Joint Regional Planning Panel
(Sydney East Region)

JRPP No.	2011SYE108
DA No.	DA/748/2011
Local Government area	Randwick City Council
Proposed Development	Redevelopment of the Kensington Colleges, including construction of 3 buildings varying between 5 and 8 storeys comprising 920 beds, 5 Dean's apartments and 23 tutor's studios; provision of parking for 107 cars, 48 motorcycles and 92 bicycles; construction of landscaped courtyards and rooftop terraces; upgrading of Gate 5 Avenue and Basser Steps; and construction of pedestrian through-site link.
Street Address	330 Anzac Parade, Kensington NSW 2033 (UNSW)
Applicant	UNSW
Owner	UNSW
Number of Submissions	Nil
Recommendation	Approval subject to conditions
Report By	Simon Ip, Senior Planning Officer

1. Executive Summary

Council is in receipt of a development application proposing the redevelopment of the Kensington Colleges, including the construction of 3 buildings varying between 5 and 8 storeys comprising 920 beds, 5 Dean's apartments and 23 tutor's studios; provision of parking for 107 cars, 48 motorcycles and 92 bicycles; construction of landscaped courtyards and rooftop terraces; upgrading of Gate 5 Avenue and Basser Steps; and construction of pedestrian through-site link.

The subject proposal is a Crown development having a capital investment value of more than $5 million. Pursuant to Section 23G and Schedule 4A of the Environmental Planning and Assessment Act 1979, the proposal will be referred to the Joint Regional Planning Panel for determination.

The subject application was advertised and notified from 12 to 26 October 2011 in accordance with Development Control Plan – Public Notification of Development Proposals and Council Plans. No submissions were received at the conclusion of the public consultation process.

The subject site is zoned Special Uses No. 5 under Randwick Local Environmental Plan 1998 (Consolidation). The development involves the provision of student accommodation with associated car parking and floor space for supporting services, which will be ancillary to the primary educational function of the Kensington Campus. The proposal is considered to be consistent with the zoning objectives.

The UNSW Kensington Campus DCP applies to the proposed development. The proposal satisfies the key planning principles and controls in the DCP in terms of increasing on-campus residential accommodation, providing retail and ancillary services, enhancing campus accessibility and legibility, creating communal interaction spaces, retaining significant trees, maximising energy efficiency and encouraging sustainable modes of transport.

The site planning organises the building blocks around two central courtyards. The buildings present a rectilinear layout on plan view and provide clear definition to High Street and the internal roads. The east-west building masses have a height of 4 to 6 storeys. The north-south blocks have a height of 7 to 8 storeys. The arrangement and orientation of the buildings will maximise solar access to the landscaped courtyards.

The proposal entails variation from the DCP external wall height control. The most significant deviation occurs in Seniors College, where a full habitable storey is above the 24m wall height line. Notwithstanding, the overall height and scale of the buildings respect the natural fall of the land and are commensurate with the recently completed Village student housing development to the west of the site. The proposal is considered to be compatible with the emerging character of High Street. The overall building disposition and massing are considered to be a reasonable design response to the site characteristics and the surrounding development context.

At the ground levels, the proposed development has average front setback from the High Street boundary of approximately 3.5m. At the upper levels, the average setbacks range from approximately 1.5m (to balconies) to 3.5m (to walls). The recently completed Village development to the west has front setbacks of approximately 2.0m to 3.4m. The general front alignment of the development is consistent with the neighbouring residential college. A row of street trees extending from the site to the eastern part of The Village will also be planted to deliver a suitable landscape character for High Street.

The existing mature fig trees in Fig Tree Lane will be retained. The development scheme will rationalise landscaped area provision across the site. The quantum and quality of replacement planning and garden areas are considered to be adequate and would provide significant improvements to the Kensington Colleges precinct.

At present, the site accommodates approximately 25 surface parking spaces. Under the Kensington Campus DCP, the development is required to provide 64 car spaces. The proposal includes 107 parking spaces at the basement level. The proposal will not result in any net loss in campus parking as the quantum of proposed parking will more than offset the loss in existing parking, while satisfying the requirements of the DCP.

The proposal will not result in unreasonable shadow impacts on the surrounding areas. The proposed accommodation rooms and dwelling units will enjoy satisfactory amenity.

Council's Section 94A Development Contributions Plan applies to the proposal and a monetary levy of $863,687.15 is required. The UNSW disputes the imposition of the levy and does not agree to the applicability of the Section 94A contribution, and is in the process of preparing a submission outlining their case to the JRPP. It should be noted that the draft condition requiring Section 94A contribution is still maintained in the "Recommendation" of this report.

The proposal satisfies the matters for consideration under Section 79C of the Environmental Planning and Assessment Act 1979, and is recommended for approval subject to conditions.

2. Description of Subject Site and Locality

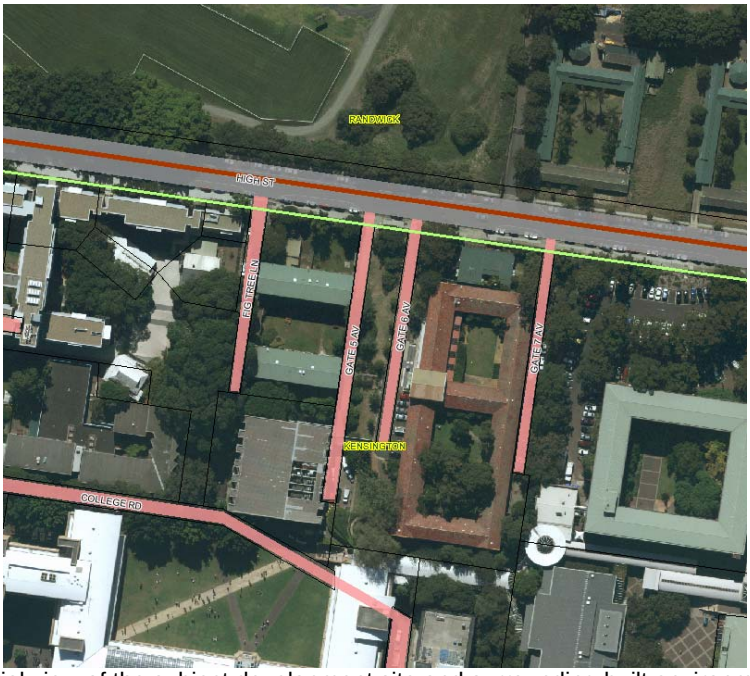
The development site is located within the UNSW Kensington Campus between Gate 7 Avenue in the east and Fig Tree Lane in the west, with northern frontage to High Street. The site has a land area of 10979m2. The site has a significant fall from east to west with a level difference of approximately 12m. At present, the site is occupied by a group of four buildings that comprise Basser College and Goldstein College.

To the north on the opposite side of High Street is the Randwick Racecourse, which is listed as a Conservation Area under Randwick Local Environmental Plan 1998.

The eastern side of Gate 7 Avenue are occupied by the Morven Brown Building and open car park.

The major circulation stairway connecting the upper with the lower campus, known as Basser Steps, is located to the south. The Quadrangle Lawn is situated to the south-west.

Goldstein Hall and its forecourt are located immediately to the west of the site, and are proposed to be retained. On the opposite side of Fig Tree Lane is the Old Tote / Fig Tree Theatre Conservation Area listed under the LEP, which comprises three historical buildings, namely the White House, the Old Tote Building and the Fig Tree Theatre, paved courtyard as well as a row of mature fig trees. Further to the west is the recently completed student housing development known as “The Village”.



Aerial view of the subject development site and surrounding built environment

3. Proposed Development


Computer generated model of the proposed development as viewed from the opposite side of High Street

The proposed development is for the construction of 3 buildings for the purpose of student accommodation with ancillary facilities for the residential colleges and the University. The proposal includes the following elements:

- Provision of four residential colleges, namely Seniors' College, Goldstein College, Basser College, Baxter College and Fourth College, incorporating 920 beds, 5 Dean's apartments, 23 tutor's studios and associated communal facilities.

Seniors' College	240 beds
Goldstein College	150 beds
Basser College	161 beds
Baxter College	211 beds
Fourth College	158 beds
Total	*920 beds*

- Provision of multi-purpose suites ancillary to the operation of the University (designated as "cold shell" units on the drawings) within the buildings. The Statement of Environmental Effects provides the following information on this matter (page 21):

  "In addition to the core residential activities within the Kensington Colleges, the development will provide ground floor core and 'cold shell' spaces for University-related uses. The location and design of this space will ensure a constant and active use of the precinct's ground planes during the day, and will invite non-resident students and staff to enter and use the site."

- Provision of college administration and teaching spaces within the buildings.
- Provision of parking for 107 vehicles, 48 motorcycles and 92 bicycles.
- Construction of landscaped courtyards and rooftop terraces.
- Upgrading of Gate 5 Avenue to function as a shared vehicular and pedestrian access route.
- Construction of east-west through-site link connecting Gate 7 Avenue with Fig Tree Lane.

- Upgrading and widening of Basser Steps and installation of new shade canopy.

The subject proposal is a Crown development having a capital investment value of more than $5 million. Pursuant to Section 23G and Schedule 4A of the Environmental Planning and Assessment Act 1979, the determining authority for the application is the Joint Regional Planning Panel (Eastern Region). The submitted application will therefore be referred to the Joint Regional Planning Panel for determination.

A development application for site preparation and formation works for facilitating the construction of the subject student housing buildings has recently been approved by Council.

4. Site History

4.1 Application History

The UNSW campus has been the subject of a series of facility upgrade and development works. The following development application is relevant to the current proposal:

DA/739/2011	Site preparation and early works for the Kensington Colleges redevelopment, including demolition of existing buildings, removal of trees, excavation, installation of perimeter piles and capping beams, removal of contaminated fill materials, removal of Gate 6 Avenue, and erection of site hoardings and amenities. The above development proposal is directly related to the subject application and was approved by Council's Planning Committee on 6 December 2011, subject to conditions.

4.2 Plan amendments

Revised drawings and additional information addressing issues raised by Council were submitted on 12 January 2012. The key amendments include provision of street trees on the southern side of High Street that extend to the eastern section of The Village development, clarification of front setback alignments, amendments to the documentation with additional details and explanation, and provision of thermal comfort and energy efficiency reports.

5. Notification and Advertising

The subject application was advertised and notified from 12 to 26 October 2011 in accordance with Development Control Plan – Public Notification of Development Proposals and Council Plans. No submissions were received at the conclusion of the public consultation process.

6. Technical Officer and External Referral Comments

6.1 Building Surveyor

Council's Building Surveyor has reviewed the proposal and raised no objections, subject to standard conditions.

6.2 Development Engineer and Landscape Development Officer

The comments provided by Council's Development Engineering Section are extracted below:

> ***Carparking Provision***
> *The carparking is compliant with UNSW Kensington Campus Development Control Plan 2007 and has been discussed in detail elsewhere in the Assessment planners report.*
>
> ***Stormwater Drainage Comments***
> *Standard UNSW drainage conditions have been imposed within this report.*
>
> ***Tree Comments***
> *Approval to remove 31 out of the 41 trees affected by this development was already granted as part of the early works consent (DA/739/2011), and while the majority were relatively small specimens, of no environmental consequence, this did include 4 large and significant trees that had been assigned a high & highest retention priority in the UNSW DCP, being a Eucalypt fronting High Street, as well as a row of three Poplars to its south, adjacent the Basser College and Basser Steps.*
>
> *However, several other established trees throughout the site have been identified as suitable for retention in and around the proposed building footprints, and are shown as being incorporated as existing landscape elements into the works.*
>
> *They comprise firstly, a Quercus suber (Cork Oak, Tree 1) growing in the northeast corner of the site, adjacent the Gate 7 Avenue, which while not being significant in dimension at around 10m x 8m, is an extremely rare species, and as it is included in both UNSW and Council documents as a significant specimen, must be retained.*
>
> *New concrete kerb is proposed to be only 1.3m to its west, with the water main and hydrant booster only 200mm to its east, with conditions in this report requiring that the recommendations contained in point 7 of the Revised Arboricultural Impact Assessment by Footprint Green Pty Ltd, dated 20 September 2011 (which was submitted as part of the Early Works - DA/739/11), be adopted, and states that ground levels within a 5m radius must remain unchanged, and that all systems associated with the booster also be setback at least a 5m distance.*
>
> *The two mature Jacaranda mimosifolia (Jacaranda's, Trees 3 & 4) of 9m and 16m in height respectively, growing within the existing forecourt between Goldstein Hall and Goldstein College Block B, being Tree 3 at the eastern end and Tree 4 at the western end, will also be retained, with general protection measures sufficient to ensure this.*

Beyond the western site boundary, there is a row of five Ficus macrophylla (Moreton Bay Figs, from south to north, Trees 5-9) of extraordinary dimensions, measuring between 22-25m in height and x 12-33m in spread, of exceptional historical and environmental significance, which despite being located outside the scope of works, in recognition of their status and importance, protection measures will still need to be imposed given the spread of their canopies and root systems.

Should pruning from their eastern aspects be required, either to avoid damage to the trees or for clearance reasons, Council will only agree to a very minimal amount, under strict conditions and direct supervision.

The same also applies to a 25m x 22m Eucalyptus species (Gum Tree, Tree 10) to the south of the group described above.

Landscape Comments
One of the main components of this application is the arrangement and treatment of landscaped areas and plant selection both within the site, as well as along the High Street frontage.

In order to assist with presentation of the building and assist with the integration of the development into the streetscape, which is one of the main avenues in the City, the applicant has proposed that a row of 27 x 100 litre Acer buergerianum (Trident Maples) be planted within Council's public footpath, and will extend past the western boundary, all the way to the 'Campus Living' building/s, comprising 7 to the east of the proposed Gate 5 Avenue, 4 to its west, then a further 16 beyond the western extent of the works, which will be under-planted with low growing, low maintenance grasses.

However, our Street Tree Masterplan (which has been adopted by Council) does not nominate this species for this area, and has not been planted by Council as a public tree in the surrounding streets, so while being an attractive small-medium exotic, deciduous tree, is not deemed suitable by Council.

Given the quantity of trees proposed, and the maintenance responsibilities that will follow, an on-site meeting was held with Council's Co-ordinator of Tree Management, to discuss our preferred species and arrangement, where it was agreed that Corymbia citriodora (Lemon Scented Gum) shall be used.

This species is:
- *nominated for this area in the Masterplan;*
- *is a native that will benefit local wildlife, complementing the surrounding Fig Trees,*
- *has an open canopy that will maintain solar access and is conducive to pruning;*
- *will attain a size at maturity that will be similar in scale to the proposed building;*
- *maximise the visual appeal of the streetscape.*

The decorative under-planting within the tree squares is not supported, as Council has concerns over given the high volumes of pedestrian traffic, maintenance/replacement costs and potential for scouring/erosion given the natural grade of the footpath and street.

In order to ensure that Council's requirements are met, the applicant will need to submit a Street Tree Set Out Plan showing a porous/permeable treatment within the tree squares, which shall be located at roughly 10m intervals, and measuring 2m in width and 1 metre in depth behind the kerb, with a 100mm radius around its trunk to allow for future growth.

The internal landscape works are of a high standard, containing a suitable planting palette for the prevailing conditions, with the main features being central grassed courtyards, raised planters and a combination of formal and informal seating.

6.3 Heritage Planner

The application has been referred to Council's Heritage Planner for review. The comments provided are extracted under the "LEP" section of this report.

6.4 Design Review Panel

The proposed development is for the construction of student accommodation buildings with shared facilities and does not fall within the definition of residential flat buildings under SEPP No. 65 Design Quality of Residential Flat Development. Nevertheless, given the significant scale of the development, the proposal has been referred to the Design Review Panel (DRP) for comments and design inputs in two occasions. The key issues identified by the Panel are addressed as follows:

- *The proposal has not provided sufficient front setback from the High Street boundary. The front setback should be increased at least at the ground level to enable construction of a wider footpath and planting of large trees. A series of sections demonstrating the interface between the buildings and the High Street public domain should be prepared.*
  Comments:
  The applicant has submitted detailed drawings and photomontages showing the degree of setback and landscape treatment to the High Street frontage of the development. It is considered that the front setback is compatible with the recently completed student housing development to the west ("The Village") and the emerging character of High Street.

  A row of medium sized canopy trees extending from the full site frontage to the eastern portion of The Village will be provided within the High Street footpath. In addition, a combination of medium sized trees and dense under-storey planting will be provided in the setback areas. The landscape design will deliver a high level of amenity to the public domain and will visually soften the physical structures on the site.

  A detailed discussion on this matter is provided in the "Environmental Assessment" section of this report.

- *There are insufficient sun shading and weather protection to the east- and west-facing windows.*
  Comments:
  Refer to the "Environmental Assessment" section of this report for details.

- *Weather protection should be provided for the cantilevered balconies.*
  Comments:
  The balconies to the student rooms are configured as break-out spaces for the occupants. The absence of overhead canopies or awnings would restrict their use during adverse weather conditions. Notwithstanding, there are generous communal living areas within the colleges for use by all residents. The design scheme in its current form is considered to be satisfactory having regard to living amenity of the individual rooms.

- *Design measures should be included to ensure window / door openings allow natural ventilation without compromising security.*
  Comments:
  The applicant has submitted detailed drawings demonstrating that safety and security of the rooms will not be compromised when the full-height windows are at partial or fully open position. The window gap would not allow intruders to pass through.

- *The double-loaded circulation corridors are internalised and natural ventilation and lighting would be compromised. Window openings to external areas should be provided in the corridors.*
  Comments:

Refer to the “Environmental Assessment” section of this report for details.

- *Improved privacy protection should be given to the Dean’s apartments at the lower levels of the development.*
  Comments:
  The drawings have been updated to show the installation of timber batten privacy screens to the side windows of the Dean’s apartments at level 02 and level 03 of Seniors College and Goldstein College respectively.

- *The balustrades to the balconies should be designed in a manner that improves privacy for the occupants.*
  Comments:
  Each student room will be provided with internal roller blinds. Given the nature of the development as communal and transient student accommodation, the degree of privacy offered by the units is considered to be acceptable.

- *The location of balconies compromises the privacy of the adjoining units.*
  Comments:
  The applicant has submitted details demonstrating that an acceptable level of privacy will be provided for the rooms. Refer to the “Environmental Assessment” section of this report for details.

- *The ratio of bathroom facilities to bedrooms is too low.*
  Comments:
  The number of bathroom facilities is considered to be acceptable. Refer to the “Environmental Assessment” section of this report for details.

- *Ventilated skylights should be installed over the top floor toilet areas. Clerestory windows should be provided for the top floor apartments.*
  Comments:
  All of the student rooms have shallow layouts and adequate window openings. The units will enjoy satisfactory natural ventilation and at least ambient day lighting. The provision of skylights to the top floor level would only have minimal improvement to the overall energy consumption.

  The provision of skylights to closely located small rooms presents significant difficulties for fire separation.

  The proposal in its current form is considered to be satisfactory.

- *Large scale sections demonstrating construction details and weather protection of the canopy over Basser Steps should be provided. The canopy element should be used as a moderating element to integrate the new development with the existing Quadrangle buildings.*
  Comments:
  Additional design details relating to the canopy over Basser Steps have been submitted. The canopy will be constructed with glass roofing and horizontal steel louvres supported by steel framing.

  Construction details are not deemed to be necessary at the DA stage.

  The height, scale and materials of the canopy are not considered to detract from the architectural character of the proposed colleges and nearby buildings.

- *Details of the rooftop shade structures have not been given.*
  Comments:
  Design information relating to the rooftop shade structures has been included in the revised plans.

- *Soil depths details in the courtyards should be provided to ensure that canopy trees could be successfully planted.*
  Comments:
  Specific conditions will be recommended to ensure adequate soil depth and volume for the podium planting.

6.5 NSW Police

The application was referred to the Maroubra Local Area Command for crime risk assessment on 4 October 2011. No comments have been received to date.

6.6 NSW Roads and Traffic Authority

The application was referred to the RTA for comments on 4 October 2011 in accordance with the provisions of State Environmental Planning Policy (Infrastructure) 2007. No comments have been received to date. Refer to the "SEPP" section of this report for further details.

6.7 Sydney Airport Corporation Ltd. / Civil Aviation Safety Authority

Under the provisions of the Civil Aviation (Buildings Control) Regulation, the concurrence of the Sydney Airport Corporation Ltd. (SACL) / Civil Aviation Safety Authority (CASA) is required as the proposed building has a maximum height in excess of 15.24m above existing ground level and may fall within the Conical Surface of the Obstacle Limitation Surfaces for Sydney Airport.

A letter has been received from SACL / CASA advising that no objections are raised against the proposal, subject to the recommended height restrictions and construction management requirements. These requirements have been incorporated in the "Recommendation" section of this report.

7. Relevant Environmental Planning Instruments

7.1 State Environmental Planning Policy (Infrastructure) 2007

Clause 104 and Schedule 3 of the SEPP stipulate that developments for the purpose of educational establishment with a capacity of 50 or more students and access to any road will need to be referred to the RTA. The application was referred to the RTA on 4 October 2011. No response has been received to date.

Clause 104(3)(b)(i) requires the consent authority to take into consideration any submission that the RTA provides within 21 days after a referral notice has been given. This 21-day period has long expired and it is not mandatory for the consent authority to consider inputs from the RTA, which in fact have not been given.

Clause 104(3)(b) also requires the consent authority to consider:

(ii) The accessibility of the site concerned, including:
  (A) The efficiency of movement of people and freight to and from the site and the extent of multi-purpose trips, and
  (B) The potential to minimise the need for travel by car and to maximise movement of freight in containers or bulk freight by rail, and

(iii) Any potential traffic safety, road congestion or parking implications of the development.

The subject site is highly accessible with convenient access to the local and regional transport network and public transport services. The proposal is for the construction of on-campus student accommodation buildings with supporting facilities relating to the university operation. The development will contribute to the reduction of vehicular trips to and from the campus. As will be discussed in the "Environmental Assessment" section of this report, the proposal will incorporate suitable parking facilities for cars, motorcycles and bicycles. Council's Development Engineer has reviewed the application and raised no objections on traffic or safety grounds.

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

The proposed development primarily comprises boarding rooms for students with and without ensuite bathrooms. There will only be 5 fully self-contained apartments for the College Deans as compared to 920 student rooms. The student housing will rely on shared facilities, including kitchens, laundries, toilets and recreation space, and accordingly should be identified as Class 3 buildings under the Building Code of Australia (BCA). The SEPP (BASIX) requirements typically apply to Class 1A, 2 and 4 buildings.

It is considered that SEPP: BASIX should not apply to the proposal given its design and configuration as transient living units. Notwithstanding, the proposed development will still be required to comply with the energy efficiency provisions under Section J of the BCA.

7.3 State Environmental Planning Policy No. 55 Remediation of Land

SEPP No. 55 aims to promote the remediation of contaminated land for the purpose of reducing the risk of harm to human health or any other aspect of the environment.

The "Additional Environmental Site Assessment" report, dated 6 May 2011, and submitted with the previous development application (DA/739/2011) for early works associated with the subject development, indicates that the landfill materials on the site contain asbestos. A specific condition is recommended to ensure that the site remediation requirements imposed in development consent 739/2011 will be complied with.

7.4 Randwick Local Environmental Plan 1998 (Consolidation)

Clause 17 Zone No. 5 (Special Uses Zone)

The subject site is zoned Special Uses No. 5 under RLEP 1998 (Consolidation). The proposed development is for the provision of student accommodation with supporting facilities for the university operation, which will be ancillary to the primary educational use of the Kensington Campus. The proposed land use is therefore defined as educational establishment and is permissible within Zone No. 5.

The zoning objectives listed under sub-clause (1) are addressed as follows:

(a) To accommodate development by public authorities on publicly owned land, and
The proposal is initiated by a public university on land owned by the Crown.

(b) To accommodate development for educational, religious, public transport or similar purposes on both publicly and privately owned land, and
The proposal will provide student accommodation and supporting services, which will be associated with and ancillary to the tertiary educational use of the university campus.

(c) To enable associated and ancillary development, and
The proposal will provide student accommodation and supporting services, which will be associated with and ancillary to the tertiary educational use of the campus site.

(d) To allow for a range of community uses to be provided to serve the needs of residents, workers and visitors, and
The proposal will provide student accommodation with supporting facilities relating to the campus operation. The supporting facilities are designed to be publicly accessible.

(e) To allow for the redevelopment of land no longer required for a special use.
The development site will continue to be used for education related purposes.

Clause 37A Development in Special Uses Zone

Clause 37A provides that consent may be granted to the development of land within Zone No. 5 only if the consent authority is satisfied that the proposal is compatible with the character of the locality, and will not adversely affect the amenity of nearby and adjoining premises.

The development site is surrounded by student accommodation and institutional buildings associated with the UNSW. More specifically, the areas to the west have been developed with a large scale student accommodation facility (known as "The Village").

The height and massing of the proposed development are compatible with the aforementioned student housing facility and will not detract from the predominant character of the campus. The proposal will retain the existing mature fig trees along Fig Tree Lane. Replacement planting will also be provided along the High Street frontage. University services will be provided at ground floor levels to offer activation to High Street, Gate 5 Avenue, Basser Steps and the internal through-site links. As will be discussed in the following sections, the proposed buildings will not result in detrimental parking and amenity impacts on the surrounding areas.

Clause 40 Earthworks
Clause 40 provides that when determining an application for the carrying out of earthworks, the consent authority must consider the likely disruption of existing drainage patterns and soil stability in the locality, and the effect of the proposed works on the likely future use of the land.

The bulk excavation works associated with the subject student housing development have been addressed in the previous consent number 739/2011 issued by Council on 6 December 2011. The required earthworks have already been assessed as being satisfactory and will not adversely affect the drainage pattern and use of the land, subject to compliance with the conditions imposed in the above consent.

Clause 43 Heritage conservation
The development site is located immediately to the east of the Old Tote / Figtree Theatre Conservation Area listed under the LEP. The Racecourse Precinct Conservation Area is located to the north of the site on the opposite side of High Street.

Council's heritage officer has reviewed the proposal and provided the following comments:

> ***The Site***
> *The site falls steeply from east to west and is occupied by Goldstein and Basser Colleges. The site is directly to the east of the Old Tote/Fig Tree Theatre Conservation area which includes the White House, the Old Tote building and the Fig Tree Theatre, surrounded by large fig trees. The site is also adjacent to the Randwick Racecourse conservation area, located on the opposite side of High Street. In terms of Historic Significance, the Statement of Significance for the Old Tote/Fig Tree Theatre Heritage Conservation Area notes that "the White House, the Old Tote and the fig trees have historical significance as surviving evidence of the use of the university site as Kensington Racecourse from 1893 to 1941. The orientation and location of the buildings and trees remain indicative of the layout of the racecourse. In terms of Aesthetic Significance, the Statement notes that "the precinct's three period buildings are situated in an open space, surrounded by large trees and other campus buildings. … The space which is formed by the trees and the three buildings has visual qualities which are rare of the university campus. This quality is created by the traditional gabled and verandahed building forms, nestled between the larger masses of the fig trees." Within the subject site, the bronze figure group in the pond in front of Goldstein Hall, was identified in the Survey of Sculptures, Monuments and Outdoor Cultural material carried out by the Art galley of NSW in 1994. The work, designed by Bert Flugelman, was installed in 1969.*
>
> ***Proposal***
> *The application proposes demolition of the existing Goldstein (Block A and Block B) and Basser College buildings, including the Masters Residence along High Street, and construction of new college accommodation buildings. The existing Goldstein Hall, set back from High Street is to be retained. The development is to be in the form of lower*

buildings parallel to High Street with higher buildings perpendicular to High Street dividing the intervening space into one large and one smaller courtyard.

Background
A Part 3A project application for construction of student housing immediately to the west of the site was approved by the Department of Planning in November 2008, retaining the existing buildings and trees within the heritage conservation area.

Submission
The application includes a Heritage Assessment prepared by Urbis which addresses the questions to be answered set out in Statement of Heritage Impact publication prepared by the Heritage Office and the Department of Urban Affairs and Planning. The HA suggests that the new buildings have been designed to provide east-west pedestrian access through the conservation area and improved views to the conservation area from the east through activation of the ground floor. The HA notes that the new building is 4 floors higher than the existing building and exceeds the 24m height control by 3m but is of similar height to the recent student housing development to the west. The HA argues the existing Sydney School style buildings do not have sufficient heritage value to warrant retention and notes that the new buildings will retain the names of the earlier buildings. The HA argues that the curtilage of the heritage buildings and trees will be retained and that the new development will not visually dominate the conservation area. According to the HA proposed landscaping will improve the integration and aesthetics of the development. Articulated form will complement the historic character of the adjacent conservation area. In relation to an existing sandstone retaining wall on the south side of High Street, the HA notes that this wall, probably constructed in the 1890s in conjunction with the establishment of the Racecourse, is to be retained in conjunction with the proposal. In relation to Archaeology the HA considers that construction of the existing buildings would have disturbed archaeological potential for remains of former Kensington Racecourse structures. The HA includes recommendations protection measures for the fig trees during construction work and limiting construction access along Fig Tree Lane.

Comments
In relation to the previous student housing development to the west of the current proposal, concerns were raised in relation to possible physical damage to built elements, impact on curtilage and setting of built elements, impact on landscape elements, impact on spatial character of the courtyard, relationship between the new buildings and High Street and impact on the Randwick Racecourse conservation area. A number of these concerns are relevant to the current proposal.

- ***Possible physical damage to built elements***
  Given that the western-most new building, is around 17m from the Old Tote, it is not likely that construction will impact on the structural stability of the existing buildings. Consent conditions should be included however in relation to protection and monitoring.

- ***Impact on landscape elements***
  As the site for the new student accommodation is not within the conservation area, it is not expected that the project will impact on the group of Hills Weeping figs behind the Fig Tree Theatre.

- ***Impact on curtilage and setting of built elements***
  The Old Tote building, the White House and the Fig Tree Theatre vary in scale from one to three storeys and existing buildings present their short ends to the heritage precinct. The proposed building closest to the Old Tote will have a scale of 8 storeys for its full length of 54m. Due to the fall of the site, the ground floor level of the proposal will be significantly higher than the ground floor level of the Old Tote.

The scale of the proposal will be incompatible with the scale of existing buildings in the heritage precinct. The existing Hills Weeping figs however will screen the upper levels of the new development, will assist in mediating between the scale of new and existing development and reduce the dominance of the proposal. Views towards the main entrance at the eastern end of the Fig Tree Theatre will be retained.

- ***Impact on spatial character of the courtyard***
  The previous student housing project created a generous open space partially enclosed by the three existing buildings and related to the entrance of the Theatre building. The proposal will not significantly impact on the spatial character of the courtyard. The proposed development will not significantly reduce the visibility of the buildings from High Street and will retain their visibility from the Gate 4 access.

- ***Relationship between the new buildings and High Street***
  Impact on Randwick Racecourse heritage conservation area
  The Statement of Significance for the Randwick Racecourse conservation area notes that the Racecourse provides an outlook for the University of NSW to the south, and that the frontages to Alison Road, Wansey Road and High Street have avenue plantings of Port Jackson and Moreton Bay figs. The proposed development will significantly increase the scale of development along High Street between Fig Tree Lane and Gate 4. Unlike the previous student housing site there are no large trees along the High Street boundary of the site to assist in screening the development from the direction of the racecourse, although new street trees are proposed. It is noted that the racecourse site comprises an extensive area of open space and it considered that the proposed development will assist in providing a built edge which will better define the open space of the racecourse.

- ***Archaeology***
  Given that the site of the proposed development has been modified and built upon over a considerable time period, it is unlikely that Aboriginal or Historical archaeological deposits will be encountered. Appropriate consent conditions should be included to advise of statutory requirements in the unlikely event that archaeological material is uncovered.

Assessment Officer's comments:
No objections have been raised against the proposal on conservation grounds. The proposed development is not considered to create any significant impacts upon the curtilage to the Old Tote and Figtree Theatre courtyard. The heritage officer has suggested a number of precautionary conditions relating to construction site management and discovering of archaeological remains during excavation works. These conditions have been incorporated in the "Recommendation" section of this report.

8. Policy Controls

8.1 Randwick Development Control Plan – UNSW Kensington Campus

The UNSW Kensington Campus DCP applies to the proposed development. The relevant provisions of the DCP are addressed as follows:

Section	Requirement	Compliance comments
Campus Design Principles and Provisions		
5.1	**Sustainability** • Ensure new buildings target a 5-star rating under Green Star rating scheme	SEPP: BASIX does not apply to the subject proposal as the development is identified as a Class 3 building under the BCA. Notwithstanding, the proposal is required to comply with the energy efficiency measures stipulated in the BCA.

Section	Requirement	Compliance comments
Campus Design Principles and Provisions		
		The application has included a Green Star Report prepared by ERBAS Engineers, which indicates that the proposed design is capable of achieving 50 credit points under the Green Star Multi-Unit Residential Tool. It is considered that a suitable level of environmental sustainability will be achieved.
	• Increase accessible green open space	The proposed development incorporates landscaped courtyards at the podium levels, which will be conveniently accessible by all residents and other staff and students of the university. The proposal will be required to comply with the accessibility requirements of the BCA.
	• Pursue travel demand management strategies to reduce the number of vehicle trips to the campus • Increase staff and student numbers travelling on foot, by bicycle and/or by public transport	The proposed development will increase student population in the UNSW campus and will contribute to reduction in the level of vehicle trips. The development site is located in close proximity to bus services. The proposal provides on-campus residential accommodation with ancillary services and bicycle parking facilities. The development is considered to encourage sustainable modes of transport.
5.2	**Sense of place** High Street: • Improve frontage with major new buildings that are to define major new gathering spaces	The proposed development will improve the visual definition of High Street, Fig Tree Lane, Gate 5 Avenue, Gate 7 Avenue and Basser Steps with an articulated built form and active frontages, complimented by the provision of landscaped courtyards that will be accessible to the residents and staff and students of the university.
	• Variety of uses including university, housing and publicly accessible facilities	The student housing development incorporates publicly accessible “cold shell” spaces adjacent to the main pedestrian routes, such as Fig Tree Lane, Gate 5 Avenue, Basser Steps and the new east-west through-site link. These “cold shell” units are designed to accommodate a range of uses ancillary to the university operation, such as retail shops, restaurants and the like, which will provide activation to the public circulation areas. The proposal will also create new landscaped courtyards, which will function as key gathering spaces for the residents and staff and students of the university.

Section	Requirement	Compliance comments
Campus Design Principles and Provisions		
		The development will contribute to creating a "hub" character.
	• Numerous new entries to relate to public transport	The proposed development has multiple pedestrian entries that address High Street, Fig Tree Lane, Gate 5 Avenue and Basser Steps. The development will facilitate access to the public bus services along High Street.
	• Buildings to be setback to maintain existing mature trees	The mature fig trees in Fig Tree Lane will be retained. The proposal involves removal of a number of significant trees from the site. A detailed discussion on this matter is provided in the "Environmental Assessment" section of this report.
	• Building heights to optimise capacity, northern aspect and views	The proposed building height is considered to be satisfactory and adequate level of solar access to the surrounding areas will be maintained. Refer to the "Environmental Assessment" section of this report for details.
5.3	**Legibility** • Achieve a network of well defined major gathering spaces and a grid of smaller connective spaces which link the gathering spaces and campus entrances	The proposal will upgrade Gate 5 Avenue as a shared pedestrian and vehicle entry to the development site. It will function as the key north-south circulation route connecting High Street with Basser Steps / University Walk. The proposal includes a new through-site link connecting Gate 7 Avenue in the east with Fig Tree Lane in the west. Basser Steps will be upgraded and provided with new weather protection canopies. The development will significantly contribute to the establishment of legible and well defined circulation network within the campus, and enhance connection between key hubs and gathering spaces.
	• An enlarged square at Old Tote Courtyard to provide a major focus for future housing and new gateway as a campus-community interface, capitalising on the existing figs, heritage buildings, theatre and community uses	The proposal will not affect the existing fig trees and historical buildings within Old Tote Courtyard. Goldstein Hall and its northern forecourt will be retained. The proposed Seniors College will provide an articulated built form that reinforces the spatial definition of the Old Tote Courtyard. The proposed student housing will introduce a residential population that maximise usage of existing communal facilities within the campus.
	• Gathering spaces are to be joined by a network of east-	The proposal will upgrade Basser Steps with better configured walking treads and new

Section	Requirement	Compliance comments
Campus Design Principles and Provisions		
	west links, the enhanced and extended University Mall and University Walk and north-south connections • Covered access is to be provided along University Walk, preferably by awnings or colonnades as part of buildings along the route or alternatively as free-standing canopies • Lighting of the public domain is to contribute to legibility and ensure safety, with particular emphasis on open spaces at hubs, University Walk and its intersections with north-south connections, and all routes to campus entrances with public transport stops • Equal access to the public domain is to be achieved	weather protection canopies. The development will significantly improve the amenity of Basser Steps and University Walk. A special condition is recommended to require the preparation of a detailed lighting plan prior to the commencement of works on the site. The proposal will be required to comply with the accessibility requirements of the BCA.
5.4	**Knowledge clusters and hubs** • The Quadrangle: Establish more activity at the intersection of University Walk, College Road and Fig Lane. This Hub could also include an active frontage on the north side of College Road expanding the Cluster to include residential uses and improve the relationship with Goldstein Hall • Old Tote Courtyard: With redevelopment of the High Street edge of the campus, a new public open space characterised by the fig trees and heritage buildings, focused on University and boarder community use of Fig Tree Theatre, and retail and services including a convenience store, could provide a new Hub as a focus for a proposed housing Cluster	Whilst the proposal does not involve any works within The Quadrangle Lawn and adjacent buildings, Basser Steps will be upgraded and new canopies will be installed. The proposal will improve pedestrian access between University Walk and The Quadrangle. The existing historical buildings and mature fig trees within Old Tote Courtyard will be retained. The proposed development includes a “Cold Shell” suite at ground floor level of Seniors College facing Fig Tree Lane, which will enhance activation of the Courtyard and nearby areas. The proposed student housing will introduce a residential population that provides night time activation and reinforces the activity cluster at Old Tote Courtyard.
5.5	**Landscape** • The existing gum tree near the High Street frontage is designated as having “high retention priority”. The 3	These trees are proposed to be removed. Refer to the “Environmental Assessment” section of this report for details.

Section	Requirement	Compliance comments
Campus Design Principles and Provisions		
	poplars at the southern end of the site are identified as having "highest retention priority" (Figure 5.6a)	
	• The trees within the Old Tote Courtyard are designated with "highest retention priority" (Figure 5.6a)	All mature fig trees within Old Tote Courtyard will be retained.
5.6	**Building** • New buildings are to be located within the building location zones identified in Figure 5.8	The location of the proposed buildings is generally consistent with Figure 5.8 of the DCP, with the exception that the areas adjacent to Basser Steps (southern part of the site) will also be occupied by building structures. The design scheme is considered to be satisfactory having regard to site planning and building layout. Refer to the "Environmental Assessment" section of this report for details.
	• The maximum wall height is up to 24m as shown in Figure 5.8. Areas above the wall height may include plant and equipment only, which is not to occupy more than 50% of the building footprint	The proposed development features the following maximum overall heights (as measured from existing ground line to the topmost point of lift overrun and stairwell enclosure on the roof): High Street: approx. 27.6m Basser Steps: approx. 25.8m Gate 7 Avenue: approx. 24.4m Fig Tree Lane: approx. 28.4m The rooftop installations occupy significantly less than the building footprints. The proposal entails deviation from the 24m external wall height limit in the following areas: Seniors College: Exceeds the control by a maximum of 4.3m on the southern elevation. Goldstein and Basser Colleges: Exceed the control by a maximum of 1.6m on the western elevation. Despite the deviation from the wall height control, the overall height and scale of the buildings are compatible with the recently completed Village development on the western side of Fig Tree Lane. The proposal is considered to be compatible with the emerging character of High Street and does not result in detrimental streetscape impacts. Refer to the "Environmental Assessment" section of this report for further details.
	• In mixed use residential and	Separate entry lobbies for the residential

Section	Requirement	Compliance comments
Campus Design Principles and Provisions		
	university use buildings, a secure separate entry is to be provided for residents, to prevent unrestricted public access to private residential areas	floors have been provided.
5.7	**Housing** • Increase university housing on and near the campus to support sustainability principles, liveliness of campus, sense of community and increased affordability • On campus housing is to be located as indicated in Figure 5.10 • New housing is to be focused on or near a hub with activities and facilities to meet student needs well beyond 9am to 5pm • The ground levels of new accommodation buildings are to be activated with retail and services to provide active edges and passive surveillance of the public domain	The proposal will significantly increase on-campus student accommodation. The development site is identified in Figure 5.10 as being suitable for student accommodation purposes. The subject site is located adjacent to Old Tote Courtyard and Fig Tree Theatre. The proposal contains "cold shell" suites for various ancillary uses at the ground floor levels, which will offer activation to the public domain. The future student accommodation will be adequately supported by local services. The proposal is considered to be consistent with the strategic intent of the DCP in creating activity hubs at key locations.
5.8	**Retail and services** • When opportunities arise over time, existing inappropriately located retail and services are to be relocated to hubs and the specific frontages identified in Figure 5.11	The proposal incorporates "cold shell" spaces adjacent to the main pedestrian routes, such as Fig Tree Lane, Gate 5 Avenue, Basser Steps and the new east-west through-site link. These "cold shell" units are designed to accommodate a range of uses ancillary to the university operation, such as retail shops, restaurants and the like, which will provide activation to the public areas. The proposal will reinforce the character of Old Tote Courtyard as a key activity hub within the campus.
5.9	**Recreation and cultural facilities and events**	Fig Tree Theatre and Goldstein Hall will be retained.
5.10	**Transport and parking** • Reduction in car dependency is to be achieved through: - Reduction in parking supply - Public transport upgrades - Location of university accommodation • The total number of parking	The proposal includes 107 car parking spaces at the basement level. The proposed parking provision is considered to be satisfactory. Refer to the "Environmental Assessment" section of this report for details.

Section	Requirement	Compliance comments
Campus Design Principles and Provisions		
	on campus is to be maintained until such time as it is demonstrated through the annual parking survey that the total number may be reduced without adversely impacting on the surrounding streets • Surface parking is to continue to be relocated at basement or within structured car parks • Parking demand for new university accommodation: - 1 space / 15 students or staff for accommodation at campus	

8.2 Randwick Section 94A Development Contributions Plan

Under the provisions of the Section 94A Development Contributions Plan, effective from 2 July 2007, the following monetary levy is required:

Category	Cost	Applicable Levy	S94A Levy
Development cost more than $200,000	$86,368,715	1.0%	**$863,687.15**

*Total development cost $91,278,715 minus early works cost $4,910,000 = $86,368,715
(The early works embodied in development consent 739/2011 are already subjected to separate Section 94A levy and therefore are not to be included in the subject contribution.)

The UNSW disputes over and does not agree to the applicability of the above Section 94A contribution and is in the process of preparing a submission outlining their case to the JRPP. It should be noted that the draft condition requiring Section 94A contribution is still maintained in the "Recommendation" of this report.

The Section 94A levy enables Council to provide quality public facilities to meet the expectations of the existing and future population. The Plan recognises that the expected growth in population and jobs in Randwick City will be focused on the University precinct. The draft Sub-Regional Strategy confirms this and suggests at least 2900 extra jobs in the precinct over 20 years. This precinct contains almost 40% of the City's jobs and the University is the highest employer in the City. While employment change may be variable, estimates are that jobs at the University could increase by 25 to 30% over the next 20 years. The University is thus expected to continue to place substantial pressures on Council's local infrastructure.

The UNSW has been seeking exemption from Section 94A contributions for their development projects. The primary reason is that the University is a not-for-profit organisation and provides benefits to Randwick City.

The Section 94A contributions are intended to address and meet expected increased demands on the City's infrastructure. Council has provided benefits in the form of capital infrastructure to the University without any rating base, such as roads, footpaths, street signage, street furniture, bus shelters, stormwater management, street trees, parks, community facilities (libraries and halls) and town centre public domain improvement.

Therefore, the imposition of Section 94A contribution requirement on the subject proposal is appropriate and reasonable.

9. Environmental Assessment

9.1 Section 79C assessment

The site has been inspected and the application has been assessed having regard to Section 79C of the Environmental Planning and Assessment Act 1979, as amended.

Section 79C 'Matters for Consideration'	Comments
Section 79C(1)(a)(i) – Provisions of any environmental planning instrument	Refer to the "Environmental Planning Instruments" section of this report for details.
Section 79C(1)(a)(ii) – Provisions of any draft environmental planning instrument	Not applicable.
Section 79C(1)(a)(iii) – Provisions of any development control plan	Refer to the "Policy Control" section of this report for details.
Section 79C(1)(a)(iiia) – Provisions of any Planning Agreement or draft Planning Agreement	Not applicable.
Section 79C(1)(a)(iv) – Provisions of the regulations	The relevant clauses of the Environmental Planning and Assessment Regulation 2000 have been addressed by the recommended conditions.
Section 79C(1)(b) – The likely impacts of the development, including environmental impacts on the natural and built environment and social and economic impacts in the locality	The environmental impacts of the proposed development on the natural and built environment, which are otherwise not assessed within the body of this report, are addressed below. The proposed development is consistent with the educational function of the locality, and is not considered to result in detrimental social or economic impacts.
Section 79C(1)(c) – The suitability of the site for the development	The subject site is located within an established university campus and has convenient access to the local and regional road network. The site has appropriate size and dimensions and is considered to be suitable for the proposed development.
Section 79C(1)(d) – Any submissions made in accordance with the EP&A Act or EP&A Regulation	No submissions have been received.
Section 79C(1)(e) – The public interest	The proposal is not considered to result in unreasonable environmental, social or economic impacts on the locality, subject to the recommended conditions. Therefore, the development is considered to be within public interest.

9.2 Built form and urban design

Site planning and setbacks:

At the ground levels, the proposed development has average front setback from the High Street boundary of approximately 3.5m. There are various recesses in the façades where the setback increases up to approximately 5.9m. At the upper levels, the average setbacks range from approximately 1.5m (to balconies) to 3.5m (to walls).

The recently completed Village development to the west of the site has front setbacks of approximately 2.0m to 3.4m.

The proposed balconies at the corners of the college buildings project forward of the main building line. Notwithstanding, the general front alignment of the development is consistent with the neighbouring residential college to the west. The design is compatible with the

emerging character of High Street where the newly developed multi-storey student housing generally offers clear spatial definition to the street.

The layout and configuration of the building blocks address the alignments of Fig Tree Lane, Gate 5 Avenue and Gate 7 Avenue. The western edge of Seniors College (occupying the north-western section of the site), in particular, is aligned with the retained Goldstein Hall to the south. The building footprints do not reserve substantial setbacks from the eastern, western and southern boundaries of the site, which are considered adequate in order to reinforce the definition and legibility of the internal roads.

Overall, the site layout is considered to have appropriately utilised the available land area and will provide an urban presence that compliments the character of the campus.

Photomontage showing the public domain along the southern side of High Street adjacent to the subject development looking west; the entrance to the main courtyard is shown on the foreground

Photomontage showing the public domain on the southern side of High Street looking east; the main entrance to Seniors College is shown on the foreground

Circulation:
The master planning concept focuses on the reduction of driveway entries from High Street to the site, in order to minimise conflicts between vehicular and pedestrian traffic. In this respect, Gate 6 Avenue will be removed. The existing isolated surface car parks will be consolidated into a single parking level within the basement. Gate 5 Avenue will be upgraded to form a shared way allowing vehicular access to the basement car park.

Fig Tree Lane will not be affected by the proposed works and will continue to provide access from High Street to Old Tote Courtyard. Gate 7 Avenue will be retained as a secondary vehicular access route for occasional or emergency use.

The design scheme includes a through-site link connecting Gate 7 Avenue in the east with Fig Tree Lane in the west. This through-site link provides stairways that enable direct pedestrian access to Goldstein Hall, Old Tote Courtyard, The Village and proposed residential college at Gate 2 Avenue through a series of courtyard spaces.

Basser Steps are located to the south of the site and form part of University Walk, which is an important pedestrian circulation connecting the upper campus with the lower campus. As part of the proposal, Basser Steps will be widened and upgraded with new weather protection canopy.

The proposal includes various “cold shell” suites, which are designed for accommodating ancillary operations of the university. These uses will enhance activation and casual surveillance of the internal circulation and public areas in the complex.

The upgrading of existing internal roads and pedestrian routes, provision of through-site link, creation of new entries from High Street and installation of ramped access will assist in the establishment of a network of legible and permeable spaces within the campus.

Photomontage illustrating Gate 5 Avenue looking north

Built form, height and scale:

- The master planning organises the building blocks around two central courtyards. The buildings present a rectilinear layout on plan view and provide clear definition to High Street and the internal roads.

The east-west building masses have a height of 4 to 6 storeys. The north-south blocks have a height of 7 to 8 storeys. The arrangement and orientation of the buildings will maximise solar access to the landscaped courtyards.

- The building blocks will appear as being set on a one- to two-storey high podium when viewed from Goldstein Hall and Quadrangle Lawn, which will maintain a suitable human scale to the surrounding campus features.

- Seniors College has an L-shaped layout and is spatially separated from Goldstein Hall via an open courtyard. This will retain appropriate sunlight to the northern elevation of the Hall.

  An open gallery walkway is proposed along the eastern side of Goldstein Hall. This will enable Goldstein Hall and its sunken plaza to continue to present as an activity focus in the Kensington Colleges precinct.

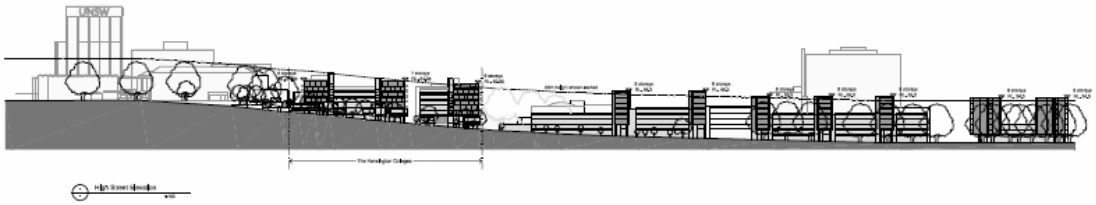
- The proposal entails variation from the DCP external wall height control. The most significant deviation occurs in Seniors College, where a full habitable storey is above the 24m line.

  The overall heights (as measured to the topmost points of the structures) of the building blocks fronting High Street range from RL65.7 to RL68.8. The external wall heights of these blocks range from RL62.85 to RL64.35. In comparison, The Village development to the west is situated at lower ground and has parapet heights ranging from RL55.3 to RL56.3.

  The application has included a streetscape analysis drawing, which demonstrates that the overall height and scale of the buildings respect the natural fall of the land and are commensurate with the recently completed Village student housing development to the west. The proposal is considered to be compatible with the emerging character of High Street and will not result in detrimental streetscape impacts.

  Although the buildings are significantly higher than those within the adjoining Old Tote Courtyard, the existing mature fig trees within Fig Tree Lane will offer effective visual screening and softening of the structures.

  As will be discussed in the following paragraphs, the proposed building heights at the rear and along the sides will not result in detrimental overshadowing of the surrounding areas.



Streetscape analysis diagram showing the height and scale of the proposal as compared to the other recent and approved developments in High Street.

- The building mass is divided by podium courtyards and through-site links to avoid a monolithic appearance. The facades are well articulated by a coherent pattern of angled walls, liberally placed projecting balconies and vertical windows, timber batten screens and a combination of finishes.

- The proposal includes the installation of a new canopy above Basser Steps. The canopy structures will be constructed with glass roofs and horizontal steel louvres supported by steel frames. The form and height of the canopy will provide a suitable

civic scale to this important pedestrian route and allow more direct western views down to Quadrangle Lawn.

The overall building disposition and massing are considered to be a reasonable design response to the site characteristics and the surrounding development context. The scale and density of the development are justified by the site's high accessibility and compatibility with recent student housing development in the vicinity. The proposal represents an orderly and economic use of the land and is supported.

Computer generated model showing the central courtyard bounded by Goldstein, Basser, Baxter and Fourth Colleges


Photomontage showing the upgraded Basser Steps and new canopy as viewed from Quadrangle Lawn

9.3 Landscape

- The proposed development involves the removal of a number of significant trees from the site, including:
  1 x Eucalyptus species fronting High Street (identified as Tree 2 in the Arborist's report submitted with the early works DA)
  3 x Cottonwood Poplars in the southern section of the site (identified as Trees 22, 23 and 24)

  The UNSW DCP assigns the Gum as having "high retention priority" and the 3 Poplars "highest retention priority". The removal of these trees has already been approved in the early works application (DA/739/2011). The main reasons for supporting the tree removal are summarised below:

  - The retention of the Gum would necessitate substantial setback from the High Street boundary to the detriment of the development potential, spatial definition to the street and casual surveillance.
  - The upgrading of Basser Steps would necessitate removal of the southern-most Poplar due to the presence of a number of utility and civil services immediately adjacent to it.
  - The retention of the remaining two Poplars would significantly compromise the project objective of upgrading Gate 5 Avenue to a major access route connecting High Street with Basser Steps. The Poplars would also become an isolated, ad hoc landscape strip.
  - The tree removal will be compensated by the provision of generously sized landscaped courtyards which are publicly accessible.

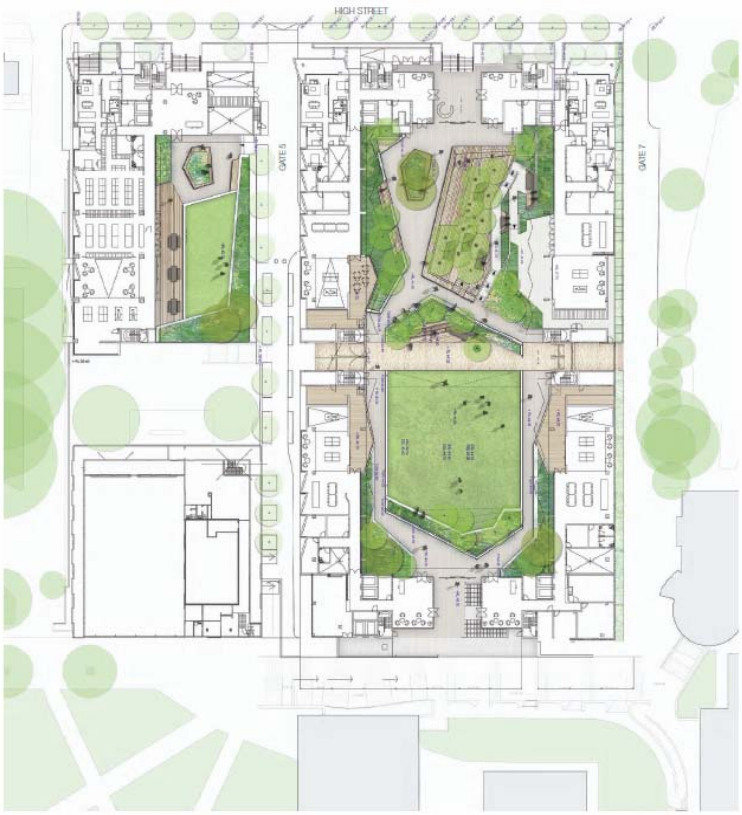
  The development scheme will rationalise landscaped area provision across the site. On balance, the quantum and quality of replacement planning and garden areas are considered to be adequate and would deliver material improvements to the Kensington Colleges precinct. The applicant is deemed to have demonstrated compliance with the objectives of the UNSW DCP by exploring and analysing all available design options. The removal of the trees in question is supported on this basis.

- At present, the southern side of High Street is characterised by the presence of mature trees in close proximity to the property boundary within the campus land. There is generally no footpath planting on this side of High Street. The development scheme intends to compensate for the tree removal with the provision of medium sized footpath planting. This may lead to a piecemeal appearance in the street.

  At Council's request, the applicant has submitted revised landscape plans showing the provision of footpath planting extending from the eastern end of the site to the west, and reaching the eastern part of The Village housing complex (the extension of the planting to the far end of The Village is not deemed necessary as there are retained fig trees in that area). The above on-street planting will assist in achieving a coherent streetscape appearance.

  In additional to footpath planting, the front setback areas will contain densely planted native grass understorey supplemented by Banksia trees. At maturity, a tree canopy will be developed over the footpath.

- Landscaped courtyards will be provided at the podium levels of the development. A specific condition is recommended to ensure adequate soil volume and depth will be provided to ensure sustained growth of the vegetation.



Landscape concept plan for the site

9.4 Car parking

The UNSW Kensington Campus DCP stipulates the following requirements:

a) *Reduction in car dependency is to be achieved through:*
   - *Reduction in parking supply*
   - *Public transport upgrades*
   - *Location of university accommodation*

b) *The total number of parking on campus is to be maintained until such time as it is demonstrated through the annual parking survey that the total number may be reduced without adversely impacting on the surrounding streets*

c) *Surface parking is to continue to be relocated at basement or within structured car parks*

d) *Provision of short-stay parking on the subject site (Figure 5.13)*

e) *Parking demand for new university accommodation:*
   - *1 space / 15 students or staff for accommodation at campus*

Proposal	Requirement	Proposal
920 student beds	1/15 x 920 = 61.3	107
23 tutor's studios	1/15 x 23 = 1.53	
5 Dean's apartment (3 bedrooms)	1/15 x 3 x 5 = 1	
Total	63.8	107

Based on the DCP parking rate, the development will generate a parking requirement of 64 spaces. The proposal includes 107 parking spaces at the basement level and generally satisfies the DCP requirement.

The proposed parking provision is considered to be satisfactory for the following reasons:

- At present, the site contains 25 surface parking spaces. The existing Basser College (to be demolished) accommodates 132 students and 6 staff. The existing Goldstein College (to be demolished) accommodates 75 students and 4 staff.

On a theoretical basis, the proposal will not result in any net loss in campus parking as the quantum of proposed parking will more than offset the loss in existing parking, while satisfying the requirements of the DCP:

Proposed parking	107
DCP requirements	64 (see above)
Loss in existing parking	25
Net balance (a) – (b) – (c)	18 spaces

- The proposal includes a number of "cold shell" units of varying sizes. These "cold shell" units are designed to accommodate a range of uses ancillary to the university operation, such as retail shops, restaurants and the like. The Kensington Campus DCP does not specify parking requirements for "cold shell" ancillary facilities.

  In general, university campuses typically require a range of ancillary services to support their daily operation. These include shops, restaurants, canteens, administration office, lecture rooms, printing office and the like. It could be reasonably anticipated that the majority of the future users or customers of these services would be staff and students of the University, and therefore would not generate significant parking demand. Access to these services is also likely to form part of a multi-purpose trip and would not generate significant additional vehicle traffic.

  The design scheme includes a loading dock within the car park. Where these cold shell units require regular or occasional deliveries, they could be efficiently handled by the on-site loading facilities.

  Furthermore, the quantum of car parking proposed would allow allocation of some of the spaces to selected operators of the ancillary services.

  A specific condition is recommended to exclude those uses that are likely to generate significant vehicular traffic from any approval of this application, such as child care centre and supermarket.

- The development incorporates 48 motorcycle and 92 bicycle parking spaces, which will encourage alternative modes of transport to private vehicle usage.

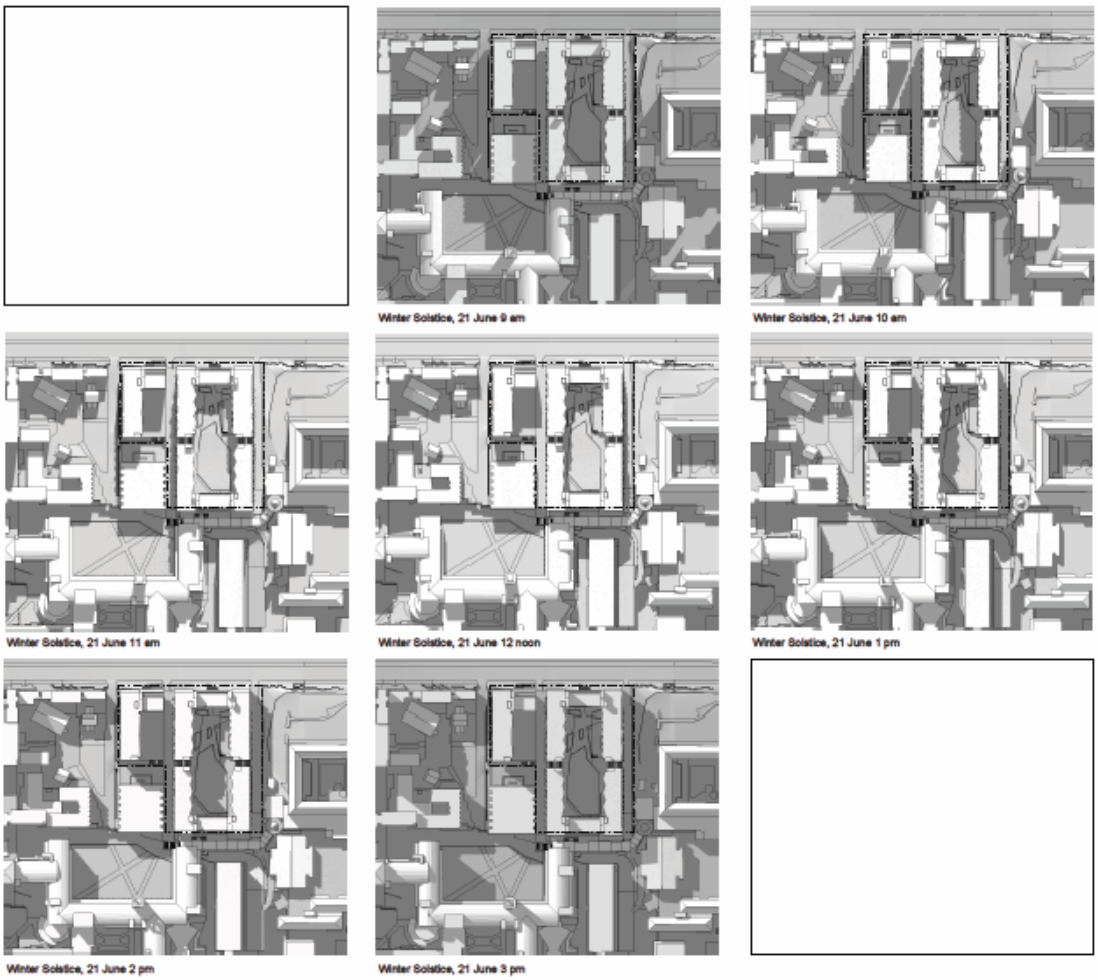
- The proposed on-campus student accommodation is located in close proximity to local services and bus routes and will contribute to the reduction of vehicle trips to and from the University.

In conclusion, the proposed development is consistent with the key direction of the DCP in terms of managing travel demand to and from the University by reducing reliance on private motor vehicle usage and encouraging the use of public transport. The long term migration away from motor vehicle usage would be significantly dependent upon improvements in the local and regional transport systems, which are outside the scope of the subject application.

9.5 Solar access

Shadow impacts on surrounding areas:

The submitted shadow diagrams are extracted below:



The proposed development will cast shadows on the northern and eastern elevations of the existing Phillip Baxter College at 9am, 21 June. Notwithstanding, by 10am, the shadows will have shifted away from the above residential college.

Quadrangle Lawn is an important activity node within the campus and is situated to the south-west of the site. The shadow diagrams show that the majority of the Lawn will receive direct sunlight between 11am and 2pm, 21 June. A good level of sunlight will be retained.

The proposal will cast shadows on various non-residential institutional buildings and unbuilt upon surfaces to the south and west on the winter solstice. Given the orientation of the site and the close proximity of other campus facilities, a degree of impact is inevitable. The proposal is not considered to create any significant detrimental impacts upon the campus ground.

The height and scale of the proposed buildings are consistent with the recently completed and approved student housing developments to the east (being The Village and Gate 2 Avenue student housing complex respectively). The design is compatible with the institutional character of the Kensington Campus. The proposal will have no impacts on any private residential properties outside the campus. The expected shadow impacts are considered to be within reason.

Solar access to proposed accommodation units:
Based on the submitted information, it is expected that the majority of the student rooms will receive varying degree of direct sunlight on 21 June. However, due to the height and orientation of the buildings, the following areas will receive restricted or nil sunlight in mid winter:

- All south-facing rooms

- East-facing rooms within Seniors College at the lower and mid levels
- Some of the courtyard-facing rooms within Goldstein and Fourth Colleges

The site planning and massing of the buildings are considered to have maximised solar access to both the internal and external elevations of the development (except southern elevation) as well as the central courtyards. All student rooms will enjoy natural ventilation and at least ambient daylight. Having regard to the scale and complexity of the development, the proposal is considered to offer a reasonable level of amenity for the occupants.

9.6 Amenity

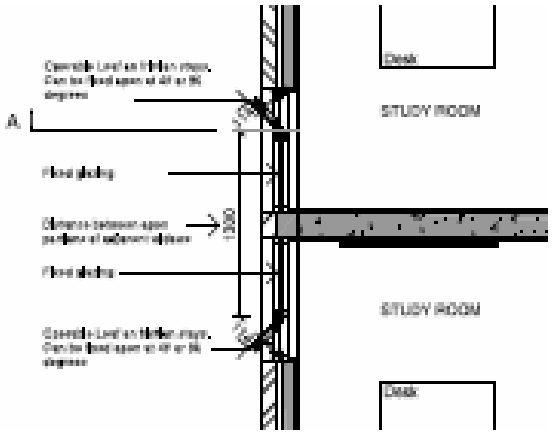
Sun protection:
The design scheme proposes full-height windows on all elevations and there are implications on the thermal comfort and energy efficiency of the rooms.

The proposal will be required to comply with Section J *Energy Efficiency* of the Building Code of Australia. The applicant has submitted a BCA (Section J) preliminary assessment and a thermal comfort analysis. The above reports indicate that the proposal is capable of satisfying the energy efficiency performance requirements of the BCA via the use of high performance, or a combination of high performance and low-E glazing. According to the submitted Green Star report, the proposal would also be able to achieve 50 credit points under the Green Star Rating Scheme.

Based on the evidence presented, the provision of external sun shade devices is not the only option for ensuring a suitable level of thermal comfort and environmental sustainability. The specification of glazing type is not necessary at this stage as a degree of flexibility should be reserved for the applicant to formulate methods for compliance with the BCA.

Weather protection:
The Design Review Panel has raised concerns relating to weather protection of the full-height windows.

The applicant has submitted detailed drawings to demonstrate the window operation. The glazing is recessed 90mm from the outer surface of the external wall. The operable window pane could swing open and remain at 45-degree from the wall surface. This would allow suitable protection against wind-blown rains while maintaining natural ventilation to the room.

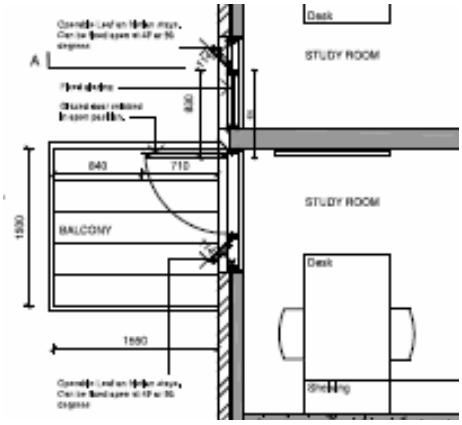


Plan showing the operation of windows; note that the window pane can swing open and remain at 45-degree angle

Privacy:
The design proposes liberally positioned windows on the facades. Some of the windows to neighbouring rooms are located immediately adjacent to each other and have privacy implications on the occupants. Notwithstanding, fixed glazing will be installed on either side of the party wall between neighbouring rooms. This will achieve a separation distance of 1300mm between the operable parts of the windows of adjacent rooms. In this manner, a reasonable level of acoustic privacy will be maintained. Refer to the diagram above for details.

The proposal also includes a number of projecting balconies that are situated immediately adjacent to the windows of adjoining rooms, and may compromise their privacy. The swing doors to the balconies will be mounted in a manner that open against the windows of the adjoining rooms. Roller blinds will also be provided to all student rooms.

The applicant has emphasised the importance of social and informal interaction in the subject college proposal. Given the communal living and transient nature of the accommodation, the degree of privacy afforded to the rooms is considered to be acceptable in this instance.



Plan showing operation of swing door to balcony

Ventilation of hallways:
The Design Review Panel has raised concerns regarding ventilation of the common hallways on the residential floors.

According to the drawings, the common circulation is internalised and smoke doors would need to be installed given the considerable length of the hallways through the building. The corridors would not allow effective cross ventilation.

The proposal is considered to be acceptable having regard to ventilation and occupant comfort for the following reasons:

- All lift lobbies on the residential floors of the colleges will be naturally ventilated via the adjacent operable windows.
- Open, naturally ventilated staircases are proposed, which will encourage usage over lifts.
- A degree of natural ventilation to parts of the common circulation is made possible by window openings at the ends of the hallways.
- All student rooms and recreation rooms on the residential floors will receive adequate natural ventilation.

Sanitary facilities:
A significant number of student rooms within Goldstein, Basser and Baxter Colleges are without ensuites and will need to share sanitary facilities. Up to approximately 25 single rooms are served by only 3 closet pans. The ratio of room number to toilet number reaches 8:1.

The UNSW DCP does not contain any guideline regarding the level of sanitary facility provision. The Sydney City DCP for Boarding Houses stipulates that a minimum of 1 toilet is to be provided for 10 occupants or part thereof.

Although it is more desirable to provide additional toilet facilities, the current proposal is not below any available guideline for similar type of development. Therefore, the proposal is considered to be acceptable in this instance.

Relationship to City Plan

The relationship with the City Plan is as follows:

Outcome: A vibrant and diverse community, leadership in sustainability, excellence in urban design and development, integrated transport and land use.

Direction: Improved design and sustainability across all development, integrating transport and pedestrian links between town centres and key locations.

Conclusion

The proposed development complies with the objectives and performance requirements of relevant State and Local planning controls.

The site planning, built form, massing and façade articulations will create a satisfactory streetscape outcome for High Street and the internal roads and key public space within the campus. The development scheme will not result in unreasonable impacts on the amenity of the surrounding areas in terms of visual bulk and scale, solar access and traffic.

The proposed development density and scale are justified by the site's location within the UNSW Kensington Campus, and its proximity to retail and commercial services in Anzac Parade and public transport. The proposal involves removal of a number of mature trees within the campus. However, adequate replacement planting and landscaped areas have been incorporated to compensate for their loss.

The proposal represents an economic and orderly use of the site and will deliver positive planning benefits.

Therefore, the proposal is recommended for approval subject to conditions.

Recommendation

That the Joint Regional Planning Panel, as the consent authority, grants development consent under Sections 80 and 80A of the Environmental Planning and Assessment Act 1979, as amended, to Development Application No. 748/2011 for redevelopment of the Kensington Colleges, including construction of 3 buildings varying between 5 and 8 storeys comprising 920 beds, 5 Dean's apartments and 23 tutor's studios; provision of parking for 107 cars, 48 motorcycles and 92 bicycles; construction of landscaped courtyards and rooftop terraces; upgrading of Gate 5 Avenue and Basser Steps; and construction of pedestrian through-site link, at No. 330 Anzac Parade, Kensington, subject to the following conditions:

A. GENERAL

1. The development must be implemented substantially in accordance with the following plans:

Plan / Document Number or Title	Dated	Received	Prepared By
DA0.01(F)	16.12.11	12 Jan 2012	Bates Smart Pty. Ltd.
DA1.01(J)	16/12/11		
DA2.01(G)	16.12.11		
DA2.02(G)	16.12.11		
DA2.03(G)	16.12.11		
DA2.04(G)	16.12.11		
DA2.05(G)	16.12.11		
DA2.06(F)	16.12.11		
DA2.07(F)	16.12.11		
DA2.08(F)	16.12.11		
DA2.09(F)	16.12.11		
DA2.10(F)	16.12.11		

DA2.11(E)	16.12.11		
DA7.01(G)	16.12.11		
DA7.02(F)	16.12.11		
DA8.01(F)	16.12.11		
DA8.02(F)	16.12.11		
DA8.03(G)	16.12.11		
DA8.04(G)	16.12.11		
DA8.05(F)	16.12.11		
DA10.01(D)	16.12.11		
11026-DA-01(E)	08.12.2011	12 Jan 2012	Aspect Studios
11026-DA-02(A)	08.12.2011		
11026-DA-03(E)	08.12.2011		
11026-DA-04(E)	08.12.2011		
11026-DA-05(E)	08.12.2011		
11026-DA-06(E)	08.12.2011		
11026-DA-07(E)	08.12.2011		
11026-DA-08(E)	08.12.2011		

, the application form and any supporting information received with the application, except as may be amended by the following conditions:

2. The colours, materials and finishes of the external surfaces of the buildings are to be consistent with the approved drawings and Section 7.0 *Façade Approach* (pages 36 to 39 inclusive) of "The Kensington Colleges Development Application Design Report", document number S11332-R012 Rev A, dated September 2011, prepared by Bates Smart , and stamp-received by Council on 7 October 2011.

3. The use of the "Cold Shell" units as shown on the plans is approved for all uses that are ancillary to the operation of the University and the subject student accommodation, except for the following:

   - Licensed bar
   - Convenience store or mini-supermarket with more than 100m2 of gross floor area
   - Child care centre
   - Hair dressing salon
   - Beauty salon
   - Skin penetration and piercing business
   - Remedial massage business

   Advisory: All food premises occupying the Cold Shell units shall be registered with Council's Environmental Health Section (phone no. 9399 0949) with relevant administration / inspection fees paid, prior to the commencement of the food business.

4. An appropriate lighting system shall be installed within the development to ensure the legibility and safety of the publicly accessible areas, including High Street, Fig Tree Lane, Gate 5 Avenue, Gate 7 Avenue, Basser Steps, the east-west through-site link (connecting Gate 7 Avenue and Fig Tree Lane) and the podium courtyards.

   In this regard, a detailed lighting plan specifying the location, type, configuration and illumination level of lighting devices shall be prepared to the satisfaction of the relevant certifying body, prior to the commencement of any construction works. The lighting system described in the lighting plan is to be implemented in the development.

5. A minimum of ninety-two (92) bicycle parking spaces are to be provided within the development. The design and construction of bicycle parking facilities are to be compliant with Australian Standard 2890.3. Details demonstrating compliance are to

be incorporated in the construction drawings to the satisfaction of the relevant certifying body.

6. External lighting to the premises shall be designed in accordance with Australian Standard 4282 – 1997: Control of the Obtrusive Effects of Outdoor Lighting (or more updated version) so as not to cause a nuisance to nearby residents or motorists and to ensure that light overspill does not affect the amenity of the area.

7. The reflectivity index of glass used in the external facades of the development must not exceed 20 percent.

8. Openable windows to a room, corridor, stairway or the like with a floor level more than 4m above the external ground/surface level, must be designed and constructed to reduce the likelihood of a child accessing and falling through the window opening.

   Options may include one or more of the following measures:

   i. The window having a minimum sill height of 1.5m above the internal floor level,
   ii. Providing a window locking device at least 1.5m above the internal floor level,
   iii. Fixing or securing the window (e.g. by screws or a window locking device) to restrict or to be able to secure the extent of the opening to a maximum width of 125mm,
   iv. Installing a fixed heavy-duty gauge metal screen over the opening (e.g. A metal security screen or metal security mesh and frame system, but not standard fly-screen material), or
   v. Other appropriate effective safety measures or barrier.

Heritage Conservation

9. A report shall be prepared by a *professional engineer* and submitted to the relevant certifying body prior to the commencement of works, detailing the proposed methods of excavation, shoring or pile construction, including details of potential vibration emissions. The report must demonstrate the suitability of the proposed methods of construction to overcome any potential damage to nearby premises including the Fig Tree Theatre, the Old Tote building and the White House.

   Any practices or procedures specified in the engineer's report in relation to the avoidance or minimisation of structural damage to nearby premises, must be fully complied with and incorporated into the documentation for construction.

   A copy of the engineer's report is to be submitted to the Council for record keeping purposes.

10. In the unlikely event that Aboriginal archaeological remains or deposits are exposed during excavation and construction, all work shall cease and the Department of Environment and Conservation is to be notified under the requirements of the National Parks and Wildlife Act 1974.

11. In the unlikely event that Historical archaeological remains or deposits are exposed during excavation and construction, all work shall cease and the NSW Heritage Office is to be notified under the requirements of the Heritage Act 1977.

The following condition is applied to meet additional demands for public facilities:

12. In accordance with Council's Section 94A Development Contributions Plan, effective from 2 July 2007, based on the development cost of $86,368,715, the following applicable monetary levy must be paid to Council: **$863,687.15**.

    The levy must be paid in cash, bank cheque or by credit card **within 28 days of the issue of the Crown Completion Certificate**. The development is subject to an index

to reflect quarterly variations in the Consumer Price Index (CPI) from the date of Council's determination to the date of payment.

Council's Section 94A Development Contributions Plan may be inspected at the Customer Service Centre, Administrative Centre, 30 Frances Street, Randwick or at www.randwick.nsw.gov.au.

The following conditions are applied to satisfy the requirements of Sydney Airport Corporation Ltd. (SACL) / Civil Aviation Safety Authority (CASA):

13. The maximum height of the development, inclusive of all lift overruns, vents, chimneys, aerials, TV antennae and etc., must not exceed **RL 72.10 AHD**.

14. Approval to operate construction equipment (i.e. cranes) is to be obtained prior to any commitment to construct.

Information required by SACL prior to any approval is to include:

- the location of any temporary structure or equipment, ie. construction cranes, planned to be used during construction relative to Mapping Grid of Australia 1994 (MGA94);
- the swing circle of any temporary structure/equipment used during construction;
- the maximum height, relative to Australian Height Datum (AHD), of any temporary structure or equipment ie. construction cranes, intended to be used in the erection of the proposed structure/activity;
- the period of the proposed operation (ie. construction cranes) and desired operating hours for any temporary structures.

Any application for approval containing the above information, should be submitted to this Corporation at least 35 days prior to commencement of works in accordance with the Airports (Protection of Airspace) Regulations Statutory Rules 1996 No. 293, which now apply to this Airport.

For further information on Height Restrictions please contact Ms Lynne Barrington on (02) 9667-9217.

Under Section 186 of the Airports Act 1996, it is an offence not to give information to the Airport Operator that is relevant to a proposed "controlled activity" and is punishable by a fine of up to 50 penalty units.

The height of the prescribed airspace at the site is 60.0 metres above Australian Height Datum (AHD). In accordance with Regulation 9 of the Airports (Protection of Airspace) Regulations Statutory Rules 1996 No. 293, "a thing to be used in erecting the building, structure or thing would, during the erection of the building, structure or thing, intrude into PANS OPS airspace for the Airport, cannot be approved".

Bird and Obstacle Hazard Management

The area in which the proposed development is located is immediately adjacent to Runway 07/25.

To minimise the potential for bird habitation and roosting, the Proponent must ensure that non-bird attracting plant species are used in any landscaping design.

Any landscaping design must minimise the attractiveness for foraging birds, i.e. site is kept clean regularly, refuse bins are covered, and detention ponds are netted.

All trees to be planted shall not be capable of intruding into the Obstacle Limitation Surface when mature.

Engineering Conditions

Security Deposit Condition
The following condition is applied to provide adequate security against damage to Council's infrastructure:

15. The following damage/civil works security deposit requirement is to be complied with prior to commencement of works, as security for making good any damage caused to the roadway, footway, verge or any public place; or as security for completing any public work; and for remedying any defect on such public works, in accordance with section 80A(6) of the Environmental Planning and Assessment Act 1979:

    a) $10000.00 - Damage / Civil Works Security Deposit

    The damage/civil works security deposit may be provided by way of a cash or cheque with the Council and is refundable upon:

    - A satisfactory inspection by Council that no damage has occurred to the Council assets such as roadway, kerb, guttering, drainage pits, footway, or verge; and

    - Completion of the civil works as conditioned in this development consent by Council.

    The applicant is to advise Council, in writing, of the completion of all building works and/or obtaining a Crown Completion Certificate, if required.

    The applicant is to advise Council in writing and/or photographs of any signs of existing damage to the Council roadway, footway, or verge prior to the commencement of any building/demolition works.

Traffic Conditions/Civil Works Conditions
The following conditions are applied to provide adequate provisions for access, transport and infrastructure:

16. All new walls adjacent to vehicular crossings must be lowered to a height of 600mm above the internal driveway level for a distance of 1.50m within the site or splayed 1.5 metre by 1.5 metre to provide satisfactory sight lines. Details are to be submitted to the relevant certifying body prior to the commencement of site construction works.

17. The applicant must meet the full cost for Council or a Council approved contractor to repair/replace any damaged sections of Council's footpath, kerb & gutter, nature strip etc which are due to building works being carried out at the above site. This includes the removal of cement slurry from Council's footpath and roadway.

18. Prior to the issuing of a Crown Completion Certificate the applicant must meet the full cost for Council or a Council approved contractor to:

    - Remove the existing kerb and gutter for the full High Street site frontage and to construct new kerb and gutter except opposite the vehicular entrance and exit points.

    - Carry out a full depth road construction in front of the new kerb and gutter along the full site frontage. The width of road reconstruction shall be the minimum required to match the existing road pavement.

    - Remove the existing concrete footpath and to construct a new concrete footpath along the full High Street site frontage. Any unpaved areas on the nature strip must be turfed and landscaped to Council's specification.

- Construct 2 new heavy duty vehicular crossings in High Street opposite the proposed entry / exit points.

- Remove all redundant vehicular crossings and to reinstate the area to Council's specification.

- Undertake street tree planting to Council's satisfaction.

19. All external civil work to be carried out on Council property (including the installation and repair of roads, footpaths, vehicular crossings, kerb and guttering and drainage works), must be carried out in accordance with Council's Policy for "Vehicular Access and Road and Drainage Works" and the following requirements:

    a) All work on Council land must be carried out by Council, unless specific written approval has been obtained from Council to use non-Council contractors.

    b) Details of the proposed civil works to be carried out on Council land must be submitted to Council in a *Pre-paid Works Application Form*, prior to issuing a Crown Completion Certificate, together with payment of the relevant fees.

    c) If it is proposed to use non-Council contractors to carry out the civil works on Council land, the work must not commence until the written approval has been obtained from Council and the work must be carried out in accordance with the conditions of consent, Council's design details and payment of a Council design and supervision fee.

    d) The civil works must be completed in accordance with Council's conditions of consent and approved design and construction documentation, prior to occupation of the development, or as otherwise approved by Council in writing.

20. A Works Zone is to be provided in High Street for the duration of the construction works. The 'Works Zone' shall be provided to the satisfaction of the Randwick Traffic Committee and shall have a minimum length of 12 metres. The prescribed fee for the Works Zone must be paid to Council at least four (4) weeks prior to the commencement of work on the site.

    It is noted that the requirement for a Works Zone may be waived if it can be demonstrated (to the satisfaction of Council's traffic engineer) that all construction related activities (including all loading and unloading operations) may be undertaken wholly within the site.

21. Prior to the commencement of construction works, the applicant shall submit for approval and have approved by Council's Traffic Engineer a detailed construction traffic management plan. The plan shall demonstrate how construction and delivery vehicles will access the development site during the demolition and construction phase of the development.

    All traffic associated with the subject development shall comply with the terms of the approved construction traffic management plan.

22. The driveway openings at the High Street frontage (including Gate 5 Avenue and Gate 7 Avenue) must be a minimum of 6.0 metres wide. The internal driveways must be a minimum 5.50m wide (clear width) at all points along the internal driveways and ramps and suitably designed for two way traffic movements.

23. Prior to the commencement of construction, the applicant shall submit for approval and have approved by Council's Traffic Engineer a detailed traffic and parking

strategy for management of construction worker's private vehicles. The strategy/management plan shall identify where vehicles are to be accommodated during all stages of the construction works. Private vehicles associated with the site's construction workers must not be parked in streets fronting or surrounding the development site.

All traffic associated with the subject development shall comply with the terms of the approved traffic and parking strategy.

24. The proposed carpark layout, (including any service vehicle parking), and vehicular entry/exit point must conform to the requirements of AS2890.1-2004 and AS2890.2-2002 with respect to:

- Carspace dimensions, aisle widths, dead end aisles and column placements;
- Access and crossover widths;
- Manoeuvring requirements of vehicles within the carpark;
- Ramp grades and transitions; and
- Head room clearances.

The approved "For Construction" plans must demonstrate compliance with this requirement.

Alignment Level Conditions

The following conditions are applied to provide adequate provisions for future civil works in the road reserve:

25. The Council's Development Engineer has inspected the above site and has determined that the design alignment level (concrete/paved/tiled level) at the High Street property boundary for driveways, access ramps and pathways or the like, must match the back of the existing footpath along the full site frontage.

The design alignment level at the property boundary must be strictly adhered to.

26. The design alignment levels (concrete/paved/tiled level) issued by Council and their relationship to the roadway/kerb/footpath must be indicated on the building plans for the Crown Completion Certificate.

27. The above alignment levels and the site inspection by Council's Development Engineering Section have been issued at a prescribed fee of $4488 calculated at $44.00 (inclusive of GST) per metre of site frontage. This amount is to be paid prior to commencement of site construction works.

Service Authority Conditions

The following conditions are applied to provide adequate consideration for service authority assets:

28. A public utility impact assessment must be carried out on all public utility services on the site, roadway, nature strip, footpath, public reserve or any public areas associated with and/or adjacent to the development/building works and include relevant information from public utility authorities and exploratory trenching or pot-holing, if necessary, to determine the position and level of service.

29. The applicant must meet the full cost for telecommunication companies, gas providers, Energy Australia and Sydney Water to adjust/repair/relocate their services as required. The applicant must make the necessary arrangements with the service authority.

30. Documentary evidence from the relevant public utility authorities confirming that their requirements have been satisfied, must be submitted to the relevant certifying body prior to a Crown Completion Certificate being issued for the development.

31. A Road / Asset Opening Permit must be obtained from Council prior to carrying out any public utility service works within or upon a road, footpath, nature strip or in any public place, in accordance with section 138 of the Roads Act 1993 and all of the conditions and requirements contained in the Road / Asset Opening Permit must be complied with.

    The owner/builder must ensure that all works within or upon the road reserve, footpath, nature strip or other public place are completed to the satisfaction of Council, prior to the issuing of a final Crown Completion Certificate for the development.

    For further information, please contact Council's Road / Asset Opening Officer on 9399 0691 or 9399 0999.

32. Any electricity substation required for the site as a consequence of this development shall be located within the site and shall be screened from view. The proposed location and elevation shall be shown on all detailed landscape drawings and specifications. The applicant must liaise with Ausgrid prior to the commencement of any site construction works to determine whether or not an electricity substation is required for the development.

33. A Section 73 Compliance Certificate under the Sydney Water Act 1994 must be obtained. Application must be made through an authorised Water Servicing Coordinator. Please refer to "Your Business" section of Sydney Water's web site at www.sydneywater.com.au then the "e-developer" icon or telephone 13 20 92.

    Following application a "Notice of Requirements" will detail water and sewer extensions to be built and charges 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.

    The Notice must be issued to the relevant certifying body prior to the commencement of site construction works.

    The Section 73 Certificate must be submitted to the relevant certifying body prior to occupation of the development.

Drainage Conditions

The following conditions are applied to provide adequate provisions for drainage and associated infrastructure:

34. **Stormwater drainage plans have not been approved as part of this development consent.** Stormwater runoff from the proposed development site is to be managed in general accordance with the **Stormwater Strategy** prepared for UNSW by ANA Technical Services Pty Ltd dated 28/11/2005. Engineering calculations and plans with levels reduced to Australian Height Datum in relation to site drainage shall be submitted to and approved by the relevant certifying body prior to commencement of site construction works. The engineering calculations and plans must demonstrate compliance with the above referenced stormwater strategy. A copy of the engineering calculations and plans are to be forwarded to Council once approved by the relevant certifying body. The drawings and details shall include the following information:

    a) A detailed drainage design supported by a catchment area plan, at a scale of 1:100 or as considered acceptable to the Council or an accredited certifier,

and drainage calculations prepared in accordance with the Institution of Engineers publication, Australian Rainfall and Run-off, 1987 edition.

b) A layout of the proposed drainage system including pipe sizes, type, grade, length, invert levels, etc., dimensions and types of all drainage pipes and the connection into Council's stormwater system.

c) Generally all internal pipelines must be capable of discharging a 1 in 20 year storm flow. However the minimum pipe size for pipes that accept stormwater from a surface inlet pit must be 150mm diameter. The site must be graded to direct any surplus run-off (ie. above the 1 in 20 year storm) to the proposed drainage system.

d) The separate catchment areas within the site, draining to each collection point or surface pit are to be classified into the following categories:

i. Roof areas
ii. Paved areas
iii. Grassed areas
iv. Garden areas

e) Where buildings abut higher buildings and their roofs are "flashed in" to the higher wall, the area contributing must be taken as: the projected roof area of the lower building, plus one half of the area of the vertical wall abutting, for the purpose of determining the discharge from the lower roof.

f) Proposed finished surface levels and grades of car parks, internal driveways and access aisles which are to be related to Council's design alignment levels.

g) The details of any special features that will affect the drainage design eg. the nature of the soil in the site and/or the presence of rock etc.

35. Any required infiltration system, (detention/infiltration system), must be designed by a suitably qualified and experienced consultant using infiltration rates determined by the applicant's geotechnical engineer or other appropriately qualified consultant. The location and design of the infiltration system, (detention/infiltration system), must not adversely impact on adjacent footings/foundations/structural elements. The applicant's geotechnical engineer shall certify that the base of any infiltration system is located sufficiently above the ground water table such that the operation of the infiltration system will not be compromised by any potential future fluctuations in the water table. The referenced certification must be provided to the relevant certifying body prior to the commencement of site construction works.

36. Any Infiltration systems/Absorption Trenches must be designed in general accordance with "Section 8.5 ABSORPTION TRENCHES" as stipulated in Randwick City Council's Private Stormwater Code. Any detention area/infiltration system must be regularly cleaned and maintained to ensure it functions as required by the design.

37. A childproof and corrosion resistant fastening system shall be installed on access grates over pits/trenches where water is permitted to be temporarily stored.

38. Should a pump system be required to drain any portion of the site the system must be designed with a minimum of two pumps being installed, connected in parallel (with each pump capable of discharging at the permissible discharge rate) and connected to a control board so that each pump will operate alternatively. The pump wet well shall be sized for the 1 in 100 year, 2 hour storm assuming both pumps are not working.

The pump system must also be designed and installed strictly in accordance with "Section 8.4 PUMP SYSTEMS" as stipulated in Randwick City Council's Private Stormwater Code.

39. A sediment/silt arrester pit must be provided prior to stormwater discharging into any required absorption/infiltration system.

The sediment/silt arrester pit shall be constructed in accordance with the following requirements:

- The base of the pit located a minimum 300mm under the invert level of the outlet pipe.
- The pit constructed from cast in-situ concrete, precast concrete or double brick.
- A minimum of 4 x 90 mm diameter weep holes located in the walls of the pit at the floor level with a suitable geotextile material with a high filtration rating located over the weep holes.
- A galvanised heavy-duty screen located over the outlet pipe/s (Mascot GMS multipurpose filter screen or equivalent).
- The grate being a galvanised heavy-duty grate that has a provision for a child proof fastening system.
- A child proof and corrosion resistant fastening system provided for the access grate (e.g. spring loaded j-bolts or similar).
- A sign adjacent to the pit stating:

  "This sediment/silt arrester pit shall be regularly inspected and cleaned."

Note: Sketch details of a standard sediment/silt arrester pit may be obtained from Council's Drainage Engineer.

40. Prior to occupation of the development, a "restriction on the use of land" and "positive covenant" (under section 88E of the Conveyancing Act 1919) shall be placed on the title of the subject property to ensure that any infiltration system (detention / infiltration system) is maintained and that no works which could affect the design function of the infiltration system are undertaken without the prior consent (in writing) from Council. Such restriction and positive covenant shall not be released, varied or modified without the consent of the Council.

Notes:

a. The "restriction on the use of land" and "positive covenant" are to be to the satisfaction of Council. A copy of Council's standard wording/layout for the restriction and positive covenant may be obtained from Council's Development Engineer.

b. The works as executed drainage plan and hydraulic certification must be submitted to Council prior to the "restriction on the use of land" and "positive covenant" being executed by Council.

41. Prior to the issuing of a Crown Completion Certificate, the applicant shall submit to Council a works-as-executed drainage plan prepared by a registered surveyor and approved by a suitably qualified and experienced Hydraulic Engineer. The works-as-executed drainage plan shall be to the satisfaction of the relevant certifying body and shall include the following details:

a) The location, diameter, gradient and material (i.e PVC, RC etc) of all stormwater pipes;
b) The orifice size(s) (if applicable);
c) Details of any detention/infiltration/absorption systems; and
d) Details of any pumping systems installed (including wet well volumes).

42. Prior to the issuing of a Crown Completion Certificate, the applicant shall submit to the relevant certifying body and Council, certification from a suitably qualified and experienced Hydraulic Engineer confirming that the design and construction of the stormwater drainage system comply with the conditions of development consent. The certification must be provided following inspection/s of the site stormwater drainage system by the certifying engineers and shall be provided to the satisfaction of the relevant certifying body.

43. **As the above site is located in an area where the water table is adjacent to the base of the excavation (and given that water table levels fluctuate),** the basement carparks or similar structures must be suitably waterproofed to the satisfaction of the relevant certifying body. Details of the proposed method of waterproofing must be submitted to Council, prior to the commencement of site construction works.

44. Details of any proposed connection and / or disposal of groundwater or collected rainwater/stormwater from the excavation to Council's external stormwater drainage system must be submitted to and approved by Council's Development Engineer, prior to commencing these works, in accordance with section 138 of the *Roads Act 1993*.

The subject details must include the following information:

- Site plan
- Hydraulic engineering details of the proposed disposal/connection of groundwater or site stormwater to Council/s drainage system
- Volume of water to be discharged
- Location and size of drainage pipes
- Duration, dates and time/s for the proposed works and disposal
- Details of water quality and compliance with the requirements of the *Protection of the Environment Operations Act 1997*
- Details of associated plant and equipment, including noise levels from the plant and equipment and compliance with the requirements of the *Protection of the Environment Operations Act 1997* and associated Regulations and Guidelines
- Copy of any required approvals and licences from other Authorities (e.g. A water licence from the Department of Planning/Department of Water & Energy).
- Details of compliance with any relevant approvals and licences

Waste Management Conditions

The following conditions are applied to provide adequate provisions for waste management:

45. Prior to the commencement of works for the proposed development the applicant is to submit to Council and have approved by Council's Manager of Waste Services, a Waste Management Plan detailing waste and recycling storage and disposal for the development site.

The plan shall detail the type and quantity of waste to be generated by the development; demolition waste; construction waste; materials to be re-used or recycled; facilities/procedures for the storage, collection, recycling & disposal of waste and the on-going management of waste.

46. The waste storage areas are to be provided with a tap and hose and the floor is to be graded and drained to the sewer to the requirements of Sydney Water. The waste storage areas shall be clearly signposted.

Landscape Conditions

The following conditions are applied to provide adequate provisions for landscaping and to maintain reasonable levels of environmental amenity:

47. Landscaping at this site must be installed substantially in accordance with the approved landscape plans by Aspect Studios, dwg 11026-DA-01 – 08, dated 08.12.11, subject to the following additional requirements being included on amended plans, which are to be submitted to, and be approved by, the relevant certifying body, prior to the commencement of site works:

    a. Planting schedules divided up into individual areas of the site showing the exact quantities and location of all proposed planting.

    b. Adequate soil volume for the species being proposed must be provided for those planter boxes/raised gardens to be provided over slab. Generally, those smaller, low growing species (up to 1m in height) will require a minimum soil depth of at least 300 - 400mm; those plants and shrubs which will attain a mature height of between 1m - 2.5m will require at least 600mm in depth, with those larger shrubs and trees to require a minimum soil depth of between 600mm - 1m or more in depth respectively, and can be increased where necessary through mounding.

    c. All lawn areas must have a minimum soil depth of 300mm.

    d. In order to reduce the amount of storm-water generated by the site, as well as to recharge groundwater supplies, porous/permeable paving shall be used in all hard surfacing not over slab.

    e. To ensure satisfactory maintenance of the landscaped areas, an automatic drip irrigation system shall be installed throughout all planted areas under-cover which are not exposed to natural rainfall. Details shall be provided showing that the system will be connected to the sites rainwater tanks, with back-up connection to the mains supply, in accordance with all current Sydney Water requirements.

    f. All detention tanks and below ground stormwater infiltration systems located within the landscaped areas shall have a minimum soil cover of 600mm to ensure sufficient soil depth for plant establishment.

    g. Any substation required shall be screened from view. The proposed location, elevation and screening method shall be shown on all detailed landscape drawings and specifications.

Landscape Certification

48. The landscaping shall be installed in accordance with the approved documentation, prior to the issue of a Final (or any other type of Interim) Crown Completion Certificate, with suitable strategies to be implemented to ensure it is maintained in accordance with these plans.

49. Documentary evidence from a qualified professional in the Landscape/Horticultural industry (must be a registered member of a nationally recognised association/organisation) must be submitted to, and be approved by, the relevant certifying body, which confirms that they have attended the site, and that the completed landscaping complies with the approved plans and conditions of consent.

Streetscape Improvements

50. The applicant shall meet all costs associated with upgrading the High Street frontage, for the full width of the site, as well as the section which extends past the western edge of the proposed works, up to adjacent the Campus Living buildings (also known as "The Village") as has been shown on the submitted plans. All works carried out on Council property, must be in accordance with Council's requirements for Civil Works on Council property.

A Streetscape Plan showing the extent and location of awnings, doors/entranceways, bus stops and any other details required by Council, shall be submitted to, and approved by, Council's Director of City Planning, prior to the commencement of the landscape works, and must also include the following requirements:

- Replace the proposed, 7.5m spaced *Acer buergerianum* (Trident Maples) with 100 litre *Corymbia citriodora* (Lemon Scented Gums), to be installed at roughly 12-15m intervals as appropriate;
- Deletion of the under-planting around the street trees;
- Provision of a porous/permeable aggregate surfacing within the tree squares, and must include a 100mm circumference/allowance for future growth (details to be provided);
- Location of the tree squares, spaced evenly along the length of the site;
- Tree squares to measure 2m in width, and a depth of 1m behind the back of the kerb.
- Make allowances for tree squares in the existing footpath, for the relevant areas in front of the Campus Living site, including the repair of any concrete as required in order to match in with the new street tree plantings and surrounding surfaces. The extent and completion of external/civil works will be to the satisfaction of Council.

Following approval of the streetscape plan; and prior to commencement of the landscape works on Council property, the applicant shall also liaise with Council's Pre-paid Works Designer on 9399-0922, regarding scheduling of work including inspections, supervision fees and compliance with Council's requirements for public liability insurance.

The approved landscape works shall be completed to the satisfaction of Council's Landscape Development Officer and Pre-paid Works Designer, prior to the issue of a Final Crown Completion Certificate.

Street Tree Management

51. The applicant must also cover the cost for Council to supply and plant the required quantity of street trees, *Corymbia citrioodora* (Lemon Scented Gums), as part of the streetscape works described above, and will be calculated at a standard rate of $356 + GST per 100 litre sized tree.

This fee will need to be paid into **Tree Amenity Income** at the Cashier on the Ground Floor of the Administrative Centre, **prior to the commencement of site construction works.**

The applicant must contact Council's Landscape Development Officer on 9399-0613 (quoting the receipt number), and giving at least 3 months notice to arrange for sourcing and planting of these advanced trees.

Arborist

52. Prior to the commencement of any site works, the relevant certifying body must ensure that a professional Arborist, who holds a minimum of AQF Level 5 in

Arboriculture (and is a registered member of a nationally recognised organisation/association) has been engaged for the duration of works for the purpose of establishing, monitoring and implementing Tree Protection Zones or Tree Protection Measures, as well as performing or supervising any works that may have an impact on those trees listed for retention, with all site staff to comply with instructions given by the 'site Arborist'.

Pruning

53. Should pruning be required from any of those trees being retained as part of this proposal (Trees 1, 3-10), it must only be minimal and selective, either to avoid damage to the trees; or, to provide a clearance off the works, and must not be an amount that would affect their health, habit or form.

54. Prior to performing any pruning works, the site Arborist must contact Council's Landscape Development Officer on 9399-0613, giving at least 5 working days notice, to arrange a joint inspection for the purposes of identifying the exact location and extent of pruning allowable, with the site Arborist to comply with any instructions issued.

55. All pruning can only be undertaken by the site Arborist, and to the requirements of Australian Standard AS 4373-2007 'Pruning of Amenity Trees,' and NSW Work Cover Code of Practice for the Amenity Tree Industry (1998).

Tree Protection Measures

56. All relevant conditions relating to tree protection measures contained in Development Consent 739/2011 for the subject development site shall be complied with.

Advisory Conditions

- Further information and details on Council's requirements for trees on development sites can be obtained from the recently adopted Tree Technical Manual, which can be downloaded from Council's website at the following link, http://www.randwick.nsw.gov.au - Looking after our environment – Trees – Tree Management Technical Manual; which aims to achieve consistency of approach and compliance with appropriate standards and best practice guidelines.

The following conditions are applied to ensure that the development satisfies the provisions of the Environmental Planning and Assessment Act 1979 and Regulation:

57. The requirements and provisions of the Environmental Planning & Assessment Act 1979 and Environmental Planning & Assessment Regulation 2000, must be fully complied with at all times.

58. All new building work must be carried out in accordance with the provisions of the Building Code of Australia (BCA).

B. OPERATIONAL MATTERS

The following conditions are applied to satisfy the relevant pollution control criteria and to maintain reasonable levels of health, safety and amenity to the locality:

59. The use and operation of the premises shall not give rise to an environmental health or public nuisance.

60. There are to be no emissions or discharges from the premises which will give rise to a public nuisance or result in an offence under the *Protection of the Environment Operations Act 1997* and *Regulation.*

61. Adequate provisions are to be made within the premises for the storage, collection and disposal of waste and recyclable materials, to the satisfaction of the relevant certifying body.

62. The development shall not give rise to environmental pollution or public nuisance or result in an offence under the Protection of the Environment Operations Act 1997 or NSW Occupational Health & Safety Act (2000) & Regulations (2001).

The following conditions are applied to ensure that noise emissions from the development satisfy legislative requirements and maintain reasonable levels of amenity to the area:

63. The proposed use of the premises and the operation of all plant and equipment shall not give rise to an 'offensive noise' as defined in the Protection of the Environment Operations Act 1997 and Regulations.

    In this regard, the operation of the premises and plant and equipment shall not give rise to a sound pressure level at any affected premises that exceeds the background (LA90), 15 min noise level, measured in the absence of the noise source/s under consideration by more than 5dB(A). The source noise level shall be assessed as an LAeq, 15 min and adjusted in accordance with the NSW Environmental Protection Authority's Industrial Noise Policy 2000 and Environmental Noise Control Manual (sleep disturbance).

64. The use of the premises and the operation of plant and equipment shall not give rise to the transmission of a vibration nuisance or damage to other premises.

The following condition is applied to satisfy the relevant pollution control criteria and to maintain reasonable levels of health, safety and amenity to the locality:

65. The use and operation of the plant and equipment within the building shall not give rise to an environmental health or public nuisance and there are to be no emissions or discharges from the premises, which will give rise to a public nuisance or result in an offence under the Protection of the Environment Operations Act 1997 and Regulations.

C. PRIOR TO ANY WORK COMMENCING ON THE SITE

Site Remediation

66. All relevant conditions relating to site remediation contained in Development Consent No. 739/2011 for the subject development site shall be complied with.

Construction Management

67. Prior to the commencement of any building works, a relevant certifying body must be appointed for the development to monitor compliance with the relevant standards of construction, Council's development consent and the approved construction plans.

    The critical stages of construction are to be inspected and inspections must be carried out, to the satisfaction of the relevant certifying body, prior to proceeding to the subsequent stages of construction or finalisation of the works (as applicable).

    Documentary evidence of the building inspections carried out and details of critical stage inspections carried out and copies of certification relied upon must also be forwarded to Council upon finalisation of the development.

68. The required Long Service Levy payment, under the Building and Construction Industry Long Service Payments Act 1986, is to be forwarded to the Long Service

Levy Corporation or the Council, prior to commencement of work, in accordance with Section 109F of the Environmental Planning & Assessment Act 1979.

At the time of this development consent, Long Service Levy payment is applicable on building work having a value of $25,000 or more, at the rate of 0.35% of the cost of the works.

69. All building, plumbing and drainage work must be carried out in accordance with the requirements of the Sydney Water Corporation.

The approved construction plans must be submitted to a Sydney Water Quick Check agent or Customer Centre prior to commencing any building or excavation works, to determine whether the development will affect Sydney Water's sewer and water mains, stormwater drains and/or easements, and if any further requirements need to be met.

If suitable, the plans will be appropriately stamped. For Quick Check agent details please refer to Sydney Water's web site at www.sydneywater.com.au and go to the Building, Developing and Plumbing, then Quick Check or Building and Renovating or telephone 13 20 92.

The relevant certifying body is required to ensure that a Quick Check Agent/Sydney Water has appropriately stamped the plans before commencing works.

The following group of conditions are applied to ensure the structural adequacy and integrity of the proposed building and adjacent premises:

70. Documentary evidence prepared by a suitably qualified professional geotechnical engineer shall be obtained prior to commencement of work, certifying the suitability and stability of the site for the proposed building and certifying the suitability and adequacy of the proposed design and construction of the building for the site.

A copy of the engineer's report is to be submitted to the Council.

71. All excavations and backfilling associated with the erection or demolition of a building must be executed safely in accordance with appropriate professional standards and excavations are to be properly guarded and supported to prevent them from being dangerous to life, property or buildings.

Retaining walls, shoring or piling must be provided to support land which is excavated in association with the erection or demolition of a building, to prevent the movement of soil and to support the adjacent land and buildings, if the soil conditions require it. Adequate provisions are also to be made for drainage.

Retaining walls, shoring or piling must be designed and installed in accordance with appropriate professional standards and the relevant requirements of the Building Code of Australia and Australian Standards. Details of proposed retaining walls, shoring or piling are to be submitted to and approved by the relevant certifying body prior to commencing such excavations or works.

72. A Construction Site Management Plan is to be prepared by a suitably qualified person (and a copy is to be forwarded to Council) prior to the commencement of demolition, excavation or building works. The site management plan must include the following measures, as applicable to the type of development:

- location and construction of protective fencing / hoardings to the perimeter of the site;
- location of site storage areas/sheds/equipment;
- location of building materials for construction;
- provisions for public safety;

- dust control measures;
- site access location and construction;
- details of methods of disposal of demolition materials;
- protective measures for tree preservation;
- provisions for temporary sanitary facilities;
- location and size of waste containers/bulk bins;
- details of proposed sediment and erosion control measures;
- construction noise and vibration management;
- construction traffic management.

The site management measures are to be implemented prior to the commencement of any site works and be maintained throughout the works, to maintain reasonable levels of public health, safety and convenience to the satisfaction of the relevant certifying body. A copy of the approved Construction Site Management Plan must be maintained on site.

73. A report must be obtained from a suitably qualified and experienced consultant **upon commencement of works**, certifying that noise and vibration emissions from the construction of the development satisfies the relevant provisions of the *Protection of the Environment Operations Act 1997*, Council's conditions of consent and relevant Standards relating to noise and vibration. In support of the above, it is necessary to submit all relevant readings and calculations made and a copy of the report is to be forwarded to Council.

Any recommendations and requirements contained in the report are to be implemented accordingly and should noise and vibration emissions not comply with the terms and conditions of consent, work must cease forthwith and is not to recommence until details of compliance are submitted to the relevant certifying body and copied to Council.

74. During construction stages, sediment laden stormwater run-off shall be controlled using the sediment control measures outlined in the manual for Managing Urban Stormwater – Soils and Construction, published by the NSW Department of Housing.

Details of the proposed sediment control measures are to be included in a *site water management plan* and must be prepared prior to the commencement of any site works. The sediment and erosion control measures must be implemented prior to the commencement of any site works and be maintained throughout construction. A copy of the approved details must be forwarded to the Council and a copy is to be maintained on-site and be made available to Council officers upon request.

Details of proposed sediment and erosion control measures shall include; a site plan; indicating the slope of land, access points & access control measures, location and type of sediment & erosion controls, location of existing vegetation to be retained, location of material stockpiles and storage areas, location of building operations and equipment, methods of sediment control, details of drainage systems and details of existing and proposed vegetation.

Stockpiles of soil, sand, aggregate or other materials must not be located on any footpath, roadway, nature strip, drainage line or any public place and the stockpiles must be protected with adequate sediment control measures.

Building operations such as brick cutting, washing tools or equipment and mixing mortar are not permitted on public footpaths, roadways, nature strips, in any public place or any location which may lead to the discharge of materials into the stormwater drainage system.

75. All workers and sub-contractors employed on the site shall be required to undertake an induction program prior to the undertaking of any task. During the conduct of this program, participants shall be advised that parking will not be provided on-site and

that limited parking is available on the surrounding streets. It shall be recommended to all participants that they utilise the public transport system wherever possible for trips to / from work. To facilitate such use, all participants shall be provided with a copy of the Sydney Buses Transport Access Guide map for the UNSW.

76. Public health, safety and convenience must be maintained at all times during demolition, excavation and construction works and the following requirements must be satisfied:

a) The roadway, footpath and nature strip must be maintained in a good, safe condition and free from any obstructions, materials, soils or debris at all times. Any damage caused to the road, footway or nature strip must be repaired immediately, to the satisfaction of Council.

b) Building materials, sand, soil, waste materials or construction equipment must not be placed upon the footpath, roadway or nature strip at any time and the footpath, nature strip and road must be maintained in a clean condition and free from any obstructions, soil and debris at all times.

c) Bulk bins/waste containers must not be located upon the footpath, roadway or nature strip at any time without the prior written approval of the Council. Applications to place a waste container in a public place can be made to Council's Health, Building & Regulatory Services department.

d) Stockpiles of soil, sand, aggregate or other materials must not be located on any footpath, roadway, nature strip, drainage line or any public place and the stockpiles must be protected with adequate sediment control measures.

Building operations such as brick cutting, washing tools or equipment and mixing mortar are not permitted on public footpaths, roadways, nature strips, in any public place or any location which may lead to the discharge of materials into the stormwater drainage system.

e) A temporary timber, asphalt or concrete crossing is to be provided to the site entrance across the kerb and footway area, with splayed edges, to the satisfaction of Council, unless access is via an existing concrete crossover.

f) Temporary toilet facilities are to be provided within the work site throughout the course of demolition and construction, to the satisfaction of WorkCover NSW and Council. The toilet facilities must be connected to a public sewer or other sewage management facility approved by Council.

g) Public safety must be maintained at all times and public access to the site and building works, materials and equipment on the site is to be restricted, when work is not in progress or the site is unoccupied, to the satisfaction of Council.

A temporary safety fence is to be provided to protect the public, located to the perimeter of the site (unless the site is separated from the adjoining land by an existing structurally adequate fence, having a minimum height of 1.5 metres). Temporary fences are to have a minimum height of 1.8 metres and be constructed of cyclone wire fencing, with appropriate fabric attached to the inside of the fence to provide dust control, or other material approved by Council.

Temporary site fences are to be structurally adequate, safe and be constructed in a professional manner and the use of poor quality materials or steel reinforcement mesh as fencing is not permissible.

The public safety provisions and temporary fences must be in place prior to the commencement of any demolition, excavation or building works and be maintained throughout construction.

h) If the work involved in the erection or demolition of a building is likely to cause pedestrian or vehicular traffic in a public place to be obstructed or rendered inconvenient or the 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, an awning is to be erected sufficiently to prevent any substance from, or in connection with, the work from falling into the public place or adjoining premises.

The public place adjacent to the work site must be kept lit between sunset and sunrise if it is likely to be hazardous to persons in the public place and any such hoarding, fence or awning is to be removed upon completion of the work.

i) A 'B Class' overhead type hoarding is required to be provided to protect the public, located adjacent to the development, prior to the commencement of any works on the site which comprise:-

- any works or hoisting of materials over a public footway or adjoining premises, or
- any building or demolition works on buildings which are over 7.5m in height and located within 3.6 metres of the street alignment.

The public safety provisions and temporary fences must be in place prior to the commencement of any demolition, excavation or building works and be maintained throughout construction.

j) If it is proposed to locate any site fencing, hoardings or amenities upon any part of the footpath, nature strip or any public place, the written consent from Council's Building Services section must be obtained beforehand and detailed plans are to be submitted to Council for consideration, together with payment of the weekly charge in accordance with Council's adopted fees and charges.

k) The public safety provisions and temporary fences must be in place prior to the commencement of any demolition, excavation or building works and be maintained throughout construction.

l) A Road / Asset Opening application must be submitted to and be approved by Council prior to carrying out any works within or upon a road, footpath, nature strip or in any public place, in accordance with section 138 of the Roads Act 1993 and all of the conditions and requirements contained in the Road / Asset Opening Permit must be complied with.

The owner/builder must ensure that all works within or upon the road reserve, footpath, nature strip or other public place are completed to the satisfaction of Council, prior to the occupation of any part of the development. For further information, please contact Council's Road / Asset Opening Officer on 9399 0691 or 9399 0999.

m) The owner/builder is required to hold Public Liability Insurance, with a minimum liability of $10 million and a copy of the Insurance cover is to be provided to Council.

The following condition is applied to provide access and facilities for people with disabilities:

77. Access, facilities and car parking for people with disabilities must be provided to and within the building in accordance with the relevant provisions of the Building Code of Australia. Details of the proposed access, facilities and car parking for people with disabilities are to be included in the plans / specifications.

D. DURING CONSTRUCTION WORKS

The following conditions are applied to ensure that the development satisfies relevant standards of construction, and to maintain adequate levels of health, safety and amenity during construction:

78. A sign must be erected and maintained in a prominent position on the site for the duration of the works, which contains the following details:

- name, address, contractor licence number and telephone number of the *principal contractor*, including a telephone number at which the person may be contacted outside working hours;
- name, address and telephone number of the project manager;
- a statement stating that "unauthorised entry to the work site is prohibited".

79. A copy of the approved construction plans must be provided to Council and a copy is to be kept on the site at all times and be made available to the Council officers and personnel for assessment upon request.

80. The adjoining land and buildings located upon the adjoining land must be adequately supported at all times.

If an excavation associated with the erection or demolition of a building extends below the level of the base of the footings of any building located on an adjoining allotment of land, the person causing the excavation must:

- preserve and protect the building/s on the adjoining land from damage; and
- effectively support the excavation and building; and
- at least seven (7) days before excavating below the level of the base of the footings of a building on an adjoining allotment of land (including a public road or public place), give notice of the intention and particulars of the works to the owner of the adjoining land.

Notes

- *This consent and condition does not authorise any trespass or encroachment upon any adjoining or supported land or building whether private or public. Where any underpinning, shoring, soil anchoring (temporary or permanent) or the like is proposed to be carried out upon any adjoining or supported land, the principal contractor or owner-builder must obtain:*
  - *a) the consent of the owners of such adjoining or supported land to trespass or encroach, or*
  - *b) an access order under the Access to Neighbouring Land Act 2000, or*
  - *c) an easement under section 88K of the Conveyancing Act 1919, or*
  - *d) an easement under section 40 of the Land & Environment Court Act 1979, as appropriate.*

- *Section 177 of the Conveyancing Act 1919 creates a statutory duty of care in relation to support of land. Accordingly, a person has a duty of care not to do anything on or in relation to land being developed (the supporting land) that removes the support provided by the supporting land to any other adjoining land (the supported land).*

81. Building, demolition and associated site works must be carried out in accordance with the following requirements:

Activity	Permitted working hours
All building, demolition and site work, including site deliveries (except as detailed below)	• Monday to Friday - 7.00am to 6.00pm • Saturday - 8.00am to 5.00pm • Sunday & public holidays - No work permitted
Excavating of rock, use of jack-hammers, pile-drivers (excluding bored piles) or the like	• Monday to Friday - 8.00am to 5.00pm • Saturday - No work permitted • Sunday & public holidays - No work permitted
Additional requirements for all development (except for single residential dwellings)	• Saturdays and Sundays where the preceding Friday and/or the following Monday is a public holiday - No work permitted

An application to vary the abovementioned hours may be submitted to Council's Manager Health, Building & Regulatory Services for consideration and approval to vary the specified hours may be granted in exceptional circumstances and for limited occasions (e.g. for public safety, traffic management or road safety reasons). Any applications are to be made on the standard application form and include payment of the relevant fees and supporting information. Applications must be made at least 10 days prior to the date of the proposed work and the prior written approval of Council must be obtained to vary the standard permitted working hours.

82. Noise and vibration emissions during the construction of the building and associated site works must not result in damage to nearby premises or result in an unreasonable loss of amenity to nearby residents and the relevant provisions of the Protection of the Environment Operations Act 1997 must be satisfied at all times.

83. A Registered Surveyor's survey certificate is to be obtained (and a copy is to be forwarded to the Council), detailing compliance with Council's approval at the following stage/s of construction:

a) Prior to construction of the first completed floor/floor slab (prior to pouring of concrete), showing the area of land, building and boundary setbacks and verifying that the building is being constructed at the approved levels.

b) On completion of the erection of the building showing the area of the land, the position of the building and boundary setbacks and verifying the building has been constructed at the approved levels.

84. During demolition, excavation and construction works, dust emissions must be minimised, so as not to result in a nuisance to nearby residents or result in a potential pollution incident.

Adequate dust control measures must be provided to the site prior to the works commencing and the measures and practices must be maintained throughout the demolition, excavation and construction process, to the satisfaction of the relevant certifying body.

Dust control measures and practices may include:-

- Provision of appropriate materials to all perimeter site fencing (attached on the prevailing wind side of the site fencing).

- Covering of stockpiles of sand, soil and excavated material with adequately secured tarpaulins or plastic sheeting.
- Installation of a water sprinkling system or provision of hoses or the like.
- Regular watering-down of all loose materials and stockpiles of sand, soil and excavated material.
- Minimisation/relocation of stockpiles of materials, to minimise potential for disturbance by prevailing winds.
- Revegetation of disturbed areas.

85. If the work involved in the erection or demolition of a building is likely to cause pedestrian or vehicular traffic in a public place to be obstructed or rendered inconvenient or the 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, an awning is to be erected sufficiently to prevent any substance from, or in connection with, the work from falling into the public place or adjoining premises.

    The public place adjacent to the work site must be kept lit between sunset and sunrise if it is likely to be hazardous to persons in the public place and any such hoarding, fence or awning is to be removed upon completion of the work.

86. The demolition, removal, storage, handling and disposal of materials and all building work must be carried out in accordance with the following requirements (as applicable):

    - Australian Standard 2601 (2001) – Demolition of Structures
    - Occupational Health and Safety Act 2000
    - Occupational Health and Safety (Hazardous Substances) Regulation 2001
    - Occupational Health and Safety (Asbestos Removal Work) Regulation 2001
    - WorkCover NSW – Guidelines and Codes of Practice
    - Randwick City Council's Asbestos Policy
    - The Protection of the Environment Operations Act 1997 and Protection of the Environment Operations (Waste) Regulation 1996.

The following condition is applied to satisfy the relevant pollution control criteria and to maintain reasonable levels of health, safety and amenity to the locality:

87. Any hazardous and/or intractable wastes arising from any excavation, building and any works are to be managed and disposed of in accordance with the requirements of Work Cover NSW and the Department of Environment and Climate Change (formerly EPA), including the provisions of:

    - New South Wales Occupational Health and Safety Act, 2000
    - The Occupational Health and Safety (Hazardous Substances) Regulation 2001
    - The Occupational Health and Safety (Asbestos Removal Work) Regulation 2001
    - Protection Of the Environment Operations Act 1997 (NSW)
    - Environment Protection Authority's Environmental Guidelines; Assessment, Classification and Management of Liquid and Non Liquid Wastes (1999)
    - Randwick City Council's Asbestos Policy

E. PRIOR TO OCCUPATION OF THE BUILDING / PREMISES

88. A Crown Completion Certificate must be issued prior to the occupation of any part of the development

89. A statement confirming that the building is suitable for occupation must be obtained from a suitably qualified person (i.e. relevant certifying body) prior to any occupation of the building work encompassed in this development consent.

The statement must not be issued if the development is inconsistent with the development consent and the relevant conditions of development consent must be satisfied prior to occupation.

Details of critical stage inspections carried out, together with any other certification relied upon must be provided to Council prior to occupation.

90. A Certificate shall be obtained from a professional engineer and be submitted to the relevant certifying body and copied to Council, prior to occupation of the building, which certifies that the building works satisfy the relevant structural design requirements of the Building Code of Australia.

91. A report, prepared by a suitably qualified and experienced consultant in acoustics, shall be submitted to the relevant certifying body and copied to Council prior to occupation of the premises, which demonstrates and certifies that noise and vibration emissions from the development comply with the relevant provisions of the Protection of the Environment Operations Act 1997, NSW Environmental Protection Authority Noise Control Manual & Industrial Noise Policy and conditions of Council's approval, to the satisfaction of Council's Manager Environmental Health & Building Services.

92. Prior to occupation of the development, a single and complete Fire Safety Certificate, which encompasses all of the essential fire safety measures contained in the *fire safety schedule* must be obtained and be submitted to Council, in accordance with the provisions of the *Environmental Planning and Assessment Regulation 2000*. A copy of the Fire Safety Certificate must be displayed in the building entrance/foyer and a copy of the Fire Safety Certificate must also be forwarded to the NSW Fire Brigades.

An annual *Fire Safety Statement* is also required to be submitted to the Council and the NSW Fire Brigades, each year after the date of the *Fire Safety Certificate*, in accordance with the *Environmental Planning & Assessment Regulation 2000*.

F. ADVISORY

A1 The assessment of this development application does not include an assessment of the proposed building work under the Building Code of Australia (BCA).

All new building work must comply with the BCA and relevant Australian Standards and details of compliance must be provided in the construction documentation.

A2 A separate Local Approval application must be submitted to and be approved by Council's Health, Building & Regulatory Services department prior to commencing any of the following activities:-

- Install or erect any site fencing, hoardings or site structures on any part of the nature strip, road or footpath
- Operate a crane or hoist goods or materials over a footpath or road
- Placement of a waste skip, bin or any other container or article on the road, nature strip or footpath.