



## REPORT TO DEVELOPMENT UNIT

**SUBJECT:** N0102/10 - 1112 - 1116 BARRENJOEY ROAD, PALM BEACH (Lot 21 DP 571298) Shop Top Housing development comprising 5 residential units, ground floor commercial space and kiosk with basement carparking for 22 cars

**Determination Level:** Development Unit

**Date:** 13<sup>th</sup> December 2010

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## SUMMARY OF RECOMMENDATION

### CONSENT WITH CONDITIONS

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**REPORT PREPARED BY:** Gina Hay

**APPLICATION SUBMITTED ON:** 04/03/2010

**APPLICATION SUBMITTED BY:** ANASTASIOS ANASTASOPOULOS  
PO BOX 393  
HABERFIELD NSW 2045

**OWNER(S):** ANASTASOPOULOS, HARRY (OwnResOcc)  
ANASTASOPOULOS, MARIE (OwnResOcc)  
ANASTASOPOULOS, ANASTASIOS (OwnResOcc)

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### 1.0 DEVELOPMENT CONTROLS

The site is zoned Neighbourhood Business3(c) and identified on the 'shop top housing map'. Accordingly shops, commercial premises (listed in Schedule 3) is permissible with Council's consent. The site is located within the Foreshore Scenic Protection area, and is identified as being bushfire prone and subject to landslip. It is also identified as being within the vicinity of a heritage item, being Barrenjoey House, which is located on the site immediately to the south; and 'Winton', a dwelling being located behind the site at No. 21 Palm Beach Road. In addition, the Norfolk Island Pines in Pittwater Park, across the road from the site, are also listed as Heritage Items.

### 2.0 NOTIFICATIONS

14 property owners notified  
47 submissions received

### 3.0 ISSUES

- B3.1 Landslip Hazard
- B3.8 Estuarine Hazard - Residential Development: Multi Unit Housing and Shop-Top Housing Development
- B6.10 Transport and Traffic Management - All Development other than Dwelling Houses, Secondary Dwelling and Dual Occupancy
- B1.2 Heritage Conservation - Items in the vicinity of a heritage item, heritage conservation areas, archaeological sites or potential archaeological sites
- B4.4 Flora and Fauna Habitat Enhancement Category 2 and Wildlife Corridor
- C1.1 Landscaping
- 3.6 State Environment Planning Policies (SEPPs) and Sydney Regional Environmental Policies (SREPs)
- B2.6 Dwelling Density and Subdivision - Shop-Top Housing
- C1.5 Visual Privacy
- C2.5 View Sharing
- C2.12 Protection of Residential Amenity
- D12.1 Character as viewed from a public place
- D12.4 Height
- D12.5 Front building line
- D12.6 Side and rear building line
- D12.14 Scenic Protection Category One Areas

#### 4.0 COMPLIANCE TABLE

T - Can the proposal satisfy the technical requirements of the control?

O - Can the proposal achieve the control outcomes?

N - Is the control free from objection?

Control	Standard	Proposal	T	O	N
<b>Development Engineer</b>					
B3.1 Landslip Hazard		Objections have been received regarding the potential for slip in the locality.	Y	Y	N
B3.8 Estuarine Hazard - Residential Development: Multi Unit Housing and Shop-Top Housing Development		Estuarine Planning Level 2.2 metres AHD. An objection has been received that the carpark falls below this.	Y	Y	N
B3.22 Flood Hazard - Flood Category 3 - All Development			-	-	-
B5.4 Stormwater Harvesting			Y	Y	Y
B5.7 Stormwater Management - On-Site Stormwater Detention			Y	Y	Y
B5.9 Stormwater Management - Water Quality - Other than Dwelling House, Dual Occupancy and Secondary Dwellings			Y	Y	Y
B5.10 Stormwater Discharge into Public Drainage System			Y	Y	Y
B5.12 Stormwater Drainage Systems and Natural Watercourses			-	-	-
B5.14 Stormwater Drainage Easements (Public Stormwater Drainage System)			-	-	-
B6.2 Access Driveways and Works on the Public Road Reserve- All Development other than Dwelling Houses, Secondary Dwelling and Dual Occupancy			-	-	-

<b>Control</b>	<b>Standard</b>	<b>Proposal</b>	<b>T</b>	<b>O</b>	<b>N</b>
B6.4 Internal Driveways - All Development other than Dwelling Houses, Secondary Dwelling and Dual Occupancy			Y	Y	Y
B6.6 Off-Street Vehicle Parking Requirements - All Development other than Dwelling Houses, Secondary Dwelling and Dual Occupancy			Y	Y	Y
B6.7 Access driveways and Works on Road Reserves on or Adjacent to a Main Road			Y	Y	Y
B6.9 On-Street Parking Facilities - All Development other than Dwelling Houses, Secondary Dwellings and Dual Occupancy			-	-	-
B6.10 Transport and Traffic Management - All Development other than Dwelling Houses, Secondary Dwelling and Dual Occupancy		Objections have been received regarding traffic congestion as a result of the development.	Y	Y	N
B8.1 Construction and Demolition - Excavation and Landfill			Y	Y	Y
B8.2 Construction and Demolition - Erosion and Sediment Management			Y	Y	Y
B8.3 Construction and Demolition - Waste Minimisation			Y	Y	Y
B8.4 Construction and Demolition - Site Fencing and Security			Y	Y	Y
B8.5 Construction and Demolition - Works in the Public Domain			Y	Y	Y
B8.6 Construction and Demolition - Traffic Management Plan			Y	Y	Y

<b>Control</b>	<b>Standard</b>	<b>Proposal</b>	<b>T</b>	<b>O</b>	<b>N</b>
<b>Health</b>					
C2.21 Food Premises Design Standards		Council's Environmental Health Officer has provided conditions to ensure compliance with the relevant standards.	Y	Y	Y
<b>Heritage</b>					
B1.2 Heritage Conservation - Items in the vicinity of a heritage item, heritage conservation areas, archaeological sites or potential archaeological sites	Development must conserve the heritage significance of the item or area. 3 items of heritage significance have been identified in the vicinity of the site. These are: 'Barrenjoey House', 'Winton', and the Norfolk Island Pines in Pittwater Park opposite the site.	The application was referred to Council's Heritage Officer who has no objection to the proposal. Concern has been raised by objectors that the existing cottage on site has a connection to Jørn Utzon.	Y	Y	N
<b>Bushfire</b>					
B3.2 Bushfire Hazard	The applicant has prepared a Bushfire Hazard Assessment Report Ref No: 90489, dated 29 June 2009, which was referred to the RFS for comment.	By letter dated 20 May 2010, the RFS have provided conditions of consent to be attached to any consent given.	Y	Y	Y
<b>Natural Resources</b>					
B1.4 Aboriginal Heritage Significance			Y	Y	Y
B3.5 Acid Sulphate Soils		Acid Sulphate Region 5	Y	Y	Y
B4.4 Flora and Fauna Habitat Enhancement Category 2 and Wildlife Corridor			Y	Y	Y
B5.3 Greywater Reuse			-	-	-
C1.1 Landscaping			Y	Y	Y
<b>Planner</b>					
EPA Act Section 147 Disclosure of political donations and gifts			-	-	-
3.1 Submission of a Development Application and payment of appropriate fee			Y	Y	Y

<b>Control</b>	<b>Standard</b>	<b>Proposal</b>	<b>T</b>	<b>O</b>	<b>N</b>
3.2 Submission of a Statement of Environmental Effects			Y	Y	Y
3.3 Submission of supporting documentation - Site Plan / Survey Plan / Development Drawings		Submissions received have indicated that the proposal has not addressed water removal from the basement carpark, excavation & geotechnical stability, & the existing dwelling at No. 23 Palm Beach Road. These matters have been addressed by the applicant and a Geotechnical report which addresses these issues has been referred to Council's Senior Development Engineer who has raised no objections.	Y	Y	N
3.4 Notification			Y	Y	Y
3.5 Building Code of Australia			Y	Y	Y
3.6 State Environment Planning Policies (SEPPs) and Sydney Regional Environmental Policies (SREPs)		The proposal is subject to SEPP 65 – Design Quality of Residential Flat Buildings and the architect has included a Design Statement as required under the SEPP.	Y	Y	Y
4.7 Integrated Development - Roads			-	-	-
5.1 Referral to the Roads and Traffic Authority under SEPP (Infrastructure) 2007			-	-	-
5.3 Referral to NSW Department of Environment and Climate Change (DECC)			-	-	-
6.2 Section 94 Contributions - Open Space Bushland and Recreation		5 dwellings @ \$9,000 per dwelling, credit given for 1 dwelling \$36,000 TOTAL	Y	Y	Y
6.3 Section 94 Contributions - Public Library Services		5 dwellings @ \$2,000 per dwelling, credit given for 1 dwelling \$8,000 TOTAL	Y	Y	Y
6.4 Section 94 Contributions - Community Service Facilities		5 dwellings @ \$3,500 per dwelling, credit given for 1 dwelling \$14,00 TOTAL	Y	Y	Y
6.5 Section 94 Contributions - Village Streetscapes		5 dwellings @ \$5,000 per dwelling, credit given for 1 dwelling \$20,000 TOTAL	Y	Y	Y

Control	Standard	Proposal	T	O	N
A1.7 Considerations before consent is granted			Y	Y	Y
B2.6 Dwelling Density and Subdivision - Shop-Top Housing	Max 1 dwelling/150sqm site area. Min 25% GLA commercial/retail uses.	Site area of 1362sqm, which would permit 9 dwell or 1 dwelling /272sqm. Proposed 5 dwellings - complies. GFA = 1257m <sup>2</sup> . GLA = 347 m <sup>2</sup> or 27%	Y	Y	N
B3.6 Contaminated Land and Potentially Contaminated Land			Y	Y	Y
<b>B3.23 Climate Change (Sea Level Rise and Increased Rainfall Volume)</b>		<b>This item was a reason for deferral from the previous DU – see comments later in report.</b>	Y	Y	Y
B5.1 Water Management Plan			-	-	-
B5.2 Wastewater Disposal			-	-	-
B5.3 Greywater Reuse			-	-	-
B5.12 Stormwater Drainage Systems and Natural Watercourses			-	-	-
C1.4 Solar Access	3 hours solar access to principal living areas and private outdoor space of proposal and adjacent dwellings	Proposal faces west and provides appropriate levels of solar access to relevant dwellings.	Y	Y	Y
C1.5 Visual Privacy		Objections have been received stating the proposal will impact on the visual privacy of neighbouring dwellings.	Y	Y	N
C1.6 Acoustic Privacy			Y	Y	Y
C1.7 Private Open Space	terrace to be minimum of 15% area of unit	Units 1, 2, 3 & 4 all 155m <sup>2</sup> total area - need 23 m <sup>2</sup> open space have 40 m <sup>2</sup> Unit 5 238 m <sup>2</sup> total area needs 36 m <sup>2</sup> open space has 89 m <sup>2</sup>	Y	Y	Y
C1.9 Adaptable Housing and Accessibility	Proposal to have 25% adaptable housing to meet AS 4299-1995: Adaptable Housing.	Proposal has nominated two units, being unit 1 & 2 as Adaptable housing. A disabled carspace has been provided. Condition of consent to be included stating that the development must be certified as compliant by Access Consultant.	Y	Y	Y
C1.10 Building Facades			Y	Y	Y
C1.12 Waste and Recycling Facilities	Residential and commercial waste enclosures must be separate.	No separation of residential/commercial waste, however this can be conditioned	N	Y	Y

<b>Control</b>	<b>Standard</b>	<b>Proposal</b>	<b>T</b>	<b>O</b>	<b>N</b>
C1.14 Separately Accessible Structures			-	-	-
C1.15 Storage Facilities	8 cubic metres per dwelling	Each dwelling has a minimum of 8m <sup>3</sup> stage available within the unit.	Y	Y	Y
C1.18 Car/Vehicle/Boat Wash Bays		Control is only applicable where development has 10 or more units.	-	-	-
C1.19 Incline Passenger Lifts and Stairways			-	-	-
C1.23 Eaves			Y	Y	Y
C2.1 Landscaping			Y	Y	Y
C2.2 Safety and Security			Y	Y	Y
C2.3 Awnings			Y	Y	Y
C2.5 View Sharing		Concern raised by objectors that the proposal would result in view loss to properties at the rear.	Y	Y	N
C2.11 Business Identification Signs			-	-	-
C2.12 Protection of Residential Amenity		An objection has been received stating that the proposed solar panels will cause glare to the neighbours to the rear.	Y	Y	N
C2.16 Undergrounding of Utility Services			Y	Y	Y
C2.20 Public Road Reserve - Landscaping and Infrastructure		Council's Landscape Architect has provided conditions of consent to be included in draft determination.	Y	Y	Y
C2.22 Plant, Equipment Boxes and Lift Over-Run	Plant and equipment boxes and lift over-runs are to be integrated internally into the design fabric of the built form of the building	Proposal complies with this standard.	Y	Y	Y
D12.1 Character as viewed from a public place		Objections have been received that the proposal is out of keeping with the local area.	Y	Y	N
D12.3 Building colours and materials	Dark & earthy tones	Proposal utilises a variety of sandstone and hardwood finishes and a dark green coloured render. It also proposes a copper roof, which, while it will be bright initially, will quickly become more muted, and which has been used in other buildings in Pittwater.	Y	Y	Y
D12.4 Height	8.5 metres high maximum height limit above natural ground level.	Maximum 8 metres above natural ground level	Y	Y	N



Control	Standard	Proposal	T	O	N
D12.5 Front building line	Front building line for commercial zoned land - 3.5 metres	Front building line to kiosk - 3 metres. FBL to building - 11 metres Objections have been received regarding the front building line.	N	Y	N
D12.6 Side and rear building line	3 metres to boundaries with residential land, nil metres to commercial zoned land	6 metres to rear, 2 - 3 metres to north, 1 -2 metres to south.	N	Y	Y
D12.12 Fences - Flora and Fauna Conservation Areas			Y	Y	Y
D12.14 Scenic Protection Category One Areas		Objections have been received regarding the appearance of the building.	Y	Y	N
SEPP (Building Sustainability Index: BASIX) 2004			Y	Y	Y

\*Issues marked with an x are discussed later in the report.

Issues marked with a - are not applicable to this Application.

Issues in **bold** have additional information resulting from the deferral of the application at the DU meeting.

## 5.0 SITE DETAILS

The site is known as No. 1112 - 1116 Barrenjoey Road, Palm Beach (Lot 21 DP 571298), and has a site area of 1362sqm. The site is located on the east side of Barrenjoey Road, just north of Barrenjoey House, and opposite Council's carpark for the Palm Beach public jetty. The site slopes up and away from the road, and currently contains several buildings which contain shops and a timber residence to the rear of the site.

## 6.0 PROPOSAL IN DETAIL

Shop Top Housing development comprising 5 residential units, ground floor commercial space and kiosk, with basement carparking for 22 cars. The building has a large public forecourt in the front of the site, with the main part of the building stepping back into the hill side. Subdivision of the site is not sought under this application.

## 7.0 BACKGROUND

A previous shop top housing development was proposed for the site under DA N0088/04. This was withdrawn by the applicant prior to determination, when it was apparent that the proposal did not comply with Council's controls for the site.

The application went to the Development Unit meeting of 30 September 2010 where it was deferred for the following reasons:

- a) the assessing officer to liaise with the objectors representative (Mr Boston) in relation to issues concerning roof top mechanical plant, structural/geotechnical staging plans, dilapidation reports and landscaping

- b) the applicant to amend the roof form over unit 5 in relation to reducing glare from the solar panels and privacy impacts concerning 21a Palm Beach Road and further articulation of the roof line over unit 5
- c) the applicant to provide a landscape plan prepared in accordance with the requirements of Pittwater 21 DCP, and
- d) further advice from the council senior development engineer in relation to the residents concerns of the extent of excavation through the active zone, rock bolting across property boundaries, any need for further detail concerning a structural engineering/geotechnical engineering staging plan and assessment concerning climate change in accordance with Pittwater 21 DCP.

## **8.0 STATE ENVIRONMENTAL PLANNING POLICY NO. 1 - DEVELOPMENT STANDARDS (SEPP No. 1)**

The application of SEPP No. 1 is not required.

## **9.0 EXISTING USE RIGHTS**

Does the proposal rely on Existing Use Rights? No

## **10.0 DISCUSSION OF ISSUES**

- **B3.1 Landslip Hazard**

Objections have been received stating that the site is slip affected and that there is the potential for land slippage in the vicinity of the site as a result of the works.

The applicant has submitted a Geotechnical Report prepared by Douglas Partners which makes numerous recommendations with regards to ensuring compliance with Council's Geotechnical Risk Management Policy, both while construction is occurring, and after the building is complete. Council's Senior Development Engineer has reviewed the document and has stated that it is in compliance with Council Policy. Conditions of consent have been included on the draft determination to ensure that these recommendations are incorporated into the development.

Following the DU deferral, Council's Senior Development Engineer has address the points of concern:

*I refer to the above application and in particular the recent resolution of councils development unit, which requested further advice regarding the extent of excavation and possible temporary and permanent support structures for the excavation.*

*A Geotechnical Risk assessment was prepared by Douglas and Partners in support of the application, in which the proposed excavation was identified and considered for potential risks to property and life.*

*The report identified that the development would require excavations of between 2.5 and 10m and would be through material of varying strength. The report identifies the need to progressively inspect the excavation and adapt support structures as required. This approach is considered practical and common practice.*

*The report suggests that it is likely that the deeper excavation along the eastern slope will require a range of temporary and permanent structures involving bored soldier piles, shotcrete panels with temporary and possible permanent anchors, however the exact methodology of providing support could not be determined until the actual excavation face was inspected. This is considered acceptable and normal practice.*

*The report further recommends that all such structures be appropriately designed by engineers at construction certificate stage. This is also considered acceptable and common practice.*

*The assessment has recommended a number of conditions requiring the implementation of all the recommendations of the geotechnical risk assessment as well as the submission of certified structural drawings at construction certificate stage. This is the approach adopted by councils geotechnical risk management policy in that detailed engineering designs are not required at development assessment stage and that development approval can be granted as long as the potential risk to the site and adjoining sites can be managed appropriately both during construction and over the life of the development.*

- **B3.8 Estuarine Hazard - Residential Development: Multi Unit Housing and Shop-Top Housing Development**

Objections have been received that the basement carpark is below the estuarine planning level. Council's Senior Development Engineer states that the proposal complies with the Estuarine Risk Management Policy for Development in Pittwater. Moreover, the control states that

*All access, ventilation and any other potential water entry points must be above the Estuarine Planning Level. A clearly signposted pedestrian access to a 'safe haven' above the Estuarine Planning Level separate from the vehicular access ramps, shall be provided.*

The Estuarine Planning Level is 2.2 metres AHD, with the uppermost point of the ramp to the basement being at 2.47 AHD before descending to the basement. This is in accordance with the Policy and as such the proposal is deemed acceptable. It should also be noted that the commercial/residential areas of the development with a minimum of 3.35 metres AHD are well above the EPL and are thus also compliant.

Following the deferral of this issue at the previous Development Unit meeting, Council's Project Leader – Floodplain Management obtained the Calculation of Estuarine Planning Levels (Foreshore Flood Planning Levels) for Nos. 1112 to 1116 Barrenjoey Road Palm Beach that include the NSW State Government Sea Level Rise Planning Bench Marks of 0.4m by 2050 and 0.9m by 2100.

This showed that for the purposes of minimum floor levels and minimum levels for the entrance to basement carparking at this site (for intensification of development), the Foreshore Flood Planning Level should be 2.39m AHD. This represents a consideration of sea level rise estimates up to the year 2100.

As such, it can be seen that the proposal complies with the requirements of the control and further amendments do not need to be made to this development on this basis.

- **B6.10 Transport and Traffic Management - All Development other than Dwelling Houses, Secondary Dwelling and Dual Occupancy**

Objections have been received stating the existing traffic congestion will be worsened as a result of the proposed development. The proposal is for five apartments, six commercial units and a kiosk. It is not considered that the proposal is of a sufficient size to materially worsen the traffic congestion that already exists in Palm Beach as a result of its status as a holiday and day excursion destination.

- **B1.2 Heritage Conservation - Items in the vicinity of a heritage item, heritage conservation areas, archaeological sites or potential archaeological sites**

The application was referred to Council's Heritage Officer as three items of heritage significance have been identified in the vicinity of the site. These are: 'Barrenjoey House', 'Winton', and the Norfolk Island Pines in Pittwater Park opposite the site. By letter dated 23/03/10 Council's Heritage Officer has made the following comments:

*I have received and read the documents forwarded to me in relation to the above proposed development. I have noted in particular the SEE and the SHI, and have had regard to the differences between this proposal and its predecessor, on which I also commented.*

*As with that scheme, I would conclude in response to the present proposal that in my opinion, no adverse heritage impacts appear to be promised by the proposal which would diminish the significance of the listed items near the site, or the larger heritage interest of the Palm Beach context.*

*While saying that, a factor in arriving at that conclusion is the particular presentation of the building – specifically, painting it in a dark colour regime which will make it recessive in the context of the proposed landscaping, and neighbouring buildings. A light colour scheme would not be helpful to this scheme, in how it would be read in juxtaposition with the nearby heritage items.*

*Similarly the long continuous site-width ridge line of the uppermost roof form is a design feature that would be ideally avoided if possible, as it accentuates the scale of the building in context, when its form is otherwise broken up and helpful to its scale in context. Segmenting it to avoid a continuous ridge may be possible. The ridge is however, set well back from the frontage.*

*The effective role of this building in the Village will be crucial and hopefully, beneficial. It parallels the Blueberry Ash site on the ocean front of the suburb, but promises a more realistic and potentially helpful commercial component than the development of that other site. However, I readily acknowledge these are urban design and planning issues beyond the heritage dimensions of the site's influence.*

Submissions have raised issues that Jørn Utzon, the architect who designed the Sydney Opera House may have some relationship with the existing cottage on the site. Council's Heritage Register, contained in the Pittwater LEP 1993, makes no reference to any structure on the site being heritage listed. Research by Council staff, including discussions with the Royal Australian Institute of Architects, has also failed to turn up any conclusive evidence of this link.

- **B4.4 Flora and Fauna Habitat Enhancement Category 2 and Wildlife Corridor**

Council's Natural Resources Officer has made the following comments

*Property contains a modified landscape and is currently used as a commercial area. The proposed works involve the demolition of the existing buildings and construction of a shop top housing development. The vegetation onsite is mainly exotic including trees, and the site is not considered ecologically significant. An arborist report (Urban Forestry Australia June 2009) has been provided which assesses eight (8) trees within 5 metres of the proposed works, of which only one is locally native. Five (5) trees are recommended for removal, as they are within the proposed building footprint, all of which are exotic and/or exempt from Council's Tree Preservation Order. Two trees are on neighbouring properties including a Tuckeroo (Tree 1) on the road reserve. These trees are to be retained and are expected to have minimal impact upon them.*

*All recommendations of the arborist report are to be adopted as specified. The landscape plan (Lesiuk Architects Pty Ltd Drawing No. DA10 October 2009) provides a number of canopy trees of locally native species which serve as adequate canopy replacement. The plant species provided on Page 2 are generally locally native or at least suitable and non-invasive and are considered acceptable. Due to the high profile location of the site and the proposed development type, the application should be referred to Council's Landscape Architects for comment with regard to screening, planting depths etc.*

- **C1.1 Landscaping**

The application was referred to Council's Landscape Architect, who made the following comments

*Following referral of the above application to Reserves, Recreation & Building Services, we have assessed plans and make the following comments: Plans as submitted extremely concept. Can only provide conditions as landscape plans prepared by architect show no definite boundaries. Generally relies on front landscaped courtyard with central grove/garden areas of palms and associated pergola.*

A number of conditions were also included which have been incorporated into the draft determination.

Subsequent to the Development Unit meeting the applicant stated that they had submitted a landscape plan and re-sent it. This appears to be the same plan that Council's Landscape Architect commented on.

A further review of the landscape concept plan by Council's Landscape Architect has resulted in the following comment:

*"I have reviewed the landscape plans which, whilst acceptable in principle, will require a more detailed plan to be submitted at Construction Certificate stage. Please apply the following Conditions of Consent:*

- *A detailed landscape plan prepared by a qualified Landscape Architect / Horticultural Designer to be prepared as part of documentation for the Construction Certificate generally in accordance with the landscape concept plan as prepared by Lesiuk Architects.*

*The landscape plan is to detail the following elements:*

- *3 street trees provided to the front road reserve set in proposed paving (dimension 1.5 wide / 2 metres long (Glochidion ferdinandi) installed at 400 litre size.*
- *Front road reserve to the unit paved to match with existing pavement pattern/ type (header to all edges) laid on concrete sub-base.*
- *All works in road reserve to be approved/ liaised with Council's Landscape Architect prior to commencement – ph: 9970 1356.*
- *Indicated palm grove to site frontage to be Livistonia australis/howea forstrana, with clear trunk height of minimum 3 metres. Canopy trees to southern/ northern boundary and central planter to be minimum 400 litre in size and endemic to area.*
- *Trees must have minimum 10m<sup>3</sup> planting volume to allow realistic growth and prevent long term damage to proposed retaining walls.*
- *Those trees located to the rear boundary area to be minimum 100 litre size at installation and endemic to the Palm Beach locality.*
- *All planter boxes to be detailed in relation to structural capability (i.e. concrete core filled to deal with large growth and associated roots) growing medium minimum depth (800mm) and mulch treatment.*
- *All planters built on slab to incorporate drainage membranes/ drainage layer with inspection pits connected to proposed stormwater system and allow minimum of 800m depth growing medium. Waterproof membrane to be independently certified by qualified contractor.*
- *All landscape works to be maintained for the life of the development.*
- *A report confirming construction of the landscape works in accordance with the concept plan and detail landscape plan to be prepared by qualified Landscape Architect and approved by the nominated Certifier prior to release of Occupation Certificate.”*
- **3.6 State Environment Planning Policies (SEPPs) and Sydney Regional Environmental Policies (SREPs)**

The proposal is subject to SEPP 65 as it comprises five dwellings over three storeys. Following is an analysis of the proposal against the heads of consideration in the SEPP and the Residential Flat Design Code.

**Context** The proposal is considered to respond appropriately to its context. The massing of the building is sited towards the rear of the site and into the hill so as not to break the tree canopy towards the rear and which allows for Barrenjoey House to retain prominence in the foreground as a heritage item. The dark colours also allow it to recede into the background.

**Scale** The scale is considered appropriate for the commercial zoning, and it complies with the height limit for the locality. The massing of the building at the rear of the site means that the residential dwellings on the northern side of the building are not overpowered as the sections of the building closest to the dwelling to the north have a similar scale, with the building only increasing in size behind this.

**Built Form** The built form is appropriate for the building design as a shop top housing scheme. It utilises a number of elements to provide interest to the streetscape. The residential element is set back from the street with the commercial elements taking primacy when viewed from the immediate street frontage.

**Density** The proposal has a lower density than that permitted in the DCP, however it is considered that this lower density is appropriate for the locality, given that this is a small commercial area in an outer suburban area primarily characterised by single dwellings.

**Resource, energy and water efficiency** The proposal is efficient in these respects and a BASIX certificate has been provided. All apartments have good ventilation with windows on three or four sides and use passive solar design principles. Shading devices are utilised, and deep soil planting around the perimeter of the site will provide for a mature tree canopy to shade the proposal and provide a pleasant microclimate for the building.

**Landscape** The proposal provides for deep soil planting along the perimeter of the site to facilitate a mature tree canopy to provide screening and shading as well as ensuring that the proposal integrates with the surrounding area. It will be an improvement on the existing landscaping on site, which consists of a number of exotic species.

**Amenity** The proposal provides a high level of amenity for residents. There is ample cross ventilation, solar penetration into all units of the development will be high due to the design and the orientation. All units are single storey and room sizes are acceptable. The layout is efficient in that lift access is immediately adjacent to each dwelling with stairs as well running around the lift.

**Safety and security** The proposal provides good passive surveillance not just of the public spaces within the development, but also the immediate street front and Pittwater Park across the road. There is a clear definition of public/private areas.

**Social Dimensions and housing affordability** All units are three bedrooms, which is appropriate for the locality. It is to be anticipated that some of these dwellings may be occupied by people down-sizing from larger single dwellings in the local community, and as such there is no issue with the lack of housing variation. The dwellings appear to have been designed with the particular needs of people in the local area in mind.

**Aesthetics** The proposal has a high standard of aesthetics. The proposal is for a shop-top housing scheme in a commercial zone and has been designed so that it does not dominate the streetscape but recedes somewhat into the background. It has good articulation and use of materials to provide a varied and interesting street appearance.

- **B2.6 Dwelling Density and Subdivision - Shop-Top Housing**

A number of objectors have raised issues regarding the density of the proposal and stating that it is not in keeping with the locality. As stated in the table, with five proposed dwellings the proposal has a density somewhat less than the maximum permissible density on the site of nine dwellings, and as such is considered to be in accordance with the outcomes of the control.

- **C1.5 Visual Privacy**

Objections have been received that the proposal will impact on the privacy of neighbouring properties, in particular, 23 & 21a Palm Beach Road. The uppermost level contains a single dwelling, the closet part of which is 6 metres from the boundary (with heavy screen planting in between) and which has an RL of 12.35. The ground level at the boundary between the two properties is around AHD15.0, with both dwellings higher than this again. As such it is considered that the spatial separation, both horizontal and vertical is sufficient, particularly when combined with the screen planting to minimise visual privacy issues between the proposed building and the rear dwellings.

It is noted that one of the objections regarding privacy relates to a dwelling adjacent to the property to the north, which is not the objectors house. The owner of the property to the north has not objected on the grounds of visual privacy and in fact has stated that she thinks that care has been taken to minimise loss of visual privacy to her property. She has however requested that a privacy screen be provided to the northern side of the terrace of Unit 1, Level 1 as this is directly opposite a window in her house. This is considered reasonable and will also aid acoustic privacy between the two properties. A condition has been included in the draft consent to this effect.

- **C2.5 View Sharing**

Concern was raised by objectors in the properties to the rear that the proposal would result in view loss from these properties. As a result, height poles were erected on the site so as to assess the impact and Council staff visited the affected premises to assess the impact. From the photographs taken it is clear that 21a Palm Beach Rd will retain unobstructed views of Pittwater, the Norfolk Island Pines and the land/water interface at Pittwater Park from both levels of the property. The height poles are not visible from 23 Palm Beach Rd and as such it is considered that there is no substantive view loss experienced from this property as a result of the proposal.

At 1102-1108, there is no building on the site and so an exact definition of view loss would be hard to quantify. However, based on the assessment from the neighbouring buildings to the north, it is considered that there would be minimal, if any view loss as a result of the subject development. As such, it is considered that the proposal will not cause view loss to neighbouring properties to the east and is in compliance with the outcomes of the control.

- **C2.12 Protection of Residential Amenity**

An objection has been received stating that the proposed solar panels will create glare to the properties to the rear. It should be noted that solar panels, by their nature, are designed to absorb rather than reflect light. Moreover, the solar panels in question are located towards the front of the rearmost portion of the roof and heavy screening is proposed between the subject building and the dwellings to the rear. As such it is considered that the proposal will not cause an adverse glare impact to neighbouring dwellings.

With regard to the "unarticulated roof form", it is noted that the roof component of the development is quite small given the overall size of the development, and can be seen to have three distinct elements of varying sizes and shapes. As such it is considered that the proposed roof will add interest to the streetscape and will not appear as a monoform mass.



Objections have also been received regarding the proposed kiosk. In this regard it is noted that the site is zoned for commercial use and as such a kiosk is a permitted use on the site. While Council's Environmental Health Officer has included assessed the proposal to ensure that compliance with the relevant Australian Standards as regards food hygiene, it is considered that the operation of the kiosk should be assessed as a separate DA, as little detail has been provided in the SEE regarding hours of operation, type of food to be sold and other details of this nature.

Following the Development Unit meeting of 30 September, the applicant was requested to amend the roof form over unit 5 in relation to reducing glare from the solar panels and privacy impacts concerning 21a Palm Beach Road and further articulation of the roof line over unit 5. The applicant has agreed to remove the solar panels from the eastern portion of the roof, which will remove the issue of potential glare to the neighbouring properties to the east. The westernmost row of solar panels are on a different angle, facing west, and thus will not impact on the properties to the east.

The Development Unit also requested the applicant to further articulate the roof form over the uppermost unit. The applicant has submitted a response in which they argue that the roof form is already highly articulated, complies with maximum height restrictions and does not impact on solar access, views or bulk and scale. In this regard, and noting Council's heritage consultant's comments on the proposal, it is still considered that the roof will not present as an unarticulated monoform.

The roof has three major planes, being an almost flat roof at the rear that runs the width of the building, a much steeper form that also runs the width of the building and is angled towards the west and a curved form roof that sits below this and is well articulated. The roof form is also significantly smaller than the mass of the building at its base due to the stepped nature of the building as it extends up the hill.

Given the above, it is difficult to see where the roof form could be more articulated, without giving a disjointed appearance to the building. There is landscaping proposed at the rear of the building which will screen the building from the properties to the rear, from where it is considered the main concerns arise.

Discussions have been held with the Objectors consultant regarding issues raised at the previous DU meeting. The outcome of this is that the consultant has agreed to table conditions relating to issues of concern prior to the meeting. Conditions B36 & B37 in the attached draft consent relate to the prohibition of plant on the roof and the removal of the easternmost row of solar panels from the roof.

- **D12.1 Character as viewed from a public place**

A number of objections have been received stating that the proposal is out of character with the character of the locality.

Section A4.12 Palm Beach Locality in the Pittwater 21 DCP states that the locality

*will remain primarily a low-density residential area with dwelling houses in maximum of two storeys in any one place in a landscaped setting, integrated with the landform and landscape.*

It further states that any multi-unit housing will be located within and around commercial centres, public transport and community facilities, and that

*The design, scale and treatment of future development within the commercial centres will reflect a 'seaside-village' character through building design, signage and landscaping, and will reflect principles of good urban design. Landscaping will be incorporated into building design. Outdoor cafe seating will be encouraged.*

It is considered that the proposal generally meets these objectives. While the rear part of the building is four storeys above the ground level at the front of the site, it is set into the site and as such is not so overwhelming as it would be if the full height of the building were set immediately adjacent to the street frontage. The building, sitting further back into the site and with good articulation and generous balconies will tend to recess into the middle ground rather than standing prominently in the foreground when viewed either from the immediate street frontage or from Pittwater Park, across the road and adjacent to the Palm Beach Wharf. The muted, earthy colour scheme will also help in this regard.

The proposal is also considered to promote a scale and density that is in keeping with the natural environment and is also at a human scale to those utilising the public space at the front of the development and across the road. Due to the excavation proposed, the building at its rear will be 4-5 metres above natural ground level and thus well below the tree canopy.

The spatial character of the existing built and natural environment are also well addressed, given that it is located in a commercial zoning adjacent to residential zonings on two sides. The recessing of the bulk of the building into the hill behind allows for the front part of the site to be of generally similar height to the residential dwelling to the north, with the horizontal planes of the terraces at a similar height to the roof of this dwelling and those further north again. The terraced area at the south of the site again is of similar height and bulk to the building between the site and Barrenjoey House proper, and permits Barrenjoey House the prominence due to it as a Heritage Item.

As such, it is considered that the proposal is an appropriate development for this commercial strip of Palm Beach and is consistent with the outcomes of the control.

- **D12.4 Height**

A number of objections have been raised that the proposal is too high, as it is 15 metres high overall and when viewed from the street. It should be noted that the definition of "building height" in Pittwater LEP 1993 & Pittwater 21 DCP is "the distance measured vertically from any point of the building to the natural ground level directly below that point." As such, it can be seen that the proposal does comply with the building height control of 8.5 metres. The building has been designed to sit into the hillside and step back so as not to break the line of the hill at the rear of the property. The proposed planting and dark and earthy tones and materials used in the finishes will also further minimise the impact on the locality.

- **D12.5 Front building line**

The proposal is slightly noncompliant with the front building line in that the kiosk structure has a 3 metre setback, which is slightly forward of the minimum setback of 3.5 metres in a commercial zoning. The control does permit a variation to the minimum front setback where established building lines are forward of the technical standard. In this instance, the buildings to the right, being Barrenjoey House, have a similar setback to the kiosk structure.

It is considered that this setback thus provides for an appropriate continuation of the existing commercial setback and as such a variation should be supported.

Objections have also been received stating that the proposal is set too far back and should maintain the 3.5 metre commercial zoned land front setback. In this regard, it should be noted that the site is adjacent to residential zoned land which has a front setback of 10 metres, and that the architect has set the bulk of the building at a similar setback.

While this is in part due to the desire to raise the height of the building, it also allows for a greater level of amenity for the adjacent dwelling to the north than a 3.5 metre setback would permit, and further enables a transition between the commercial and residential zonings. It also allows the development to respond sensitively to the existing spatial characteristics and permits for vegetation within the front setback to screen the building. As such it is considered that the proposal complies with the outcomes of the control.

- **D12.6 Side and rear building line**

The proposal is generally compliant with the side and rear setback, however it is noted that a stairwell leading from the basement has a minor encroachment into the northern side setback. Given that this is a small structure which is only a storey in height and does not add to the bulk and scale of the building, or provide adverse impacts to the neighbouring property, it is considered that a variation be supported in this instance.

- **D12.14 Scenic Protection Category One Areas**

This has largely been addressed earlier in this report under Control D12.1 Character as viewed from a public place. The proposal complies with the outcomes of the control and it is considered that the design of the proposal and dark and natural materials and colours used will help the building recede into the hillside, which will be further heightened once the proposed perimeter canopy planting reaches maturity.

## **11.0 CONCLUSION**

The Development Application has been assessed in accordance with the provisions of Section 79C of the Environmental Planning and Assessment Act 1979, Pittwater Local Environmental Plan 1993, Pittwater 21 DCP and other relevant Council & State policies.

The proposal is permissible within the 3(c) – Neighbourhood Business zone as defined by Pittwater Local Environmental Plan 1993 and is considered to be acceptable and consistent with the controls, outcomes and variations for development within the zone and locality as discussed within this report.

The proposal is generally compliant with the controls in the Pittwater 21 DCP and is compliant with SEPP 65 – Design Quality of Residential Flat Buildings. While there are some minor non-compliances with the DCP, in general the proposal is well designed and is considered that it will sit comfortably in the local context. It has been designed to sit into the hillside and not to rise above the tree canopy, and also to respect the setting of Barrenjoey House as a heritage item.

As such the proposal is recommended for approval.

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## **RECOMMENDATION OF DEVELOPMENT OFFICER / PLANNER**

That Council, as the consent authority pursuant to Section 80 of the Environmental Planning and Assessment Act 1979, grant consent to development application N0102/10 for a Shop Top Housing development comprising 5 residential units, ground floor commercial space and kiosk, with basement carparking for 22 cars at 1112-1116 Barrenjoey Rd Palm Beach subject to conditions as contained in the attached draft consent.

### **Report prepared by**

Gina Hay  
**EXECUTIVE PLANNER**

## DETERMINATION

### DRAFT CONSENT NO: N0102/10 ENVIRONMENTAL PLANNING & ASSESSMENT ACT, 1979 (AS AMENDED) NOTICE TO APPLICANT OF DETERMINATION OF A DEVELOPMENT APPLICATION

Applicants Name and Address:  
ANASTASIOS ANASTASOPOULOS  
PO BOX 393  
HABERFIELD NSW 2045

Being the applicant in respect of Development Application No N0102/10

Pursuant to section 80(1) of the Act, notice is hereby given of the determination by Pittwater Council, as the consent authority, of Development Application No N0102/10 for:

Shop Top Housing development comprising 5 residential units, ground floor commercial space and kiosk, with basement carparking for 22 cars.

At: 1112 - 1116 BARRENJOEY ROAD, PALM BEACH (Lot 21 DP 571298)

#### Decision:

The Development Application has been determined by the granting of consent based on information provided by the applicant in support of the application, including the Statement of Environmental Effects, and in accordance with Plan numbers DA04, DA05, DA06, DA07, DA08, DA09, DA10, DA11, DA12, DA13, DA14, DA15, DA16, DA17, DA18, DA19, DA20, DA21, DA22, DA23, DA24, DA25, DA26, DA27, DA28, DA29, DA30, DA31, DA32, DA33, DA34, DA35, all issue A dated October 2009, prepared by Lesuik Architects Pty Ltd, and Site Plan/Landscape Plan DA10 issue A dated October 2009, and landscape planting plan issue A dated September 2009 also prepared by Lesuik Architects Pty Ltd.

as amended in red (shown clouded) or as modified by any conditions of this consent.

The reason for the imposition of the attached conditions is to ensure that the development consented to is carried out in such a manner as to achieve the objectives of the Environmental Planning and Assessment Act 1979 (as amended), pursuant to section 5(a) of the Act, having regard to the relevant matters for consideration contained in section 79C of the Act and the Environmental Planning Instruments applying to the land, as well as section 80A of the Act which authorises the imposing of the consent conditions.

Endorsement of date of consent **Insert Date**

Mark Ferguson  
GENERAL MANAGER  
Per:

## Conditions of Approval

This consent is not an approval to commence building work. The works associated with this consent can only commence following the issue of the Construction Certificate.

Note: Persons having the benefit of development consent may appoint either a council or an accredited certifier as the principal certifying authority for the development or for the purpose of issuing certificates under Part 4A of the Environmental Planning and Assessment Act. When considering engaging an accredited certifier a person should contact the relevant accreditation body to ensure that the person is appropriately certified and authorised to act in respect of the development.

### A. Prescribed Conditions:

1. All works are to be carried out in accordance with the requirements of the Building Code of Australia.
2. Critical stage inspections are to be carried out in accordance with clause 162A of the **Environmental Planning & Assessment Regulation 2000**. To allow a Principal Certifying Authority or another certifying authority time to carry out critical stage inspections required by the Principal Certifying Authority, the principal contractor for the building site or the owner-builder must notify the Principal Certifying Authority at least 48 hours before building work is commenced and prior to further work being undertaken.
3. A sign must be erected in a prominent position on any site on which building work, subdivision work or demolition work is being carried out:
  - a. showing the name, address and telephone number of the Principal Certifying Authority for the work, and
  - b. showing the name of the principal contractor (if any) for any building work and a telephone number on which that person may be contacted outside working hours, and
  - c. stating that unauthorised entry to the work site is prohibited.

Any such sign is to be maintained while the building work, subdivision work or demolition work is being carried out, but must be removed when the work has been completed.

Residential building work within the meaning of the Home Building Act 1989 must not be carried out unless the Principal Certifying Authority for the development to which the work relates (not being the Council) has given the Council written notice of the following information:

- d. in the case of work for which a principal contractor is required to be appointed:
  - i. The name and licence number of the principal contractor, and
  - ii. The name of the insurer by which the work is insured under Part 6 of that Act.
- e. in the case of work to be done by an owner-builder:
  - i. The name of the owner-builder, and
  - ii. If the owner-builder is required to hold an owner-builder permit under that Act, the number of the owner-builder permit.

4. If arrangements for doing the residential building work are changed while the work is in progress so that the information notified under subclause (2) becomes out of date, further work must not be carried out unless the Principal Certifying Authority for the development to which the work relates (not being the Council) has given the Council written notice of the updated information.
5. The hours of construction are restricted to between the hours of 7.00am and 5.00pm Monday - Friday and 7.00am to 1.00pm on Saturdays. No works are to be carried out on Sundays or Public Holidays. Internal building work may be carried out at any time outside these hours, subject to noise emissions from the building or works not being audible at any adjoining boundary.

**B. Matters to be incorporated into the development and maintained over the life of the development:**

1. The recommendation of the risk assessment required to manage the hazards as identified in Geotechnical Report prepared by Douglas and Partners, dated October 2009 are to be incorporated into the construction plans.
2. The Estuarine Planning level is 2.4m AHD.
3. The lowest habitable floor level shall be at the Estuarine Planning level.
4. All access and potential water entry points to a covered basement or bunded carpark facilities shall be at or above the Estuary Planning Level.
5. The Stormwater Harvesting and Reuse Scheme shall be installed and operated in accordance with the accepted design, Environmental and Health Risk Management Plan, Operation and Maintenance Plan, Manufacturer's Specifications and associated operational guidelines.
6. The Stormwater Harvesting and Reuse Scheme shall be maintained as appropriate in accordance with best practice to ensure optimum performance of the stormwater treatment system.
7. As part of the integrated stormwater management plan, suitably positioned stormwater quality improvement devices shall be installed and operated in accordance with Manufacturer's Specifications and associated operational guidelines.
8. The stormwater quality improvement devices shall be maintained and emptied of spoil materials at regular intervals. Spoil materials removed from the stormwater quality improvement devices shall be disposed of as dry mixed waste.
9. The internal driveway is to be constructed to an all weather standard finish to be of dark or earthy tones, linemarked and signposted.
10. Water, electricity and gas are to comply with section 4 1 3 of "Planning for Bush Fire Protection 2006".

11. New construction shall comply with Australian Standard AS3959-1999 'Construction of buildings in bush fire-prone areas' BAL 12.5 and undertake the following:

- a) The subfloor space shall be enclosed with either
  - i. A wall that complies with Clause 5.4 of AS3959-2009, or
  - ii. A mesh or perforated sheet with a maximum aperture of 2mm, made of corrosion-resistant steel, bronze or aluminium, or
  - iii. A combination of the items above NOTE: There are no construction requirements for subfloor supports where the subfloor space is enclosed.
- b) Where the subfloor space is unenclosed, the support posts, columns, stumps, piers and poles shall be
  - i. Of non-combustible material, or
  - ii. Of bushfire-resisting timber (see AS3959-2009 Appendix F), or
  - iii. A combination of the items above

NOTE: This requirement applies to the principle building only and not to verandahs, decks, steps, ramps and landings (see Clause 5.7 of AS3959-2009)

- c) Where the subfloor space is unenclosed, flooring material, including bearers, joists and flooring less than 400 mm above finished ground level, shall be
  - i. Non-combustible (eg, concrete, steel), or
  - ii. Of bushfire-resisting timber (AS3959-2009 see Appendix F), or
  - iii. Particleboard or plywood flooring where the underside is lined with sarking-type material or mineral wool insulation, or
  - iv. A system complying with AS1530.8.1, or v. A combination of any of the items above.

NOTE: There are no construction requirements for elements of elevated floors, including bearers, joists and flooring, if the underside of the element is 400mm or more above finished ground level.

- d) In relation to unenclosed verandahs, decks, steps, ramps and landings - the support posts, columns, stumps, stringers, piers, poles and framing (i.e. Bearers and joists) shall be
  - i. of non-combustible material, or
  - ii. of bushfire-resisting timber (see AS3959-2009 Appendix F), or
  - iii. a combination of the items above



e) Parts of handrails and balustrades that are less than 125 mm from any glazing or any combustible wall shall be

- i. of non-combustible material, or
- ii. of bushfire-resisting timber (see AS3959-2009 Appendix F), or
- iii. a combination of the items above

NOTE: Those parts of handrails and balustrades that are 125 mm or more from the building have no requirements.

f) External framed walls must incorporate either

- i. Breather-type sarking complying with AS/NZS 4200 1 and with a flammability index of not more than 5 (see AS 15030 2) and sarked on the outside of the frame, or
- ii. An insulation material conforming to the appropriate Australian Standard for that material. 3) Landscaping to the site is to comply with the principles of Appendix 5 "Planning for Bush Fire Protection 2006".

12. If any Aboriginal Engravings or Relics are unearthed all work is to cease immediately and the Metropolitan Local Aboriginal Land Council (MLALC) and Department of Environment & Climate Change (DECC) are to be notified.
13. At least five (5) locally native canopy trees are to be planted onsite to replace trees approved for removal. Canopy tree species are to be as per the approved Landscape Plan or selected from the list pertaining to the vegetation community growing in the locality as per the vegetation mapping in the Native Plants for Your Garden link on Council's website [www.pittwater.nsw.gov.au/environment/plants\\_\\_and\\_\\_animals/native\\_plants](http://www.pittwater.nsw.gov.au/environment/plants__and__animals/native_plants). All native trees are to be retained for the life of the development, or for their safe natural life. Trees that die or are removed must be replaced with another locally native canopy tree.
14. For the life of the development, domestic pet animals are to be kept from entering wildlife habitat areas at all times. Dogs and cats are to be kept in an enclosed area or on a leash such that they cannot enter areas of bushland, unrestrained, on the site or on surrounding properties or reserves. Ferrets and rabbits are to be kept in a locked hutch/run at all times.
15. Any vegetation planted outside approved landscape zones is to be consistent with:
  - a. Species listed in the Ecological Sustainability Plan or Bushland Management Plan
  - b. Species listed from the Endangered Ecological Community
  - c. Locally native species growing onsite and/or selected from the list pertaining to the vegetation community growing in the locality as per the vegetation mapping and *Native Plants for Your Garden* link available from Council's website [www.pittwater.nsw.gov.au](http://www.pittwater.nsw.gov.au)
16. Over the life of the development all declared noxious weeds are to be removed/controlled in accordance with the Noxious Weeds Act 1993. Environmental weeds are to be removed and controlled. Refer to Pittwater Council website ([www.pittwater.nsw.gov.au](http://www.pittwater.nsw.gov.au)) for noxious/environmental weed lists.

17. No environmental weeds are to be planted on the site. Refer to Pittwater Council website ([www.pittwater.nsw.gov.au](http://www.pittwater.nsw.gov.au)) for environmental weed lists.
18. Any new fencing is to be made passable to native wildlife. As a guideline, hole dimensions should be 150mm wide X 100mm long at ground level spaced at 6 metre intervals.
19. No odour nuisance shall be created by the operation of any plant or equipment or any procedure carried out at the premises.
20. Noise levels shall comply with the requirements of the **Protection of the Environment Operations Act 1997**.
21. Sanitary facilities shall be provided in accordance with Part 2 of the Building Code of Australia.
22. A fixed privacy screen is to be provided to the northern side of the terrace of Unit 1, Level 1 to a minimum height of 1.75 metres. The screen shall have openings of no more than 25% of the overall area of the screen.
23. The development is to include a minimum number of 2 units at the rate and class as required under the Accessibility Control and in compliance with the requirements of AS 4299 - Adaptable Housing
24. Unless specifically approved through development consent no mesh enclosing of the car parking spaces of any kind will be permitted.
25. All carparking facilities and driveway profiles, for adaptable and accessible housing, from the street to the on site car parking spaces for the adaptable apartments must comply with AS/NZS 2890.1:2004 Parking facilities - Off-street car parking
26. Garbage enclosures/stores shall be provided and maintained in accordance with the following:
  - a. A separate room or an appropriately constructed area is to be provided for the storage of garbage and recyclables.
  - b. The walls of the enclosure shall be cement rendered and steel trowelled to a smooth, even surface.
  - c. The floor shall be of impervious material coved at the intersection with the walls, graded and drained to an approved floor waste within the room/enclosure.
  - d. Stormwater shall not enter the floor of the garbage enclosure such that the sewer system may be contaminated by rainwaters.
  - e. Garbage and recycling rooms shall be vented to the external air by natural or artificial means. The installation and operation of the mechanical ventilation system shall comply with AS 1668, Parts 1 & 2.
  - f. The room used for the storage and washing down of garbage and recycling receptacles shall be constructed of solid material (brick, concrete blocks, structural fibrous cement or similar homogeneous material) so as to prevent the formation of cavities which become possible harborages for insects and vermin. Framing in timber is not permitted.

- g. The garbage and recycling room shall be made vermin proof.
- h. Hot and cold water hose cocks shall be located within a garbage enclosure or in close proximity to Council's satisfaction.
- i. The enclosure shall be of adequate size to accommodate the following bins numbers and capacity per dwelling:
  - i. 80 litres per household per week of garbage, and
  - ii. 70 litres per household per week of paper recyclables, and
  - iii. 70 litres per household per week of container recyclables.

The residential waste and recycling enclosure is to be physically separated from the commercial waste and recycling enclosure.

- 27. You are advised to contact Australia Post regarding the required size and location of letterboxes.
- 28. Address street numbering can only be authorised by Council. Before proceeding to number each lot/occupancy in your development, approval must be sought from Council's Planning and Assessment Business Unit.
- 29. The copper roof shall not be treated to retain brightness but shall be allowed to weather to a neutral non-glare finish.
- 30. All utility services including overhead power supply and communication cables located in the adjacent road verge & those to service the development are to be placed and/or relocated underground for the total frontage of the development site to any public road at the full cost to the developer.
- 31. Street trees to front road reserve area, minimum soil volume 12m<sup>3</sup>, min 400 litre size.
- 32. Pavements in road reserve to match existing sequential concrete pavements as existing throughout the commercial strip. Pavements to be set 100mm 20mpa concrete sub-base. All utility pits to be replaced/liased with relevant utility authority
- 33. All plumbing and drainage fixtures are to be concealed and not exposed to public view on buildings over one storey in height.
- 34. All external glazing is to have a maximum reflectivity index of 25%.
- 35. New electrical connections are to be carried out using underground cabling.
- 36. No mechanical plant shall be located at any point on the roof of the building.
- 37. The easternmost row of solar panels shall be removed from the development.
- 38. Materials and colour schemes are to be in accordance with the samples submitted to Council with the application. No white or light coloured roofs are permitted.
- 39. The commitments identified in the BASIX Certificate and on the plans or specifications are to be fulfilled and maintained for the life of the development.

40. This consent does not authorize the operation of the propose kiosk, which shall be the subject of a separate Development Application.

### C. Matters to be satisfied prior to the issue of the Construction Certificate:

Note: All outstanding matters referred to in this section are to be submitted to the accredited certifier together. Incomplete Construction Certificate applications / details cannot be accepted.

1. Prior to issue of the Construction Certificate, Form 2 of the **Geotechnical Risk Management Policy for Pittwater** (Appendix 5 of P21 DCP) is to be completed and submitted to the Principal Certifying Authority.
2. Engineering details showing the stormwater quality treatment system are to be submitted to the Accredited Certifier or Council with the Construction Certificate application. Such details are to be accompanied by a certification by a qualified practicing Water Engineer with corporate membership of the Institute of Engineers Australia ( MIE Aust), or who is eligible to become a corporate member and has appropriate experience and competence in the related field, confirming that the plans/details comply with B5.10 of Pittwater 21 DCP.
3. Drainage plans including specifications and details showing the site stormwater management are to be submitted to the Accredited Certifier with the Construction Certificate application. Such details are to be accompanied by a certificate from (as appropriate) either a Licensed plumber or qualified practicing Civil Engineer with corporate membership of the Institute of Engineers Australia (M.I.E), or who is eligible to become a Corporate member and has appropriate experience and competence in the related field, that the stormwater management system complies with the requirements of section 3.1.2 Drainage of the Building Code of Australia Housing Provision and AS/NZS 3500.3.2 - Stormwater Drainage. The details shall include disposal of site stormwater (if the site is in a known slip area the stormwater disposal system must comply with the recommendations of a Geotechnical Engineers Report).

Note: Where Council is the Principal Certifying Authority 3 sets of plans/specifications are to be submitted.

4. Plans and details demonstrating that the following issues have been addressed are to be submitted to the Accredited Certifier with the Construction Certificate application.
  - a. Driveway profiles must be obtained from Council for all access driveways across the public road verge to road edge. The driveway profiles provided by Council must be incorporated into and attached to design plans for the access driveway and internal driveway.
  - b. A Deed of Agreement indemnifying Council must be entered into for construction of a cosmetic access driveway across the public road verge (i.e. other than a plain concrete finish).
  - c. All construction of the access driveway across the public road verge must be undertaken by a Council authorised contractor.
  - d. Council\'s Fees and Charges apply to driveway profiles and Deed of Agreement for Access Driveway.
5. An approval under Section 138 of the **Roads Act** to construct an access driveway to the main road is to be submitted to the Accredited Certifier.
6. A Dilapidation Report is required in relation to the structures on the adjoining property. The report is to be prepared by a qualified Geotechnical Engineer.

7. Civil engineering details of the proposed excavation/landfill are to be submitted to the Accredited Certifier or Council with the Construction Certificate application. Each plan/sheet is to be signed by a qualified practising Civil Engineer who has corporate membership of the Institution of Engineers Australia (M.I.E) or who is eligible to become a corporate member and has appropriate experience and competence in the related field.
8. Detail landscape plans prepared by qualified landscape architect/designer (Scale 1:100) to be prepared for the front road reserve/forecourt area.  
Plans to detail:
  - (a) Boundary side treatments, including retaining structures, soil volumes for proposed vegetation, proposed planting type and size at installation, edge finishes, drainage, lighting and fencing.
  - (b) Pergola type construction.
  - (c) Palm Grove edge finishes, sizes, planting volume, drainage, signage, and lighting.
  - (d) Details of all onslab planters, including waterproof membranes, drainage, flushing and watering points, planting types/sizes.
  - (e) Watering points.
9. Submission of construction plans and specifications and documentation which are consistent with the approved Development Consent plans, the requirements of Building Code of Australia and satisfy all conditions shown in Part B above are to be submitted to the Principal Certifying Authority.
10. The applicant is to consult with Sydney Water to establish whether there are any Section 73 Compliance Certificate requirements for this proposal, under the provisions of the Sydney Water Act, 1994. A copy of any Notice of Requirements letter which may be issued by Sydney Water, is to be provided to the Private Certifying Authority with the Construction Certificate application.

Application must be made through an authorised Water Servicing Coordinator. Please refer to the Building Developing and Plumbing section of the web site [www.sydneywater.com.au](http://www.sydneywater.com.au) then refer to "Water Servicing Coordinator" under "Developing Your Land" or telephone 13 20 92 for assistance.

Following application a "Notice of Requirements" will advise of water and sewer infrastructure to be built and charges to be paid. Please make early contact with the Coordinator, since building of water/sewer infrastructure can be time consuming and may impact on other services and building, driveway or landscape design.

11. Any proposed demolition works shall be carried out in accordance with the requirements of AS2601-2001 The Demolition of Structures.

Amongst others, precautions to be taken shall include compliance with the requirements of the WorkCover Authority of New South Wales, including but not limited to:

1. Protection of site workers and the general public.
2. Erection of hoardings where appropriate.
3. Asbestos handling and disposal where applicable.
4. Any disused service connections shall be capped off.

Council is to be given 48 hours written notice of the destination/s of any excavation or demolition material. The disposal of refuse is to be to an approved waste disposal depot.

12. In accordance with Clause 94 of the Environmental Planning and Assessment Regulation 2000, plans are to be submitted with the Construction Certificate application demonstrating how the building will be brought into full conformity with fire and spread of fire requirements of the Building Code of Australia.

A satisfactory and complete schedule of essential fire safety measures required to be installed within and/or in association with the building including the minimum standard for performance of each measure is to be submitted to the Accredited Certifier or Council prior to release of the Construction Certificate. The schedule is to include a signed statement from a suitably qualified person confirming that all essential fire safety measures as required by the Building Code of Australia have been listed so as to ensure the safety of persons in the building in the event of an outbreak of fire.

13. A Schedule of Works prepared by a qualified practising Structural Engineer with corporate membership of the Institute of Engineers Australia (M.I.E), or who is eligible to become a corporate member and has appropriate experience and competence in the related field is to be submitted to the Accredited Certifier or Council in respect of the following items:
  1. The details and location of all intercept drains, provided uphill of the excavation, to control runoff through the cut area.
  2. The proposed method of disposal of collected surface waters is to be clearly detailed
  3. Procedures for excavation and retention of cuts, to ensure the site stability is maintained during earthworks.
14. A contribution of \$36,000 is to be made to Cashier Code SOPS, pursuant to Section 94 of the 'Environmental Planning and Assessment Act, 1979' (as amended), for Embellishment of Open Space, Bushland and Recreation in accordance with Section 94 Contributions Plan No.2. The Contributions Plan may be inspected at Pittwater Council, No 1 Park Street, Mona Vale. The Section 94 contribution is to be paid prior to issue of the Construction Certificate.

Where rates payable under Section 94 Contributions Plan No 2 are reviewed and varied, the applicant is to pay the contribution rate as specified in the plan as it exists at the time of contribution.

15. A contribution of \$8,000 is to be made to Cashier Code SLEL, pursuant to Section 94 of the 'Environmental Planning and Assessment Act, 1979' (as amended), for Public Library Services in accordance with Section 94 Contributions Plan No.3. The Contributions Plan may be inspected at Pittwater Council, No 1 Park Street, Mona Vale. The Section 94 contribution is to be paid prior to issue of the Construction Certificate.
16. A contribution of \$14,000 is to be made to Cashier Code SCSF, pursuant to Section 94 of the 'Environmental Planning and Assessment Act, 1979' (as amended), for Community Services Facilities in accordance with Section 94 Contributions Plan No.18. The Contributions Plan may be inspected at Pittwater Council, No 1 Park Street, Mona Vale. The Section 94 contribution is to be paid prior to issue of the Construction Certificate.

17. A contribution of \$20,000 is to be made to Cashier Code SVSS, pursuant to Section 94 of the 'Environmental Planning and Assessment Act, 1979' (as amended), for providing improved Village Streetscapes in accordance with Section 94 Contributions Plan No.19. The Contributions Plan may be inspected at Pittwater Council, No1 Park Street, Mona Vale. The Section 94 contribution is to be paid prior to issue of the Construction Certificate.

Where rates payable under Section 94 Contributions Plan No 19 are reviewed and varied, the applicant is to pay the contribution rate as specified in the plan as it exists at the time of contribution.

18. Certification from an Accredited Access Adviser that design details and specifications comply with the Accessibility Control and AS 4299 - Adaptable Housing, must be submitted to the Accredited Certifier or Council with the Construction Certificate application.
19. Plans and details demonstrating that the commitments identified in the BASIX Certificate that apply to the construction certificate or complying development plans and specifications are fulfilled.
20. A detailed landscape plan prepared by a qualified Landscape Architect / Horticultural Designer to be prepared as part of documentation for the Construction Certificate generally in accordance with the landscape concept plan as prepared by Lesiuk Architects.

The landscape plan is to detail the following elements:

- 3 street trees provided to the front road reserve set in proposed paving (dimension 1.5 wide / 2 metres long (*Glochidion ferdinandi*) installed at 400 litre size.
- Front road reserve to the unit paved to match with existing pavement pattern/ type (header to all edges) laid on concrete sub-base.
- All works in road reserve to be approved/ liaised with Council's Landscape Architect prior to commencement – ph: 9970 1356.
- Indicated palm grove to site frontage to be *Livistonia australis/howea forstrana*, with clear trunk height of minimum 3 metres. Canopy trees to southern/ northern boundary and central planter to be minimum 400 litre in size and endemic to area.
- Trees must have minimum 10m<sup>3</sup> planting volume to allow realistic growth and prevent long term damage to proposed retaining walls.
- Those trees located to the rear boundary area to be minimum 100 litre size at installation and endemic to the Palm Beach locality.
- All planter boxes to be detailed in relation to structural capability (i.e. concrete core filled to deal with large growth and associated roots) growing medium minimum depth (800mm) and mulch treatment.
- All planters built on slab to incorporate drainage membranes/ drainage layer with inspection pits connected to proposed stormwater system and allow minimum of 800m depth growing medium. Waterproof membrane to be independently certified by qualified contractor.

- All landscape works to be maintained for the life of the development.
- A report confirming construction of the landscape works in accordance with the concept plan and detail landscape plan to be prepared by qualified Landscape Architect and approved by the nominated Certifier prior to release of Occupation Certificate.

**D. Matters to be satisfied prior to the commencement of works and maintained during the works:**

Note: It is an offence to commence works prior to issue of a Construction Certificate.

1. All excavated material is to be removed from the site.
2. All excavations and backfilling associated with the erection or demolition of a building must be executed safely and in accordance with appropriate professional standards.
3. All excavations associated with the erection or demolition of a building must be properly guarded and protected to prevent them from being dangerous to life or property.
4. Where excavations extend below the level of the base of the footings of a building on an adjoining allotment of land, the person causing the excavation must preserve and protect the building from damage and, if necessary, underpin and support the adjoining building in an approved manner.
5. Temporary sedimentation and erosion controls are to be constructed prior to commencement of any work to eliminate the discharge of sediment from the site.
6. Sedimentation and erosion controls are to be effectively maintained at all times during the course of construction and shall not be removed until the site has been stabilised or landscaped to the Principal Certifying Authority's satisfaction.
7. Adequate measures shall be undertaken to remove clay from vehicles leaving the site so as to maintain public roads in a clean condition.
8. The site is to be fully secured by a fence to all perimeters to the site to prevent unauthorised access both during the course of the works and after hours.
9. No works are to be carried out in Council's Road Reserve without the written approval of the Council.
10. A Road Opening Permit, issued by Council, must be obtained for any road openings, or excavation within Council's Road Reserve associated with the development on the site, including stormwater drainage, water, sewer, electricity, gas and communication connections. During the course of the road opening works the Road Opening Permit must be visibly displayed at the site.
11. No skip bins or materials are to be stored on Council's Road Reserve.
12. A site fence and silt and sediment control fence is to be erected and maintained during the course of works along any street boundary and park/reserve boundary to the site.



13. A clearly legible **Site Management Sign** is to be erected and maintained throughout the course of the works. The sign is to be centrally located on the main street frontage of the site and is to clearly state in legible lettering the following:
- The builder's name, builder's telephone contact number both during work hours and after hours.
  - That no works are to be carried out in Council's Road Reserve without the written approval of the Council.
  - That a Road Opening Permit issued by Council must be obtained for any road openings or excavation within Council's Road Reserve associated with development of the site, including stormwater drainage, water, sewer, electricity, gas and communication connections. During the course of the road opening works the Road Opening Permit must be visibly displayed at the site.
  - That no skip bins or materials are to be stored on Council's Road Reserve.
  - That the contact number for Pittwater Council for permits is 9970 1111.
14. All construction in the public road reserve must be undertaken by a Council authorised contractor.
15. If approved works are likely to cause pedestrian or vehicular traffic in a public place to be obstructed or if works involve the enclosure of a public place, then a hoarding or fence must be erected between the work site and the public place.
- If necessary, an awning or other structure is to be erected, sufficient to prevent any substance from, or in connection with, the work falling into the public place. Further, 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 such hoarding, fence or awning is to be removed when the work has been completed.
- NOTE: Hoardings and temporary awnings erected on or over public places are required to be subject to a separate approval from Council.
16. A satisfactory construction traffic management plan (CTMP) prepared by a suitably qualified traffic consultant is required to be submitted to the Private Certifying Authority prior to the commencement of any site works. The plan is to detail:
- Quantity of material to be transported
  - Proposed truck movements per day
  - Proposed hours of operation
  - Proposed traffic routes, noting that 3 tonne load limits apply to some roads within Pittwater
17. As there are existing trees to be retained within 5 metres of proposed development works, all recommendations as outlined in the supplied arborist report by Urban Forestry Australia dated June 2009 are required to be complied with before and throughout the development period, particularly with regard to the following:
- . Works, erection/demolition of structures, excavation or changes to soil levels within 5 metres of existing trees are not permitted unless part of the development as approved, and the storage of spoil, building materials, soil or the driving and parking of any vehicle or machinery within 5 metres of the trunk of a tree to be retained is not permitted;

- i. Where specified, tree guards are to be provided to all trees as indicated in the report, and are to be installed prior to the commencement of any work on the site. Tree guard materials and dimensions are specified in the arborist report;
- ii. All works within 5 metres of existing trees including demolition, excavation, civil works, fencing and the like must be carried out by hand and under the supervision of an experienced and suitably qualified arborist. In the event that major structural or feeder roots are encountered, the arborist is to advise the builder to carry out appropriate action to ensure the retention of the tree.
- iii. Signage is to be erected advising all contractors and visitors to the site that no works or storage are to take place within the dripline of existing trees.

Any changes or alterations made to the tree management recommendations as outlined by the arborist report due to the discovery of new structural roots or underground services during development works must be reported to the Principal Certifying Authority prior to works recommencing.

18. A stamped copy of the approved plans is to be kept on the site at all times, during construction.
19. Toilet facilities are to be provided in a location which will not detrimentally affect the amenity of any adjoining residents at or in the vicinity of the work site during the duration of the development.
20. Where excavations extend below the level of the base of the footings of a building on an adjoining allotment of land, the person causing the excavation must give the owner of the adjoining property at least seven (7) days written notice of their intention to excavate below the level of the base of the footing and furnish the adjoining property owner with particulars of the proposed work.

#### **E. Matters to be satisfied prior to the issue of Occupation Certificate:**

Note: Prior to the issue of an Occupation Certificate the principal certifying authority is to ensure that Council's assets, including road, kerb and gutter and drainage facilities adjacent or near to the site have not been damaged as a result of the works. Where such damage has occurred, it is to be repaired to Council's written satisfaction prior to the issue of an Occupation Certificate or suitable arrangements put in place to effect those repairs at a future date to Council's written satisfaction. Should this process not be followed, Council will pursue action against the principal accredited certifier in relation to the recovery of costs to effect such works.

Note: It is an offence to occupy the building or part thereof to which this consent relates prior to the issue of an Occupation Certificate.

1. Prior to issue of the Occupation Certificate, Form 3 of the **Geotechnical Risk Management Policy** (Appendix 5 of P21 DCP) is to be completed and submitted to the Principal Certifying Authority.
2. Prior to the issue of a Occupation Certificate a certificate by a Registered Surveyor is to be provided to the Private Certifying Authority, stating that the finished floor level is at or above the EPL.
3. Certification is to be provided to the Principal Certifying Authority by a qualified experienced practicing Civil Engineer, with corporate membership of the Institute of Engineers Australia (M.I.E.), or who is eligible to become a corporate member and has appropriate experience and

competence in the related field, that the drainage/stormwater management system has been installed to the manufacturer's specification (where applicable) and completed in accordance with the engineering plans and specifications required under this consent.

4. A Certificate is to be submitted to the Principal Certifying Authority with the Subdivision Certificate application by a qualified practising Civil Engineer with corporate membership of the Institute of Engineers Australia (M.I.E), or who is eligible to become a Corporate member and has appropriate experience and competence in the related field confirming to the satisfaction of the Private Certifying Authority that the driveway has been constructed in accordance with the approved plans and relevant conditions of Development Consent.
5. A certificate submitted by a Chartered Professional Engineer confirming to the satisfaction of the Principal Certifying Authority that the works in the public road reserve comply with Council requirements is to be provided with the Occupation Certificate application.
6. Prior to issue of an Occupation Certificate photographic evidence of the condition of the street trees and road reserve and area adjoining the site after the completion of all construction, must be submitted to the Principal Certifying Authority showing that no damage has been done and if damage has been done that it has been fully remediated. The photographs shall be accompanied by a statement that no damage has been done (or where damage has been remediated that Council has approved that work). In this regard Council's written agreement that all restorations have been completed satisfactorily must be obtained prior to the issue of any Occupation Certificate.
7. Restoration of all damaged public infrastructure caused as a result of the development to Council's satisfaction. Council's written approval that all restorations have been completed satisfactorily must be obtained and provided to the Private Certifying Authority with the Occupation Certificate application.
8. Certification of completed landscape works with approved plans (as approved at construction certificate stage) to be provided by supervising/nominated landscape architect/designer prior to release of occupation certificate
9. Evidence of agreement to maintain the nominated landscape/garden areas for a 24 month period by qualified landscape contractor/horticultural maintenance contractor to be provided prior to release of occupation certificate.
10. All onslab waterproof membranes to be independently certified as being installed to BA/watertight specifications with a minimum five year guarantee prior to issue of occupation certificate.
11. An Occupation Certificate application stating that the development complies with the Development Consent, the requirements of the Building Code of Australia and that a Construction Certificate has been issued must be obtained before the building is occupied or on completion of the construction work approved by this Development Consent.
12. A copy of the Section 73 Compliance Certificate issued under the provisions of the **Sydney Water Act, 1994**, is to be forwarded to Council or the Private Certifying Authority with the Occupation Certificate.
13. All proposed dwellings/sole occupancy units are to have approved hard-wired smoke alarms installed and maintained over the life of the development. All hard-wired smoke alarms are to be Australian Standard compliant and must be installed and certified by any appropriately qualified electrician prior to the issue of any Occupation Certificate.
14. Street numbers are to be affixed to the building prior to occupation.

15. Certification is to be provided that the commitments identified in the BASIX Certificate have been fulfilled.

#### **F. Matters to be satisfied prior to the issue of Subdivision Certificate:**

Nil

#### **G. Advice:**

1. In accordance with Section 95(1) of the Act, this consent will lapse if the development, the subject of this consent, is not physically commenced within 5 years after the date from which this consent operates.
2. Failure to comply with the relevant provisions of the **Environmental Planning and Assessment Act, 1979** (as amended) and/or the conditions of this Development Consent may result in the serving of penalty notices (on-the-spot fines) under the summary offences provisions of the above legislation or legal action through the Land and Environment Court, again pursuant to the above legislation.
3. The applicant is also advised to contact the various supply and utility authorities, i.e. Sydney Water, Sydney Electricity, Telstra etc. to enquire whether there are any underground utility services within the proposed excavation area.
4. It is the Project Managers responsibility to ensure that all of the Component Certificates/certification issued during the course of the project are lodged with the Principal Certifying Authority. Failure to comply with the conditions of approval or lodge the Component Certificates/certification will prevent the Principal Certifying Authority issuing an Occupation Certificate.
5. To ascertain the date upon which the determination becomes effective, refer to Section 83 of the **Environmental Planning and Assessment Act, 1979** (as amended).
6. Should any of the determination not be acceptable, you are entitled to request reconsideration under Section 82A of the **Environmental Planning and Assessment Act, 1979**. Such request to Council must be made in writing, together with appropriate fees as advised at the time of lodgement of such request, within 1 year from the date of determination.
7. If you are dissatisfied with this decision, Section 97 of the **Environmental Planning and Assessment Act, 1979**, gives you a right of appeal to the Land and Environment Court within 12 months of the date of endorsement of this Consent.
8. You are reminded of your obligations under the objectives of the Disability Discrimination Act (DDA) 1992.

# LOCALITY MAP



# NOTIFICATION PLANS













