4 The Proposal

4.1 Introduction

The proposal seeks consent from the Minister for the redevelopment of the property known as the Stamford Plaza Hotel at 33 Cross Street, Double Bay for a new five (5) Star boutique hotel with hotel residences and speciality retail at the ground floor level. A publicly accessible piazza with open pedestrian connections from Cross Street to Galbraith walkway and laneway connections to Transvaal Avenue and to the Georges Centre.

The development, within Woollahra LGA, meets the non discretionary criteria under Clause 17(b) of Schedule 1 of SEPP (major Projects) 2005 and, therefore can be considered as a major project to which Part 3A applies.

4.2 Project overview

Major Project Application MP 08_0100 seeks the Minister for Planning's consent for the following:

- Demolition of the existing hotel and associated retail arcade, down to ground level including the ground floor slab;
- Retention and reconfiguration of the two basement levels for 107 parking spaces, comprising 74 residential and 33 hotel car spaces, residential storage space, bicycle parking, hotel back of house and plant equipment.
- Erection of a 3 5 storey podium level, part five (5) storey tower to the north east corner of the site and two part fifteen (15) storey towers to the south east and south west corners of the site fronting Cross Street.
- A luxury five star boutique hotel, comprising sixty six (66) Hotel Rooms, situated within the podium levels;
- Retail uses at the ground floor level of 1,397m². This is envisaged to include a mix of high quality specialty retail, food and café/restaurant tenancies.
- A hotel bar/restaurant situated at level 4.
- A pool situated on level 4 for use by hotel guests, residents and their visitors.
- A total of 39 x hotel residences to be situated in the podium and in two towers, comprising 8 x 1 bedroom, 12 x bedroom and 19 x 3 bedroom apartments to be located within the tower elements;
- A publicly accessible piazza with through site links from Cross Street (South) through to the Georges Centre at 45 Cross Street (West), Transvaal Avenue (East) and Galbraith Walkway (North).

Future applications for the proposed redevelopment include:

- Strata and stratum subdivision with easements for public access;
- Hotel fit-out; and
- Retail tenancy fit-outs.

4.3 Architectural drawings

This section of the report describes the proposed development and is based on architectural drawings prepared by Architectus. **Table 3** provides a schedule of architectural drawings that have been referred to in the preparation of this Environmental Assessment prepared by Architectus. All drawings are dated 20 February 2009. Reduced copies of these plans are included at **Appendix A.** A1 sets of architectural drawings are submitted with the development application under separate cover.

Table 3. Architectural drawings

Drawing number	Description	Revision
DA00-00	Cover sheet and drawing list	A
DA00-01	Site analysis plan	A
DA00-03	Site plan	С
DA00-11	Demolition lower basement plan	A
DA00-12	Demolition ground floor plan	A
DA00-13	Demolition ground floor plan	A
DA01-20	Elevated perspective view	A
DA01-21	Hotel entry perspective view	A
DA01-22	Piazza entry perspective view	A
DA01-23	Piazza perspective view 1	A
DA01-24	Piazza perspective view 2	A
DA02-01	Lower basement floor plan	I
DA02-02	Upper basement floor plan	I
DA02-03	Ground floor plan	D
DA02-04	Level 1 floor plan	F
DA02-05	Level 2 floor plan	F
DA02-06	Level 3 floor plan	G
DA02-07	Level 4 floor plan	G
DA02-08	Level 5 floor plan	F
DA02-09	Level 6-12 floor plan	F
DA02-10	Level 13 floor plan	D
DA02-11	Level 14 floor plan (Plant/roof terrace)	D
DA02-12	Roof plan	D
DA03-01	North Elevation	В
DA03-02	South elevation	В
DA03-03	East elevation	В
DA03-04	West elevation	В
DA03-11	Section A-A	D
DA03-12	Section B-B	D
DA03-13	Section C-C	D
DA03-14	Section D-D	D
DA03-21	Detailed section 1-1	Α
DA03-22	Detailed section 2-2	A
DA03-23	Detailed section 3-3	A
DA03-24	Detailed section 4-4	A
DA03-25	Detailed section 5-5	A
DA03-26	Detailed section 6-6	A
DA03-27	Detailed section 7-7	A
DA04-01	Substation details	В
DA04-60	Typical adaptable apartment 1	В
DA04-61	Typical adaptable apartment 2	В
DA04-62	Typical adaptable apartment 3	В

architectus

Drawing number	Description	Revision
DA13-10	Gross floor area (Woollahra LEP)	С
DA13-11	Gross floor area (Woollahra LEP)	С
DA14-01	Shadows – 21 st June 9am	A
DA14-02	Shadows – 21 st June 12pm	A
DA14-03	Shadows – 21 st June 1pm	A
DA14-04	Shadows – 21 st June 2pm	A
DA14-05	Shadows – 21 st June 3pm	A
DA14-11	Shadows – 21 st September 9am	A
DA14-12	Shadows – 21 st September 12pm	A
DA14-13	Shadows – 21 st September 1pm	A
DA14-14	Shadows – 21 st September 2pm	A
DA14-15	Shadows – 21 st September 3pm	A
DA14-21	Shadows – 21 st December 9am	A
DA14-22	Shadows – 21 st December 12pm	A
DA14-23	Shadows – 21 st December 1pm	A
DA14-24	Shadows – 21 st December 2pm	A
DA14-25	Shadows – 21 st December 3pm	A
DA14-31	Shadows – 21 st March 9am	A
DA14-32	Shadows – 21 st March 12pm	A
DA14-33	Shadows – 21 st March 1pm	A
DA14-34	Shadows – 21 st March 2pm	A
DA14-35	Shadows – 21 st March 3pm	A
DA15-00	Visual Assessment Key Plan	A
DA15-01	Visual Assessment 1	A
DA15-02	Visual Assessment 2	A
DA15-03	Visual Assessment 3	A
DA15-04	Visual Assessment 4	A
DA15-05	Visual Assessment 5	A
DA15-06	Visual Assessment 6	A
DA15-07	Visual Assessment 7	A
DA15-08	Visual Assessment 8	A
DA15-09	Visual Assessment 9	A
DA15-10	Visual Assessment 10	A
DA15-11	Visual Assessment 11	A
DA15-12	Visual Assessment 12	A
DA15-13	Visual Assessment 13	A
DA15-14	Visual Assessment 14	A
DA15-15	Visual Assessment 15	A
DA16-01	External Finishes	-

4.4 Numerical overview

Table 4 provides a numerical overview of the proposed development.

Table 4. Numerical overview

Site area			3,675m ²
Maximum building height			52.44 metres (RL 55.63 AHD)
Gross Floor Area (GFA)			19,545 m ²
Floor Space Ratio (FSR)			5.32:1
Open space area	Piazza		800m ²
			(22% of site)
Hotel rooms	Hotel rooms		66
Hotel	1 bedroom		8
Residences	2 bedroom		12
	3 bedroom		19
	Total		39
Car parking	Resident	tial	74
	Hotel		33
	Total		107
	Total	On-site	107
		Off-site	32
Service vehicles			
Bicycle parking spaces			30

4.5 Urban Design and Planning objectives and principles

This section of the report outlines the key urban design and planning objectives and principles that form the basis of the Project Application.

Urban Design and Planning objectives

The key objectives that have guided the design are to provide a high quality integrated hotel development with retail and residential uses, which:

- Employs a high level of design and amenity;
- **Demonstrate leadership in ecologically sustainable development** for a mix of uses through energy and water efficiency initiatives;
- Posses **exemplary town centre development** characteristics that will a make a positive contribution to Double Bay by:
 - Opening up the site to provide a **central piazza space with open air entries** to the site's street frontages that will enhance the pedestrian experience along Cross Street and through the site;
 - Promoting a development that will have positive economic benefits for the Double Bay commercial area through employment generation and positive flow on effects to local business;
 - Retention of the existing amount of floor space to ensure a hotel is sustainable and is supported by adequate retail uses and

a mix of hotel residences in an integrated fashion;

- Providing a **better distribution of floor space** providing a finer grain development that opens up the existing enclosed monolithic building;
- Providing a high quality development that is world class and that will attract tourism expenditure to Double Bay and the broader Sydney Region. The retention of the hotel on site has been supported by both Council and the community.
- Manage and mitigate impacts on the amenity of the surrounding area

Urban Design and Planning principles

In order to achieve the urban design and planning objectives of the Project Application, the following principles have guided the Project Application design, as follows:

- Sense of Place
- Meaningful Character
- Quality Built form
- Pedestrians
- Usable Open Space Public & Private
- Mixed Use
- Diversity
- Appropriateness and Context
- High Quality Streets
- Landscape and the Natural Environment
- Sustainability
- Safety
- Privacy and amenity

An explanation of how the proposed redevelopment of the Stamford Plaza Hotel satisfies these Urban Design and Planning principles is provided as follows:

Sense of Place

Create a unique 'sense of place' through excellence in design and delivery.

Urban design should aim to create a 'sense of place' within each project, particularly for large sites within town centres. This will ensure the new development presents as a memorable and important place in its own right as well as contributing to the local context. Each project has the ability to become unique as it responds to the particular context, its use and this can be translated into the sense of place.

A strong sense of place is a fundamental characteristic of Double Bay. The regional context of Eastern Sydney, the Double Bay Town Centre as well as the Cross Street location all contribute to creating a strong sense of place for the proposed development. The proposed development builds on this broader sense of place. When considering the best locations in the world to live, work at and to visit, Double Bay's sense of place is key to its attraction. The Double Bay sense of place is influenced by its proximity to Sydney Harbour, it high quality streetscape and public domain, its vibrant mix of uses and activation of buildings at street level which creates a human scale. The proposed development will make a positive contribution to the Double Bay Town Centre through the proposed mix of uses, high architectural and public domain design and fine grained network of pedestrian links to adjoining properties to improve connectivity to adjoining properties. The retention of a hotel in Double Bay is a desirable inclusion in the project. The design of the hotel with entries from Cross Street and from the piazza space and the activation of the space with retail tenancies is characteristic of the open laneways.

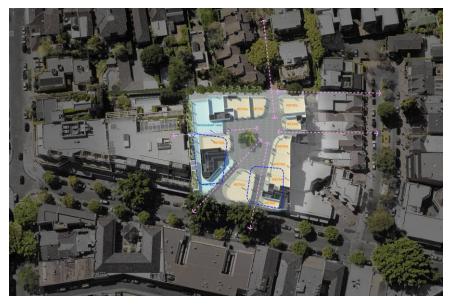


Figure 37. Figure ground image of Double Bay Town Centre

Aerial view of part of the Double Bay Town Centre with the proposed ground floor plan superimposed. This aerial view shows the through site links and publicly accessible piazza space. The retail uses are show shaded yellow. The hotel use with entry and bar/restaurant is shown shaded blue. The location of the two tower forms are show with a dashed blue line.

A Landmark development for a landmark site

Create an exemplary town centre development that reflects the landmark characteristics of the site and its location.

Given the size of the site, the existing floor space ratio and the site's location the site is considered to be a landmark site. The circumstances the site are somewhat of an anomaly and therefore the development proposal must be designed as an exemplary town centre development.

Prominent sites provide opportunities for visually recognisable buildings that visually mark the town centre location and deliver other town centre objectives such as additional open space and open through site connections, as contributions to the network of publicly accessible pedestrian ways throughout Double Bay.

Buildings that are visually prominent should have the highest design quality in the forms of the buildings and in the selection of external materials and finishes.

Meaningful Character

Create a development that is meaningful to the place and community.

Creating a meaningful built 'character' relevant to the site and development is related to understanding the sense of place. A meaningful

character is reflected in the subtle cultural and life style preferences of residents, retailers and visitors. It is also about how to engender a feeling of belonging within a particular development and community.

The character of Double Bay is established, exclusive, leafy with tree lined streets, fine grained and pedestrian oriented. Proximity to the harbour, local parks, as well as Double Bay shops and restaurants also contributes to the feel of the place. The urban design of the development reflects and builds upon this character in the design of the piazza space with multiple connections to surrounding areas, as well as the street and in the building and open spaces.

Appropriateness and Context

Create places which are appropriate and responsive to their context.

The appropriateness of a new urban design to its context is a crucial factor in determining how successfully it will sit in its surroundings. The nature and character of the spaces created need to suit the location and the intended users. A design can blend into the existing urban fabric or deliberately stand out to be noticed as an iconic feature in the urban landscape and both directions can be equally appropriate when all the aspects of the context and project have been well considered.

Quality Built Form

Incorporate highest quality urban design and architectural design.

Design excellence is essential for creating places of the highest quality, and this applies to urban design, building design and landscape design. Built elements of the urban design ground plane such as plazas, street fronts, interfaces with adjacent development, pedestrian links and through roads all require high level attention to detail. Quality materials, detailing, construction and maintenance are also all fundamental to achieving the best results.

Architectus is a multi-disciplinary design based practice that has been highly awarded for excellence in Architectural design, urban design and planning by industry bodies including the Australian Institute of Architects (AIA) and the Planning Institute of Australia (PIA). The landscape architects for the project McGregor + Partners bring to the design team excellence in public domain design and landscape architecture.

The project delivers a landmark response to the site, in recognition of the highly prominent town centre location. The prominence of the site and the height of the proposed tower forms require careful attention to the architectural quality. The proposal is visible from areas within and because of the height of the towers from outside the tower centre and therefore must be a high quality architectural response.

The design configuration and materials proposed for publicly accessible piazza, as well as the location of through site links have been given careful consideration. The scale of the open space at 800m² equates to 22% of the site area. In addition the public seating which have a sculptural design and the large canopy tree will provides shade for people visiting the site. The public space will also have sunlight areas along its eastern side. The through site links follow pedestrian desire lines and enhance existing site connections.

Mixed Use

Ensure there is a mix of uses within the new development where possible and appropriate.

Providing a well considered mix of uses in an area will activate the public domain throughout the day and at night. Different uses will attract a range of people to an area at different times thereby maximising the attractiveness and the value to the community it serves. Generally in urban areas the aim is to create places that are vibrant and active by day, and still well enough populated with pedestrians in the evening and night for safety and amenity.

Residential, retail, commercial, entertainment and recreation uses all draw people through an area at different times of the day and night, and together create a 24 hour economy. Not all developments can include all uses but a careful needs analysis of the local area can identify opportunities which could be included in the development or be assisted to establish nearby, and would be successful as well as being an asset to the community. Financially sustainable developments with the right mix of uses can be catalysts for urban renewal and sustain employment for long term success which potentially flow on to the surrounding area.

The proposed mix of hotel, retail and residential uses are complementary to the role that Double Bay plays in the East subregion of Sydney. There is a recognised shortage of quality hotels in eastern Sydney, however the existing hotel is struggling to sustain its capacity and is in decline. Furthermore Double Bay retail precinct has been adversely affected by the regional shopping centre at Bondi Junction. The addition of new high quality specialty shops, cafes and restaurants on the northern edge of the town centre can enliven this part of Double Bay and be a catalyst for renewal. The inclusion of residential uses will provide for additional residents to live in the Double Bay town centre which is desirable.

The potential for the proposed mix of uses to renew, enliven and add to the vitality of Double Bay is supported by retail and economic specialist's HillPDA, who prepared a recent study of the Double Bay Town Centre for Woollahra Council.

Diversity

Provide diversity to add interest and complexity to the urban environment.

Providing a series of changing experiences along a pedestrian route or around a piazza space can add significantly to the enjoyment of the space. As well as appealing to a wider range of people, as every community is diverse in its character and needs, diversity provides stimulus to the senses. Not only can the visual landscape change, but sounds and smells can also vary. Spaces can be enclosed then open up as a person moves through a particular development or neighbourhood. Diversity adds richness to life experiences.

A signature restaurant is located of the north western corner of the piazza space. Cafes, delis and providores are also envisaged to surround the piazza. High quality retail fit outs will be sought to provide a visually stimulating shopping experience, which builds on the outdoor and open characteristics of the town centre.

Pedestrian access

Create an urban environment where the pedestrian is prioritised.

Optimising pedestrian access where possible means promoting the ability to be able to move through a place easily and avoiding creating urban barriers which break down the fine grained urban environment so admired in established urban centres such as Double Bay. The attractiveness of Double Bay is in the fine grained network of streets and laneways, which are open air and provide interesting meandering opportunities for shoppers. The fine grained pedestrian structure of the town centre and the highly permeable characteristics provide a pedestrian focus for the development.

Figure 38 shows the ground floor plan of the proposed development. The retail uses will include a complementary mix of specialty retail as well as food premise such as delis and providores. Also at ground level is a restaurant, which will be associated with the hotel use but will be open to the public. Access through the Georges Centre will remain between the retail entry and the restaurant/bar. The subdivision of the retail tenancies in indicative only and will be subject to future applications.

Pedestrian links are clear and obvious and the publically accessible areas and entries are clearly distinguishable from the private and residential, hotel and retail entries. Each of these private use entries is distinguishable for pedestrians.



Figure 38. Ground floor plan

Usable Open Space – Public & Private

Create a highly usable and versatile open space network.

It is essential when designing any open space, whether within the public or private realm, that it be highly useful and usable. This involves designing the space with an understanding of how the space will be used in mind, and accommodating that in the best possible way. Well designed spaces should be flexible and adaptable as demand and needs can change over time.

The provision of an 800m² piazza will provide a space that is desirable for a diverse range of users. This generous open central area seeks to allow maximum solar access to the space. The permanent sculptural seating elements and temporary restaurant and cafe tables are to be strategically located not to inhibit pedestrian access and site lines.

The open space is designed to be accessible and usable by those who are less mobile or have special needs. The piazza space will have good amenity afforded through solar access. The height of the building podium surrounding the space will screen undesirable wide effects from the south and allowing for desirable north easterly breezes. The design of the space and the diversity of uses in the buildings surrounding it will optimise its safety. be a safe place during the day and at night. A large canopy tree is proposed at the centre of the piazza space that will provide shade and also soften of the built form.

Key components of the public realm are the spaces which connect other places and spaces. Best practice urban design looks to define and enhance these linkages across sites and through neighbourhoods. These connections must have amenity and be safe. They should also be legible and attractive in their own right in order to draw people through the site, contributing to the permeability of the area.

Through site links in five directions are provided, which build on and enhance existing connections and will be desirable spaces for pedestrians to meet and walk thorough.



Figure 39. Artist's impression of the proposed piazza space

High Quality Streetscapes

Provide well connected networks of high amenity, pedestrian friendly streets.

The design of streets vitally affects the urban character of the neighbourhood. The first consideration when designing quality streetscapes is to design street networks which are well connected and legible. Double Bay has a well connected street network of primary streets, secondary streets and laneways. The proposal seeks to build on this established urban structure.

Design pedestrian friendly streets incorporates generous footpaths, street trees, coordinated street furniture and adequate lighting. Pedestrian amenity is improved with shelter, shade and places to sit and rest comfortably. In urban centres streets should also be provided with awnings for shelter, frequent safe pedestrian crossings and traffic calming measures.

Streets in commercial and retail areas should be designed to be active, well populated, streetscapes with pedestrians and visitors to local businesses providing an attractive level of activity to the street in the day and evening. The careful location of a wide range of uses in an area can assist in making streets active over a longer part of the day and night.

All streets, like other public spaces, should be designed with 'passive surveillance' from surrounding buildings and areas which, along with the activity, will improve the safety of the street. In Cross Street it is desirable to create a strong street wall of 5 storeys in height to continue the precedent set by adjoining developments to the west.

The development will retain the existing street trees along the Cross Street frontage which provide shade for pedestrians and assist in softening the bulk and scale of the lower podium levels of the development. The footpath and the pavement entry points to the central piazza space will be upgraded to be consistent with the Double Bay town centre public domain improvements program. Street and pedestrian amenity and safety will be further improved through the removal of the existing vehicular entry to the site. Pedestrian access through and around the site will be retained and enhanced. A direct and legible pedestrian link will be created from Cross Street to the laneway connection to William Street.

The architectural design along the Cross Street frontage accords with the Double Bay DCP by creating a 5 storey street wall as a podium to the two tower forms. The contemporary architectural response with strong vertical and horizontal articulation in the podium punctuated by the vertical recess which reinforces the north-south through site link.

The proposed podium continues the strong street wall alignment of the northern side of Cross Street. The tower forms appear separated from the podium by a transition level of different external sun shade materials. The towers forms are also setback by differing degrees from the Cross Street frontage so that looking along Cross Street from the East and West will appear as separate forms. **Figure 40** shows the 3D view of the development from the corner of Cross Street and Bay Street.

090320kf-C05_REPT_Environmental Assessment_Final



Figure 40. Cross Street streetscape The Cross Street Streetscape will remain the main frontage to the site. Ground level retail uses will provide high quality retail uses and activation along the street frontage. The pedestrian entries for residents of the apartments are located off the piazza space



Figure 41. Graphic artist's impression of the Cross Street frontage The main entry to the hotel from Cross Street provides a distinctive address for the hotel. The entry is via the Cross Street frontage and forms part of the new pedestrian network of through site links on the site. The entry is an open welcoming address to the hotel and to the public piazza space and new retail precinct on the site.

090320kf-C05_REPT_Environmental Assessment_Final

architectus



Figure 42. 3D elevation

The tower forms above Level 5 use a terracotta façade and screen system. This will give the towers a more solid appearance which is characteristic of some buildings in Double Bay. Glazing is incorporated with external shadowing to provide a contemporary mix of materials. The towers read as distinct forms from the Cross Street Streetscape.

Landscape and the Natural Environment

Provide high quality landscaping throughout the project, and retain and provide significant trees where ever possible.

Significant trees and quality landscaping within the built environment have a major impact on the character of a place. Established trees are a valuable asset which can give a feeling of permanence and establishment to an area. The significant trees in the Cross Street frontage will be retained and protected.

Trees also contribute significantly to the amenity of the public realm. They can provide shade in summer and attract birds. Deciduous trees can add seasonal colour and allow through welcome sunshine in the cooler winter months.

The site is located within a dense town centre environment. The proposal to retain the existing basement levels will avoid the need to major excavation works. The urban character of the site has been reflected in the landscape design and the election of planting species. The plantings selected by McGregor + Partners Landscape Architects is derived from native and locally endemic species to enhance biodiversity. The design of the piazza space incorporates a large canopy tree for shade.



Figure 43. Existing trees on Cross Street Existing significant trees along the Cross Street frontage are to be retained and protected. These trees are important to the Cross Street streetscape. The large fig trees soften the appearance of the existing hotel building in the streetscape.



Figure 44. Existing trees on Cross Street frontage to be retained The existing trees in Cross Street fronting the site are to be retained. These trees will be protected during demolition and construction phases. The street trees are important to the Cross Street streetscape, softening the appearance of buildings and providing shade for pedestrians.

Sustainability

Demand environmentally, socially and financially sustainable urban design solutions.

Environmental sustainability involves a wide range of specialist areas including water sensitive urban design, alternative power sources, recycling options and the embodied energy of materials. High quality projects should demonstrate leadership in environmental sustainability.

The proposed development provides a strong environment performance meeting and exceeding minimal standards.

Safety

Provide safe and secure places to live, socialise, work and recreate.

Providing 'passive surveillance' is a well recognised method of improving safety and the sense of security in public areas whether it is in plazas, streets or parks. Adjacent buildings should locate habitable rooms with windows overlooking the public areas and parks should be bordered by through streets to provide activity and so the people in the cars can provide the passive surveillance.

Keeping pedestrians and vehicular traffic clearly separated is another important element in providing safe public areas. Provide legible and high quality pedestrian networks to remove any confusion about where people can safely walk or drive with care. Footpaths should be wide enough to accommodate two people passing each other with prams or in wheel chairs. Traffic should be calmed where there are high pedestrian movements.

architectus



Figure 45. Activation of new publicly accessible open space

View of the piazza space close to the entry of the ground level restaurant looking east. The piazza space is be publicly accessible 24 hours a day. The space is activated on all sides with retail uses. Entries to residential properties are also located off the piazza space. Hotel residences and hotel suites face into the public piazza space and through site links providing passive surveillance.

Privacy and amenity

Ensure privacy is provided where appropriate.

Privacy and security are important in both the private and public realm but privacy is usually more associated with the former. Careful design ensures that the privacy of residents is not compromised by being overlooked by public areas or neighbours. Consideration should also be given to the desired level of privacy at the entries of residences.

Privacy for adjoining residential is also important so as not to create undesirable overlooking opportunities. Where potential overlooking opportunities exist additional screening has been incorporated along the site's northern boundary with a new screen fence and additional landscaping.

The restaurant, bar and pool on the northern side of the site are designed to minimise overlooking opportunities to the North and West. These hotel and resident facilities are setback from the northern parapet on Level 4. The restaurant and bar is enclosed to the West and North to minimise acoustic impacts. Moreover time limitations are proposed to restrict late night use to maintain the amenity of adjoining residents.



Figure 46. Relationship to surrounding properties

3D artist's impression looking South shows the proximity of the proposal to the residential properties to the north. The proposal includes residential apartments at level 1 and 2. The Level 4 bar restaurant is setback from the northern boundary with landscape planters. The swimming pool on the Level 3 roof terrace is also setback and restricts hotel guests and residents using this pool from accessing the northern edge of the roof terrace. The island in the middle of the swimming pool is accessible for seating, which is well setback from the northern boundary. In additional to these design principles to maintain privacy between residents. Source: McGregor + Partners Landscape Architects.

4.6 Proposed uses

The proposed mixed use development comprises the following uses:

- **Hotel** on ground levels, levels 1, 2, 3 and 4 with a bar and restaurant on Level 4;
- Retail uses including specialty retail, delis/providores, cafes and restaurants on the ground floor level; and
- Hotel residences on Levels 1-14

These uses are illustrates in Figure 47 and described in detail below:



Figure 47. Cross section of the proposal indicating the different uses The three uses shown comprise retail (yellow) hotel (blue) and residential (pink).

Hotel

The hotel will be a boutique type hotel of 5 star quality comprising 66 rooms over 3 levels and a restaurant and bar and swimming pool at Level 4. The existing hotel on the site is closing in March 2009, which means there will be no tourism employment or flow on effects from tourism expenditure on the site. The hotel is a desirable use for the site, however needs to be in a more sustainable size and configuration is proposed.

The hotel fit out is not the subject of this Project Application. This will be sought separately.

Retail

The development includes 1395m2 of retail floor space comprising:

- Ground floor specialty retail tenancies of various sizes; and
- A signature restaurant also at ground level.

Specialist retail consultants, BC Associates Pty Ltd have reviewed the proposed development (Report at **Appendix W**) and provide the following comments on the proposed configuration of retail uses on the site:

"The retail layout and concept is consequently based upon sound established principles and detailed consideration is currently being given to the appropriate mix and configuration of retail concepts to be targeted".

Accordingly the retail strategy for the site as outlined herein and in the concept plans is the most suitable for the site and provides for the best possible enhancement to the immediate retail environment and the overall Double Bay character and profile".

Retail tenancy fit outs are not the subject of this Project Application. This will be sought separately. The subdivision of retail tenancies shown on the floor plans for the project application is indicatively only.

Hotel residences

The hotel residences range in type and size between 1 bedroom residences in the levels 1, 2 and 3 to large 3 bedroom residences in the upper levels of the development. The concept of hotel residences was explained with precedents in detailed in the Clause 6 Request/Preliminary Environmental Assessment. The concept provides for residential apartments to be serviced by the hotel. For instance residents can have access to the use of the swimming pool, spa facilities, hotel laundry services and the restaurant/bar at Level 4.

Permissibility of proposed uses

The proposed mix of uses is permissible under Clause 8 of the Woollahra Local Environmental Plan (WLEP 1995) the site is zoned 3(a) General Business "A" Zone.

The description of the 3(a) General Business Zone given in Clause 8 of the WLEP 1995 is as follows

"The General Business "A" Zone is a broad commercial zone allowing a diversity of commercial and retail uses. As an urban consolidation initiative and to add vitality to commercial centres, dwellings attached to commercial and retail buildings (referred to in this plan as mixed development) are also permissible. This zone applies largely within the main business centres of Double Bay, Edgecliff and Rose Bay".

The proposal is consistent with the zone description in that it has incorporated commercial (hotel), retail and residential uses in an integrated mixed-useway.

The relevant objectives of the zone are:

(a) "to define the main commercial areas within the Council's area which provide for a wide range of retail and commercial uses, ancillary light industrial uses, entertainment, social and recreational uses, tourist accommodation and residential development mixed with nonresidential uses,

- (b) to encourage employment generating uses in accessible localities,
- (c) to allow for residential development in the form of mixed development so as to encourage urban consolidation and promote the vitality of business centres, and
- (d) to control the physical and functional characteristics of business centres in order to minimise their impact on neighbouring residential lands."

The proposal is consistent with the objectives of the 3(a) General Business Zone. The mixed use nature of the proposal with a hotel, retail and hotel residences supports the wide range of uses in the Double Bay commercial centre. The retention of hotel accommodation use of the site is highly desirable within this prominent harbour side destination. The proposal will result in an additional 162 jobs being created on site of which 103 jobs are tourism related. The inclusion of an additional 39 residential apartments supports the principles of urban consolidation by facilitating the use of existing urban serviced more efficiently.

The design of the proposal in terms of the scale and form and use of the building has been carefully considered and additional measures introduced to minimise localised environmental impacts following community consultation.

4.7 Floor space and density

This section of the Environmental Assessment describes the density of the project providing a level by level calculation of gross floor area, calculated in accordance with the Woollahra Council definition of gross floor area under the Woollahra LEP 1995. Refer to **Table 6**. The definition of gross floor area under Schedule 1 of the Woollahra LEP 1995 is:

"gross floor area, in relation to a building, means the sum of the areas of each level of the building, including:

- (a) the thickness of the external walls, and
- (b) the area of voids, staircases and lift shafts, counted at each level, and
- (c) that part of the area of balconies and verandahs which is in excess of 20m² per dwelling in the case of a building used or intended for use for residential purposes, or in excess of 10% of the site area in the case of a building used or intended for use for non-residential purposes, and
- (d) any other areas of the building where the height of those areas exceeds 1.5 metres above ground level,

and excluding:

- (e) car parking to meet the requirements of the Council and any vehicular access to the car park, and
- (f) any area used or intended for use as a car parking station, and
- (g) uncovered roof terraces, and
- (h) any area used or intended for use as an arcade".

For comparison purposes a level-by-level description of the gross floor

area calculated in accordance with the above GFA definition of the existing building by Project Surveyors is provided in **Table 5**. Appendix S includes advice from Project Surveyors that confirms the **Gross Floor** Area of the existing building is 19,545m².

Level	Gross Floor Area (m ²)
Basement Level 02	135
Basement Level 01	1145
Ground Floor Level	2495
Level 1	3375
Mezzanine	3375
Level 2	2095
Level 3	2035
Level 4	2035
Level 5	2035
Roof	535
Balconies	285
Total	19,545

Table 5. Existing Gross Floor AreaSource: Project Surveyors

Table 6. Proposed Gross Floor Area

Level	Gross Floor Area (m ²)
Basement Level 02	947
Basement Level 01	1419
Ground Floor Level	2106
Level 1	2328
Level 2	2328
Level 3	1880
Level 4	1419
Level 5	894
Level 6	729
Level 7	729
Level 8	729
Level 9	729
Level 10	729
Level 11	729
Level 12	729
Level 13	729
Level 14	389
Total	19,545

4.8 Building height

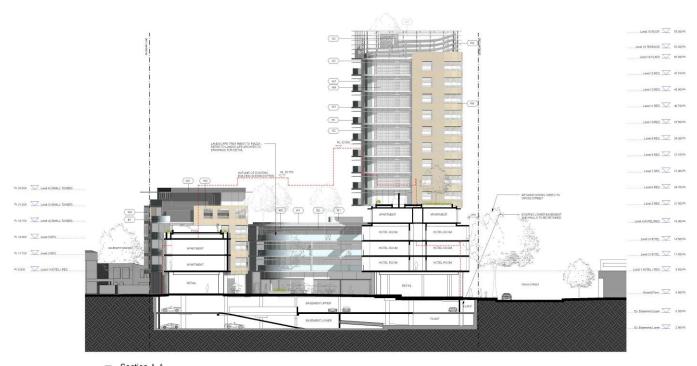
The proposal varies in height from 3 storeys to 15 storeys, with an open piazza space at ground level, leaving 21% of the site with no building height. The maximum height of the development is 52.44 metres (RL 55.65 AHD) measured to the top most point of the screen around the plant room on the roof of both towers.

The podium ranges in height from 3 to 5 storeys with the 3 storey element at the central northern part of the site. The north eastern corner of the site has a height of 5 storeys (RL 24.5 AHD) which is lower than the height of the existing building.

Error! Reference source not found. provides a section through the site looking East. The section shows the line of the existing building outlined in red. The proposed development at a maximum of 52.44 metres (RL 55.65 AHD) is less than twice the maximum height of the existing building at 29.77m (RL 32.98 AHD).

The Woollahra LEP does not identify a maximum height limit for the site. However, the Double Bay DCP 2002 Control Drawings in Sections 5.5 to 5.11 indicate the maximum permissible height of the site as being between 7.5m (podium) with 16.5m elements, which is less than the height of the existing building.

An analysis of the height, bulk and scale of the proposed development is provided at **Section 6**.



Section A-A

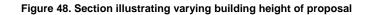




Figure 49. Materials and finishes board A large A1 version of the materials and finishes sample board with physical samples of selected materials is submitted with the Environmental Assessment under separate cover.

4.9 Building materials and finishes

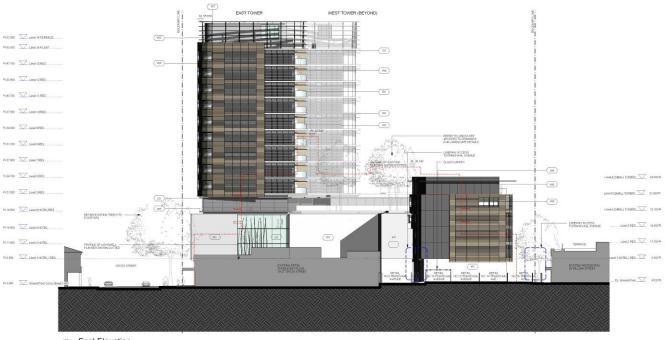
The proposed materials and finishes are illustrates on the coloured elevation drawings included at **Appendix A** and the accompanying materials and finishes sample boards. A simple and refined palette of materials and colours is proposed that will provide visual interest and fine quality detailing to effectively articulate each of the building facades.

The selection of materials and finishes is generally consistent with the range of contemporary materials being used in other recent developments at Double Bay.

The external materials selected includes:

- Concrete with opaque mineral paint finish for horizontal floor slabs and vertical blade walls;
- Aluminium metal cladding
- Modular terracotta façade/screen system
- Aluminium façade screen system
- Zinc cladding
- Alluvium light shelf
- Frameless glazing
- Aluminium framed glazing
- Aluminium framed glazing suite with external retractable blind system
- Frameless glass balustrade

Figure 48 shows the coloured East Elevation as an example of the mix of materials and finishes.



East Elevation

Figure 50. East elevation

The Eastern Elevation with a mix of modular terracotta zinc cladding, painted concrete, aluminium screens and glazing, provides an appropriate mix of solid and light weight materials.

090320kf-C05_REPT_Environmental Assessment_Final The proposal is a contemporary architectural response with materials and finishes selected to complement the architectural response. There are a number of modern architectural designed buildings in Double Bay with large amounts of glazing and painted concrete in façade treatments. **Figure 50** and **Figure 51** shows a recent development on New South Head Road, which displays a highly modern design. The proposal provides a contemporary response to its town centre location which is not out of character with the architecture expression of building in Double Bay.



Figure 51. View of the contemporary development in Double Bay



Figure 52. Elevated view of New South Head Road development

4.10 Vehicular access

Existing vehicular access to the basement car parking area is via a right of way driveway through the adjacent Georges Centre to the west of the site at 45 Cross Street, Double Bay.

The proposal seeks to retain existing vehicle access arrangements.

4.11 Car parking

It is proposed to provide a total of 107 spaces over two levels. The upper level parking area will generally be reserved for residential tenant parking, within a secured area and some visitor parking, while the lower basement while containing some residential parking spaces will predominately operate as a valet car park for hotel guests. Parking for the retail tenancies will not be accommodated in the development.

The development proposes:

- 74 car spaces for residents and their visitors
- 33 car spaces for the hotel

Table 7 provides a breakdown of the required and proposed car parking for the development.

A detailed review of the proposed parking arrangements addressing the Director General's Requirements is provided at **Section 6** of this report.

Type of development	DCP Controls Spaces per unit/Per 100m ² GFA	Floor Space (m²)/No. of Rooms/Units	Spaces required as per DCP control	Spaces provided
Retail	3.5 spaces per 100m ² GFA	1,081m²	38	0
Restaurant	15 spaces per 100m ² GFA	295m ²	44	0
Retail/Restaurant sub-total	-	-	82	0
Hotel	1 space per 2 rooms	66 rooms	33	33
Residential 1 bed	0.5 spaces per unit	8 units	4	8
Residential 2 bed	1 spaces per unit	12 units	12	20
Residential 3 bed	1.5 spaces per unit	19 units	29	38
Residential (visitors)	1 space per 5 units	39 units	8	8
Residential sub-total	-	-	53	74
TOTAL			168	107
SUB TOTAL (minus parking credit of 50 spaces)			118	
Shortfall in Retail/Restaurant Parking Provision			82	
Total shortfall in Retail/Restaurant Parking Provision (minus parking credit of 50 spaces)			32	

Table 7. Parking requirements and provision

4.12 Landscape design

Introduction

Landscape Plans and a Landscape Design report have been prepared by McGregor + Partners Landscape Architects. The proposed landscape design will complement the Town Centre locality in terms of orientation of open space, climate control, enhancement of the pedestrian experience and plant species and materials selection. The landscape design complements the architectural design of the building and the function of the publicly accessible, common and private spaces within the site contributing to the aesthetic approach and quality of the external areas within the site.

Landscape architectural drawings

Table 8 provides a list of landscape architectural drawings for the 33Cross Street Double Bay development. Refer to **Appendix B** for A3landscape drawings.

Table 8. Landscape Architectural drawings

Drawing number	Description	Date
SK 01	Cover page	February 2009
SK 02 Rev. E	Ground Floor Level	February 2009
SK 03 Rev. E	Pool Level 4	February 2009
SK 04 Rev. D	Level 5/14	February 2009
SK 05 Rev. E	Views	February 2009
SK 06 Rev. D	Ground Floor Level	February 2009

Landscape design approach

The design approach is described in the Landscape Design Report at **Appendix B** as follows:

"The design philosophy for the landscape architecture of the project encompasses expression of the existing and proposed cultural heritage of the site and its context. The refined nature of the area and the proposed development is to be reflected in the landscape architecture.

The experience of the landscape has been carefully considered to support a diversity of spaces that provide a range of amenity. The union of inside and outside, landscape and architecture has been carefully considered and integrated throughout the development.

The Landscape Architectural approach can be summarised into the following key points:

- Satisfy all statutory requirements.
- Add more trees and vegetation to the site than currently exists.
- Retain visible presence and public interaction with the site through creation of a central retail precinct visible to Cross Street and linking with pedestrian access routes.
- Increase social interaction and amenity for pedestrians and local residents. Pedestrian networks to encourage the use of spaces intended for public access.
- Provide maximum connections between the internal spaces and the communal open spaces.
- Provide an improved street interface.
- Provide improved pedestrian safety and amenity to the street.
- Use planting to control shade and light.
- Establish green roofs to reduce the urban heat island effect and reduce the visual mass of the built form.
- Establish green roofs to help re-link the site with its original ecological community through indigenous planting.
- Link internal and external spaces through creation of 'outdoor rooms'.
- Use planting to control privacy with adjoining residences.
- Utilise planting to control thermal access and improve thermal performance of buildings.
- Increase the area of deep soil planting.
- Provide spaces that satisfy both the users, residents and the local community.
- Use of high quality, robust materials and finishes with minimised embodied energy.
- Use of roof tank water for irrigation, water features and pool topup.
- Preference for Australian materials, eg stone pavements and features.
- Use of indigenous, native and water hardy plant species".

Streetscape

The streetscape design approach to the landscape architecture for the project is described in the landscape design report as follows:

"The development will retain the existing street trees. The footpath and the pavement entry points to the central piazza space will be upgraded in the 'Double Bay pattern' (SK02). Street and pedestrian amenity and safety will be further improved through the removal of the existing vehicular entry to the site. The legibility of the streetscape and sight lines will be improved over the previous land use. Pedestrian access through and around the site will be retained and enhanced. A direct and legible pedestrian link will be created from Cross Street to the laneway connection to William Street".

Piazza open space

The design of the publicly accessible piazza space is described in the landscape design report as follows:

"The development contains a central Piazza retail space designed to encourage public use and activation. It is envisioned that retail shops, cafes and restaurants will occupy this space. A generous open central area seeks to allow maximum solar access to the space. It is envisioned that restaurant and cafe tables will be strategically located not to inhibit pedestrian access and site lines (SK02). The careful positioning of a native, deciduous Melia azederach provides ideal conditions year-round through metering sun and shade.

High quality stone is used throughout this area in the pavement and the sculptural stone planters and water features, which also act as seating elements. The history of the site will be expressed through the sculptural sound and light installations (rings) proposed in the piazza. The intention of the lighting is to project strategic light onto the ground plane, which also increases viability and safety of the space after dark".

Figure 53 illustrates the landscape design of the ground floor level.



Figure 53. 3D Artist's impression of piazza open space Source: McGregor + Partners Landscape Architects

architectus



Figure 54. Ground floor landscape plan Source: McGregor + Partners Landscape Architects Vertical garden

The design for the vertical garden on the western side of the site as described in the landscape design report as follows:

"The western site boundary incorporates a vertical garden in the light well space between the proposed building and the existing neighbouring properties. Climbing plants will grow onto a conical lightweight wire system providing amenity and privacy (SK02)".



Figure 55. 3D Artist's impression of the Level 5 roof terrace The roof terrace between the tower forms provides small trees, shrubs and ground covers and terrace space for seating. Source: McGregor + Partners Landscape Architects

Roof gardens

The design for the roof terraces on Level 5 are described in the landscape design report as follows:

"The proposed development contains several green roof areas, detailed in SK03 & SK04. These areas propose to reinstate native and local flora including trees, shrubs, groundcovers, climbers etc once indigenous to the area before European settlement. A greenwall is also proposed on the central roof garden on level five (SK04). These roof and vertical gardens provide a range of benefits, including increased privacy between residents and neighbours, reduced urban heat effect, improved thermal performance to spaces under the gardens, and reduction of the appearance of built form. These roofs will be constructed with lightweight soils and appropriate waterproofing and drainage systems, with 300mm lightweight soil depth provided for shrub and grass planting and 800mm for trees".



Figure 56. Level 5 roof terraces Source: McGregor + Partners Landscape Architects

Pool deck

The design of the Level 4 roof terraces including pool deck is described in the landscape design report as follows:

"The proposed wet-edge pool (SK03) offers a spectacular experience to residents and hotel guests. Surrounded by planting, the wet-edge pool is seamlessly integrated in the green-roof space. Positioned as an island, the pool is accessed via a bridge, through a glazed balustrade acting as a pool fence. The island deck floats over the pool water and two mature Cupaniopsis anacardiodies create a canopy that provides shade and amenity".

Figure 56 illustrates the landscape design for the Level 4 roof terraces.



Figure 57. Landscape terrace Level 4 Source: McGregor + Partners Landscape Architects

Materials palette

The materials palette selected for site landscaping is described in the landscape design report as follows:

"The project uses a refined, high quality, minimised materials palette. The landscape architecture compliments this with a minimised palette of high quality materials These include granite and bluestone, crushed sandstone (gravel), terracotta (cladding), steel edges to planting areas and water features. The planting reflects the materials approach using carefully selected species to compliment and contrast the character of the materials. Simple natural materials have been selected to fit harmoniously with the existing site character and proposed architecture".

4.13 **Pedestrian access**

The existing public access arrangements described in Section 2 of this report will need to be amended to reflect the proposed new access arrangements. The pedestrian links through the site and piazza space is proposed to be retained in private ownership however will be publicly accessible 24 hours a day/7 days a week. The level of public access is consistent with best practice urban design principles to providing meaningful additions to the public pedestrian network throughout Double Bay.

These rights of access will form part of an application for strata and stratum subdivision for the proposed development and prior to the occupation of the site the amendments to existing and new easements for rights of public access will be registered on the title of the land.

4.14 Stormwater management

Stormwater drainage concept plans and a report have been prepared by TTW. Refer to Appendix I.

Table 9 provides a list of proposed Stormwater Concept Plans for the
 proposal. A summary report has been prepared by TTW addressing the relevant Director General's Environmental Assessment Requirements (DGRs). The specific DGRs in relation to stormwater management are addressed in Section 6 of this report.

Table 9. Stormwater Concept Plans				
Drawing number	Description	Date		
071496 SKC00 P1	Notes and legend	5 February 2009		
071496 SKC01 P2	Catchment area	4 February 2009		
071496 SKC01 P2	Stormwater Concept Plan	5 February 2009		
071496 SKC02 P2	Erosion and Sediment Control Plan	5 February 2009		
071496 SKC03 P1	Detail Sheet 1	5 February 2009		

Table 0 Stormwater Concept Blanc

4.15 Waste management

An operational waste management has been prepared for the proposed development. Refer to Appendix R. The report, prepared by JD MacDonald Waste Management Consultants explains how waste will be managed for each of the proposed uses on the site. The management solutions for each use are based on the locations of the uses and their proximity to waste storage rooms on site and the number of garbage and recycling bins required.

Space has been allocated for refuse storage and collection areas, for the proposed development at the upper Basement Level. Private contractors will collect general waste on a twice-weekly basis for all uses in the development. All recyclables will be collected on a weekly basis. The collection of waste and recyclables will occur from the loading dock located adjacent to the main refuse storage room at the upper Basement Level.

All waste facilities and equipment are to be designed and constructed in compliance with Woollahra Council Codes, BCA, Australian Standards and Statutory Requirements.

Demolition and construction waste management is addressed in the Draft Construction Management Plan at **Appendix H**. A detailed waste management plan for the demolition and construction phases of the development is to be lodged to the consent authority prior to the commencement of any works on site.

4.16 Building services, BCA and fire safety

Davis Langdon, BCA consultants have assessed the architectural drawings for the proposed development against the Building Code of Australian 2008 in terms of:

- Fire resistance (BCA Section C)
- Access & Egress (BCA Section D)
- Fire Fighting & Smoke Hazard Management (BCA Section E)
- Health & Amenity (BCA Section F)
- Ancillary Provisions (BCA Section G)
- Special Use Buildings (BCA Section H)
- Energy Efficiency (BCA Section J)

In relation to Energy Efficiency, a BCA Section J assessment has been undertaken by Advanced Environmental and has been addressed in terms of ecologically sustainable development, a key issue in the DGRs at **Section 6** of this report.

In summary, the Davis Langdon concludes that the development can readily comply with BCA 2008. Refer to **Appendix Y** for the full BCA assessment report.

5 Regulatory context

The Director General's Requirements requires that the Proponent address the relevant EPIs, policies and guidelines which include planning previsions applicable to the site, including permissibility and the provisions of the following plans and policies:

- SEPP 55, 65, 66, Infrastructure 2007, BASIX 2004;
- Draft East Subregional Metropolitan Strategy;
- Woollahra LEP 1995, Double Bay Centre DCP 2002

The following section outlines the applicable statutory planning instruments and policies of relevance to the application. The DGRs also require the Proponent to address the nature and extent of any noncompliance and to provide justification.

5.1 Metropolitan planning context

Sydney Metropolitan Strategy

The proposal will support the objectives of the Metropolitan Strategy and East Subregional Strategy as it:

- Provides additional retail uses to compliment Double Bay;
- Provides additional residential dwellings;
- Contributes to a 24 hour town centre; and
- Maintains a hotel in a desirable Sydney Harbour side destination.

The Metro Strategy provides a target of 60-70% of new dwellings to be located within existing centres. Double Bay is located in close proximity to Central Sydney and is considered to be an appropriate location for additional housing with increased densities due to its access to existing urban services and its proximity to open space, amenities, services and public transport including the eastern suburbs railway line.

Draft East Subregional Strategy

The East Subregional strategy identifies Double Bay as a town centre and forms part of the Woollahra Local Government Area. The strategy states that:

"Double Bay contains a mix of retail, commercial, service and residential uses. The retail activity is characterised by small-scale specialty retailing concentrated between Knox and Cross Streets, and along New South Head Road, Bay Street and Cross Streets. The expansion of retailing at Bondi Junction in recent years has impacted on the Double Bay Centre".

Source: The Sydney Metro East Subregional Strategy page 50.

The proposal will provide 1397m² of retail floorspace at the ground floor including the restaurant. The level 4 hotel restaurant comprises 295m², with 39 residential apartments and 66 hotel rooms. The proposed development will play an important role in re-vitalising the Double Bay centre, through the provision of high quality retail floorspace, in a high quality development can assist in reinstating Double Bay as a high end retail centre.

The East Subregional strategy provides that Woollahra LGA has an employment capacity target of an additional 300 jobs in the area by 2031. The proposal will provide employment opportunities for 162 people, which in turn will help Woollahra LGA meet its employment capacity targets. The East Subregional Strategy identifies the need for increasing

residential densities in Centres, ranging from Neighbourhoods to Major Centres, with good public transport; this will help to create more vibrant places with greater housing opportunity. The East has a target of 20,000 new dwellings by 2031; with Waverley having a dwelling target of 2200 additional dwellings by 2031.

The Strategy encourages the provision of a mix of housing, particularly providing for different types of seniors living accommodation and aged care facilities. The East Subregion is expected to increase the mix of housing types, especially in centres with good accessibility which can support higher density forms of residential development.

The proposal will increase residential densities in the Double Bay Town Centre which will assist in improving the vibrancy of the area. Additionally, the hotel residences will offer a new form of serviced accommodation which is currently unavailable. This will provide added housing choice for the aging population by providing a type of suitable accommodation that offers assistance particularly by providing aid with the labour intensive household tasks, as provided through the services of the hotel and which will allow an elderly resident to age in a comfortable and convenient environment.

Double Bay is readily serviced by bus, rail network (Edgecliff station) and ferry. Therefore making it a highly accessible place to live.

Double Bay is identified as a town centre under the East Subregional Strategy with a mix of small scale specialty retail concentrated between Knox and Cross Streets and along New South Head Road, noting also:

"The expansion of retail at Bondi Junction in recent years has impacted on the Double Bay centre. Edgecliff provides local services and is focused on the transport interchange and small shopping centre". Source: East Subregional Strategy Page 60

Given the impacts from the proliferation of retail services provided at Bondi Junction, Double Bay will benefit from the increased vibrancy, activity and employment provided by the residential/hotel development.

The Eastern Subregional Strategy encourages high quality and appropriately located civic spaces. The Strategy States that:

"Urban Civic Space, such as town squares, streets and boulevards and other pedestrianised areas are an important part of the urban environment. In planning for future growth of Strategic Centres and smaller local centres there are opportunities to enhance existing and identify new civic space". Source: East Subregional Strategy Page 107.

The proposed public plaza with 1397m² of high quality retail floorspace, will entice quality retail tenants to position themselves within this development. It is considered that the plaza will provide a focal point for an up-market shopping environment, with the vision of attracting high end shoppers to the precinct. Overall, this scheme will contribute to an improvement to the existing retail environment by providing a broader range of quality retail products and services, which Double Bay is currently lacking.

Additionally the public plaza will provide through site links, connecting Cross Street with Transvaal Avenue via two separate laneway accesses, William Street via Galbraith Walkway to the North and to the west of the site is an arcade connection into the Georges Centre.

5.2 State legislation

090320kf-C05_REPT_Environmental Assessment_Final State Environmental Planning Policies address matters of state significance in relation to new development. They can be applied to an entire site or to particular geographical areas, or to particular development types. The SEPPs that are applicable to the proposed development and relevant comments concerning their application are outlined below.

State Environmental Planning Policy (Major Projects)

State Environmental Planning Policy (SEPP): Major Projects provides the criteria that identify the types of projects that are to be determined under Part 3A of the EP&A Act.

Clause 6(1)(a) of State Environmental Planning Policy (SEPP) Major Projects states that major projects are *"Development that in the opinion of the Minister, is development of a kind that is described in Schedule 1 or* 2..."

Clause 17 Tourist, Convention and Entertainment Facilities

Clause 17 of Schedule 1 provides various classes of development that may be considered Part 3A applications if:

17 Tourist, Convention and Entertainment Facilities

Development for the purpose of tourist related facilities, major convention and exhibition facilities or multi use entertainment facilities that:

- d) Has a capital investment value of more than \$100 million, or
- e) Employs 100 or more people, or
- f) Has a capital investment value of more than \$5 million and is located in an environmentally sensitive area of State significance".

The Hill PDA Retail and Economic Impact Assessment calculates the level of employment generated by the development. The following industry ratios have been used:

- 1.23 jobs per hotel room,
- 1.23 jobs for 50% of the 39 proposed
- 1 job per 20sqm of café, restaurant and specialty food floorspace; and
- 1 job per 30sqm of specialty/general retail space.

In accordance with the above ratios, the development will generate the following employment figures:

- Hotel Jobs = 81.2
- Hotel Residences related jobs = **23.4**
- Specialty non food retail (650sqm) = 21.6
- Cafes, Restaurants and Specialty Food = **36.2**

Total Jobs = 162

Hill PDA calculates that the development will generate **162 operational jobs**. This is calculated, by combining the retail jobs generated by tourism with those tourism jobs generated by the hotel function, we can conclude that **103 tourist related jobs** will result from the development within the

Double Bay Town Centre alone.

Comment:

In May 2008, the applicant prepared a Clause 6 report for the Minister for Planning justifying why the project should be considered under Part 3A of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

The Department of Planning considered that the proposed development was considered to meet the non discretionary criteria under Clause 17(b) (as outlined above) of Schedule 1 of SEPP (Major Projects) 2005 and, therefore can be considered as a major project to which Part 3A applies.

As development, although modified from the proposal submitted to the Department of Planning for the Clause 6 application, will generate over 100 tourist related jobs therefore meeting the non discretionary criteria, as stipulated under Clause 17(b) of the *Environmental Planning and Assessment Act.*

SEPP 65 Design Quality of Residential Flat Development

This policy applies to the proposed development as it is defined under the SEPP as a 'residential flat building', in that it meets the criteria of being 'three or more storeys, and consisting of four or more self-contained dwellings'. The table provided below gives a summary of the proposal's consistency with the design quality principles of SEPP 65.

Reference should also be made to the SEPP 65 design verification report included at **Appendix Z** which provides an assurance from Architectus, that the subject proposal has been prepared in accordance with the design principles outlined below and in **Table 10**.

Table 10. SEPP 65 Assessment

SEPP 65 Design Principle	Consistency	Comments
Principle 1: Context Good design responds and contributes to its context. Context can be defined as the key natural and built features of an area. Responding to context involves identifying the desirable elements of a location's current character or, in the case of precincts undergoing a transition, the desired future character as stated in planning and design policies. New buildings will thereby contribute to the quality and identity of the area.	Yes	The proposed development incorporates a three to five storey podium level with a five (5) storey residential tower to the north eastern corner of the site, with the two fifteen (15) storey towers being deliberately positioned to the south west and south eastern corners of the site, fronting Cross Street, a shopping/retail frontage. In order to retain the same amount of floorspace existing on the site and incorporate some public accessible open space by way of a piazza in the centre of the site, some height has been incorporated into the development. It is considered that the public piazza and embellishment of through site linkages is of significant public benefit and contributes to the quality, vibrancy and identity of the area. The fifteen (15) storey towers are considered to be appropriate for a Town Centre mixed use development, by establishing a landmark, high quality, building's in Double Bay.
Principle 2: Scale Good design provides an appropriate scale in terms of the bulk and height that suits the scale of the street and surrounding buildings. Establishing an appropriate scale requires a considered response to the scale of existing development. In precincts undergoing a transition, proposed bulk and height needs to achieve the scale identified for the desired future character of the area.	Yes	It is considered that this development will establish a landmark development for Double Bay Town Centre. The site is the largest existing site in the Double Bay Town Centre with the highest amount of floorspace, therefore is able to accommodate some taller elements of height on the site and also be able to provide public open piazza space at the centre of the site. The options analysis at Section 3 of this report and the visual impact assessment at Appendix C considers the design of the proposal in context to the established building heights in Double Bay and surrounding suburbs.
Principle 3: Built form Good design achieves an appropriate built form for a site and the building's purpose, in terms of building alignments, proportions, building type and the manipulation of building elements. Appropriate built form defines the public domain, contributes to the character of streetscapes and parks, including their views and vistas, and provides internal amenity and outlook.	Yes	The proposal will incorporate a variety of heights and building elements, with the embellishment of through site linkages and creation of a new central public piazza with the provision of retail, restaurant/café space at the ground floor level. The development will re-inforce and extend the Cross Street retail frontage, which will contribute to the character of the retail streetscape. The proposed development is consistent with the specified objectives of built form. Also refer to the 3D views and schedule of external materials and finishes, both of which are included at Appendix A
Principle 4: Density Good design has a density appropriate for the site and its context, in terms of floor space yields (or number of units or residents). Appropriate densities are sustainable and consistent with the existing density in an area or, in precincts undergoing a transition are consistent with the stated desired future density. Sustainable densities respond to the regional context, availability of infrastructure, public transport, community facilities and environmental quality.	Yes	The density of the development is considered to be appropriate for the site (a large town centre site) and its context within the Double Bay Town Centre. The design development proposes a re- distribution of the existing amount of floorspace on the site into an alternative form that will provide a central public piazza at the ground floor level. The development does exceed Woollahra Councils, FSR and Height Controls, however the existing building already exceeds these controls. The density of the development does not compromise amenity of future residents or adjoining properties through the design of the development ensuring that the bulk and height of the development is orientated towards Cross Street and privacy and amenity is maintained.

SEPP 65 Design Principle	Consistency	Comments
Principle 5: Resource, energy and water efficiency Good design makes efficient use of natural resources, energy and water throughout its life cycle, including construction. Sustainability is integral to the design process. Aspects include demolition of existing structures, recycling of materials, selection of appropriate and sustainable materials, adaptability and reuse of buildings, layouts, and built form, passive solar design principals, efficient appliances and mechanical services, soil zones for vegetation and reuse of water.	Yes	The proposal, as presented by this application, is consistent with the design principles of SEPP 65, particularly through the orientation and design of the units (solar access and ventilation), and the choice of materials to reduce heating and cooling costs, the use of recycled water for landscaping, and the selection of appropriate planting/landscaping materials (see Landscape Plan at Appendix B). A comprehensive analysis of the buildings has been undertaken by Advanced Environmental in order to meet the minimum BASIX requirements and solar access. The cross-ventilation, insulation, high-performance glazing, thermally improved frames, window shading, blade walls and thermal massing were used to achieve the desired thermal comfort results (see NatHERS and BASIX certificates contained in the ESD report provided at Appendix D).
Principle 6: Landscape Good design recognises that together landscape and building operate as an integrated and sustainable system, resulting in greater aesthetic quality and amenity for both occupants and the adjoining public domain. Landscape design builds on the existing site's natural and cultural features by co- ordinating water and soil management, solar access, micro-climate, tree canopy and habitat values. It contributes to the positive image and contextual fit of development through respect for streetscape and neighbourhood character, or desired future character. Landscape design should optimise useability, privacy and social opportunity, equitable access and respect for neighbours' amenity, and provide practical establishment and long term management.	Yes	 A detailed landscape plan and report by McGregor and Partners is provided at Appendix B The design philosophy for the landscape architecture of the project has been carefully considered to support a diversity of spaces that provide a range of amenity. Landscaped features have been carefully considered and integrated throughout the development. The landscape architectural approach as stated in the Landscape report is as follows: Add more trees and vegetation to the site Retain visible presence and public interaction with the site through the creation of a central retail precinct visible to Cross Street and linking with pedestrian access routes. Increase social interaction and amenity for pedestrians and local residents. Predestrian networks to encourage the use of spaces intended for public access. Provide maximum connections between the internal spaces and the communal open spaces. Provide an improved street interface. Provide improved pedestrian safety and amenity to the street. Use planting to control shade and light. Establish green roofs to help re-link the site with its original ecological community through indigenous planting. Link internal and external spaces through creation of 'outdoor rooms'. Use planting to control privacy with adjoining residences. Utilise planting to control thermal access and improve the thermal performance of buildings. Increase the area of deep soil planting. Provide spaces that satisfy both the users, residents and the local community. Use of noigh quality, robust materials and finishes with minimised embodied energy. Use of took tawk ater for irrigation, water features and pool top-up. Preference for Australian Materials, eg stone pavements and features.

88

SEPP 65 Design Principle	Consistency	Comments
Principle 7: Amenity Good design provides amenity through the physical, spatial and environmental quality of a development. Optimising amenity requires appropriate room dimensions and shapes, access to sunlight, natural ventilation, visual and acoustic privacy, storage, indoor and outdoor space, efficient layouts and service areas, outlook and ease of access for all age groups and degrees of mobility.	Yes	 The majority of the residential units have been provided with a private open space area (balcony or terrace) that has a configuration and area conducive to recreational use. All residential units have appropriate access to natural ventilation and sunlight. Privacy between balconies and neighbouring properties, particularly Galbraith Walkway, has been carefully considered in terms of overlooking and privacy. The development will adhere to the recommendations of the acoustic consultants will result in compliance with Australian Standards internal noise criteria for living and sleeping areas. The depth of the dwellings has been restricted to maintain good access to natural daylight to all rooms therein, and the taller buildings are situated to the south of the site, to ensure greater solar access to all the residential units and to the landscaped piazza. There is very little possibility of overlooking from balconies or living room windows of dwellings within the development to the windows or balconies of other residential units, with appropriate separation distances and screening provided.
Principle 8: Safety and security Good design optimises safety and security, both internal to the development and for the public domain. This is achieved by maximising overlooking of public and communal spaces while maintaining internal privacy, avoiding dark and non-visible areas, maximising activity on streets, providing clear, safe access points, providing quality public spaces that cater for desired recreational uses, providing lighting appropriate to the location and desired activities, and a clear definition between public and private spaces.	Yes	 The proposal will provide a safe and secure environment for future residents and visitors through the following initiatives: Each building entrance from ground level, is easily identifiable, and allows for surveillance, but does not dominate the view from the street. The publicly accessible piazza at ground level is security controlled with passive surveillance and benefits from passive surveillance above, from, and into, the space. Lighting will be provided around the permitter of the site and within the landscaped piazza, and appropriate lighting will be used throughout the common internal spaces within each building. Access to the development is limited to residents and their visitors through the use of intercom and 'access cards'. Direct access is available from the upper basement car parking areas to the pedestrian foyers, including disabled access. Valet parking will be provided for all hotel guests and retail parking at the lower basement level. The design reflects the principles of Crime Prevention Through Environmental Design (CPTED). The use of CPTED principles within the building design can be seen with respect to the following aspects of the site: Secure car parking areas; Ingress/egress points; Service corridors; Active security measures; and Communal areas including the public piazza, through passive surveillance.

SEPP 65 Design Principle	Consistency	Comments
		 spaces are reasonably close to the relevant lift core to allow for a direct path of travel. The entry areas maximise natural surveillance through high pedestrian visibility and street level visibility. The path of travel from the main entrance on Cross Street, and through the development, is clear. The development will have active surveillance in the form of CCTV. Residential communal areas are only accessible by residents and visitors, with parts of the podium levels accessed by hotel guests. The report considered that the functional planning and the proposed design detailing will provide an environment which is secure for the building's users and will minimise the likelihood of petty crime. The outdoor seating areas in the public piazza and the internal piazza facing residential units will create substantial passive surveillance of the piazza space. The proposal satisfies the four design principles of CPTED, as given in the main body of the report.
Principle 9: Social dimensions and housing affordability Good design responds to the social context and needs of the local community in terms of lifestyles, affordability, and access to social facilities. New developments should optimise the provisions of housing to suit the social mix and needs in the neighbourhood or, in the case of precincts undergoing transition, provide for the desired future community. New developments should address housing affordability by optimising the provision of economic housing choices and providing a mix of housing types to cater for different budgets and housing needs.	Yes	 The proposal incorporates a mix of compatible uses, including residential, hotel and retail. The residential apartments will have the option of obtaining the services of the hotel if they wish. The proposed mix of residential apartments are as follows: 8 x 1 bed 12 x 2 bed 19 x 3 bed 10% percent of the residential units can be adapted for accessibility purposes. A range of housing options are on offer, each providing a high level of amenity. Even through the residential units will be luxury style accommodation, the variation in unit sizes and orientations should result in greater affordability particularly the one bedroom units, reflective of the local market.
Principle 10: Aesthetics Quality aesthetics require the appropriate composition of building elements, textures, materials and colours and reflect the use, internal design and structure of the development. Aesthetics should respond to the environment and context, particularly to the desirable elements of the existing streetscape, or, in precincts undergoing transition, contribute to the desire future character of the area.	Yes	The development is designed with consideration of the surrounding existing characteristics, the characteristics of the site and the view corridor to Double Bay. Appropriate features, colours and finishes have been used to give a simple and modern design that is suited to the site and incorporates curved glazing similar to the development at 376 New South Head Road, Double Bay. The design is crisp and modern, but also presents an appropriate variety of materials and finishes to provide interest. The development is articulated so that there is relief in the elevations (ie. not presenting a solid-wall façade).

NSW Residential Flat Design Code 2002

The NSW Residential Flat Design Code 2002 published by the Department of Planning NSW is part of the package of measures under SEPP 65 which the State Government is using to improve the design quality of residential flat development in NSW.

It is noted that the NSW RFDC 2002 provides design principles and 'rules of thumb' standards; other standards may achieve the design principles. Consequently, a degree of judgement is needed to interpret the NSW RFDC 2002 rules of thumb which apply to a wide range of multi-unit development throughout NSW regardless of local area character.

Table 11. NSW RFDC 2002

Residential Flat Design Code 2002	Compliance	Comments
Site analysis		
Development proposals need to illustrate design decisions, which are based on careful analysis of the site conditions and their relationship to the surrounding context. By describing the physical elements of the locality and the conditions impacting on the site, opportunities and constraints for future residential flat development can be understood and addressed in the design. A written statement explaining how the design of the proposed development has responded to the site analysis must accompany the development application.	Yes	The proposed development has been designed in order to respond to the surrounding existing and future character and conditions of the area and the sites capability. A detailed site analysis drawing is provided within the architectural plans at Appendix A. A detailed design options analysis has been undertaken, exploring a range of opportunities for redistributing the existing amount of floorspace on-site, whilst trying to achieve a large element of open space on-site. The Environmental Assessment provides further details of the site analysis and the design of the building.
Site Configuration		
Deep soil zones Optimise the provision of consolidated deep soil zones within a site. Optimise the extent of deep soil zones beyond the site boundaries by locating them contiguous with the deep soil zones of adjacent properties. Promote landscape health by supporting for a rich variety of vegetation type and size. Increase the permeability of paved areas by limiting the area of paving and/or using pervious paving materials. A minimum of 25% of the open space area of a site should be a deep soil zone; more is desirable. Exceptions may be made in urban areas where sites are built out and there is no capacity for water infiltration. In these instances, stormwater treatment measures must be integrated with the design of the residential flat building.	Yes	McGregor + Partners have provided detailed landscape drawings and a report at Appendix B . There is currently limited landscaping on-site in the form of boundary treatments. The proposal will provide a central landscaped public piazza, a private entertainment area and pool, private courtyards, green roof gardens and vertical gardens. There are currently no existing trees within the site boundary. The plans show that two existing palms (trees 01 and 02) beyond the northern boundary are proposed to be removed and replaced with six <i>tristanopsis laurina</i> as deep soil planting (refer to SK02). A further existing tree (tree 03) is to be retained just beyond the site boundary to the north east of the site. All existing and proposed trees are mapped on the plans.

Residential Flat Design Code 2002	Compliance	Comments
Fences and walls Respond to the identified architectural character for the street and/or the area. Clearly delineate the private and public domain without compromising safety and security. Contribute to the amenity, beauty and useability of private and communal open spaces. Retain and enhance the amenity of the public domain. Select durable materials, which are easily cleaned and graffiti resistant.	Yes	The development proposes to contribute to public amenity by providing a central public piazza in the centre of the site, with open through site linkages from Cross Street through to Transvaal Avenue, Galbraith Walkway through to William Street. The embellishment of the through site linkages will enhance the permeability and functioning of the site to the public, essentially inviting the public to walk through and use the site. The walls proposed are both solid and transparent in nature. It is considered these walls and fences will contribute to the enhancement of the public domain. Materials for walls are durable and can be easily cleaned and maintained.
Landscape design Improve the amenity of open space with landscape design which provides appropriate shade from trees or structures, accessible routes through the space, screening, allows for locating artworks. Contribute to streetscape character and the amenity of the public domain. Improve the energy efficiency and solar efficiency of dwellings and the microclimate of private open spaces. Design landscape that contributes to the site's particular and positive characteristics. Contribute to water and stormwater efficiency by integrating landscape design with water and stormwater management. Provide sufficient depth of soil above paving slabs to enable growth of mature trees. Minimise maintenance by using robust landscape elements.	Yes	A detailed landscape plan and report by Mcgregor + Partners is provided at Appendix B . There is currently little landscaping on-site. The proposal will result in a central landscaped public piazza, courtyards, green roof garden, vertical gardens and landscaped boundary treatments including deep soil planting to the northern boundary. This will greatly improve public amenity and contribute to the character of the area.
Open space Provide communal open space that is appropriate and relevant to the context and the building's setting. Where communal open space is provided, facilitate its use for the desired range of activities. Provide private open space for each apartment capable of enhancing residential amenity. Locate open space to increase the potential for residential amenity. Provide environmental benefits including habitat for native fauna, native vegetation and mature trees, a pleasant microclimate, rainwater percolation and outdoor drying area. The area of communal open space	Yes	The proposal provides a central landscaped public piazza (refer to landscape plans provided in Appendix B) of approximately 800m ² This space is designed to encourage public use and activation. It is envisaged that retail shops, cafes and restaurants will occupy this space. Restaurant and café tables will be strategically located within the piazza, not to inhibit pedestrian access and site lines but to encourage activity of this space. Six (6) out of the thirty nine (39) residential apartments do not provide private open space. However, the majority of the residential apartments have usable private open space in terms of balconies and terraces. All units have access to communal open space on level 4, and the central piazza. A substantial amount of communal open space is provided on-site in terms of the public piazza (800m ²) and the hotel pool/terrace area on level 4, which is also accessible to the residential units. Steyne Park (near Double Bay wharf) is within close proximity of the site, approximately 5 minutes walk away and offers a substantial area of open space.

Residential Flat Design Code 2002	Compliance	Comments
required should generally be at least between 25 and 30% of the site area. Larger sites and brownfield sites may have potential for more than 30%. Where developments are unable to achieve the recommended communal open space, such as those in dense urban areas, they must demonstrate that residential amenity is provided in the form of increased private open space and/or in a contribution to public open space. The minimum recommended area of private open space for each apartment at ground level or similar space on a structure, such as on a podium or carpark, is 25m ² , the minimum preferred dimension in one direction is 4.0m.		
Orientation Plan the site to optimise solar access by positioning and orienting buildings to maximise north facing walls, providing adequate building separation within the development and to adjacent buildings. Select building types or layouts which respond to the streetscape while optimising solar access. Optimise solar access to living spaces and associated private open spaces by orienting them to the north. Detail building elements to modify environmental conditions, as required, to maximise sun access in winter and sun shading in summer.	Yes	Glazing is maximised to the northern, eastern and western façades in order to maximise solar access and natural light, external shading structures are provided predominately to the eastern and western facades. This provides a high level of amenity to building occupants. Balconies are oriented to maximise solar access as far as possible to enhance amenity and solar access to private open space areas.
Planting on structures Design for optimum conditions for plant growth by providing soil depth, soil volume and soil area appropriate to the size of the plants to be established etc. Design planters to support the appropriate soil depth and plant selection. Increase minimum soil depths in accordance with the mix of plants in a planter. In terms of soil provision there is no minimum standard that can be applied to all situations as the requirements vary with the size of plants and trees at maturity. The recommended minimum soil depth standards range from 100- 300mm for turf to 1.3 metre large trees.	Yes	The proposed development contains several green roof areas, detail on the Landscaped Plans provided in Appendix B . These areas proposed to reinstate native and local flora including trees, shrubs, groundcovers, climbers etc. A greenwall is also proposed on the central roof garden on level five. These roof and vertical gardens provide a range of benefits including increased privacy between residents and neighbours, reduced urban heat effect, improved thermal performance to spaces under the gardens and reduction of the appearance of built form. These roofs will be constructed with lightweight soils and appropriate waterproofing and drainage systems, with 300mm lightweight soil depth provided for shrub and grass planting and 800mm for trees.
Stormwater management Reduce the volume impact of stormwater on infrastructure by retaining it on site. Optimise deep soil zones. All	Yes	A Stormwater Management Plan is submitted with the application, the details of which indicate that the site will adequately drain; refer to Appendix I.

Residential Flat Design Code 2002	Compliance	Comments
development must address the potential for deep soil zones.		
On dense urban sites where there is no potential for deep soil zones to contribute to stormwater management, seek alternative solutions.		
Protect stormwater quality by providing for sediment filters and traps etc.		
Reduce the need for expensive sediment trapping techniques by controlling erosion.		
Consider using grey water for site irrigation.		
Site amenity		
Safety Reinforce the development boundary to strengthen the distinction between public and private space. This can be actual or symbolic. Optimise the visibility, functionality and safety of building entrances. Improve the opportunities for casual	Yes	The design of the proposed buildings provides a clear distinction between public (ground floor level piazza), hotel lobby and rooms and private residential at the (upper levels) as well as the hotel facilities (pool and restaurant) at the fourth floor level. Balconies and private open space provide the opportunity for passive surveillance of the street, public domain and internal landscaped areas and open space, reducing the potential risk of crime or unsafe activity. Principal living rooms are also placed adjacent to balconies to increase casual surveillance.
surveillance by orienting living areas with views over public or communal open spaces, where possible. Minimise opportunities for concealment. Control access to the development.		There is minimal opportunity for concealment within the proposed development. The building design avoids inactive or unusable corridors and provides a number of openings to lobbies and circulation areas within each building. Access to the residential component will be appropriately controlle to ensure that only residents, visitors of residents and authorised service personnel have access to these areas.
Visual privacy Locate and orient new development to maximise visual privacy between buildings on site and adjacent buildings. Design building layouts to minimise direct overlooking of rooms and private open spaces adjacent to apartments. Use detailed site and building design elements to increase privacy without compromising access to light and air.	Yes	Minimum separation is provided. Screening is provided on balconies and through landscaping where necessary; windows and balconies are sufficiently offset and separated to avoid any visual intrusion. There will be no direct outlook into internal areas of other dwellings. Separation between the tower forms at 14 metres is less than the required 18 metres for buildings of this height, however screening incorporated to bedroom windows to minimise direct overlooking to opposite living rooms and balconies, which are orientated to the north.
Site access		
Building entry	Yes	Separate entrances are provided for retail/hotel and residential uses, and are separated from the vehicular entry points. Disabled
Improve the presentation of the development to the street (ie. designing the entry as a clearly identifiable element of the building in the street, ground floor apartment entries-where it is desirable to activate the street edge or reinforce a rhythm of entries along a street). Provide as direct a physical and visual connection as possible between the street and the entry. Achieve clear lines of transition		 access has been provided. Vehicular entry and exit is via the existing cross over at 45 Cross Street. The residential entry points provide direct physical and visual entry surrounding the piazza space. Landscaping and barriers ensure that there is a clear line of transition between the public domain, publicly accessible areas, the hotel and residential units. Equal access is provided to all parts of the building through the provision of ramps and lifts that service each level of the building.

Residential Flat Design Code 2002	Compliance	Comments
between the public street, the shared private, circulation spaces and the apartment unit. Ensure equal access for all. Provide safe and secure access. Generally provide separate entries from the street for pedestrians and cars and different uses. Design entries and associated circulation space of an adequate size to allow movement of furniture between public and private spaces. Provide and design mailboxes to be convenient for residents and not to clutter the appearance of the development from the street.		
Parking Determine the appropriate car parking space requirements in relation to proximity to public transport, shopping and recreational facilities, density etc. Limit the number of visitor parking spaces, particularly in small developments. Give preference to underground parking, whenever possible. Where above ground enclosed parking cannot be avoided, ensure the design of the development mitigates any negative impact on streetscape and amenity. Provide bicycle parking, which is easily accessible from ground level and from apartments.	Yes	All car parking is contained within the existing basement car park, with vehicular access available via 45 Cross Street, down to the two basement levels. The residential car parking will be situated at the upper basement level adjacent to the lift cores. The hotel valet and retail car parking is situated at the lower basement level, with some residential car parking also proposed at the lower level. It is noted that the site is within walking distance of a number of public transport options including bus, ferry and rail and several other facilities. 30 bicycle parking spaces are provided on-site, with 25 situated at the upper basement level and 5 at the ground floor level for visitors. See Section 6.6 for a detailed assessment of parking.
Pedestrian access Utilise the site and its planning to optimise accessibility to the development. Promote equity by ensuring the main building entrance is accessible for all from the street and from car parking areas. Design ground floor apartments to be accessible from the street, where applicable, and to their associated private open space. Maximise the number of accessible, visitable and adaptable apartments in a building. Australian Standards are only a minimum. Separate and clearly distinguish between pedestrian access ways and vehicle access ways. Follow the accessibility standard set out in Australian Standard AS 1428 (Parts 1 and 2), as a minimum.	Yes	All units have accessible paths of travel from the basement car park levels and the adjacent street footpath has been designed for adaptation in accordance with AS 4299 ' <i>Adaptable housing</i> '. All entrances and access ways comply with the BCA and Australian Standards. There is only one vehicular access point, via 45 Cross Street, which does not conflict with pedestrian access points to the site. Movement through the site is clear, with access for disabled persons made available via lift access points. The lifts within each building have access to all floors except for the lower basement, which has only one lift core access. All corridors and circulation spaces comply with the Australian Standards and the Disability Discrimination Act, allowing a wheelchair to pass or turn.

Residential Flat Design Code 2002	Compliance	Comments
20% dwellings in the development.	Compliance	Comments
Vehicle access Ensure that pedestrian safety is	Yes	Vehicular entrances will not interfere with any street intersections and is clearly distinguishable.
maintained by minimising potential pedestrian/vehicle conflicts.		The servicing arrangements for both the retail and hotel are located internally on the upper basement level of the existing car park.
Ensure adequate separation distances between vehicular entries and street intersections.		The vehicular and servicing vehicle entry point is via the existing access at 45 Cross Street. The vehicle access has a width of 7 metres, with a 2.1 metres head clearance to the car park.
Generally limit the width of driveways to a maximum of 6m.		
Locate vehicle entries away from main pedestrian entries and on secondary frontages.		
Building configuration		
Apartment layout	Yes	Minimum areas for units are met, and in most cases exceeded.
Determine appropriate apartment sizes in relation to geographic location and market demands, the spatial configuration of an apartment, not just its plan, and its affordability. Ensure apartment layouts are resilient over time. Design apartment layouts, which respond to the natural and built environments and optimise site opportunities by providing private open space, orienting main living spaces toward the primary outlook, etc. Avoid locating the kitchen as part of the main circulation space of an apartment, such as a hallway or entry space. Ensure apartment layouts and dimensions facilitate furniture removal and placement. Comparative unit sizes: internal area		 There are four balconies that are slightly below the recommended areas in the RDFC; however, all such instances are very minor (i.e. Unit 102, Unit 103, 202 and 203), however these units have access to communal outdoor areas associated with the hotel which include access to the swimming pool and the public piazza open space at the ground floor level. Living rooms/main habitable spaces are located towards the balconies. Kitchens are generally not located in circulation spaces. Apartment layouts are logical and practical, allowing for useability and minimising noise intrusion, for example locating kitchens and bathrooms adjacent other kitchens and bathrooms. The back of all kitchens is within 8.0m of a window. The design provides the following average unit sizes: 1-bedroom units (80m²-95m²) 2-bedroom units (344m² - 385m²) The internal areas of each unit are given on the architectural plans at Appendix A. All unit sizes are well in excess of the requirements
 (external area): Studio 38.5m² (6m²) 1br cross-through 50m² (8m²) 1br loft 62m² (9.4m²) 1br single-aspect 63.4m² (10m²) 2b corner 80m² (11m²) 2br cross-through 89m2 (2m²) 2br cross-over 90m² (16m²) 2br corner with study 121m² (33m²) 3br 124m² (24m²) The back of a kitchen should be no more than 8.0m from a window. Buildings not meeting the minimum standards listed above, must demonstrate how satisfactory daylighting and natural ventilation can be achieved, particularly in relation to habitable rooms. 		of the RFDC.

 Apartment mix Provide a variety of apartment types. Refine the appropriate apartment mix for a location by: Considering population trends. Noting the apartment's location in relation to public transport, public facilities, etc. Locate a mix of apartments on the ground level. Optimise the number of accessible and adaptable apartments. Investigate the possibility of flexible apartment configurations. 	Yes	A mix of one, two and three bedroom units is provided. The mix is as follows: 8 x 1 bedroom units 12 x 2 bedroom units 19 x 3 bedroom units A minimum of 10% of the total number of units will be capable of being made accessible/adaptable units in accordance with Australian Standard4299. Plans indicating adaptable unit layout for 1,2,3 bedroom units are provided in the architectural drawings at Appendix A.
BalconiesProvide at least 1 primary balcony.Primary balconies should be locatedadjacent to the main living areas,sufficiently large and well proportionedto be functional and promoteindoor/outdoor living.Design and detail balconies in responseto the local climate and context.Design balustrades to allow views andcasual surveillance of the street whileproviding for safety and visual privacy.Coordinate and integrate buildingservices, such as drainage pipes, withoverall facade and balcony design.Consider supplying a tap and gas pointon primary balconies.Provide primary balconies for allapartments with a min. depth of 2.0m.	Yes	All units have an appropriately positioned private balcony/terrace. All balconies are located adjacent to main living room areas. Some of the one bedroom units have juliet style balconies comprising 1 metre maximum in depth. However in this urban context it is considered appropriate. Six out of the 39 residential units do not have a balcony. It is considered that these units will access to the communal open space provided on level 4 (hotel swimming pool and terrace area), and the central piazza space at the ground floor level. Furthermore, Steyne Park and Double Bay wharf is in close walking distance to the development and provides a substantial amount of open space.
 Ceiling Heights Design better quality spaces in apartments by using ceilings to define a spatial hierarchy between areas of an apartment using double height spaces, raked ceilings, changes in ceiling heights and/or the location of bulkheads, maximise heights in habitable rooms by stacking wet areas from floor to floor, promote the use of ceiling fans. Facilitate better access to natural light by using ceiling heights which promote the use of taller windows, highlight windows and fan lights and light shelves. Recommended minimum floor to ceiling heights:	Yes	Minimum floor to ceiling heights are met and generally exceeded. The wet areas are stacked from floor to floor.

Flexibility Provide apartment layouts, which	Yes	Compliance with the Australian Standards is stated and shall be conditioned.
accommodate the changing use of rooms.		Unit layout could accommodate office uses if required, or varied dwelling layouts.
Utilise structural systems, which support a degree of future change in building use or configuration.		The required number of accessible units is given, and there is a high degree of accessibility throughout the development.
Promote accessibility and adaptability by ensuring the number of accessible and visitable apartments is optimised and adequate pedestrian mobility and access is provided.		
Internal Circulation	Yes	The residential tower elements of the development (i.e. 3 bedroom units) incorporate one residential unit per level with internal lift
circulation spaces by providing generous corridor widths and ceiling heights, appropriate levels of lighting, including the use of natural daylight,		access. The one and two bedroom units that are situated at the podium levels 1 and 2 are accessed via a small corridor (15 metres in length) and 1.5m in width with only four units per level.
minimising corridor lengths, providing adequate ventilation. Support better apartment building		The residential units at level 4 of the podium are accessed via a small corridor (approximately 13 metres in length and 2 metres in width) and are accessed by 3 units.
layouts by designing buildings with multiple cores which increase the number of entries along a street and the		A single lift core situated in the centre of each floor (including the 3 bedroom units at the tower levels 5 to 14) and stairwell services each level.
number of vertical circulation points, give more articulation to the facade, limiting the number of units off a circulation core on a single level.		There are a number of separate entrances to each building. Level access is provided from the internal piazza or upper basement level.
Articulate longer corridors.		There are several cross-over and cross-through units, which provide for greater air flow and ventilation.
Minimise maintenance and maintain durability by using robust materials in common circulation areas.		
In general, where units are arranged off a double-loaded corridor, the number of units accessible from a single core/corridor should be limited to 8. Exceptions may be allowed.		
Mixed use	Yes	Acoustic impact is mitigated through landscaping, and design features (as recommended by the acoustic report included at
Choose a mix that complements and reinforces the character, economics and function of the local area.		Appendix G). Circulation within the development is logical and convenient.
Chose a compatible mix of uses, for example, food retail, small-scale commercial and residential is a better mix than car repair and residential. Consider building depth and form a		Some of the ground floor retail tenancies have an active frontages to Cross Street. These retail tenancies along Cross Street provides an important relationship with the piazza and adjacent public spaces. Further conditions can be imposed to ensure no real noise intrusion (eg. hours of operation).
relation to each use's requirements for servicing and amenity. The compatibility of various uses can be addressed by utilising flexible building layouts, which promotes variable tenancies or uses,		Acoustic considerations have been addressed within this report and are met accordingly. The retail tenancies are located at ground floor, along what are expected to be the most frequented areas of the site by non-residents, and do not directly interfere with any nearby residential units.
optimal floor to ceiling heights, optimal building depths, extra care where larger footprint commercial spaces (cinemas, supermarkets, department stores) are integrated with residential uses.		The fourth floor hotel pool and restaurant have been assessed in terms of acoustics and recommendations have been made in regards to operating hours of the swimming pool, restaurant/bar and also the external music will be limited. These will be discussed further in this report.
Design legible circulation, which ensure the safety of users by isolating		The development is to comply with the BCA in terms of acoustic treatment requirement between units to avoid noise transmission.

commercial service requirements such as loading docks, from residential servicing areas and primary outlook, locating clearly demarcated commercial and residential vertical access points, providing security entries to all private areas including carparks and internal courtyards and providing safe pedestrian routes through the site where required. Ensure the building positively contributes to the public domain and streetscape by fronting onto major streets with active uses and avoiding the use of blank walls at ground level. Address acoustic requirements for each use by separating residential uses from ground floor leisure or retail use by utilising an intermediate quiet-use barrier, such as offices and design for acoustic privacy from the beginning of the project to ensure that future services do not cause acoustic problems later. Recognising the ownership/lease patterns and separating requirements for BCA considerations.	Yes	Storage is supplied within each unit and further storage is provided within the upper basement level to provide for storage of larger
 Locate storage conveniently for apartments. Options include providing at least 50% of the required storage within each apartment, dedicated storage rooms on each floor, providing dedicated and/or leasable secure storage in internal or basement carparks. Where basement storage is provided ensure that it does not compromise natural ventilation in car parks or create potential conflicts with fire regulations, exclude it from FSR calculations. Provide accessible storage facilities at the following rates: Studio apartments 6m³ 1 bedroom apartments 6m³ 2 bedroom apartments 8m³ 3 plus bedroom apartments 10m³. 		items. Bicycle Storage is also provided within the upper basement level. Storage is supplied within all units, and all residents will have access to a minimum of the required storage volume. The majority of units have at least 50% of this storage within the unit. A total of 401.7m ³ storage space is provided within all units; a total of 173m ³ of storage space is made available within the upper level of the basement car park areas, giving a total of 574.7m ³ . Only 4 out of 39 apartments (10%) have internal storage volumes less than the RFDC rule of thumbs. These are 4 x 1 bedroom units. Storage in the basement is generous and these units can be allocated additional basement storage for large bulky items. An indication of the storage space allocation is provided on marked up plans contained in the architectural drawings at Appendix X .
Building amenity		
Acoustic privacy Utilise the site and building layout to maximise the potential for acoustic privacy by providing adequate building separation within the development and from neighbouring buildings. Arrange apartments within a development to minimise noise transition between flats.	Yes	The units have been designed with basic urban design principles in mind to reduce acoustic impact, such as bedroom to bedroom and bathroom to bathroom. Acoustic Logic, the appointed acoustic consultants, have concluded that subject to satisfaction of the acoustically treated glazing, the development will meet Australian Standard AS 2107: 2000, and the RIS and SRA internal noise criteria for living and sleeping areas, with windows and doors closed. In regards to the level 4 bar/restaurant and pool area a number of recommendations have been made including:

and September and provide appropriate shading in summer.Shading in summer.Optimise the number of apartments receiving daylight access to habitable rooms and principal windows.Design for shading and glare control, particularly in summer using shading devices, colonnades, balconies, pergolas, external louvres and planting, optimising the number of north-facing living spaces, providing vertical shading to east or west windows, using high performance glass but minimising external glare, use a glass reflectance below 20%.Prohibit the use of lightwells as the primary source of daylight in habitable rooms.Living rooms and private open spaces for at least 70% of apartments in a devices (10%.devices, colories, balconies, pergolas, external louvres and planting, optimising there as a minimum of 2 hours may be acceptable.Living rooms and private open spaces for at least 70% of apartments in a development should receive a minimum of 3 hours differed sungition the acceptable.Living rooms and private open spaces (SW-SE) to a maximum of 10% of the total units proposed. Developments which seek to vary from the minimum standards must demonstrate how site constraints and orientation prohibit the achievement of these standards and how energy efficiency is addressed.Natural ventilation Plan the site to promote and guide natural breezes.YesThe majority of units (25 out of 39) are flow-through (65%), allowing for cross ventilation. As given by the applicant, the proposal comples with the policies of natural ventilation the projice is of natural ventilation.			
DecompositionThe development complex with the applicable standards regarding solar access.Ensure direct daylight access to communal open space between March and September and provide appropriate shading in summer.The development complex with the applicable standards regarding solar access.Optimise the number of apartments receiving daylight access to habitable rooms and principal windows.A modular external terracotta façade and external aluminium screer shading in summer.Design for shading and glare control, particularly in summer using shading to devices, colonnades, balconies, opergolas, external loures and parting, optimising the number of north-facing living spaces, providing external horizontal shading to north-facing windows, providing vertical shading to east or west windows, using high performance glass but minimising external jources a minimum of 3 hours direct sunlight between 9,00am and 3.00pm in minimum of a hours direct sunlight between 4 apatrments with a southerly aspect (SW-SE) to a maximum of 10% of the total units proposed. Developments which seek to vary from the minimum standards must demonstrate how site coonstraints and orientation prohibit the achievement of these standards and how energy efficiency is addressed.YesNatural ventilation Plan the site to promote and guide natural breezes.YesThe majority of units (25 out of 39) are flow-through (65%), allowing for cross ventilation, Ag given by the applicant, the proposal complex with the neuricid	separate noisier spaces from quieter. Resolve conflicts between noise, outlook and views by using double glazing, operable screened balconies, and continuous walls to ground level courtyards where they do not conflict with streetscape. Reduce noise transmission from common corridors or outside the building by providing seals at entry doors. Daylight access Plan the site so that new residential flat	Yes	 Time limits on the opening hours of the external areas of the restaurant and bar. Limiting times when music can be played on the external areas. Limiting the level of recorded music on external areas. Time when the external façade should be closed. The acoustic recommendations have been incorporated into the draft statement of commitments in Section 7.
total units proposed. Developments which seek to vary from the minimum standards must demonstrate how site constraints and orientation prohibit the achievement of these standards and how energy efficiency is addressed. Natural ventilation Plan the site to promote and guide natural breezes. Yes The majority of units (25 out of 39) are flow-through (65%), allowing for cross ventilation. As given by the applicant, the proposal complies with the policies of natural ventilation, and mechanical ventilation is provided when required	Ensure direct daylight access to communal open space between March and September and provide appropriate shading in summer. Optimise the number of apartments receiving daylight access to habitable rooms and principal windows. Design for shading and glare control, particularly in summer using shading devices, colonnades, balconies, pergolas, external louvres and planting, optimising the number of north-facing living spaces, providing external horizontal shading to north-facing windows, providing vertical shading to east or west windows, using high performance glass but minimising external glare, use a glass reflectance below 20%. Prohibit the use of lightwells as the primary source of daylight in habitable rooms. Living rooms and private open spaces for at least 70% of apartments in a development should receive a minimum of 3 hours direct sunlight between 9.00am and 3.00pm in mid winter. In dense urban areas a minimum of 2 hours may be acceptable. Limit the number of single-aspect apartments with a southerly aspect		 solar access. A modular external terracotta façade and external aluminium screen shading system is providing shading and allowing residents to reduce glare. As the subject site is within a dense urban area, however, as the majority of the residential units 32 out of 39 (82%) will receive more than 3 hours of sunlight to living rooms and or primary balconies in midwinter. A total of 3 out of 39 apartments are single aspect -south facing
increase the potential for natural All kitchens are located within 8.0m of a window opening.	total units proposed. Developments which seek to vary from the minimum standards must demonstrate how site constraints and orientation prohibit the achievement of these standards and how energy efficiency is addressed. Natural ventilation Plan the site to promote and guide natural breezes. Utilise the building layout and section to	Yes	complies with the policies of natural ventilation, and mechanical ventilation is provided when required.

ventilation. Design solutions include facilitating cross ventilation etc.		
Design the internal apartment layout to promote natural ventilation.		
Select doors and operable windows to maximise natural ventilation opportunities established by the apartment layout.		
Coordinate design for natural ventilation with passive solar design techniques.		
Explore innovative technologies to naturally ventilate internal building areas or rooms - such as bathrooms, laundries and underground car parks.		
Building depths, which support natural ventilation typically range from 10 to 18m.		
60% of residential units should be naturally cross ventilated.		
25% of kitchens within a development should have access to natural ventilation.		
Developments, which seek to vary from the minimum standards, must demonstrate how natural ventilation can be satisfactorily achieved, particularly in relation to habitable rooms.		

Building form					
Awnings and signage	Yes	Awnings:			
Awnings and signage <u>Awnings:</u> Encourage pedestrian activity on streets by providing awnings to retail strips, where appropriate, which give continuous cover in areas which have a desired pattern of continuous awnings, complement the height, depth and form of the desired character or existing patterns of awnings and providing all weather protection. Awnings should contribute to the legibility of the residential flat development and the amenity of the public domain by being located over building entries. Enhance the safety for pedestrians by providing under awning lighting. <u>Signage:</u> Signage should be integrated with the design of the development by responding to scale, proportions and architectural detailing. Signage should provide clear and legible	Yes	All units have some external covering from the balconies above. The entrances to all buildings are covered by the podium level above; this fits the modern design of the development. Entrances and common areas are to be appropriately lit. <u>Signage:</u> There is no signage proposed as part of this development. Further development consent will be sought from Council regarding any future signage. Informational/directional signage is to be conditioned as appropriate.			
continuous cover in areas which have a desired pattern of continuous awnings, complement the height, depth and form of the desired character or existing patterns of awnings and providing all weather protection. Awnings should contribute to the legibility of the residential flat development and the amenity of the public domain by being located over building entries. Enhance the safety for pedestrians by providing under awning lighting. <u>Signage:</u> Signage should be integrated with the design of the development by responding to scale, proportions and architectural detailing.		Signage: There is no signage proposed as part of this development. For development consent will be sought from Council regarding a future signage. Informational/directional signage is to be			
Signage should provide clear and legible way-finding for residents and visitors.					

Facades	Yes	The development presents an active retail frontage to Cross Street,
Facades Consider the relationship between the whole building form and the facade and/or building elements. The number and distribution of elements across a facade determine simplicity or complexity. Columns, beams, floor slabs, balconies, window openings and fenestrations, doors, balustrades, roof forms and parapets are elements, which can be revealed or concealed and organised into simple or complex patterns. Compose facades with an appropriate scale, rhythm and proportion, which respond to the building's use and the desired contextual character. Design facades to reflect the orientation of the site using elements such as sun shading, light shelves and bay windows as environmental controls, depending on the facade orientation.	Yes	The development presents an active retail frontage to Cross Street, which the current development lacks the development also provides visual interest and vibrancy, at the ground level. The facades have been designed to consider the opportunities and constraints of the site, the buildings generally orientate towards Cross Street, and decrease in height towards the rear of the site to the north, this is in order to situate the height away from the residential properties to the rear and also take advantage of the views and natural sunlight. The design of the development has used various materials, scales and elements to articulate the appearance of the façade and to evoke visual interest. A schedule of materials is provided with the architectural drawings at Appendix A .
Express important corners by giving visual prominence to parts of the facade, for example, a change in building articulation, material or colour, roof expression or increased height. Coordinate and integrate building services, such as drainage pipes, with overall facade and balcony design. Coordinate security grills/screens, ventilation louvres and car park entry doors with the overall facade design.		
Roof design Relate roof design to the desired built form. Some design solutions include: Articulating the roof, using a similar roof pitch or material to adjacent buildings, using special roof features, which relate to the desired character of an area, to express important corners etc. Design the roof to relate to the size and scale of the building, the building elevations and three-dimensional building form. Design roofs to respond to the orientation of the site, for example, by using eaves and skillion roofs to respond to sun access. Minimise the visual intrusiveness of service elements by integrating them into the design of the roof. Support the use of roofs for quality open space in denser urban areas.	Yes	The roof design is flat both at the podium level and at the roof of the towers, with some plant room being located in the middle of the roof of the towers. The roof of the towers will also have planting and be used as a roof terrace with plunge pools for the top floor penthouse residential units. The plant room is screened in aluminium metal cladding and Aluminium light shelf, which will screen the plant equipment.

Building performance						
Energy efficiency	Yes	Low flow water fittings with a 4-5 star WELS rating will reduce water consumption by 50%.				
Incorporate passive solar design techniques to optimise heat storage in winter and heat transfer in summer.		External shading shall be incorporated to optimise daylight availability and reduce lighting energy consumption during the day.				
Improve the control of mechanical space heating and cooling.		Renewable energy may be incorporated in the form of Building Integrated photovoltaic's.				
Provide or plan for future installation of photovoltaic panels.		Rainwater harvesting is being investigated, which can provide up to 35% of total non-potable water demand.				
Improve the efficiency of hot water systems. Reduce reliance on artificial lighting.		Measures are being investigated such as including the use of low VOC materials, incorporation of appropriate internal and external				
Maximise the efficiency of household appliances.		shading, will aid in improving occupant comfort levels through out the development.				
		High water and energy efficiency ratings have been obtained – refe to the attached BASIX Certificate and NatHERS report included at Appendix D .				
Maintenance	Yes	Appropriately durable materials will be used for the construction –				
Design windows to enable cleaning from inside the building, where possible.		see the schedule of external finishes provided on the architectural plans (see Appendix A ; also see the sample provided with the documents submitted with the application), appropriate methods of				
Select manually operated systems, such as blinds, sunshades, pergolas and curtains in preference to		construction are to be followed. The piazza and other areas of the development is likely to be				
mechanical systems. Incorporate and integrate building maintenance systems into the design of			managed by the hotel/retail/body corporate of the residential units and will be finalised prior to occupation of the premises, with this to be addressed at the Occupation Certificate stage.			
the building form, roof and facade. Select durable materials, which are easily cleaned and are graffiti resistant.		The landscaped spaces have also been designed to minimise maintenance, for example, by watering during early morning and late evening, and use of an on-site rainwater harvesting– see				
Select appropriate landscape elements and vegetation and provide appropriate irrigation systems.		landscaping report and plans attached at Appendix B .				
For developments with communal open space, provide a garden maintenance and storage area, which is efficient and convenient to use and is connected to water and drainage.						
Waste management	Yes	The development will accord with the recommendations of the submitted Waste Management Plan; refer to Appendix R				
Incorporate existing built elements into new work and recycle and reuse demolished materials, where possible.		Appropriate space has been provided for storage and rubbish bins, as can be seen on the architectural plans.				
Specify building materials that can be reused and recycled at the end of their life.						
Integrate waste management processes into all stages, of the project, including the design stage.						
Support waste management during the design stage.						
Prepare a waste management plan.						
Locate storage areas for rubbish bins away from the front of the development where they have a significant negative impact on the streetscape, on the visual						

presentation of the building entry and on the amenity of residents, building users and pedestrians. Provide every dwelling with a waste cupboard or temporary storage area of sufficient size to hold a single day's waste and to enable source separation. Incorporate on-site composting, where possible, in self contained composting units on balconies or as part of the shared site facilities.	Yes – to be	Recycled water is to be used within the development; as given in
Use AAA rated appliances to minimise water use. Collect, store and use rainwater on site.	conditioned.	the stormwater management plan prepared by TTW (refer to Appendix I). Appropriate water efficient appliances will be installed as required.
Incorporate local indigenous native vegetation in landscape design. Consider grey water recycling.		The development is to be constructed and operated in accordance with the principles of Ecologically Sustainable Development, through the requirement to comply with the NatHERS rating as submitted, and the BASIX Certificate (given in Appendix D). The overall 'water score' of 47% is achieved (exceeding the target by 7%).

SEPP 55 Remediation of Land

This policy adopts a state wide approach for the remediation of contaminated land. It requires the consent authority to consider whether the land is contaminated, and if so, it must be satisfied that the land is suitable, or will be suitable after remediation, for the proposed use.

The policy makes remediation permissible across NSW, defines when consent is required, requires all remediation to comply with standards and requires that Councils be notified of all remediation proposals. Clause 7 of the SEPP requires the consent authority to consider whether land is contaminated, prior to the consent for the carrying out of any development on that land.

Comment:

It is considered that the proposal minimise disturbance to the foundations of the basement level slab. Therefore site remediation is not required as part of this development proposal. Advice from TTW engineers at **Appendix I** describes how minimal excavation for piling will be managed to minimise impacts on ground water and acid sulphate soils.

SEPP Infrastructure 2007

State Environmental Planning Policy Infrastructure 2007 came into operation on the 1st January 2008. One of the aims the SEPP is to provide for consultation with relevant public authorities about certain development during the assessment process or prior to development commencing.

The SEPP applies to new development that generates large amounts of traffic in a local area and outlines consultation requirements. It establishes that NSW Roads and Traffic Authority (RTA) as the sole traffic

management authority to be consulted and ensures that it is given the opportunity to make a representation on a development application prior to its determination.

Comment

Halcrow MWT transport study **(Appendix F)** addresses the RTA's Guide to Traffic Generating Development, 2002 and the RTA input into the DGRs. Halcrow MWT report concludes that the proposal will not result in increased traffic generation. The traffic generation potential of the existing use vs the proposed use is detailed in Halcrows report.

In summary, the existing use would generate about 128 vph during the Thursday evening peak and approximately 153 vph during the Saturday morning peak period. Whereas, the proposed use would generate peak hour traffic in the order of 114 vph and 122 vph during the Thursday evening and Saturday morning peak periods respectively, which is a reduction in traffic generated by the proposal.

SEPP (Building Sustainability Index: BASIX) 2004

This SEPP operates in conjunction with Environmental Planning and Assessment Amendment (Building Sustainability Index: BASIX) Regulation 2004 to ensure that BASIX is effectively enacted in NSW.

The SEPP ensures consistency in the implementation of BASIX throughout the State by overriding competing provisions in other environmental planning instruments and development control plans, and specifies that SEPP 1 does not apply in relation to any development standard arising under BASIX.

Comment

There has been a commitment to use the requirements of BASIX as a minimum requirement for the residential component. The development is also be in accordance with the building requirements contained in the Woollahra LEP 1995 and BCA.

Advanced Environmental consultants report (at Appendix D) assesses the residential component of the proposal in accordance with the requirements of BASIX (for class 2).

The resulting BASIX scores are:

- Energy 20%
- Water 47% (exceeding the target by 7%)
- Thermal Comfort Pass (no targets).

The full set of minimum compliance requirements are provided in the BASIX certificates in the appendices of Advanced Environmental report at **Appendix D**. The associated drawings, assessor's certificates and thermal specification are also provided as an appendix to the Advanced Environmental Report.

Draft SEPP 66 (Integration of Land Use and Transport)

This SEPP is in draft format and aims to ensure that urban structure, building forms, achieves the following planning objectives as stipulated in Part 1, Clause 2 of the draft SEPP:

- a) Improving accessibility to housing, employment and services by walking, cycling, and public transport,
- b) Improving the choice of transport and reducing dependence solely on cars for travel purposes,
- c) Moderating growth in the demand for travel and the distances travelled, especially by car,
- d) Supporting the efficient and viable operation of public transport services,
- e) Providing for the efficient movement of freight.

Part 2 Clause 7 stipulates that the planning objectives of this policy relate will generally comprise development having a gross floor space of more than 1000 square metres and includes, but is not limited to:

- a) Development for the purposes of retailing, such as shopping centres, large specialist shops, department stores, supermarkets, bulky goods, big box format stores, markets, factory outlets, warehouse retail, service stations and fast food outlets,
- b) Development for the purpose of leisure and entertainment, such as cinemas, theatres, bowling alleys, gymnasia, clubs, hotels, amusement centres and sports venues,

Comment

The Draft SEPP applies to this development. A Transport and Accessibility impact study has been prepared by Halcrow MTW (provided at **Appendix F**). The proposal achieves the objectives of this SEPP as follows:

- Providing 30 bicycle parking spaces, 25 in the upper basement for residents and 5 racks on the ground floor for easy access by visitors.
- The embellishment of through site linkages and creation of two open air linkages from Cross Street, will significantly improve the permeability of the site;
- The proposed development is expected to generate less traffic than what the existing use would generate if it was operating at full capacity;
- No intersection upgrades would be necessary;
- Vehicular access to the car park would be unchanged;
- Loading will need to be by small vehicles due to the limited headroom in the car park on the site;
- The site has very good access to public transport and this will in itself encourage the use of public transport.

5.3 Local Environmental Planning Instruments

Woollahra Local Environmental Plan

Zoning

The subject site is zoned 3(a) Business General. The proposed mix of uses is permissible in the zone which *"is a broad commercial zone allowing a diversity of commercial and retail uses."* Mixed use developments including retail, residential and hotels are permissible with consent in the 3(a) zone.

Floor Space Ratio

The Floor Space Ratio control for the site is contained in the Woollahra LEP 1995 and is stipulated as 2.5:1. The existing building currently exceeds the maximum permissible FSR with an FSR of 4.06:1.

As stated previously in the planning history section of this report (**Section 2**). Woollahra Council granted consent to the development of the existing hotel in 1988, well in excess of the permitted floor space ratio control at the time (2.5:1), which were contained in the Woollahra LEP 25.

The objectives of floor space ratio standards are as follows:

- a) To set the maximum density for the new development,
- b) To control building density, bulk and scale in all residential and commercial localities in the area in order to achieve the desired future character objectives of those localities,
- c) To minimise adverse environmental effect on the use or enjoyment, or both, of adjoining properties, and
- d) To relate new development to the existing character of surrounding built and natural environment as viewed from the streetscape, the harbour or any other panoramic viewing point.

The proposal does not seek any additional floor space above the existing FSR. An identical amount of floor space to the existing building is proposed albeit in with an alternative configuration that will result in better urban design, built form and open space outcomes than what is existing onsite and notably approved by Woollahra Council in 1988.

Height

The objectives of the height control are contained in the LEP 1995 and are as follows:

- a) To minimise impact of new development on existing views of Sydney Harbour, ridgelines, public and private open spaces and views of the Sydney City skyline,
- b) To provide compatibility with the adjoining residential neighbourhood,
- c) To safeguard visual privacy of interior and exterior living areas of neighbouring dwellings,
- d) To minimise detrimental impacts on existing sunlight access to interior living rooms and exterior open space areas and minimise overshadowing,

e) To maintain the amenity of the public domain by preserving public views of the harbour and surrounding areas and the special qualities of the streetscapes.

The LEP does contain a Height Map, however does not allocate a height limit for the site.

The Double Bay Centre DCP does contain the illustrations that control height for the site. Clause 6.3.2 of the Double Bay Centre DCP 2002 states that *"the permissible height of development in the Double Bay Centre is indicated on the control drawings in sections 5.5 to 5.11"*. The control drawings in Figure 8 and Figure 9 illustrate that the height for the site is between 7.5 metres and 16.5 metres.

The existing building has a height of 29.77m which exceeds the maximum height limit. As stated above, the proposed development redistributes the existing floor space into a different configuration in order to achieve an open air ground level piazza. This redistribution proposes taller elements comprising, two 14 storey towers and a 5 storey tower in the North Eastern corner of the site. The maximum proposed height of the building at the tallest element will be 52.44 metres.

Hotel buildings offer the best opportunity to deliver landmark developments as their physical appearance and individuality often benefit the branding and successful marketing of the hotel, in other words there is a significant benefit to costs ratio which grants an impetus for more bold, imaginative and inventive designs.

It is considered that Double Bay could benefit from a quality landmark development as it has the potential to regenerate Double Bay. Providing a high quality structure will set a new standard for the regeneration of Double Bay with positive benefits to the retail precinct, vitality and vibrancy of the area.

The height and FSR will be discussed in greater depth in **Section 6** of this report.

Heritage Conservation

Clause 27 of the LEP relates to development in the vicinity of heritage conservation areas. Specifically, Clause 27 states:

"The Council must take into consideration the likely effect of the proposed development on the heritage significance of a heritage item, heritage item group, heritage conservation area, archaeological site or potential archaeological site and on its setting when determining an application for consent to carry out development on land in its vicinity."

The site is situated adjacent to the Transvaal Conservation Area. The proposed design, orientation and materials have taken into consideration the significance of the Transvaal Conservation Area and its setting.

It is considered that the development will not detract, but improve the setting of the Transvaal Conservation Area when viewed in context to the existing development. This is discussed in detail in **Section 2.8**, the Double Bay DCP **Table 12** below and in **Section 6.1** of this report.

5.4 Development Control Plans

Double Bay Centre Development Control Plan 2002

This DCP supplements the requirements of Woollahra LEP 1995 and provides detailed controls specifically for Double Bay. Compliance with the relevant controls is detailed as follows.

Table 12. DBDCP 2002 Summary table of compliance

Do	uble Bay Centre DCP	Compliance	Comment		
DC	DCP Objectives 1.5				
a)	To provide appropriate development control for the future development of Double Bay Centre.	Yes	The proposed development complies with the objectives of the Double Bay DCP. The proposal		
b)	To retain and enhance through block connections which allow pedestrians to move freely within the Double Bay Centre.		will provide double bay with a new high quality development that will attract interest in Double Bay.		
c)	To develop the particular qualities of different parts of the Double Bay Centre.		The proposed development will create through site links and an open piazza that will enhance		
-	To encourage a diverse mix of uses in the Double Bay Centre and maintain retail uses at ground level.		pedestrian connectivity to Galbraith Walkway and the residential buildings in William Street and to businesses in Cross Street and Transvaal		
e)	To conserve and enhance the visual and environmental amenity of all buildings and places of heritage significance in the Double Bay Centre.		Avenue. The proposal encourages and provides for a diverse mix of uses, being residential, hotel and		
f)	To ensure a high standard of architectural and landscape design in any new developments within the Double Bay Centre.		high quality retail floor space at the ground floor level. This development will attract interest in Double Bay, therefore acting as a stimulus for		
g)	To preserve and enhance the diversity of uses in the Double Bay Centre.		further investment and shopping trips which will in turn benefit the centre as a whole.		
h)	To ensure that new development is compatible with the existing built form, and streetscape and village character.				
i)	To encourage view sharing and individual privacy.				
j)	To ensure new development is designed to be compatible with the heritage significance of listed heritage items,				
k)	To consider the needs of people with access disabilities.				
Us	e Part 6.2				
•	Deign for a mix of uses within buildings.	Yes	The proposal incorporates a mix of uses within		
•	Design durable and adaptable buildings, spaces and places.		the development, including retail, hotel and residential components.		
•	Design for retail, commercial and community uses at ground and first floor levels. Consider design solutions that promote retail. Commercial use at first		The retail component is situated at the ground floor levels with the residential and hotel uses above.		
•	floor level such as galleried arcades. Access to residential uses should not occupy more than 20% of ground floor frontage.		Through site linkages will be embellished and provide easy pedestrian access to and from the plaza from Cross Street, Transvaal Avenue and William Street.		
Bu	Building Envelopes Part 6.3.1				
•	Development should contribute to the desired future character of streetscapes with appropriate and consistent building forms built to the street alignment.	Yes	The development introduces a retail frontage to Cross Street, which the existing building currently does not provide.		
•	Permit deep building footprints at ground and first floor level only.		The development is designed around providing a central piazza. In order to redistribute the same amount of floor space on the site, a three - five		
٠	Promote building forms that allow natural day lighting,		storey podium level contains the majority of the		

natural ventilation and privacy between dwellings or commercial premises.		development with the taller towers being situated to the southern side of the site fronting Cross
 Encourage courtyards and light wells at ground and first floor level of deep blocks to allow natural light and ventilation. 		Street. All units face north and allow for natural daylight/sunlight access.
 Enable the provision of through site links and arcades. 		
 Encourage a variety of interior volumes, i.e. split levels, double height spaces and arcades. 		
Height 6.3.2		
 The maximum building height is 5 storeys to the street frontage (Cross Street) and 4 storeys to the rear laneway. 	No	Please refer to Section 6.2 of this report for a detailed discussion on height.
• To reinforce the definition of streets, buildings should be well designed and should achieve the maximum prescribed height along the primary frontage.		
• The building (including lift tower machinery plant rooms and storage space) must be contained within the envelope height, with the following exclusions: chimneys, stacks, vent popes, and television antennae.		
Building Articulation 6.3.3		
• Promote buildings of articulated design and massing, with building facades that contribute to the character of the street, and provide usable external spaces.	Yes	The building is well articulated providing a variety of materials and massing to break up the façade of the building.
Utilise building articulation to:Generate high quality architectural resolution		The proposal provides shading devices to optimise daylight availability and reduce lighting
 Provide private open space which addresses and overlooks streets and lanes 		energy consumption during the day, thus providing thermal amenity.
 Provide thermal amenity within buildings such as screening and balconies for summer sunshading and maximising solar access in winter, appropriately 		The development is orientated around a central piazza, which is designed to encourage activity, such as outdoor eating areas.
 scaled to their use and context Encourage activity such as outdoor eating along attract adapt, to belo primeto the street. 		A retail frontage is proposed along Cross Street, which will help to re-activate this area and create vibrancy and vitality to Double Bay Town Centre.
street edges, to help animate the street. Setbacks 6.3.4		
	Yes	The property is built to the costory and western
 Building alignment must comply with the 'build to' lines shown on the control drawings. Side setbacks must protect privacy to adjoining buildings and protect access to natural sunlight and ventilation to adjoining buildings and residential 	103	The proposal is built to the eastern and western boundary, with a 4 metre ground floor setback to the rear boundary and 3 metre setback along the front boundary (Cross Street) which is consistent with adjoining developments.
 areas. Rear setbacks must accommodate vehicle access to rear of lots, provide deep soil landscape areas where blocks adjoin residential areas. These areas are indicated on the Control Drawings. Protect privacy and facilitate solar access to adjoining buildings and gardens. 		The proposed setbacks are compliant with the 'build to' lines as indicated on the control drawings. The proposal will create a landmark development for Double Bay, with high quality architectural design and through the embellishment of through site linkages and public open space, by way of a central piazza.
Architectural Resolution 6.3.6		
 Promote high quality architectural design throughout the Double Bay Centre to create a desirable and memorable environment. Encourage coherent streetscapes based on common 	Yes	The proposal will create a landmark development for Double Bay Town Centre, with a complementary mix of land uses proposed, being hotel, residential and retail on the ground floor
design principles for each street and lane.		level. The site will be open and accessible to the public, with open air through site linkages, and a

090320kf-C05_REPT_Environmental Assessment_Final

		public piazza space.
Roof Design 6.3.7		
 Encourage highly articulated roof design that responds to building orientation and the location and character of Double Bay. Encourage roof design that creates a distinctive silhouette to buildings. Encourage a variety of articulated roof forms for the Double Bay Centre. Discourage the provision of air conditioning plant and 	Yes	The development proposes a flat roof design, so that the residents of the penthouse apartments can optimise the roof space, by way of private roof terraces and private plunge pools. Some plant equipment will be situated on the roof, however this is well articulated and screened. Aluminium façade.
equipment on the roof of buildings.		
Awnings 6.4.1	Yes	
 Retain and supplement the existing awnings along New South Head Road, Knox Street (south side) and Cross Street (north side) to provide continuous awning cover. Canvas blinds along the outer edge of awnings may 	res	Although the development doesn't provide 'awnings', the overhang from the podium level will provide some coverage to cross street, with an overhang of 1 metre.
be used to provide sun shading to the east and west facades.		
 The provisions and operating cost of under awning lighting is the responsibility of the building owner. Under awning lighting may be recessed into the soffit of the awning or wall mounted on the building. 		
Arcades, walkways and courtyards 6.4.3		-
 All existing arcades and walkways must be retained or replaced when a site is redeveloped. Arcades must have substantial natural lighting and ventilation. Encourage new arcades and walkways that provide public access across private land, and provide connections between streets and other parts of the public domain. 	Yes	The proposal includes a new public piazza, with embellished open air through site linkages, with two open air pedestrian walkways via Cross Street through to the lane way accessing Transvaal Avenue and Galbraith Walkway. A internal through site linkage will be provided to the Georges Centre, where the existing doors are located. The proposal will essentially open up the site and encourage public access and permeability through the site.
Ground Floor Active Lane Frontage 6.4.5		
 Accommodate active uses at the ground level of buildings facing lanes to add to the vitality, and usefulness of both land and building. Separate and clearly articulate vehicle access points and building entrances to avoid pedestrian and vehicular conflicts. Ensure service areas are unobtrusive and have minimal lane presence. Preferably orientate service areas within the building envelope, perpendicular to lane frontage. Retail, restaurant, café shopfronts should be glazed and able to be opened and/or provide through action of the service areas and able to be opened and/or provide through actions. 	Yes	The proposal involves the creation of a central publically accessible piazza, with surrounding retail and restaurant/bar floor space and a new retail frontage to Cross Street. Two new pedestrian open air through site access points are proposed from Cross Street, linking the public piazza, through to Transvaal Avenue, and Galbraith Walkway, with one existing vehicle cross over to be retained via 45 Cross Street.
shop/lot visibility. Acoustic Privacy 6.5.1		
 Building sitting and layout, particularly with regard to the location of courtyards, terraces and balconies, should minimise the transmission of noise to other buildings and private open space on the site and on adjacent land. Noise impact associated with good delivery and 	Yes	Acoustic Logic have undertaken an assessment of the proposed development and have made a number of recommendations (see Appendix G). These recommendations are summarised in Section 6.7 of this report. It is proposed to incorporate acoustic treatments
garbage collection, particularly early morning, should		and controls to the restaurant and café areas as

he webster and		
be minimised.		appropriate. Operating hours will also be restricted, as well as limiting times when music
 Restaurants and cafes should be designed to minimise the impact of noise associated with late 		can be played on the external areas, as well as
night operation, on nearby residents.		when the external façade of the restaurant/bar at
Landscaped Open Space 6.5.4		level 4 should be closed.
	Yes	MaQue and Destroyer have an end of data its d
Locate car parking under the building footprint to maximise deep soil landscaping.	105	McGregor and Partners have prepared a detailed landscape plan and report (refer to Appendix B) which addresses the landscaping for the site.
 Provide landscaped open space, typically in the centre of blocks to preserve and extend established open spaces. 		The site will provide public access open space, level 4 terrace with pool, private courtyards and a green roof and vertical gardens.
 Provide landscaped open space that preserves neighbouring residences access to day light and natural ventilation and provides and provide visual privacy. 		
 Mature trees and other planting are encouraged within landscaped open space to maintain Double Bay's existing leafy quality. Permeable surfaces are also encouraged to maximise the on-site infiltration of stormwater. 		
Private Open Space 6.5.4		
 Provide at least one balcony, terrace, verandah, loggia, roof terrace or deck for each dwelling, within the area nominated for building articulation. This open space must be accessible from a principle living 	Yes	The majority of residential units are provided with a terrace and/or balcony, which is accessible from the principle living area. It is noted that some balconies for the one
area.The preferred depth of the required open space is		bedroom units do not meet the required depth of the balcony, however is considered that there is
2.4m and the minimum permissible depth 1.8 metres.Roof terraces and balconies must protect the privacy		large communal open space provided on the site, by way of the level 4 pool area and ground
of neighbours.		floor piazza. Roof terraces are proposed on the two fourteen
 Lightweight pergolas, sunscreens, privacy screens and planters are permitted on roof terraces, provided that they do not increase the bulk of the building. 		storey towers and the five storey tower. These will be screened and appropriately landscaped to maintain privacy and amenity for residents.
 The profile and silhouette of parapets, eaves and roof top elements must be considered in roof terrace design. 		
Energy Efficiency and Conservation 6.6.1		
 Incorporate passive solar design principles in building design to avoid the need for additional heating and cooling. A report on energy efficiency is required to accompany development applications for any new 	Yes	The proposal incorporates ESD principles throughout. Advanced Environmental have assessed the proposal and their report as well as the NatHERS and BASIX certificates are provided at Appendix D
 building with a construction cost of \$500,000 or more. Development Applications for new residential buildings must comply with the principles of 		The holistic design approach is aimed at best practice level of sustainably. The development provides:
NatHERS) efficiency rating of 3.5 stars.		Rainwater collection for re-use
Wherever possible, roof-top solar heating panels are		• 3 star to 6 star WELS water efficient fittings
to be installed so as not to be visible from the street.		Energy efficient appliances and fittings
		External Shading Devices
		Photovoltaic panels are being investigated
		The resulting BASIX scores are:
		Energy 20%
		• Water 47% (exceeding the target by 7%)
		Thermal Comfort – Pass (no targets)

090320kf-C05_REPT_Environmental Assessment_Final

Natural Daylight and Natural Ventilation 6.6.2		
 The maximum building depth of development for levels 3-5 is 15.6m to achieve buildings that are substantially naturally lit and ventilated. Encourage the provision of windows to all rooms, including kitchens and bathrooms, to facilitate natural light and ventilation. Encourage building articulation such as light wells and courtyards. All dwellings must have windows that can be opened and/or doors in walls with differing orientations, to facilitate cross ventilation. 	Yes	The development achieves maximum solar access to all dwellings, by orientating all living areas and balconies to the north. The dwellings achieve high levels of cross ventilation.
Solar Access 6.6.3		
 Preserve solar access to Guilfoyle Park and the footpath on the south side of Knox Street, Cross Street and New South Head Road between 12noon and 2pm on June 22. Where already existing, access to sunlight should be maintained for a minimum period of 4 hours between 9:00am and 3:00pm on June 22nd to windows of habitable room and private open space of adjoining properties. Access to sunlight should be achieved for a minimum period of 3 hours between 9:00am and 3:00pm on June 22nd to windows of nabitable rooms and private open space of new development. Locate main living spaces including lounge, dining, kitchen and family rooms toward north where possible. 	Yes	Shadow diagrams are provided within the Architectural Drawings provided at Appendix A The development has been orientated and designed to address to minimise the impact of overshadowing, particularly to residential properties. It is considered that the main overshadowing impact will be to the Southern side of Cross Street, which comprises retail and commercial premises. This is discussed further in Section 6.3 of this report. All residential apartments are orientated to the north, to achieve maximum solar access between the hours of 9am and 3pm in mid winter.
Glazing 6.6.4		
 Appropriate sun protection during summer should be provided for glazed areas facing north, west and east. Extensive areas of glazing unprotected from solar access during summer will not be permitted. New buildings and facades should not result in glare that causes discomfort or threatens safety of pedestrians or drivers. 	Yes	The development provides external and internal sun shading devices, particularly to the glazed areas facing north, west and east. The development will not result in obtrusive glare, as it uses low reflectivity materials.
Water Conservation 6.6.5		
 Wherever possible implement 'fit for purpose substitution' by matching water quality with its intended use. Collect and store rainwater. Consider recycling grey water for toilet flushing or external use. Water conservation devices with "AAA" Australian Standards Water Conservation Rating must be installed, including tap flow regulators, shower head roses and dual flush toilets. 	Yes	The development proposes rainwater harvest methods to collect and re-use rainwater throughout the site. The ESD report by Advanced Environmental (refer to Appendix D) addresses each of the holistic sustainable design solutions proposed in the development. Low flow water fittings, with a 4-5 star WELS rating will be installed.
Waste Minimisation 6.6.7		
 A suitable are should be set aside in all new development in the Double Bay Centre for the recycling of waste products. Such an area should be located so as not to cause offence to adjoining property owners or occupiers with regard to smell, 	Yes	A waste management plan by JD Macdonald is provided at Appendix R The plan details the waste requirements for the proposed development. Adequate waste storage facilities are provided in

visual appearance or noise disturbance.		the upper basement level.
Environmentally Systemable Buildings 6.6.9		
Environmentally Sustainable Buildings 6.6.8		
 The use of the building materials with the following characteristics are encouraged: With low embodied energy Durable Recycled or able to be recycled Sourced from renewable resources and materials Non-polluting in manufacture, use and disposal Non toxic, do not "outgas", and contribute to healthy indoor air quality. The use of rainforest timbers and timbers from old growth forests is discouraged. The use of bulk and or reflective insulation to walls ceilings and roofs is recommended. 	Yes	Advanced Environmental (report provided at Appendix D) has assessed the development proposal and have incorporated a number of recommendations in regards to ESD principles. The incorporation of environmentally sustainable building materials will be considered during future design stages.
Geotechnology and hydrology 6.6.9		
 Development Applications must include a design statement and supporting drawings (if necessary) that show the design measures proposed to minimise risk to ensure that no adverse impacts will occur. Geotechnical and Hydro geological reports with supporting design statements must be submitted with all development applications which include below ground structures. There will be no ground settlement or movement, during and after construction, sufficient to cause an adverse impact on adjoining properties and infrastructure. There will be no change to the ground water level, during and after construction, sufficient to cause an adverse impact on surrounding properties and infrastructure. Wibration during construction is minimised or eliminated to ensure no adverse impact on surrounding properties and infrastructure. 	Yes	A Stormwater Management Plan by Taylor Thomas Whitting (TTW) is provided at Appendix I A supporting letter (Appendix I) has also been provided by TTW outlining the Construction Methodology, Stormwater Methodology, Effects of Climate Change, and effect on the adjoining overall water table and Acid Sulphate Soil. There will be no change to the ground water level as a result of this development. The basement level is not changing, apart from drilling piers, which will not affect the water table as the water table is situated well below the existing basement slab.
Pedestrian access and mobility 6.7.1	Vaa	
 Provide access for people with mobility disabilities from the public domain to shops and all facilities and amenities. At least one main entry with convenient, barrier free access must be provided in all new development and redevelopment. Provide adequate parking for people with mobility disabilities. 	Yes	The development will provide disabled access throughout the site. Disabled parking will be provided.
On-site parking 6.7.2		
 Car parking must comply with the Woollahra DCP for off-street parking Provision and servicing facilities except where detailed below. Consolidated parking areas are preferred below ground level where possible and concentrated under building footprints. A cooperative approach to car parking provision, where car parks may be amalgamated and share access and egress points, are encouraged between 	No	Car parking is discussed in detail in Section 6.6 of this report.

two or three small lots.		
 Opportunities for the natural ventilation of basement 		
car parking must be maximised.		
Vehicular Access 6.7.3		
 In the centre vehicular access to a building is only permitted via a rear lane or rear right of way where possible. Preferred width of driveway crossings is 3m, a 	Yes	Vehicular Access will be via the existing vehicular crossover at 45 Cross Street. The width of the driveway will be 6 metres.
maximum of 6m is permitted.		
 Driveways to car parking above, below and at the ground floor level should be designed with minimum visual impact on the street and maximum pedestrian safety. Pedestrian access to the development should be separate and clearly defined. Garage doors should be set back. Access to car parking should not be located in direct proximity to doors or windows to habitable rooms. 		
Consider incorporating car manoeuvring devices such as car hoists and turntables.		
Site Facilities 6.7.5		
 Adequate garbage and recycling areas must be provided. 	Yes	Adequate garbage and recycling areas are provided within the upper basement level.
 Lockable mailboxes must be provided close to the street. 		Loading and servicing facilities for the hotel, and retail are provided within the upper basement car park.
 Loading facilities must be located in a rear lane or side street. 		park.
 Ensure service areas are unobtrusive and have minimal lane presence. Preferably orientate service areas within the building envelope, perpendicular to lane frontage. 		
Part 8 Appendix 1 - Transvaal Avenue Heritage Conservation Area		
• To retain and enhance the existing contributory buildings in Transvaal Avenue and to ensure that they retain their visual prominence in the streetscape.	Yes	The development will not impact adversely on the contributory buildings situated in Transvaal Avenue, nor impact on their visual prominence in the streetscape.
 To conserve the characteristics which give the Transvaal Avenue group of former residences its special sense of identity. 		It is considered that the existing building significantly detracts from the townscape
• To encourage replacement of buildings that detract from the townscape character of Transvaal Avenue.		character of Transvaal Avenue. It presents a large six storey monolithic blank facade as the backdrop to the Transvaal Conservation Area.
		The proposed development will present as a four storey podium, with the taller towers set back from the backdrop of the Conservation Area toward the southern boundary with Cross Street and will be articulated through the use of high quality, contemporary, materials and finishes, which visually will be of greater interest, than the existing situation.
Part 8 Appendix 1 – A1.4 Summary Statement of Significance	~	
 The Transvaal Avenue retail strip provides a physical record of a significant historical phase in the evolution of the Double Bay Commercial Centre. 	Yes	The proposed development will not impact on the aesthetic value, or the significance of the north-south streetscape vista along Transvaal Avenue.
 The group of buildings provides physical evidence of the working class residential boom at the end of the 19th century by a renowned local developer, Edward Knox Harkness, who was responsible for many fine 		The site is located adjacent to Transvaal Avenue, to the west of the Conservation Area and presents as a backdrop to Transvaal Avenue. Therefore the proposed development

 Double Bay area. 3. The quality and disidecoration of the tue exemplifies the ecocentury and the expendence of the tue exemplifies the ecocentury and the expension of the ture development after the exemplement after the exem	emi-detached cottages within the tinction of the architectural rn of the century buildings nomic boom of the turn of the bansion by residential he introduction of the tram service and from Rose Bay in 1898.	will not impact directly on, or disrupt the uniformity and scale of the federation styled cottages, or the consistency and aesthetic value of the streetscape.
through the naming avenue after the vio South African Boer	an historical record of the time of each of the properties and the ctories of the British force in the War. Transvaal being the ne South Africa Republic.	
cottages with their the brick and tile constr	d relative intactness of the ine Federation but Gothic style ruction, stucco details and timber distinctive and aesthetically	
development of the detached cottages	rm and scale within the Harkness single storey brick and tile semi- contributes to the unique qualities p within the Double Bay t.	
enhanced by the cl	s high aesthetic value which is osed vistas and the carefully ees and landscape works at the	
community, demon the local community was granted heritag	I and significance to the local strated through the involvement of / during the 1980s when the area ge conservation area status after ctions raised to the proposed he group.	

6 Environmental Assessment

This section of the report provides an Environmental Assessment of the Proposal against the key issues identified in the Director General's Requirements. A copy of the Director General's Requirements is provided at **Appendix Q**. The relevant Environmental Planning Instruments (EPIs), policies and guidelines are addressed in **Section 5** under the regulatory context. The following key issues are addressed:

- Architectural, Building and Urban Design Impacts
- Built Form
- Environmental and Residential Amenity (proposed development)
- Public domain
- Transport and accessibility (construction and operational)
- Noise and Lighting Impacts
- Construction impacts
- Ecological Sustainable Development (ESD)
- Drainage/Flooding
- Utilities
- Staging

The additional issues not identified in the DGRs however are considered to be important for this development being retail and economic impacts are also address in this section.

The key issue of consultation has been addressed in **Section 1** of this report.

6.1 Architectural, building and urban design impacts

The environmental assessment is required to address the visual impacts of the project in the context of adjoining development, the impact on the adjacent conservation area and if heritage item (on site, adjoining and adjacent the site) and its setting and building massing as viewed from public areas.

A Visual Impact Assessment, prepared by Architectus is provided at **Appendix C**. The report provides an assessment of the potential visual impact of the proposed mixed use hotel, residential and retail development at 33 Cross Street, Double Bay. The visual impact assessment has been prepared in response to the Director-General Environmental Assessment Requirements (DGRs)

The proposed development will be of a high quality architectural design incorporating quality materials and finishes.

The ground floor retail façade will be of frameless curved and curved glass. This will create an inviting transparency between the retail tenancies and the public domain. Concrete with an opaque mineral paint finish will also be used at ground floor. This will provide variation to the ground floor façade.

Much of the podium façade to Cross Street is glazed panels with aluminium framing. This façade to the hotel incorporates the use of light and transparent materials and is an improvement to the existing solid façade. The east, west and southern façades will include large panels of glazing and concrete with the five (5) storey building in the north west being defined by zinc cladding and modular aluminium façade screening. The variation in the podium façade defines the separate uses and elements of the development, being the retail, hotel and residential uses.

The tower façades to Cross Street will be of terracotta cladding and screening, providing solid tower forms that appear distinctly separated from the podium level when viewed from Cross Street. The northern façade of the towers is generally aluminium framed glazing with frameless glass balustrades.

Overall, the proposed building design, materials and finishes provide an interesting and well articulated built form. This provides visual interest and reduces the overall perceived bulk and scale of the development, with the tower forms and the podium levels being designed to appear as separate and distinct features of the one overall development, which is necessary on a site of this size.

In order to establish the potential visual impacts of the proposed development, the viewing zones have been separated into three components:

- Regional views long range (> 500m).
- Local area mid-range (200m 500m);
- Immediate vicinity short range (< 200m)

Within these viewing zones, views were selected which were considered important public spaces and locations. These places are likely to be of value to the local community for their public use for:

- Foreshore recreation;
- Lunchtime use by employees of commercial/retail uses in the town centre;
- Harbour recreational boating and commuter ferry patrons;
- Retail streetscapes;
- Streets arriving at Double Bay town centre; and
- Historic conservation area Transvaal Avenue.



Figure 58. Map of viewing zones.

The regional views comprise those greater than 500 metres from the subject site. The regional views have been selected as representative of views from various points in and around Sydney Harbour, as well as from elevated vantage points in Woollahra, near Bondi Junction. These regional views include:

- View 1 Bradleys Head, Mosman;
- View 2 Clarke Island, Sydney Harbour;
- View 3 Double Bay, Sydney Harbour;
- View 4 Harkness Street, Woollahra; and
- View 5 Bathurst Lane off View Street, Woollahra.

Local views are those within between 200 metres and 500 metres of the subject site. The selected local views include:

- View 6 Double Bay Wharf;
- View 7 Steyne Park;
- View 8 Corner of William Street and New South Head Road,

Double Bay;

- View 9 Bellevue Road, Double Bay; and
- View 10 Greenoaks Avenue, Darling Point.

The views in the immediate vicinity of the subject site are those within the Double Bay town centre. This area is generally dense with one to five storey buildings, and with a high site coverage. Open space in the immediate vicinity of the site includes a small pocket park at the corner of Bay Street and Guilfoyle Avenue, Steyne Park and surrounding foreshore open space and the adjacent heritage conservation area. These views include:

- View 11 Corner of Cross Street and Transvaal Avenue;
- View 12 Transvaal Avenue;
- View 13 Galbraith Walkway at William Street;
- View 14 Corner of Cross Street and Bay Street; and
- View 15 Guilfoyle Park.

The visual impact assessment provides visual impact ratings for all 15 sites. Overall, the proposed development is likely to have a moderate to high visual impact, as detailed in the assessment. From a regional perspective, which includes views and visual impact on Sydney Harbour and its foreshore, the visual impact rating will be generally low. The proposed development will have a high visual impact mainly from the local to the south and within the Double Bay town centre. The proposed development will generally not block important views of Sydney Harbour or the Central Sydney skyline from public vantage points due to the long narrow low valley floor behind the town centre.

The high quality design, materials and finishes proposed will result in a visually pleasing tower that will create a landmark development for the Double Bay town centre. The tower forms will allow for identification of the Double Bay town centre, particularly on approach from Sydney Harbour and the surrounding suburbs.

In summary, the proposed development will have a low visual impact on regional viewing points, however a moderate to high visual impact on local viewing points and those within the immediate vicinity of the site. Notwithstanding this, the proposed development will be of landmark quality and make a positive contribution to the identification of the Double Bay town centre. The proposal will be visible, however being visible is not in itself a negative impact. Due to the visibility, the design must be of the highest quality and the building forms must respond to the town centre location.

Transvaal Conservation Area

Transvaal Avenue is a low scale retail shopping strip with historical Queen Anne period cottages. As addressed in **Section 5.3**, Council have recognised the significance of the streetscape as a conservative area in the Woollahra Local Environmental Plan 1995.

The *Double Bay Centre DCP 2002 Appendix 1* outlines the objectives and management policies in relation to the Transvaal Avenue Conservation Area. Clause A1.5 of the Management Policy, states that:

"In recognition of the heritage significance of the Transvaal Avenue Heritage Conservation Area and its contributory buildings, the impact of the proposed development on individual buildings, on the character of the streetscape and on the overall significance of the area must be considered as part of the assessment of all development applications in the area."

During the options analysis phase (discussed in **Section 3**), consideration was given to the impact of the various design proposals on the Transvaal Conservation Area. It was considered that this proposal presents the best overall design outcome, particularly as the tower elements are orientated away from the eastern boundary, towards the southern Cross Street frontage.

Figures 59 and 60 below shows the existing hotel building in context to the Transvaal Conservation Area. The hotel presents as a monolithic form with a bland eastern elevation of six storeys which has few endearing qualities and detracts from the Transvaal Avenue streetscape.



Figure 59. Site as viewed from Transvaal Avenue The site presents as a blank façade monolithic block when viewed from Transvaal Avenue which detracts from the townscape character of Transvaal Avenue.

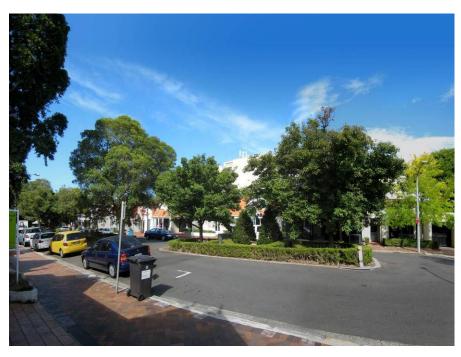


Figure 60. Existing view from Transvaal Avenue



Figure 61. Proposed view from Transvaal Avenue

The north eastern corner of the building will be lower in height than the existing building. Furthermore, the bulk of the podium will sit substantially lower than the existing building (proposed RL 18,000, 14.6 metres, existing RL 24.700, 21.3 metres) and will improve the scale relationship of the building to the conservation area, with the tower forms at 15 storeys being located towards the Cross Street frontage and furthest from the conservation area boundary.

One of the objectives of the Transvaal Avenue Conservation Area states:

"To encourage replacement of buildings that detract from the townscape character of Transvaal Avenue."

It is considered that the current building does detract from the character of Transvaal Avenue. This is shown in **Figure 59** which shows the existing hotel in the background presenting a blank monolithic facade to Transvaal Avenue.

The development proposes high quality, modern, articulated materials to the eastern façade of the proposed building, which fronts Transvaal Avenue Conservation Area, this will create greater visual interest, whilst not trying to replicate or mimic the character of the Conservation Area.

6.2 Built form

Height, Bulk and Scale

The Director General's Requirements states that:

"The Department has concern regarding the proposed height of the development in particular the hotel residence on the north east corner of the site and the length/height of the hotel residences on the western edge".

This concern was raise by the Department with the previous preferred option submitted with the Clause 6/Preliminary Environmental Assessment. The proposal has been amended with the reduction in the height of the north eastern corner of the site from 10 storeys to 5 storeys. Also, the length of the western building has been reduced.

The DGRs also require the Environmental Assessment to address the appropriateness of the height, bulk and scale of the proposed development within the context of the surrounding development and mitigate potential impacts relating to loss of sunlight, privacy and views at neighbouring properties. The EA is required to provide the following:

- Comparable height study to demonstrate how the proposed height relates to the height of the existing development surrounding the subject site; Refer to site sections at Appendix A
- View analysis to and from the site from key vantage points; Refer to visual impact assessment at **Appendix C**. and
- Options for building massing shall be provided (refer to Section 3).

The proposal varies in height from 4 storeys to 15 storeys. The maximum height of the development is 52.44 metres (RL 55.65 AHD). Measured to the top most point of the screen around the plant room on the roof of both towers.

The podium range in height from 3 to 5 storeys with the 3 storey element at the central northern part of the site. The north eastern corner of the site has a height of 5 storeys (RL 24.5 AHD) which is lower than the height of the existing building.

Figure 58 provides a section through the site looking East. The section shows the line of the existing building outlined in red. The proposed development at a maximum of 52.44 metres (RL 55.65 AHD) is less than twice the maximum height of the existing building at 29.77m (RL 32.98 AHD).

The Woollahra LEP 1995 does not identify a maximum height limit for the site. However, the Double Bay DCP 2002 Control Drawings in Sections 5.5 to 5.11 indicate the maximum permissible height of the site as being between 7.5m (podium) with 16.5m elements, which is less than the height of the existing building.

It is considered that if the site were to be redeveloped in accordance with the DCP height controls, it would result in a smaller development than what currently exists and is unlikely that any new development of the site would take place other than the refurbishment of the existing building. In this regard, the inconsistency between the existing building and the FSR and height controls as contained in the LEP and DCP are a disincentive to improve the urban design and built form of the existing building, due to it not being recognised by Council's Controls.

The redevelopment proposal presented by the proponent considers that the existing FSR should be retained and redistributed in a new format within a new development. As described previously in **Section 3** of this report, a number of redevelopment design options have been explored with the Department of Planning Urban Design Panel in regards to redistributing the existing amount of floor area on the site, in different areas of the site and in a fashion that that provides additional benefits in terms of pedestrian permeability throughout the site and also provide for a central public piazza space. Hence the current proposal is considered to be the best design option.

The objectives for Height as outlined in Woollahra LEP 1995 are as follows:

- a) To minimise impact of new development on existing views of Sydney Harbour, ridgelines, public and private open spaces and views of the Sydney City skyline,
- b) To provide compatibility with the adjoining residential neighbourhood,
- c) To safeguard visual privacy of interior and exterior living areas of neighbouring dwellings,
- d) To minimise detrimental impacts on existing sunlight access to interior living rooms and exterior open space areas and minimise overshadowing,
- e) To maintain the amenity of the public domain by preserving public views of the harbour and surrounding areas and the special qualities of the streetscapes.

The proposed development is considered to accord with the above height objectives, as demonstrated through the visual impact and views analysis, provided at **Appendix C** and the overall design concept which concentrates the height of the development towards Cross Street.

The design of the development incorporates a three – five storey podium level, orientates the two tower elements of the building towards the Cross Street frontage, away from the residential properties situated to the north of the site along Galbraith Walkway. A smaller 5 storey residential tower is located towards the rear of the site, on the north eastern corner, which will be less overall height than the hotel existing building in this same location.

It should also be noted that 70% of the proposed floor space is below the maximum height of the existing building, meaning that the bulk of the building is concentrated on the podium levels (ground to level 4) and the

overall height of the proposal is less that twice the height of the existing building.

The tower forms have small floor plates comprising a single hotel residence per floor level of 344m² and 385m². This makes for less bulky and more slender forms

Figure 58 below provides a comparison of the height of the existing building, adjoining buildings and the proposed height of the building.

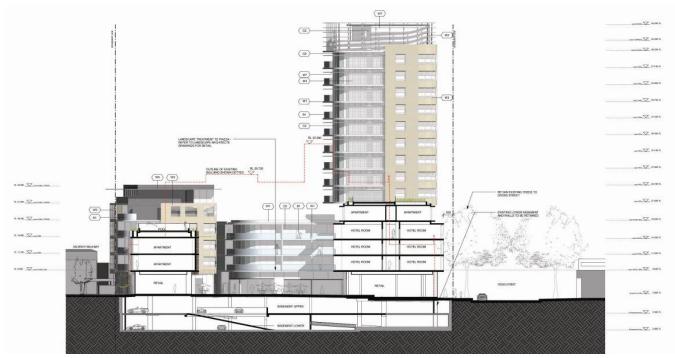


Figure 62. Comparison of existing and proposed building height t 70% of the development is located in the podium element of the building. The five storey tower in the north eastern corner of the site is lower in overall height than the existing building.

Significant positive urban design, built form and economic benefits including increased connectivity, aesthetic appearance and economic revitalisation are expected to result from the proposal. It is considered that new development on this site, should be permitted to maintain the current FSR (in a better alternate format) and if not, progressive urban improvements will be stifled as a result of controls that permit less development opportunity than currently exists.

The provision of taller elements in certain parts of the site and a lower podium, will free up other areas of the site, to allow for public open space to be provided with a central piazza, with through site pedestrian access linking with the surrounding streets and areas. This is considered to be a significant public benefit for Double Bay Town Centre, and would not be created without exceeding the FSR and Height controls.

6.3 Environmental and residential amenity

Solar access, acoustic privacy, visual privacy, view loss and wind impacts are required to be examined and are addressed as follows:

Solar Access and overshadowing

The development has been designed to achieve maximum solar access to each of the residential units and hotel rooms, thereby orientating the bulk of the development to the southern eastern and south western portions of the site. The podium level is designed in an L-shape, with the two tower elements above; a smaller five storey tower is situated to the north eastern corner of the site.

The majority of the residential units enjoy a northerly or north easterly aspect with a few units oriented to the east and south to address the public domain and Cross Street frontage, thereby optimising maximum natural sunlight access to the majority of units living room areas. The majority (82%) units will enjoy a minimum of 3 hours natural sunlight during the winter months.

The central public piazza will receive access to natural sunlight during the winter months as indicated on the shadow diagrams.

Shadow diagrams are contained in the Architectural Plans provided at **Appendix A**. The shadow diagrams indicate that as a result of this proposal the southern side of Cross Street and Knox Lane will experience some additional overshadowing, particularly during the winter months to the public domain.

The southern side of Cross Street is characterised by cafés/restaurants with some outdoor eating, retail shops and commercial offices.

The properties situated on Transvaal Avenue, will not experience any significant additional overshadowing as a result of this proposal.

The Shadow diagrams indicate the additional overshadowing created by the proposal, (in blue) and the additional solar access to the public domain as created by the proposal (in orange) and the line of the proposed projected shadow (hatched in blue) compared to the line of the existing shadow (hatched in pink). As indicated on the shadow diagrams for the 21st June, the southern side of Cross Street will experience additional overshadowing.

A number of re-development options as discussed in **Section 3** of this report were explored, all of the design options considered the overshadowing impacts arising from each design proposal. It is considered that this proposal represents the least impact in terms of additional overshadowing to the southern side of Cross Street, and the best overall design concept. The changes to the design following receipt of the DGRs have introduced a wider gap between the tower forms to maintain sunlight access to part of the southern side Cross Street during mid winter.

The following series of figures show the shadow impacts of the proposed at 21 June (mid winter) and 21 September (equinox). Scale drawings of these shadow diagrams as well as shadow diagrams for 21 December and 21 March at 9am, 12pm, 1pm, 2pm and 3pm are provided at **Appendix A**.

090320kf-C05_REPT_Environmental Assessment_Final

SOLAR AND SHADOW ANALYSIS:



ADDITIONAL SOLAR ACCESS TO PUBLIC DOMAIN

ADDITIONAL SHADOW TO PUBLIC DOMAIN



LINE OF PROJECTED SHADOW ON GROUND PLANE (PROPOSED DEVELOPMENT) LINE OF PROJECTED SHADOW ON GROUND PLANE (EXISTING DEVELOPMENT)



Figure 63. Shadow diagram June 21 (wind winter) 9am



Figure 64. Shadow diagram September 21 (equinox) 9am

architectus

SOLAR AND SHADOW ANALYSIS:



ADDITIONAL SOLAR ACCESS TO PUBLIC DOMAIN

ADDITIONAL SHADOW TO PUBLIC DOMAIN



LINE OF PROJECTED SHADOW ON GROUND PLANE (PROPOSED DEVELOPMENT)

LINE OF PROJECTED SHADOW ON GROUND PLANE (EXISTING DEVELOPMENT)



Figure 65Shadow diagram June 21 (mid winter) 12pm



Figure 66 Shadow diagram September 21 (equinox) 12pm

SOLAR AND SHADOW ANALYSIS:



ADDITIONAL SOLAR ACCESS TO PUBLIC DOMAIN

ADDITIONAL SHADOW TO PUBLIC DOMAIN

LINE OF PROJECTED SHADOW ON GROUND PLANE (PROPOSED DEVELOPMENT) LINE OF PROJECTED SHADOW ON GROUND PLANE (EXISTING DEVELOPMENT)



Figure 67 Shadow diagram June 21 (mid winter) 1pm



Figure 68.Shadow diagram September 21 (equinox) 1pm

architectus

SOLAR AND SHADOW ANALYSIS:



ADDITIONAL SOLAR ACCESS TO PUBLIC DOMAIN

ADDITIONAL SHADOW TO PUBLIC DOMAIN



LINE OF PROJECTED SHADOW ON GROUND PLANE (PROPOSED DEVELOPMENT)

LINE OF PROJECTED SHADOW ON GROUND PLANE (EXISTING DEVELOPMENT)



Figure 69. Shadow diagram June 21 (mid winter) 2pm



Figure 70. Shadow diagram September 21 (equinox) 2pm

SOLAR AND SHADOW ANALYSIS:



ADDITIONAL SOLAR ACCESS TO PUBLIC DOMAIN

ADDITIONAL SHADOW TO PUBLIC DOMAIN

LINE OF PROJECTED SHADOW ON GROUND PLANE (PROPOSED DEVELOPMENT) LINE OF PROJECTED SHADOW ON GROUND PLANE (EXISTING DEVELOPMENT)



Figure 71.Shadow diagram June 21 (mid winter) 3pm



Figure 72. Shadow diagram September 21 (equinox) 3pm

Acoustic Privacy

Acoustic Logic have prepared a report assessing (refer to Appendix G) the potential impacts on the acoustic amenity of the proposal for both external and internal noise sources.

The noise sources investigated are as follows:

- Existing environmental noise impact on the future site including surrounding traffic noise from surrounding roadways.
- Noise emissions associated with traffic generated from the site.
- Noise emissions from the site including mechanical plant noise.

To minimise traffic noise from the proposed development, the external façade of the proposed development will be acoustically treated where necessary to ensure internal noise levels comply with specified Australian Standards (ASA2107:2000).

A detailed mechanical noise assessment will be conducted once plant selections have been finalised as part of the construction certificate documentation. Mechanical plant treatments such as lining of ductwork, acoustic silences, variable speed controllers, time switches, acoustic screens will be integrated into the proposed development.

A preliminary acoustic assessment of the proposed Level 4 bar, restaurant and pool area has been conducted. Details of noise management controls will be provided as part of the operating documentation and may include a number of the following controls:

- a) Time limits on the operation of the swimming pool.
- b) Time limits on the operating hours of the external areas of the restaurant and bar.
- c) Limiting times when music can be played on the external areas.
- d) Limiting the level of recorded music on external areas.
- e) Time when the external façade should be closed

Specific restrictions on time limits have been recommended in the draft statement of commitments at **Section 7** of this report.

Visual Privacy

Screening, such as planting and the proposed aluminium façade screen system to the external façade of the building are incorporated into the design to create visual privacy for residents and neighbouring residents to the north of the site.

The rear (north elevation) is screened with 1.2 metre high balustrades around some of the terraces and balconies, as well as densely foliating trees on rooftop areas as indicated on the landscape drawings.

The hotel communal pool and terrace situated on level 4 of the podium will be screened with planting and the pool will be setback a minimum of 1.5 metres from the edge of the building and between 4.7 metres from the rear boundary. Patrons of the pool will not be able to stand up on the edge of the pool to protect the privacy and amenity of the residents to the north.

Wind

A Pedestrian Wind Environment Study and Solar Light Reflectivity Analysis prepared by Windtech are provided at **Appendix E and AA).**

The results of the wind study indicate that wind conditions at some of the outdoor areas of the proposed development will exceed the relevant criteria. The following treatments are recommended for the development to maintain an acceptable wind environment on the site and the surrounding area:

- The existing trees along the Cross Street frontage are to be retained.
- 1.2 metre high impermeable balustrades around some of the terraces and balconies (see figures 7b, 7c, 7d in the Pedestrian Wind Environment Study at Appendix E)
- Densely foliating trees shall be incorporated onto the rooftops at Level 5.

The above treatments have been modelled and tested in the wind tunnel to verify their effectiveness. With these treatments included into the final design of the development, the wind conditions within and around the proposed development site will be acceptable for their intended uses.

Solar Light Reflectivity

A reflectivity analysis of the proposed development has been carried out using the technique published by Mr David N.H.Hassall.

The Solar Light Reflectivity Analysis recommends that to avoid any adverse glare to drivers and pedestrians on the surrounding streets of the proposed development site, and to comply with the requirements of the City of Sydney DCP October 2003, Section 4.5 *Reflectivity*, the following recommendations has been made on the on the reflectivity properties of the glazing to be used on the façade to satisfy minimum comfort levels for the occupants of the neighbouring buildings;

 All areas of the façade of the development shall have a maximum normal specular reflectivity of visible light of 20 percent.

6.4 Public domain

The site currently has an internalised north south through site pedestrian connection that is open during normal business hours. These pedestrian access ways link the main Cross Street entrance to Transvaal Avenue to the east and William Street to the north.

The existing hotel does not offer an unrestricted pedestrian connection through the site. The internalised retail arcade of the existing facility is open Monday to Saturday days between 7am and 6pm and closed on Sundays provides a north-south through site link to Galbraith walkway and beyond to William Street. After those hours the access way is locked for hotel security reasons. In addition, the existing pedestrian access way is internalised and uninviting, making pedestrians feel like interlopers when the through site access is open.

As part of the proposed redevelopment of the site, a public plaza surrounded by new retail tenancies will be created. The public plaza is proposed to have a number of pedestrian access points connecting to the surrounding pedestrian network. To the north, the new public plaza is to be connected through to Galbraith Walkway and William Street. To the east the plaza is to be connected to Transvaal Avenue via a laneway. The hotel lobby on the western side of the site would be connected to the Georges Centre via a retail arcade. In addition, pedestrian access is proposed at two locations from Cross Street. The proposed pedestrian access points would significantly improve permeability of the site. **Figure 69** provides a ground floor plan of the development showing pedestrian connections.



Figure 73. Site plan

The red arrows indicate the through site linkages and overall increased permeability through the site.

The creation of a central piazza space, with high quality landscaping, will create a hub for passive recreational activities and shopping for public enjoyment and a positive contribution to the Double Bay town centre. The piazza will be surrounding by retail uses that activate the space with the potential for outdoor dining, which is characteristic of the retailing and experiences in the surrounding Double Bay area.



Figure 74. Artist's impression of piazza and pedestrian link to North

6.5 Safety and security

The proposed development contributes to the process of crime prevention through environmental design (CPTED) and is designed in accordance with the principles laid down in *Crime Prevention and the Assessment of Development Applications (2001)* published by DUAP (now Department of Planning).

The guidelines provide assessment criteria for new development that encourages good design to help avoid creating environments that are conducive to crime or criminal activities.

The four CPTED principles used in the assessment of the development application to minimise the opportunity for crime are:

- Surveillance
- Access control
- Territorial reinforcement
- Space management

An assessment of the proposed development against the CPTED

principles is provided below: **Surveillance**

Good surveillance will often deter people from taking part in criminal or unsafe activity due to the fact that they can be seen. It also minimises crime perception and makes people feel safe and secure.

Surveillance can be achieved as part of the design of the building by the provision of:

- Clear sightlines between public and private spaces.
- Effective lighting of the public domain.
- Landscaping that makes the place attractive, but does not allow offenders with a place to hide or entrap victims.

The proposed development includes integrated public connections through the site, increasing surveillance to different parts of the building, internally and externally.

The building which incorporates permanent occupants also will enable the 24 hour use of the site with a range of non-residential uses. The building Design retains the Cross Street frontage as the main entry to the site with secondary entries via existing and enhanced through site links from the North, East and West. Two (2) connections from the street into the piazza space are proposed which offer clear and direct sightlines into an out of the site.

The enhances from the public domain into the site are improved and improved retail spaces at Ground Level, address the street, the through site links and public piazza space give good surveillance. The retail tenancies have significantly been improved with an increase in retail public domain frontage with the deletion of the porte couture and loading dock. New retail tenancies oriented to the street.

Residential apartments are oriented to Cross Street and into the piazza space. Upper level apartments are oriented to the northern harbour views. The lower level apartments on the northern side of the site have been designed to maintain privacy given the proximity to adjoining properties but are also designed with screening devices to optimise privacy but also allow for some surveillance of the northern laneway which provide good surveillance of adjoining streets and building entries. The piazza space will be surveyed by residents and their visitors, patrons of the hotel and the retail employees and patrons throughout the day, in the evening and at night.

It is envisaged that throughout the day and in the evening the site will activate with people, entering and leaving the hotel, visiting shops, sitting in the piazza space in cafes or visiting the restaurant or bar in the evening

All building entries are clearly defined and there are clear sightlines to the entries so the entries are not concealed as entrapment spaces for potential crime. Residential lobbies at ground floor level are clearly visible from the piazza space and are distinctly separate from entrances to hotel and residential entries. This allows for constant surveillance and vibrancy both in and out of the building that will only deter and prevent crime on the subject site, but also the surrounding public domain. There are some concealed spaces within the basement levels. This is inevitable in basement levels of this scale. The existing design of the basements have been improved by generally securing the residential parking from non-residential so there is no need for non-residential visitors who are parking on the site to access residential parking areas, therefore appropriately securing the basement car parking areas. The adaptable residential car spaces at Basement Level 1 are to be secure with a gate to limit unauthorised access.

The bicycle parking spaces within the basement parking levels are sited to be visible and will have transparent security fencing to allow for surveillance into these areas to avoid any possible corner concealment or create any entrapment spaces. Also residential storage cages are to be key lock entry only and secure. Moreover, plant and service rooms are to be key lockable access only and secure so that only authorised personnel may go into these areas.

In addition to the high level of passive surveillance provided to public and publicly accessible private open space including entries, surveillances will include CCTV in the basement parking levels, as well as in the publicly accessible through site links to monitor pedestrian movements.

Access control

Areas that may not be under natural or technical (CCTV) surveillance, or other areas that should not have unauthorised public access have controlled access. Effective access control can be achieved by:

- Landscapes and physical locations that channel and group pedestrians into target areas;
- Public spaces which attract, rather than discourage people to gather.
- Restricted access to internal areas or high-risk areas (like car parks or other rarely visited areas). This is often achieved through the use of physical barriers.

Residential and hotel lobbies have secure access from the public domain to the upper levels. Retail tenancies are clearly separate with separate from residential and hotel lobbies.

The publicly accessible piazza space with retail uses including potentially cafes fronting onto the space will be an attractive and active space for occupants and visitors. The proposal achieves a good degree of access control with a pedestrian movement system that encourages people to move through the site. A clear sightline is provided in a North-South direction through the site from Cross Street to Galbraith Walkway.

Connection to Galbraith Walkway and residential area to the North

It is good urban design and planning practice to include open air through site links on large sites such as the subject site. Open air connections providing 24 hour public access will make a positive contribution to the public domain network of Double Bay town centre. There are time limitations for public access through the site to the Galbraith Walkway, which were a condition imposed by Woollahra Council on the Development Consent for the existing hotel development.

It is considered that an open publicly accessible through site link to the north is desirable and the proposal will enhance this connection. It is also

recognised that with this enhanced access it will be the more desirable for people to use this connection. This may have undesirable impacts on the privacy and amenity of the residents living off Galbraith Walkway however the unrestricted access is considered to be in the broader public interest.



Figure 75. North-South through site connection 3D artist's impression view of the proposed development showing the relationship between the north-south through site link and the Galbraith Walkway and adjacent residential properties. (Source: McGregor + Partners Landscape Architects).

Territorial reinforcement

It is important that open space areas that are accessible to the public are well designed and located in order to provoke the feeling of shared ownership of these areas. As stated in the CPTED guidelines, territorial reinforcement can be achieved through:

- Design that encourages people to gather in public spaces and to feel some responsibility for its use and conditions;
- Design with clear transitions and boundaries between public and private space.
- Clear design cues on who is to use space and what the spaces are to be used for. Care is needed to ensure that territorial reinforcement is not achieved by making public spaces private spaces, through gates and enclosures.

The piazza space and through site links will encourage occupants and visitors to gather given them a feeling of ownership of the sites. High quality retail tenancies and high quality materials and finishes in the public domain including lighting, furniture and plantings as well as its regular maintenance will promote a sense of ownership of the spaces.

There is a clear transition between public and private areas. Private residential apartments are clearly separate from hotel. The separate entries for the different uses on the site are clearly distinct.

Space management

090320kf-C05_REPT_Environmental Assessment_Final Space management strategies include activity coordination, site cleanliness, rapid repair of vandalism and graffiti, the replacement of pedestrian and car park lighting and the removal and refurbishment of decayed or damaged physical elements.

It is anticipated that the areas which are publicly accessible will be well maintained by the building's strata management, and be kept in an inviting and clean manner in order to minimise the potential for crime and to maintain safety and security. The high quality maintenance of the site will be in owners, managers and tenant's best interests to promote a highly desirable retail precinct within Double Bay.

There will be 24 hour surveillance from the hotel concierge providing a constant security presence for the development and the piazza space.

Conclusion

The proposal has been designed to achieve a high level of safety and security and is consistent with the CPTED principles outlined above.

The high level of visual security provided by the design to public domain areas both internally and externally with the increased activity proposed for this area of Double Bay.

A Security Management Plan should be submitted to Woollahra Council for approval prior to the occupation of the building addressing, but not limited to the following list for recommendations to ensure that safety, security and crime prevention measures are provided for:

- Lighting should be maintained and faulty lighting should be replaced promptly in order to maintain safety, particularly to public domain areas.
- Plant areas and other services are not intended for public entry should be lockable and secure, only allowing for entry of authorised personnel;
- A CCTV security network should cover publicly accessible areas, including the piazza space and through site links as well as possibly concealed spaces, and car parking areas.
- Adequate infrastructure (electrical requirements etc), should be provided in the Construction Certificate documentation to ensure that full CCTV coverage of public domain areas and the car park is demonstrable; and
- Details of car park entry and security should also be specified in the Security Management Plan;
- Bicycle parking and storage areas should be able to be secured and locked.

6.6 Transport and accessibility

Introduction

The Director General's Requirements require the Environmental Assessment to demonstrate the provision of sufficient on-site car parking for the proposal having regard to local planning controls and RTA guidelines. The EA is also required to provide a Transport and Accessibility Impact Study prepared in accordance with the RTA's Guide to Traffic Generating Developments, considering the following matters:

- Traffic generation,
- Any required road/intersection upgrades (including Cross Street & New South Head Road, Cross Street and Ocean Avenue & Bay Street and William Street, and
- Car parking arrangements, measures to promote public transport usage and pedestrian and bicycle linkages.

Halcrow MTW have prepared a transport and parking assessment report (**Appendix F**). The existing hotel includes a car parking facility with 173 spaces. The facility has 2 components which include hotel parking and a public car park that is managed by the hotel.

The proposal incorporates a re-configuration of the basement car parking spaces, due to some of the plant facilities associated with the development and hotel back of house being accommodated in the basement, with parking provision for 107 car spaces and retail and hotel loading docks.

Section 6.2 of the Halcrow MWT report specifically addresses each of the Director General's Requirements and issues raised in the more detailed submissions by the Ministry of Transport (MoT) and the Roads and Traffic Authority (RTA) which informed the Department's of Planning preparation of the DGRs.

The issues of access, car parking, service vehicles, pedestrian access and bicycle parking are addressed below:

Access

The access to the basement car parking area is shared with the Georges Centre at 45 Cross Street.

Car parking

It is proposed to provide a total of 107 spaces over two levels. The upper level parking area will generally be reserved for residential tenant parking, within a secured area and some visitor parking, while the lower basement levels while containing some residential parking spaces, will predominately operate as a valet car park for hotel guests.

The development proposes:

- 74 spaces for residents
- 33 spaces for the hotel

In relation to the original development consent of the hotel (88/176), the consent notice at **Appendix T** stated that:

Condition 2:

"The provision of 223 car parking spaces on-site and further, stack parking by valet service being provided if required"

Condition 40

"that in lieu of the provision of 50 car parking spaces on site, the Council accept a monetary contribution...and in any event the contribution being paid prior the release of approved building plans"

The plans of the basement level by Leffler Simes Architects (approval date 11 April 1990) indicate that there are173 car parking spaces provided within these two basement levels. Thus credit for the additional parking spaces is attributable to the site.

The Double Bay Centre DCP 2002 and the Woollahra DCP for Off-street parking provision and servicing facilities specify the following parking provision rates for uses proposed in the development. Refer to **Table 13**.

Type of development	DCP Controls Spaces per unit/Per 100m ² GFA	Floor Space (m²)/No. of Rooms/Units	Spaces required as per DCP control	Spaces provided
Retail	3.5 spaces per 100m ² GFA	1,081m²	38	0
Restaurant	15 spaces per 100m ² GFA	295m ²	44	0
Retail/Restaurant sub-total	-	-	82	0
Hotel	1 space per 2 rooms	66 rooms	33	33
Residential 1 bed	0.5 spaces per unit	8 units	4	8
Residential 2 bed	1 spaces per unit	12 units	12	20
Residential 3 bed	1.5 spaces per unit	19 units	29	38
Residential (visitors)	1 space per 5 units	39 units	8	8
Residential sub-total	-	-	53	74
TOTAL			168	107
SUB TOTAL (minus parking credit of 50 spaces)			118	
Shortfall in parking spaces (118 spaces minus 107 spaces)			11	107
Shortfall in Retail/Rest Parking Provision			82	
Total shortfall in Retail/Rest Parking Provision (minus parking credit of 50 spaces)			32	

Table 13. Parking requirements and provision

Due to the re-configuration of the existing basement and lower basement levels, including the incorporation of retail and hotel servicing areas, plant equipment and waste/residential storage areas, the proposed development will decrease the amount of parking spaces on-site with 107 parking spaces proposed.

The Double Bay DCP 2002 (and the Woollahra DCP for off-street parking provision and servicing facilities where applicable) specify the following parking provision rates for the uses proposed in the development:

- Retail 3.5 spaces per 100m² GFA;
- Restaurant 15 spaces per 100m² GFA

- Hotel 1 space per 2 rooms;
- Residential (1 Bed) 0.5 spaces per unit
- Residential (2 bed) 0.5 spaces per unit
- Residential (3 bed) 1.5 spaces per unit; and
- Residential (visitors) 1 space per 5 units.

In accordance with the above requirements the development would require 168 spaces. In accordance with the original development consent (88/176), condition 40, required that a monetary contribution be paid for 50 spaces on-site. (this is explained in detail in **Section 2** of this report)

The proposed development provides the following parking:

- 74 spaces for the residential
- 33 spaces for the hotel

There will be a shortfall in parking of 11 spaces in total taking into consideration the parking credit, however technically there is a shortfall of 32 retail parking spaces.

As indicated in **Table 13** above, the development proposes to provide a total of 107 spaces. On the bases that the proposed development would require a minimum of 118 spaces. This takes into consideration the parking credit of 50 spaces.

The shortfall is in the requirement for retail and restaurant uses (a total of 82 spaces), taking into account the 50 space credit, an additional 32 spaces would be required to be provided off site.

Halcrow MWT has undertaken a parking survey of the Cross Street Car park and the existing public car park located underneath the Stamford Plaza Hotel. The parking surveys were conducted over three separate days (Friday 5, Saturday 6 and Thursday 11 December 2008). The surveys were conducted from 12:00pm to 12:00am for Friday and Saturday, and for Thursday it was from 4:00pm to 10:00pm. The results are presented in Figure 3 in the Halcrow MWT report at **Appendix F**.

The Cross Street car park peak usage was from 12;00pm to 1:00pm for both the weekday and Saturday. The Cross Street car park was only 80% at capacity on the weekends and only about 50% capacity on Saturday.

Given the results of the parking survey, it is considered that there is sufficient capacity in the Cross Street car park to be able to cater for the shortfall in the retail parking spaces for the proposed development. Although it is not considered necessary, if required a contribution to Woollahra Council could be made in respect of the shortfall in parking spaces.

Service vehicles

It is good urban design practice to remove the existing hotel loading dock from Cross Street, which will improve the streetscape providing an opportunity to enhance the presence of retail tenancies and the hotel lobby. The deletion of the loading dock from the Cross Street frontage means the proposed loading requirements for the new retail and hotel and residential uses on the site will need to be accommodated in the existing basements accessed via the existing access arrangement from the adjoining 45 Cross Street site. The basement car parking levels of the site have a vertical clearance of 2.1m at the entrance to the car park. This restricts the size of service vehicles that can access the site. Therefore, it is proposed that the site be serviced by vehicles be no larger than vans or low clearance small trucks.

Larger trucks would be required to service the site from Cross Street. It is proposed that the Cross Street frontage of the site (between the existing cross-overs of the porte-cochere) is to be sign-posted as "no parking" to allow for occasional loading needs of large trucks and for hotel guest and customer drop-offs and pick-ups. This facility would be of general benefit to the local area and operating under a "no parking" control could serve more visitors than it would if used for regular kerbside parking.

The site frontage is currently allocated as a bus zone for the Sydney Explorer Bus plus one metered on-street parking space. With the removal of the porte-cochere ingress and egress driveways, the available length would be about 50m. With the bus zone and on-street parking retained, a length of about 20m would be available for a drop-off/pick-up zone. This would allow for three standard car spaces or a loading area for a large truck.

Bicycle parking

Woollahra Council does not have any specific requirement for bicycle parking. However, it is proposed to provide 30 parking spaces for bicycles. Approximately 25 of these spaces would be located on the upper basement level for use of tenants and visitors. There would be an additional five bicycle racks on the ground floor for easy access by visitors.

Traffic impacts

The RTA's *Guide to Traffic Generating Developments, 2002* has been used by Halcrow MWT to determine the traffic generation potential of the proposed development.

The Halcrow MWT report provides that the existing use would generate about 128 vph during the Thursday evening peak and approximately 153 vph during the Saturday morning peak period.

It is noted that these estimates do not include an allowance for the traffic generation of the function rooms because that would be highly variable from day to day. At peak usage, the function rooms have the potential to double the peak hourly traffic generation of the existing development.

The proposed use would generate peak hour traffic in the order of 116 vph and 123 vph during the Thursday evening and Saturday morning peak periods respectively. The Halcrow MWT report provide that:

> "Therefore, the proposed development is expected to generate somewhat less traffic than what the existing use would generate if it was operating at full capacity. It is this apparent that the proposed development would not have any adverse impacts on the operations of the surrounding road network".

Construction traffic

The proposed construction works are expected to take place over a two year period. There will be minimal excavation, however demolition material will be removed and construction materials, fittings and equipment delivered to the site.

It is anticipated that one or more tower cranes would be erected on site and that a construction zone would be provided along the Cross Street frontage of the site. Trucks would arrive from the west on New South Head Road, turn left into Bay Street and then right into Cross Street. They would exit from Cross Street then turn right into New South Head Road to return to the west.

During construction appropriate hoardings and measures to protect pedestrians and vehicles would be implemented. There is nothing intrinsically difficult with the construction of a new building on the site, but naturally appropriate measures to protect the public will need to be implemented.

A detailed construction traffic management plan will be prepared once a builder is appointed. This will allow the construction management plan to reflect the actual staging of development as it is proposed.

The management plan will be submitted to the Woollahra Local Traffic Committee for their agreement before the commencement of construction.

6.7 Noise and lighting Impacts

The Director General's Requirements requires the Proponent to address the key noise and lighting impacts associated with the proposal as:

> "Demonstrate that the proposal will be designed, constructed, operated and maintained so that there is no unacceptable level of noise impacts (including traffic noise) on amenity in the locality".

Comments on acoustic impacts of the development on the amenity of the surrounding area have been addressed previously in his report in terms of residential amenity.

6.8 Construction impacts

A construction methodology is provided in the Taylor Thomas Whitting report at **Appendix I** stating:

"The project involves demolition of the existing building including the ground floor slab. The site is surrounded by three adjoining properties and Cross Street. It does not involve any additional excavation. There are a small number of piles that will need to be drilled and the material removed from the site. This will be done by drilling rig on the upper basement slab and drilling through the basement slab. Although there is a cut off wall, over the years the water table inside the site has risen to just below the existing lowest basement slab. Thus, the water table outside the wall is 2 metres below Cross Street and inside the site, is below the lowest basement, therefore the boundary wall is acting as a cut off... A construction zone in Cross Street and using a crane on the site. There will be some initial hoarding on Cross Street, with the ground floor slab acting as a construction platform in the future civic area...."

The proponent is required to address measures to ameliorate potential

impacts arising from the construction of the proposed development.

A Draft Construction Management Plan (CMP) has been prepared by Architectus and is provided at **Appendix H** to serve as a tool for construction management practices for the demolition and building construction on the site. While the management of potential impacts during demolition is not mentioned in the DGRs, this phase of the development is addressed in the Draft Construction Management Plan and will be further addressed in the detailed construction management plans to be prepared with the benefit of a contractor.

This document is a draft document and covers the following demolition and construction management issues:

Demolition and construction management

- Pre-commencement inspections
- Tree preservation
- Compliance with the relevant Australian Standards
- WorkCover licence
- Contaminated land
- Asbestos
- Erosion and dust control
- On-site burning
- Recycling/reuse of materials
- Footpath and roadway protection
- Adjoining buildings
- Working hours
- Waste minimisation during demolition and construction

Erosion and sediment control

- Erosion control measures
- Sediment fence
- Drainage pit control
- Water diversions
- Stock pile control
- Washing area
- Vegetation retention and protection
- Pump out
- Erosion and Sediment Management Plan
- Warning sign on site
- Dust control on disturbed area

Acoustic Requirements for Construction Hoardings

• Damage to or obstruction of Council footway and roadway

Construction Traffic Management

- Pedestrian Public Traffic
- Vehicular Public Traffic

A detailed CMP will be prepared for the construction works with input from the contractors and will be submitted to the consent authority for agreement prior to the commencement of any demolition works commencing on site. The details CMP will need to have reference to this draft CMP. Refer to the Draft Statement of Commitments at **Section 7**.

6.9 Ecologically Sustainable Development (ESD)

The proposal is required to be designed to incorporate ESD principles in the design, construction and on-going operation phases. Also required is an assessment of the new hotel building against industry best practice standards sustainability initiatives (i.e. the Department of Environment and Climate Change's NABERS Energy and Water Rating for Hotels).

In regards to the NABERS for hotels, Advanced Environmental have advised in their ESD report (at **Appendix D**) that NABERS for hotels is a rating tool which assesses the energy and water performance of operational hotels. At present, there are no assessment methodology guidelines currently available for assessing a potential NABERS rating during design phases. As an operational tool, it depends significantly on the guest usage of water and energy, the design of the building can only have a limited impact on water and energy savings. This is especially the case in hotels, where guest usage cannot be restricted or managed.

The hotel design is at a conceptual design phase, at which accurate energy predictions are not possible. In the interest of achieving a sustainable solution, preliminary services concepts have focused on reducing the energy and water footprint of both the hotel and residential components and these concepts will be developed in conjunction with operator when they are appointed. However at this stage, this does not inform the potential NABERS energy and water operational ratings.

Advanced Environmental have prepared a detailed ESD report, BASIX Certificates, for the proposed development (provided at **Appendix D**). The report specifically addresses:

ESD opportunities considered for the proposed development;

Initiatives which demonstrate compliance with NatHERS and BASIC requirements for the residential component (BCA class 2).

Approach to BCA Section J for the hotel and retail components (BCA class 3 and class 6)

The A holistic design approach is aimed at providing best practice level of sustainability. The legislative compliance requirements are as follows:

- Class 2 (residential)
 - NatHERs Thermal Comfort Analysis
 - BASIX Energy, Water and Thermal Comfort Assessment
- The hotel, retail and restaurant (Class 3 and 6)
 - Deemed-to-satisfy (DTS) approach to demonstrating compliance has been selected to satisfy the provisions of Section J.
 - J1 Building Fabric
 - J2 Glazing
 - J3 Building Sealing
 - J4 Air Movement
 - J5 Air-conditioning and ventilation systems
 - J6 Artificial Lighting and power
 - J7 Hot Water Supply
 - J8 Access for maintenance

090320kf-C05_REPT_Environmental

- The key energy and water efficiency initiatives currently included in the development are:
- Water efficient fittings and appliances
 - Rainwater collection for re-use
 - 3 star WELS showers
 - 4 star WELS toilets
 - 6 star WELS kitchen and bathroom taps
 - 5 star WELS clothes dryers and dishwashers
- Energy efficient appliances
 - Gas boosted solar hot water heaters
 - Central ventilation systems
 - Efficient lighting and good natural lighting
 - Gas ovens and cook tops
 - 6 star refrigerators
 - 4 star dish washers
 - 4.5 star clothes washers
 - Gas heater clothes dryers
- Central Renewable Energy Capacity
 200m² Solar collector

The resulting BASIX scores are:

- Energy 20%
- Water 47% (exceeding the target by 7%)
- Thermal Comfort Pass (no targets)

A range of ESD solutions have been included in the design such as:

- All the spaces are intended to be mixed mode, which will reduce energy consumption for air-conditioning.
- External shading shall be incorporated to optimise daylight availability and reduce lighting energy consumption during the day.
- Compact fluorescents are used for all primary light fittings incorporated in the retail and hotel components. This could reduce lighting consumption by more than 50%.
- Services for common areas such as lighting, HVAC, and mechanical ventilation be operated through time switches or be linked to motion sensors to reduce energy consumption when the space is unoccupied.
- Low-flow water fittings with 4-5 star WELS rating would lead to a reduction of up to 50% in overall water consumption.
- Rainwater harvesting. The rainwater from the roof will be collected and stored in a tank situated in the basement and re-used for the watering of the landscaped communal landscaped areas.

Additional Items which are being investigated include:

- Renewable Energy in the form of Building Integrated Photovolatics;
- Interactive metering would help increase awareness among

occupants regarding impacts on energy and water use;

- Incorporation of low VOC materials, internal and external shading, manual over-rides to all end use applications can aid in improving occupant comfort levels; and
- The holistic strategies would combine to produce a building that minimises its energy and water footprint and optimises visual and thermal occupant comfort. This is demonstrated by the substantial improvement on the minimum regulatory requirements for sustainability.

6.10 Drainage and flooding

The Environmental Assessment is required to address flooding and drainage issues associated with the development site, including:

- Stormwater,
- The potential effects of climate change, sea level rise and an increase in rainfall intensity,
- Drainage infrastructure; and
- Water Sensitive Urban Design measures.

A Stormwater Concept Plan has been prepared by Taylor Thomas Whitting (TTW) and is provided at **Appendix I**.

The overland flow path is indicated on the drawings provided by TTW at indicates where inlet pits and drains are situated to drain the surrounding areas and how the overland flow will drain to the street.

The stormwater pipe system concept plan will cater for an increase in rainfall intensities due to climate change. With respect to rainfall, it is understood that at most the rainfall for one day will increase by 10%, which is the standard rate. The stormwater system has been designed with this increase in mind, by increasing the pipe diameter, pipe grade and pipe capacity as indicated on the calculations provided by TTW at **Appendix I**.

The site is approximately 3 metres above sea level and setback 250 metres from the harbour and it is not anticipated that the site will be affected by an increase in sea level.

With respect to the water table, the existing basement levels will be retained. A small number of piles will be drilled and the material removed from the site. This will be undertaken by placing a drilling rig on the upper basement slab and drilling through the basement slabs.

The water flows and water table inside the site has risen to just below the existing lower basement slab. Thus, the water table outside the perimeter wall is 2 metres below Cross Street and inside the site is below the lower basement level. The existing perimeter boundary wall acts as an cut off wall, thereby isolating the site from the surrounding areas. Therefore drilling the piers will not change the water table within the site as the water table is below the existing basement slab.

6.11 Contributions

The Proponent is required to address provision of public benefits, services and infrastructure having regard to the Council's Section 94/94A Contribution Plan and/or details of any Voluntary Planning Agreement.

Section 94 of the *Environmental Planning and Assessment Act 1979* contains the provisions that allow a consent authority to impose or require the dedication of land free of cost or the payment of a monetary contribution or both, in order to meet demand for public amenities and public services, which, would be generated by the proposed development.

There are a number of fundamental principles that the Minister is required to follow when imposing contributions under Section 94:

- The consent authority must establish a **nexus** between the need created by a new development and the provision of public amenities and services;
- The contributions must relate or be imposed for a planning purpose;
- The contributions must be reasonable for the particular development;
- The contributions must be spent within a reasonable time; and
- The funds collected must be **accounted for** in a clearly identifiable manner and in the prescribed form and manner.

In accordance with the *Environmental Planning and Assessment Act Regulations 2000, clause 25K (1)(iii)*, the **maximum percentage** of the proposed cost of carrying out development that may be imposed by a levy under section 94A of the Act is, that is if the proposed cost is greater than \$200,000, then a 1% levy of the total cost of the development may be charged.

The Woollahra Councils Section 94A 2005 contributions plan, authorises a condition of development consent to require the payment of a fixed levy.

The total cost of the proposed development being its CIV is **\$146,873,000** therefore in accordance with the S94A levy; the total contribution would be **\$1,468,730.00**

Levies paid to the Council will be applied towards the provision, extension or augmentation of public facilities, or towards recouping the cost of their provision, extension or augmentation.

Prior to the S94A policy, Woollahra Council Section 94 Contributions Plan 2002 was in place. In accordance with this plan, the standard items to be included in the schedule of works include the following categories:

- Recreational Facilities/ Parks/Open Space
- Parking Double Bay
- Civic Improvements Double Bay
- Administration

The contribution rates have been summarised in the table below.

Contribution rates by types of development	Amount			
Residential	Recreation	Civic Improvements	Administration	
1 bed unit (1.3 Persons per unit)	\$948/unit	\$690/unit	1.5c/\$	
2 bed unit (1.8 persons per unit)	\$1,312/unit	\$956/unit	1.5c/\$	
3 bed unit (2.2 persons per unit)	\$1,604/unit	\$1,168/unit	1.5c/\$	
Retail	Parking	Civic Improvements	Administration	
	\$27,325/space	\$13/m²	1.5c/\$	
Commercial and other business (i.e. hotel)	Parking	Civic Improvements	Administration	
	\$27,325/space	\$27/m²	1.5c/\$	

Table 14. Section 94 Contribution Rates

In accordance with the S94 contributions rates as listed in **Table 14** above and based on the preliminary architectural drawings we can estimate the financial contributions as follows:

- Recreation = \$53,804
- Civic improvements = \$161,463
- Parking = \$874,400
- Administration = \$76,347
- Total Contribution amount = \$1,166,014.00

This is less than the 1% levy contribution as per the S94A 2005 policy document. It is considered that to apply a contribution of this amount (1% levy) is not fair or reasonable. Particularly given the following:

- Given that a new public plaza area is proposed, with enhanced public through site links, it is considered that this development will significantly contribute to the additional embellished open space areas in Double Bay Town Centre and therefore should be classified as a material public benefit to the community and offset from the civic improvements category of the S.94 Plan.
- There are no planned works contained in the S94 Contributions Plan for Steyne Park which is the main park within the immediate vicinity of the Double Bay Town Centre. There are plans for Kiosk Facilities in Steyne Park adjacent to Double Bay Wharf; however this is still subject to a study by the Council, with the estimated cost still to be determined.
- A contribution should be made in regards to the parking shortfall of 32 retail parking spaces, which at \$27,325 per space, amounts to \$874,400 it is considered that this amount is fair and reasonable in this instance.

Therefore the total contribution under S.94 of the EP&A Act 1979 will be **\$1,166,014.00**

6.12 Utilities

A utilities report prepared by Lincolne Scott is provided at Appendix J

The report details the on-going consultation and commitments with Energy Australia, Telstra and Sydney Water. The report confirms the following:

- Energy Australia confirms the existing substation is adequately sized to meet the proposed site load.
- Minor works will still need to be completed within the substation, namely to the LV distribution equipment which is dated and in need of replacement.
- An initial application to Telstra for a new communication service has been completed by Lincolne Scott for the supply to the site.
- Pressure and flow inquiry has been received from Sydney Water to confirm the available requirements for the development.
- The available water supply from Cross Street towns main is adequate to supply the proposed new hydraulic system.
- It is proposed to provide cold water and hot water plant and pump arrangements at lower basement level to reticulate supply to all water consuming fixtures.
- A Section 73 Notice of Requirements will set out Sydney Water requirements regarding authority connection requirements once approval has been submitted.

6.13 Staging of construction

The Proponent is required to include details regarding the staging the proposed development (if proposed).

Due to the integrated nature of the proposed development, it is proposed to demolish the existing hotel building continues including down to the ground floor slab and construct the proposed development in a phase is expected to take 2 years. This will help to keep to a minimum the length of construction impacts on the surrounding area.

6.14 Economic and retail impact

In addition to the key issues identified in the DGRs that the Proponent has addressed, in preparing this Environmental Assessment it was considered necessary to address the economic and retail impact of the development:

Economic Impact assessment

Specialist Consultants Hill PDA has also assessed the economic impact of the proposed development. The economic assessment concludes that:

- A 5 star boutique hotel could generate \$2.7 million of expenditure per annum that will be directly captured by business within the Town Centre.
- 39 residential dwellings could generate an additional \$600,000 per annum of expenditure for the Town Centre.
- It is estimated that the proposed development will generate close to \$3.3 million of expenditure to the benefit of the Double Bay Town Centre.

- The proposed hotel (trading at reasonable levels of occupancy) could contribute over \$12 million per annum directly to the wider tourist economy with additional benefits generated through indirect industry flow on effects and multipliers.
- Based on industry employment yield benchmarks and advice, we estimate that the proposed development will create 162 operational jobs.
- By combining the retail jobs generated by tourism with those generated by the hotel, Hill PDA concludes that **103 tourist** related jobs will result from the development within the Double Bay Town Centre alone. This figure represents 64% of all operational jobs.
- It is anticipated that a two year project will create over 1,107 jobs per annum for the two year construction period. This equates to 2,213 jobs in total in the wider economy during construction.
- The economic activity generated by the construction of the proposed development is estimated at approximately \$166 million.
- Hill PDA have also identified the following additional retail/economic benefits of the proposed development:
- Enhance the Town Centre's amenity and character owing to improved pedestrian connectivity, a new public space, improved street amenity and fresh new retail offer.
- Make efficient use of a Town Centre site through the provision of residential and tourist accommodation as well as retail facilities in close proximity to transport and support services.
- Improve retail offer thereby increasing the attraction of the Centre for shoppers and the level of choice for consumers.
- Improve retail offer that accords with the preferred image for Double Bay Town Centre as a high end and high quality fashion and dining/leisure destination.
- Create a catalyst for Town Centre investment and tourist related development.

Retail impact assessment

The proposal retail strategy is to include a range of specialty retail uses, which are small scale in their operations, which is consistent with the fine grained nature of the Double Bay shopping experience. Retail uses which are considered appropriate include restaurants and cafes, delis/providores, and high end boutique fashion retail. The design of the ground floor level is conducive to these small scale finer grained retail tenancies. With the exception of the restaurant associated with the proposed hotel, the subdivision of retail tenancies is not sought as part of this Project Application. Separate development applications under Part 4 of the Environmental Planning and Assessment Act 1979 (EP&A Act 1979) will be sought from Woollahra Council for the individual retail tenancies. The final retail uses may include a mix of 2 restaurants (1 associated with the hotel), 3-4 deli/providores and 5-6 retail fashion tenancies.

While impacts associated with the proposed retail use of part of the site was not required to be addressed as a key issue in the Director General's Requirements, Ashington engaged HillPDA to prepare a retail impact assessment and is provided at **Appendix BB**.

An advisory letter on the proposed retail layout and mix has been provided by BC Retail Development Consultants and is provided at **Appendix W** BC concludes that the proposed retail layout and concept is consequently based upon sound established principles. Accordingly the retail strategy for the site is the most suitable for the site and provides the basis for the best possible enhancement to the immediate retail environment and the overall Double Bay character and profile.

Jones Lang LaSalle Hotels have prepared a report (at **Appendix CC**) in respect of likely full-time hotel related employment that may be anticipated as per the planned redevelopment of the site at 33 Cross Street, Double Bay. The report uses the Full-time equivalent (FTE) employment in order to ascertain the future likely full-time employment that a hotel may generate at the site.

Hill PDA is the author of the Double Bay Commercial Centre Study commissioned Woollahra Council to undertake market research and provide advice concerning opportunities to improve and strengthen business development within the Double Bay Commercial Centre. Specifically Hill PDA was required to investigate ways in which the Council, the Chamber of Commerce, Tenants and Land Owners could work together to support the revitalisation of the Double Bay Commercial Centre.

It is recognised that business within Double Bay commercial centre has stagnated. It is believed that this is in part a result of recent changes in retail market conditions and in part owning to the growth of competing centres such as Bondi Junction Westfield.

In summary the retail impact assessment by Hill PDA concludes that:

- Bondi Junction is a major competitor for Double Bay Town Centre and has an adverse effect on Double Bay Town Centre's trading levels.
- There will be no significant net change in the level of turnover generated by the proposed retail and therefore trade/loss of expenditure from surrounding centres such as Edgecliff, Bondi Junction or Rose Bay.
- The proposal will enhance Double Bay's image as a prestigious location for shopping replacing the existing floorspace with new shopping opportunities.
- The proposed retail space replaces the indoor shopping plaza with a form of retail that accords with the established street front retail pattern characteristic of the Double Bay Town Centre.
- The proposed development is not "out of centre" but rather located centrally within the established Centre. The proposed retail floorspace will help to reinvigorate the Town Centre and the cluster of specialty retail that draws trade from across Sydney.

7 Draft Statement of Commitments

Implementation of the following development commitments are recommended as part of this application.

7.1 Future applications

Ashington commit to preparing a separate project application for strata and stratum subdivision including all necessary easements to facilitate public access arrangements that have been agreed to by the consent authority in the determination of this Major Project Application MP 08_0110.

The final subdivision plans are to be registered with the Lands Titles Office prior to the occupation of the site.

Separate applications for the hotel and retail tenancy fitouts will be made.

7.2 Construction

Prior to the issue of a Construction Certificate, the proponent commits to the following:

A detailed Demolition and Construction Management Plan, including but not limited to, management measures as incorporated in the draft management plan will be prepared by Ashington for approval prior to the commencement of any demolition or construction works on site.

7.3 Construction vehicle management plan

A detailed construction traffic management plan will be prepared once a builder is appointed. This will allow the construction management plan to reflect the actual staging of development as it is proposed.

The management plan will be submitted to the Woollahra Local Traffic Committee for their agreement before the commencement of construction.

7.4 Acoustics

Acoustic Logic (see report at **Appendix G**) have recommended a number of controls in regards to the potential noise sources generated from the proposed development to surrounding properties.

Relevant noise goals have been set in accordance with the requirements of the relevant statutory/regulatory authorities including Woollahra Council DCP and the EPA.

In regards to acoustic controls from potential noise sources, preliminary recommendations include:

- The hotel swimming pool will be closed at 11pm every night.
- The outdoor terrace area associated with the hotel restaurant bar on level 4 will be closed at Midnight every night.
- Music on the external terrace area on level 4 shall cease at 11pm every night.

- Music on the external areas, shall be kept to ambient background noise levels and no live music shall be played on external areas.
- The external façade of the restaurant/bar on level 4 shall be closed at 10pm every night.
- Incorporate acoustic treatments and controls to restaurant and café areas situated at the ground floor level, as appropriate. It is noted that noise associated with future restaurants/cafes will be assessed once tenancy uses are finalised and are subject to separate applications.

A detailed mechanical noise assessment be conducted once plant selections and services drawings have been finalised, as part of the Construction Certificate documentation.

Acoustic treatment to the external façade, where necessary, shall be incorporated into the development in order to comply with Internal Noise Level Criteria, as stipulated in Table 10 of the Acoustic Logic Environmental Noise Assessment in relation to Traffic Noise Level Objectives.

7.5 Ecological Sustainable Development (ESD)

A number of design initiatives; both passive and active, are proposed to reduce the overall environmental footprint of the proposed development and demonstrate compliance with the regulatory tools of the BCA Section J and BASIX.

The development commits to the requirements as detailed in the schedule contained in the BASIX certificate as provided at **Appendix D**

Furthermore, pursuant to the provisions of Section J of the Building Code of Australia, Architectus commits to the design being in accordance with the following sections:

- Section J1-Building Fabric
- Section J2 Glazing glazing selections will be in accordance with the glazing performance requirements specified in the BASIX report prepared by Advanced Environmental
- Section J3 Building Sealing
- Section J4 Air Movement
- Section J8 Access for maintenance

7.6 Waste management

A Waste Management Plan by JD Macdonald is at Appendix R.

The following waste equipment and quality recommendations have been made based on expected waste generation quantities.

Residential

General Waste

The recommendations for waste handling equipment are as follows:

A private contractor is to engaged to provide a twice-weekly collection service for residential general waste. Therefore, utilising the

previously calculated General Waste for the residential section, the following 240L Mobile Garbage Bins are required:

Twelve (12) x 240L bins collected twice-weekly

Recycled Waste

The recommendations for waste handling equipment are as follows:

- A private contractor to provide a weekly collection service for residential recycling. Therefore, utilising the previously calculated Recyclable Waste for the residential section, the following 240L Mobile Garbage Bins are required:
- Three (3) x 240L bins collected weekly for paper recyclables
- Five (5) x 240L bins for mixed bottle recyclables

Commercial Hotel

General Waste

- A private contractor is to engaged to provide a twice-weekly collection service for residential general waste. Therefore, utilising the previously calculated General Waste for the residential section, the following 240L Mobile Garbage Bins are required:
- Ten (10) x 240L bins collected twice-weekly

Recycled Waste

- A private contractor to provide a weekly collection service for residential recycling. Therefore, utilising the previously calculated Recyclable Waste for the residential section, the following 240L Mobile Garbage Bins are required:
- Four (4) x 240L bins collected twice-weekly

Retail Space

General Waste

- A private contractor is to engaged to provide a twice-weekly collection service for residential general waste. Therefore, utilising the previously calculated General Waste for the residential section, the following 240L Mobile Garbage Bins are required:
- Twenty (20) x 240L bins collected twice-weekly

Recycled Waste

- A private contractor to provide a weekly collection service for residential recycling. Therefore, utilising the previously calculated Recyclable Waste for the residential section, the following 240L Mobile Garbage Bins are required:
- Ten (10) x 240L bins collected twice-weekly

Garbage Rooms and Garbage Areas

Private contractors will collect general waste on a twice-weekly basis for all sections of the development.

- All recyclable waste will be collected on a weekly basis.
- All collections of waste will occur from the loading dock adjacent to the

main refuse storage room at the upper basement level.

- Construction of both the garbage areas and garbage rooms is to meet all requirements set out in Typical Council Codes, BCA and Australian Standards.
- The floors of the garbage rooms shall be constructed of concrete at least 100mm thick or impervious material, graded and drained to an approved connection to the sewer.
- The floor shall be finished to a smooth even surface coved at the intersection with walls and plinths.
- Waste areas or bins shall be constructed to prevent the entry of vermin;
- An adequate supply of hot and cold water shall be provided to all waste areas and drainage to sewer;
- Hose cocks shall be located and protected so they cannot be damaged and fitted with an adequate length of hose;
- There is adequate ventilation either natural or mechanical;
- The waste area shall be appropriately signposted e.g. for recycling bins.

7.7 Security Management Plan

A Security Management Plan should be submitted to Woollahra Council for approval prior to the occupation of the building addressing, but not limited to the following list for recommendations to ensure that safety, security and crime prevention measures are provided for:

- Lighting should be maintained and faulty lighting should be replaced promptly in order to maintain safety, particularly to public domain areas.
- Plant areas and other services are not intended for public entry should be lockable and secure, only allowing for entry of authorised personnel;
- A CCTV security network should cover publicly accessible areas, including the piazza space and through site links as well as possibly concealed spaces, and car parking areas.
- Adequate infrastructure (electrical requirements etc), should be provided in the Construction Certificate documentation to ensure that full CCTV coverage of public domain areas and the car park is demonstrable; and
- Details of car park entry and security should also be specified in the Security Management Plan;
- Bicycle parking and storage areas should be able to be secured and locked.

7.8 Car Park Management Plan

A Car Park Plan of Management is to be provided to the Consent Authority prior to the issue of a Construction Certificate.

7.9 Wind and Solar Light Reflectivity

Wind

The results of the wind study indicate that wind conditions at some of the outdoor areas of the proposed development will exceed the relevant criteria. The following treatments are recommended for the development:

- The existing trees along the Cross Street frontage are to be retained.
- 1.2 metre high impermeable balustrades around some of the terraces and balconies (see figures 7b, 7c, 7d in the Pedestrian Wind Environment Study at Appendix E)
- Densely foliating trees shall be incorporated onto the rooftops at Level 5.

Solar Light Reflectivity

The following recommendation has been made on the reflectivity properties of the glazing to be used on the façade to satisfy minimum comfort levels for the occupants of the neighbouring buildings;

• All areas of the façade of the development shall have a maximum normal specular reflectivity of visible light of 20 percent.

8 Conclusion

The proposal seeks development consent for the demolition and construction of a new five star boutique hotel comprising sixty six (66) rooms with 1395sqm of ground floor quality retail space and 39 hotel residences which seek to enhance and revitalise the Double Bay Town Centre.

The proposal will also include the creation of a central public piazza space comprising $800m^2$, (21% of the site) which is a significant benefit to Double Bay.

The proposed development at 33 Cross Street, Double Bay offers substantial improvements to the existing development on the site. The proposal retains the existing amount of floorspace on the site (19, 545m²) and redistributes it to achieve an exemplary town centre development delivering better urban design outcomes for the site and the town centre.

Architectus has developed and tested a wide range of development options for the site to redistribute the existing floor space area in different forms and have investigated how each option meets urban design and planning principles for mixed use town centre developments.

The key principles that have driven the design are to provide a high quality integrated hotel development with retail and residential uses, which:

- Employ a high level of design and amenity.
- Create a landmark town centre development that will make a positive contribution to Double Bay by:
 - Opening up the site to provide a central piazza space with open air entries to the site's street frontages that will enhance the pedestrian experience along Cross Street and through the site.
 - Provide a better distribution of floorspace by providing a finer grain development that opens up the existing enclosed monolithic building.
 - Promote a development that will have positive economic benefits for the Double Bay commercial area through employment generation and positive spin off effects for local businesses.
 - Retain the existing amount of floorspace to ensure a hotel is sustainable and is supported by adequate retail uses and a mix of apartments in an integrated fashion.
 - Provide a high quality development that is world class and that will attract tourism expenditure to Double Bay and the broader Sydney Region.

The form of the development has been developed following extensive consultation with the Department of Planning, Woollahra Council and the community. The form of the development comprises:

- Three to five storey podium levels addresses the Cross Street frontage and wraps around each side of the site.
- Two tower forms of fifteen (15) storeys to the south east and south west corners addressing Cross Street.

It is necessary for the development to contain some elements of height, due to the redistribution of the amount of existing floorspace and the creation of a central public piazza, with embellished through site linkages at the ground floor level, thereby greatly increasing the sites permeability. Furthermore, it is considered that Double Bay could greatly benefit from a quality landmark development with high quality retail floorspace, as it has the potential to regenerate Double Bay and attract shoppers back to Double Bay.

The Development provides a high quality; integrated mixed use building that sets a new standard for future developments in Double Bay Town Centre with overall positive design outcomes.

Positive retail and economic impacts on Double Bay with the retention of the hotel use of the site and the benefits of additional publically accessible open space are of considerable public benefit.

Visual impacts, loss of views, overshadowing, impacts of visual and acoustic privacy of adjacent residences and construction related impacts have been given careful consideration in the design of the development.

In summary, this Environmental Assessment has addressed these matters as follows:

• Visual impact and view loss

Through consideration of views from key public vantage points in immediate, local and regional locations. The proposal will be visible within the town centre which will provide a visual marker defining the town centre location. Other regional and local views of the development are seen within the context of taller buildings in Darling Point and Point Piper and along the ridgelines in Edgecliff and Bellevue Hill. There will be some loss of views from private residential properties to the south. Views of the proposal on the slopes leading up to Edgecliff and Bellevue Hill. The building from these locations will appear in a broad longer distance view and in the context of other taller buildings surrounding Double Bay.

Acoustic and Visual Privacy

Acoustic and Visual privacy of adjoining properties will be maintained through a combination of setbacks for active uses on the site, landscaping of roof terraces, screening to habitable rooms and limitation on hours of operation of the level 4 bar/restaurant.

Overshadowing

Additional overshadowing of the public and private domain will result from the development with the proposed 15 storey tower forming the separation of the towers and their small floor plates will allow sunlight to parts of the southern side of Cross Street. The reduction in the height of the north western building following the Clause 6 Preliminary Environmental Assessment has removed additional overshadowing of Transvaal Avenue between 9am and 3pm throughout the year.

Construction Impacts

The adoption of a detailed construction management plans can appropriately manage demolition and construction related impacts.

We consider that the redevelopment of the site will offer the best development outcomes for Double Bay in terms of sustainable urban renewal.

The Project Application is consistent with Part 3A of the *Environmental Planning and Assessment Act 1979*, the Director-Generals Requirements and other relevant provisions and guidelines. Accordingly, it is recommended that the Minister for Planning approve the subject Project Application.