referred to Sutherland Shire Council and key government agencies.
30 March 2012	Response to Submissions and Preferred Project Report submitted to NSW Department of Planning and Infrastructure
26 July 2012	Planning Assessment Commission conducts public meeting

Date	Event
27 August 2012	Concept Plan Application approved by NSW Planning Assessment Commission
Future Milestones	
March/April 2013	Lodge Stage 1 Residential Development Application with Sutherland Shire Council
Late-2013	Commencement of construction for Retail Centre and Residential Stage 1

1.1.2 Capital Investment Value

The proposed development has a Capital Investment Value (CIV) of \$55,606,415.00 as detailed in CIV Statement (prepared in accordance with *Planning Circular PS 10-008 - New definition of capital investment value*) prepared by Parkview Constructions (**Appendix C**). This Project Application achieved the (former) threshold for assessment under Part 3A as the overall Woollooware Bay Town Centre project (for which the Concept Plan and Retail/Club Precinct Project Applications DGRs were issued concurrently) has a CIV of over \$200 million.

1.2 Project Team

An expert project team has been formed to deliver the project and includes:

Land Owner	Cronulla Sutherland Leagues and Football Club
Proponent	Bluestone Capital Ventures No.1 Pty Ltd
Urban Planning	JBA
Architecture	Scott Carver
Landscape Architecture	ASPECT Studios
Builder and Quantity Surveyors	Parkview Constructions
Traffic and Transport	McLaren Traffic Engineering
Infrastructure and Engineering	AT&L
Contamination	DLA Environmental
Water and Flooding Engineers	WMA Water
Ecology	Eco Logical Australia
Sustainability	ARUP
Fire Engineering	ARUP
BCA Consultant	Vic Lilli and Associates
Indigenous Heritage	Godden Mackay Logan
Noise	Acoustic Logic
Accessibility	Morris Goding Accessibility Consulting
Arborist	Earthscape Horticultural Services
Waste Management	Leigh Design
Lighting Design	Haron Robson

2.0 Site Analysis

2.1 Site Location and Context

The Woollooware Bay Town Centre – Club/Retail precinct is located at 461 Captain Cook Drive, Woollooware, within the Sutherland Local Government Area (LGA).

The site, which includes Sharks Stadium, the Leagues Club and the eastern car park, has a total area of 59,340m², and is bounded by a tidal stormwater drainage channel to the west, Woollooware Bay to the north, Woollooware Road North (unformed) to the east and Captain Cook Drive to the south.

The site's locational context is shown at **Figure 1**.



Figure 1 – Site Plan

2.2 Land Ownership and Legal Description

The PAC granted approval for the subdivision of Lot 11 DP526492 into two new lots without need for further environmental assessment pursuant to Section 75J of the *Environmental Planning and Assessment Act 1979*. The final plan of subdivision has not yet been registered. The purpose of this subdivision is to separate the Leagues Club lot and eastern grandstand of Sharks Stadium from the retail centre.

The development site also includes a small Council-owned lot (Lot 21 DP 529644) that fringes the site along the northern shore of Woollooware Bay, and a small triangular lot which is owned by Council to the south of Captain Cook Drive (Lot 1 DP 501920) at the intersection with Woollooware Road. These sites were included in the Concept Plan approval and land owner's consent for the inclusion of these Council-owned lots is provided at **Appendix D**.

2.3 Existing Development

The eastern grandstand is linked to the Cronulla Sutherland Leagues Club, which is a four storey building operating as a registered club. The club includes several bar areas, a bistro, gaming areas and a number of function rooms. The main visitor entrance to the club is located at the east of the building with a covered courtesy bus and taxi drop-off area. The service entry and loading dock for the club is located at the south of the building near the western vehicular access point to Captain Cook Drive.

The eastern portion of the site is comprised of a bitumen sealed car parking area which adjoins the leagues club and contains 532 parking spaces. A boardwalk extends from the club car park through the mangroves to Woollooware Bay.

Photographs of the site are included at **Figures 2 to 7**.



Figure 2 – Eastern facade of Leagues Club building with car park in foreground



Figure 3 – Southern facade of Leagues Club building and Eastern Grandstand



Figure 4 – Cub and Eastern Grandstand viewed from Family Hill



Figure 5 – Eastern Car Park viewed from Leagues Club building



Figure 6 – Stadium frontage to Captain Cook Drive looking east



Figure 7 – Area between the Western Grandstand and stormwater drainage channel

2.4 Vegetation and Landscaping

The site is primarily comprised of hard surfaces with mature trees and vegetation concentrated around the existing Leagues Club building. A 15 to 30 metre-wide grassed verge provides a buffer between Captain Cook Drive and the car park and Leagues Club.

An Arborist's Report has been prepared for the subject site by Earthscape Horticultural Services (**Appendix E**) which identifies existing vegetation within the site. A total of 75 trees are located within the Project Application site and immediately adjoining the site on adjoining properties. These trees are a mix of local endemic species, native Australian and introduced species. The Arborist's Report finds that none of the trees within the site have any special ecological or heritage significance, which is confirmed by ecological and heritage studies which accompanied the Concept Plan application for the site.

2.5 Contamination

A Phase 2 Detailed Environmental Site Assessment has been undertaken for the Retail/Club precinct site by DLA Environmental and is provided at **Appendix F** in accordance with Schedule 5 Statement of Commitment 2 of the Concept Plan approval. Details of the proposed remediation strategies to address identified contamination issues are included at **Sections 4.11** and **6.8**.

Soil Contamination

Soil sampling identified filling of the site to depths in excess of four metres. A total of 14 soil samples were collected across the site, and concentrations of total petroleum hydrocarbons (TPH), monocyclic aromatic hydrocarbons (BTEX), polycyclic aromatic hydrocarbons (PAH), heavy metals, pesticides (OC/OP) and polychlorinated biphenyls (PCB) were all found to be within the NSW Service Station Guidelines and the NEPM 1999 Commercial/Industrial criteria.

Groundwater

Three groundwater monitoring wells were installed in accordance with Schedule 5 Statement of Commitment 2 of the Concept Plan approval. Groundwater was encountered at depths of 3-4 metres across the site. Elevated concentrations of zinc were encountered in one of the three groundwater monitoring wells (MW#2), however concentrations in the remaining two wells registered zinc concentrations levels which were approximately 1% of the concentration found in MW#2 and as such the result from MW#2 was considered to be an anomaly. No other exceedances were recorded for groundwater analytes within the subject site.

Acid Sulphate Soils

Acid Sulphate Soils (ASS) are present within the site and are associated with the former natural wetland estuarine system which existed on, and in the immediate vicinity of, the site.

Methane

Methane concentration was sampled within the site, with analysed samples showing an upper level of 0.2% volume concentration (v/v), whilst field measurements found methane concentrations up to 19% v/v. Previous site investigations have found upper gas concentrations of 29% v/v.

Asbestos

Asbestos fragments were detected in 40% of excavated test pits, with no evidence of fragment clustering. Respirable asbestos fibres were not detected within any of the analysed soil samples.

2.6 Stormwater and Flooding

Existing Stormwater Management Infrastructure

At present the Project Application site is divided into three mini-catchments:

- Leagues Club building – drains to Woollooware Bay via Captain Cook Drive then stormwater drainage channel;
- Eastern car park – approximately 1/3 drains to Woollooware Bay directly via overland flow and a stormwater pipe as concentrated flow, 1/3 drains to Woollooware Bay via Captain Cook Drive and the stormwater drainage channel, and 1/3 drains to Woollooware Bay via the grassed buffer to the east of the site; and
- Sharks Stadium – drains to Woollooware Bay via stormwater drainage channel.

Stormwater flows from the site all discharge to Woollooware Bay with minimal/no treatment of water quality.

Existing Flood Conditions

A Flood Assessment Report has been prepared for the proposed development by WMA Water (**Appendix P**) and includes detailed hydrological modelling of existing flood conditions on the site and the broader catchment as required by Schedule 5 Statement of Commitment 4 of the Concept Plan approval. In particular, the Flood Assessment models the existing flood conditions for:

- 20-year Average Recurrence Interval (ARI) flood event;
- 100-year ARI flood event; and
- Probable Maximum Flood event (PMF).

This flood study also takes into account the potential impacts of sea level rise and increased rainfall intensity associated with climate change.

The majority of the main Retail/Club precinct site is not flood affected in modelled flood events up to and including the Probable Maximum Flood (PMF) event. A small section of this site in the vicinity of the existing western club vehicular access point is, however, flood affected in all modelled flood events.

Portions of the Captain Cook Drive road reserve, including the pedestrian/ shared paths within the road reserve, as well as the area to the immediate west of the Western Grandstand, experience flooding in all in all modelled design flood events above the 20-year event

Floodwaters originating from Woollooware Golf Course and the upper Woollooware Bay Catchment currently exceed the capacity of stormwater culverts beneath Captain Cook Drive and overtop the road in all modelled design flood events above the 20-year event.

Flooded areas in the immediate vicinity of the existing Leagues Club and eastern car park are generally categorised as 'low hazard' in all modelled flood events. Highly hazardous flood flows in the vicinity of the site are generally contained to Woollooware Golf Course and the stormwater drainage channel, with portions of Captain Cook Drive adjacent to and to the west of Sharks Stadium being categorised as highly hazardous during the PMF event.

2.7 Infrastructure and Services

The site is currently serviced by potable water, sewer, electricity and gas infrastructure from mains services located along Captain Cook Drive.

The site is currently serviced for water through 100mm and 150mm diameter mains in Captain Cook Drive. In terms of sewer, there is an existing 1800mm diameter trunk sewer carrier that services the site.

11kV electricity distribution lines run along the site's frontage to Captain Cook Drive. 132kV high voltage electricity transmission lines which service the Kurnell Peninsula currently run east-west through the northern portion of the site, and are located within a service easement approximately 30 metres wide.

2.8 Surrounding Development

The site is surrounded by mangrove wetlands within Woollooware Bay to the north, a service station and private gymnasium (Fitness First) to the east and Captain Cook Drive to the south, beyond which are the Woollooware Golf Club, Captain Cook Oval and Woollooware High School.

Sutherland Shire Council is currently in the process of upgrading Captain Cook Drive to the east of the Fitness First building to a four-lane road with on-road breakdown/cycle lanes in each direction and an off-road shared path on the southern side of the road.

Towra Point Nature Reserve, which is an internationally recognised RAMSAR estuarine wetland managed by the NSW National Parks and Wildlife Service, is located approximately 1.8 kilometres to the north east of the subject site. Towra Point Aquatic Reserve is located immediately to the north of the subject site and comprises Woollooware Bay, Quibray Bay, Weeney Bay and waterways around Towra Point.

Figures 8 to 11 show the site's existing surrounds.



Figure 8 – Woollooware Bay and Towra Point (background) viewed from Club



Figure 9 – Fitness First building to the east of the site



Figure 10 – Captain Cook Drive to the south of Sharks Stadium



Figure 11 – Fitness First car park within Woollooware Road alignment looking south

3.0 Consultation

In accordance with Part 3A of the EP&A Act, consultation is required to occur at the following stages:

- the Director General of the Department of Planning is required to consult with relevant public authorities in preparing the environmental assessment requirements for the Concept Plan and Project Application; and
- the Director-General is required to advertise and exhibit the Environmental Assessment and appended reports and documentation.

Sutherland Shire Council, the Office of Environment and Heritage, the Department of Primary Industries, NSW Office of Water and the Roads and Traffic Authority (now Roads and Maritime Service) were all consulted during the preparation of the DGRs for this Project Application.

In determining the Project Application, the Planning Assessment Commission may also meet with community representatives, key government agencies and Sutherland Shire Council, and may elect to hold a public meeting if appropriate.

3.1 Public Consultation

An extensive community consultation process was undertaken by the proponent throughout the preparation and assessment of the Concept Plan throughout 2011 and into 2012, including holding information sessions and project information mail-outs. The project website, www.infoonsharks.com.au, is still in operation and will continue to be used to provide updates on the planning approvals and development stages of the Woollooware Bay Town Centre project.

During the formal exhibition period for the Concept Plan a total of 4,813 submissions were received from the public and 94 persons addressed a public meeting of the Planning Assessment Commission held in Cronulla on 26 July 2012. The key issues raised in public submissions on the Concept Plan application are identified at **Figure 12**. The proposal described in this Project Application is consistent with the Concept Plan application. Key issues relevant to the Concept Plan were addressed in the Preferred Project Report, Statement of Commitments and the PAC's conditions of approval.

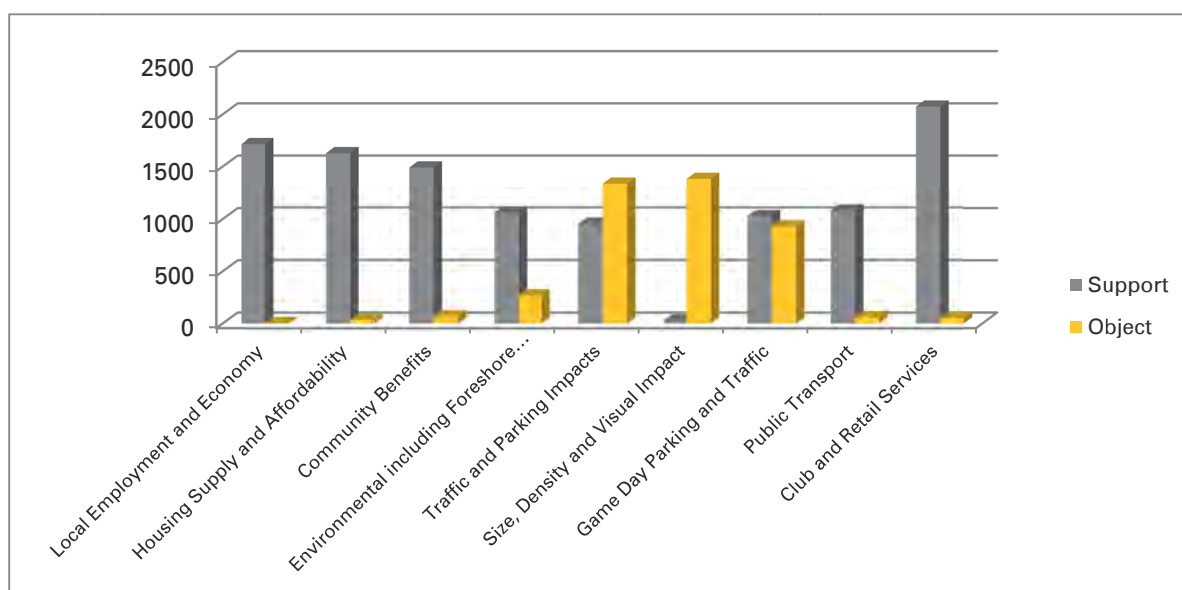


Figure 12 – Summary of public submissions on Concept Plan application

3.2 Council, Agency and Stakeholder Consultation

Bluestone Capital Ventures and the project team have been engaged in ongoing dialogue with key agencies since the approval of the Concept Plan in August 2012 in order to ensure the timely resolution of issues identified for further assessment and the maintenance of a positive dialogue with key stakeholders.

3.2.1 Sutherland Shire Council

Following the determination of the Concept Plan the proponent has met with both officers and elected officials of Sutherland Shire Council on a number of occasions to discuss both this Project Application and residential components of the Woollooware Bay Town Centre development.

Development Contributions

The proponent is in the process of negotiating appropriate Development Contributions in relation to the Retail/Club development which is the subject of this Project Application in accordance with Schedule 3 Condition 13 of the Concept Plan approval. As there is no Contributions Plan currently in place for the site, the final contributions for this development will be benchmarked against Sutherland Shire Council's existing contributions plans. It is anticipated that an agreement regarding the amount of development contributions payable will be finalised prior to the determination of this Project Application and will be conditioned as part of any approval.

Land Owner's Consent

Sutherland Shire Council has provided land owners consent for the lodgement of this Project Application as the owner of Lot 1 DP 501920 and Lot 21 DP 529644. Correspondence to this effect is provided at **Appendix D**.

3.2.2 Roads and Maritime Service

Correspondence from the NSW Roads and Maritime Service (RMS) dated 7 February 2012 is appended to the Traffic and Parking Impact Assessment prepared by McLaren Traffic Engineering (**Appendix J**) which confirms that the RMS has provided agreement to the proposed site access arrangements from Captain Cook Drive, including two signalised intersections to the Retail/Club precinct.

The RMS will also have the opportunity to review and confirm the adequacy of the following project elements during the exhibition of this Project Application:

- proposed pedestrian fencing along the median of Captain Cook Drive; and
- shared pedestrian and cycle pathway.

3.2.3 NSW Department of Education and Training/ Cronulla High School

Bluestone Capital Ventures has progressed discussions with the NSW Department of Education and Training (DET) and Cronulla High School regarding the provision and use of new rugby league playing fields within the grounds of Cronulla High School at Captain Cook Drive, Greenhills Beach.

Under Schedule 5 Statement of Commitment 6 of the Concept Plan approval, the proponent committed to consultation with DET, Cronulla High School, Cronulla Sutherland Water Polo Club and the Cronulla Caringbah Junior Rugby League Football Club (CCJRLC) to identify opportunities for the provision of new rugby league playing fields and club facilities. Schedule 3 Condition 29 of the Concept

Plan approval requires that a site be identified and agreements reached with the relevant parties prior to the lodgement of the first application for the Residential Precinct of Woollooware Bay Town Centre.

Cronulla Sutherland Water Polo Club Inc has an existing agreement with DET and Cronulla High School to develop a new water polo training and competition facility within the school site. DET and Cronulla High School have stated that Bluestone Capital Ventures may include new playing fields and club facilities for CCJRLC as part of the water polo proposal with the agreement of Cronulla Sutherland Water Polo Club. Correspondence from DET, Cronulla High School, Cronulla Sutherland Water Polo Club and CCJRLFC is included at **Appendix G** for information purposes.

3.2.4 La Perouse Local Aboriginal Land Council

The La Perouse Local Aboriginal Land Council (LPLALC) was consulted in the preparation of the Archaeological Assessment of the site, with members of the LALC participating in the site inspection. It is expected that the LPLALC shall provide their final feedback on the findings of the assessment prior to the determination of this application.

4.0 Description of Proposed Development

This chapter provides a detailed description of the proposed development for which this Project Application seeks consent. Architectural drawings prepared by Scott Carver are provided under separate cover.

This application seeks approval for the following development:

- Club/Retail precinct building with total GFA of 26,493m²;
- public forecourt and through-site link to Woollooware Bay;
- foreshore park and environmental buffer;
- extension and realignment of Woollooware Road;
- vehicular access including two new signalised intersections;
- 770 on-site carparking spaces;
- provision of shuttle bus to site commencing upon operation of retail centre;
- new bus and taxi bays on Captain Cook Drive;
- flood mitigation works including upgrade and landscaping of existing stormwater drainage channel;
- stormwater management;
- site remediation; and
- development contributions.

4.1 Overview of Development

This application relates to the Retail/Club precinct of the Woollooware Bay Town Centre for which Concept Approval was granted in August 2012. This Project Application seeks consent for the partial demolition of the existing Leagues Club building and other structures within the subject site and the construction of a new four storey building on the site of the existing car park with structural and access connections to the existing building. This combined structure will encompass a new retail centre, medical centre, leisure uses, restaurant and dining tenancies and a new club facility for the Cronulla Sutherland Leagues Club. This Project Application also seeks consent for road upgrades, landscaping and public domain within and in the immediate vicinity of the subject site.

This Project Application seeks consent for the base building, landscaping and public domain, traffic and access provisions and overall management principles for the , whilst the fitout and use of individual tenancies within the complex will be subject to separate future Development Applications

A site plan of Level One (ground) of the proposed development is included at **Figure 13**, and the proposal is described in detail below.



4.2 Site Preparation

A Demolition Plan has been prepared by Scott Carver and is included within the Architectural Drawings (under separate cover). Existing car parking pavement, lighting structures, landscaping and trees will all be removed in order to facilitate the proposed development. The Leagues Club entrance and some external additions to the club building will also be demolished.

4.3 Land Uses and Floor Space

Table 2 details the proposed Gross Floor Area and Gross Building Area of the proposed development, both of which are within the parameters established under Schedule 2 Condition A3 of the Concept Plan.

Table 2 – Development parameters

	Concept Plan Approval	Project Application	Complies?
Gross Floor Area (GFA)	26,495 m ²	26,493 m ²	✓
Outdoor Club Deck	943 m ²	940 m ²	✓
Outdoor Retail Deck	853 m ²	820 m ²	✓
Gross Building Area (GBA)	58,420 m ²	47,055 m ²	✓

Table 3 provides a breakdown of the uses within the Club/Retail precinct.

Table 3 – Distribution of land uses within Retail/Club precinct

Land Use	Gross Floor Area
Supermarket	4,013 m ²
Retail (including restaurant and dining)	5,367 m ²
Registered Club	3,450 m ²
Medical Centre	3,072 m ²
Major retail tenants (Major 2 and Major 3)	1,992 m ²
Leisure	2,801 m ²
Services, circulation, centre Management and other within Standard Instrument LEP definition of GFA	5,798 m ²
TOTAL	26,493 m²

Allocation of floor space between the retail, medical and leisure uses may be subject to minor amendment to meet future market demand. Any future Development Application for first tenancy fitout and use that proposes to vary the use nominated in this Project Application (**Architectural Drawing DA041 – DA044**) must be accompanied by a Traffic Statement demonstrating that sufficient car parking is available to support the alternate use. A Statement of Commitment is included at **Section 7.0** requiring the submission of information to this effect.

4.4 Description of Retail/Club Development by Level

4.4.1 Existing Leagues Club Building

It is proposed to partially demolish the existing Leagues Club building whilst retaining the core structure and floor plates in order to facilitate the integration of this building into the new Retail/Club complex. Existing furnishings, partitions, services and non-structural elements will be removed and the building layout configured to accommodate the proposed tenancies. Existing building services will be replaced and/or upgraded as required to accommodate the needs of new retail, club and leisure tenancies and ensure compliance with the Building Code of Australia.

Structural works will occur with full investigation of the existing building structure and will include the creation of break-through connections into the new building, construction of new vertical access and service duct.

Demolition Plans for the existing building are included within the Architectural Drawings (under separate covers), which also detail new services and connections to the proposed new building.

4.4.2 Level One (Ground)

The ground plane is the key public interface for the new Retail/Club precinct of Woollooware Bay Town Centre and includes key access points for the Leagues Club, medical centre and retail centre, public spaces and pedestrian linkages and a small offering of street-level retail.

The Level One layout is shown at **Drawing No. DA011** and includes:

- Lower level of medical centre/ mini-major tenancy;
- Leisure tenancies;
- Specialty retail adjacent pedestrian forecourt;
- Retail centre loading dock;
- Leagues Club loading dock;
- 258 car parking spaces;
- Electrical, communications and fire service rooms;
- Leagues Club pedestrian entrance; and
- Retail Centre pedestrian entrance

4.4.3 Level Two

Pedestrian access to Level Two is provided from the entrance forecourt at Captain Cook Drive, ramped pathways, elevators and steps from the Woollooware Bay foreshore area and internally via lifts and a travelator from the car parking areas. These pedestrian entrances bring customers into the main retail arcade which is comprised of specialty retail, mini-majors and a major supermarket retail tenant. During centre opening hours, this arcade will serve as a major through-site linkage providing connectivity between Captain Cook Drive and the Woollooware Bay foreshore and pedestrian linkages.

Food retail and restaurant tenancies are located towards the northern end of the retail arcade and facing onto Woollooware Bay,

The main retail space on Level Two will have a finished floor level (FFL) of RL 8.0 AHD and the layout is shown at **Figure 14** and **Drawing No. DA012**. Uses on this level include:

- Main retail centre, including:
 - Major supermarket retail tenancy;
 - Two mini-major retail tenancies;
 - Specialty shops;
 - Food court and associated tenancies; and
 - Restaurants.
- Upper Level of Medical Centre/ mini-major tenancy;
- Customer bathrooms; and
- Service rooms and centre management offices.

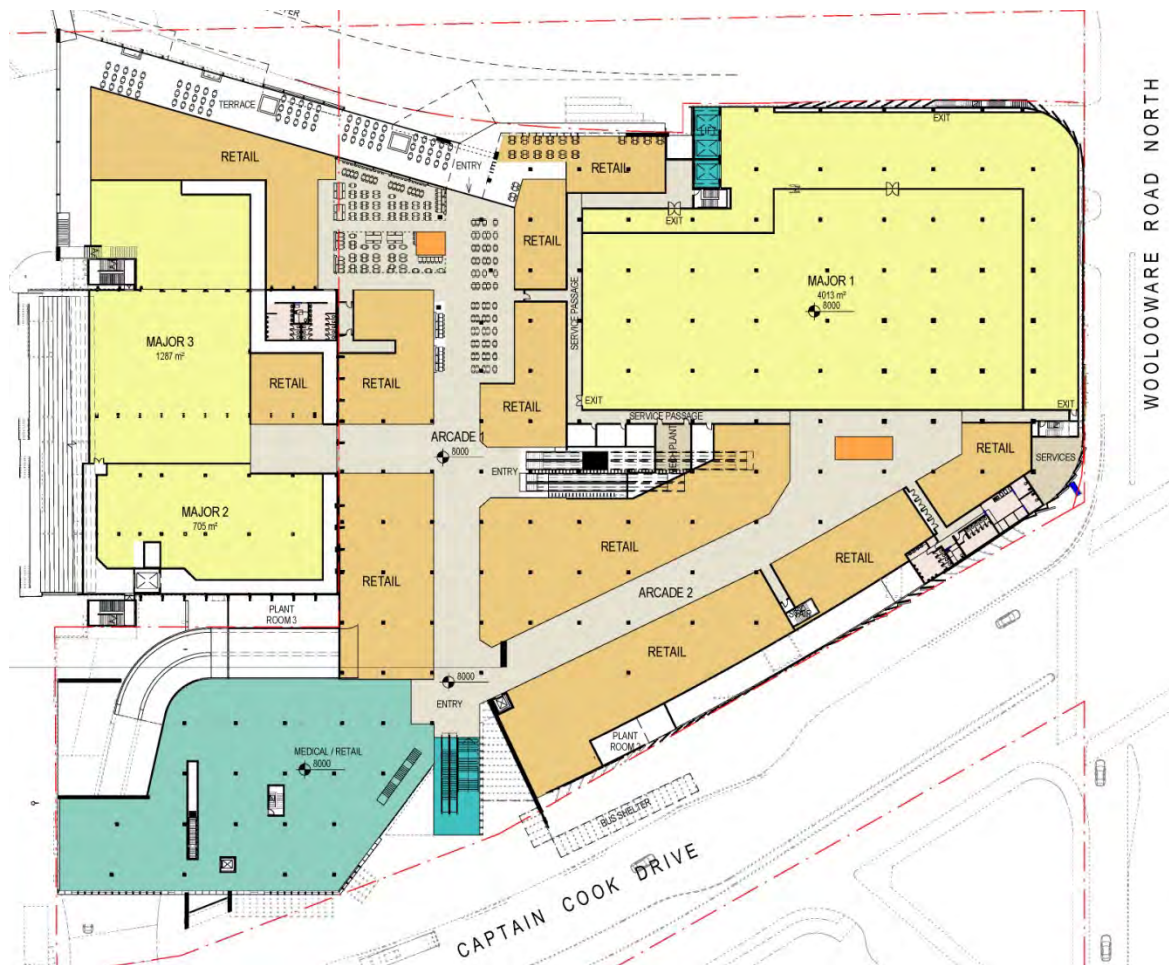


Figure 14 – Level Two plan and main retail arcade layout

4.4.4 Level Three

Level Three is comprised of the lower level of the relocated Leagues Club tenancy, which will be the subject of a future fitout Development Application to Sutherland Shire Council, the 'club deck' and customer car parking. The Level Three layout is shown at **Drawing No. DA013** and includes:

- Lower floor of relocated Leagues Club;
- Club Deck;
- Plant room; and
- 356 car parking spaces.

4.4.5 Level Four

The Level Four layout is shown at **Drawing No. DA014** and is comprised of the upper level of the relocated Leagues Club tenancy and 164 car parking spaces.

4.5 Architectural Treatment and Materials

Retail Building Facade Treatment

The main retail building includes a number of architectural elements designed to introduce greater variety into the built form and aesthetic of the Captain Cook Drive street frontage. These include the employment of a range of timber and composite timber louvres along the western portion of the Captain Cook Drive which add curvature to the main retail facade. The louvre motif is continued along the eastern portion of this facade and integrated with the more active frontages and pedestrian access points.

Materials

A Materials Schedule for external areas of the proposed development is included at **Drawing DA931**. The Retail/Club complex will incorporate a range of materials which relate to the place architecture for the Woollooware Bay Town Centre and the site's surrounds. Building facades and structures oriented towards the Woollooware Bay foreshore will adopt a more 'natural' materials scheme with hardwood timber and composite timber claddings, whilst the Captain Cook Drive frontage will introduce more urban materials in addition to composite timber louvres.

Signage Strategy

This Project Application seeks consent for a Signage Strategy (**Drawing DA902 – DA923**) which establishes appropriate signage zones for precinct and business identification. Signage elements will include:

- Precinct Identification Signage;
- Leagues Club Identification Signage;
- Sharks Stadium Identification Signage (to Captain Cook Drive);
- Tenant business identification signage; and
- Directional and way-finding signage.

The Signage Strategy will provide an integrated approach to the location and design of signage to ensure that signage is consistent with the architectural approach to Woollooware Bay Town Centre and supports a high quality urban environment.

4.6 Interim Use of Leagues Club

The Cronulla Sutherland Leagues Club will maintain its presence within the site for the duration of the construction period.

The Leagues Club currently operates within the entirety of the existing building in accordance with the original approval (D/561/1973) as subsequently modified and amended. During the construction period the Leagues Club will consolidate its existing operations into the existing club spaces within the upper two levels of the building whilst vacating the lower two levels to enable the modification of these spaces for new uses.

The relocation into the existing upper levels will be interim only, with a separate Development Application to be lodged with Sutherland Shire Council to attain approval for fitout and use of new spaces (such as the Club Deck) following determination of this Project Application.

Throughout the transition period prior to the completion of the full provision of above-ground car parking for the Retail/Club precinct, a minimum of 100 parking

spaces will be provided within the precinct site as detailed in the Construction Management Plan (**Appendix L**), with appropriate access provided to these spaces from Captain Cook Drive/Woollooware Road and from the Leagues Club building.

4.7 Landscaping and Public Domain

The Landscape Drawings (**Appendix H**) and Landscape Report (**Appendix O**) prepared by ASPECT Studios detail the landscape and public domain treatments which shall be used to embellish public and semi-public spaces within the Retail/Club precinct.

4.7.1 Captain Cook Drive and Public Forecourt

Street tree planting will be provided along the length of the Retail/Club precinct and Southern Grandstand street frontages to Captain Cook Drive using a range of native tree species. New concrete paving will be provided along the precinct's street frontages in accordance with the relevant standards for access.

The pedestrian forecourt and retail building entrance will be demarcated by a stone/concrete paving system, native palm tree plantings and bench seating to encourage use of this space.

A covered bus shelter will be provided for the bus stop adjacent to the public forecourt area within the Captain Cook Drive frontage.

4.7.2 Foreshore Buffer

The proposed foreshore zone will be revegetated from its current state (paved car parking and weed-infested embankment) to provide a recreated Swamp Oak Floodplain Forest ecosystem, native grassland, a bio-swale for stormwater treatment, shared paths for pedestrians and cyclists and a terraced open space area at the northern edge of the retail arcade. A new sea wall will be provided at the embankment to stabilise the interface between the wetlands and the new foreshore area, and will be designed and constructed in accordance with the *Environmentally Friendly Seawall Guidelines* by the (former) Department of Environment and Climate Change.

Landscape species for the foreshore zone have been selected with input from EcoLogical Australia to achieve the objectives of the NSW Office of Water's *Guidelines for Controlled Activities – Riparian Corridors*.

Ongoing Foreshore Management

A Vegetation Management Plan (VMP) has been prepared by EcoLogical Australia and is provided at **Appendix U**. The VMP describes how new landscaped areas will be managed to ensure successful establishment and long-term growth within the site. In particular the VMP details how new vegetation will interface with existing habitats and vegetation within the site. The VMP and general landscaping maintenance works will be the responsibility of the retail centre management.

4.8 Vehicular Access and Parking

4.8.1 Road Upgrades

This Project Application includes the entire external/public road works package for the Woollooware Bay Town Centre, providing a coordinated assessment and approvals process which ensures that the necessary approvals are in place for vehicular access to Woollooware Bay Town Centre. In particular, the Project Application seeks consent for the construction of two new signalised access points to Captain Cook Drive, the upgrade of the Woollooware Road/Captain Cook Drive intersection and the extension of Woollooware Road to the north of Captain

Cook Drive as shown in the Civil Infrastructure Drawings prepared by AT&L Civil Engineers (**Appendix I**). Key road works include:

- Northern extension of Woollooware Road;
- Upgrade and signalise Captain Cook Drive/ Woollooware Road intersection;
- New signalised vehicular access to Captain Cook Drive at western end of Retail/Club Precinct;
- New signalised vehicular access to Captain Cook Drive from Residential Precinct.

Construction of the Residential Precinct vehicular access point is included within this Project Application in order to ensure that the required road works for the Woollooware Bay Town Centre development are carried out in a timely and coordinated manner and to ensure that any local disruptions caused by the required road works are minimised.

In addition to the key identified road works, pedestrian and cycle footpath upgrades will be undertaken within the affected road reserve areas along Captain Cook Drive and Woollooware Road as well as the construction of new bus bays on Captain Cook Drive.

Timing of the proposed traffic signals will be coordinated to optimise traffic flows in the vicinity of the site, with provision for special signals operation during major event periods for Sharks Stadium.

Northern Extension of Woollooware Road

The northern extension of Woollooware Road is included in the current Project Application and will provide vehicular access to the ground-level Retail/Club car park and loading dock and the adjoining properties at 447 Captain Cook Drive (gymnasium building) and 449 Captain Cook Drive (service station). The road will be constructed as a two-way road with a raised median and a turning circle at the northern extent. At the signalised intersection with Captain Cook Drive, the new road will have a single northbound lane, with egress from the road provided with one right-hand turning lane to Captain Cook Drive, one straight lane to Woollooware Road south and one left-hand turning lane to Captain Cook Drive.

Woollooware Road/ Captain Cook Drive Intersection

The intersection of Woollooware Road and Captain Cook drive will be upgraded to provide traffic signals and facilitate access to Woollooware Bay Town Centre and the adjoining gymnasium and service station.

The following turning movements will be facilitated at this intersection:

- from Woollooware Road (southbound):
 - one right-hand turn lane;
 - one straight lane; and
 - one left-hand turn lane.
- from Woollooware Road (northbound):
 - one left-hand turn lane (via slip lane);
 - one straight lane; and
 - one left-hand turn lane.
- from Captain Cook Drive (eastbound):
 - one left-hand turn lane;
 - two straight lanes; and
 - one right-hand turn lane.

- from Captain Cook Drive (westbound):
 - one right-hand turn lane;
 - one straight lane; and
 - one combined left-hand turn/straight lane.

Signalised pedestrian crossings will be provided at this intersection for all east-west and north-south pedestrian movements, and a marked zebra crossing will allow pedestrian movements across the westbound slip-lane to Captain Cook Drive.

Western Retail/Club Precinct Vehicular Access Point

Direct access to the Retail/Club precinct upper-level car parking and the Leagues Club loading dock will be provided in the form of a new access point with traffic signals to Captain Cook Drive. The following turning movements will be facilitated at this access point:

- from Woollooware Bay Town Centre:
 - one left-turn lane; and
 - one right-turn lane.
- from Captain Cook Drive (eastbound):
 - one straight lane; and
 - one combined left-turn lane/ straight lane.
- from Captain Cook Drive (westbound):
 - two straight lanes; and
 - one right-hand turn lane.

Residential Precinct Vehicular Access

Vehicular access from Captain Cook Drive to the future internal street within the Residential Precinct will be provided in the form of a new signalised access point to Captain Cook Drive in accordance with the approved Concept Plan. The following turning movements will be facilitated at the residential access point:

- from Woollooware Bay Town Centre:
 - one left-turn lane; and
 - one right-turn lane.
- from Captain Cook Drive (eastbound):
 - one straight lane; and
 - one combined left-turn lane/ straight lane.
- from Captain Cook Drive (westbound):
 - no ingress to residential precinct.

Captain Cook Oval Entrance

The proposed road works include the provision of a new right-hand turn bay to permit eastbound traffic to turn from Captain Cook Drive into the Captain Cook Oval playing fields car park.

Captain Cook Drive Bus and Taxi Bays

Indented bus bays will be provided on the northern side of Captain Cook Drive immediately adjacent to the Retail/Club precinct public forecourt and the Residential Precinct street frontage. A new indented bus bay will also be provided on the southern side of Captain Cook Drive immediately opposite the existing bus bays to the south of Sharks Stadium.

4.8.2 Loading Docks

Retail Loading Dock

The primary retail loading dock will be located at the north-eastern corner of the retail building with direct access from the extended Woollooware Road. Articulated service vehicles will be required to reverse into the loading dock from Woollooware Road in order to enable egress in a forward direction. Signage and loading dock management measures will be provided to minimise any potential vehicular conflict at this location.

Club Loading Dock

The Leagues Club loading dock will be accessed from the western retail centre intersection, with service vehicles entering and exiting the loading dock in a forward direction via access lanes located to each side of the customer parking entrance ramp.

4.8.3 Car Parking

Condition 4 of Schedule 2 of the Concept Plan approval requires the provision of a minimum of 770 car parking spaces within the Retail/Club precinct, which are proposed to be provided across Level 1, Level 3 and Level 4 of the proposed retail building.

The modifications to the Concept Plan Preferred Project described in **Section 6.2** of this report have required the introduction of an additional half-deck of customer car parking on Level Four of the retail centre building and the extension of the Level Three car parking deck over the roof of the Medical Centre.

4.8.4 Pedestrian and Cycle Infrastructure

Pedestrian and cycle connections and infrastructure are identified in the Landscape Drawings prepared by ASPECT Studios (**Appendix H**) and the Civil Infrastructure Drawings prepared by AT&L (**Appendix I**) and briefly described in the following sections of this report.

Foreshore Shared Path and connection to Captain Cook Drive

As detailed in the Landscape Drawings prepared by ASPECT Studios (**Appendix H**) the proposed development includes the provision of a shared path along the northern frontage of the Retail/Club complex with a minimum width of 3.5 metres. This path will include a number of connections to the future Family Hill shared paths to the west, to Woollooware Road to the west, to the upgraded mangrove boardwalk to the north and into the main Retail/Club precinct to the south.

The connection to Woollooware Road will provide access for pedestrians and cyclists to a signalised crossing of Captain Cook Drive with connection to the existing (and future upgraded) shared path along the southern side of Captain Cook Drive.

Captain Cook Drive

Pedestrian facilities within the road reserve will be upgraded along the northern side of Captain Cook Drive (between the Southern Grandstand of Sharks Stadium and Woollooware Road) and the southern side (between the stormwater drainage channel and Woollooware Road), including the provision of new paving and shared paths, new signalised pedestrian crossings

A pedestrian fence will be provided within the median along the length of Captain Cook Drive between Woollooware Road and the stormwater drainage channel (except at intersections) in accordance with NSW Roads and Maritime Services requirements. The balance of the pedestrian fencing required by Schedule 3

Condition 9(b) of the Concept Plan Approval (between the stormwater drainage channel and Gannons Road) will be provided as part of the Stage 1 Residential precinct of Woollooware Bay Town Centre.

Bike Parking

Parking for bicycles will be provided in excess of the rates specified in the Sutherland Shire DCP, being a total provision of 37 spaces. Bike parking for the Retail/Club precinct will be located within the pedestrian forecourt adjacent to Captain Cook Drive and on the spill-out deck adjacent to the Woollooware Bay shared path as shown in the Landscape Plans prepared by ASPECT Studios (**Appendix H**). Bicycle parking for staff will be provided within a secure room located on Level One and is shown in the Architectural Drawings (under separate cover).

4.9 Shuttle Bus Service

Bluestone Capital Ventures No. 1 and Cronulla Sutherland Leagues Club propose to provide a regular shuttle bus service between the site immediately upon commencement of the proposed retail centre's operations. A letter of offer to this effect is provided at **Appendix K**.

The details of the proposed shuttle service for the Retail/Club precinct are as follows:

- Hours of operation: 7am to 9pm, 7 days per week;
- Service frequency: minimum 2 services per hour;
- Service capacity: 22 seat bus;
- Set-down/pick-up points: Woollooware Station and Retail/Club Precinct bus stop.

The indicative shuttle bus route is identified in the Traffic and Parking Impact Assessment prepared by McLaren Traffic Engineering (**Appendix J**). The proponent may also explore further options for expanding this service in the future above the requirements of the Concept Plan.

The operation of the shuttle service may commence sooner than proposed if the residential apartments within the Woollooware Bay Town Centre are occupied prior to the commencement of retail centre operations, and it is anticipated that appropriate conditions will be included in future approvals for residential consents to ensure adequate service frequency and capacity.

Operation of the shuttle bus service will cease upon the commencement of a public bus service with timetabled stops at the Woollooware Bay Town Centre bus bays.

4.10 Infrastructure and Utility Upgrades

Potable Water

The proposed development includes the upsizing of the existing 150mm potable water main to a 200mm main from the existing 375mm main on the corner of Kurnell and Hume Road. Some additional existing potable water infrastructure in the immediate vicinity of the site will also be relocated as detailed in the Services and Utilities Coordination Plan (**Appendix I**) in order to permit the proposed road upgrades.

Sewerage

The proposed development includes the upsizing of the existing 225mm wastewater main in Captain Cook Drive to a 200mm main. Some additional existing sewerage infrastructure will be relocated as detailed in the Services and Utilities Coordination Plan (**Appendix I**) in order to permit the proposed road upgrades.

Electricity

Existing local electrical infrastructure in the immediate vicinity of the site is expected to have sufficient capacity to service the proposed development and no significant infrastructure upgrades are required. Some existing power poles and lines will be relocated as detailed in the Services and Utilities Coordination Plan (**Appendix I**) in order to permit the proposed road upgrades.

Communications

NBN Co have committed to servicing the proposed development with communications services.

Some existing communications infrastructure will be relocated as detailed in the Services and Utilities Coordination Plan (**Appendix I**) in order to permit the proposed road upgrades.

Gas

Based on initial discussions with the local service provider (Jemena) it is anticipated that the existing gas network which is reticulated along Captain Cook Drive and Woollooware Road in the immediate vicinity of the site has sufficient capacity to service the proposed development and no significant infrastructure upgrades are required. Some existing gas mains will be relocated as detailed in the Services and Utilities Coordination Plan (**Appendix I**) in order to permit the proposed road upgrades.

4.10.1 Stormwater Management

Stormwater collected within the site will be treated and discharged via a number of networks due to the size of the site as detailed in the Civil Infrastructure Drawings prepared by AT&L (**Appendix P**).

Stormwater from the southern portion of the club building, Woollooware Road (north extension) and new intersections and road upgrades to Captain Cook Drive will discharge to Council's existing stormwater network in Captain Cook Drive.

Stormwater from the new retail centre building will discharge to a bio-filtration swale located to the north of the building as shown in the Landscape Plans prepared by ASPECT Studios (**Appendix H**). This swale will be designed to ensure that stormwater discharge meets Sutherland Shire Council water quality improvement targets. Following bio-filtration stormwater will be discharged to the Woollooware Bay Road northern extension and flow to Woollooware Bay via the existing recreated salt marsh adjoining the Fitness First building.

On-site stormwater detention (OSD) is not proposed to be provided due to the position of the site within the lower reaches of the catchment.

4.11 Site Remediation

A Remediation Action Plan (RAP) has been prepared for the proposed development by DLA Environmental and is included at **Appendix Q**. The RAP proposes an 'on site capping and containment' approach to managing contamination within the site as required by Condition 19(a) of the Concept Plan approval.

Minor amounts of material may also be required to be removed to allow construction of service trenches and the like, and any material removed from the site will be classified in accordance with the (former) Department of Environment Climate Change and Water's 2009 *Waste Classification Guidelines* and disposed of at a suitable waste facility.

The RAP has been endorsed by an independent EPA-accredited site auditor (**Appendix R**).

4.12 Construction Management

A Construction Management Plan (CMP) has been prepared by Parkview Constructions, (**Appendix L**) which details the site management principles to ensure that construction impacts on surrounding areas is minimised as far as practical.

Construction Hours

Construction works will be undertaken between the standard Sutherland Shire Council construction hours, being:

- 7.00am to 6.00pm, Monday – Friday;
- 8.00am to 3.00pm, Saturday; and
- No work on Sundays or Public Holidays.

Construction Traffic

Construction traffic will enter and exit the site via existing site access points until the completion of new intersections and access points. All construction traffic will be advised to plan access routes via Captain Cook Drive in order to minimise the impact of construction traffic on local roads.

Construction Staging

Construction of the proposed development will be staged in order to enable the ongoing operation of the Leagues Club throughout the construction phase, including the provision of a minimum of 100 parking spaces for patrons. Site management plans provided within the CMP detail the indicative staging of works within the Club/Retail precinct.

Construction Parking

Appropriate levels of parking for construction staff and construction vehicles will be provided on-site for the duration of works.

Erosion and Sediment Control

An Erosion and Sediment Control Plan is included in the Civil Infrastructure Drawings prepared by AT&L (**Appendix I**).

4.13 Development Contributions

As detailed in **Section 3.2.1** of this report, the proponent is currently in the process of negotiating suitable development contributions (or works-in-kind) for the Retail/Club precinct of Woollooware Bay Town Centre (i.e. this Project Application) and it is anticipated that a negotiated contribution amount will be provided to the NSW Department of Planning and Infrastructure for inclusion within the recommended conditions of any approval.

5.0 Director General's Environmental Assessment Requirements

On 25 March 2011, in accordance with Section 75F of the EP&A Act, the Director-General of the Department of Planning issued the requirements for the preparation of an Environmental Assessment to accompany a Concept Plan for the entire Cronulla Sutherland Leagues Club site and a Stage 1 Project Application for the development of the Retail/Club precinct of the new Town Centre. A copy of the DGRs is included in **Appendix A**.

The Concept Plan and Project Application have been prepared for submission separately, with the Concept Plan now approved. As such, a number of the environmental assessment requirements contained within the DGRs have already been satisfied, either in full or in part. Where further assessment is not required in relation to the detailed Project Application, this is noted in **Table 4** as 'Concept Plan Approval'.

Table 4 provides a detailed summary of the individual matters listed in the DGRs and identifies where each of these requirements has been addressed in this report and the accompanying technical studies.

Table 4 – Director General's Requirements

Requirement	Location in Environmental Assessment	
General		
Statement of Validity	Page i	
Executive Summary	Page ii	
Quantity Surveyor's Certificate	Appendix A	
Site Analysis	Section 2.0	
Description of Community Consultation	Section 3.0	
Description of the Proposed Development	Section 4.0	
Assessment of Key Legislation and Policies	Section 6.0	
Assessment of the Key Planning Issues	Section 6.0	
Draft Statement of Commitments	Section 7.0	
Conclusion and Justification	Section 8.0	
Key Issues	Report	Technical Study
Planning provisions applying to the site, including permissibility and the provisions of all plans and policies are contained in Appendix A.	Concept Plan Approval	N/A
Built Form/ Urban Design		
The EA shall address the height, bulk and scale of the proposed development within the context of the locality. In particular, detailed envelope/height and contextual studies should be undertaken to ensure the proposal integrates with the local environment, including significant coastal wetlands, and the public domain.	Concept Plan Approval	N/A
The EA shall provide justification for the height, scale and density of the proposed development in relation to the accessibility to public transport. In particular, the height of the residential component requires justification and careful consideration as noted in the letter to the proponent dated 21 February 2011.	Concept Plan Approval	N/A
The EA shall provide the following; <ul style="list-style-type: none">Comparative height study to demonstrate how	Concept Plan Approval	N/A

<p>the proposed building heights relate to the height of the existing, proposed and approved developments surrounding the subject site and in the locality, including solar impacts to adjacent development;</p> <ul style="list-style-type: none"> Visual and view analysis to and from the site from key vantage points; including Woollooware Bay, Towra Point Nature Reserve, Captain Cook Drive, the corner of Bate Bay Drive and Sanderson Street Cronulla and from Woollooware Road; Options for siting and orientation of building envelopes, massing and articulation. 		
The EA shall address the design quality with specific consideration of the massing, setbacks, building articulation, landscape concepts, above ground level parking design, safety by design and public domain, and pedestrian/bicycle connectivity.	Sections 4.0, 6.4, 6.5, 6.7, 6.18	Appendix N and Architectural Drawings
Land Use		
The EA shall address the relevant metropolitan, regional and local strategies in relation to the desired future mix of land uses, including justification for the proposed type, function and quantity of retail floorspace.	Concept Plan Approval	N/A
The EA shall provide justification for the creation of a new centre within the Metropolitan hierarchy, including consideration of the hierarchy established by the Draft Southern Sub Regional Strategy and the Metropolitan Plan 2036	Concept Plan Approval	N/A
The EA shall address the loss of active open space, detailing how existing and future demands for sports fields will be met within the context of growing participation rates across all sports.	Concept Plan Approval	N/A
The EA shall address the social impacts of the proposal and include an appropriate investigation of the potential impacts upon the ongoing provision of community services and functions of the Cronulla Sharks Club. Sufficient justification shall be provided to demonstrate that the proposal will not unreasonably diminish the social benefits provided by the club to the community.	Concept Plan Approval	N/A
Economic Impact Assessment		
The EA shall address the economic impact of the proposal and include a detailed investigation into the impact of the proposed retail floorspace upon surrounding centres. It should also examine whether there is sufficient strategic justification for the proposal and address how the proposal would support the objectives /aims of relevant State and regional strategies for the locality.	Concept Plan Approval	N/A
The impact of a new centre upon facilities and services in existing centres should also be considered.	Concept Plan Approval	N/A

Public Domain/ Open Space		
The EA must explain the type, function and landscape character of the various private, communal and public areas on site. Pedestrian circulation and linkages between each space and the foreshore of Woollooware Bay should be demonstrated in a schematic form.	Section 4.7	Appendix H and Appendix O
The EA must address public domain improvements, pedestrian linkages and street activation.	Sections 4.5, 4.7 and 6.4	Appendix H and Appendix O
The EA must demonstrate that publicly accessible pedestrian and cycle access can be provided between any development and Woollooware Bay as identified in the Sutherland Shire Bicycle Plan	Concept Plan Approval	Appendix H
<p>The EA is to demonstrate how the design of proposed structures and the treatment of public domain and open spaces will:</p> <ul style="list-style-type: none"> ■ Maximise safety and security within the site and the public domain. ■ Maximise surveillance and activity within the site and the public domain. ■ Comply with Crime Prevention through Environmental Design (CPTED) principles. ■ Ensure access for people with disabilities. ■ Minimise potential for vehicle and pedestrian conflicts. 	Section 6.17	Appendix BB
	Section 6.13	Appendix X
	Section 6.7	Appendix J
Environmental and Amenity Impact		
The EA must address solar access, acoustic privacy, visual privacy, view loss, wind impacts, light spillage and achieve a high level of environmental and residential amenity. Any analysis must address amenity impacts associated with game days.	Concept Plan Approval & Future Residential DAs	N/A
The EA must demonstrate that the proposal can achieve compliance with the requirements of SEPP 65 and the associated Residential Flat Design Code (RFDC).	Not Applicable to Retail Centre Project Application	N/A
The EA must address the impacts associated with the electricity transmission easement, and the transmission towers and wires upon future dwellings.	Not Applicable to Retail Centre Project Application	N/A
Transport and Accessibility (Construction and Operational)		
<p>The EA shall address the following matters:</p> <ul style="list-style-type: none"> ■ Provide details on transport and accessibility, traffic generation, access, loading areas, car parking arrangements, pedestrian and bicycle linkages associated with the proposed works, including safe links to nearby residential neighbourhoods, schools and recreational facilities. ■ Provide a Traffic Management and Accessibility Plan (TMAP) prepared in accordance with the RTA's Guide for preparation of TMAPs, considering the traffic generation capacity of the various land uses 	<ul style="list-style-type: none"> ■ Sections 4.8, 4.9 and 6.7 	Appendix J
	<ul style="list-style-type: none"> ■ Section 6.7 	

<p>on site, any required road/intersection upgrades and analysis of intersection capacities to ensure adequate levels of services are maintained, access, loading dock(s) including vehicle type and delivery times and manoeuvring paths for the full range of intended user vehicle types, car parking arrangements, and measures to promote public transport usage and pedestrian and bicycle linkages. The TMAP shall be undertaken in the context of the current and anticipated future traffic volumes from significant traffic generators on the Kurnell Peninsula.</p> <ul style="list-style-type: none"> ■ Demonstrate the appropriate provision of on-site car parking for the proposal having regard to Council and RTA guidelines and including "game day" parking arrangements. ■ Provide an assessment of the implications of the proposed development for non-car travel modes (including public transport, walking and cycling), including an assessment of existing and proposed pedestrian and cycle movements within the vicinity of the subject site; ■ Provide measures to improve public transport accessibility and demonstrate how users of the development will be able to make sustainable travel choices. ■ The EA shall address the potential for implementing a location specific sustainable travel plan such as a Workplace Travel Plan for workers and/or a Travel Access Guide for employees. 	<ul style="list-style-type: none"> ■ Section 6.7 ■ Section 6.7 ■ Sections 6.7 and 6.16 ■ Section 6.16 	
Noise and Vibration Assessment		
The EA should address the issue of noise and vibration impacts and provide details of how these will be managed and ameliorated through the design of the building, in compliance with relevant Australian Standards and the Department's <i>Interim Guidelines for Development near Rail Corridors and Busy Roads</i> .	Section 6.10	Appendix V
Ecologically Sustainable Development (ESD)		
The EA shall detail how the development will incorporate ESD principles in the design, construction and ongoing operation phases of the development.	Section 6.16	Appendix AA
Archaeological		
The EA shall provide an Archaeological Assessment of Aboriginal and non-Indigenous archaeological resources, including an assessment of the significance and potential impact on the archaeological resources.	Section 6.12	Appendix W
Flooding, Drainage and Stormwater		

The EA shall address drainage, groundwater and flooding issues associated with the proposed development including piped stormwater, overland flows, drainage infrastructure and incorporation of Water Sensitive Urban Design measures.	Section 6.6	Appendix P
The EA shall address measures proposed to be taken to ensure that the disposal of stormwater to Woollooware Bay maintains/ enhances the existing hydrology and water quality at the land/wetland interface.	Section 6.6	Appendix P
Provide an assessment of any flood risk on site in consideration of any relevant provisions of the NSW Floodplain Development Manual (2005) including the potential effects of climate change, sea level rise and expected increases in rainfall intensity and address measures to be taken to render the site suitable for high density residential development- free from flooding. Identify any water management structures proposed to service the Stage 1 Project Application and any subsequent stage of the Concept Plan, including any dams, swales or detention basins. Information regarding the size, location, capacity and purpose of any water management structures.	Section 6.6	Appendix P
The EA shall address the protection and enhancement of riparian land along the southern shore of Woollooware Bay and the watercourse on the site.	Concept Plan Approval and Sections 4.7, 6.6, 9.8 and 6.9	Appendices H, O and P
Sea Level Rise		
Provide an assessment of sea level rise (separate from flood impacts) on site in consideration of any relevant provisions of the State Governments Sea Level Rise policy and planning guidelines and address measures to reduce impacts of sea level rise on the development.	Section 6.6	Appendix P
Contamination/ Acid Sulphate Soils		
The EA is to demonstrate compliance that the site is suitable for the proposed use in accordance with SEPP 55 – Remediation of Land.	Section 6.1	Appendix F and Appendix Q
The EA shall provide an Acid Sulphate Soils Management Plan prepared in accordance with the manual produced by the Acid Sulphate Soil Management Advisory Committee.	Section 6.8	Appendix F and Appendix Q
The EA shall demonstrate consistency with NSW State Groundwater Policies.	Section 6.8	Appendix F and Appendix Q
Flora & Fauna		
The EA shall address impacts on flora and fauna, including threatened species, populations and endangered ecological communities and their habitats and steps taken to mitigate any identified impacts to protect the environment, both marine and land in accordance with DECC <i>'Threatened Species Assessment Guidelines 2007'</i> . In this regard, the EA shall include a detailed survey (using a variety of survey methods by a suitably qualified person) of the migratory bird habitat, and determine whether and how they are using the site and adjoining areas, and assess any potential impact or threat to the population.	Concept Plan Approval And Section 6.9	Appendix T

The Towra Point Nature reserve is protected under RAMSAR. The Commonwealth Department of Sustainability, Environment, Water, Population and Communities should be consulted to ascertain whether the proposed development triggers the need for an assessment and approval under the <i>Commonwealth Environment Protection and Biodiversity Conservation Act 1999</i> .	Concept Plan Approval	N/A
The EA shall provide a description of mitigation and management options that will be used to prevent, control, abate or minimise identified impacts on Towra Point Aquatic Reserve associated with the project. This should include an assessment of the effectiveness and reliability of the measures and any residual impacts after these measures are implemented.	Section 6.9	Appendix S and Appendix T
The EA shall include a detailed biodiversity assessment, including assessment of impacts on threatened biodiversity, native vegetation and habitat.	Concept Plan Approval	N/A
The EA shall address the protection and enhancement of riparian land along the southern shore of Woollooware Bay and watercourse on the site and assess and provide details on all watercourses and riparian land on the site, potential impacts of the proposal on any watercourses and riparian areas and wetlands including areas of disturbance and, safeguard measures to mitigate impacts, contingency plans for remediation and rehabilitation of riparian areas in the event of potential adverse impacts and the long term management of riparian lands.	Concept Plan Approval and Sections 4.7 and 6.9	Appendix T
The EA must demonstrate compliance with the NSW Office of Water's Guidelines for Controlled Activities (2008) and outline the provision of a 40 metre wide Core Riparian Zone.	Concept Plan Approval	N/A
Contributions		
The EA shall address the provision of public benefit, services and infrastructure having regard to Council's Section 94 Contribution Plan, and provide details of any Planning Agreement or other legally binding instrument proposed to facilitate this development.	Section 4.13	N/A
Consultation		
Undertake an appropriate and justified level of consultation in accordance with the Department's <i>Major Project Community Consultation Guidelines October 2007</i> , including discussion with relevant agencies.	Concept Plan Approval and Section 3.0	N/A
Utilities		
In consultation with relevant agencies, the EA shall address the existing capacity and requirements of the development for the provision of utilities, including staging of infrastructure works.	Section 4.10	Appendix P
Staging		
The EA must include details regarding the staging of the proposed development including details of	Section 4.12	Appendix L

subsequent Project Applications and Construction Staging.		
Statement of Commitments		
The EA must include a draft Statement of Commitments detailing measures for environmental management, mitigation measures and ongoing monitoring for the project.	Section 7.0	
Project Application Specific Requirements		
The Project Application EA shall include with specific consideration of the facade, massing, setbacks, building articulation, appropriate colours, materials, finishes, landscaping, safety by design and public domain, including an assessment against the CPTED Principles; and	Sections 4.5, 4.7, 6.2, 6.4, 6.5 and 6.17	Architectural Drawings, Appendices H, N, O and BB
The provision of appropriate private and public open space for Stage 1.	Sections 4.7 and 6.5	Appendices H and O
The EA shall address how the Stage 1 Project Application development will integrate with the overall Concept Plan proposal, including details of infrastructure work, car parking provisions and car parking access required to ensure that the Stage 1 Project Application development is fully serviced and how the infrastructure works serving the Stage 1 Project Application will be integrated with those for the remaining stages and existing uses on site. Consideration should be given to the temporary loss of car parking on site during construction phases and any potential impacts, including the location of temporary parking.	Section 4.0, 6.7, 6.18	Appendices I, J, L and P
The EA shall address noise and other impacts during the construction phase of the development and address how these will be managed and mitigated in accordance with the <i>"Interim Construction Noise Guideline" (DECCW, 2009)</i> .	Section 6.10	Appendix V
The EA shall address sediment and erosion controls taken to reduce impacts on Woollooware Bay.	Section 6.18	Appendix I
Relevant EPI's, Policies and Guidelines		
Objects of the EP&A Act 1979	Concept Plan Approval	N/A
NSW State Plan	Concept Plan Approval	N/A
Sydney Metropolitan Plan 2036	Concept Plan Approval	N/A
Draft South Subregional Strategy	Concept Plan Approval	N/A
SEPP 65 – Design Quality of Residential Flat Buildings and the Residential Flat Design Code	Not Applicable to Retail Centre Project Application	N/A
SEPP (Infrastructure) 2007	Concept Plan Approval and Section 6.1	N/A
SEPP 55 – Remediation of Land	Section 6.1	Appendix F and Appendix Q
Sutherland Shire LEPs, DCPs, S94 Plans and Environmental Specifications – Stormwater	Concept Plan Approval	Appendix P

management	and Section 6.6	
Development Near Rail Corridors and Busy Roads – Interim Guideline	Section 6.10	Appendix V
Threatened Species Conservation Act 1995 and Threatened Species Assessment Guideline 2007	Concept Plan Approval	N/A
Floodplain Development Manual 2005	Section 6.6	Appendix P
State Sea Level Rise Policy	Section 6.6	Appendix P
Draft Sea Level Rise Risk Assessment (Sutherland Shire Council)	Section 6.6	Appendix P
NSW Ground Water Policy Framework Policy, NSW Groundwater Quality Management and Protection Policy, NSW Groundwater Dependent Ecosystem Policy	Concept Plan Approval and Section 6.6	Appendix P
NSW State Rivers and Estuaries Policy	Concept Plan Approval	N/A
NSW Wetlands Management Policy	Concept Plan Approval	N/A
Environmental Protection and Biodiversity Act 1999 (Cwth)	Concept Plan Approval	N/A
EPBC Regulation 2000: Schedule 2	Concept Plan Approval	N/A
Biodiversity Conservation Act 1999: <i>Guide to implementation in NSW</i>	Concept Plan Approval	N/A
Visual Values & Guidelines for Botany Bay 2004	Concept Plan Approval	N/A
Draft Guidelines for Aboriginal Cultural Heritage Impact Assessment and Community Consultation	Concept Plan Approval and Section 6.12	Appendix W
Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010	Concept Plan Approval and Section 6.12	Appendix W
Fisheries Management Act 1994	Concept Plan Approval	N/A
Water Management Act 2000	Concept Plan Approval	N/A
Water Act 1912	Concept Plan Approval	N/A
Acid Sulphate Soils Manual 1998 & Acid Sulphate Soils Laboratory Methods Guidelines 2004	Section 6.8	Appendix Q
Interim Construction Noise Guidelines 2009	Section 6.10	Appendix V
Guidelines for Controlled Activities	Concept Plan Approval	N/A

6.0 Environmental Assessment

This section of the report assesses and responds to the environmental impacts of the Concept Plan proposal. It addresses the matters for consideration set out in the Director-General's Environmental Assessment Requirements (DGRs).

The draft Statement of Commitments located at **Section 7.0** complements the findings of this section.

6.1 Relevant Planning Policies and Environmental Planning Instruments

The Environmental Assessment for Concept Plan Application MP10_0229 included an assessment of the proposed development against the relevant planning policies and environmental planning instruments. The assessment contained within the Environmental Assessment Report prepared by JBA dated September 2011 and the Preferred Project Report prepared by JBA dated March 2012, and documentation appended to these reports, assesses the following legislation and policies:

- *Environmental Planning and Assessment Act 1979*;
- NSW State Plan;
- Sydney Metropolitan Plan 2036;
- Draft South Subregional Strategy;
- Sutherland Shire LEPs and DCPs;
- Threatened Species Conservation Act 1995;
- NSW State Rivers and Estuarine Policy
- NSW Wetlands Management Policy;
- *Environmental Protection and Biodiversity Conservation Act 1999 (Cwth)* and associated regulations and guidelines;
- *Fisheries Management Act 1994*;
- *Water Management Act 2000*;
- *Water Act 1912*; and
- NSW Office of Water Guidelines for Controlled Activities.

As detailed at **Section 5.0** of this report, the above legislation and policies have been assessed and resolved through the Concept Plan approval and do not require further assessment as part of this Project Application.

6.1.1 State Environmental Planning Policy No.55 – Remediation of Land

A Remediation Action Plan (RAP) (**Appendix Q**) has been prepared for the proposed development by DLA Environmental in accordance with the recommendations of the Phase 2 Detailed Site Investigation (**Appendix F**). The RAP has been endorsed by the Site Auditor (**Appendix R**). As such the proposed development is consistent with the provisions of *State Environmental Planning Policy No.55 – Remediation of Land*. Site contamination is addressed in further detail at **Section 6.8** of this report.

6.1.2 State Environmental Planning Policy (Infrastructure) 2007

Clause 104 of *State Environmental Planning Policy (Infrastructure) 2007* requires that for certain traffic generating developments (the proposed development triggers the nominated threshold under Schedule 3 for shops and commercial premises), the consent authority must take into consideration the comments of the Roads and Maritime Service (RMS) during the environmental assessment, as well as the accessibility of the site and any potential traffic congestion or safety issues. These issues were addressed in detail at the Concept Plan stage, and details of RMS endorsement of the proposed access arrangements are included at **Appendix J**.

6.2 Compliance with Concept Plan Approval MP10_0229

The Concept Plan Approval issued by the PAC on 27 August 2012 included a number of conditions relating to the nature of the project, project modifications, ongoing assessment and mitigation measures. A full summary of the project's compliance with these conditions is included at **Appendix M**, whilst key issues are addressed in greater detail below.

6.2.1 Building Envelope and Floor Space

The proposed development will provide a total of 26,493m² of floor space area (Standard Instrument LEP definition) within the retail/club component of Woollooware Bay Town Centre (excluding existing floorspace within the Western Grandstand), which is well within the FSA allowance approved under the Concept Plan of 26,495m². Similarly, the Gross Building Area (GBA) of 45,358m² provided for in this Project Application is well within the Club/Retail GBA allowance of 50,991m² approved under the Concept Plan.

The proposed Retail/Club building varies from the approved building envelope at a total of 27 points in four general locations, being:

- Leagues Club and Retail Centre Entrances;
- Captain Cook Drive frontage and building corner to Woollooware Road/Captain Cook Drive intersection;
- Club Deck Roof; and
- Leisure Centre and Level 2 dining tenancies.

The specific points of variation from the approved building envelope are identified at **Architectural Drawings DA811 – DA814**.

Despite the variations to the envelope which are identified above, the proposed building volume is 11% less than the maximum building volume approved under the Concept Plan. The volume of the proposed variations from the approved envelope represents approximately 9% of the approved building volume, and is considered to be minor in nature and does not alter the nature of the development approved under the Concept Plan approval.

The proposed variations from the approved building envelope are necessary to ensure that the Project Application achieves a high standard of architectural design and interest, achieves appropriate building massing and complies with Conditions 1 and 2 of Schedule 3 of the Concept Approval which requires that:

1. *Future applications shall demonstrate that the development achieves a high standard of architectural design **incorporating a high level of modulation / articulation of the buildings (our emphasis)** and a range of high quality materials and finishes.*
2. *Future applications for the Retail and Club Precinct shall ensure that the frontages to Captain Cook Drive, Woollooware Road and the riparian zone are activated at ground level **and demonstrate sufficient articulation (our emphasis)** to the satisfaction of the consent authority.*

The proposed variations are entirely consistent with these conditions and assist in addressing key concerns raised by the NSW Department of Planning and Infrastructure and Sutherland Shire Council (along with detailing of other architectural facade treatments and space activation as described in **Section 4.0**) during the assessment of the Concept Plan.

The largest variation from the approved Retail/Club building envelope controls is the location of leisure, restaurant and retail uses within the north-west corner of the building. This protrusion encroaches in part into space identified for future grandstand extensions to Sharks Stadium. The proposed Retail/Club building envelope does not impact upon the ability to provide new seating within this area if required in the future. The protrusion is consistent with the previously proposed built form, ensures that sufficient active frontage is provided to the increased Woollooware Bay foreshore setback to provide casual surveillance, and improves the ability of the centre to connect to the shared path and 'Family Hill' to the west. In light of the above, it is considered that this protrusion is generally consistent with the approved Concept Plan and therefore no modification to the Concept Plan is required.

Notwithstanding the above, Transitional Part 3A Project Applications are not bound by the "generally consistent" provision under Clause 3B(2)(c) of Schedule 6A of the *Environmental Planning and Assessment Act 1979* which apply to projects where a Concept Plan is in place which are assessed under Part 4. As such, the PAC may approve a Project Application which deviates from the Concept Plan building envelope without need for modification of the approved Concept Plan.

6.2.2 Condition A5 Sch.2 and Condition 8 Sch.3– Shuttle Bus Service

A letter has been provided by Cronulla Sutherland Leagues Club Pty Ltd (**Appendix K**) which outlines the proposed arrangements for the operation of a shuttle bus service for staff, customers and visitors between the town centre and Woollooware Railway Station in accordance with the requirements of the Concept Plan conditions. As the land owner (current and future) for the Retail/Club Precinct, the Leagues Club is the most appropriate party to hold responsibility for the provision of this service bound by the conditions of any Project Approval.

The details of the proposed shuttle service are detailed in **Section 4.9** and **Appendix K**.

6.2.3 Condition A4 Sch. 2 – Car Parking

The NSW Planning Assessment Commission (PAC) imposed a higher quantum of Retail/Club precinct parking (minimum of 770 spaces) than those shown on the stamped Concept Plans. This followed discussions with the proponent and the identification of potential locations for additional parking, including behind the Western Grandstand adjacent to the stormwater drainage channel. Detailed design of the proposed development has resulted in all 770 of the required car parking spaces being provided within the main Retail/Club complex, which is considered to

provide a superior outcome in terms of traffic management, urban design, safety, ecology and stormwater management.

6.3 Land Use

Concept Plan approved the following land uses within the Woollooware Bay Town Centre:

*Residential accommodation, **retail premises, health services facility, exhibition home, recreation area, environmental facility, entertainment facility, recreation facility (major), recreation facility (indoor), registered club, environmental protection works***

The land uses indicated in bold above are those uses which are applicable to this Project Application.

In addition to the above uses, 'advertising', 'demolition', 'roads' and 'restaurants' are permissible with consent within Zone 6(b) Private Recreation which is the land use zone for the site under the applicable local environmental planning instrument, the *Sutherland Shire Local Environmental Plan 2000* (SLEP 2000).

All of the uses proposed under this Project Application are permissible with consent under the terms of either the Concept Plan approval or SLEP 2000.

6.4 Built Form and Architectural Design

The proposed development detailed in the Architectural Drawings prepared by Scott Carver Associates (under separate cover) provides modulation to the building envelope controls established under the Concept Plan approval in order to provide and interesting and aesthetically pleasing building form. The detailed design includes greater modulation of the building form at the key Captain Cook Drive pedestrian entrance and forecourt area, with distinct entrances to the Leagues Club and retail centre.

Architectural treatments to the Captain Cook Drive between the entrance forecourt and Woollooware Road will break up the facade and provide a more emphasised curvature in the building form along this frontage. In conjunction with street tree planting along this site frontage, this treatment will add greater depth and interest to the building form and reduce perceptions of the bulk of the building when viewed from Captain Cook Drive and Woollooware Road.

As detailed in **Section 6.2** of this report, the inclusion of building articulation and architectural detail to respond to Schedule 3 Conditions 1 and 2 of the Concept Plan approval has led to some minor deviations from the approved building envelope control. Overall it is considered that these variations are sufficiently minor, and overwhelmingly beneficial to the aesthetic of the centre, such that the proposed development represents a significantly improved outcome and are therefore appropriate.

6.5 Landscape and Public Domain

The Landscape Drawings (**Appendix H**) and Landscape Report (**Appendix O**) have been prepared by ASPECT Studios to provide additional detail and resolution to the conceptual landscape design approved under the Concept Plan.

The public forecourt within the site's key street frontage has been designed to ensure functionality that balances the need to create an attractive and usable public space within the primary pedestrian address to the site with the peak operational demands of Sharks Stadium. This space will provide places to sit and

congregate, traffic within and between the various components of the Woollooware Bay Town Centre and create a pleasant environment that is safe and functional for public transport users.

Separate pedestrian entrances to the Leagues Club, main retail arcade and ground-level tenancies will promote pedestrian activity along the Captain Cook Drive street frontage. Direct linkages from these access points to new public transport stops and cycle/pedestrian routes to the site's surrounds (including the residential precinct) will further encourage pedestrian traffic along the length of the site's Captain Cook Drive frontage.

Street tree planting along the Captain Cook Drive verge adjacent to the Southern Grandstand and new Club/Retail complex will act to break up views towards new and existing buildings from street level and provide a shaded, human scale pedestrian environment along Captain Cook Drive.

The revegetated and landscaped Woollooware Bay foreshore located to the north of the main Club/Retail complex represents a key pedestrian and cycle linkage within the regional network of bicycle shared paths, as well as representing a key activity space in its own right. In order to establish the ecological functionality of this space, pedestrian activity will largely be confined to pathways with low-profile fencing and key building access points. The future pedestrian connection to the west via the Sharks Stadium 'Family Hill' will ramp up to provide a direct pedestrian/cycle connection to Level 2 (the main retail arcade) in order to enhance pedestrian activity along the length of the Woollooware Bay Town Centre foreshore. In addition, the proposed landscaping scheme includes a terraced semi-formal space for access and congregation which seeks to provide an interface which strengthens connectivity between the foreshore and the main retail arcade. This terraced space will increase activity within the foreshore space whilst ensuring that human activities are appropriately structured and limited so as not to impact upon this area's ecological role.

6.6 Flooding and Stormwater

6.6.1 Flooding

A Flood Assessment Report has been prepared by WMA Water (**Appendix P**) which includes detailed modelling of the existing and post-development flood conditions within and in the vicinity of the site. This study fulfils the flood study requirements of Schedule 5 Statement of Commitment 3, including an assessment of potential sea level rise and increased rainfall intensity as a result of climate change.

Flood Levels

The finished floor level for the ground floor of the proposed retail development (RL 4.0m AHD) is well above the 100-year average recurrence interval (ARI) flood event and probable maximum flood (PMF) flood levels for the site of 2.46m AHD and 3.14m AHD respectively. All vehicular entrances are located above the 100-year ARI flood level.

Figure 15 shows flood levels post-development, which show that the Retail/Club building is almost entirely unaffected by flooding during the 100-year ARI post-development, with a small area of flooding in the vicinity of the Leagues Club loading dock and vehicular entrance. Given the nature of the use of these areas of the development it is considered that shallow flooding (<25cm) of these spaces during the 100-year ARI is acceptable. No new areas of the Retail/Club building are flood affected during the PMF.

Figure 16 shows the impact of the development on flood levels during the 100-year ARI flood event. The proposed development and associated road works will result in reduced flooding in some areas and increased flooding at others, with the vast majority of flooding in the vicinity of the site being unchanged by the proposed development.

The proposed road works will result in a very minor (<5cm) increase in flooding to a small portion of land within the Woollooware high School site adjacent to Captain Cook Drive. This area is generally already subject to flooding during the 20-year ARI event, is not developed and represents a small portion of the open space area available within the school grounds. This flooding arises as a result of the proposed road works rather than the new retail building, and the proposed road works will significantly improve pedestrian safety for school students at the existing intersection. As such it is considered that the minor modelled flooding impact is acceptable.

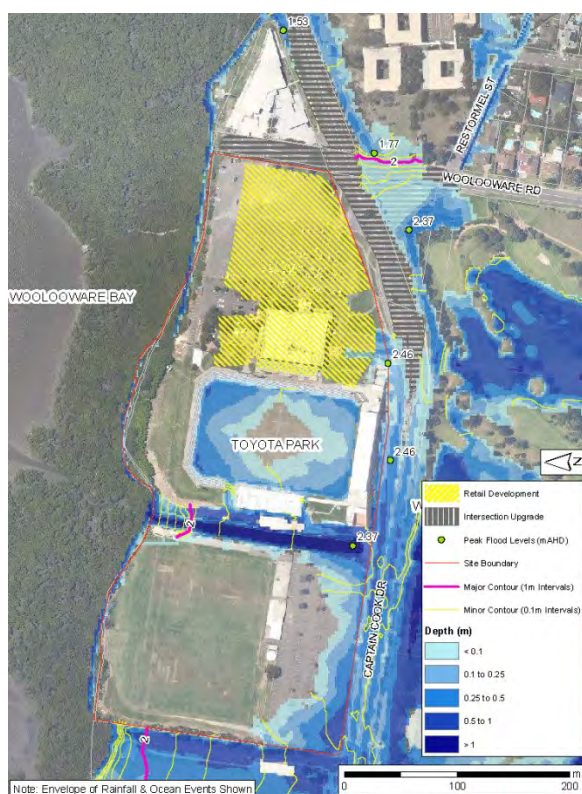


Figure 15 – 100-year ARI post-development flood depths

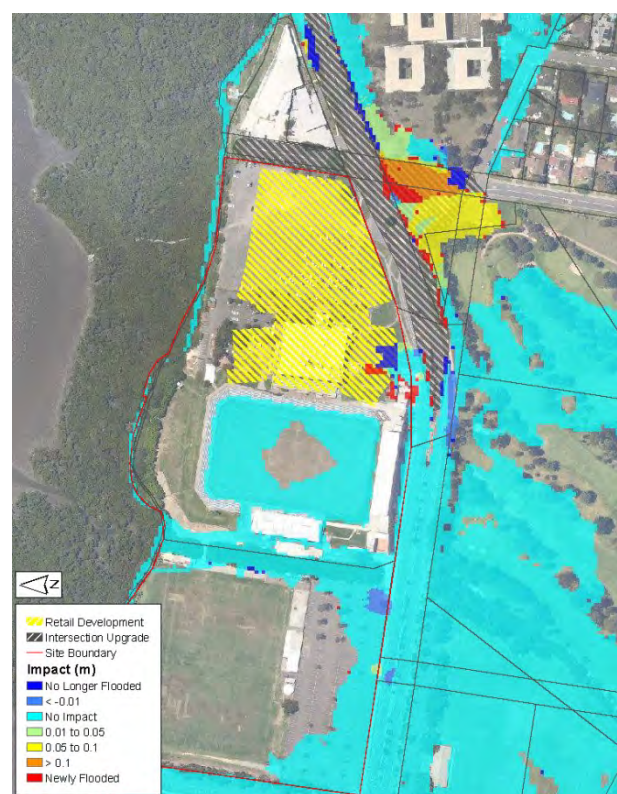


Figure 16 – 100-year ARI post-development depth changes

Climate Change and Sea Level Rise

Due to the relatively flat topography of the site, sea level rise and increased rainfall intensity associated with climate change has a large impact upon the extent of flooding in the vicinity of the site. Sea level rise and increased rainfall intensity in the locality is expected to result in a small amount of additional flooding along Captain Cook Drive and within the vicinity of the Leagues Club loading dock by the year 2100, and will not significantly impact upon the operation of the proposed Retail/Club precinct. Modelling included within the Flood Assessment is based on the (now repealed) *NSW Coastal Planning Guideline: Adapting to Sea Level Rise*, and does not take into account any future flood mitigation of stormwater management which may reduce flooding. In light of the above it is considered that the impact of climate change on the proposed development will be negligible.

Site Egress and Flood Hazard

Safe vehicular and pedestrian evacuation routes from the site via dry and 'low-hazard' low water velocity areas of flooding is available for occupants of the Retail/Club precinct up to and including the PMF flood events. **Figure 17** shows the proposed evacuation route via Captain Cook Drive and Woollooware Road overlaid on flood hazard levels during the 100-year ARI flood event.

A Flood Evacuation Plan for the precinct will be developed prior to the issue of an Occupation Certificate and details will be notified to the relevant local emergency services including the State Emergency Service (SES).

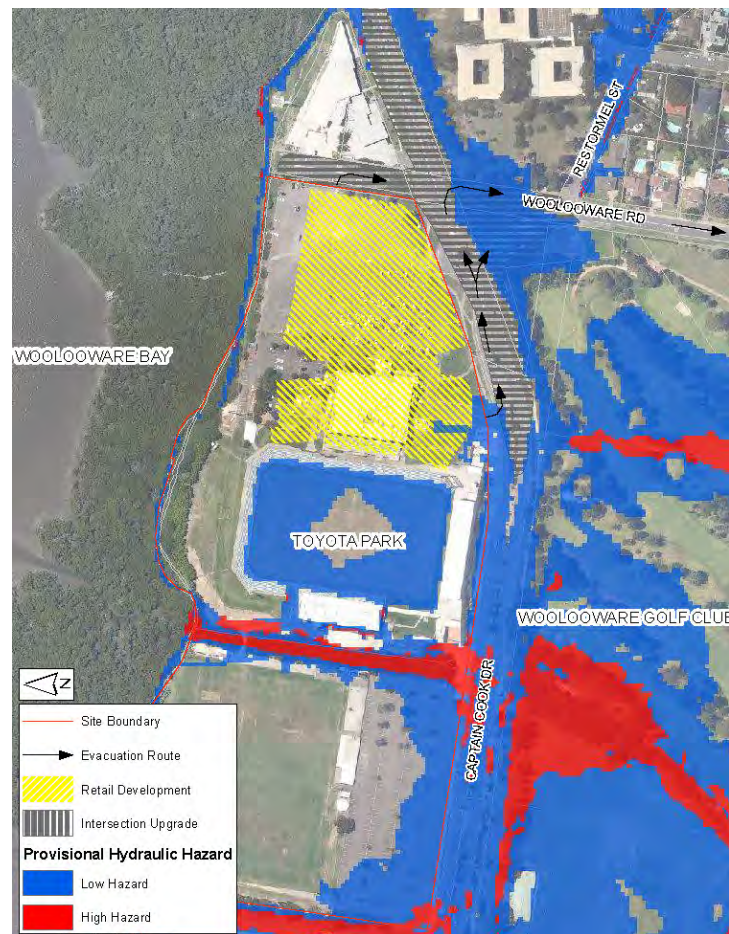


Figure 17 – 100-year ARI post-development flood hazard

6.6.2 Stormwater Management and Water Quality

Water Quality and Water Sensitive Urban Design

The proposed stormwater management system for the site has been designed in accordance with the principles of Water Sensitive Urban Design (WSUD) and the relevant Sutherland Shire Council guidelines to achieve the following water quality objectives for stormwater discharges from the subject site:

- 70% reduction in total suspended solids;
- 20% reduction in total phosphorus content;
- 35% reduction in total nitrogen content;
- Gross Pollutant Trap to retain all litter greater than 50mm-diameter for up to 1-in-3 month storm event; and

- Reduction in external pollutant flows into Woollooware Bay through construction of trash rack at southern culvert entrance underneath Captain Cook Drive.

On-site Stormwater Detention

On-site detention (OSD) of stormwater flows is not proposed for the Woollooware Bay Town Centre site. Due to the location of the site within the lower portion of the local catchment, the use of OSD has the potential to result in stormwater discharges coinciding with peak flows from the upper-catchment area which may result in increased local flooding. As such it is considered that the omission of OSD devices achieves the best environmental outcome for the site.

6.7 Traffic, Access and Transport

The Traffic and Parking Impact Assessment prepared by McLaren Traffic Engineering for the proposed development is included at **Appendix J** and discussed in the following sections.

6.7.1 Vehicular Access and Traffic Generation

The traffic generation rates for the proposed development are lower than those assessed at the Concept Plan Application stage due to the final mix of uses within the Retail/Club precinct. As such, the proposed development will result in impacts on existing and new intersections which are equal to, or better than, those assessed and considered acceptable under the Concept Plan approval.

Condition 9(a) of Schedule 3 of the Concept Approval requires that the first detailed application for development provide details of agreement by the Roads and Maritime Service RMS to the vehicular access arrangements to Captain Cook Drive. The RMS supported the upgrade and signalisation of the intersection of Woollooware Road and Captain Cook Drive throughout the Concept Plan assessment process but required further modelling and detail surrounding the proposed provision of a second signalised access point to the Retail/Club component.

McLaren Traffic Engineering has undertaken additional modelling of the proposed second signalised access to the Retail/Club component, and the preferred access arrangement is now supported by the RMS subject to minor design changes, with correspondence to this effect provided at **Appendix J**. The provision of two signalised intersections to the Retail/Club Precinct is consistent with the Concept Plan approval.

Vehicle manoeuvring paths for private cars and small buses (such as the Leagues Club's courtesy bus) within the centre have been modelled and are included at **Architectural Drawing DA842**. The Traffic and Parking Impact Assessment recommends that an electronic dynamic parking guidance system be installed to direct traffic entering the car park to available spaces, which could also be utilised to manage game-day traffic.

6.7.2 Loading Dock Management

The primary retail centre loading dock shall be accessed from Woollooware Road North as detailed in the Traffic Management and Access Plan prepared by McLaren Traffic Engineering (**Appendix J**). The PAC decision to increase the foreshore setback adjoining the loading dock from 40 metres to 35 metres has constricted ability to provide safe stopping distances to the vehicular access points to the car park and primary retail loading dock from Woollooware Road. In order to ensure the safe operation of this road, the loading dock has been narrowed from the Concept Plan approval, resulting in reduced vehicle manoeuvring areas for large delivery trucks. As a result, articulated service vehicles shall be required to

reverse into the main retail loading dock to enable these vehicles to leave the site in a forward direction. Vehicle manoeuvring paths for articulated service vehicles up to 19 metres in length have been modelled and are included at **Architectural Drawing DA841**.

A detailed Loading Dock Management Plan shall be prepared in consultation with centre management and key retail tenants for both the main retail loading dock and the Leagues Club loading dock prior to the issue of an Occupation Certificate for the centre. This plan shall establish management procedures for loading dock supervision, signage, delivery times, frequencies, truck sizes, waste collection and vehicle movements.

The function of Woollooware Road (northern extension) is primarily to act as a service road for the proposed development and the adjoining gymnasium and service centre sites. In light of this, it is considered that the reversing of trucks into the loading dock at the northern extent of this road (in accordance with appropriate management measures established under a detailed Loading Dock Management Plan) will not adversely impact upon the efficiency or safety of this road.

6.7.3 Pedestrian Environment

The proposed development provides for a significant improvement in pedestrian facilities within the site and along the Woollooware Bay foreshore and is consistent with the key pedestrian linkages identified in the approved Concept Landscape Plans. Landscaping and public domain treatments along the foreshore, Woollooware Road (northern extension), Captain Cook Drive and within the centre will create a positive and safe pedestrian environment which promotes walking. Linkages to surrounding Council paths and new intersections will ensure full pedestrian connectivity to the site's surrounds is achieved.

The location of vehicular entrances to the Club/Retail Precinct have been designed to minimise potential for vehicle and pedestrian conflicts by separating key pedestrian spaces from roads and driveways. The western vehicular access to the Club/Retail carpark is located a sufficient distance from the retail and Leagues Club pedestrian entrances on Captain Cook Drive to ensure minimal interference between the two. Signalised pedestrian access will be provided across this driveway, and additional pedestrian and vehicular control measures will be implemented during game-days and major events at Sharks Stadium to ensure pedestrian conflicts are minimised. At the interface between the foreshore shared path and Woollooware Road (northern extension), clear way-finding and traffic control signage will be provided to ensure that pedestrians are able to safely transit between Captain Cook Drive and the foreshore in a controlled and safe manner.

This Project Application seeks consent for the erection of a pedestrian fence along the Captain Cook Drive median between Woollooware Road and the stormwater drainage channel. This fence will prevent uncontrolled pedestrian movements across Captain Cook Drive and significantly improve road safety in the vicinity of the site. This pedestrian fence will be extended to Gannons Road as part of the Stage 1 residential development.

6.7.4 Cycle Facilities

Bike parking spaces will be provided in excess of the applicable Council rates to facilitate cycling and present the centre as a destination point for cyclist activity along the greater Woollooware Bay foreshore shared path. Appropriate staff change facilities and secure bike storage will be provided on Level One of the centre to encourage cycling for commuting as well as leisure.

The shared path provided within the foreshore landscaped zone will provide a significant and direct linkage from the existing Woollooware Bay shared path at Solander Fields and the future upgraded shared path along the southern side of Captain Cook Drive. The development of the Woollooware Bay Town Centre foreshore path will allow cyclists to transit from Taren Point at Mangrove Lane to North Cronulla at Eloura Road along off-road shared paths with only one road crossing at the signalised intersection of Captain Cook Drive and Woollooware Road (included within this Project Application). This linkage will improve the cycling experience within the subregion and will provide a destination point to allow cyclists to rest, socialise and refresh.

6.7.5 Peak Event Management

A revised Peak Event Management Plan and Satellite Parking Management Plan has been prepared by McLaren Traffic Engineering following consultation with Sutherland Shire Council and is included at Annexure G and Annexure H of **Appendix J**. It is anticipated that these plans shall be endorsed by Sutherland Shire Council and finalised prior to the exhibition of this Project Application.

6.8 Contamination

As discussed at **Section 2.5** of this report, the Phase 2 Detailed Site Investigation prepared by DLA Environmental (**Appendix F**) identified elevated concentrations of methane gas, asbestos fragments within the site fill and the presence of Acid Sulphate Soils as the key issues to be addressed in site remediation. Soil and groundwater contamination were not identified as significant issues. A Remediation Action Plan (RAP) has been prepared for the proposed development by DLA Environmental (**Appendix Q**) which details the remediation strategy which is proposed to be implemented in order to ensure that the site is suitable for the proposed Woollooware Bay Town Centre Club/Retail development. The RAP has been reviewed and endorsed by the independent OEH licensed site auditor (**Appendix R**) as required by Schedule 5 Statement of Commitment 2 of the Concept Plan approval.

Acid Sulphate Soils Management

An Acid Sulphate Soils Management Plan (ASSMP) has been prepared as part of the RAP by DLA Environmental (**Appendix Q**) for the proposed development in accordance with the 1998 *Acid Sulphate Soil Assessment Guidelines* and as required by Schedule 3 Condition 21(g) of the Concept Plan approval. The ASSMP also addresses the management of leachate to ensure that acid leachates do not impact upon the adjoining Towra Point Nature Reserve as required by Schedule 3 Condition 12(f) of the Concept Plan approval.

The ASSMP outlines the management principles for piling, construction and ongoing protection of buildings and surrounding sites. PASS soils are typically located at depths greater than 2 metres on the site, and as such it is not anticipated that built structures will disturb or be impacted by these soils. Piling to bed rock will be required to extend through PASS soils, and as such all piling spoil will be required to be placed in a controlled (bunded) storage area for determination of treatment requirements. Treated PASS soils will be reused on-site as subsurface fill where possible in order to minimise construction-phase waste generation and truck movements. Where on-site reuse is not possible PASS soils will be treated on-site and disposed of at an appropriate waste facility.

Leachate Management

Groundwater and visual assessments by DLA Environmental undertaken in preparing the Phase 2 Detailed Site Investigation (**Appendix F**) and RAP (**Appendix Q**) found the existing ground water to be of an acceptable quality, clarity and odour, and with low ammonia content and not indicative of putrescible wastes

generally associated with leachate generation. The RAP therefore concludes that no further investigation of leachate within the site are required and hence control measures, such as the preparation of a Leachate Management Plan, are not required.

Methane Gas Management

A Methane Gas Management Plan has been prepared as part of the RAP by DLA Environmental (**Appendix Q**) and agreed to by the Site Auditor (**Appendix R**) in accordance with Schedule 3 Condition 19(b) of the Concept Plan approval. This plan establishes management principles to ensure that gas does not build up underneath new structures or in service pits using ventilation systems (natural and mechanical) or penetrate into the building through the use of physical barriers.

Asbestos Management

A Site Asbestos Management Plan has been prepared as part of the RAP by DLA Environmental (**Appendix Q**). This plan includes precautionary management measures and strategies for piling, excavation and works within areas of the site which contain asbestos. All asbestos material will be managed in accordance with the relevant WorkCover NSW guidelines and the requirements of the *Work Health and Safety Act 2011*.

An airborne asbestos monitoring program will be implemented with background monitoring for airborne asbestos carried out prior to the commencement of work, daily airborne asbestos monitoring during periods of intrusive works at ground level, and monitoring of meteorological conditions including wind speed and direction. This monitoring program shall ensure that the disturbance and removal of asbestos material will not impact upon occupants of nearby sites.

6.9 Flora and Fauna

6.9.1 Microbats

Schedule 5 (Statement of Commitment No.8) of the Concept Approval requires further investigation to confirm the presence (or otherwise) of the Large-footed Myotis within the mangroves adjoining the site. Further detailed investigations into the presence of this species have been undertaken by EcoLogical Australia and are included in a Microbat Monitoring Report (**Appendix S**).

The Large-footed Myotis was identified within the study area during further visual inspection and Anabat recordings. As such, the study makes a number of recommendations relating to lighting, noise, habitat protection, water quality and landscaping to ensure that microbat habitat within the mangroves to the north of the site is adequately protected. These measures shall ensure that the proposed development will not result in any significant impact upon the microbats located within the wetlands. A Statement of Commitment is included at **Section 7.0** which requires that these recommendations are implemented during the detailed design, construction and occupation phases of the project.

6.9.2 Vegetation Management

A Vegetation Management Plan (VMP) has been prepared for the proposed foreshore riparian buffer by EcoLogical Australia (**Appendix U**) in order to ensure that this area fulfils its intended ecological values and to satisfy Schedule 5 Statement of Commitment 8 of the Concept Plan approval. The VMP outlines the appropriate species selection, soil conditions, planting processes, irrigation and management requirements required to successfully recreate Swamp Oak Floodplain Forest ecological community within the riparian zone in the area designated in the Landscape Drawings prepared by ASPECT Studios (**Appendix H**).

6.9.3 Noise Impacts

The 'Review of Noise, Light and Bird Strike Potential' prepared by EcoLogical Australia (**Appendix T**) includes a review of the Noise Assessment carried out by Acoustic Logic (discussed in detail at **Section 6.10**) with regard to potential impact upon fauna in the vicinity of the site. At present there is no established policy or academic framework for the assessment of noise impacts on fauna, and as such the impact of noise on local fauna is based on existing experience of the site, fauna species and local ecosystems.

Adverse noise impacts are likely to be limited to the construction phase of the proposed development, with noise levels during the operational phase being generally consistent with existing measured noise levels. The construction phase for site preparation and erection of the base building is anticipated to last for a total period of 18-24 months, during which noise levels will vary. High-intensity noises, such as hydraulic hammering, are likely to be limited to short periods within the overall construction process. Whilst EcoLogical's review finds that some bird species may opt to forage elsewhere within the Woollooware Bay during the construction period, bats which roost in the adjoining mangrove areas to the north of the site are unlikely to be affected as all significant noise-generating works will be conducted during daylight hours. EcoLogical's review finds that fauna within the Towra Point Nature Reserve, the nearest point of which is which is located 500m to the east of the site, is unlikely to be affected.

Ultimately, the proposed development facilitates the establishment of a new 35-40 metre wide vegetated buffer to the Woollooware Bay foreshore which will improve ecological performance of the site and the surrounding wetlands, and which will establish new potential habitat for local fauna including within the newly established Swamp Oak Floodplain Forest.

6.9.4 Light Spill Management

The 'Review of Noise, Light and Bird Strike Potential' prepared by EcoLogical Australia (**Appendix T**) finds that potential environmental impacts relating to lighting within the landscaped area surrounding Woollooware Bay is capable of being appropriately managed, subject to the implementation of the following recommendations:

- Install lights along the side of the path which is opposite the mangroves rather than adjacent
- Install low bollards (1-2 m height) where possible, with post tops (4-5 m height) installed at key pedestrian junctions if required for public safety
- Utilise low pressure sodium lamps with UV filters
- Minimise the time during which the lighting is used
- Use lowest possible brightness
- Direct light below the horizontal plane towards the path and shield mangroves by fitting lights with hoods
- Do not illuminate bat roosts / mangroves
- Ensure that bat habitat/flyways are not cut-off by installation of light sources i.e. don't install lights on bridges across the channel or on boardwalks through the mangroves

A Statement of Commitment is included at **Section 7.0** of this report to ensure that these design measures are adopted in the final development.

6.9.5 Bird Strike Potential

The 'Review of Noise, Light and Bird Strike Potential' prepared by EcoLogical Australia (**Appendix T**) considers the potential for bird strike against windows within the proposed development. The design of the proposed building towards the Woollooware Bay foreshore has included measures to reduce the likelihood of bird strike, with the majority of glazed facades set back below covered awnings and pedestrian paths which reduce the likelihood of birds flying directly into these spaces. Where there are direct sight lines through glazed areas in the building, consideration will be given to treatment of glass to ensure that it is visible to birds.

6.9.6 Tree Removal

This Project Application proposes the removal of a total of 75 trees within the development site, including 9 trees that are of high retention value and in good health, in order to facilitate the construction of the proposed development and the establishment of the foreshore buffer zone. The Arborist's Report (**Appendix E**) recommends that in order to mitigate the impact of the removal of moderate and high-retention value trees from the site that a minimum of 30 new trees be planted within the site which are capable of attaining a mature height of at least 12 metres. The Landscape Plans prepared by ASPECT Studios (**Appendix H**) details the provision of a substantial number of new trees which are capable of growing to over 12 metres, and as such it is considered that the removal of the existing trees will not result in any adverse environmental impacts.

The Arborist's Report recommends that consideration be given to the transplanting of the Port Jackson Fig which is located within the landscaped centre of the roundabout at the intersection of Captain Cook Drive and Woollooware Road. This recommendation has been incorporated and the Fig shall be replanted within the site as shown in the Landscape Plans prepared by ASPECT Studios (**Appendix H**).

6.10 Noise & Vibration Impact

A Noise Impact Assessment has been prepared for the proposed development by Acoustic Logic and is provided at **Appendix V**. This report establishes the existing noise environment of the site and assesses the potential noise impact from the proposal during the construction and operational phase of the development against the relevant criteria and standards.

Noise impacts on fauna and flora have been assessed by EcoLogical Australia on the basis of the Noise Impact Assessment and are discussed separately in detail at **Section 6.9** of this report.

6.10.1 Construction Noise

Acoustic Logic has identified the relevant noise and vibration controls relating to the construction phase of the proposal. These guidelines and standards will be used to inform the preparation of a Construction Noise and Vibration Management Plan prior to the issue of the relevant Construction Certificate. A number of recommendations and management measures have been provided in the Noise Impact Assessment and are required to be addressed at the relevant development stage by a Statement of Commitment included at **Section 7.0** of this report.

6.10.2 Operational Noise

The Noise Impact Assessment finds that the proposed development will comply with the relevant criterion established in the (former) Department of Environment and Climate Change's (DECC) *Industrial Noise Policy*. Noise emissions generated from the development are not expected to exceed the background noise level by more than 15 dB(A). At the majority of times, the expected noise generation from the development falls below the measured background noise levels. During the

detailed design of the development there will be a continued focus on the inclusion of acoustic treatments and controls to limit the noise emissions of the development and ensure compliance with the relevant noise level criteria.

The selection of appropriate mechanical plant required to service the proposed development will be determined prior to the issue of the relevant Construction Certificate. An acoustic assessment of the selected plant equipment and any noise enclosures will be carried out to ensure that this mechanical plant does not impact on the surrounding amenity. The Noise Impact Assessment includes several recommendations regarding plant location and acoustic treatment to minimise and mitigate potential noise impacts from the mechanical plant, and these recommendations are included as a Statement of Commitment at **Section 7.0**.

6.10.3 Traffic Noise

The Noise Impact Assessment considers the potential noise impacts on surrounding properties as a result of increased traffic from the proposed development. This assessment has taken into account the potential worst case noise increases on each of the surrounding streets, and finds that even during peak traffic generating periods the proposal is not expected to result in the exceedances of the relevant criteria for local roads specified under the *Environmental Criteria for Road Traffic Noise*.

6.11 Major Events

The public forecourt will be well-utilised on major event days and will act as both a focal point for meeting and entering Sharks Stadium and also as a distribution point for patrons entering and exiting the ground. During major events this space will act as a key interface on Captain Cook Drive between the stadium, the retail precinct and transport linkages.

This Project Application seeks consent for new bus bays along Captain Cook Drive for both east-bound (in front of Retail/Club and Residential precincts) and west-bound (in front of Retail/Club precinct) buses, which will significantly improve the ability of bus transport providers to convey patrons to and from Sharks Stadium.

The proposed development shall significantly enhance the functioning of traffic to and from Sharks Stadium during major events by providing for an integrated transport strategy which seeks to reduce local traffic congestion and promote. The *Peak Event Management Plan* prepared by McLaren Traffic Engineering will be updated prior to the determination of this Project Application to reflect the outcomes of ongoing consultation with Sutherland Shire Council.

Consideration will be given to the designation and use of car parking spaces within the Retail/Club Precinct for major event parking, to be in addition to the shuttle bus and public transport network established under the *Peak Event Management Plan*. Use of parking within the centre for game-day parking will be subject to appropriate control measure in order to ensure that sufficient parking is available to the retail centre.

6.12 Indigenous Archaeology

An Archaeological Assessment Addendum report has been prepared by Godden Mackay Logan for the entirety of the Cronulla Sutherland Leagues Club site (as required by the Director General's Requirements) and is provided at **Appendix W**.

The report finds that the study area does not have the potential to possess Aboriginal burials and that the potential for the study area to possess intact Aboriginal archaeological deposits is low to nil. As such the report concludes that no further archaeological monitoring, recording or investigation is required.

The La Perouse Local Aboriginal Land Council was forwarded a copy of the Archaeological Assessment Addendum for comment however no response has been received to date.

6.13 Accessibility

An Access Review has been prepared for the proposed development by Morris Goding Accessibility Consulting (**Appendix X**) to ensure that site access, ingress and egress, paths of travel, common area access, circulation areas, passenger lifts, accessible carparking and accessible toilets comply with the access provisions of the Building Code of Australia, the Disability Discrimination Act Premises Standards and Australian Standard 1428 – 2010 'Design for Access and Mobility'. The review finds that the proposed development demonstrates an appropriate level of accessibility, and makes a number of recommendations for the design to be incorporated prior to the issue of a Construction Certificate. A Statement of Commitment is included at **Section 7.0** to ensure that these recommendations are adopted in the final development.

6.14 Fire Safety

Arup have reviewed the proposed development and undertaken an initial assessment (**Appendix Y**) of the architectural drawings with regard to compliance with the fire safety design and performance requirements of the Building Code of Australia (BCA). Based on this assessment it is evident that the proposed development will generally satisfy the 'Deemed to Satisfy' provisions of the BCA, however fire engineered solutions may be required to ensure compliance with the performance requirements with respect to travel distances, smoke control, fire resistance and allotment separation. Notwithstanding the above, the proposal is considered to be capable of complying with the provisions of the BCA and as such the proposed design is acceptable from a fire safety perspective.

6.15 Building Code of Australia

The proposed development has been reviewed against the applicable requirements of the Building Code of Australia (BCA) 2012 by Vic Lilli & Partners (**Appendix Z**). This assessment concludes that the proposed development is capable of readily achieving compliance with the BCA.

6.16 Ecologically Sustainable Development

An Ecologically Sustainable Development (ESD) Report has been prepared for the proposed development by ARUP (**Appendix AA**). This report considers the environmental targets for the Retail/Club precinct established under the Concept Plan and the inclusion of ESD principles in the detailed building design. In particular, the ESD Report has regard to Schedule 3 Condition 11 and Schedule 5 Statement of Commitment 7 of the Concept Plan approval.

An initial assessment of the proposed development against the requirements of Section J of the BCA has been carried out to ensure building systems and materials support energy efficient building design and meet the standards established under the Concept Plan. Measures to reduce energy consumption within the Retail/Club Precinct include:

- BCA Section J-compliant glazing and building insulation
- use of efficient LED and fluorescent lighting in 80% of all fittings;
- diversion rate of 80% of waste from landfill;

- introduction of light wells into common circulation areas of the retail centre to improve daylight quality; and
- north-facing dining and retail tenancies to promote natural lighting, with retractable shade canopies to provide suitable thermal management.

Water consumption within the precinct will target a minimum 25% in potable water consumption through the use of efficient appliances and use of harvested rainwater for toilet-flushing, irrigation and partial-supply to water cooling towers.

Carbon and greenhouse gas emission reductions will be targeted to exceed the BCA requirements and will include measures such as the energy efficiency measures outlined above, selection of building materials with lower embodied carbon, reduction of construction waste output and improvements to public transport within the locality.

Green Travel

Condition 10 of Schedule 3 of the Concept Approval requires that future applications provide details of any Travel Access Guide or Green Travel Plan. Prior to the issuing of an Occupation Certificate, a Travel Access Guide will be prepared for issue to staff and patrons of the Leagues Club, retail, leisure and medical centre with information regarding transport options. This will include details of the shuttle bus and/or public bus service and broader public transport network, cycle facilities and linkages and car parking facilities.

The Retail/Club precinct within Woollooware Bay Town Centre largely functions as a destination within the town centre rather than an origin, and therefore it is not considered that a car share scheme would attract sufficient patronage within the precinct to warrant its inclusion. Centre management will investigate options to facilitate home delivery options for local residents in order to support the use of non-car transport modes. As an origin location, the residential precinct may be more suitable for the inclusion of a car share scheme and detailed consideration will be given to this in future Development Applications for that precinct.

6.17 Crime and Public Safety

A CPTED (Crime Prevention through Environmental Design) Assessment has been prepared for the proposed development by JBA (**Appendix BB**) in fulfilment of the requirements of the Director General's Requirements and Schedule 3 Condition 25 of the Concept Plan approval. The CPTED Assessment finds that the Crime Risk Assessment Rating of the proposed development is 'Low'.

The following recommendations of the assessment seek to further improve the safety and security of the development have been considered at this stage of design and will be incorporated in the final detailed design, construction and management of the Retail/Club precinct:

- Consider the use of way finding signage to reinforce visitors perception of safety and legibility of the development.
- Ensure the landscaping design does not give rise to concealment opportunities and does not restrict sightlines from the development overlooking public open spaces.
- Consult a qualified lighting engineer to ensure the correct lighting is provided to meet minimum Australia and New Zealand Lighting Standards and enable sufficient surveillance of the entire site.
- Consider the provision and use of a formal security presence throughout the development.

- Ensure mechanisms are in place for on-going maintenance of landscaping and the building, which includes:
 - rapid removal policy for vandalism repair and the removal of graffiti; and
 - maintenance of all surrounding public spaces.

6.18 Construction Management

The Construction Management Plan prepared for the proposed development by Parkview Constructions (**Appendix L**) details the site management procedures that will ensure that construction proceeds in an orderly and economic manner without any significant adverse environmental impacts. Issues including construction traffic and parking, dust control, site fencing, site management, materials handling, and dust control. An Erosion and Sediment Control Plan is included within the Civil Infrastructure Drawings prepared by AT&L (**Appendix I**) which will ensure that runoff from the site does not adversely impact upon flora or fauna within the site's stormwater catchment (Woollooware Bay).

A key management consideration throughout the construction process will be ensuring that the Leagues Club is able to continue to provide its key social and recreational functions and maintain its presence within the site for Club members. Construction within the retail precinct will be staged so as to ensure that safe and clearly marked access is provided for patrons of the Leagues Club to and from the temporary parking area. Construction management processes will ensure that the Leagues Club is able to continue to provide its social and recreational functions to the community throughout the construction period, and the Leagues Club and the appointed builder shall liaise regularly to ensure that any issues are resolved in a timely manner.

6.19 Waste Management

A Waste Management Plan has been prepared for the proposed development by Leigh Design and is provided at **Appendix CC**. This plan identifies the anticipated waste generation volumes, waste streams, storage requirements, management and collection frequencies and procedures. Waste will be collected by private contractors and the removal of waste from storage areas in the vicinity of the loading docks will be coordinated by centre management.

6.20 Shopping Trolley Management

A Shopping Trolley Management System will be implemented by management of the retail centre in conjunction with key retail centres as part of leasing agreements and ongoing management processes. An integrated approach will be taken across the Woollooware Bay Town Centre development so as to minimise the use of shopping trolleys to convey goods from the shopping centre to the residential precinct and surrounding areas.

Measures which will be considered for implementation will include:

- Use of established trolley wheel-lock technology to prevent trolleys from leaving the Club/Retail precinct;
- Investigation of a home-delivery service to the residential precinct and surrounding residential neighbourhood;
- Woollooware Bay Town Centre branded private trolleys to ensure ease of identification and retrieval; and
- Provision of personal two-wheeled fabric shopping trolleys to tenants and owners of apartments within the Woollooware Bay Town Centre residential precinct as part of 'welcome packages'.

Future Development Applications for the fit-out and use of major supermarket and mini-major retailers will demonstrate that appropriate trolley management measures are in place.

6.21 Electromagnetic Radiation

An Electromagnetic Radiation Report prepared by Magshield Products International accompanied the Concept Plan application, and found that electromagnetic radiation levels within the Retail/Club precinct would be well within the applicable criteria for future occupants of this precinct and therefore no further assessment is required.

7.0 Draft Statement of Commitments

Subject	Commitments	Approved by Whom	Timing
1. Accessibility	The recommendations of the Access Review prepared by Morris Goding Accessibility Consultants dated 23 February 2013 shall be incorporated into the design and be provided in the final development.	Private Certifying Authority	Prior to Issue of Construction Certificate/ Prior to Issue of Occupation Certificate
2. Bird Strike	Where there are direct sight lines through glazed areas from external areas through the building to other external areas, glazing will include appropriate treatment of glass to ensure that it is visible to birds.	Private Certifying Authority	Prior to Issue of Construction Certificate
3. Contamination	The Remediation Action Plan (including the Methane Gas Management Plan, Asbestos Management Plan and Acid Sulphate Soils Management Plan) prepared by DLA Environmental Revision 6.0 dated March 2013 shall be implemented to the satisfaction of an OEH licensed independent site auditor.	Private Certifying Authority	Prior to Issue of Occupation Certificate
	Any condition included on the Site Audit Statement shall become a condition of consent.		Ongoing
	Groundwater shall not be extracted for use in the development.		Ongoing
4. Crime Prevention through Environmental Design	The recommendations of the Crime Prevention through Environmental Design Assessment prepared by JBA dated 15 February 2013 shall be incorporated into the design and be provided in the final development.	Private Certifying Authority	Prior to Issue of Construction Certificate
5. Construction Management	The development will be carried out in compliance with the Construction Management Plan (CMP) prepared by Parkview Constructions.	Private Certifying Authority	Prior to Issue of Construction Certificate
6. Travel Access Guide	A Travel Access Guide shall be prepared and distributed to staff and visitors to the site by centre management which details public transport services and connections, pedestrian and cycle facilities and parking arrangements for the centre.	Private Certifying Authority	Prior to Issue of Occupation Certificate
7. Floor Space Allocation	Any Development Application for first fit-out and uses of tenancies within the Retail/Club precinct which varies from the approved use detailed in Architectural Drawings DA041, DA042, DA043 and DA044 will be accompanied by a Traffic Statement which confirms that adequate parking is provided within the precinct to support the alternate use.	Relevant Consent Authority	Ongoing

Subject	Commitments	Approved by Whom	Timing
8. Lighting	Design of all lighting within 40m of the MHW of Woollooware Bay will be in accordance with the recommendations contained in Section 3.2 of the <i>Review of Noise, Light and Bird Strike Potential</i> prepared by EcoLogical Australia dated 12 February 2013.	Private Certifying Authority	Prior to Issue of Construction Certificate
9. Loading Dock	A Loading Dock Management Plan shall be prepared by an appropriately qualified traffic engineer to address supervision, signage and management procedures for both the main retail loading dock and the Leagues Club loading dock in consultation with key tenants.	Private Certifying Authority	Prior to Issue of Occupation Certificate
10. Noise	A Construction Noise Management Plan will be prepared and implemented in accordance with the recommendations of the Noise Impact Assessment prepared by Acoustic Logic dated 24 January 2013.	Private Certifying Authority	Prior to Issue of Construction Certificate
	Acoustic treatment of mechanical ventilation and plant equipment will be provided in accordance with the recommendations of the Noise Impact Assessment prepared by Acoustic Logic dated 24 January 2013.	Private Certifying Authority	Prior to Issue of Construction Certificate
11. Sea Wall	Detailed design of the proposed seawall shall be in accordance with the principles in the 'Environmentally Friendly Seawall Guidelines' produced by the former Department of Environment and Climate Change and Sydney Metropolitan Catchment Management Authority.	Private Certifying Authority	Prior to Issue of Construction Certificate
12. Shuttle Bus	The land owner shall be responsible for the provision of a shuttle bus service as detailed in Section 4.9 of the Environmental Assessment Report.	Private Certifying Authority	Commence upon issue of Occupation Certificate. Conclude upon commencement of first timetable public bus service via the site
13. Vegetation Management	Management principles established under the Vegetation Management Plan prepared by EcoLogical Australia dated 12 January 2013 shall be adopted in the detailed design and establishment of foreshore landscaping	Private Certifying Authority	Prior to Issue of Construction Certificate/ Prior to Issue of Occupation Certificate

8.0 Conclusion

This Project Application seeks consent for the development of the Retail/Club Precinct of Woollooware Bay Town Centre, and represents the first detailed application for the development of the new town centre which was approved under Concept Plan MP10_0229 by the Planning Assessment Commission in August 2012.

The detailed architectural design of the proposed development has responded to the need to provide an increased foreshore setback, additional car parking and greater building modulation and articulation. These design outcomes have been achieved through the framework of place architecture in order to achieve a development outcome that operates within the overall Woollooware Bay Town Centre and creates an attractive, functional and safe place that fulfils the activity supporting roles of a town centre.

The proposed development will provide a range of important new retail, medical, recreational and leisure facilities for the benefit of the community within a functional and integrated new centre. The introduction of new supermarket and specialty food retail floor space will address in part a severe shortage of supermarket floorspace within the local catchment, improving access to fresh food and improving competition within the region.

Key issues raised during the assessment of the Concept Plan application, including site access, flooding and stormwater management and architectural design of the proposed building, have all been addressed in this Project Application, as have other issues relevant to the detailed design and operation of the proposed development. The Environmental Assessment addresses the Director General's Requirements for environmental assessment of this Project Application and the Terms of Approval for Concept Plan MP10_0229.

The proposed Concept Plan raises no adverse environmental impacts that cannot be effectively managed via the Statement of Commitments. Given the justification for the proposal, and the fact that it is generally consistent with the approved Concept Plan for the Woollooware Bay Town Centre, we have no hesitation in recommending this Project Application for approval.