JRPP No.	
DA No.:	**DA/806/2009 - Relocation of existing demountable building and construction of part one/part two storey Solar Industrial Research Facility with associated road and landscape works at UNSW upper campus north of Oval Lane**
Applicant:	**The University of New South Wales**
Report By:	**Major Assessment Co-ordinator – Randwick City Council**

1. EXECUTIVE SUMMARY

Council is in receipt of a development application proposing removal of an existing demountable building and the construction of a part one and part two storey building to be used as a Solar Industrial Research Facility with associated landscape works.

The application is referred to the Joint Regional Planning Panel to determination pursuant to clause 13B (1)(a) of State Environmental Planning Policy (Major Development) 2005 as the development has a capital investment value in excess of $10 million.

The proposed Solar Industrial Research Facility is permissible as an "educational establishment" within the Special Uses 5 zoning of the subject site. The proposal is also consistent with relevant objectives of the Special Uses 5 zone.

The proposal generally complies with the requirements of the University of New South Wales DCP - Multi-unit Housing. In particular, the proposal complies with the performance criteria for campus design (relating to legibility, building and landscaping) and transport and parking strategy.

The proposal would be suitable for the site and would have acceptable impacts on the amenity of adjoining and surrounding properties.

The proposed development was advertised for fourteen (14) days in accordance with Council's DCP – Public Notification. No submissions were received in response to the notification and advertising of the DA.

As the proposal is a Crown application pursuant to Section 116 of the Environmental Planning and Assessment Act 1979 (as amended), the University has concurred with the conditions included in the recommendation.

The application is recommended for approval subject to conditions.

2. SITE DESCRIPTION AND LOCALITY:

The site is identified as Lot 1 DP 510271 and is located in the south-eastern section of the UNSW campus at 330 Anzac Parade, Kensington. The site is situated between the Mathews Building to the north and the multi-storey Botany Street Parking Station to the south. The subject site adjoins a paved walkway, Library Walk, and access road

Library Road on the northern side; and pedestrian walkways comprising Valentine Close and Chancellery Walk on the western and eastern sides respectively.

Figure 1: Aerial view of subject site

The allotment is regular in shape with a site area of approximately 3705 sqm. Existing on-site is a demountable building known as The Learning Centre in the western end with and a hard-stand area containing 79 carparking spaces.

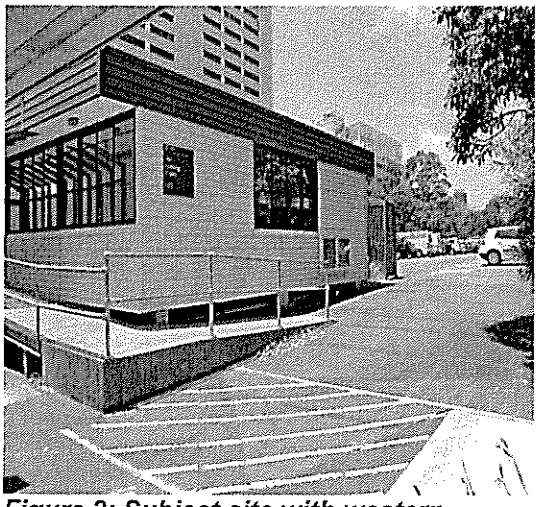

Figure 2: Subject site with western demountable building (left) and open carpark at rear.

Figure 3: Open carpark at rear with Mathews Building immediately adjoining to the north.

Figure 4: Open carpark at rear with multi-storey carpark building immediately adjoining to the south.

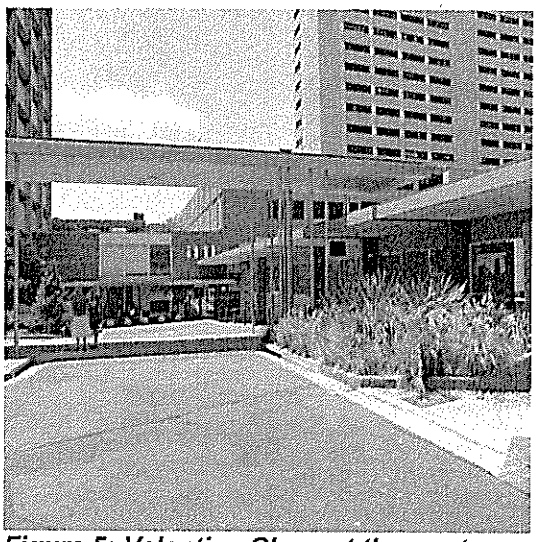

Figure 5: Valentine Close at the western front of the subject site and looking due north.

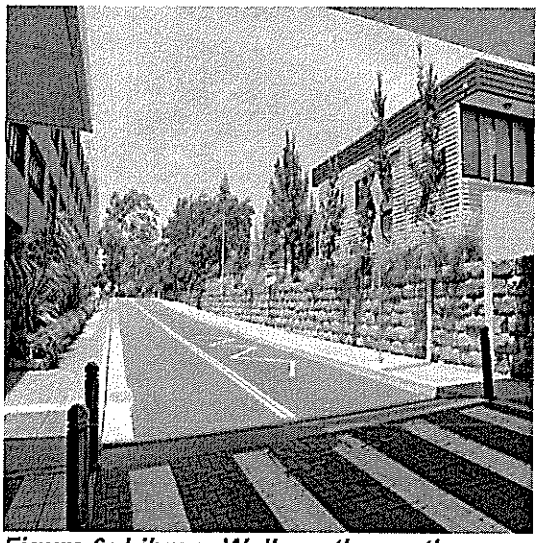

Figure 6: Library Walk on the northern frontage looking due east.

3. HISTORY:

The subject site forms part of the wider UNSW Campus which is the subject of a Master Plan/Deemed DCP adopted by Council in November 2005. This revised Master Plan/Deemed DCP was incorporated as a new DCP for the University of NSW, Kensington Campus which was adopted by Council on 27 March 2007 and came into effect on 16 April 2007.

In recent years, a number of development applications have been approved in the wider UNSW Campus including student housing, new research facilities, new faculty buildings, refurbishment of existing educational buildings, and provision of services and infrastructure.

4. THE PROPOSED DEVELOPMENT

The development proposal involves the removal of an existing demountable building and erection of a stand alone building part one/part two storeys in height containing the following uses:

Ground level
Photovoltaic pilot line approximately 50m long x 13m wide
Support areas including chemical handling and storage water plant and workshop
Staff shower and locker area
Waste water plant
Service Yard

Part Level 1
Administrative areas including meeting room and kitchenette
Communications room
Plant rooms
Laboratory area approximately 150 sqm in area

Roof Level
Exposed roof plant enclosure on the southern side of building
Solar Panel installation areas on the northern side

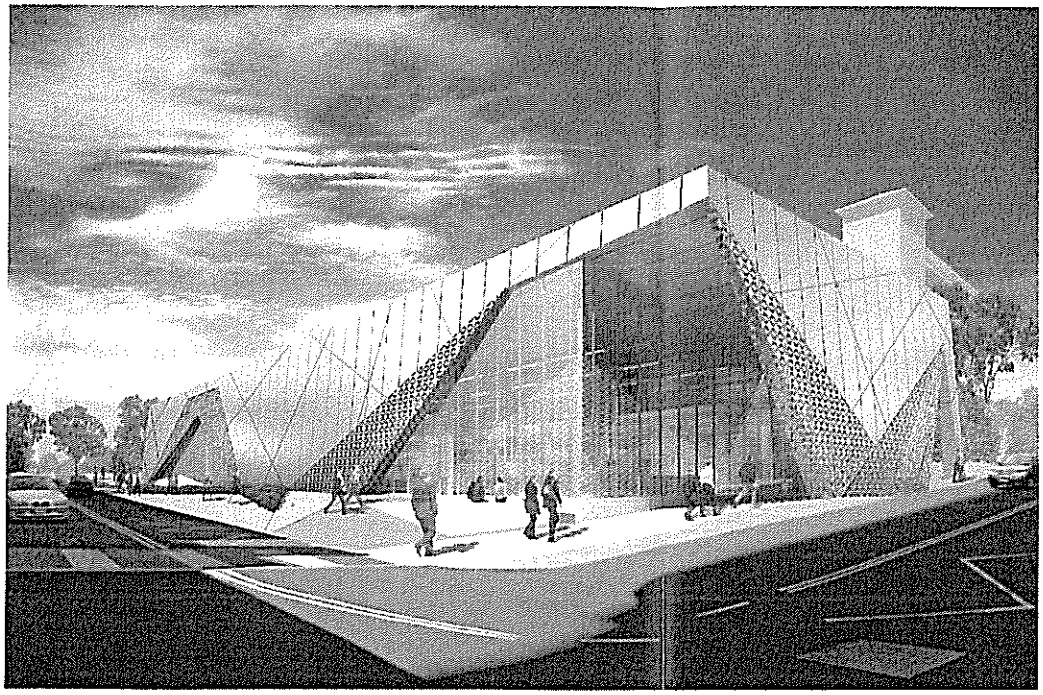

Figure 7 : Library Walk and Valentine Close corner perspective.

The building facade comprises a combination of three cladding elements being transparent, perforated and solid which assists in its function as a solar research facility. Improvements to adjoining pedestrian and vehicular accessways include new

paving and low-key landscaping to complement the building and strengthen the adjoining public domain.

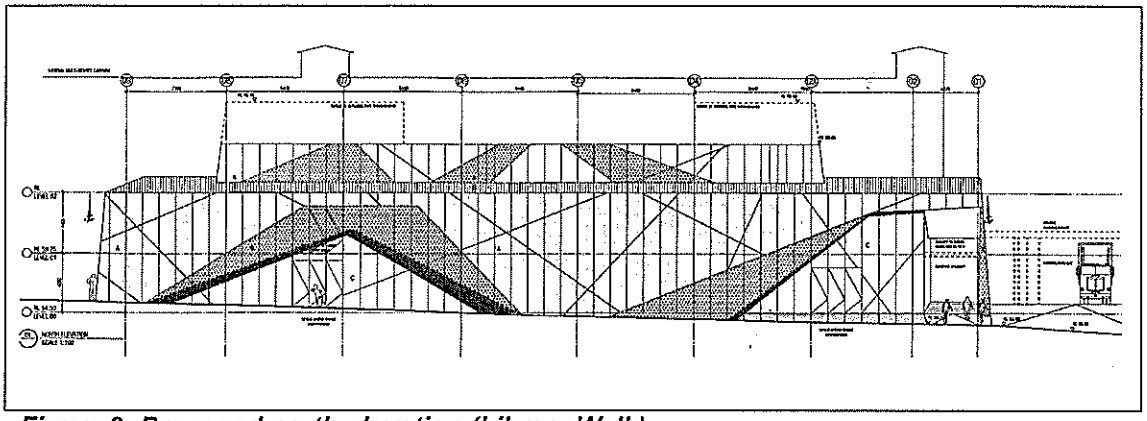

Figure 8: Proposed north elevation (Library Walk)

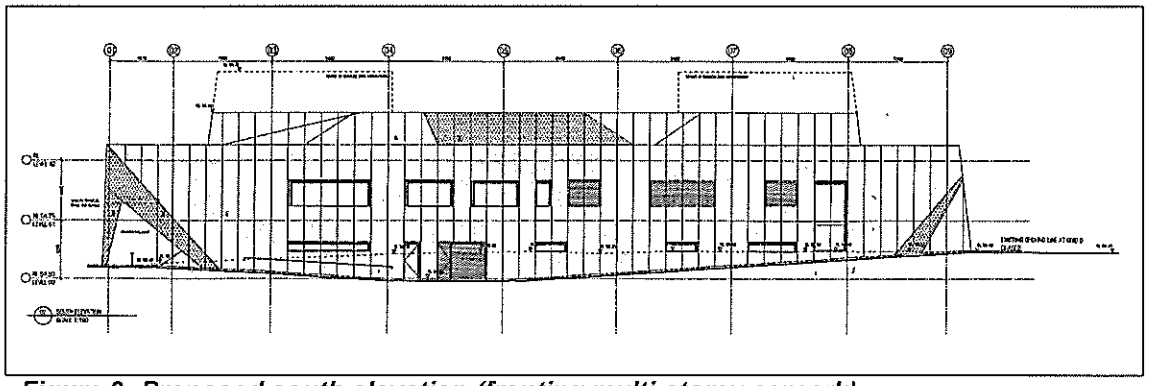

Figure 9: Proposed south elevation (fronting multi-storey carpark)

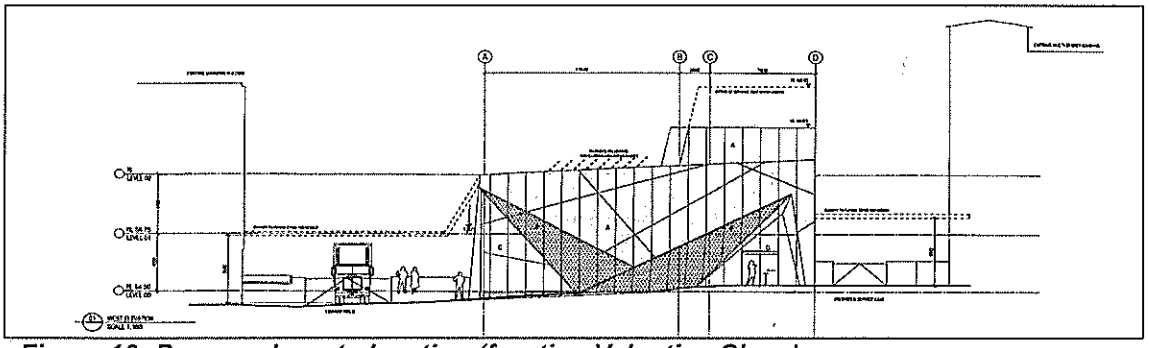

Figure 10: Proposed west elevation (fronting Valentine Close)

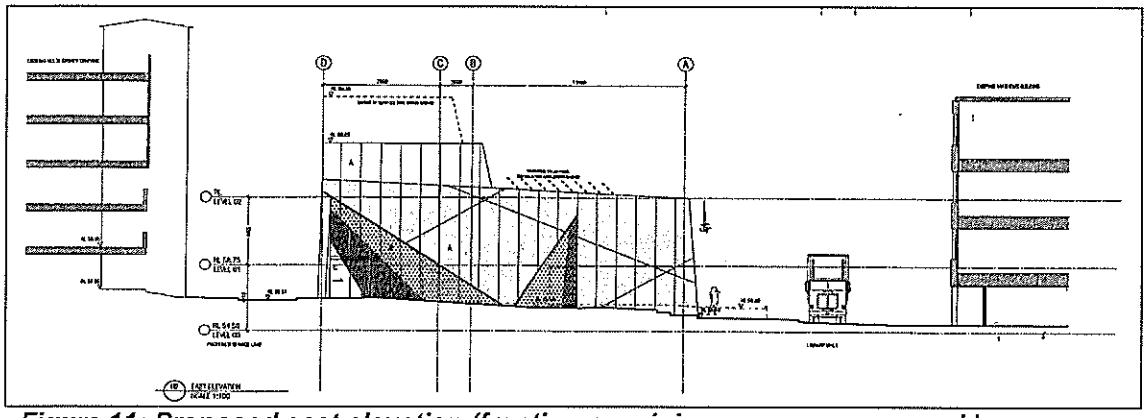

Figure 11: Proposed east elevation (fronting remaining open space carpark)

The main entrance to the facility will be at the western end and staff entry at the eastern end. Access to Level 1 will be via stairs at the eastern and western ends of the building. A lift is also provided at the western end for disabled access.

The Statement of Environmental Effects advises that a total of 20 staff will be employed in the proposed facility comprising 14 staff existing on campus and 6 new additional staff.

5. TECHNICAL OFFICER AND EXTERNAL COMMENTS

Development Engineering Comments
The development application was referred to Council's Development Engineer primarily in relation to stormwater drainage and landscaping. No objection is raised to the proposed development subject to conditions of consent.

Traffic Engineering Comments
The application was referred to Council's Traffic Engineer and no objection is raised in relation to the parking and traffic impact of the proposal having regard to the Traffic Report submitted with the application which indicates that the relevant criteria for reduction in carparking demand in the UNSW Campus has been met consistent with the parking and traffic strategy contained in the DCP - UNSW Kensington Campus.

Building Services and Environmental Health Comments
The development application was referred to Council's Building Services and Environmental Health sections. No objection is raised to the proposed development subject to conditions of consent.

External Authority Comments
The application was not required to be referred to any external authority for comments.

6. RELEVANT ENVIRONMENTAL INSTRUMENTS

The statutory controls that relate to the proposed development are:

1. State Environmental Planning Policy (Major Development) 2005

2. State Environmental Planning Policy No. 33 (Hazardous and Offensive Developments)
3. State Environmental Planning Policy No. 55 – Remediation of Land
4. Randwick Local Environmental Plan 1998

An assessment of the proposed development under the planning controls is provided below:

1. State Environmental Planning Policy (Major Development) 2005

The provisions of SEPP – Major Development 2005 apply to the proposed development as the capital investment value is in excess of $10 million. In accordance with the requirements of Clause 13B (1)(a) the submitted application is classified as 'regional development' with the determining authority for the application being the Joint Regional Planning Panel (Eastern Region). The submitted application is referred to the Joint Regional Planning Panel for determination in accordance with the applicable provisions of SEPP (Major Development).

2. State Environmental Planning Policy No. 33(Hazardous and Offensive Development)

A review of the proposed storage of hazardous materials and dangerous goods has been submitted with the application. The review essentially applies the " Applying SEPP33" screening test to determine whether or not the quantity and location of dangerous goods stored and handled at the proposed facility would exceed critical threshold levels that would make them potentially hazardous to people, property and the environment. The review finds that the quantities of dangerous goods proposed for storage and handling at the proposed facility do not exceed the threshold quantities that would make them potentially hazardous to people, property and the environment. Accordingly, SEPP No. 33 does not apply to the proposed Facility.

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

State Environmental Planning Policy No. 55 aims to promote the remediation of contaminated land for the purposes of reducing risk of harm to human health or any other aspect of the environment. The subject site has been continuously used for a carparking area for a prolonged period. There is no known previous industrial usage on the site, which would potentially contribute to land contamination. Accordingly, no contamination report is required in this instance. Notwithstanding this, conditions will be applied to address any unexpected contamination finds that may occur during excavation and construction.

4. Randwick Local Environmental Plan 1998

The following relevant clauses apply to the proposal

Clause 9 - Objectives

Clause 9 of RLEP 1998 requires Council to consider the aims of the LEP and Zone objectives prior to determining any DA on land to which the RLEP applies. The proposed research facility is permissible in the Special Uses 5 zone. The proposal will

not compromise the aims of the LEP in relation to aesthetic character, environmental qualities and social amenity of the locality and provides a facility that does not compromise the amenity of any residential area, consistent with the Special Uses 5 zone objectives.

Clause 17 Zone No 5 (Special Uses)

The subject site is zoned Special Uses 5 under the provisions of Randwick Local Environmental Plan 1998 (RLEP). The use of the subject property is considered to constitute an *'educational establishment'* under the definitions contained within the RLEP. Development for the purpose of an educational establishment requires development consent under Clause 17 of RLEP 1998. RLEP 1998 defines an *'educational establishment'* as: *"a building or place used for education (including teaching) and includes:*

(a) a school

(b) a tertiary institution, being a university, TAFE establishment, teachers' college or other tertiary college, providing formal education which is constituted by or under the Act, and

(c) an art gallery, library or museum, not being an art gallery, library or museum in which any items on display are for sale,

whether or not accommodation for staff and students is provided and whether or not used for the purpose of gain.

The proposed development is permissible with Council's consent under the zoning provisions applying to the land.

The proposal is also consistent with the relevant objectives of the Special Uses 5 zone in that

1. The proposed development constitutes State/Crown development being a development on Crown land as provided for in Objective (a).
2. The proposed development is for an educational (research and development) purpose on publicly owned land as provided for in Objective (b).

Clause 37A Development in Special Uses Zone

Clause 37 ensures that consideration is given to the compatibility and amenity impacts of development within the Special Uses Zone on nearby development and uses in the locality. The proposed solar research facility is a compatible use within the UNSW Campus representing a sustainable use of a site which has had a long association with the surrounding community for the provision of research and educational facilities. The redevelopment of this site will utilise existing infrastructure by co-locating a research use within an existing tertiary education site and make more efficient use of the site for the provision of research services. The subject site is located well within the UNSW grounds with the closest residential properties being approximately 750m from the proposed facility. The proposed use is one of a number of uses included under the DCP - UNSW Kensington Campus. The potential impact of the proposal has been adequately assessed in relevant sections of this report and found not to have any significant impact on nearby development and uses.

Clause 40 Excavation and filling of land

Clause 40 of the RLEP contains provisions for undertaking of excavation and filling of land to ensure minimal impacts on drainage patterns, soil topography, and future redevelopment of the land. The proposal will require some moderate excavation to be undertaken in the southern section of the proposed building that will be sunk into the ground as a result of the need to retain the level of the existing adjoining multi-storey carpark building immediately to the south. This work will not result in any significant impact on the topography of the site, is unlikely to interrupt the drainage patterns of the site subject to appropriate drainage works (as addressed by Council's Development Engineer in relevant sections of this report) or result in soil instability and will not adversely impact upon future redevelopment of the subject land. Accordingly, the proposal is acceptable in relation to the provisions of Clause 40.

Clause 40A Master plans

A Master Plan/Deemed DCP was adopted for the whole UNSW Kensington Campus in November 2005. The provisions of the UNSW Master Plan/Deemed DCP became the template for, and were incorporated into, the DCP – UNSW Kensington Campus which was adopted by Council on 27 March 2007 and came into effect on 16 April 2007. Accordingly, the assessment of the proposal against the provisions of the DCP – UNSW Kensington Campus (as undertaken in Section below) provides an indication also of the proposals compliance with the Master Plan. In this regards, as assessed in the section below, the proposal is generally compliant with the principles and controls of the Deemed DCP/Master Plan.

7. POLICY CONTROLS

Development Control Plan – UNSW Kensington Campus

The Development Control Plan - UNSW Kensington Campus is applicable over the subject site by virtue of its location within the UNSW Campus. The DCP contains a range of performance criteria for campus design principles and provisions namely in terms of sense of place, legibility, clusters & hubs, landscape, buildings, housing, retail & services, recreation and cultural facilities and transport & parking. The proposal is assessed against the relevant performance criteria as follows:

Control	Requirement	Proposal	Com-plies
5.1 Sustainability	Environmentally sustainable design in accordance with the UNSW Environmental Management Plan (EMP). Energy Management requirements address: • energy conservation • reduce greenhouse gas emissions • consider renewable energy technologies such as photovoltaic cells in the new designs and/or refurbishment	The proposal incorporates a range of ESD measures in line with the UNSW EMP as outlined in the environmental report prepared by Bovis Land Lease. The proposed development itself is a solar research facility to promote photovoltaic technology. Building incorporates ESD principles of aspect, shading and	Yes

Control	Requirement	Proposal	Com-plies
	projects	shelter.	
	Water management requirements are to: • reduce potable water consumption • increase the use of bore water for non-potable water requirements • maximise the on-site retention of stormwater via natural infiltration and aquifer recharge, and • ensure all water fittings and equipment are 4 star efficiency.	UNSW local bore water supply to be used for non-potable water requirements.	
	Stormwater runoff from the UNSW Kensington Campus is to be managed in accordance with the **Stormwater Strategy** prepared for UNSW.	Stormwater drainage to be in accordance with UNSW Stormwater Strategy.	
	Materials management requirements are to: • reduce solid waste to landfill and thermal treatment, and • increase solid waste recycling, especially in construction and demolition and organics.	Condition requiring Construction and Operation Waste Management Plan addressing relevant requirements will be applied.	
	Waste management plans are to be prepared for all developments ensuring recycling, re-use and waste avoidance both for demolition/construction and operational phases.		
	All waste storage areas are to be graded and drained to the sewer to the requirements of Sydney Water.		
	Planning, design and development requirements to: • ensure all new buildings and refurbishments target a 5 star rating under Green Star rating scheme • increase accessible green open space, and • achieve compliance with environmental	The Solar Research facility will incorporate a range of ESD initiatives. The facility itself will conduct improvements in photovoltaic technology.	

Control	Requirement	Proposal	Com-plies
	planning, heritage and construction regulations. Compliance and pollution prevention requirements to: • achieve compliance with environmental legislation and regulations, and • reduce quantity and toxicity of wastes and products on campus. **Transport** requirements to: • pursue a range of travel demand management strategies to reduce the number of vehicle trips to the campus, and • increase staff and student numbers travelling by foot, bicycle and/or public transport.	 Two main sources of emissions from the facility will be waste water to sewer and exhaust air to atmosphere. Waste water will meet Protection of Environment Act 1997. Air emissions will meet NSW Environment Protection Agencies (EPA) Protection of Environment Operations (Clean Air) Regulation 2002. The proposed development complies with these requirements (as discussed in relevant section below).	
5.2 Sense of Place	Sense of place is protected and promoted in all future development focusing on: • identification of the campus from afar, such as the building silhouettes and icon signage • perimeter tree planting • the sense of arrival, particularly along Anzac Parade, High Street and Botany Street • primary entrances from all streets • major existing and new gathering places, and • the network of connective spaces. The achievement of sense of place is also based on the pursuit of the issues and provisions of other campus design principles, particularly Legibility (Section 5.3), the "public rooms" and specific characters of each Hub (Section 5.4), Landscape (Section 5.5), Buildings (Section 5.6), Retail (Section 5.7) and recreation and Cultural Facilities (Section 5.9). The interface of the campus with the surrounding community also determines its sense of place. The	1. Building has been design to reinforce Valentine Walk on the western front and Library Walk on the northern front. 2. Existing trees along north facing wall of the adjoining southern multi-storey carpark will be retained. Complies with this requirement where applicable Complies – proposed building will define main pedestrian axes along Valentine Walk on the western frontage and Library Walk on the northern front. Gathering spaces linked into east west pedestrian links and	Yes

Control	Requirement	Proposal	Com-plies
	desired future character of these interfaces are to be as follows: • **Botany Street** - Major buildings to define frontage, particularly High/Botany Street corner. - Extended East Mall to create new major eastern entry to campus (with possible future extension to hospital complex).	enhances the University Mall. The proposed building will reinforce the main pedestrian axes along Valentine Walk on the western frontage and Library Walk on the northern front which will form part of the overall system of entrances and walkways in the Campus especially to any future potential entry point in the eastern end on Botany Street.	
5.3 Legibility	a. New projects are to maintain and enhance the views into the campus identified in Figure 5.2 to ensure the legibility of the campus in the street layout.	Complies. Western building edge reinforces north-south view corridor along Valentine Walk and northern building edge defines east-west view corridor along Library Walk	Yes
	b. Major and minor entries to the campus, and the varying permeability of campus boundaries, are to be achieved as identified in Figures 5.1 – 5.3.	Proposal will not adversely affect permeability through major and minor entries to the campus. Rather, the enhancement of existing walkways along Library Walk and Valentine Close will further facilitate permeability through the Campus.	
	c. New development and refurbishment projects are to over time achieve the pattern of public domain identified on Figure 5.3 which comprises a network of well defined major gathering spaces and a grid of smaller connective spaces which link the gathering spaces and campus entrances.	Complies. Public domain around the facility will be enhanced by better definition of street edges and linking public open spaces	
	d. The boundaries of most existing spaces are well defined by building alignments or landscape elements, however those of new spaces are to be subject to refinement during further design studies. These aspects are further documented in Figures 5.6b, 5.7 and 5.8.	The proposal will better define the existing public spaces by reinforcing the public domain through eth design of the building and its adjacent street front.	
	e. Major new gathering spaces, as set out below, are to provide new public open spaces and refine the spatial pattern and built form (see Figure 5.3) Refer also Hubs	Complies. Proposal reinforces campus entrances and will contribute to upgrade of Library Walk/East Mall connection.	

Control	Requirement	Proposal	Com-plies
	(Section 5.4) and Landscape (Section 5.5).		
	f. Gathering spaces are to be joined by a network of east-west links, the enhanced and extended University Mall and University Walk and north-south connections as shown in Figure 5.3.	Complies. New building will: • define gathering space connection upgrade of Library Walk into East Mall on upper campus. • Gathering spaces to be joined by a network of east-west links and enhanced and extended University mall.	
	g. Significant places are to be achieved at the intersections of major pedestrian routes by the creation of: • a gathering space (see Figure 5.3), and/or • a public room (see Figure 5.4) and/or • a Hub (see Section 5.4 and Figure 5.5), and/or • memorable features such as landscape elements (see Figure 5.6b), building design, uses, and/or public art.	Complies. New building will: • define gathering space connection upgrade of Library Walk into East Mall on upper campus. • Gathering spaces to be joined by a network of east-west links and enhanced and extended University mall.	
	h. A subset of the public domain, including courtyards within buildings, is to be developed as quiet contemplative spaces (see Section 5.5 and Figure 5.6b).	N.A. (proposal is for an research facility not residential use)	
	i. Covered access is to be provided along University Walk (refer Figure 5.3), preferably by awnings or colonnades as part of buildings along the route or alternatively as free-standing canopies.	Covered walkway is provided on the western front.	
	j. 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.	Complies. Adjoining public domain will be lit.	
	k. Paving selections for the connective spaces are to contribute to legibility, with particular emphasis on the routes between Hubs and to	Complies. Areas to the north and west of the proposed building will be paved to increase legibility of adjoining pedestrian spaces.	

Control	Requirement	Proposal	Com-plies
	campus entrances with public transport stops. l. All new campus projects are to incorporate consistent high quality signage throughout the public domain in accordance with the adopted UNSW Signage Code. Icon signage is to contribute to identification of the campus from afar but not adversely impact on adjoining properties. m. Equal access to the public domain is to be achieved through implementation of the findings of the UNSW Disability Access Audit. This is to include a "shoreline" for the vision impaired through the campus. n. All connective spaces are to provide for service vehicles and emergency access within a generously sized, obstacle free environment compatible for pedestrians and the slow movement of vehicles.	Signage will be consistent with the UNSW Signage Code. Condition will be applied. Complies. An Accessibility Review addressing disabled access has been lodged with the DA. Complies. Access for service and emergency vehicles suitable provided consistent with obstacle-free environment compatible for pedestrians and the slow movement of vehicles.	
5.5 Landscape	• All landscape works and management are to implement the sustainability principles and mechanisms of the EMP. • New buildings are not to impinge on or harm existing significant trees and areas of vegetation identified in **Figures 5.6a and 5.6b,** except as set out below. In these locations the existing vegetation is to form the basis of landscape designs. • Prior to design work for adjoining new developments, the specific root and canopy zone requirements of the vegetation in **Figure 5.6a** is to be assessed and the needs of the vegetation may be a constraint on development. This vegetation can only be removed based on detailed arborist assessments if there is no other design option, and in conjunction with agreed replacement or compensation strategies.	Removal of existing trees identified as significant along Library Walk is proposed. This is supported by an Arborist Report. Council's Landscape Officer has assessed the Arborist Report and advises that approval for removal of the identified trees is granted given the strong modern design of the proposed building in reinforcing the street complemented by proposed low-key landscape and paving treatment along the streetfront and subject to a condition requiring further improvements to the proposed landscaping along Library Walk. The arborist report also recommends measures to protect and enhance existing trees that will be retained in the section of the remaining section of the carpark to the east will strengthen the landscaping treatment around the proposed building. The proposed paving and low-key	Yes

Control	Requirement	Proposal	Com-plies
	• The successful inter-building spaces identified in **Figure 5.6b**) are to be appropriately landscaped in accordance with their role and position in the public domain pattern and their specific site characteristics. • Landscape development is to lead toward an optimal distribution of appropriate landscape types. Landscape design is to use successful existing spaces as models for new development. • Landscape design is to be a key aspect of the creation of new entrances (see **Figures 5.1 & 5.6b**). • Landscape design and management is to optimise safety and security by enhancing visibility and sight lines, and eliminating areas of darkness and places for entrapment; provide equal access throughout the public domain implementing the findings of the UNSW Disability Access Audit and service and emergency access to buildings; optimise plant growth, including large trees, by provision of permeable surfaces, deep soil areas and drainage to planted areas, promoting water infiltration and aeration provision of hard surfaces and their drainage to relate to the UNSW Stormwater Strategy).	landscape treatment is considered an appropriate design for the inter-building spaces (ie., between the proposed building and the existing adjoining Mathews building to the north and the multi-storey carpark to the south. Plant species and spacing will be the subject of a condition requiring detailed landscape plan for the proposed development. Landscaping treatment has been designed to ensure safety and security, sight-lines, equal access (address in an Accessibility Review submitted with the DA).	
5.6 Building	• New buildings are to be located within the building location zones identified in **Figure 5.8** subject to the additional provisions set out below. • New buildings or extensions to existing buildings are to be located behind the key building alignments identified in **Figure 5.7** and the existing alignments set for University Mall, Science Square, the Quadrangle, Library Lawn, Commerce Courtyard, Chancellery Forecourt, Union Road,	The proposed new Building will be located within an identified building zone in the DCP. The proposed maximum height of 12m complies with the maximum 24m height control applicable to the subject site. The proposal also complies with the Kennedy Street building alignment and has a northern building alignment to Library Walk aligned with the existing pedestrian walkway in this street. Building alignments and public domain matters have been	Yes

Control	Requirement	Proposal	Com-plies
	Engineering Road, College Road and Chancellery Walk. • The precise position of other building alignments is to be subject to detailed design studies of both the proposed buildings and adjoining public domain. including appropriate building footprint sizes; and solar access requirements of adjoining open spaces and buildings, and • Maximum building heights are to be as specified in **Figure 5.8 of the DCP**. (Max 24m) Heights are defined as wall heights allowing for appropriately articulated upper levels and roof forms. • Floor levels of all new habitable and storage areas are to be a minimum of 300 mm above any adjoining 1 in 100 year ARI flow path/ponding depth. • Design of campus buildings is to respond positively to the architectural relationships and elements setout in Section 6.1.	considered in the design and siting of the proposed building including the size of the building footprint in meeting design and energy performance and maintenance of solar access to the subject property. Proposal's storage area complies with the minimum 300 mm above any adjoining 1 in 100 year ARI flow path/ponding depth. The proposal will require a roof form that is conducive to the placement of photovoltaic cells. The design of the building is addressed in the Section 8 below which essentially recognises that the architecture fits in well with its Campus location providing both a striking architecture befitting the designated function and a modernist builtform marking the corner of Library Walk and Valentine Close.	
5.13 Transport	• The transport strategy of the DCP primarily involves reduction in car dependence is to be achieved through a combination of: • reduction in parking supply • public transport upgrades • location of university accommodation • parking charges, and • an interactive information system as set out in the **Transportation Strategy** in **Figure 5.12**. • The total number of parking spaces 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 parking on the surrounding streets.	A Transport Report has been submitted with the DA indicating the following: • Reduction in the use of private vehicles in line from 32% to 25% over the past three years as demonstrated in recent travel survey. • Reduction in parking supply on campus resulting from new campus developments has been accompanied by improvements in public transport. • Provision of new student housing on campus comprising 1,300 beds including the new student housing development in High Street and the new post graduate housing at New College reduces the need for travel to Uni.	Yes

Control	Requirement	Proposal	Com-plies
	• Surface parking within the campus is to continue to be relocated to be under new buildings or within structured car parks (see **Figure 5.13**) New car parking areas are to be constructed under new buildings on western campus and on lower campus (possibly also under new buildings) to replace 300 existing permit and reserved parking as lost due to redevelopment. 100 short-term parking spaces are to be located in lower campus with access from High Street over time as new visitor parking for the campus. • Maintain the provision of Disabled Parking and Loading Zones throughout the campus. • All new DAs (excluding university accommodation) are to include an assessment of whether the proposal involves an increase in staff, student or other visitations to the campus or only a relocation or up-grade of existing facilities in the context of the total campus population and parking trends, as set out in the Transportation Strategy in **Figure 5.12 of the DCP**. • Where an increase is proposed, the DA is to be supported by a Traffic and Parking Report which addresses: • the potential increase in parking demand • the potential impacts on campus parking supply and demand and on-street parking demand • achievements in reducing parking demand across the campus, and • any specific measures proposed to lower parking demand or avoid potential adverse impacts.	• Increase in parking charges on campus every year. • Provision of freely available travel information to all campus users. • Introduction of carpooling system in 2009. Accordingly, the removal of 79 carparking spaces is consistent with the objectives of the DCP to reduce parking on campus. The proposal will retain a remaining 60 car spaces in an adjoining eastern section of the existing carpark which is consistent with the DCP's requirement that any existing accessible parking on-site be retained until such time as these are also phased out and relocated under new buildings wherever and whenever these are proposed in the Campus in the future. Disabled parking will be maintained in the remaining carpark to the rear. The Traffic Report has provided an assessment of the increase in staff which amounts to 6 new persons which will require no additional carparking having regard to the DCP strategy of reducing car dependence and the promotion of public transport.	

Overall, the proposal complies with all the performance requirements of the DCP.

10.2.3 Section 94 Contributions Plan

In accordance with Council's Section 94A Development Contributions Plan effective from 2 July 2007, the monetary levy shown in the below must be paid to Council.

Section 94A Contributions			
Category	Cost	Applicable Levy	Contribution
Development Cost More than $200,000	$13,378,000	1.0%	$133,780.00

8. SECTION 79C CONSIDERATIONS:

The following sections summarise the assessment of the proposal in terms of the heads of consideration in Section 79C of the Environmental Planning and Assessment Act 1979.

(a) The provisions of:

(i) Any Environmental Planning Instrument
The proposed development is defined as educational establishment under the Randwick Local Environmental Plan 1998. Such a use is permissible with the consent of Council on the subject site. The proposed development complies with all relevant clauses of Randwick LEP 1998 and related SEPPs as assessed in the relevant section above. The assessment of the proposed development has revealed that the amenity of the surrounding area will be maintained and that the proposal is consistent with the objectives of the Special Uses zone.

(ii) Any Draft Environmental Planning Instrument
The Draft Randwick (Administrative) LEP 2008 was submitted to the Department of Planning on 28 March 2008. This Draft Administrative LEP is primarily a consolidating and updating document to simplify the preparation of a Comprehensive LEP for Randwick City by 2011.

(iii) Any Development Control Plan
The Development Control Plan - UNSW Kensington Campus 2006 applies to the application. The proposed development has demonstrated general compliance with the requirements of the DCP.

(iiia) Any Planning Agreement
No planning agreement relates to the site or proposed development.

(iv) The Regulations
There are no matters prescribed by the Regulations that apply to this development.

(b) The likely impacts of the development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality

The scale, density and built form and operation of the proposal are considered to be satisfactory. In addition, the proposal is sympathetic to the existing and desired character of the UNSW campus as prescribed in the UNSW Kensington Campus DCP and adopted Master Plan. The proposed development generally will have a positive impact in terms of the natural and built environments, and social and economic aspects as indicated in the following sections below.

Natural Environment

The development site lies within the existing built-up area of the UNSW. The subject site itself is predominantly hardstand surface for the existing carpark. As such, there are no threatened species, populations or ecological communities or habitats that would be affected by the proposed development within and in the vicinity of the development site.

Urban Design

The proposal essentially has a modern architectural design based on an abstraction of a "multi-crystaline solar cell" resulting in a unique and architectural style and expression. With this architecture, the building fits in well with its Campus location providing both a striking architecture befitting the designated function and a modernist builtform marking the corner of Library Walk and Valentine Close.

In terms height, the proposal has a maximum building height of approximately 12m to the top of parapet enclosing the roof plant area. However, the proposed building predominantly will have a height of between 7.3m and 8.8m (allowing for the fall in the land and angle of the roof). The proposed building will be lower than the adjoining Mathews Building (approximately 15m high) to the north and the multi-storey carpark (approximately 17m high). Accordingly, The proposed building heights are considered moderate compared to existing development and will not result in a visually intrusive building.

In terms of the public domain, the western building edge of the proposal will reinforce the north-south pedestrian corridor along Valentine Close. In particular, a covered walkway along this western edge acts both as a protected walkway and a strong design feature with a stylised wall feature defining the western edge of this covered walkway.

The proposed building will also define the northern boundary of Library Walk/East Mall and enhance this east-west corridor through the use of appropriate paving and low scaled landscaping to accentuate the pedestrian experience along this public domain whilst complementing the architectural design of the proposed building. In order to ensure that the landscape treatment along Library Walk is maximised, a condition will be applied requiring a detailed landscape plan to be provided for this corridor.

Sunlight, Privacy and Views

The submitted shadow diagrams indicate that at 9.00 am, 12 noon and 3:00 pm in the winter solstice, overshadowing will occur predominantly upon the southern accessway

separating the proposed facility from the adjoining multi-storey carpark building and the northern wall of the carpark building. No residential property will be affected by overshadowing. Similarly, there will be no immediate impact in terms of overlooking or loss of views from the proposed development as there are no residential developments near or adjoining the subject site.

Parking, Traffic and Transport

The proposal will result in the loss of 79 carparking spaces as a result of the removal of the existing western section of the uncovered carparking area on-site. As indicated in the DCP assessment section above, the UNSW Kensington Campus DCP requires a reduction in car dependence is to be achieved through a combination of:

- reduction in parking supply
- public transport upgrades
- location of university accommodation
- parking charges, and
- an interactive information system

The development application is supported by a Transport Report indicating the following:

- Reduction in the use of private vehicles in line from 32% to 25% over the past three years as demonstrated in recent travel survey.
- Reduction in parking supply on campus as a result of new campus developments has been accompanied by improvements in public transport.
- Provision of new student housing on campus comprising 1,300 beds including the new student housing development in High Street and the new post graduate housing at New College.
- Increase in parking charges on campus every year.
- Provision of freely available travel information to all campus users.
- Introduction of carpooling system in 2009.

The proposed facility will result in minimal increase in new staff (only 6 new staff) such that it is reasonable not to provide for carparking for these new staff in the new facility, given the UNSW Kensington Campus DCP policy of reducing carparking on campus and increasing public transport usage. Council's Traffic Engineering Section has assessed the parking impacts of the proposal and finds it acceptable and reasonable subject to appropriate conditions.

The Transport Report indicates that the proposed Solar Research facility will generate low volume of traffic given the low number of additional new staff in the facility (6 new staff) and the removal of 79 existing carparking spaces on-site. Accordingly, the Transport report estimates that the traffic generation through the main access gate to the proposed facility (Gate 11) will be reduced by approximately 40 to 50 vehicles per hour two-way at peak times. As such, surrounding intersections will continue to operate at existing reasonable levels of service or better with similar average delays per vehicle.

Ecologically Sustainable Development

The SEE states that the proposal has been designed to incorporate a range of Environmental Sustainable Design (ESD) principles and is accompanied by an environmental report prepared by Bovis Land Lease. The report is considered a positive step towards identifying a comprehensive range of measures to achieve sustainability. In general, the ESD initiatives identified in the report are standard measures that would be expected of any development of this scale and outlay including the use of energy efficiency measures in building design recycled building material, and the use of renewable energy technologies and energy efficient products.

In addition, the proposed research facility will be well served by public buses along Botany Street and, slightly further, along Anzac Parade, linking the subject site to the CBD, Railway Square, Bondi Junction, and Randwick Junction in keeping with the promotion of public transport usage as a primary means of enhancing ecological sustainability and the reduction of greenhouse gases in the Sydney Region. The proposal would assist in encouraging the use of public transport in line with ESD principles.

Social and Economic Impacts

The purpose built development will provide a facility to meet the research objectives of the University in the solar technology photo-voltaic cell development. This will be in line with the development of alternative energy sources to existing fossil-fired and carbon-emitting sources. Additionally, the proposed facility will create local employment opportunities. Overall, the proposal will have generally positive social and economic impacts within the site and locality.

The suitability of the site for the development

As canvassed within the report, it is considered that the university location is particularly suitable for the proposed facility. Consideration has been given to impacts of the proposal on the University and there are no known constraints which would render the site unsuitable for the proposed development. Furthermore the proposed facility will not be inconsistent with the terms of the adopted Master Plan and DCP applicable to the subject site. Additionally, the proposal is a permissible use in the Special Uses 5 zone.

Any submissions made

The application was placed on public exhibition for fourteen (14) days in accordance with Council's DCP – Public Notification. No submissions were received in response to the public exhibition. Accordingly, the public exhibition process has been satisfied and the proposed development is considered satisfactory.

The public interest

The public interest is taken to include the provision of a future facility for solar energy and technology research which is a critical area of renewable energy thus contributing towards the global drive for reduction in carbon emissions. The role of the proposed

facility in research and development of solar power as an alternative "green" energy source is considered in the public interest, and is worthy of support.

Financial Impact

This matter has no direct financial impact upon Council's adopted budget or forward estimates.

9. CONCLUSION

The proposed development has been assessed against Section 79C of the Environmental Planning and Assessment Act 1979, Randwick Local Environmental Plan 1998 and UNSW Kensington Campus Development Control Plan and is considered satisfactory.

The proposed development is considered an appropriate use of the site in line with the surrounding campus environment and location. The implementation of appropriate measures during construction and operation, as outlined in this report, will ensure that there will be minimal impacts on the surrounding locality.

The impacts of the proposal during operation can and will be appropriately mitigated by conditions to ensure that the amenity of the locality is maintained.

The proposal is a Crown Application, requiring concurrence of the University to the condition of consent. This has been received from the University and the agreed conditions applied as recommended.

The application is recommended for approval subject to conditions.

10. RECOMMENDATION

THAT the Joint Regional Planning Panel approves Development Application No. DA/806/2009 for relocation of existing demountable building and construction part one and part two storey Solar Industrial Research facility with associated road and landscape works in the University of New South Wales upper campus at Lot 1 DP 510271, 330 Anzac Parade, Kensington, subject to the following conditions:

GENERAL

1. The development must be carried out substantially in accordance with plans and details listed below except where amended by other conditions of consent:

Plan Number	Revision	Description	Dated	Received	Prepared By
A1002	01	Demolition Works Plan	4/11/2009	6/11/2009	Woods Bagot Architects
A1003	01	Site Plan	4/11/2009	6/11/2009	
A2200	01	Ground Floor Plan	4/11/2009	6/11/2009	
A2201	01	Level 01 Floor Plan	4/11/2009	6/11/2009	
A2202	01	Level 02 Plan Plant Rooms	4/11/2009	6/11/2009	
A2203	01	Roof Plan	4/11/2009	6/11/2009	
A2700	01	Shadow Diagrams	4/11/2009	6/11/2009	
A3002	01	East and West Elevation	4/11/2009	6/11/2009	
A3101	01	Sections 01 and 01	4/11/2009	6/11/2009	
A3102	01	Section 03	4/11/2009	6/11/2009	

The following conditions are applied to satisfy the provisions of section 79C of the Environmental Planning and Assessment Act 1979 and to maintain reasonable levels of safety and environmental amenity:

2. The external colours, materials and finishes of the proposed development shall be in accordance with the sample board details and elevations prepared by Woods Bagot Architects, received by Council on 6 November 2009.

3. The finished ground levels external to the building are to be consistent with the development consent and are not to be raised (other than for the provision of paving or the like on the ground) without the written consent of Council.

4. Lighting to the premises shall be designed 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.

5. Signage for the premises shall be consistent with the UNSW Signage Code.

6. 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.

   Failure to comply with these legislative requirements is an offence and may result in the commencement of legal proceedings, issuing of `on-the-spot` penalty infringements or service of a notice and order by Council.

7. All building work must be carried out in accordance with the provisions of the Building Code of Australia (BCA), in accordance with Clause 98 of the Environmental Planning and Assessment Regulation 2000.

8. The recommendations and works proposed in the BCA Assessment report prepared by Steve Watson & Partners, ref: 2009/829 R1.0, dated October 2009 are to be incorporated in the plans and documentation for a construction certificate.

The following conditions are applied to provide appropriate access and facilities to the premises:

9. Access and facilities for people with disabilities must be provided to new building work in accordance with any relevant provisions of the Building Code of Australia, to the satisfaction of the Certifying Authority and details are to be provided with the Construction Certificate application.

The following conditions are applied to provide adequate security against damage to Council's infrastructure:

10. The following damage/civil works security deposit requirement is to be complied with prior to a construction certificate being issued for the development, 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) $5000.00 - 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 an occupation 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.

The following conditions are applied to provide adequate provisions for access, transport and infrastructure:

11. 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.

12. The applicant shall note that all external work, carried out on Council property, shall be in accordance with Council's Policy for "Vehicular Access and Road and Drainage Works". An application for the cost of the Council civil works is to be submitted to Council at the completion of the internal building works. An application fee shall be payable to Council for the quotation of the required works. The applicant may elect to use his contractor for the required works, subject to Council approval, however a design and supervision fee based on the lowest quotation from Council's nominated contractor will be required to be paid prior to the commencement of any works.

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

13. 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.

14. 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.

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

15. 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.

16. The waste storage areas shall be clearly signposted.

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:

17. The use and operation of the premises shall not give rise to an environmental health or public nuisance, vibration or, result in an offence under the Protection of the Environment Operations Act 1997 and Regulations.

18. The 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).

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

19. Any detention area/infiltration system for the premises must be regularly cleaned and maintained to ensure it functions as required by the design.

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

21. 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.

22. A sediment/silt arrester pit must be provided prior to stormwater discharging into the 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.

C. PRIOR TO THE ISSUE OF A CONSTRUCTION CERTIFICATE

The following conditions are applied to satisfy the provisions of section 79C of the Environmental Planning and Assessment Act 1979 and to maintain reasonable levels of safety and environmental amenity:

23. 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 the issuing of a Construction Certificate, 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.

The following conditions are applied to provide adequate provisions for access, transport and infrastructure:

24. The amended carpark layout and the proposed vehicle circulation paths (including service vehicle parking and circulation) 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
    - Sight distance at potential vehicle/vehicle and vehicle/pedestrian conflict points.

    The Construction Certificate plans must demonstrate compliance with this requirement.

25. A Works Zone is to be provided in Botany 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.

26. Prior to the issue of a construction certificate, 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.

27. Prior to the issue of a construction certificate, 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.

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

28. Documentary evidence from the relevant public utility authorities confirming that their requirements have been satisfied, must be submitted to the certifying authority prior to a construction certificate being issued for the development.

29. 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 Energy Australia prior to lodging the construction certificate to determine whether or not an electricity substation is required for the development.

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

30. Stormwater drainage plans have not been approved as part of this development consent. Engineering calculations and plans with levels reduced to Australian Height Datum in relation to site drainage shall be submitted to and approved by the certifying authority prior to a construction certificate being issued for the development. A copy of the engineering calculations and plans are to be forwarded to Council, prior to a construction certificate being issued, if the Council is not the certifying authority. The drawings and details shall include the following information:

    a) A detailed drainage design 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.

    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.

31. Stormwater runoff from the UNSW Kensington Campus is to be managed in accordance with the Stormwater Strategy prepared for UNSW by ANA Technical Services Pty Ltd dated 28/11/2005. Prior to the issuing of a Construction Certificate for the proposed development the applicant must fully demonstrate to the Certifying Authority that the proposed method of site stormwater drainage and the discharge of stormwater from the site is fully compliant with the above referenced strategy including plans CMP 1000 Revision 1 and DSP 1000 Revision 1 (prepared by ANA Technical Services Pty Ltd and dated 22/11/2005).

32. 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.

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

33. Prior to the issuing of a Construction Certificate, a landscape plan (prepared by a registered member of either AILA/AILDM), must be submitted to, and be approved by, the Certifying Authority, and must include the following:

a. A plant schedule and planting plan for those areas on the northern side of the building shown for 'soft landscaping – low vegetation', on the Landscape General Arrangement Plan, drawing number A8000, fronting Library Walk, which will both accentuate and enhance the proposed works, while also matching in with the existing landscape theme in this area of the site;

b. Additional notation showing soil and mulch details, irrigation details, edging, paving, fencing details, surface finishes, retaining wall details, and any other landscape elements in sufficient detail to fully describe the proposed landscape works;

c. All planter boxes and garden beds constructed on slab must have a minimum *soil depth* of 600mm;

d. 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 to permit the establishment of landscaping;

e. 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.

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

34. In accordance with Council's Section 94A Development Contributions Plan effective from 2 July 2007, the following monetary levy must be paid to Council.

Category	Cost	Applicable Levy	S94A Levy
Development cost more than $200000	$13,378,000	1.0%	$133,780.00

The levy must be paid in cash, bank cheque or by credit card prior to a construction certificate being issued for the proposed development. 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 Contribution Plans 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 provide adequate provisions for waste management:

35. Prior to the issuing of a construction certificate 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 construction waste and disposal for the development site.

The plan shall detail the type and quantity of waste to be generated by the development during demolition, excavation and construction.

D. PRIOR TO ANY WORK COMMENCING ON THE SITE

The following conditions are applied to satisfy the provisions of section 79C of the Environmental Planning and Assessment Act 1979 and to maintain reasonable levels of safety and environmental amenity:

36. Prior to the commencement of any building works a construction certificate must be obtained from the Council's Building Certification Services or an Accredited

Certifier, in accordance with the provisions of the Environmental Planning & Assessment Act 1979 and Environmental Planning & Assessment Regulation 2000.

A copy of the construction certificate, the approved plans & specifications and development consent conditions must be kept on the site at all times and be made available to the Council officers and all building contractors for assessment.

37. Prior to the commencement of any building works, the person having the benefit of the development consent must:-

i) appoint a *Principal Certifying Authority*, and

ii) appoint a *principal contractor* for the building work and notify the *Principal Certifying Authority* and Council accordingly in writing, and

iii) notify the *principal contractor* of the required *critical stage inspections* and other inspections to be carried out, as specified by the *Principal Certifying Authority*, and

iv) give at least two days notice to the Council, in writing, of the person's intention to commence building works.

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

The approved Construction Certificate 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 principal certifying authority must ensure that a Quick Check Agent/Sydney Water has appropriately stamped the plans before **commencing any works**.

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

39. All stormwater run-off naturally draining to the site must be collected and discharged through this property's stormwater system. Such drainage must, if necessary, be constructed prior to the commencement of building work.

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

40. Approval is granted for removal of the following trees from the open air car-park, as listed in point 4.5.1 of the Arboricultural Assessment by the ENTS Tree Consultancy, dated 23rd October 2009, and shown on Appendix 5, Site Plan, being:

a. Those at the western end of the central row: trees **34-40**, for the proposed building;
b. The northern row, adjacent the Library Walk: trees **63-73**, for the proposed building;
c. Those various small trees where necessary in order to facilitate a turning circle for large trucks: trees **32-33, 41, 60 & 62**.

41. Permission is also granted for the selective pruning of only those lower growing branches from those trees being retained (refer Tree Protection Measures below), where specifically necessary in order to avoid damage to the trees or to assist with clearances, access or similar.

42. All pruning must be undertaken by an Arborist who holds a minimum of AQF Level III in Arboriculture, and who is also a registered member of a nationally recognised organisation/association, with all pruning to be performed to Australian Standard AS 4373-1996 'Pruning of Amenity Trees.'

43. Prior to the commencement of any site works, the PCA must ensure that a site Arborist, who holds a minimum of AQF Level V in Arboriculture, and is also a registered member of a nationally recognised organisation/association, has been engaged for the duration of the works for the purpose of implementing and monitoring the Tree Protection Measures described in this report, with all site staff required to adhere to any instructions issued by the Arborist.

E. DURING CONSTRUCTION/ WORKS

The following conditions are applied to satisfy the provisions of section 79C of the Environmental Planning and Assessment Act 1979 and to maintain reasonable levels of safety and environmental amenity:

44. The building works must be inspected by the Principal Certifying Authority (or another certifying authority if the Principal Certifying Authority agrees), in accordance with sections 109 E (3) of the Environmental Planning & Assessment Act 1979 and clause 162A of the Environmental Planning & Assessment Regulation 2000, to monitor compliance with the relevant standards of construction, Council's development consent and the construction certificate.

The *Principal Certifying Authority* must specify the relevant stages of construction to be inspected in accordance with section 81A (2) (b1) (ii) of the Environmental Planning & Assessment Regulation 2000 and a satisfactory inspection must be carried out, to the satisfaction of the *Principal Certifying Authority,* 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 compliance with Council's consent is to be maintained by the *Principal Certifying Authority*. Details of *critical stage inspections* carried out and copies of certification relied upon must also be forwarded to Council with the *occupation certificate.*

The *principal contractor* or *owner-builder* (as applicable) must ensure that the required critical stage and other inspections, as specified in the *Principal Certifying Authority's* "Notice of Critical Stage Inspections", are carried out to the satisfaction of the *Principal Certifying Authority* and at least 48 hours notice (excluding weekends and public holidays) is to be given to the *Principal Certifying Authority*, to carry out the required inspection, before carrying out any further works.

45. 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 *Principal Certifying Authority*,
- a statement stating that "unauthorised entry to the work site is prohibited".

46. Except with the written approval of Council's Manager of Health, Building & Regulatory Services, all building, demolition and associated site works (including site deliveries) must only be carried out between the hours of 7.00am to 5.00pm on Monday to Friday inclusive and (except as detailed below) between 8.00am to 5.00pm on Saturdays.

All building, demolition and associated site works are strictly prohibited on Sundays, Public Holidays and also on Saturdays adjacent to a Public Holiday.

In addition, the use of any rock excavation machinery or any mechanical pile drivers or the like is restricted to the hours of 8.00am to 5.00pm (maximum) on Monday to Friday only, to minimise the noise levels during construction and loss of amenity to nearby residents.

47. 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.

48. Public safety and convenience must be maintained at all times during demolition, excavation and construction works.

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) A Road Opening Permit must be obtained from the Council and other relevant Authorities prior to excavating or opening-up the road or footway for services or the like.

c) 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.

d) 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.

e) 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. Sediment and erosion control measures must be implemented prior to the commencement of any site works and be maintained throughout construction.

f) Public safety must be maintained at all times and public access to demolition/building works, materials and equipment on the site is to be restricted. If required, a temporary 1.8m high safety fence or hoarding is to be provided to protect the public, located between the work site and the public place. An awning may also be required to prevent any substance from, or in connection with, the work from falling into the public place or adjoining premises.

Temporary fences or hoardings or the like 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 or hoardings must be in place prior to the commencement of any demolition, excavation or building works and be maintained throughout construction.

If it is proposed to locate any hoardings, site fencing or amenities upon any part of the footpath, nature strip or any public place, the written consent from Council's Health, Building & Regulatory Services department 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.

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

49. If any temporary dewatering of the site is required to facilitate construction of any part of the proposed development a licence under Part V of the Water Act 1912 will be required. The licence must be obtained from the NSW Department of Water and

Energy prior to installation of the works. A copy of the license agreement must be forwarded to Council prior to any dewatering being undertaken.

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

50. In order to ensure the retention of trees 1-31 and 42-59, as identified in point 4.6.1 of the Arboricultural Assessment by the ENTS Tree Consultancy, dated 23rd October 2009, and as shown on Appendix 5, Site Plan, of this report in good health, the following measures are to be undertaken:

    a. The PCA must ensure that a site Arborist, who holds a minimum of AQF Level V in Arboriculture, and is also a registered member of a nationally recognised organisation/association, is engaged for the duration of the works for the purpose of implementing and monitoring the Tree Protection Measures described in this report, with all site staff required to adhere to any instructions issued by the Arborist.

    b. The PCA must ensure that the site Arborist performs periodic site inspections at the relevant stages of works, which at minimum must include prior to and during demolition, as well as for excavations associated with the proposed access ramp and retaining wall adjacent trees 1-27, with written reports of compliance to be provided.

    c. As detailed in the 'Recommendations' section of the submitted Arborist Report, Trees 1-31 and 42-59 shall be protected and retained in accordance with the Tree Protection Guidelines outlined in Appendix 2.

    d. The exception to point 'c' above are trees 28-31 and 42-59 which will not require protective fencing as they are not located in the work zone and will remain unaffected.

    e. The site Arborist must ensure that the required level of moisture is maintained to these trees through watering or an irrigation system, particularly following excavations which may leave the soil profile and feeder roots exposed to the atmosphere.

The following conditions are applied to maintain reasonable levels of environmental amenity and public health safety.

51. Any fill importation to the site is to be monitored and classified by a suitably qualified person. Only 'Virgin Excavated Natural Material ' (VENM) is to be imported to the site, as defined within the NSW EPA 'Environmental Guidelines; Assessment, Classification and management of Liquid and Non-Liquid Wastes. 1999'.

52. Details of any unexpected finds in relation to site contamination, including the details of any investigation procedures undertaken shall be forwarded to the Council. Any new information which comes to light during demolition and

construction works in relation to site contamination shall be notified to the Council and the Principal Certifying Authority immediately.

F. PRIOR TO OCCUPATION OF THE BUILDING/ PREMISES

The following conditions are applied to satisfy the provisions of section 79C of the Environmental Planning and Assessment Act 1979 and to maintain reasonable levels of safety and environmental amenity:

53. An Occupation Certificate must be obtained from the Principal Certifying Authority prior to any occupation of the building work encompassed in this development consent, in accordance with the relevant provisions of the Environmental Planning & Assessment Act 1979.

    An Occupation Certificate must not be issued for the development if the development is inconsistent with the development consent. The requirements of the Environmental Planning & Assessment Act 1979 and conditions of development consent must be satisfied prior to the issuing of an occupation certificate.

54. Prior to the issuing of an interim or final occupation certificate, a statement is required to be obtained from the Principal Certifying Authority, which confirms that the development is not inconsistent with the development consent and the relevant conditions of development consent have been satisfied.

55. A Fire Safety Certificate must be submitted to Council prior to the issuing of an Occupation Certificate, in accordance with the requirements of the Environmental Planning and Assessment Regulation 2000.

    A single and complete *Fire Safety Certificate* must be provided which includes details of all of the fire safety measures contained in the building and as detailed in the *fire safety schedule* attached to the Construction Certificate.

    Prior to issuing any Occupation Certificate the Principal Certifying Authority must be satisfied that all of the relevant fire safety measures have been included and are sufficiently detailed within the *Fire safety Certificate*.

    A copy of the *fire safety certificate* must be displayed in the building near the entrance and a copy must be forwarded to the NSW Fire Brigades.

56. A Certificate prepared by a professional engineer, shall be submitted to the Council prior to the issuing of an occupation certificate, certifying the structural adequacy of the building

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

57. Prior to the issuing of a construction certificate 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 operational 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. Details should also include provision of a tap and hose; the floor graded and drained to the sewer to the requirements of Sydney Water; and clear signposting.

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

58. 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 Principal Certifying Authority prior to the construction certificate being issued.

The Section 73 Certificate must be submitted to the Principal Certifying Authority prior to **occupation of the development.**

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

59. Prior to the issuing of an occupation 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 Principal Certifying Authority (PCA) 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).

60. Prior to the issuing of an occupation certificate, the applicant shall submit to the Principal Certifying Authority (PCA) and Council, certification from a suitably qualified and experienced Hydraulic Engineer confirming that the design and construction of the stormwater drainage system complies 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 PCA.

61. As the above site may encounter seepage water within the depth of the proposed excavation those structures located below the existing ground level must be suitably tanked and waterproofed. A Structural Engineer\Geotechnical Engineer shall certify the tanking & waterproofing has been carried out to an acceptable standard, to the satisfaction of the certifying authority. A copy of the certification is to be forwarded to Council.

Notes:-

a) Any subsoil drainage (from planter boxes etc) is to be disposed of within the site and is not to be discharged to Council's kerb & gutter and/or underground drainage system.

b) Adequate provision is to be made for the seepage water to drain around the structures located below the existing ground level (to ensure that the lower level structures will not dam or slow the movement of the ground water through the development site). Seepage water must not be collected and discharged into the stormwater drainage system external to the development site.

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

62. The landscaping shall be installed in accordance with the approved documentation, prior to the PCA issuing a Final Occupation Certificate, with the applicant responsible for maintaining the site landscaping in accordance with those plans.

G. ADVISORY MATTERS:

1. The applicant is advised that the Construction Certificate plans and specification must comply with the provisions of the Building Code of Australia (BCA).

In this regard, the development consent plans do not show compliance with the deemed-to-satisfy provisions of the BCA. Details of compliance with the relevant provisions of the Building Code of Australia and conditions of development consent are to be provided in the plans and specifications for the construction certificate.

You are also advised to ensure that the development is not inconsistent with Council's consent and if necessary consult with Council's Building Certification Services or your accredited certifier prior to submitting your construction certificate application to enable these matters to be addressed accordingly.

2. The applicant/owner is advised that this approval does not guarantee compliance with the provisions of the Disability Discrimination Act 1992 and the applicant should therefore consider their liability under the Act. In this regard,

the applicant is advised that compliance with the requirements of the Building Code of Australia and Australian Standard 1428.1 - Design for Access and Mobility does not necessarily satisfy the objectives of the Disability Discrimination Act 1992.

The applicant/owner is requested to give consideration to providing access and facilities for people with disabilities in accordance with Australian Standard 1428 Parts 1, 2, 3 and 4 - Design for Access and Mobility, which may be necessary to satisfy the objectives of the Disability Discrimination Act 1992.

3. 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.