

**JOINT REGIONAL PLANNING PANEL  
(Sydney West Region)**

<b>JRPP No</b>	2011SYW037
<b>DA Number</b>	DA0109/11
<b>Local Government Area</b>	Ku-ring-gai Council
<b>Proposed Development</b>	Demolition of four (4) dwellings and construction of three (3) residential flat buildings comprising fifty nine (59) units and three (3) levels of basement car parking.
<b>Street Address</b>	1179 Pacific Highway (lots 4 and 5 of DP 16292), 2, 4, and 6 Warrangi Street (lots 1, 2, and 3 of DP 16292) Turramurra
<b>Applicant/Owner</b>	Mackenzie Architects / BR Sheedy, JH Sheedy, RG Haines, DN Haines, LF Levy, RC Ibanez, and SG Ibanez
<b>Number of Submissions</b>	Nine (9) submissions were received in relation to the proposal (one of which is on behalf of seven (7) property owners).
<b>Recommendation</b>	Deferred Commencement Consent
<b>Report by</b>	Grant Walsh, Executive Assessment Officer

## Assessment Report and Recommendation

### SUMMARY SHEET

<b>REPORT TITLE:</b>	DEMOLITION OF 4 DWELLINGS AND CONSTRUCTION OF THREE (3) RESIDENTIAL FLAT BUILDINGS COMPRISING FIFTY NINE (59) UNITS, THREE (3) LEVELS OF BASEMENT CAR-PARKING, AND ASSOCIATED LANDSCAPING
<b>WARD:</b>	WAHROONGA
<b>DEVELOPMENT APPLICATION N<sup>o</sup>:</b>	DA0109/11
<b>SUBJECT LAND:</b>	1179 Pacific Highway TURRAMURRA NSW 2074 Lot 4 & 5 of DP 16292 2 Warrangi Street TURRAMURRA NSW 2074 Lot 1 of DP 16292 4 Warrangi Street TURRAMURRA NSW 2074 Lot 2 of DP 16292 6 Warrangi Street TURRAMURRA NSW 2074 Lot 3 of DP 16292
<b>APPLICANT:</b>	MacKenzie Architects
<b>OWNER:</b>	BR Sheedy, JH Sheedy, RG Haines, DN Haines, LF Levy, RC Ibanez, and SG Ibanez
<b>DESIGNER:</b>	MacKenzie Architects
<b>PRESENT USE:</b>	Residential
<b>ZONING:</b>	Residential 2(d3)
<b>HERITAGE:</b>	No
<b>PERMISSIBLE UNDER:</b>	Ku-ring-gai Planning Scheme Ordinance (KPSO)
<b>COUNCIL'S POLICIES APPLICABLE:</b>	KPSO DCP 31 - Access DCP 40 – Waste Management DCP 43 – Car Parking DCP 47 – Water Management DCP 55 – Railway / Pacific Highway Corridor and St Ives Centre DCP 56 Notification
<b>COMPLIANCE WITH CODES/POLICIES:</b>	No
<b>GOVERNMENT POLICIES APPLICABLE:</b>	SEPP 55 – Remediation of Land SEPP 65 – Design Quality of Residential Flat Development SEPP BASIX 2004 SEPP Infrastructure 2007 SREP 2005 – (Sydney Harbour Catchment)
<b>COMPLIANCE WITH GOVERNMENT POLICIES:</b>	No

<b>DATE LODGED:</b>	9 March 2011
<b>40 DAY PERIOD EXPIRED:</b>	18 April 2011
<b>PROPOSAL:</b>	Demolition of 4 dwellings and construction of three residential flat building comprising of 59 units and 3 levels of basement car-parking
<b>RECOMMENDATION:</b>	Deferred Commencement Consent

## PURPOSE FOR REPORT

To determine Development Application No. 0109/11, for the demolition of existing dwellings and construction of three residential flat buildings comprising 59 units, 3 levels of basement car parking, and landscaping.

The application is required to be reported to the Joint Regional Planning Panel as the stated cost of works (CIV) of \$18.56 million exceeds \$10 million.

## EXECUTIVE SUMMARY

<b>Issues:</b>	Building separation/visual privacy, apartment layout, ceiling heights/internal amenity.
<b>Submissions:</b>	Yes
<b>Land &amp; Environment Court Appeal:</b>	No
<b>Recommendation:</b>	Deferred Commencement Consent

## HISTORY

12 March 2008	Development consent to DA0374/07 was granted for three residential flat buildings consisting of 59 units, basement car-parking, and landscaping. The proposed development is largely within the approved building footprint and envelope with some change to the external configuration and internal layout of the buildings.
9 March 2011	DA0109/11 lodged with Council.
17 March 2011 – 27 April 2011	Application notified.
17 March 2011	External referrals were sent to Energy Australia and the Roads and Traffic Authority (RTA) of NSW.
9 June 2011	Council officers brief the JRPP on the application.

28 June 2011	Council wrote to the applicant regarding the submission of amended plans to address the issues raised by Council Officers.
13 July 2011	A meeting was held with the applicant to discuss outstanding issues.
17 August – 30 August 2011	The applicant submits additional information which consists of an amended deep soil compliance diagram, landscape plan, arborist report, ecological assessment, additional storage areas for units, additional ventilation for kitchens and solar access information.
6 September 2011	A meeting was held between Council's Landscape Officer and applicant's landscape consultant to discuss remaining outstanding landscape issues.
12 September 2011	A final meeting was held between the applicant and Council staff to discuss remaining outstanding issues.
16 September 2011	The applicant lodged amended plans.

## **THE SITE**

Zoning:	Residential 2(d3)
Lot Number:	1, 2, 3, 4, 5 of DP 16292
Area:	5053.1m <sup>2</sup>
Side of Street:	Northern side of Pacific Highway and Western side of Warrangi Street
Cross Fall:	North/South
Stormwater Drainage:	To street
Heritage Affected:	Site is located within the vicinity of 1161, 1163, 1187 Pacific Highway and 7 Warrangi Street Turamurra
Integrated Development:	No
Bush Fire Prone Land:	Yes - Bushfire prone vegetation buffer
Endangered Species:	Yes – Sydney Blue Gum High Forest
Urban Bushland:	No
Contaminated Land:	No

## **THE SITE AND SURROUNDING AREA**

### **The site**

The subject site comprises five (5) lots which are identified as Lots 2, 3, and 4 in Deposited Plan (DP) 16292 being 2, 4, and 6 (respectively) Warrangi Street Turramurra and lots 4 and 5 of DP 16292 being 1179 Pacific Highway Turramurra. The (combined) site is located on northern side of the Pacific Highway on the corner of the Pacific Highway and Warrangi Street. The site is located between the Turramurra and Pymble Town Centres and railway stations. It is noted that three lots face Warrangi Street whilst two lots face the Pacific Highway.

The subject site has a combined area of 5053.1m<sup>2</sup> and contains the following boundary dimensions: south-west (Pacific Road frontage) 75.82m, south-east (Warrangi Street frontage) 70.10m, south (corner of Pacific Highway and Warrangi Street) 5.56m, north-west 76.20m, and north-east 81.92m.

The site slopes generally in a north/south direction, with the northern end, being approximately 5m lower than the southern end.

The site includes significant vegetation as defined by Council's Tree Preservation Order and also includes species which are identified as belonging to the Blue Gum High Forest (BGHF) Critically Endangered Ecological Community (CEEC).

Existing development on site consists of a two storey dwelling house with attached carport and swimming pool on lot 1 (2 Warrangi Street), a two storey dwelling house with detached garage on lot 2 (4 Warrangi Street), a two storey brick dwelling house with attached garage on lot 3 (6 Warrangi Street), and a two storey dwelling house with an attached garage on lot 5 (1179 Pacific Highway).

Site works commenced in August of 2011 relating to the development consent to DA0374/07. Demolition of the existing buildings and removal of vegetation is complete with excavation associated the basement car park currently being undertaken.

### **Surrounding development**

Development on adjoining properties primarily consists of one and two storey single dwelling houses set in established gardens. However, residential flat buildings are located within the immediate area, particularly to the south on the Pacific Highway. Construction of a town house development is currently underway opposite the subject site at No. 1 Warrangi Street.

## THE PROPOSAL

The proposal is for demolition of the four (4) existing dwellings, including all garages/carports and a swimming pool at 2 Warrangi, and construction of three 4-5 storey residential flat buildings containing 59 units summarised as follows:

- 17x1 bedroom dwellings (including 6 adaptable dwellings);
- 32x2 bedroom dwellings;
- 9x3 bedroom dwellings; and
- 1x4 bedroom dwelling.

There are three (3) levels of basement car-parking containing 107 parking spaces including 92 residential and 15 visitors. The basement car-park is accessed from a two-way driveway from Warrangi Street at the north-east corner of the subject site.

Specifically, the proposal comprises the following:

<b>Basement Levels</b>	
Basement Level 3: RL 155.3.	29 car spaces, two lifts, access stairs, storage areas, and stormwater pump out pit.
Basement Level 2: RL, 156.89, 157.89 and 158.2.	44 car spaces, 4 lifts, access stairs and storage areas.
Basement Level 1: RL 159.79, 161.00, and 161.10.	34 car spaces, 4 lifts, garbage store, access stairs, plant/services rooms, rainwater tank, and storage areas.
<b>Ground Floor Level:</b>	
Block A: RL 164.54 and 162.92.	Five units (1x3 bedrooms, 3x2 bedrooms, and 1x3 bedrooms with study).
Block B: RL 164.00.	Four units (2x2 bedrooms and 2x1 bedrooms with study).
Block C: RL 165.50.	Four units (2x2 bedrooms and 2x1 bedrooms with study).
<b>First Floor Level</b>	
Block A: RL 165.59 and 167.47.	Five units (2x3 bedrooms and 3x2 bedrooms).
Block B: RL 166.9.	Four units (2x2 bedrooms and 2x1 bedroom with study).
Block C: RL 168.40.	Four units (2x2 bedrooms and 2x1 bedroom with study).

<b>Second Floor Level</b>	
Block A: RL 168.49 and 170.37.	Five units (1x3 bedrooms, 3x2 bedrooms and 1x1 bedroom).
Block B: RL 169.8.	Four units (2x2 bedrooms and 2x1 bedroom with study).
Block C: RL 171.30.	Four units (2x2 bedrooms and 2x1 bedroom with study).
<b>Third Floor Level</b>	
Block A: RL 171.39, 173.27.	Five units (1x3 bedrooms, 3x2 bedrooms and 1x1 bedroom).
Block B: RL 174.20.	Four units (2x2 bedrooms and 2x1 bedroom with study).
Block C: RL 174.20.	Four units (2x2 bedrooms and 2x1 bedroom with study).
<b>Penthouse Level</b>	
Block A: RL 174.29, 176.17.	Two units (1x3 bedrooms and 1x4 bedrooms with study).
Block B: RL 175.60.	One unit (1x3 bedroom with study).
Block C: RL 177.0.	One unit (1x3 bedroom with study).

Vehicular access is to be from Warrangi Street, with Pedestrian access being obtained from Warrangi Street and the Pacific Highway through formalised entry points.

### **Amended plans/documentation dated August 2011**

The amended plans proposed the following modifications:

- revised landscape plan to address Council concerns
- revised deep soil plan to provide correct calculations
- updated arborist report to address Council concerns
- updated ecologist report to address Council concerns

## Further amended plans/documentation dated September 2011

- updated landscape plans to address Council concerns
- revised deep soil plan to provide correct calculation
- amendment to basement floor plans to provide sufficient storage for each unit
- amendment to plans to ensure adequate ventilation of kitchens

## COMMUNITY CONSULTATION

In accordance with Development Control Plan No. 56, owners of surrounding properties were given notice of the application. In response, submissions from the following were received:

1. *Mr Dieter Adamson 15 Warrangi Street, Turramurra.*
2. *Mr Malcolm and Mrs Elizabeth Lothian 14 Warrangi Street, Turramurra.*
3. *Mr John Barrett 38a Warrangi Street, Turramurra.*
4. *Mr Robert and Mrs Jocelyn Kemp 12 Warrangi Street, Turramurra.*
5. *Ms Helen Willis 34 Warrangi Street, Turramurra (also on behalf of the property owners of: 1, 8, 10, 12, 14, 14a Warrangi Street and 1183 Pacific Highway, Turramurra).*
6. *Mrs Mary Beasley 1183 Pacific Highway, Turramurra.*
7. *Ms Pamela and June Kirwin 8 Warrangi Street, Turramurra.*
8. *N.J Evans 32 Warrangi Street, Turramurra.*
9. *Mr Geoff Honey 14a Warrangi Street, Turramurra.*

The submissions raised the following issues:

### ***Existing stormwater issues will be made worse for down slope properties***

A number of submissions have been raised from members of the community in relation to this issue including evidence from past storm events which has resulted in property damage following storm surcharge. The issue relates to a piped drainage system which runs through 14, 14a, 16, 18, 20 and 22 Warrangi Street. It is apparent that the existing infrastructure within this system is somewhat deficient to cope with heavy rain events.

Council's Development Engineer has commented on the proposal in this respect and has indicated that the proposal will not result in additional impacts but will most likely create a better outcome for the above mentioned properties. The proposed development will not be utilising that drainage system and instead will be piping directly to Warrangi Street. Refer to the comments from Council's Engineer below.



***Increased traffic on Warrangi Street which will be unable to cope with additional load***

The development application has been accompanied with a parking and assessment report prepared by appropriately qualified traffic engineers. The report concludes that the proposal would result in an additional 13.7 vehicle trips per hour in peak times in relation to the Pacific Highway which will not result in unacceptable traffic implications in terms of the road network capacity. The report has been reviewed by Council's Development Engineers who concur with its findings.

***Inadequate carparking***

Based on the number of units and bedroom configurations in the proposal, the development control plan requires 84 car spaces. The subject application proposes 107 off-street car spaces and therefore more than satisfies the requirements of DCP 55.

***The development is too large for the area***

The proposal complies with the Floor Space Ratio (FSR), height, front and side boundary setback requirements, deep soil area and building footprint controls. The proposal is therefore considered to result in a development which has a bulk and scale of which is anticipated by the zoning and associated development controls.

***Loss of privacy to the top floor levels and the backyard of 14a Warrangi Street***

It is considered that satisfactory spatial separation has been afforded between the proposal and the dwelling (and its rear year private open space area) of 14a Warrangi Street given that the proposed building is located approximately 34m at its closest point to the property boundary of 14A Warrangi Street. The proposal is well beyond the 18m separation guidelines under the Residential Flat Design Code and DCP 55.

***Loss of privacy to living areas of 8 Warrangi Street as a result of building separation non-compliance associated with the Block A ground floor units***

The proposal complies with the side setback controls of DCP 55. It is further noted that no windows exist on the south-eastern elevation of the building at 8 Warrangi Street which addresses the common boundary. The building at 8 Warrangi Street does, however, sit in an angled juxtaposition on the site such that the rear windows are orientated toward the subject site. The rear verandah and windows are largely protected, however, by its roof which will break the lines of sight from the proposed development. The proposal is considered satisfactory in this respect, noting the side boundary fencing, the courtyard fencing, and screening devices located on higher level terraces.

### ***Overshadowing of adjoining properties***

An assessment of the shadow diagrams has indicated that the proposal will result in overshadowing to the adjoining property at 1183 Pacific Highway will be restricted to between approximately 9:00am and 10:30am. The proposal therefore meets the 3 hour requirements of DCP 55 and is considered satisfactory.

### ***Further screening of the development is required***

Council's Landscape officer has determined that the proposed landscape scheme is satisfactory. Refer to the Landscape Officer's comments below.

### ***Noise impacts from air conditioning rooms located adjacent to 8 Warrangi Street and 1183 Pacific Highway***

The plans detail that the air conditioning rooms are located in the basement carpark with no external openings. In addition, a condition is also recommended requiring compliance with standard noise emission restrictions. **(Condition 36)**

### ***Concerns with basement carpark ventilation points being in close proximity to boundaries***

The building is compliant with the Building Code of Australia, however, an additional condition of consent has been recommended to ensure the proposal meets the state government requirements. **(Condition 46)**

### ***Concerns with recommendations of geotechnical report relating to rock anchors entering adjoining properties***

It is first of all acknowledged that the geotechnical report indicates that further site investigation will be required after the demolition of the on-site structures to determine the most appropriate methods for excavation, batters and retention. The concern raised by the residents specifically relates to the method of retention of the excavation associated with the basement and is associated retaining walls. The report indicates that the preferred method would be to backfill between the temporary batter slope and the basement retaining wall during construction of the proposal. The report goes on to say an alternative method would be to adopt a shoring system where there is a possibility rock anchors may be required to extend into adjoining properties.

It is noted that rock anchors cannot extend within adjoining properties without the permission of the relevant property owner and a condition of consent is recommended in this respect. **(Condition 68)** It is further noted that the geotechnical report indicates that dilapidation surveys are to be undertaken on adjoining properties prior to excavation on site. It is also recommended that this form a condition of consent. **(Condition 10)**

***Concerns with the geotechnical report relating to impact hammers and vibration***

The recommendation includes conditions which require dilapidation reports and vibration monitoring (during construction) to address this issue. **(Conditions 10, 11, 23)**

***Request to keep stone fencing along the corner of Pacific Highway and Warrangi Street***

A condition of consent is recommended which requires the sandstone fence to be retained and repaired where necessary. **(Condition 50)**

***Excessive bulk and scale impacts on 8 Warrangi Street***

The proposal complies with Council's setback control for zone interfaces requires a greater setback between high density development and adjoining low density development. The proposal is also compliant with height, FSR, building footprint and setbacks to all other boundaries. Whilst it is acknowledged that the impacts are greater than what would be expected from low density residential development, the subject site is zoned for residential flat buildings and reasonable attempts have been made to break up the built form via the step and break in Building A.

***Objection to blue gums being proposed along the boundary adjacent 8 Warrangi Street***

Council's Landscape Officer has determined that the proposed landscape scheme is satisfactory, subject to conditions. Refer to the Landscape Officer's comments below.

***Excessive bulk and scale impacts when viewed from Warrangi Street***

As noted above, due to the proposal's compliance with built form controls, the impacts of the building is considered to be in line with what is anticipated by the zoning and associated development controls.

***External finish of the building should be sandstone***

The proposed external finishes of the buildings are as follows:

- Roof: Colorbond Woodland Grey
- Face brick: Boral Escura Chocolate Brown
- Banded render and blades: Dulux linseed
- Windows: Colorbond Precious Silver Pearl.

The proposal is considered to meet the requirement of the DCP. It is further noted that Council's Heritage Advisor has reviewed the colour scheme and has raised no objection on heritage grounds.

***Building foundations should not extend beyond property boundaries***

The building foundations are not proposed to extend beyond the property boundaries. As noted above in relation to rock anchors, permission must be obtained from adjoining property owners before the installation of rock anchors on adjoining properties can occur.

***Kerb and guttering should be constructed as part of the development***

The developer will be required to install kerb and guttering and a footpath to the Warrangi Street frontage of the proposal. **(Condition 41)**

***Further planting is required within the road reserve***

Council's Landscape Officer has determined that the proposed landscape scheme is satisfactory. Refer to the Landscape Officers Comments below. In addition to the proposed landscaping (as indicated on the landscape plan) a condition of consent is recommended for additional tree planting in the road reserve. **(Condition 87)**

***Whether solar panels be located on the roofs of blocks A, B, or C***

The plans have not nominated solar panels on the roof of the buildings.

***Trees 13 and 14 should be retained***

Tree 13 (*Angophora floribunda*) is to be retained and conditions are recommended for tree protection measures during construction. **(Condition 17)**

Tree 14 (*Monterey Cypress*) has been assessed and its removal accepted as it failed the visual tree assessment (VTA) and is currently impacting upon Tree 15 (*Blackbutt*).

***General Loss of native vegetation***

Council's Landscape Officer has determined that the proposed landscape scheme is satisfactory. Please refer to the Landscape Officer's comments below.

***Proposal lacks architectural merit***

The proposal largely meets State and Council requirements and has been assessed as acceptable by Council's Urban Design Consultant in terms of SEPP 65. Refer to Urban Design Comments below.

***Request for retention of existing trees until *Tupelo* gums reach reasonable height and retain trees numbered 44, 46, 47, 48, 49, 51 and 52***

Trees, 44, 46, 48, 49, 51, and 52 are proposed to be retained and appropriate tree protection measures are recommended to this end by condition. **(Condition 17)**

Tree 47 (Bald Cypress) is in poor health and structural condition. Council's Landscape Officer has accepted its removal.

### **Amended plans dated August 2011 and September 2011**

The amended plans were not notified to surrounding residents as the proposed amendments do not result in a greater environmental impact than the original proposal.

## **CONSULTATION – EXTERNAL TO COUNCIL**

### **INTERNAL REFERRALS**

#### **Urban design**

Council's Urban Design Consultant has reviewed the application against the provisions of SEPP 65 and has provided the following comments:

#### ***“BACKGROUND***

*We have been advised by Council that there is a valid consent for the site, No DA0374/07 and that substantial commencement has been undertaken to activate this consent. The current DA, the subject of this SEPP 65 review largely maintains the approved footprint.*

*The approved DA has been previously reviewed by Council's Urban Design Consultant at the time and also presented to the JRPP on two occasions. Subsequent to these reviews, amendments were made as part of the planning process and DA0374/07 was approved.*

*This report will comment on the current DA in regard to SEPP 65 considerations.*

#### ***Principle 1: Context***

*The proposal is located within walking distance of Turramurra town centre, local services and railway station.*

*The 5,053.1m<sup>2</sup> corner site is comprised of 5 lots zoned 2(d3) which permit residential flat buildings (RFBs). Two of the five lots, (1179 and 1181) have street frontage to the Pacific Highway while the remaining three lots, (2, 4 and 6) front Warrangi Street. There is a heritage item on the opposite side of 2 Warrangi Street at 1163 Pacific Highway.*

*Sites adjoining the subject site are mainly one and two storey dwellings set in greenery. However, to the immediate north-west, along the Pacific Highway, these sites have been up-zoned to 2(d3) to permit greater densities under the Ku-ring-gai PSO. A townhouse development comprising seven (7) townhouses is currently under construction at No. 1 Warrangi Street.*

*There is an interface zone between the subject site and the immediately adjoining north eastern site at 8 Warrangi Street. Sites in this location are zoned 2(c2) which permits a maximum of two storey and as they are down slope and will need particular consideration.*

### **Principal 2: Scale**

*The proposal is comprised of three five storey buildings. Block A is an attached building up until the second floor and is located, aligning with the northern boundary. Blocks B and C are separate buildings which front the Pacific Highway.*

*There is an interface zone with the immediately adjoining north eastern site in Warrangi Street, which is a single storey home down slope of the subject site. The built form of single and two storey is unlikely to change and therefore this interface needs consideration. It is recognised that the side setbacks have been complied with and there is a landscape buffer. Additional articulation and a setback on the top floor also assists the scale transition.*

*The scale of the development is generally appropriate to the site.*

### **Principal 3: Built form**

*The built form is generally appropriate for the site and the building envelopes are generally compliant with numerical controls. The detailed modelling of the buildings within these building envelopes in response to site opportunities and constraints could have been better considered in terms of allowing northern sun through to the lower levels of Buildings B and C and to the courtyard space between the buildings.*

*The proposal is not compliant with the required 12 metres separation between Building A and Building B and C. The consequence of the 9m separation results in the need for less optimal solutions such as privacy screen and frosted glass, reducing the amenity of the apartments. It also reduces solar and daylight access and acoustic and visual privacy.*

### **Principal 4: Density**

*The density of the development is at almost the maximum of 1.3:1 permissible on the site.*

### **Principle 5: Resource, energy and water efficiency**

*The proposal is BASIX compliant.*

*As discussed under Built form, if the separation was compliant there would be better solar access and privacy. (It is noted that the proposal complies with solar and ventilation).*

### **Principal 6: Landscape**

*The proposal just complies with the landscape requirements. Landscaping is generally provided around the perimeter of the site with pockets of landscape located within the shared space between the buildings.*

*A communal space with some level area is provided along Warrangi Street frontage. The planting layout is generally appropriate to the site and the courtyard.*

*As stated under Built Form, mature trees should be located on the boundary of the zone interface between the subject site and the adjoining lower scale dwellings in Warrangi Street. These mature trees should be implemented at the end of the construction so the green buffer is present as soon as the proposal is completed.*

### **Principal 7: Amenity**

*Many of the single aspect units do not meet the 8 metres maximum dimension from the window to the back of the kitchen bench.*

*The amenity of the lower level apartments in Buildings B and C is compromised by the building form of Building A – in particular the cantilevering elements of the second and third floor.*

### **Principal 8: Safety and security**

*Generally, surveillance will be good for pedestrians using the main entry from the Pacific Highway and from Warrangi Street. It is noted that a disabled person cannot access the building from the Pacific Highway, however an accessible path of travel is available from the Warrangi Street frontage (which is also where the mail boxes are located).*

*The courtyard space between the buildings will be overlooked by the apartments in Buildings B and C and provide a good level of surveillance.*

### **Principle 9: Social dimensions**

*The site is in close proximity to existing and proposed infrastructure and local services.*

*New housing forms and types provide a choice for prospective residents. The proposed mix is appropriate for the context.*

### **Principal 10: Aesthetics**

*Many of the proposed elevations are satisfactory. The building is highly irregular and comprises a number of materials, the glass balustrades and awnings and where the different types of brick stop and start needs careful consideration during design development in order to achieve a building that is aesthetically pleasing.*

*The materials and finishes are satisfactory.”*

## **Heritage**

Council's Heritage Advisor commented on the proposal as follows:

### **“Heritage status**

*UCA*

*The site is not within a National Trust Urban Conservation Area but is adjacent to UCA No 19 – Bobbin Head. The UCA has not been reviewed, but is noted for its collection of houses from the 1920s to 1940s. The UCA has seen substantial change in recent years. DCP 55 does not include specific clauses about development “within the vicinity” of a UCA.*

### **Nearby heritage items**

*Clause 61 E of the KPSO requires assessment of the impact of the proposed development on the heritage significance of the heritage items within the vicinity of the site. The site should also be assessed with reference to Chapter 3.5 of DCP 55 – development within the vicinity of a heritage item.*

*The site is located opposite two Spanish style houses at 1161 & 1163 Pacific Highway which are local heritage items. Other nearby items are No 7 Warrangi Street and 1187 Pacific Highway.*

### **Existing building and demolition of houses**

*Existing development on the site comprises 4 residential houses. None of the houses are identified as having heritage significance although all houses are of good quality.*



*The house at 2 Warrangi Street is a two storey brick house which appears to date for the 1930s. It does have some aesthetic merit. It has a high stone fence along part of its boundary which is worth retaining.*

*Given rezoning of the land, there is no heritage objection to demolition of the existing houses provided archival photographic recording is undertaken prior to works commencing. The high stone fence at No 2 Warrangi Street is to be retained and incorporated into the development.*

### ***Proposed development***

*The proposed development is a contemporary development of three blocks. Block A has a base of two storeys with the upper floors separating into two separate blocks. The architectural character of each building is similar. The buildings feature a sloping roof to shade the terrace areas on the top floor. From the Pacific Highway, the development presents as two blocks. The highway elevation is articulated by the use of vertical bands, contrasting materials, textures and colours.*

### ***DCP 55 Issues – Chapter 3.5 - Development within the vicinity of a heritage item –***

*Design controls.*

#### ***C-1 Setbacks.***

*The site does not adjoin a heritage item but is separated by a road. This control is satisfactory.*

#### ***C-2 Tree screening.***

*Adequate screen planting between the proposed development and the heritage items is achieved.*

#### ***C-3 Aesthetic haracter.***

*The aesthetic character of this development is contemporary and is different to the Inter- War 'Mediterranean' or 'Spanish Mission' style of the nearest items and different to the Federation house at 1187 Pacific Highway and the Federation Bungalow house at No 7 Warrangi Street.*

*In the Statement of Environmental Effects, the applicant claims that the proposed development contributes to the desired character of the area and is compatible with the character of recently constructed residential flat buildings in the immediate locality. I acknowledge that buildings from different periods and styles can comfortably coexist in close proximity and can add to the diversity of an environment.*

*The heritage impact statement recognises the inherent impact that a development of greater massing and scale will have on nearby one and two storey heritage items and the adjacent UCA. It claims the development mitigates any heritage impacts by using three blocks with well articulated elevations and by the use of landscaping*

*The aesthetic character of the proposed development is satisfactory.*

#### **C-4 Colours and materials.**

*The application proposes a variety of colours which are generally mid-tone recessive colours including greys browns and greens. The base of the building is block work. The variety, textures and colours are considered acceptable for the heritage context of the site.*

#### **C-5 Fences.**

*The house at No 2 Warrangi Street has a 1.8m high stone fence along most of its Pacific Highway elevation and returns along part of the Warrangi Street elevation. The stone is very old hand cut stone that may have been reused from another site or may have been reused from a former building on the site. The mortar is later and there is evidence of cracking/instability from tree roots and several repairs. The application proposes retaining it and constructing a 1.2m high timber paling fence along the remaining highway elevation. This is acceptable, providing the stone wall is repaired as necessary.*

#### **C-6 Heritage statement.**

*The application is supported by a heritage impact statement.*

### **Comments**

*There is no objection to demolish the houses, provided archival photographic recording is undertaken before any works commence.*

*The heritage items at 1161 – 1163 Pacific Highway are good examples of the Mediterranean style but are visually separated from the Pacific Highway by high masonry fences and planting. The house at No 1163 Pacific Highway has a secondary elevation to Warrangi Street. Other houses in the area are a mix of Federation period and Inter War houses. The contemporary style of this*

*development is clearly different to the established character of housing and designed to reflect the desired future character.*

*Retention and repair of the existing stone fence along the Pacific Highway elevation is supported. A condition is recommended to ensure appropriate repair to the stone wall. **(Condition 50)***

*The proposed development largely complies with the objectives and guidelines in DCP 55 for heritage items “within the vicinity” of the site and the desired future character of the rezoned sites.*

*In terms of visual domination, there will be some impact on the nearby items, but the impact is mitigated by the separation by the street, the transition in scale, setbacks and fall on the site.*

### **Conclusions and recommendations**

*Demolition of the existing houses is acceptable, provided photographic recording is undertaken before any works commence.*

*The proposed development generally complies with the objective and controls in DCP 55 for development within the vicinity of a heritage item and is supported.*

*Retention and reconstruction of the existing stone fence along the Pacific Highway and Warrangi Street is acceptable however, it should be carefully rebuilt and a condition **(Condition 50)** is included to that effect.”*

### **Landscaping**

Council's Landscape and Tree Assessment Officer has commented on the proposal as follows:

#### **“Site characteristics**

*The site (5053.1m<sup>2</sup>) and falls approximately 3 metres to the north from the Pacific Highway. Mature existing trees including several large Eucalyptus pilularis (Blackbutt) are located along the Pacific Highway frontage, forming a corridor with remnant trees on sites along the Pacific Highway to the south.*

#### **Deep Soil**

*The Deep soil area is compliant at 51.2%*

#### **Tree and vegetation removal and impacts**

*An Arboricultural Assessment, prepared by Advanced Tree Consulting and dated 8/03/11, has been submitted with the application. Tree numbers refer to this report.*

### **Significant trees proposed to be retained**

*Tree 11/Eucalyptus pilularis (Blackbutt)* This tree is located in the south eastern corner of site, in fair condition. The tree is 9.9m from the proposed excavation for a 3m high retaining wall to the building and 12.5m from the proposed building. The proposed 1.2m high timber boundary fence is located within structural root zone of tree.

*Tree 13/Angophora floribunda (Rough-barked Apple)* This tree is located in the south-eastern corner of site, in fair condition. The tree is 8.4m from the proposed excavation for a 3m high retaining wall to building and 12.4m from the proposed building. The proposed 1.2m high timber boundary fence is located within structural root zone of tree.

*Tree 15/ Eucalyptus pilularis (Blackbutt) /* This tree is located in the south eastern corner of site, in good condition and is visually prominent to the Pacific Highway. The tree is 15m from the proposed excavation for a 3m high retaining wall and 22m from the proposed building.

*Tree 18/Araucaria cunninghamiana(Cook Pine)* This tree is located in the south- eastern part of the site, on the Pacific Highway frontage and is in good condition. The tree is 6m from the proposed excavation for a 3m high retaining wall to the building within the 12m radius tree protection zone. Minor branch pruning will be required. The percentage of encroachment into the tree protection zone has been calculated as 10.9% in accordance with AS4970 – 2009 Protection of trees on development sites. This is considered acceptable with conditions.

*Tree 46/Cedrus atlantica (Atlantic Cedar)* is located on western boundary and is in good condition. The tree is 4.2m from the proposed 3 level basement. A stepping stone path is proposed within the structural root zone of tree.

*Tree 48/ Magnolia grandiflora (Bull-bay Magnolia)* This tree is located on western boundary and is in good condition. A stepping stone path is proposed within the structural root zone of tree.

*Tree 49/ Cedrus deodara (Himalayan Cedar)* This tree is located on the western boundary and is in good condition. The tree is 9m from the proposed 3 level basement within the 12m radius tree protection zone. The percentage of encroachment into the tree protection zone has been calculated as 14% in accordance with AS4970 – 2009 Protection of trees on development sites. This is considered acceptable with conditions.

*Tree 55/Cryptomeria japonica (Japanese Cedar) This tree is located on the northern boundary is in good condition and provides good screening to the north. The tree is 6.1m from the proposed excavation for the basement.*

*Tree 56/ Stenocarpus sinuatus (Firewheel Tree) This tree is located on the northern boundary is in good condition and provides good screening to the north. The tree is 6.0m from the proposed excavation for the basement.*

*Tree 59/Liquidambar styraciflua (Liquidambar) This tree is located on northern boundary is in good condition and provides good screening to the north. The tree is 5.4m from the proposed excavation for the basement.*

### **Trees on adjoining properties**

*Tree 44/Eucalyptus pilularis (Blackbutt) This tree is located in the south west corner on the adjoining property at 1183 Pacific Highway. The tree is 10.8m from the proposed building and 6m from the proposed retaining wall. A timber fence is proposed within the structural root zone of the tree.*

### **Significant trees to be removed**

*Existing trees have been removed as part of the enacted development consent to DA0374/07.*

### **Street trees to be removed**

*Tree 2/Jacaranda mimosifolia (Jacaranda) This tree is located along the Warrangi Street nature strip, 1.5m from the existing driveway. The tree has been trimmed for power lines, however, it is in good condition and is part of the existing streetscape planting. The tree is 2.0m from the proposed 375mm diameter stormwater connection to the street and is within the structural root zone of the tree.*

*Trees 32-34/ These small trees are located within the Pacific Highway nature strip, pruned for overhead wires. The trees are proposed to be replaced. No replacement trees are shown on the landscape plan.*

*Replacement street trees along Pacific Highway and Warrangi Street are to be conditioned. (Condition 87)*

### **Blue Gum High Forest - Critically Endangered Ecological Community (Threatened Species Conservation Act 1995)**

*The property has several trees representative of Blue Gum High Forest. Blue Gum High Forest is classified as a Critically Endangered Ecological Community under the Threatened Species Conservation Act (1995).*

*A Flora and Fauna Report, prepared by Keystone Ecological and dated August 2011, has been submitted. The report has been referred to Council's Ecological Assessment Officer for comment.*

***Landscape plan/tree replenishment  
front setback***

*The front setback is proposed as primarily lawn areas with proposed deciduous and locally occurring canopy trees including the existing trees. Plantings within canopy spread of existing endemic canopy trees are to be locally occurring shrub and groundcover plantings.*

***Communal open space***

*A requirement under SEPP65 and the NSW Residential Flat Design Code (RFDC) is the provision of useable and well designed communal open space. Communal open space is to be consolidated on the site into recognisable space, facilities and landscape (RFDC). At least 50% of the principal area of communal open space of the development shall receive direct sunlight for at least 3 hours between 9.00am and 3.00pm on June 21(C-2, 4.5, DCP55).*

*Communal open space - northwest end of Buildings A and B*

*An area (approx 87m<sup>2</sup>) of communal open space is located at the north-western end of Buildings A and B. The area attains a high level of privacy, however, it is largely overshadowed by the Block A and evergreen trees.*

*Communal open space – Pacific Highway and Warrangi Street frontages*

*The two site frontages to Pacific Highway and Warrangi Street include areas of lawn and seating on the landscape plan. The area facing Warrangi Street (approximately 250m<sup>2</sup>) has better solar access and is located adjacent the central entrance path. The area does not achieve privacy from the street, however, it provides a large, useable area of lawn.*

*In addition, there are two areas provided between the two buildings that offer small areas for social interaction along the main entrance pathway.*

***Private open space***

*The majority of the private courtyards are north facing and exceed the minimum dimension. The ground floor units of Block A are approximately 1.0 to 1.2 metres above existing ground level.*

**Screen planting**

North-eastern boundary – *Elaeocarpus reticulatus* (Blueberry Ash) 6-8m, *Pittosporum revolutum* (Yellow Pittosporum) 3m, *Persoonia linearis* (Geebung) 2m.

North-western boundary – *Elaeocarpus reticulatus* (Blueberry Ash) 6-8m, *Pittosporum revolutum* (Yellow Pittosporum) 3m, *Persoonia linearis* (Geebung) 2m, *Notelaea longifolia* (Long Leafed Mock Olive) 4-8m, *Breynia oblongifolia* (Coffee Bush) 3m, *Persoonia linearis* (Geebung) 2m.

*The proposed screen planting is considered acceptable.*

**Tree replenishment**

*17 replenishment canopy trees are required to be supported on the site. 24 trees are proposed, which exceeds compliance.*

**Basix**

*No indigenous/low water use species have been nominated under the Basix certificate. No landscape areas within private courtyards are nominated as indigenous/low water use species under the Basix Certificate.*

**Stormwater plan**

*An on site detention tank is proposed under the driveway draining to the north-east corner of the site. A humerceptor is shown located near the entry path between Block A and Block C*

**Bushfire**

*A bushfire report, prepared by Bushfire Safety Solutions, has been submitted with the application. In relation to the landscape surrounds to the building, the report states that,*

*'The development is land locked and has minimal open space along the northern, southern and western aspects and will rely on the Pacific Highway and Warrangi Street as the APZ to the south western and south eastern aspects for separation between the bushfire prone vegetation and the development interface.*

*The proposed open area APZ will include open grass lawns and landscaped garden areas and the sealed driveway off Warrangi Street.'*

### **Front fence**

*The existing sandstone block wall, located at the corner of the Pacific Highway and Warrangi Street, is considered to be visually significant within both streetscapes and is proposed to be retained. The existing curved section to the Pacific Highway frontage includes specially cut stone and is to be retained.*

### **Conclusion**

*The application is considered to be acceptable, subject to conditions.*

## **Ecology**

Council's Ecological Assessment Officer commented on the proposal as follows:

*"The amended landscape plan has addressed the following comments previous referral:*

*Native species proposed within the Tree Protection Zone/s (TPZ) of Tree 11 - Eucalyptus pilularis (Blackbutt), T13 - Angophora floribunda (Rough-barked Apple) & T15 - Eucalyptus pilularis (Blackbutt) have been mostly selected from the scientific determination for Blue Gum High Forest.*

*A mixture of Blue Gum High Forest sub-canopy trees, shrubs & ground covers are now proposed to be planted within the TPZ of the aforementioned trees.*

### **Conclusion:**

*The application is supported, subject to **Condition 25**.*

## **Engineering**

Council's Development Engineer commented on the proposal as follows:

*"The applicant has now submitted a valid BASIX Certificate as well as amended plans.*

*The BASIX commitments are the same as previously assessed.*

*No changes are proposed to the basement levels, and amended stormwater management plans have not been submitted.*

*Therefore the comments made in my previous report still apply and are reproduced below:*



*The application is supported subject to conditions, which are in Proclaim. The Roads and Traffic Authority has recommended conditions including the introduction of parking restrictions along the site frontages. These conditions are included in the set. (Conditions 116, 117, 118, 119, 120, 121, 122, 123, 124)*

### **Water management**

*The stormwater management plans, Northrop Concept Stormwater Management Plans Drawings DA01 to DA08, all Revision 3, may be stamped with the DA stamp and listed in Condition 1.*

*The BASIX water commitments include a 10 000 litre rainwater tank, collecting runoff from 500 square metres of roof area, with re-use for toilet flushing in Building C. The Stormwater Management Plan shows a 62 cubic metre rainwater tank collecting runoff for the entire roof area (given as 1118 square metres on the BASIX Certificate. This is satisfactory.*

*The on site detention tank is located under the driveway. A volume of 100 cubic metres is provided. The volume required under DCP 47 is 104.6 cubic metres (using 50% of the site area) minus 10 cubic metres (the mandatory on site retention volume) = 95 cubic metres. The drawings show that 100 cubic metres is provided which is satisfactory.*

*The pump out system wet well volume has been calculated using the correct parameters (ie ARI of 100 years) which is satisfactory.*

*A water quality treatment device is shown on the drawings to achieve the targets in Chapter 8 of DCP 47.*

*To discharge runoff from the site, it is proposed to install a pipe in Warrangi Street to connect the site to the nearest downstream kerb inlet pit. This was the approved method of stormwater discharge for the previous approved DA (DA0374/07) and is envisaged in Section 5.4 of Council's DCP 47 Water management.*

*Submissions have been made regarding the piped system through 14-22 Warrangi Street, which is reported to have surcharged in the storm early last year. This system does not carry runoff from any road and is not a Council system.*

*The subject site is part of the catchment for the pipe but does not benefit from any easement over the intervening properties 10 and 12 Warrangi Street. Unless the owners of those properties were willing to grant a drainage easement and all the other downstream owners were willing to amend the terms of the easement over their properties to benefit the subject site, there is no prospect of the development site conveying its runoff via this system.*

*The collection of roof and paved area runoff from the subject site and its discharge via the street drainage system, will most likely reduce the flow in the inter-allotment drainage pipe and may improve the situation.*

### **Traffic and parking**

*The site is zoned 2(d3) and is further than 400 metres from the station, so 69 resident and 9 visitor parking spaces are required. Of these, at least 6 resident spaces and 1 visitor space must be suitable for disabled parking.*

*The architectural plans show that 92 resident and 15 visitor spaces are provided, with the correct number of disabled parking spaces.*

*The basement carpark complies with AS2890.1:2004 Off street carparking in terms of dimensions, gradients and manoeuvring.*

*The driveway access is towards the northernmost end of the Warrangi Street frontage but clear of the street tree. This is satisfactory.*

### **Council infrastructure**

*Council's approval will be required under the Roads Act for the new pipe in the road reserve.*

*The developer will also be required to construct a footpath and kerb and gutter for the Warrangi Street frontage of the site.*

*Designs for each of these will have to be approved by Council's Director Operations prior to issue of the Construction Certificate.*

### **Waste management**

*A waste collection area is shown just inside the entry to Basement 1. There is space for the small waste collection vehicle to stand while collecting and adequate room for manoeuvring for forward entry and exit.*

*The ramp section on Drawing DA30P2 indicates that 2.6 metres of headroom will be available at the basement entry.*

*Although the containers are not individually shown on the plan, there is sufficient space for the required number.*

### **Construction traffic management**

*It is expected that construction site access will be to and from Warrangi Street via the Pacific Highway only. A condition is recommended that a No Parking restriction be implemented for the construction period on one side of Warrangi Street to maintain two way traffic flow.*

### **Geotechnical investigation**

*The assessment is based on previous experience in the area and contains recommendations for dilapidation survey, excavation methods and support and further investigation following demolition. These have been included in the recommended conditions of consent.*

### **Building**

Council's Building Officer commented on the proposal as follows:

*"Class 2 (residential units) & Class 7 (basement carpark)*

*The proposed building design complies in general with the Building Code of Australia (BCA) requirements. Detail BCA assessment will be done by the Principal Certifying Authority of the CC stage."*

The proposal is therefore considered to be satisfactory in this respect.

## **STATUTORY PROVISIONS**

### **Roads and Traffic Authority**

Under the provisions of section 91 of the Environmental Planning and Assessment Act 1979, the proposal is Integrated Development on the basis that the applicant requires consent under section 138 of the Roads Act.

Accordingly, the development has been referred to the Roads and Traffic Authority.

*The RTA reviewed the proposal and had no objection to the development application, subject to conditions, which are included in the recommendation. (Conditions 116, 117, 118, 119, 120, 121, 122, 123, 124)*

### **State Environmental Planning Policy (Infrastructure) 2007**

The property has a frontage to a classified road, being the Pacific Highway, and consideration is required pursuant to Division 17 Clause 101 and 102 of the SEPP. Clause 101 of the SEPP states:

## **101 Development with frontage to classified road**

(1) *The objectives of this clause are:*

*(a) to ensure that new development does not compromise the effective and ongoing operation and function of classified roads, and*

*(b) to prevent or reduce the potential impact of traffic noise and vehicle emission on development adjacent to classified roads.*

(2) *The consent authority must not grant consent to development on land that has a frontage to a classified road unless it is satisfied that:*

*(a) where practicable, vehicular access to the land is provided by a road other than the classified road, and*

*(b) the safety, efficiency and ongoing operation of the classified road will not be adversely affected by the development as a result of:*

- (i) the design of the vehicular access to the land, or*
- (ii) the emission of smoke or dust from the development, or*
- (iii) the nature, volume or frequency of vehicles using the classified road to gain access to the land, and*

*(c) the development is of a type that is not sensitive to traffic noise or vehicle emissions, or is appropriately located and designed, or includes measures, to ameliorate potential traffic noise or vehicle emissions within the site of the development arising from the adjacent classified road.*

The proposed development is considered to be consistent with the above requirements. As noted previously in this report, a traffic report (which includes a Construction Traffic Management Plan) prepared by Varga Traffic Planning Pty Ld has been submitted with the application and concludes:

*“That projected increase in traffic activity as a consequence of the development proposal is statistically insignificant, particularly considering the volume of traffic currently using that section of the pacific highway, and will clearly not have any unacceptable traffic implications in terms of the road network capacity.”*

Vehicular access to the development is from Warrangi Street.

Clause 102 of SEPP states:

## **102 Impact of road noise or vibration on non-road development**

- (1) *This clause applies to development for any of the following purposes that is on land in or adjacent to the road corridor for a freeway, a tollway or a transitway or any other road with an annual average daily traffic volume of more than 40,000 vehicles (based on the traffic volume data published on the website of the RTA) and that the consent authority considers is likely to be adversely affected by road noise or vibration:*
  - (a) *a building for residential use,*
  - (b) *a place of public worship,*
  - (c) *a hospital,*
  - (d) *an educational establishment or child care centre.*
- (2) *Before determining a development application for development to which this clause applies, the consent authority must take into consideration any guidelines that are issued by the Director-General for the purposes of this clause and published in the Gazette.*
- (3) *If the development is for the purposes of a building for residential use, the consent authority must not grant consent to the development unless it is satisfied that appropriate measures will be taken to ensure that the following LAeq levels are not exceeded:*
  - (a) *in any bedroom in the building—35 dB(A) at any time between 10 pm and 7 am,*
  - (b) *anywhere else in the building (other than a garage, kitchen, bathroom or hallway)—40 dB(A) at any time.*
- (4) *In this clause, **freeway**, **tollway** and **transitway** have the same meanings as they have in the Roads Act 1993.*

To address the above requirements, the applicant has submitted an acoustic assessment prepared by Acoustic Logic. The report includes recommended construction techniques and states that the proposal will achieve the above mentioned noise guideline requirements, subject to those construction techniques. The proposal is therefore considered to be satisfactory in this respect subject to conditions which require the recommendation of the acoustic report to be carried out. **(Conditions 1, 35)**

### **Rural Fire Service**

In accordance with the provisions of section Part 1(b) of Section 79BA of the Environmental Planning and Assessment Act 1979, Council has *been provided with a certificate by a person who is recognised by the NSW Rural Fire Service as a qualified consultant in bush fire risk assessment stating that the development conforms to the relevant specifications and requirements*. As such, the application does not require a referral to the Rural Fire Service.

Council has considered the measures to be taken with respect to the protection of persons, property and the environment from danger that may arise from a bush fire. Appropriate conditions that adopt the recommendations of the bush fire risk assessment report and certificate have been applied.

**(Condition 49)**

## **State Environmental Planning Policy No.65 - Design Quality of Residential Flat Development RFDC)**

SEPP 65 aims to improve the design quality of residential flat buildings across NSW and provides an assessment framework, the Residential Flat Design Code (RFDC), for assessing 'good design'.

Clause 50(1A) of the EPA Regulation 2000 requires the submission of a design verification statement from the building designer at lodgement of the development application. This documentation has been submitted and is satisfactory.

The SEPP requires the assessment of any development application for residential flat development against 10 principles contained in Clauses 9-18 of the SEPP which has been undertaken by Council's Urban Design Consultant. The SEPP also requires consideration of the matters contained in the publication "Residential Flat Design Code".

As such, the following consideration has been given to the requirements of the SEPP and Design Code.

### **Residential Flat Design Code Compliance Table**

Pursuant to Clause 30(2) of SEPP 65 in determining a development application for a residential flat building the consent authority is to take into consideration the Residential Flat Design Code (RFDC). The following table is an assessment of the proposal against the guidelines provided in the RFDC.

## COMPLIANCE TABLE

	<b>Guideline</b>	<b>Compliance</b>
<b>PART 02 SITE DESIGN</b>		
<b>Site Configuration</b>		
<i>Deep Soil Zones</i>	A minimum of 25 percent of the open space area of a site should be a deep soil zone; more is desirable. Exceptions may be made in urban areas where sites are built out and there is no capacity for water infiltration. In these instances, stormwater treatment measures must be integrated with the design of the residential flat building.	YES - 2534.09m <sup>2</sup> or 50.2%
<i>Open Space</i>	The area of communal open space required should generally be at least between 25 and 30 percent of the site area. Larger sites and brown field sites may have potential for more than 30 percent. (1515.93m <sup>2</sup> )	YES - 3325.4m <sup>2</sup>
<i>Planting on Structures</i>	<p>In terms of soil provision there is no minimum standard that can be applied to all situations as the requirements vary with the size of plants and trees at maturity. The following are recommended as minimum standards for a range of plant sizes:</p> <p>Medium trees (8 metres canopy diameter at maturity)</p> <ul style="list-style-type: none"> <li>- minimum soil volume 35 cubic metres</li> <li>- minimum soil depth 1 metre</li> <li>- approximate soil area 6 metres x 6 metres or equivalent</li> </ul>	<p>YES – refer to Landscape Officer's comments.</p> <p>YES</p>
<i>Safety</i>	Carry out a formal crime risk assessment for all residential developments of more than 20 new dwellings.	YES - a crime risk assessment has been carried out.
<i>Visual Privacy</i>	Refer to Building Separation minimum standards	NO - refer to building separation requirements
<i>Pedestrian Access</i>	Identify the access requirements from the street or car parking area to the apartment entrance.	YES - the proposal includes site fencing with well identified entry points for pedestrians and vehicles.

	Follow the accessibility standard set out in Australian Standard AS 1428 (parts 1 and 2), as a minimum.  Provide barrier free access to at least 20 percent of dwellings in the development.	YES - plans demonstrate disabled access with lifts the all buildings. An access report prepared by an accredited access consultant has been submitted with the application. It is recommended that conditions of consent be imposed to require certification of the proposal before CC and OC.
<i>Vehicle Access</i>	Generally limit the width of driveways to a maximum of six (6) metres.	NO - 6.1m proposed but the application is considered to be acceptable in this respect.
	Locate vehicle entries away from main pedestrian entries and on secondary frontages.	YES - a separation of approximately 14.8m is afforded between the main vehicular and pedestrian access points on Warrangi Street which is considered to be the secondary frontage in terms of vehicular traffic.
<b>PART 03 BUILDING DESIGN</b>		
<b>Building Configuration</b>		
<i>Apartment layout</i>	Single-aspect apartments should be limited in depth to 8 metres from a window.	NO - apartments within the development do not meet this requirement.
	The back of a kitchen should be no more than 8 metres from a window.	NO – the back of kitchens are further than 8.0m from a window.
	The width of cross-over or cross-through apartments over 15 metres deep should be 4 metres or greater to avoid deep narrow apartment layouts.	YES
<i>Apartment Mix</i>		
<i>Balconies</i>	Provide primary balconies for all apartments with a minimum depth of 2 metres. Developments which seek to vary from the minimum standards must demonstrate that negative impacts from the context-noise, wind – can be satisfactorily mitigated with design solutions.	YES - all apartments achieve a minimum depth of 2.0m



<i>Ceiling Heights</i>	<p>The following recommended dimensions are measured from finished floor level (FFL) to finished ceiling level (FCL). These are minimums only and do not preclude higher ceilings, if desired.</p> <p>in residential flat buildings or other residential floors in mixed use buildings: in general, 2.7 metres minimum for all habitable rooms on all floors, 2.4 metres is the preferred minimum for all non-habitable rooms, however 2.25 metres is permitted.</p> <p>for two storey units, 2.4 metres minimum for second storey if 50 percent or more of the apartment has 2.7 metres minimum ceiling heights</p>	NO - units beneath terraces of penthouse units have floor to ceiling of 2.6m. All other units comply.
<i>Ground Floor Apartments</i>	Optimise the number of ground floor apartments with separate entries and consider requiring an appropriate percentage of accessible units. This relates to the desired streetscape and topography of the site.	YES
	Provide ground floor apartments with access to private open space, preferably as a terrace or garden.	YES
<i>Internal Circulation</i>	<p>In general, where units are arranged off a double-loaded corridor, the number of units accessible from a single core/corridor should be limited to eight. Exceptions may be allowed:</p> <p>for adaptive reuse buildings where developments can demonstrate the achievement of the desired streetscape character and entry response</p> <p>where developments can demonstrate a high level of amenity for common lobbies, corridors and units, (cross over, dual aspect apartments).</p>	YES - maximum of 4 proposed.

<i>Storage</i>	In addition to kitchen cupboards and bedroom wardrobes, provide accessible storage facilities at the following rates:  - studio apartments 6m <sup>3</sup> - one-bedroom apartments 6m <sup>3</sup> - two-bedroom apartments 8m <sup>3</sup> - three plus bedroom apartments 10m <sup>3</sup>	YES
<b>Building Amenity</b>		
<i>Daylight Access</i>	Living rooms and private open spaces for at least 70 percent of apartments in a development should receive a minimum of three hours direct sunlight between 9 am and 3 pm in mid winter. In dense urban areas a minimum of two hours may be acceptable.	YES - 74% of apartments received minimum three hours of direct sunlight.
	Limit the number of single-aspect apartments with a southerly aspect (SW-SE) to a maximum of 10% of the total units proposed. Developments which seek to vary from the minimum standards must demonstrate how site constraints and orientation prohibit the achievement of these standards and how energy efficiency is addressed (see Orientation and Energy Efficiency).	YES
<i>Natural Ventilation</i>	Building depths, which support natural ventilation typically range from 10 to 18 metres.	NO – but the majority of the building is compliant. Several elements are approximately 19.0m but proposal meets minimum natural cross ventilation and kitchen ventilation requirements.
	Sixty percent (60%) of residential units should be naturally cross ventilated.	YES -61%
	Twenty five percent (25%) of Kitchens within a development should have access to natural ventilation	YES - 25% of Kitchens have access to natural ventilation
<b>Building Performance</b>		
<i>Waste Management</i>	Supply waste management plans as part of the development application submission as per the NSW Waste Board.	YES - a waste management plan has been submitted.

<i>Water Conservation</i>	Rainwater is not to be collected from roofs coated with lead- or bitumen-based paints, or from asbestos- cement roofs. Normal guttering is sufficient for water collections provided that it is kept clear of leaves and debris.	YES - proposal has colourbond roofing
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### *Visual privacy*

The proposal fails to meet the building separation requirements recommended by the Residential Flat Design Code and DCP 55 (see below). The proposal does, however, include privacy techniques such as strategic positioning of windows, privacy screens, frosted glass, and landscape treatment, including fencing for ground floor apartments, which will result in a satisfactory level of privacy for each of the units and surrounding properties.

### *Apartment layout*

The proposal includes single aspects apartments with a length of greater than 8.0m and kitchens located at a length of greater than 8.0m from a window which are specific rules of thumbs within the RFDC. This issue has also been identified by Council's Urban Design Consultant. The objectives of this control listed within the RFDC are as follows:

*"To ensure the spatial arrangement of apartments is functional and well organised;  
To ensure that apartment layouts provide high standards of residential amenity;  
To maximise the environmental performance of apartments;  
To accommodate a variety of household activities and occupants needs."*

The rule of thumb goes on to stipulate that buildings not meeting the minimum standards must demonstrate how satisfactory day lighting and natural ventilation can be achieved, particularly in relation to habitable rooms.

The applicant is aware of the issue and has justified the design of the basis that the single aspect apartments are north facing with laundry and service areas being located greater than 8.0m from a window. The applicant has further argued that the proposal complies with the cross ventilation and solar access requirements as a whole.

It is agreed that the proposal meets solar access and cross ventilation requirement of the SEPP and that the unit layouts are functional. It is further noted that the application has been supported by a BASIX certificate and is considered to achieve good levels of privacy for each of the units.

### *Ceiling heights*

3rd floor units within Blocks B and C have a 2.6m floor to ceiling height where

they are situated below the terraces of the penthouse apartments above which results in a non-compliance of 100mm. This issue has been discussed with the applicant and a condition of consent is recommended to achieve compliance in this respect. **(Condition 24)**

### **State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004**

A valid BASIX certificate has been submitted. The certificate demonstrates compliance with the provisions of the SEPP and adequately reflects all amendments to the application.

### **State Regional Environmental Planning 2005 – (Sydney Harbour Catchment)**

Matters for consideration under SREP 2005 include biodiversity, ecology and environmental protection, public access to and scenic qualities of foreshores and waterways, maintenance of views, control of boat facilities and maintenance of a working harbour. The proposal is not within close proximity to any waterways and the scope of works is such that the proposal is considered to meet the requirements of the SREP.

### **KU-RING-GAI PLANNING SCHEME ORDINANCE (KPSO)**

#### **Zoning, permissibility and aims and objectives for residential zones**

Under Clause 25B (definitions) of KPSO – LEP 194, a residential flat building is defined as '*a building containing three or more dwellings*'. The residential flat buildings proposed on the site satisfy this definition and are permissible with consent. The development satisfies the zone aims and objectives under clause 25C and 25D of the KPSO.

#### **COMPLIANCE TABLE**

<b>Development standard</b>	<b>Proposed</b>	<b>Complies</b>
<b>Site area (min):</b> 1200m <sup>2</sup>	5053.1m <sup>2</sup>	YES
<b>Deep landscaping (min):</b> 50% (2526.55m <sup>2</sup> )	50.2%	YES
<b>Street frontage (min):</b> 30m (SA>1800m <sup>2</sup> )	75.82m to Pacific Highway and 72.6m to Warrangi Street	YES
<b>Number of storeys (max):</b> 5	5	YES
<b>Site coverage (max):</b> 35% (1341.9m <sup>2</sup> )	35%	YES
<b>Top floor area (max):</b> 60% of level below	Block A 59.2% Block B 58.5% Block C 56.7%	YES YES YES
<b>Storeys and ceiling height (max):</b> 4 storey and 13.4m	4 Storey and 12.3m	

<b>Car parking spaces (min):</b> 1 per 4 dwg = 15 (visitors) 1 per dwg + 2.0 per 3 & 4 bed (residents) = 69	107 spaces proposed inclusive of 15 nominated for visitors	YES
<b>Zone interface setback (min):</b> 3 <sup>rd</sup> and 4 <sup>th</sup> storey setback of 9m	Zone interface relates to north-western boundary adjoining 8 and 10 Warrangi Street. 9.0m proposed and compliant	YES
<b>Manageable housing (min):</b> 10% = 6 Dwellings	6 dwellings proposed and compliant	YES
<b>Lift access:</b> required if greater than three storeys	Lifts have been provided in each of the buildings	YES

### **Part B: Residential zone objectives:**

The development satisfies the objectives for residential zones as prescribed in clause 25D.

### **Clause 33 – Aesthetic appearance**

The subject site fronts the Pacific Highway which is a main road. The clause requires consideration of the aesthetic appearance of the proposed building when viewed from the Pacific Highway. Given the compliance with built form controls, satisfactory materials and finishes and appropriate articulation and modulation, the proposal is considered to be satisfactory in this respect.

### **Clause 61E – Development in the vicinity of heritage items**

As noted previously in this report the proposal is within proximity of heritage items located at 1161, 1163, 1187 Pacific Highway, and 7 Warrangi Street. The application has been considered by Council's Heritage Advisor who has raised no concerns regarding the proposed development and impact upon these heritage items. The proposal is therefore considered satisfactory in this respect.

## **POLICY PROVISIONS**

### **Development Control Plan No. 55 - Railway/Pacific Highway Corridor & St Ives Centre**

<b>COMPLIANCE TABLE</b>		
<b>Development control</b>	<b>Proposed</b>	<b>Complies</b>
<b>Part 4.1 Landscape design:</b>		
<b>Consolidated Deep soil landscaping (min) 50% or 2526.55m<sup>2</sup></b>	2534.09m <sup>2</sup> or 50.2%	YES
150m <sup>2</sup> per 1000m <sup>2</sup> of site area = 750m <sup>2</sup>	>750m <sup>2</sup>	YES

<b>No. of tall trees required (min):</b> 17	24	YES
<b>Private outdoor space differentiation</b> Up to 1.2m solid wall with at least 30% transparent component	1.2m timber fencing utilised	YES
<b>Part 4.2 Density:</b>		
<b>Building footprint (max):</b> 35% of total site area	35%	YES
<b>Floor space ratio (max): 1.3:1</b> (6569.03m <sup>2</sup> )	1.3:1	YES
<b>Part 4.3 Setbacks:</b>		
<b>Street boundary setback (min):</b> 13-15m Warrangi Street 10-12m Pacific Highway	10-12 Pacific Highway 13-15 Warrangi Street Note: Awning slightly within setback area of 9.4m to Pacific Highway but accepted	YES
<b>Side and rear boundary setback (min):</b> 6.0m <b>Maximum 40% of building within setback zone</b>	6.0m 40%	YES YES
<b>Setback of ground floor courtyards to street boundary (min):</b> 8.0m Pacific Highway 11.0m Warrangi Street	No proposed courtyards fronting the Pacific Highway 11.5m Warrangi	YES
<b>% of total area of front setback occupied by private courtyards (max):</b> 15%	<15	YES
<b>Part 4.4 Built form and articulation:</b>		
<b>Façade articulation:</b> Wall plane depth >600mm	600mm minimum	YES
Wall plane area <81m <sup>2</sup>	<81m <sup>2</sup> (76m <sup>2</sup> max)	YES
<b>Built form:</b> Building width < 36 metres	28.5	YES
Balcony projection < 1.2 metres	0.5m	YES
<b>Part 4.5 Residential amenity</b>		
<b>Solar access:</b> >70% of units receive 3+ hours direct sunlight in winter solstice	74% of units will receive at least minimum of 3 hours of solar access to living areas and private open space	YES

<p>&gt;50% of the principle common open space of the development receives 3+ hours direct sunlight in the winter solstice</p>	<p>3 + hours of sunlight is available to common open space areas on the site.</p>	<p>YES</p>
<p>&lt;15% of the total units are single aspect with a western orientation</p>	<p>Zero single aspect apartments with western orientation</p>	<p>YES</p>
<p><b>Visual privacy:</b></p> <p>Separation b/w windows and balconies of a building and any neighbouring building on site or adjoining site: Storeys 1 to 4</p> <p>12 metres b/w habitable rooms 9 metres b/w habitable and non habitable 6m b/w two non habitable</p>	<p>Terrace of Units A3, A4 A5 and A9 are located within 12.0m (10.6m minimum) of a veranda of 8 Warrangi Street</p> <p>Blocks A and B have POS and habitable rooms within 10m minimum of 1183 Pacific Highway</p> <p>6.0m (minimum) separation between blocks B and C</p> <p>6.0m (minimum) separation between blocks A and B</p> <p>6.0m (minimum) separation between blocks A and C</p>	<p>NO</p>
<p>5<sup>th</sup> storey</p> <p>18 metres b/w habitable 13 metres b/w habitable and non habitable 9 metres b/w two non habitable</p>	<p>12.5m minimum between Block A to 8 Warrangi Street</p> <p>11.0m B17 to 1183 Pacific Highway 13.0m A24 to 1183 Pacific Highway</p> <p>11.5m A25 and B17 14m A25 and C17 10.3 B17 and C17 12.0m A24 and C/B 17</p> <p>17m B17 to 1183 11.5m A24 to 1183</p>	<p>NO</p>
<p><b>Internal amenity:</b> Habitable rooms have a minimum floor to ceiling height of 2.7 metres</p>	<p>2.6m proposed for level 3 units under penthouse terraces. All other units meet 2.7m requirement</p>	<p>NO</p>

Non-habitable rooms have a minimum floor to ceiling height of 2.4m	2.7m	YES
1-2 bedroom units have a minimum plan dimension of 3m in all bedroom	Yes	YES
3+ bedroom units have a minimum plan dimension of 3m in at least two bedrooms	Yes	YES
Single corridors: - serve a maximum of 8 units 1.8m wide at lift lobbies	Max 4 accessed via single corridors and minimum dimensions met for lift lobbies	YES
<b>Outdoor living:</b> Ground floor apartments have a terrace or private courtyard greater than 25m <sup>2</sup> in area	All ground floor apartments meet minimum 25m <sup>2</sup>	YES
Balcony sizes: - 10m <sup>2</sup> – 1 bedroom unit - 12m <sup>2</sup> – 2 bedroom unit - 15m <sup>2</sup> – 3 bedroom unit NB. At least one space >10m <sup>2</sup> primary outdoor space has a minimum dimension of 2.4m	YES	YES
Common Open space (30%) Of the site area 1150.20m <sup>2</sup>	YES	YES
Private open space adjoining common open space not to be enclosed with high solid fences	Fences has been limited to 1.2m in height and are constructed of timber	YES
<b>Part 4.7 Social dimensions:</b>		
<b>Visitable units (min):</b> 70%	81% (48 Units)	YES
<b>Housing mix:</b> Mix of sizes and types	17x1 bedroom dwellings (including 6 adaptable dwellings) 32x2 bedroom dwellings 9x3 bedroom dwellings and 1x4 bedroom dwelling	YES
<b>Part 5 Parking and vehicular access:</b>		
<b>Car parking (min):</b> 69 resident spaces 15 visitor spaces Total spaces 84	92 resident spaces 15 visitor spaces Total Spaces 107	YES



#### **4.5.2 Visual privacy**

The proposal is non-compliant with the building separation requirements of DCP 55 in relation to the adjoining developments at 8 Warrangi Street and 1183 Pacific Highway and between Blocks A, B and C.

In relation to 8 Warrangi Street, DCP 55 requires a building separation of 12m between two habitable rooms (a balcony is considered to be a habitable room for the purposes of this assessment). The proposal has a minimum building separation of 10.6m. However, privacy screens have been utilised on upper level terraces to reduce the amount of overlooking onto that property. It is further noted that the ground floor apartment include fencing around private open space areas and there is a large amount of landscaping proposed within the setback area between the two properties.

A site inspection of 8 Warrangi Street revealed that the rear outdoor verandah is covered by a low roof. The roof in conjunction with the existing 2.0m high side boundary fence results in acute line of sight between the verandah and the proposal. Having regard to the above factors, the proposal is considered to be satisfactory in this regard.

In relation to the property at 1183 Pacific Highway, Blocks A and B result in a non-compliance with the building separation requirements. The area of the building at 1183 Pacific highway located within the setback area of the proposal relates to the front entry area and a rear covered verandah for a minor portion given the angles associated with the proposal to that dwelling. The primary living rooms of that building lie outside the separation requirements. That is considered to be a minor non-compliance with the majority of the building exceeding the minimum setback to 1183 Pacific Highway and as there is a good degree of landscaping proposed between the two developments in associated with a side boundary fence.

As noted above, the proposal does not meet the building separation requirements between Blocks A, B, and C. The design is, however considered to be satisfactory as privacy mitigation techniques have been utilised and direct overlooking is minimised to a satisfactory extent. It is further noted that the proposal meets compliance with solar access and natural ventilation in order to provide a satisfactory amenity for occupiers of the units.

The design objectives as listed in the DCP for this control is as follows:

- Visual privacy for residents and adjoining properties and
- integration of architectural and landscape screening devices into the overall design of the building.

The proposal is considered to meet the objectives of the control.

#### **4.5.4 Internal amenity**

The proposed 2.6m ceiling height to some units will be required to comply with the 2.7m control by condition. **(Condition 24)**

#### **Development Control Plan No. 31 Access**

Matters for assessment under DCP 31 have been taken into account in the assessment of this application against DCP 55 and the proposal is satisfactory in this regard.

#### **Development Control Plan No. 40 - Construction and Demolition Waste Management**

Matters for assessment under DCP 40 have been taken into account in the assessment of this application against DCP 55 and the proposal is satisfactory in this regard.

#### **Development Control Plan No. 43 - Car Parking**

Matters for assessment under DCP 43 have been taken into account in the assessment of this application against DCP 55 and the proposal is satisfactory in this regard.

#### **Development Control Plan No.47 - Water Management**

Matters for consideration under DCP 47 have been taken into account in the assessment of this application against DCP 55 and the proposal is satisfactory in this regard.

#### **Section 94 Plan**

The development is subject to the Section 94 Contribution prescribed in **(Condition 48)**.

#### **LIKELY IMPACTS**

The likely impacts of the development have been considered within this report and are deemed to be acceptable.

#### **SUITABILITY OF THE SITE**

The site is zoned 2(d3). The proposed development is considered suitable for the site as it is permissible within the zone, is compliant with height, setbacks and density controls and results in satisfactory amenity outcomes both internally and for adjoining properties.

#### **ANY SUBMISSIONS**

The matters raised in the submissions have been addressed in this report.

## **PUBLIC INTEREST**

The public interest is best served by the consistent application of the requirements of the relevant Environmental Planning Instruments, and by Council ensuring that any adverse impacts on the surrounding area are minimized. The proposal has been assessed against the relevant Environmental Planning Instruments and policy provisions and is deemed acceptable. The proposed application is therefore considered to be in the public interest.

## **CONCLUSION**

This application has been assessed under the heads of consideration of Section 79C of the Environmental Planning and Assessment Act 1979 and all relevant instruments and policies.

The proposal complies with height, front and side setbacks, FSR, deep soil, solar access, and car-parking/traffic requirements. Non-compliances associated with buildings separation/privacy, and apartment configurations are apparent, however, these issues are considered to result in a satisfactory outcome given the proposed design and how it relates to the site. The proposal is therefore considered to be satisfactory.

## **RECOMMENDATION**

THAT the Sydney West Joint Regional Planning Panel, as the consent authority, grant a deferred commencement development consent for Development application DA0109/11 for Demolition of four (4) dwellings and construction of three (3) residential flat buildings comprising fifty nine (59) units and three (3) levels of basement car parking for a period of two (2) years, subject to the following conditions:

**The conditions of consent are as follows:**

### **SCHEDULE A - Deferred commencement condition**

***Evidence required to satisfy the following condition must be submitted to Council within twelve (12) months of the date of this consent.***

This consent does not operate until the following deferred commencement condition has been satisfied:

#### **1. Surrender of development consent (deferred commencement)**

The applicant must surrender the following development consent to Council by submitting a completed copy of Clause 97 of the Environmental Planning and Assessment Regulation 2000:

<b>Development Consent No.</b>	<b>Dated</b>	<b>For:</b>
DA: 0374/07	12 March 2008	Demolition then construct residential flat building comprising 59 units with basement parking at 1179-1181 Pacific Highway and 2-6 Warrangi Street Turramura NSW 2074

This consent will not operate until the above development consent has been surrendered.

**Reason:** To ensure orderly and economic development and certainty as to the consent to be acted upon.

***Upon receipt of written notification from Council that the abovementioned condition has been satisfied, the following conditions will apply:***

**SCHEDULE B - The standard conditions of consent are set out as follows:**

**CONDITIONS THAT IDENTIFY APPROVED PLANS:**

**1. Approved architectural plans and documentation (new development)**

The development must be carried out in accordance with the following plans and documentation listed below and endorsed with Council's stamp, except where amended by other conditions of this consent:

<b>Plan no.</b>	<b>Prepared by</b>	<b>Dated</b>
DA01 – DA15, Issue 4	Mackenzie Architects	15/09/2011
DA20, DA23, Issue 4	Mackenzie Architects	15/09/2011
Landscape Plan & Basix Calculation LPDA11-316/1, Issue D	Concept Landscape Architects	14/09/2011
DA01 – DA08 Revision 3	Northrop	1/03/2011
Bushfire Report	Bushfire Safety Solutions	26 March 2011
S79BA Certificate ref 2011/34A	Steve Parnott (Bushfire Safety Solutions)	27/9/2011

<b>Document(s)</b>	<b>Dated</b>
Access Report prepared by Mark Relf (Accessibility Solutions)	7 February 2011
Acoustic Report prepared by Acoustic Logic	28/01/2011
Arborist Report prepared by Advanced Treescape Consulting	8 March 2011
Geotechnical Report prepared by Jeffery and	24 April 2007

Katauskas Pty Ltd	
Heritage Impact Statement prepared by Weir Phillips	February 2011
Solar Impact Report prepared by PSN Matter	December 3rd 2010
Traffic and Parking Assessment Report prepared by Varga Traffic Planning	17 February 2011
Ecological Impact Assessment prepared by Keystone Ecological	August 2011
Basix Certificate No. 356840M_04	27 September 2011

**Reason:** To ensure that the development is in accordance with the determination.

## 2. Inconsistency between documents

In the event of any inconsistency between conditions of this consent and the drawings/documents referred to above, the conditions of this consent prevail.

**Reason:** To ensure that the development is in accordance with the determination.

## 3. Approved landscape plans

Landscape works shall be carried out in accordance with the following landscape plan(s), listed below and endorsed with Council's stamp, except where amended by other conditions of this consent:

Plan no.	Drawn by	Dated
Landscape Plan & Basix Calculation LPDA11-316/1, Issue D	Concept Landscape Architects	14/09/2011

**Reason:** To ensure that the development is in accordance with the determination.

## CONDITIONS TO BE SATISFIED PRIOR TO DEMOLITION, EXCAVATION OR CONSTRUCTION:

### 4. Road opening permit

The opening of any footway, roadway, road shoulder or any part of the road reserve shall not be carried out without a road opening permit being obtained from Council (upon payment of the required fee) beforehand.

**Reason:** Statutory requirement (Roads Act 1993 Section 138) and to maintain the integrity of Council's infrastructure.

## **5. Construction stage parking restrictions**

The applicant is to install 'No Parking' signs along one side of Warrangi Street which would be effective for the approved hours of construction. The signs are to be considered by the Ku-ring-gai Traffic Committee and approved by Council (subject to resident concurrence), and installed prior to the commencement of any work on the site. The extent of the restriction and the side of Warrangi Street to be affected shall be determined by the Traffic Committee. The applicant shall pay for the consideration of the matter by the Ku-ring-gai Traffic Committee, as well as for the installation, maintenance, and removal of the signs following completion of the work and the occupation certificate being issued. If construction activities overlap with another medium density development nearby, the maintenance and subsequent removal of any signs would be carried over to the other developer.

**Reason:** To maintain vehicular access in Warrangi Street.

## **6. Notice of commencement**

At least 48 hours prior to the commencement of any development (including demolition, excavation, shoring or underpinning works), a notice of commencement of building or subdivision work form and appointment of the principal certifying authority form shall be submitted to Council.

**Reason:** Statutory requirement.

## **7. Notification of builder's details**

Prior to the commencement of any development or excavation works, the Principal Certifying Authority shall be notified in writing of the name and contractor licence number of the owner/builder intending to carry out the approved works.

**Reason:** Statutory requirement.

## **8. Dilapidation survey and report (public infrastructure)**

Prior to the commencement of any development or excavation works on site, the Principal Certifying Authority shall be satisfied that a dilapidation report on the visible and structural condition of all structures of the following public infrastructure, has been completed and submitted to Council:

Public infrastructure

- Full road pavement width, including kerb and gutter, of Warrangi Street over the site frontage, including the full intersection.
- All driveway crossings and laybacks opposite the subject site.
- Pacific Highway southbound lanes over the site frontage.

The report must be completed by a consulting structural/civil engineer. Particular attention must be paid to accurately recording (both written and photographic) existing damaged areas on the aforementioned infrastructure so that Council is fully informed when assessing any damage to public infrastructure caused as a result of the development.

The developer may be held liable to any recent damage to public infrastructure in the vicinity of the site, where such damage is not accurately recorded by the requirements of this condition prior to the commencement of works.

**Note:** A written acknowledgment from Council must be obtained (attesting to this condition being appropriately satisfied) and submitted to the Principal Certifying Authority prior to the commencement of any excavation works.

**Reason:** To record the structural condition of public infrastructure before works commence.

## **9. Archival recording of buildings**

Prior to the commencement of any development or excavation works on site, the Principal Certifying Authority shall be satisfied that an archival report has been submitted to Council's Heritage Advisor.

The report must consist of an archival standard photographic record of the building (internally and externally), its garden and views of it from the street illustrating its relationship to neighbouring properties and the streetscape. Recording shall be undertaken in accordance with the guidelines for "Photographic Recording of Heritage Items Using Film or Digital Capture (2006)" prepared by the New South Wales Heritage Office.

Information shall be bound in an A4 report format. It shall include copies of photographs, referenced to plans of the site. Two (2) copies (one (1) copy to include negatives or CD of images shall be submitted to Council's Heritage Advisor. The recording document will be held in the local studies collection of Ku-ring-gai Library, the local historical society and Council's files.

**Note:** A written acknowledgment from Council must be obtained (attesting to this condition being appropriately satisfied) and submitted to the Principal Certifying Authority prior to the commencement of any works.

**Reason:** To ensure the proper management of historical artefacts and to ensure their preservation.

## **10. Dilapidation survey and report (private property)**

Prior to the commencement of any demolition or excavation works on site, the Principal Certifying Authority shall be satisfied that a dilapidation report on the visible and structural condition of all structures upon the following lands, has been completed and submitted to Council:

### **Address**

- 8 Warrangi Street
- 1183 Pacific Highway

The dilapidation report must include a photographic survey of adjoining properties detailing their physical condition, both internally and externally, including such items as walls ceilings, roof and structural members. The report must be completed by a consulting structural/geotechnical engineer as determined necessary by that professional based on the excavations for the proposal and the recommendations of the submitted geotechnical report.

In the event that access for undertaking the dilapidation survey is denied by a property owner, the applicant must demonstrate in writing to the satisfaction of the Principal Certifying Authority that all reasonable steps have been taken to obtain access and advise the affected property owner of the reason for the survey and that these steps have failed.

**Note:** A copy of the dilapidation report is to be provided to Council prior to any excavation works been undertaken. The dilapidation report is for record keeping purposes only and may be used by an applicant or affected property owner to assist in any civil action required to resolve any dispute over damage to adjoining properties arising from works.

**Reason:** To record the structural condition of likely affected properties before works commence.

## **11. Geotechnical report**

Prior to the commencement of any bulk excavation works on site, the applicant shall submit to the Principal Certifying Authority, the results of the detailed geotechnical investigation comprising a minimum of six boreholes to at least 1 metre below the proposed basement level. The report is to address such matters as:

- appropriate excavation methods and techniques
- vibration management and monitoring
- dilapidation survey
- support and retention of excavates faces
- hydrogeological considerations



The recommendations of the report are to be implemented during the course of the works.

**Reason:** To ensure the safety and protection of property.

## **12. Construction and traffic management plan**

The applicant must submit to Council a Construction Traffic Management Plan (CTMP), which is to be approved prior to the commencement of any works on site.

The plan is to consist of a report with Traffic Control Plans attached.

The report is to contain commitments which must be followed by the demolition and excavation contractor, builder, owner and subcontractors. The CTMP applies to all persons associated with demolition, excavation and construction of the development.

The report is to contain construction vehicle routes for approach and departure to and from all directions.

The report is to contain a site plan showing entry and exit points. Swept paths are to be shown on the site plan showing access and egress for an 11 metre long heavy rigid vehicle.

The Traffic Control Plans are to be prepared by a qualified person (red card holder). One must be provided for each of the following stages of the works:

- Demolition
- Excavation
- Concrete pour
- Construction of vehicular crossing and reinstatement of footpath
- Traffic control for vehicles reversing into or out of the site.

Traffic controllers must be in place at the site entry and exit points to control heavy vehicle movements in order to maintain the safety of pedestrians and other road users.

When a satisfactory CTMP is received, a letter of approval will be issued with conditions attached. Traffic management at the site must comply with the approved CTMP as well as any conditions in the letter issued by Council. Council's Rangers will be patrolling the site regularly and fines will be issued for any non-compliance with this condition.

**Reason:** To ensure that appropriate measures have been considered during all phases of the construction process in a manner that maintains the environmental amenity and ensures the ongoing safety and protection of people.

### **13. Work zone**

A Works Zone is to be provided in Warrangi Street subject to the approval of the Ku-ring-gai Local Traffic Committee.

No loading or unloading must be undertaken from the public road or nature strip unless within a Works Zone which has been approved and paid for.

In the event the work zone is required for a period beyond that initially approved by the Traffic Committee, the applicant shall make a payment to Council for the extended period in accordance with Council's schedule of fees and charges for work zones prior to the extended period commencing.

**Reason:** To ensure that appropriate measures have been made for the operation of the site during the construction phase.

### **14. Temporary construction exit**

A temporary construction exit, together with necessary associated temporary fencing, shall be provided prior to commencement of any work on the site and shall be maintained throughout the duration and progress of construction.

**Reason:** To reduce or eliminate the transport of sediment from the construction site onto public roads.

### **15. Sediment controls**

Prior to any work commencing on site, sediment and erosion control measures shall be installed along the contour immediately downslope of any future disturbed areas.

The form of the sediment controls to be installed on the site shall be determined by reference to the 'NSW Department of Housing manual 'Managing Urban Stormwater: Soils and Construction'. The erosion controls shall be maintained in an operational condition until the development activities have been completed and the site fully stabilised. Sediment shall be removed from the sediment controls following each heavy or prolonged rainfall period.

**Reason:** To preserve and enhance the natural environment.

### **16. Erosion and drainage management**

Earthworks and/or demolition of any existing buildings shall not commence until an erosion and sediment control plan is submitted to and approved by the Principal Certifying Authority. The plan shall comply with the guidelines set out in the NSW Department of Housing manual "Managing Urban Stormwater: Soils and Construction" certificate. Erosion and sediment control works shall be implemented in accordance with the erosion and sediment control plan.

**Reason:** To preserve and enhance the natural environment.

### 17. Tree protection fencing

To preserve the following tree/s, no work shall commence until the area beneath their canopy is fenced off at the specified radius from the trunk/s to prevent any activities, storage or the disposal of materials within the fenced area. The fence/s shall be maintained intact until the completion of all demolition/building work on site.

#### Schedule

Tree/location	Radius from trunk
<i>Eucalyptus pilularis</i> (Blackbutt) Tree 11	8m
<i>Angophora floribunda</i> (Rough-barked Apple) Tree 13	8m
<i>Eucalyptus pilularis</i> (Blackbutt) Tree 15	9m
<i>Magnolia x soulangiana</i> (Magnolia) Tree 36	3m
<i>Eucalyptus pilularis</i> (Blackbutt) Tree 44	8m
<i>Grevillea robusta</i> (Silky Oak) Tree 51	5m
<i>Cryptomeria japonica</i> (Japanese Cedar) Tree 55	5m
<i>Stenocarpus sinuatus</i> (Firewheel Tree) Tree 56	3m

The tree protection fencing shall be constructed of galvanised pipe at 2.4 metre spacings and connected by securely attached chain mesh fencing to a minimum height of 1.8 metres in height prior to work commencing.

**Reason:** To protect existing trees during construction phase.

### 18. Tree protection fencing excluding structure

To preserve the following tree/s, no work shall commence until the area beneath their canopy excluding that area of the proposed building shall be fenced off for the specified radius from the trunk to prevent any activities, storage or the disposal of materials within the fenced area. The fence/s shall be maintained intact until the completion of all demolition/building work on site:

#### Schedule

Tree/location	Radius from trunk
<i>Araucaria cunninghamiana</i> (Cook Pine) Tree 18	9m
<i>Cedrus atlantica</i> (Atlantic Cedar) Tree 46	5m
<i>Magnolia grandiflora</i> (Bull-bay Magnolia) Tree 48	8m
<i>Cedrus deodara</i> (Himalayan Cedar) Tree 49	8m
<i>Liquidambar styraciflua</i> (Liquidambar) Tree 59	8m
<i>Magnolia x soulangiana</i> (Magnolia) Tree 64	4m

**Reason:** To protect existing trees during the construction phase.

## **19. Tree protection signage**

Prior to works commencing, tree protection signage is to be attached to each tree protection zone, displayed in a prominent position and the sign repeated at 10 metres intervals or closer where the fence changes direction. Each sign shall contain in a clearly legible form, the following information:

Tree protection zone.

- This fence has been installed to prevent damage to the trees and their growing environment both above and below ground and access is restricted.
- Any encroachment not previously approved within the tree protection zone shall be the subject of an arborist's report.
- The arborist's report shall provide proof that no other alternative is available.
- The Arborist's report shall be submitted to the Principal Certifying Authority for further consultation with Council.
- The name, address, and telephone number of the developer.

**Reason:** To protect existing trees during the construction phase.

## **20. Tree protection mulching**

Prior to works commencing and throughout construction, the area of the tree protection zone is to be mulched to a depth of 100mm with composted organic material being 75% Eucalyptus leaf litter and 25% wood.

**Reason:** To protect existing trees during the construction phase.

## **21. Tree fencing inspection**

Upon installation of the required tree protection measures, an inspection of the site by the Principal Certifying Authority is required to verify that tree protection measures comply with all relevant conditions.

**Reason:** To protect existing trees during the construction phase.

## **22. Construction waste management plan**

Prior to the commencement of any works, the Principal Certifying Authority shall be satisfied that a waste management plan, prepared by a suitably qualified person, has been prepared in accordance with Council's DCP 40 – Construction and Demolition Waste Management.

The plan shall address all issues identified in DCP 40, including but not limited to: the estimated volume of waste and method for disposal for the construction and operation phases of the development.

**Note:** The plan shall be provided to the Certifying Authority.

**Reason:** To ensure appropriate management of construction waste.

### **23. Noise and vibration management plan**

Prior to the commencement of any works, a noise and vibration management plan is to be prepared by a suitably qualified expert addressing the likely noise and vibration from demolition, excavation and construction of the proposed development and provided to the Principal Certifying Authority. The management plan is to identify amelioration measures to ensure the noise and vibration levels will be compliant with the relevant Australian Standards and Ku-ring-gai Council's Code for the Control and Regulation of Noise on Building Sites. The report shall be prepared in consultation with any geotechnical report that itemises equipment to be used for excavation works.

The management plan shall address, but not be limited to, the following matters:

- identification of the specific activities that will be carried out and associated noise sources
- identification of all potentially affected sensitive receivers, including residences, churches, commercial premises, schools and properties containing noise sensitive equipment
- the construction noise objective specified in the conditions of this consent
- the construction vibration criteria specified in the conditions of this consent
- determination of appropriate noise and vibration objectives for each identified sensitive receiver
- noise and vibration monitoring, reporting and response procedures
- assessment of potential noise and vibration from the proposed demolition, excavation and construction activities, including noise from construction vehicles and any traffic diversions
- description of specific mitigation treatments, management methods and procedures that will be implemented to control noise and vibration during construction
- construction timetabling to minimise noise impacts including time and duration restrictions, respite periods and frequency
- construction timetabling to minimise noise impacts including time and duration restrictions, respite periods and frequency
- procedures for notifying residents of construction activities that are likely to affect their amenity through noise and vibration
- contingency plans to be implemented in the event of non-compliances and/or noise complaints
- compliance with Council's Code for the Control and Regulation of Noise on Building Sites

**Reason:** To protect the amenity afforded to surrounding residents during the construction process.

## CONDITIONS TO BE SATISFIED PRIOR TO THE ISSUE OF THE CONSTRUCTION CERTIFICATE:

### 24. Floor to ceiling heights

Prior to the issue of the Construction Certificate, the plans are to be amended to ensure that all units associated with the development achieve a minimum floor to ceiling height of 2.7m for habitable rooms.

**Reason:** To achieve a satisfactory amenity

### 25. Amendments to approved landscape plan

Prior to the issue of a Construction Certificate, the Principal Certifying Authority shall be satisfied that the approved landscape plans, listed below and endorsed with Council's stamp, have been amended in accordance with the requirements of this condition as well as other conditions of this consent:

Plan no.	Drawn by	Date
LPDA11-316/1 (Issue D)	Conzept Landscape Architects	14/09/2011

The following changes are required to the Landscape Plan Matrix Plan:

1. Replace *Imperata cylindrica* (Blady Grass) with *Entolasia stricta* and replace *Indiogofera australis* with *Elaeocarpus reticulata* (Blueberry Ash).
2. No monocultures of Blue Gum High Forest species are to be planted within the canopy spread of Tree 11 - *Eucalyptus pilularis* (Blackbutt), T13 - *Angophora floribunda* (Rough-barked Apple), & T15 - *Eucalyptus pilularis* (Blackbutt).
3. Proposed planting of Albizzia sp. between Block B and Block C to be substituted with a more upright shade tolerant tree species.

### 26. Long service levy

In accordance with Section 109F(i) of the Environmental Planning and Assessment Act a Construction Certificate shall not be issued until any long service levy payable under Section 34 of the Building and Construction Industry Long Service Payments Act 1986 (or where such levy is payable by instalments, the first instalment of the levy) has been paid. Council is authorised to accept payment. Where payment has been made elsewhere, proof of payment is to be provided to Council.

**Reason:** Statutory requirement.

## **27. Builder's indemnity insurance**

The applicant, builder, developer or person who does the work on this development, must arrange builder's indemnity insurance and submit the certificate of insurance in accordance with the requirements of Part 6 of the Home Building Act 1989 to the Certifying Authority for endorsement of the plans accompanying the Construction Certificate.

It is the responsibility of the applicant, builder or developer to arrange the builder's indemnity insurance for residential building work over the value of \$12,000. The builder's indemnity insurance does not apply to commercial or industrial building work or to residential work valued at less than \$12,000, nor to work undertaken by persons holding an owner/builder's permit issued by the Department of Fair Trading (unless the owner/builder's property is sold within 7 years of the commencement of the work).

**Reason:** Statutory requirement.

## **28. Outdoor lighting**

Prior to the issue of a Construction Certificate, the Certifying Authority shall be satisfied that all outdoor lighting will comply with AS/NZ1158.3: 1999 Pedestrian Area (Category P) Lighting and AS4282: 1997 Control of the Obtrusive Effects of Outdoor Lighting.

**Note:** Details demonstrating compliance with these requirements are to be submitted prior to the issue of a Construction Certificate.

**Reason:** To provide high quality external lighting for security without adverse affects on public amenity from excessive illumination levels.

## **29. Air drying facilities**

Prior to the issue of the Construction Certificate, the Certifying Authority shall be satisfied that a common open space area dedicated for open air drying of clothes is provided. This area is to be located at ground level behind the building line and in a position not visible from the public domain.

In lieu of the above, written confirmation that all units will be provided with internal clothes drying facilities prior to the Occupation Certificate is to be submitted to the Certifying Authority prior to the issue of the Construction Certificate.

**Reason:** Amenity & energy efficiency.

### **30. Access for people with disabilities (residential)**

Prior to the issue of the Construction Certificate, the Certifying Authority shall be satisfied that access for people with disabilities to and from and between the public domain, residential units and all common open space areas is provided. Consideration must be given to the means of dignified and equitable access.

Compliant access provisions for people with disabilities shall be clearly shown on the plans submitted with the Construction Certificate. All details shall be provided to the Principal Certifying Authority prior to the issue of the Construction Certificate. All details shall be prepared in consideration of the Disability Discrimination Act, and the relevant provisions of AS1428.1, AS1428.2, AS1428.4 and AS 1735.12.

**Reason:** To ensure the provision of equitable and dignified access for all people in accordance with disability discrimination legislation and relevant Australian Standards.

### **31. Adaptable units**

Prior to the issue of the Construction Certificate, the Certifying Authority shall be satisfied that the nominated adaptable units within the development application, six (6), are designed as adaptable housing in accordance with the provisions of Australian Standard AS4299-1995: Adaptable Housing.

**Note:** Evidence from an appropriately qualified professional demonstrating compliance with this control is to be submitted to and approved by the Certifying Authority prior to the issue of the Construction Certificate.

**Reason:** Disabled access & amenity.

### **32. Stormwater management plan**

Prior to issue of the Construction Certificate, the applicant must submit, for approval by the Principal Certifying Authority, scale construction plans and specifications in relation to the stormwater management and disposal system for the development. The plan(s) must be based on **Northrop Drawings 11037 DA01 to DA08, all Issue 3** and must include the following detail:

- exact location and reduced level of discharge point to the public drainage system
- Layout of the property drainage system components, including but not limited to (as required) gutters, downpipes, spreaders, pits, swales, kerbs, cut-off and intercepting drainage structures, subsoil drainage, flushing facilities and all ancillary stormwater plumbing - all designed for a 235mm/hour rainfall intensity for a duration of five (5) minutes (1:50 year storm recurrence)
- location(s), dimensions and specifications for the required rainwater



storage and reuse tanks and systems and where proprietary products are to be used, manufacturer specifications or equivalent shall be provided

- specifications for reticulated pumping facilities (including pump type and manufacturer specifications) and ancillary plumbing to fully utilise rainwater in accordance with Ku-ring-gai Council Development Control Plan 47 and/or BASIX commitments
- details of the required on-site detention tanks required by Ku-ring-gai Water Management DCP 47, including dimensions, materials, locations, orifice and discharge control pit details as required (refer Chapter 6 and Appendices 2, 3 and 5 of DCP 47 for volume, PSD and design requirements)
- water quality measures to achieve compliance with the targets in Chapter 8 of DCP 47
- the required basement stormwater pump-out system is to cater for driveway runoff and subsoil drainage (refer appendix 7.1.1 of Development Control Plan 47 for design)

The above construction drawings and specifications are to be prepared by a qualified and experienced civil/hydraulic engineer in accordance with Council's Water Management Development Control Plan 47, Australian Standards 3500.2 and 3500.3 - Plumbing and Drainage Code and the Building Code of Australia.

**Reason:** To protect the environment.

### **33. Excavation for services**

Prior to the issue of the Construction Certificate, the Principal Certifying Authority shall be satisfied that no proposed underground services (ie: water, sewerage, drainage, gas or other service) unless previously approved by conditions of consent, are located beneath the canopy of any tree protected under Council's Tree Preservation Order, located on the subject allotment and adjoining allotments.

**Note:** A plan detailing the routes of these services and trees protected under the Tree Preservation Order shall be submitted to the Principal Certifying Authority.

**Reason:** To ensure the protection of trees.

### **34. Recycling and waste management**

Prior to the issue of the Construction Certificate, the Certifying Authority shall be satisfied that the development provides a common garbage collection/separation area sufficient in size to store all wheelie garbage bins and recycling bins provided by Council for the number of units in the development in accordance with DCP 40. The garbage collection point is to be accessible by Council's Waste Collection Services.

The responsibility for:

- the cleaning of waste rooms and waste service compartments; and
- the transfer of bins within the property, and to the collection point once the development is in use;

shall be determined when designing the system and clearly stated in the Waste Management Plan.

**Note:** The architectural plans are to be amended and provided to the Certifying Authority.

**Reason:** Environmental protection.

### **35. Noise from road and rail (residential only)**

Prior to the issue of the Construction Certificate, the Certifying Authority shall submit evidence to Council demonstrating that the development will be acoustically designed and constructed to ensure that the following LAeq levels are not exceeded:

- (a) in any bedroom in the building—35 dB(A) at any time between 10 pm and 7 am,
- (b) anywhere else in the building (other than a garage, kitchen, bathroom or hallway)—40 dB(A) at any time.

Plans and specifications of the required acoustic design shall be prepared by a practicing acoustic engineer and shall be submitted to the Principal Certifying Authority.

**Reason:** To minimise the impact of noise from the adjoining road or rail corridor on the occupants of the development.

### **36. Noise from plant in residential zone**

Where any form of mechanical ventilation equipment or other noise generating plant is proposed as part of the development, prior to the issue of the Construction Certificate the Certifying Authority, shall be satisfied that the operation of an individual piece of equipment or operation of equipment in combination will not exceed more than 5dB(A) above the background level during the day when measured at the site's boundaries and shall not exceed the background level at night (10.00pm –6.00 am) when measured at the boundary of the site.

**C1. Note:** A certificate from an appropriately qualified acoustic engineer is to be submitted with the Construction Certificate, certifying that all mechanical ventilation equipment or other noise generating plant in isolation or in combination with other plant will comply with the above requirements.

**Reason:** To comply with best practice standards for residential acoustic amenity.

### **37. Location of plant (residential flat buildings)**

Prior to the issue of the Construction Certificate, the Certifying Authority shall be satisfied that all plant and equipment (including but not limited to air conditioning equipment) is located within the basement.

**C1. Note:** Architectural plans identifying the location of all plant and equipment shall be provided to the Certifying Authority.

**Reason:** To minimise impact on surrounding properties, improved visual appearance and amenity for locality.

### 38. Basement car parking details

Prior to issue of the Construction Certificate, certified parking layout plan(s) to scale showing all aspects of the vehicle access and accommodation arrangements must be submitted to and approved by the Certifying Authority. A qualified civil/traffic engineer must review the proposed vehicle access and accommodation layout and provide written certification on the plans that:

- all parking space dimensions, driveway and aisle widths, driveway grades, transitions, circulation ramps, blind aisle situations and other trafficked areas comply with Australian Standard 2890.1 – 2004 “Off-street car parking”
- a clear height clearance of **2.6 metres** (required under DCP40 for waste collection trucks) is provided over the designated garbage collection truck manoeuvring areas within the basement
- no doors or gates are provided in the access driveways to the basement carpark which would prevent unrestricted access for internal garbage collection at any time from the basement garbage storage and collection area
- the vehicle access and accommodation arrangements are to be constructed and marked in accordance with the certified plans

**Reason:** To ensure that parking spaces are in accordance with the approved development.

### 39. Car parking allocation

Car parking within the development shall be allocated in the following way:

Resident car spaces	92
Visitor spaces	15
Total spaces	107

Each adaptable dwelling must be provided with car parking complying with the dimensional and location requirements of AS2890.1 – parking spaces for people with disabilities.

At least one visitor space shall also comply with the dimensional and location requirements of AS2890.1 – parking spaces for people with disabilities.

Consideration must be given to the means of access from disabled car parking spaces to other areas within the building and to footpath and roads and shall be clearly shown on the plans submitted with the Construction Certificate.

**Reason:** To ensure equity of access and appropriate facilities are available for people with disabilities in accordance with federal legislation.

#### **40. Number of bicycle spaces**

The basement car park shall be adapted to provide 18 bicycle spaces in accordance with DCP 55. The bicycle parking spaces shall be designed in accordance with AS2890.3. Details shall be submitted to the satisfaction of the Certifying Authority prior to the issue of a Construction Certificate.

**Reason:** To provide alternative modes of transport to and from the site.

#### **41. Design of works in public road (Roads Act approval)**

Prior to issue of the Construction Certificate, the Certifying Authority shall be satisfied that engineering plans and specifications prepared by a qualified consulting engineer have been approved by Council's Development Engineer. The plans to be assessed must be to a detail suitable for construction issue purposes and must detail the following infrastructure works required in Warrangi Street:

- *kerb and gutter for the site frontage (kerbline to be 3.6 metres offset from property boundary or as close as necessary to 3.6 metres to avoid existing trees or services)*
- *footpath to Council's standard detail for the site frontage*
- *new vehicular crossing to Council's specification*
- *installation of approximately 150 metres of reinforced concrete pipe in Warrangi Street to connect site stormwater drainage into existing street drainage pit.*

Development consent does not give approval to these works in the road reserve. The applicant must obtain a separate approval under sections 138 and 139 of The Roads Act 1993 for the works in the road reserve required as part of the development. The Construction Certificate must not be issued, and these works must not proceed until Council has issued a formal written approval under the Roads Act 1993.

The required plans and specifications are to be designed in accordance with the General Specification for the Construction of Road and Drainage Works in Ku-ring-gai Council, dated November 2004. The drawings must detail existing utility services and trees affected by the works, erosion control requirements and traffic management requirements during the course of works. Survey must be undertaken as required. Traffic management is to be certified on the drawings as being in accordance with the documents SAA HB81.1 – 1996 – Field Guide for Traffic Control at Works on Roads – Part 1 and RTA Traffic Control at Work Sites (1998). Construction of the works must proceed only in accordance with any conditions attached to the Roads Act approval issued by Council.

A minimum of three (3) weeks will be required for Council to assess the Roads Act application. Early submission of the Roads Act application is recommended to avoid delays in obtaining a Construction Certificate. An engineering assessment and inspection fee (set out in Council's adopted fees

and charges) is payable and Council will withhold any consent and approved plans until full payment of the correct fees. Plans and specifications must be marked to the attention of Council's Development Engineers. In addition, a copy of this condition must be provided, together with a covering letter stating the full address of the property and the accompanying DA number.

**Reason:** To ensure that the plans are suitable for construction purposes.

#### **42. Energy Australia requirements**

Prior to issue of the Construction Certificate, the applicant must contact Energy Australia regarding power supply for the subject development. A written response detailing the full requirements of Energy Australia (including any need for underground cabling, substations or similar within or in the vicinity the development) shall be submitted to the Principal Certifying Authority for approval prior to issue of the Construction Certificate.

Any structures or other requirements of Energy Australia shall be indicated on the plans issued with the Construction Certificate, to the satisfaction of the Principal Certifying Authority and Energy Australia. The requirements of Energy Australia must be met in full prior to issue of the Occupation Certificate.

**Reason:** To ensure compliance with the requirements of Energy Australia.

#### **43. Utility provider requirements**

Prior to issue of the Construction Certificate, the applicant must make contact with all relevant utility providers whose services will be impacted upon by the development. A written copy of the requirements of each provider, as determined necessary by the Certifying Authority, must be obtained. All utility services or appropriate conduits for the same must be provided by the developer in accordance with the specifications of the utility providers.

**Reason:** To ensure compliance with the requirements of relevant utility providers.

#### **44. Underground services**

All electrical services (existing and proposed) shall be undergrounded from the proposed building on the site to the appropriate power pole(s) or other connection point. Undergrounding of services must not disturb the root system of existing trees and shall be undertaken in accordance with the requirements of the relevant service provided. Documentary evidence that the relevant service provider has been consulted and that their requirements have been met are to be provided to the Certifying Authority prior to the issue of the Construction Certificate. All electrical and telephone services to the subject property must be placed underground and any redundant poles are to be removed at the expense of the applicant.

**Reason:** To provide infrastructure that facilitates the future improvement of the streetscape by relocation of overhead lines below ground.

**CONDITIONS TO BE SATISFIED PRIOR TO THE ISSUE OF THE CONSTRUCTION CERTIFICATE OR PRIOR TO DEMOLITION, EXCAVATION OR CONSTRUCTION (WHICHEVER COMES FIRST):**

**45. Infrastructure restorations fee**

To ensure that damage to Council Property as a result of construction activity is rectified in a timely matter:

- a) All work or activity taken in furtherance of the development the subject of this approval must be undertaken in a manner to avoid damage to Council Property and must not jeopardise the safety of any person using or occupying the adjacent public areas.
- b) The applicant, builder, developer or any person acting in reliance on this approval shall be responsible for making good any damage to Council Property, and for the removal from Council Property of any waste bin, building materials, sediment, silt, or any other material or article.
- c) The Infrastructure Restoration Fee must be paid to the Council by the applicant prior to both the issue of the Construction Certificate and the commencement of any earthworks or construction.
- d) In consideration of payment of the Infrastructure Restorations Fee, Council will undertake such inspections of Council Property as Council considers necessary and also undertake, on behalf of the applicant, such restoration work to Council Property, if any, that Council considers necessary as a consequence of the development. The provision of such restoration work by the Council does not absolve any person of the responsibilities contained in (a) to (b) above. Restoration work to be undertaken by the Council referred to in this condition is limited to work that can be undertaken by Council at a cost of not more than the Infrastructure Restorations Fee payable pursuant to this condition.
- e) In this condition:

“Council Property” includes any road, footway, footpath paving, kerbing, guttering, crossings, street furniture, seats, letter bins, trees, shrubs, lawns, mounds, bushland, and similar structures or features on any road or public road within the meaning of the Local Government Act 1993 (NSW) or any public place; and

“Infrastructure Restoration Fee” means the Infrastructure Restorations Fee calculated in accordance with the Schedule of Fees & Charges adopted by Council as at the date of payment and the cost of any

inspections required by the Council of Council Property associated with this condition.

**Reason:** To maintain public infrastructure.

#### **46. Airborne pollution**

Emissions associated with the basement carpark are to meet compliance with the protection of the Environment Operations Act.

**Reason:** Protection of amenity.

#### **47 Temporary irrigation**

Temporary irrigation within the Tree Protection Fencing is to be provided. Irrigation volumes to be determined by the Project Arborist.

**Reason:** To protect trees to be retained on site.

#### **48. Section 94 Development Contributions - Non-Centres.**

This development is subject to a development contribution calculated in accordance with Ku-ring-gai Contributions Plan 2010, being a s94 Contributions Plan in effect under the Environmental Planning and Assessment Act, as follows:

<b>Key Community Infrastructure</b>	<b>Amount</b>
Local parks and local sporting facilities	\$513, 749.32
Local recreational and cultural, Local social facilities	\$36, 718.37
<b>Total:</b>	<b>\$550, 467.69</b>

The contribution shall be paid to Council prior to the issue of any Construction Certificate, Linen Plan, Certificate of Subdivision or Occupation Certificate whichever comes first in accordance with Ku-ring-gai Contributions Plan 2010.

The contributions specified above are subject to indexation and may vary at the time of payment in accordance with Ku-ring-gai Contributions Plan 2010 to reflect changes in the consumer price index and housing price index. Prior to payment, please contact Council directly to verify the current payable contributions.

Ku-ring-gai Contributions Plan 2010 may be viewed online at [www.kmc.nsw.gov.au](http://www.kmc.nsw.gov.au) and at the Council Chambers.

**Reason:** To ensure the provision, extension or augmentation of the Key Community Infrastructure identified in Ku-ring-gai Contributions Plan 2010 that will, or is likely to be, required as a consequence of the development.



#### 49. Bush fire risk certification

Bush fire protection measures shall be carried out in accordance with the following bush fire risk assessment, report and certificate, listed below and endorsed with Council's stamp, except where amended by other conditions of this consent:

Document title	Prepared by	Dated
S79BA Certificate ref 2011/34A	Steve Parrott, Bushfire Safety Solutions	27/9/2011
Bushfire Compliance Report ref 2011/34A	Bushfire Safety Solutions	26 March 2011

Prior to the issue of the construction certificate, the principal certifying authority must be satisfied that the construction certificate is in accordance with the recommendations of the report and certificate as listed above.

**Reason:** To ensure that the development is in accordance with the determination.

#### **CONDITIONS TO BE SATISFIED DURING THE DEMOLITION, EXCAVATION AND CONSTRUCTION PHASES:**

#### 50. Front fence

The existing sandstone front fence is to be dismantled and rebuilt in the same location to rectify existing cracking and instability problems. The stone blocks are to be cleaned and stored on site without damage. Before disassembly, the stone fence is to be adequately documented so that it can be accurately reconstructed. Any new stone required must match the size, surface pattern and colour of the existing.

**Reason:** To ensure that stone wall is retained and repaired/reconstructed in an appropriate way so that its contribution to the character of the area can be retained in the new development.

#### 51. Prescribed conditions

The applicant shall comply with any relevant prescribed conditions of development consent under clause 98 of the Environmental Planning and Assessment Regulation. For the purposes of section 80A (11) of the Environmental Planning and Assessment Act, the following conditions are prescribed in relation to a development consent for development that involves any building work:

- The work must be carried out in accordance with the requirements of the Building Code of Australia

- In the case of residential building work for which the Home Building Act 1989 requires there to be a contract of insurance in force in accordance with Part 6 of that Act, that such a contract of insurance is in force before any works commence.

**Reason:** Statutory requirement.

## **52. Hours of work**

Demolition, excavation, construction work and deliveries of building material and equipment must not take place outside the hours of 7.00am to 5.00pm Monday to Friday and 8.00am to 12 noon Saturday. No work and no deliveries are to take place on Sundays and public holidays.

Excavation or removal of any materials using machinery of any kind, including compressors and jack hammers, must be limited to between 7.30am and 5.00pm Monday to Friday, with a respite break of 45 minutes between 12 noon 1.00pm.

Where it is necessary for works to occur outside of these hours (ie) placement of concrete for large floor areas on large residential/commercial developments or where building processes require the use of oversized trucks and/or cranes that are restricted by the RTA from travelling during daylight hours to deliver, erect or remove machinery, tower cranes, pre-cast panels, beams, tanks or service equipment to or from the site, approval for such activities will be subject to the issue of an "outside of hours works permit" from Council as well as notification of the surrounding properties likely to be affected by the proposed works.

**Note:** Failure to obtain a permit to work outside of the approved hours will result in on the spot fines being issued.

**Reason:** To ensure reasonable standards of amenity for occupants of neighbouring properties.

## **53. Approved plans to be on site**

A copy of all approved and certified plans, specifications and documents incorporating conditions of consent and certification (including the Construction Certificate if required for the work) shall be kept on site at all times during the demolition, excavation and construction phases and must be readily available to any officer of Council or the Principal Certifying Authority.

**Reason:** To ensure that the development is in accordance with the determination.

## **54. Engineering fees**

For the purpose of any development related inspections by Ku-ring-gai Council engineers, the corresponding fees set out in Councils adopted Schedule of Fees and Charges are payable to Council. A re-inspection fee per visit may be charged where work is unprepared at the requested time of inspection, or where remedial work is unsatisfactory and a further inspection is required. Engineering fees must be paid in full prior to any final consent from Council.

**Reason:** To protect public infrastructure.

## **55. Statement of compliance with Australian Standards**

The demolition work shall comply with the provisions of Australian Standard AS2601: 2001 The Demolition of Structures. The work plans required by AS2601: 2001 shall be accompanied by a written statement from a suitably qualified person that the proposal contained in the work plan comply with the safety requirements of the Standard. The work plan and the statement of compliance shall be submitted to the satisfaction of the Principal Certifying Authority prior to the commencement of any works.

**Reason:** To ensure compliance with the Australian Standards.

## **56. Construction noise**

During excavation, demolition and construction phases, noise generated from the site shall be controlled in accordance with the recommendations of the approved noise and vibration management plan.

**Reason:** To ensure reasonable standards of amenity to neighbouring properties.

## **57. Site notice**

A site notice shall be erected on the site prior to any work commencing and shall be displayed throughout the works period.

The site notice must:

- be prominently displayed at the boundaries of the site for the purposes of informing the public that unauthorised entry to the site is not permitted
- display project details including, but not limited to the details of the builder, Principal Certifying Authority and structural engineer
- be durable and weatherproof
- display the approved hours of work, the name of the site/project manager, the responsible managing company (if any), its address and 24 hour contact phone number for any inquiries, including construction/noise complaint are to be displayed on the site notice
- be mounted at eye level on the perimeter hoardings/fencing and is to

state that unauthorised entry to the site is not permitted

**Reason:** To ensure public safety and public information.

## **58. Dust control**

During excavation, demolition and construction, adequate measures shall be taken to prevent dust from affecting the amenity of the neighbourhood. The following measures must be adopted:

- physical barriers shall be erected at right angles to the prevailing wind direction or shall be placed around or over dust sources to prevent wind or activity from generating dust
- earthworks and scheduling activities shall be managed to coincide with the next stage of development to minimise the amount of time the site is left cut or exposed
- all materials shall be stored or stockpiled at the best locations
- the ground surface should be dampened slightly to prevent dust from becoming airborne but should not be wet to the extent that run-off occurs
- all vehicles carrying spoil or rubble to or from the site shall at all times be covered to prevent the escape of dust
- all equipment wheels shall be washed before exiting the site using manual or automated sprayers and drive-through washing bays
- gates shall be closed between vehicle movements and shall be fitted with shade cloth
- cleaning of footpaths and roadways shall be carried out daily

**Reason:** To protect the environment and amenity of surrounding properties.

## **59. Post-construction dilapidation report**

The applicant shall engage a suitably qualified person to prepare a post construction dilapidation report at the completion of the construction works. This report is to ascertain whether the construction works created any structural damage to adjoining buildings, infrastructure and roads. The report is to be submitted to the Principal Certifying Authority. In ascertaining whether adverse structural damage has occurred to adjoining buildings, infrastructure and roads, the Principal Certifying Authority must:

- compare the post-construction dilapidation report with the pre-construction dilapidation report
- have written confirmation from the relevant authority that there is no adverse structural damage to their infrastructure and roads.

A copy of this report is to be forwarded to Council at the completion of the construction works.

**Reason:** Management of records.

## **60. Further geotechnical input**

The geotechnical and hydro-geological works implementation, inspection, testing and monitoring program for the excavation and construction works must be in accordance with the report by Jeffery and Katauskas dated 24 April 2007 and the report to be submitted prior to commencement of bulk excavation. Over the course of the works, a qualified geotechnical/hydro-geological engineer must complete the following:

- further geotechnical investigations and testing recommended in the above report(s) and as determined necessary
- further monitoring and inspection at the hold points recommended in the above report(s) and as determined necessary
- written report(s) including certification(s) of the geotechnical inspection, testing and monitoring programs

**Reason:** To ensure the safety and protection of property.

## **61. Compliance with submitted geotechnical report**

A contractor with specialist excavation experience must undertake the excavations for the development and a suitably qualified and consulting geotechnical engineer must oversee excavation.

Geotechnical aspects of the development work, namely:

- appropriate excavation method and vibration control
- support and retention of excavated faces
- hydro-geological considerations

must be undertaken in accordance with the recommendations of the geotechnical report prepared by Jeffery and Katauskas dated 2007 and the report submitted prior to commencement of bulk excavation. Approval must be obtained from all affected property owners, including Ku-ring-gai Council and RTA, where rock anchors (both temporary and permanent) are proposed below adjoining property(ies).

**Reason:** To ensure the safety and protection of property.

## **62. Use of road or footpath**

During excavation, demolition and construction phases, no building materials, plant or the like are to be stored on the road or footpath without written approval being obtained from Council beforehand. The pathway shall be kept in a clean, tidy and safe condition during building operations. Council reserves the right, without notice, to rectify any such breach and to charge the cost against the applicant/owner/builder, as the case may be.

**Reason:** To ensure safety and amenity of the area.

### **63. Guarding excavations**

All excavation, demolition and construction works shall be properly guarded and protected with hoardings or fencing to prevent them from being dangerous to life and property.

**Reason:** To ensure public safety.

### **64. Toilet facilities**

During excavation, demolition and construction phases, toilet facilities are to be provided, on the work site, at the rate of one toilet for every 20 persons or part of 20 persons employed at the site.

**Reason:** Statutory requirement.

### **65. Protection of public places**

If the work involved in the erection, demolition or construction of the development is likely to cause pedestrian or vehicular traffic in a public place to be obstructed or rendered inconvenient, or building involves the enclosure of a public place, a hoarding or fence must be erected between the work site and the public place.

If necessary, a hoarding is to be erected, sufficient to prevent any substance from, or in connection with, the work falling into the public place.

The work site must be kept lit between sunset and sunrise if it is likely to be hazardous to persons in the public place.

Any hoarding, fence or awning is to be removed when the work has been completed.

**Reason:** To protect public places.

### **66. Recycling of building material (general)**

During demolition and construction, the Principal Certifying Authority shall be satisfied that building materials suitable for recycling have been forwarded to an appropriate registered business dealing in recycling of materials. Materials to be recycled must be kept in good order.

**Reason:** To facilitate recycling of materials.

## **67. Construction signage**

All construction signs must comply with the following requirements:

- are not to cover any mechanical ventilation inlet or outlet vent
- are not illuminated, self-illuminated or flashing at any time
- are located wholly within a property where construction is being undertaken
- refer only to the business(es) undertaking the construction and/or the site at which the construction is being undertaken
- are restricted to one such sign per property
- do not exceed 2.5m<sup>2</sup>
- are removed within 14 days of the completion of all construction works

**Reason:** To ensure compliance with Council's controls regarding signage.

## **68. Approval for rock anchors**

Approval is to be obtained from the property owner for any anchors proposed beneath adjoining private property. If such approval cannot be obtained, then the excavated faces are to be shored or propped in accordance with the recommendations of the geotechnical and structural engineers.

**Reason:** To ensure the ongoing safety and protection of property.

## **69. Maintenance period for works in public road**

A maintenance period of six (6) months applies to all work in the public road reserve carried out by the applicant - after the works have been completed to the satisfaction of Ku-ring-gai Council. In that maintenance period, the applicant shall be liable for any section of the public infrastructure work which fails to perform in the designed manner, or as would reasonably be expected under the operating conditions. The maintenance period shall commence once the applicant receives a formal letter from Council stating that the works involving public infrastructure have been completed satisfactorily.

**Reason:** To protect public infrastructure.

## **70. Road reserve safety**

All public footways and roadways fronting and adjacent to the site must be maintained in a safe condition at all times during the course of the development works. Construction materials must not be stored in the road reserve. A safe pedestrian circulation route and a pavement/route free of trip hazards must be maintained at all times on or adjacent to any public access ways fronting the construction site. Where public infrastructure is damaged, repair works must be carried out when and as directed by Council officers. Where pedestrian circulation is diverted on to the roadway or verge areas, clear directional signage and protective barricades must be installed in accordance with AS1742-3 (1996) "Traffic Control Devices for Work on

Roads". If pedestrian circulation is not satisfactorily maintained across the site frontage, and action is not taken promptly to rectify the defects, Council may undertake proceedings to stop work.

**Reason:** To ensure safe public footways and roadways during construction.

### **71. Road repairs necessitated by excavation and construction works**

It is highly likely that damage will be caused to the roadway at or near the subject site as a result of the construction (or demolition or excavation) works. The applicant, owner and builder (and demolition or excavation contractor as appropriate) will be held responsible for repair of such damage, regardless of the Infrastructure Restorations Fee paid (this fee is to cover wear and tear on Council's wider road network due to heavy vehicle traffic, not actual major damage).

Section 102(1) of the Roads Act states "A person who causes damage to a public road is liable to pay to the appropriate roads authority the cost incurred by that authority in making good the damage."

Council will notify when road repairs are needed, and if they are not carried out within 48 hours, then Council will proceed with the repairs, and will invoice the applicant, owner and relevant contractor for the balance.

**Reason:** To protect public infrastructure.

### **72. Services**

Where required, the adjustment or inclusion of any new utility service facilities must be carried out by the applicant and in accordance with the requirements of the relevant utility authority. These works shall be at no cost to Council. It is the applicants' full responsibility to make contact with the relevant utility authorities to ascertain the impacts of the proposal upon utility services (including water, phone, gas and the like). Council accepts no responsibility for any matter arising from its approval to this application involving any influence upon utility services provided by another authority.

**Reason:** Provision of utility services.

### **73. Temporary rock anchors**

If the use of temporary rock anchors extending into the road reserve is proposed, then approval must be obtained from Council and/or the Roads and Traffic Authority in accordance with Section 138 of the Roads Act 1993. The Applicant is to submit details of all the work that is to be considered, and the works are not to commence until approval has been granted. The designs are to include details of the following:



- How the temporary rock anchors will be left in a way that they will not harm or interfere with any future excavation in the public road
- That the locations of the rock anchors are registered with Dial Before You Dig
- That approval of all utility authorities likely to use the public road has been obtained. All temporary rock anchors are located outside the allocations for the various utilities as adopted by the Streets Opening Conference.
- That any remaining de-stressed rock anchors are sufficiently isolated from the structure that they cannot damage the structure if pulled during future excavations or work in the public road.
- That signs will be placed and maintained on the building stating that de-stressed rock anchors remain in the public road and include a contact number for the building manager. The signs are to be at least 600mm x 450mm with lettering on the signs is to be no less than 75mm high. The signs are to be at not more than 60m spacing. At least one sign must be visible from all locations on the footpath outside the property. The wording on the signs is to be submitted to Council's Director Technical Services for approval before any signs are installed.

Permanent rock anchors are not to be used where any part of the anchor extends outside the development site into public areas or road reserves.

All works in the public road are to be carried out in accordance with the Conditions of Construction issued with any approval of works granted under Section 138 of the Roads Act 1993.

**Reason:** To ensure the ongoing safety and protection of property.

#### **74. Temporary disposal of stormwater runoff**

During construction, stormwater runoff must be disposed of in a controlled manner that is compatible with the erosion and sediment controls on the site. Immediately upon completion of any impervious areas on the site (including roofs, driveways, paving) and where the final drainage system is incomplete, the necessary temporary drainage systems must be installed to manage and control runoff as far as the approved point of stormwater discharge. Such measures shall be to the satisfaction of the Principal Certifying Authority.

**Reason:** To preserve and enhance the natural environment.

#### **75. Erosion control**

Temporary sediment and erosion control and measures are to be installed prior to the commencement of any works on the site. These measures must be maintained in working order during construction works up to completion. All sediment traps must be cleared on a regular basis and after each major storm and/or as directed by the Principal Certifying Authority and Council officers.

**Reason:** To protect the environment from erosion and sedimentation.

## **76. Drainage to street**

Stormwater runoff from all new impervious areas and subsoil drainage systems shall be piped to the street drainage system. New drainage line connections to the street drainage system shall conform and comply with the requirements of Sections 5.3 and 5.4 of Ku-ring-gai Water Management Development Control Plan No. 47.

**Reason:** To protect the environment.

## **77. Sydney Water Section 73 Compliance Certificate**

The applicant must obtain a **Section 73 Compliance Certificate** under the *Sydney Water Act 1994*. An application must be made through an authorised Water Servicing CoOrdinator. The applicant is to refer to “Your Business” section of Sydney Water’s web site at [www.sydneywater.com.au](http://www.sydneywater.com.au) then the “e-develop” icon or telephone 13 20 92. Following application a “Notice of Requirements” will detail water and sewer extensions to be built and charges to be paid. Please make early contact with the CoOrdinator, since building of water/sewer extensions can be time consuming and may impact on other services and building, driveway or landscape design.

**Reason:** Statutory requirement.

## **78. Arborist’s report**

The trees to be retained shall be inspected, monitored and treated by a Project Arborist who must be a qualified (AQF) Level 5 arborist in accordance with AS4970-2009 Protection of trees on development sites. Regular inspections and documentation from the Project Arborist to the Principal Certifying Authority are required including at the following times or phases of work. All monitoring shall be recorded and provided to the Principal Certifying Authority prior to completion of the works.

### **Schedule**

#### **Tree/location**

#### **Time of inspection**

*Eucalyptus pilularis* (Blackbutt) Tree 11

Commencement of excavation, works within TPZ

*Angophora floribunda* (Rough-barked Apple) Tree 13

Commencement of excavation, works within TPZ

*Eucalyptus pilularis* (Blackbutt) Tree 15

Commencement of excavation, works within TPZ

*Araucaria cunninghamiana* (Cook Pine) Tree 18

Commencement of excavation,

<i>Eucalyptus pilularis</i> (Blackbutt) Tree 44	scaffolding, works within TPZ Commencement of excavation, works within TPZ
<i>Cedrus atlantica</i> (Atlantic Cedar) Tree 46	Commencement of excavation, scaffolding, works within TPZ
<i>Magnolia grandiflora</i> (Bull-bay Magnolia) Tree 48	Commencement of excavation, works within TPZ
<i>Cedrus deodara</i> (Himalayan Cedar) Tree 49	Commencement of excavation, scaffolding, works within TPZ
<i>Cryptomeria japonica</i> (Japanese Cedar) Tree 55	Commencement of excavation, works within TPZ
<i>Stenocarpus sinuatus</i> (Firewheel Tree) Tree 56	Commencement of excavation, works within TPZ
<i>Liquidambar styraciflua</i> (Liquidambar) Tree 59	Commencement of excavation, works within TPZ
<i>Magnolia x soulangiana</i> (Magnolia) Tree 64	Commencement of excavation, works within TPZ

**Reason:** To ensure protection of existing trees.

## 79. Trees on nature strip

Removal/pruning of the following tree/s from Council's nature strip to permit vehicular access shall be undertaken at no cost to Council by an experienced tree removal contractor/arborist holding public liability insurance amounting to a minimum cover of \$10,000,000.

### Schedule

#### Tree/location

*Jacaranda mimosifolia* (Jacaranda) Tree 2  
*Jacaranda mimosifolia* (Jacaranda) Tree 32  
*Tristanopsis laurina* (Water Gum) Tree 33

**Reason:** To ensure protection of existing trees.

## 80. Canopy/root pruning

Canopy and/or root pruning of the following tree(s) which is necessary to accommodate the approved building works shall be undertaken by an experienced an AQF level 3 Arborist under the supervision of the Project Arborist and in accordance with the reduction pruning clause of AS4373-2007. All other branches are to be tied back and protected during construction, under the supervision of a qualified arborist.

### Schedule

#### Tree/location

*Araucaria cunninghamiana* (Cook Pine) Tree 18

*Cedrus atlantica* (Atlantic Cedar) Tree 46

*Cedrus deodara* (Himalayan Cedar) Tree 49

*Cryptomeria japonica* (Japanese Cedar) Tree 55

#### Tree works

Minor pruning for building clearance

Minor pruning for building clearance

Minor pruning for building clearance

Minor pruning for building clearance

**Reason:** To protect the environment.

## 81. Treatment of tree roots

If tree roots are required to be severed for the purposes of constructing the approved works, they shall be cut cleanly by hand, by an experienced Arborist/Horticulturist with a minimum qualification of Horticulture Certificate or Tree Surgery Certificate. All pruning works shall be undertaken as specified in Australian Standard 4373-2007 – Pruning of Amenity Trees.

**Reason:** To protect existing trees.

## 82. Cutting of tree roots

No tree roots of 30mm or greater in diameter located within the specified radius of the trunk(s) of the following, tree(s) shall be severed or injured in the process of any works during the construction period.

### Schedule

#### Tree/location

*Eucalyptus pilularis* (Blackbutt) Tree 11

*Angophora floribunda* (Rough-barked Apple) Tree 13

*Eucalyptus pilularis* (Blackbutt) Tree 15

*Araucaria cunninghamiana* (Cook Pine) Tree 18

*Magnolia x soulangiana* (Magnolia) Tree 36

*Eucalyptus pilularis* (Blackbutt) Tree 44

*Cedrus atlantica* (Atlantic Cedar) Tree 46

*Magnolia grandiflora* (Bull-bay Magnolia) Tree 48

*Cedrus deodara* (Himalayan Cedar) Tree 49

*Grevillea robusta* (Silky Oak) Tree 51

#### Radius from trunk

8m

8m

9m

9m

3m

8m

5m

8m

8m

5m

<i>Cryptomeria japonica</i> (Japanese Cedar) Tree 55	5m
<i>Stenocarpus sinuatus</i> (Firewheel Tree) Tree 56	3m
<i>Liquidambar styraciflua</i> (Liquidambar) Tree 59	8m
<i>Magnolia x soulangiana</i> (Magnolia) Tree 64	4m

**Reason:** To protect existing trees.

### 83. Approved tree works

Approval is given for the following works to be undertaken to trees on the site. An arborist report, prepared by Advanced Tree Consulting, dated 8/03/11, has been submitted as part of the application. Tree numbers refer to this report.

#### Schedule

Tree location	Approved tree works
<i>Jacaranda mimosifolia</i> (Jacaranda) Tree 2	Removal
<i>Acacia baileyana</i> (Cootamundra Wattle) Tree 3	Removal
<i>Brachychiton acerifolius</i> (Flame Tree) Tree 4	Removal
<i>Cupressus species</i> (Cypress) Tree 6,7,8 and 9	Removal
<i>Angophora floribunda</i> (Rough barked Apple) Tree 10	Removal
<i>Cupressus macrocarpa</i> (Monterey Cypress) Tree 14	Removal
<i>Liquidambar styraciflua</i> (Liquidambar) Tree 16	Removal
<i>Pittosporum undulatum</i> (Sweet Pittosporum) Tree 17	Removal
<i>Araucaria cunninghamiana</i> (Cook Pine) Tree 19	Removal
<i>Jacaranda mimosifolia</i> (Jacaranda) Tree 20	Removal
<i>Magnolia grandiflora</i> (Bull-bay Magnolia) Tree 22	Removal
<i>Eucalyptus saligna</i> (Sydney Blue Gum) Tree 24	Removal
<i>Cupressus species</i> (Cypress) Tree 25	Removal
<i>Brachychiton acerifolius</i> (Flame Tree) Tree 26	Removal
<i>Cupressus cashmeriana</i> (Cypress) Tree 27	Removal
<i>Syagrus romanzoffiana</i> (Cocus Palm) Tree 28	Removal
<i>Pittosporum undulatum</i> (Sweet Pittosporum) Tree 29	Removal
<i>Angophora floribunda</i> (Rough barked Apple) Tree 30	Removal
<i>Cupressus species</i> (Cypress) Tree 31	Removal
<i>Jacaranda mimosifolia</i> (Jacaranda) Tree 35	Removal
<i>Acer palmatum</i> (Japanese Maple) Tree 37	Removal
<i>Jacaranda mimosifolia</i> (Jacaranda) Tree 38	Removal
<i>Jacaranda mimosifolia</i> (Jacaranda) Tree 39	Removal
<i>Chamaecyparis obtusa</i> 'Crippsii' (Golden Cripps Cypress) Tree 40	Removal
<i>Acer palmatum</i> (Japanese Maple) Tree 41	Removal
<i>Eucalyptus pilularis</i> (Blackbutt) Tree 42	Removal
<i>Angophora floribunda</i> (Rough-barked Apple) Tree 43	Removal
<i>Chamaecyparis obtusa</i> 'Crippsii' (Golden Cripps Cypress) Tree 45	Removal
<i>Metasequoia glyptostroboides</i> (Dawn Redwood) Tree 47	Removal
<i>Ginkgo biloba</i> (Maiden-hair Tree) Tree 50	Removal
<i>Fagus sylvatica</i> (Beech) Tree 53	Removal
<i>Jacaranda mimosifolia</i> (Jacaranda) Tree 60	Removal
<i>Plumeria acutifolia</i> (Frangipani) Tree 61	Removal

<i>Cupressocyparis x leylandii</i> (Leyland Cypress) Tree 62, 63 and 66	Removal
<i>Pittosporum eugenoides</i> 'Variegata' (Variegated Tarata) Tree 65	Removal

Removal or pruning of any other tree on the site is not approved.

**Reason:** To ensure that the development is in accordance with the determination.

#### 84. Excavation near trees

No mechanical excavation shall be undertaken within the specified radius of the trunk(s) of the following tree(s) until root pruning by hand along the perimeter line of such works is completed:

##### Schedule

Tree/location	Radius from trunk
<i>Araucaria cunninghamiana</i> (Cook Pine) Tree 18	9m
<i>Magnolia x soulangiana</i> (Magnolia) Tree 36	3m
<i>Cedrus atlantica</i> (Atlantic Cedar) Tree 46	5m
<i>Magnolia grandiflora</i> (Bull-bay Magnolia) Tree 48	8m
<i>Cedrus deodara</i> (Himalayan Cedar) Tree 49	8m

**Reason:** To protect existing trees.

#### 85. Hand excavation

All excavation within the specified radius of the trunk(s) of the following tree(s) shall be hand dug under the supervision of the Project Arborist.

##### Schedule

Tree/location	Radius from trunk
<i>Eucalyptus pilularis</i> (Blackbutt) Tree 11	8m
<i>Angophora floribunda</i> (Rough-barked Apple) Tree 13	8m
<i>Eucalyptus pilularis</i> (Blackbutt) Tree 15	9m
<i>Araucaria cunninghamiana</i> (Cook Pine) Tree 18	9m
<i>Magnolia x soulangiana</i> (Magnolia) Tree 36	3m
<i>Eucalyptus pilularis</i> (Blackbutt) Tree 44	8m
<i>Cedrus atlantica</i> (Atlantic Cedar) Tree 46	5m
<i>Magnolia grandiflora</i> (Bull-bay Magnolia) Tree 48	8m
<i>Cedrus deodara</i> (Himalayan Cedar) Tree 49	8m
<i>Grevillea robusta</i> (Silky Oak) Tree 51	5m
<i>Cryptomeria japonica</i> (Japanese Cedar) Tree 55	5m
<i>Stenocarpus sinuatus</i> (Firewheel Tree) Tree 56	3m
<i>Liquidambar styraciflua</i> (Liquidambar) Tree 59	8m
<i>Magnolia x soulangiana</i> (Magnolia) Tree 64	4m

**Reason:** To protect existing trees.

## **86. No storage of materials beneath trees**

No activities, storage or disposal of materials shall take place beneath the canopy of any tree protected under Council's Tree Preservation Order at any time.

**Reason:** To protect existing trees.

## **87. Tree planting on nature strip**

The following tree species shall be planted, at no cost to Council, in the nature strip fronting the property along (enter street). The tree(s) used shall be a minimum 25 litres container size specimen(s):

### **Schedule**

<b>Tree/ species</b>	<b>Quantity</b>	<b>Location</b>
<i>Tristaniopsis laurina</i> (Water Gum)	5	Pacific Highway
<i>Jacaranda mimosifolia</i> (Jacaranda)	5	Warrangi Street

**Reason:** To provide appropriate landscaping within the streetscape.

## **88. Tree removal on nature strip**

Following removal of Tree 2, 32, 33 and 34 from Council's nature strip, the nature strip shall be rehabilitated to the satisfaction of Council's Landscape Assessment Officer at no cost to Council.

**Reason:** To protect the streetscape.

## **89. Removal of refuse**

All builders' refuse, spoil and/or material unsuitable for use in landscape areas shall be removed from the site on completion of the building works.

**Reason:** To protect the environment.

## **90. Canopy replenishment trees to be planted**

The canopy replenishment trees to be planted shall be maintained in a healthy and vigorous condition until they attain a height of 5.0 metres whereby they will be protected by Council's Tree Preservation Order. Any of the trees found faulty, damaged, dying or dead shall be replaced with the same species.

**Reason:** To maintain the treed character of the area.

## **91. Removal of noxious plants & weeds**

All noxious and/or environmental weed species shall be removed from the property prior to completion of building works.

**Reason:** To protect the environment.

## **92. Survey and inspection of waste collection clearance and path of travel**

At the stage when formwork for the ground floor slab is in place and prior to concrete being poured, a registered surveyor is to:

- ascertain the reduced level of the underside of the slab at the driveway entry,
- certify that the level is not lower than the level shown on the approved DA plans; and
- certify that the minimum headroom of 2.6 metres will be available for the full path of travel of the small waste collection vehicle from the street to the collection area.
- This certification is to be provided to Council's Development Engineer prior to any concrete being poured for the ground floor slab.
- No work is to proceed until Council has undertaken an inspection to determine clearance and path of travel.

At the stage when formwork for the ground floor slab is in place and prior to concrete being poured, Council's Development Engineer and Manager Waste Services are to carry out an inspection of the site to confirm the clearance available for the full path of travel of the small waste collection vehicle from the street to the collection area. This inspection may not be carried out by a private certifier because waste management is not a matter listed in Clause 161 of the Environmental Planning and Assessment Regulation 2000.

**Reason:** To ensure access will be available for Council's contractors to collect waste from the collection point.

## **93. On site retention of waste dockets**

All demolition, excavation and construction waste dockets are to be retained on site, or at suitable location, in order to confirm which facility received materials generated from the site for recycling or disposal.

- Each docket is to be an official receipt from a facility authorised to accept the material type, for disposal or processing.
- This information is to be made available at the request of an Authorised Officer of Council.

**Reason:** To protect the environment.

## **CONDITIONS TO BE SATISFIED PRIOR TO THE ISSUE OF AN OCCUPATION CERTIFICATE:**



#### **94. Completion of tree works**

Prior to the release of the Occupation Certificate, the Principal Certifying Authority is to be satisfied that all tree works, including pruning in accordance with AS4373-2007 or remediation works in accordance with AS4370-2009, have been undertaken in accordance with the approved plan(s) and conditions of consent.

**Reason:** To ensure that the tree works are consistent with the development consent.

#### **95. Compliance with BASIX Certificate**

Prior to the issue of an Occupation Certificate, the Principal Certifying Authority shall be satisfied that all commitments listed in BASIX Certificate No. 356840M\_04 have been complied with.

**Reason:** Statutory requirement.

#### **96. Clotheslines and clothes dryers**

Prior to the issue of the Occupation Certificate, the Principal Certifying Authority shall be satisfied that the units either have access to an external clothes line located in common open space or have a mechanical clothes dryer installed.

**Reason:** To provide access to clothes drying facilities.

#### **97. Mechanical ventilation**

Following completion, installation and testing of all the mechanical ventilation systems, the Principal Certifying Authority shall be satisfied of the following prior to the issue of any Occupation Certificate:

1. The installation and performance of the mechanical systems complies with:
  - The Building Code of Australia
  - Australian Standard AS1668
  - Australian Standard AS3666 where applicable
2. The mechanical ventilation system in isolation and in association with other mechanical ventilation equipment, when in operation will not be audible within a habitable room in any other residential premises before 7am and after 10pm Monday to Friday and before 8am and after 10pm Saturday, Sunday and public holidays. The operation of the unit outside these restricted hours shall emit a noise level of not greater than 5dbA above the background when measured at the nearest adjoining boundary.

**Note:** Written confirmation from an acoustic engineer that the development achieves the above requirements is to be submitted to the Principal Certifying Authority prior to the issue of the Occupation Certificate.

**Reason:** To protect the amenity of surrounding properties.

## **98. Completion of landscape works**

Prior to the release of the Occupation Certificate, the Principal Certifying Authority is to be satisfied that all landscape works, including the removal of all noxious and/or environmental weed species, have been undertaken in accordance with the approved plan(s) and conditions of consent.

**Reason:** To ensure that the landscape works are consistent with the development consent.

## **99. Accessibility**

Prior to the issue of an Occupation Certificate, the Principal Certifying Authority shall be satisfied that:

- the lift design and associated functions are compliant with AS 1735.12 & AS 1428.2
- the level and direction of travel, both in lifts and lift lobbies, is audible and visible
- the controls for lifts are accessible to all persons and control buttons and lettering are raised
- international symbols have been used with specifications relating to signs, symbols and size of lettering complying with AS 1428.2
- the height of lettering on signage is in accordance with AS 1428.1 – 1993
- the signs and other information indicating access and services incorporate tactile communication methods in addition to the visual methods

**Reason:** Disabled access & services.

## **100. Retention and re-use positive covenant**

Prior to issue of the Occupation Certificate, the applicant must create a positive covenant and restriction on the use of land under Section 88E of the Conveyancing Act 1919, burdening the property with the requirement to maintain the site stormwater retention and re-use facilities on the property.

The terms of the instruments are to be generally in accordance with the Council's "draft terms of Section 88B instruments for protection of retention and re-use facilities" and to the satisfaction of Council (refer to appendices of Ku-ring-gai Water Management Development Control Plan No. 47). For existing titles, the positive covenant and the restriction on the use of land is to be created through an application to the Land Titles Office in the form of a

request using forms 13PC and 13RPA. The relative location of the reuse and retention facility, in relation to the building footprint, must be shown on a scale sketch, attached as an annexure to the request forms.

Registered title documents showing the covenants and restrictions must be submitted to and approved by the Principal Certifying Authority prior to issue of an Occupation Certificate.

**Reason:** To protect the environment.

#### **101. Provision of copy of OSD designs if Council is not the PCA**

Prior to issue of the Occupation Certificate, the following must be provided to Council's Development Engineer:

- A copy of the approved Construction Certificate stormwater detention/retention design for the site
- A copy of any works-as-executed drawings required by this consent
- The Engineer's certification of the as-built system.

**Reason:** For Council to maintain its database of as-constructed on-site stormwater detention systems.

#### **102. Certification of drainage works (dual occupancies and above)**

Prior to issue of the Occupation Certificate, the Principal Certifying Authority is to be satisfied that:

- the stormwater drainage works have been satisfactorily completed in accordance with the approved Construction Certificate drainage plans
- the minimum retention and on-site detention storage volume requirements of BASIX and Ku-ring-gai Water Management Development Control Plan No. 47 respectively, have been achieved
- retained water is connected and available for use
- basement and subsoil areas are able to drain via a pump/sump system installed in accordance with AS3500.3 and Appendix 7.1.1 of Ku-ring-gai Water Management Development Control Plan No. 47
- all grates potentially accessible by children are secured
- components of the new drainage system have been installed by a licensed plumbing contractor in accordance with the Plumbing and Drainage Code AS3500.3 2003 and the Building Code of Australia
- all enclosed floor areas, including habitable and garage floor levels, are safeguarded from outside stormwater runoff ingress by suitable differences in finished levels, gradings and provision of stormwater collection devices

The rainwater certification sheet contained in Appendix 13 of the Ku-ring-gai Water Management Development Control Plan No. 47, must be completed and attached to the certification. Where an on-site detention system has been constructed, the on-site detention certification sheet contained in Appendix 4 of DCP 47 must also be completed and attached to the certification.

**Note:** Evidence from a qualified and experienced consulting civil/hydraulic engineer documenting compliance with the above is to be provided to Council prior to the issue of an Occupation Certificate.

**Reason:** To protect the environment.

### **103. WAE plans for stormwater management and disposal (dual occupancy and above)**

Prior to issue of the Occupation Certificate, a registered surveyor must provide a works as executed survey of the completed stormwater drainage and management systems. The survey must be submitted to and approved by the Principal Certifying Authority prior to issue of the Occupation Certificate. The survey must indicate:

- as built (reduced) surface and invert levels for all drainage pits
- gradients of drainage lines, materials and dimensions
- as built (reduced) level(s) at the approved point of discharge to the public drainage system
- as built location and internal dimensions of all detention and retention structures on the property (in plan view) and horizontal distances to nearest adjacent boundaries and structures on site
- the achieved storage volumes of the installed retention and detention storages and derivative calculations
- as built locations of all access pits and grates in the detention and retention system(s), including dimensions
- the size of the orifice or control fitted to any on-site detention system
- dimensions of the discharge control pit and access grates
- the maximum depth of storage possible over the outlet control
- top water levels of storage areas and indicative RL's through the overland flow path in the event of blockage of the on-site detention system

The works as executed plan(s) must show the as built details above in comparison to those shown on the drainage plans approved with the Construction Certificate prior to commencement of works. All relevant levels and details indicated must be marked in red on a copy of the Principal Certifying Authority stamped construction certificate stormwater plans.

**Reason:** To protect the environment.

#### **104. Basement pump-out maintenance**

Prior to issue of the Occupation Certificate, the Principal Certifying Authority shall be satisfied that a maintenance regime has been prepared for the basement stormwater pump-out system.

**Note:** A maintenance regime specifying that the system is to be regularly inspected and checked by qualified practitioners is to be prepared by a suitable qualified professional and provided to the Principal Certifying Authority.

**Reason:** To protect the environment.

#### **105. OSD positive covenant/restriction**

Prior to issue of the Occupation Certificate, the applicant must create a positive covenant and restriction on the use of land under Section 88E of the Conveyancing Act 1919, burdening the owner with the requirement to maintain the on-site stormwater detention facilities on the lot.

The terms of the instruments are to be generally in accordance with the Council's "draft terms of Section 88B instrument for protection of on-site detention facilities" and to the satisfaction of Council (refer to appendices of Ku-ring-gai Council Water Management DCP 47). For existing titles, the positive covenant and the restriction on the use of land is to be created through an application to the Land Titles Office in the form of a request using forms 13PC and 13RPA. The relative location of the on-site detention facility, in relation to the building footprint, must be shown on a scale sketch, attached as an annexure to the request forms.

Registered title documents, showing the covenants and restrictions, must be submitted and approved by the Principal Certifying Authority prior to issue of an Occupation Certificate.

**Reason:** To protect the environment.

#### **106. Sydney Water Section 73 Compliance Certificate**

Prior to issue of an Occupation Certificate the Section 73 Sydney water Compliance Certificate must be obtained and submitted to the Principal Certifying Authority

**Reason:** Statutory requirement.

#### **107. Certification of as-constructed driveway/carpark – RFB**

Prior to issue of an Occupation Certificate, the Principal Certifying Authority is to be satisfied that:

- the as-constructed car park complies with the approved Construction Certificate plans
- the completed vehicle access and accommodation arrangements comply with Australian Standard 2890.1 – 2004 “Off-Street car parking” in terms of minimum parking space dimensions
- finished driveway gradients and transitions will not result in the scraping of the underside of cars
- no doors, gates, grilles or other structures have been provided in the access driveways to the basement carpark, which would prevent unrestricted access for internal garbage collection from the basement garbage storage and collection area
- the vehicular headroom requirements of:
  - Australian Standard 2890.1 – “Off-street car parking”,
  - **2.6 metres** height clearance for waste collection trucks (refer DCP 40) are met from the public street into and within the applicable areas of the basement carpark.

**Note:** Evidence from a suitably qualified and experienced traffic/civil engineer indicating compliance with the above is to be provided to and approved by the Principal Certifying Authority prior to the issue of an Occupation Certificate.

**Reason:** To ensure that vehicular access and accommodation areas are compliant with the consent.

#### **108. Reinstatement of redundant crossings and completion of infrastructure works**

Prior to issue of the Occupation Certificate and upon completion of all works on site which could result in damage to Council's infrastructure, the Principal Certifying Authority must be satisfied that he or she has received a signed inspection form from Council which states that the following works in the road reserve have been completed:

- new concrete driveway crossing in accordance with levels and specifications issued by Council
- removal of all redundant driveway crossings and kerb laybacks (or sections thereof) and reinstatement of these areas to footpath, turfed verge and upright kerb and gutter (reinstatement works to match surrounding adjacent infrastructure with respect to integration of levels and materials)
- full repair and resealing of any road surface damaged during construction
- repair of any damage associated with provision of services to the site such as electricity or water, even if not directly outside the site, or

- payment of full restoration fees to Council.
- full replacement of damaged sections of grass verge to match existing

This inspection may not be carried out by the Private Certifier because restoration of Council property outside the boundary of the site is not a matter listed in Clause 161 of the Environmental Planning and Assessment Regulation 2000.

All works must be completed in accordance with the General Specification for the Construction of Road and Drainage Works in Ku-ring-gai Council, dated November 2004. The Occupation Certificate must not be issued until all damaged public infrastructure caused as a result of construction works on the subject site (including damage caused by, but not limited to, delivery vehicles, waste collection, contractors, sub contractors, concrete vehicles) is fully repaired to the satisfaction of Council. Repair works shall be at no cost to Council.

**Reason:** To protect the streetscape.

#### **109. Construction of works in public road – approved plans**

Prior to issue of the Occupation Certificate, the Principal Certifying Authority must be satisfied that all approved road, footpath and/or drainage works have been completed in the road reserve in accordance with the Council Roads Act approval and accompanying drawings, conditions and specifications.

The works must be supervised by the applicant's designing engineer and completed and approved to the satisfaction of Ku-ring-gai Council.

The supervising consulting engineer is to provide certification upon completion that the works were constructed in accordance with the Council approved stamped drawings. The works must be subject to inspections by Council at the hold points noted on the Roads Act approval. All conditions attached to the approved drawings for these works must be met prior to the Occupation Certificate being issued.

**Reason:** To ensure that works undertaken in the road reserve are to the satisfaction of Council.

#### **110. Infrastructure repair**

Prior to issue of the Occupation Certificate, the Principal Certifying Authority must be satisfied that any damaged public infrastructure caused as a result of construction works (including damage caused by, but not limited to, delivery vehicles, waste collection, contractors, sub contractors, concrete vehicles) is fully repaired to the satisfaction of Council Development Engineer and at no cost to Council.

**Reason:** To protect public infrastructure.

### **111. Mechanical ventilation**

Prior to the issue of the Occupation Certificate, the Principal Certifying Authority shall be satisfied that all mechanical ventilation systems are installed in accordance with Part F4.5 of the Building Code of Australia and comply with Australian Standards AS1668.2 and AS3666 Microbial Control of Air Handling and Water Systems of Building.

**Reason:** To ensure adequate levels of health and amenity to the occupants of the building.

### **112. Fire safety certificate**

Prior to the issue of the Occupation Certificate, the Principal Certifying Authority shall be satisfied that a Fire Safety Certificate for all the essential fire or other safety measures forming part of this consent has been completed and provided to Council.

**Note:** A copy of the Fire Safety Certificate must be submitted to Council.

**Reason:** To ensure suitable fire safety measures are in place.

### **113. Compliance with bush fire assessment, report and certificate**

Prior to the issue of an Occupation Certificate, the Principal Certifying Authority shall be satisfied that all recommendations listed in the bush fire risk assessment and report below have been complied with:

<b>Document title</b>	<b>Prepared by</b>	<b>Dated</b>
Bushfire Compliance Report	Bushfire Safety Solutions	March 2011

**Reason:** Statutory requirement.

### **CONDITIONS TO BE SATISFIED AT ALL TIMES:**

#### **114. Outdoor lighting**

At all times for the life of the approved development, all outdoor lighting shall not detrimentally impact upon the amenity of other premises and adjacent dwellings and shall comply with, where relevant, AS/NZ1158.3: 1999 Pedestrian Area (Category P) Lighting and AS4282: 1997 Control of the Obtrusive Effects of Outdoor Lighting.

**Reason:** To protect the amenity of surrounding properties.

#### **115. Noise control – plant and machinery**

All noise generating equipment associated with any proposed mechanical ventilation system/s shall be located and/or soundproofed so the equipment is



not audible within a habitable room in any other residential premises before 7am and after 10pm Monday to Friday and before 8am and after 10pm Saturday, Sunday and public holidays. The operation of the unit outside these restricted hours shall emit a noise level of not greater than 5dbA above the background when measured at the nearest boundary.

**Reason:** To protect the amenity of surrounding residents.

#### **Roads Traffic Authority conditions:**

##### **116. Basement parking requirements**

The layout of the proposed car parking areas associated with the subject development (including, driveways, grades, turn paths, sight distance requirements, aisle widths, aisle lengths and parking bay dimensions) should be in accordance with AS 2890.1-2004 and AS 2890.2-2002 for heavy vehicle usage.

**Reason:** Compliance with Australian Standards.

##### **117. RTA vehicle & pedestrian safety**

The required sight lines to pedestrians or other vehicles in or around the carpark or entrances are not to be compromised by landscaping, signage, fencing or display materials. Minimum sight lines for pedestrian safety are outlines in AS2890.1 (Figure 3.3). Subject to Local traffic committee approval, "No Stopping" signs shall be installed along the length of the property frontage to meet sight lines. Also subject to Local traffic Committee approval and community consultation a "No Stopping" zone should be installed across the entire Warrangi Street frontage.

**Reason:** To maintain Pedestrian & Vehicular safety.

##### **118. RTA – Pacific Highway requirement**

All demolition and construction vehicles are to be contained wholly within the site or accommodated on the local road network. A construction zone will not be permitted on the Pacific Highway.

**Reason:** Maintenance of traffic flow on the Pacific Highway.

##### **119. Redundant driveway**

The redundant driveway on the Pacific Highway shall be removed and replaced with kerb and gutter to match the existing.

**Reason:** RTA requirements.

## **120. Kerb and gutter**

The design and re-construction of the gutter off the Pacific Highway shall be in accordance with RTA requirements. Details of these requirements should be obtained from RTA's Project Service Manager, Traffic Projects Section, Parramatta on 8849 2496.

**Reason:** RTA requirements.

## **121. Works on RTA property**

Detail design plans of the proposed works are to be submitted to the RTA for approval prior to the issue of the Construction Certificate and commencement of any road works.

**Reason:** RTA requirements.

## **122. Plan checking fee**

It should be noted that a plan checking fee (amount to be advised) and lodgement of a performance bond may be required from the applicant prior to the release of the approved road design plans by the RTA.

**Reason:** RTA requirements.

## **123. Road & traffic noise**

The proposed development should be designed such that road traffic noise from the Pacific Highway is mitigated by durable materials in order to satisfy the requirements for habitable rooms under Clause 102 subdivision 3 of State Environmental planning policy (infrastructure) 2007.

**Reason:** Protection of amenity for residents.

## **124. Design drawings**

The developer is to submit detailed design drawings and geotechnical reports relating to the excavation of the site and support structures to the RTA for assessment. The developer is to meet the full cost of the assessment by the RTA.

This report would need to address the following key issues:

The impacts of excavation/rock anchors on the stability of the Pacific Highway and detailing how the carriageway would be monitored for settlement.

The impact of the excavation on the structural stability of the Pacific Highway.

Any other issues that may need to be addressed. (Contact: Geotechnical Engineer Stanley Yuen on phone 8837 0246 or Grahame Yip on phone 8837 0245 for details).

All works/regulatory signposting associated with the proposed development are to be at no cost to the RTA.

**Reason:** RTA requirement.

**Grant Walsh**  
**Executive Assessment Officer**

**Selwyn Segall**  
**Team Leader Development Assessment**

**Corrie Swanepoel**  
**Manager Development Assessment**

**Michael Miocic**  
**Director Development and Regulation**

**Attachments:**

1. Location sketch
2. Zoning map
3. Survey
4. Site/roof plan
5. Basement level 1
6. Basement level 2
7. Basement level 3
8. Ground floor plan
9. 1<sup>st</sup> floor plan
10. 2<sup>nd</sup> floor plan
11. 3<sup>rd</sup> floor plan
12. Penthouse level plan
13. Northeast elevation B and C
14. Northeast elevation A
15. Fence elevation
16. Section
17. Landscape plan
18. Stormwater plan
19. BASIX certificate