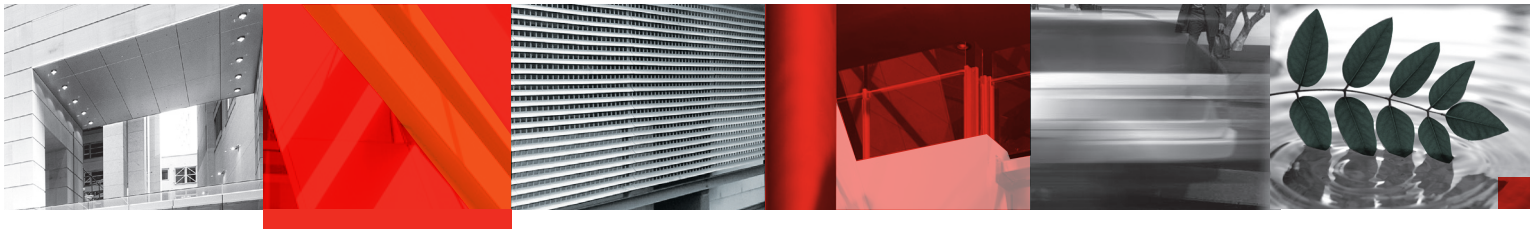


## Section 75W to Concept Plan (MP10\_0003)



### Discovery Point, Wolli Creek

Submitted to Department of Planning & Infrastructure  
On Behalf of Discovery Point Pty Ltd

March 2012 ■ 09642

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This report has been prepared by: Clare Swan

Signature



Date 1/03/2012

This report has been reviewed by: Julie Bindon

Signature



Date 1/03/2012

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## Executive Summary

The purpose of this report is to request the Minister (or his delegate) to modify the Discovery Point Concept Plan approval under section 75W and Clause 3C of Schedule 6A of the *Environmental Planning and Assessment Act, 1979* (EP&A Act). It seeks to modify this approval by providing a revised solar access target for the approved development and modifying a minor drafting error on the approved building separation diagram.

The Discovery Point project was granted Concept Plan approval under delegation to the Director General of Planning on 5 May 2011. It provides for the indicative building envelopes for 14 buildings providing for an estimated additional 1,200-1,500 dwellings (subject to final dwelling mix) and a maximum GFA of 132,000m<sup>2</sup>.

The first two stages (Stage 1 and 6) to be developed under the Concept Plan were submitted as Project Applications with the Department of Planning and Infrastructure and are currently under assessment. Development Applications for Building 2 and Building 7 and expected to be lodged as DAs to Rockdale Council in March/April 2012, in accordance with the Concept Plan approval.

The Concept Plan incorporates a set of Development Design Guidelines which address a range of amenity criteria including solar access. The Development Design Guidelines includes a requirement that 70% of dwellings within the site (excluding Stage 6 which is 60%) should receive 2 hours sunlight to living rooms and private open space between 9am and 3pm in mid-winter.

An analysis of the Concept Plan drawings in addition to the detailed design drawings produced to date for Stages 1, 2, 6 and 7, and likely floor layouts of future stages based on known housing conditions, indicate that at least 50% of apartments across the site are likely to meet the two hour solar access requirement. This Section 75W seeks to adopt a consistent methodology for calculating solar access across the site by factoring in all potential future buildings within the site.

Solar access is but one measure of amenity that contributes to good design. This report examines the range of amenity measures available to future residents of Discovery Point, including but not limited to;

- close proximity to parks, shops, services and major transport infrastructure;
- expansive park, district and water views;
- outlook to open space; and
- efficient apartment layouts.

In support of this holistic consideration of amenity a range of examples where a flexible approach for the application of the solar access 'Rule of Thumb' are provided. These examples demonstrate similar matters for consideration in achieving good amenity while varying the Residential Flat Design Code (RFDC) 'Rule of Thumb' for solar access. The examples are drawn from a wide area and include developments at St Leonards, Alexandria, Waterloo, Top Ryde and Newcastle. Recent court judgements and strategic planning documents prepared by the City of Sydney Council also point to a flexible approach to the 'Rules of Thumb' where other measures of ensuring amenity can be demonstrated.

The Discovery Point development will deliver a wide range of housing choice through the approved apartment mix, range of apartment sizes and range of different products across the site.

The Discovery Point Concept Plan has broad strategic benefits in terms of its contribution to the critical housing supply shortage in the Australian and NSW context. At the National Level there is an estimated 124,200 dwelling housing stock shortfall and an 87,900 dwelling deficiency at the NSW level (June 2011).<sup>1</sup>

Discovery Point once fully developed will accommodate approximately 1500-1800 dwellings (including existing developed stages) with a resident population in the order of 3,200-3,800. The site therefore will make an important contribution to the critical housing shortage and will significantly contribute to the Rockdale LGA's housing targets.

With the Wolli Creek railway station located centrally within the site, the project also meets a range of other strategic objectives in terms of locating higher density residential development in close proximity to public transport.

The assessment of the proposed modification to the solar access target indicate that the proposal is justified on strategic planning grounds in terms of the Concept Plan's contribution to housing supply and given a multi-faceted range of measures contribute to the residential amenity of the development.

In addition, this application seeks approval to modify a drafting error that has been noticed on the building separation diagram in relation to Stage 2.

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<sup>1</sup> LMI Housing Outlook, Australian Housing Outlook 2011-2014, Prepared by BIS Shrapnel, October 2011.

## 1.0 Introduction

This Environmental Assessment Report for modifications to the approved Concept Plan for Discovery Point, Wolli Creek is submitted to the Minister for Planning in accordance with section 75W and Clause 3C of Schedule 6 of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

The approved Concept Plan allows for a mixed use development including:

- Use of the site for a mixed use development with associated public open space;
- Building envelopes for 14 buildings to a maximum height of 79.65m AHD;
- Maximum GFA of 132,000m<sup>2</sup>;
- Basement level, ground and above ground parking;
- Road works to support the development;
- Public pedestrian and cycle pathway; and
- Landscaping areas throughout the site.

The future detailed design of each building is to be guided by the Discovery Point Development Design Guidelines.

This report has been prepared by JBA Planning on behalf of Discovery Point Pty Ltd. The report describes the proposed modifications and the reasons it is required.

The proposed modifications to the Concept Plan approval relate to a minor drafting error on the building separation diagram and amendments to the solar access requirements within the Development Design Guidelines.

## 1.1 Background to the Original Approval

### Previous Master Plan Consent

Rockdale Council granted consent to a Master Plan DA 500/01 on 11 April 2001 for the development of the Discovery Point site comprising 9 development sites, new park and foreshore open space, restoration of heritage buildings and landscape. The Master Plan Consent set out the building envelope principles, circulation patterns, road hierarchy, general parking configuration, and landscape concept over the nine development sites.

Three building stages have been built under the previously approved master plan consent. These buildings are known as “Greenbank”, “Vine” and “Verge” (refer **Figure 1**). All future buildings will be developed under the new Concept Plan.

### Approved Concept Plan

In September 2009, Discovery Point Pty Ltd embarked on a process of a Voluntary Design Competition, with the primary aim of achieving an improved planning and design outcome for the site. A revised scheme and new master plan for the site was considered necessary for Discovery Point given that desirable design and market conditions had changed significantly since the granting of the original Master Plan consent in 2001.

The winning Bates Smart design formed the basis of a Concept Plan application to the Department of Planning under Part 3A of the EP&A Act. The Concept Plan was approved by the Minister for Planning under delegation to the Director General of Planning on 5 May 2011 subject to a number of conditions (MP 10\_0003).



The approved Concept Plan was a finalist at the UDIA Awards for Excellence in 2010 in the category of 'Concept Ideas'.



 Concept Plan Site

**Figure 1 – Existing Built Stages and Concept Plan Site**



## 2.0 Background to the Modifications

Since approval of the Concept Plan further design development has been undertaken by Australand and the consultant team. This has resulted in the lodgement of two detailed design applications with the Department of Planning for Stage 1 (Building 1B and Building 1C) and Stage 6 (Building 6). These applications have the status of transitional Part 3A applications and will be determined under Part 3A of the EP&A Act 1979.

Australand are also well commenced in documenting development applications for Building 2 and Building 7, which are anticipated to be lodged with Rockdale Council in March/April 2012. The detailed design of further stages has not yet progressed to the stage of full DA lodgement, but it is anticipated that DAs for a further three buildings will be lodged with Rockdale Council this year.

Correspondence received from the Department of Planning and Infrastructure (DP&I) dated 30 November 2011 in relation to the Stage 6 Project Application sought clarification on the percentage of apartments that would achieve solar access mid-winter, taking into account all future potential buildings that could be developed on the site in accordance with the approved Concept Plan building envelopes.

Further review of the Concept Plan has subsequently been undertaken in relation to the issue of solar access. At the Concept Plan level, the solar access targets were based on a typical floor and applied to all levels. Now that the detailed design has progressed, the analysis of solar access is more detailed and thorough applying the analysis level by level. This has revealed greater shadowing than had been assumed.

An analysis of detailed design drawings produced to date compared with the Concept Plan application, as well as likely floor layouts of future stages based on known marketable indicative floor plans, has revealed that at least 50% of apartments across the total Discovery Point site are likely to meet the two hour solar access 'Rule of Thumb'. While some individual buildings (such as Building 1, 2 and 7) will achieve the 70% compliance, other buildings will achieve less than 70%. The ability of the Discovery Point development to achieve solar access to at least 50% of apartments across the site for 2 hours midwinter responds to the site road structure and building orientation that follows the perimeter block arrangement around a defined street network, which was set in the 2001, previously approved master plan. Some of the approved building shapes and dimensions will inevitably result in more south facing apartments. However, these apartments (such as those in Building 6) generally enjoy views or outlook over Discovery Point Park or other areas of open space to compensate for the lower level of solar access.

This application also seeks approval to modify a drafting error that has been noticed on the approved Concept Plan Building Separation diagram in relation to Stage 2. This diagram was initially approved to show instances where the building separation was below the RFDC 'Rule of Thumb', however, where an appropriate amenity outcome was still able to be achieved. The minor error relates to the placement of the arrow separating Building 2 from the existing building Verge and is described in further detail in Section 3.3.

## 3.0 Description of Proposed Modifications

The proposed modifications to the approved Concept Plan are described in this section. This Section 75W application essentially seeks to modify conditions relating to solar access provisions and thereby provide guidance for the assessment of future DAs on the site as well as making minor administrative amendments to address a correction to the building separation diagram.

### 3.1 Proposed Modifications to the Approval

Words proposed to be deleted are shown in ~~bold strike through~~ and words to be inserted are shown in ***bold italics***.

*Condition A2 – Development in Accordance with Plans and Documentation*

*The approval shall be generally in accordance with MP 10\_1003 and the Environmental Assessment prepared by JBA Planning dated August 2010, except where amended by the Preferred Project Report prepared by JBA Planning dated December 2010 and Section 75W Modification dated March 2012, and the following drawings except for as modified by ~~the following pursuant to Section 750 (4) of the Act~~ the instrument of approval.*

<b><i>Drawing No</i></b>	<b><i>Revision</i></b>	<b><i>Name of Plan</i></b>	<b><i>Date</i></b>
DA1-001	A	Location Plan	16.06.2010
DA1-002	D	Site Analysis	16.12.2010
DA3-001	<del>B</del> <b><i>G</i></b>	Proposed Building Envelopes	<del>23.02.2011</del> <b><i>30.01.2012</i></b>
DA3-B01	D	Proposed Basement Extent	14.12.2010
DA3-002	C	Building 1B Envelope Parameters	23.02.2011
DA3-003	B	Building 1C Envelope Parameters	10.12.2010
DA3-004	C	Building 2 Envelope Parameters	23.02.2011
DA3-005	B	Building 3 Envelope Parameters	10.12.2010
DA3-006	B	Building 4 Envelope Parameters	10.12.2010
DA3-007	B	Building 5 Envelope Parameters	10.12.2010
DA3-008	B	Building 6 Envelope Parameters	10.12.2010
DA3-009	A	Building 7 Envelope Parameters	16.06.2010
DA3-010	B	Building 8 Envelope Parameters	10.12.2010
DA3-011	B	Building 9 Envelope Parameters	10.12.2010
DA3-012	B	Building 10 Envelope Parameters	10.12.2010
DA3-013	B	Building 11 Envelope Parameters	10.12.2010
DA3-014	B	Building 12 Envelope Parameters	10.12.2010
DA3-015	B	Building 13 Envelope Parameters	23.02.2011

<b>Drawing No</b>	<b>Revision</b>	<b>Name of Plan</b>	<b>Date</b>
DA3-016	A	Building 14 Envelope Parameters	16.06.2010
DA3-101	C	Street Layout	14.12.2010
DA3-200	C	Extent of Above Ground Parking – Ground Floor Level	14.12.2010
DAD-201	B	Extent of Above Ground Parking – First Floor Level	10.12.2010

**Reason:** This condition is updated to reflect the revised Building Separation Diagram and references this modification application. As Section 75O of the Act has been repealed it appropriate to reference that the plans are approved except where modified by the conditions of the approval.

*Condition A5 – Development Design Guidelines*

*All future development of the site shall be generally consistent with the Development Design Guidelines and Rockdale City Council's Wolli Creek and Bonar Street Public Domain Plan and Technical Manual, where amended by the Modifications in Part B and Future Assessment Requirements in Schedule 3 **or otherwise agreed by the Director General of Planning.***

**Reason:** The addition of this wording allows the Director General of Planning to assess the current Stage 6 Project Application on merit concurrently with this modification application.

*Condition B3 - Development Design Guidelines*

***The Development Design Guidelines shall be modified as follows:***

- a) ~~References to 'conditions of consent' in the document are to be amended to state 'conditions of approval'.~~*
- b) ~~References to the Discovery Point Wolli Creek Landscape Design Guidelines / Public Domain Plan, floor space ratio and minimum site frontage are to be deleted.~~*
- c) ~~References to width of roads in Table 1 are to refer to minimum building envelope separations rather than building face to building face distances to provide for the inclusion of colonnades and building articulation.~~*
- d) ~~Solar access provided to each building is to comply with the Concept Plan and Preferred Project Report (buildings to achieve 70% of dwellings in accordance with the RFDC requirements, except Building 6 that is to achieve a minimum 60%) and buildings modified accordingly should this not be achieved.~~*
- e) ~~Point 4 in Section 5.2 that refers to submission of a daylight access study shall be deleted~~*
- f) ~~The reference to the number of lifts accessible from a single corridor shall be deleted.~~*
- g) ~~Roof terraces are to be setback a minimum of 1.5 metres from the buildings edge.~~*
- h) ~~Plant rooms, lift overruns and mechanical ventilation rooms provided on the roof of a building are to be appropriately screened and not exceed the heights approved by the Concept Plan.~~*
- i) ~~The reference to building depth of 24 metres shall be deleted.~~*

***The amended Development Design Guidelines shall be submitted to and approved by the Department prior to determining any future application on the site.***

***Future applications should have regard to the Development Design Guidelines, as modified.***

### Amend Condition B3 as above

**Reason:** As the updated Development Design Guidelines that have been approved by the Director General which incorporates the requirements of this condition. Hence the condition has been satisfied and all future development should be consistent with the Development Design Guidelines.

#### *Schedule 3 Condition 1 – Building Design*

*Future applications shall demonstrate compliance with the provisions of the State Environmental Planning Policy 65 - Design Quality of Residential Flat Development (SEPP 65) and the accompanying Residential Flat Design Code 2002, except where modified by this Concept Plan approval.*

*Future buildings located on the site are to demonstrate sufficient building modulation / articulation to provide an acceptable built form.*

*Solar access to future dwellings shall be consistent with the approved Concept Plan **as modified**.*

**Reason:** The addition of the wording 'as modified' allows recognition of the current modification.

## 3.2 Proposed Modification to Development Design Guidelines

### 5.2 ~~Solar Daylight~~ Access

#### Objective

- ~~\* To provide sunlight access to private open space and habitable rooms within the development in accordance with the approved concept plan envelopes.~~
- To ensure an adequate level of daylight access (natural light) is provided to dwelling apartments within the development.
- To minimise the need for artificial lighting during daylight hours.
- To provide direct sun access where site constraints and orientation permit.
- To allow flexibility in the application of solar access targets where good amenity can be optimised by prioritising other amenity measures such as outlook, access to views and privacy.

#### Controls

- Development must comply with the building form, separation and site layout within the Concept Plan.
- ~~\* Dwellings within the Concept Plan site should receive a minimum of 2 hours sunlight to living rooms and private open space to 70% of apartments between 9am and 3pm on 21 June, with the exception of Building 6 which is to achieve 60%.~~
- Notwithstanding the SEPP 65 Residential Flat Design Code 'Rules of Thumb', solar access should be provided to living rooms and private open space areas for a minimum of two hours per day at mid-winter for at least 50% of apartments across the total Discovery Point site.
- A schedule of solar access for the Discovery Point site is to be updated and submitted with each project/development application.
- As a general guide the following indicative solar access targets are provided on an individual building basis:

<i>Building</i>	<i>Target 2 hours %</i>
1	70%
2	70%
3	45%
4	45%
5	45%
6	19%
7	70%
8	40%
9	60%
10	50%
11	35%
12	50%
13	55%
<i>Total</i>	<i>50%</i>

- **Where strict adherence to the solar access targets cannot be achieved the application must address how other factors such as privacy, views, outlook, spatial separation and daylight access together contribute to a satisfactory level of residential amenity.**

**Reason:** This revised wording updates the Development Design Guidelines to include the revised solar access target across the site, as justified in this modification application.

The targets have also been provided for individual buildings on the basis that these figures contribute to the ability to meet the site wide compliance of 50% and they also provide targets against which Council can more readily assess future DAs.

For example, the form of Building 6 has been derived from the desire to continue the heritage arc around Discovery Point Park, which by virtue of the orientation of the site is south facing. The form of Building 6 has also been broken from the previously approved master plan (Building 6 and 7 were previously combined) to open up view corridors and pedestrian linkages within the site. This has affected the numerical percentages achieved for some buildings and as a result Building 6 and 7 are anticipated to meet a solar access target of 19% and 70% respectively. It should be noted that 44% of apartments in Building 6 achieve 1 hour of solar access in mid-winter. Building 6 would therefore have had a higher percentage if it remained combined with Building 7. However, the current layout provides a higher level improved outcome by breaking up this building and providing view corridors and linkages to the park (refer Section 4.2 which addresses the range of amenity considerations by way of an 'Amenity Matrix').

### 3.3 Modification to Building Envelopes Drawing

In the process of documenting the Stage 2 Development Application, it has become evident that there is a minor drafting error within the approved Concept Plan Proposed Building Envelopes drawing (DA3-001 Revision D dated 23/02/2011).

The drafting error relates to the position of the 22 metre building separation arrow between Building 2 and the existing building Verge (refer to **Figure 2**). The dimension arrow on the approved drawing is to the balcony edge. The dimension arrow in this case should carry beyond the balcony to the facade. The original reason the 22 metre dimension was labelled on the Concept Plan drawing was to establish a building separation distance less than the Residential Flat Design Code (RFDC) 'Rule of Thumb' for Levels 9 and above only (which do not have balconies).

However the distance between Building 2 and Verge main facade varies from the RFDC 'Rule of Thumb', which require a 24 metre separation for level 9 and above (**Figure 3**). This was justified within the Concept Plan EAR and PPR. As Building 2 would be located at a minimum distance of 22 metres from level 9 – 11 of Verge, a 22 metre dimension arrow was intended to be placed between the main façade of Verge and Building 2 to depict this variation (**Table 1**).



**Figure 2 – Approved building separation diagram**

**Table 1** – Building Separation Summary related to approved Concept Plan

Building	Building 2 separation distance 1 – 8 storeys		Building 2 separation distance 9 storeys and above	
	RFDC	Concept Plan	RFDC	Concept Plan
Between Building 2 and Verge	18 metres	> 18 metres (complies so no notation required on Building Separation Drawing)	24 metres	set a minimum distance of Minimum 22 metres (notation to façade required on Building Separation Diagram).

**Figure 3** – 22 metre separation to Verge (no balconies)

A minor drafting error accordingly occurred in translating the 22 metre dimension arrow on the Building Envelopes drawing. To correct this error, it is requested that the accompanying revised Building Envelopes drawing (DA3-001 rev G - included at **Appendix A**) be added to the plan list at Condition A2 of MP10\_0003 and replace the previously approved version. **Figure 4** provides an extract of the corrected placement of the 22m dimension arrow between Building 2 and the main façade of Verge.



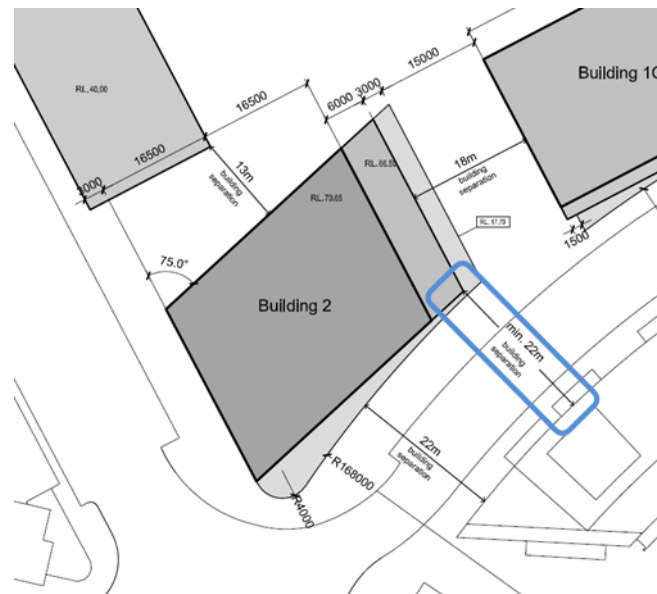


Figure 4 – Updated building separation diagram for approval

## 4.0 Environmental Assessment

This section outlines that a range of amenity factors should be considered when assessing the suitability of the built form approved in the Discovery Point Concept Plan. This section outlines that solar access is but one measure of amenity. The Discovery Point site is unique in its context and location, providing significant amenity to residents via a station being centrally located within the site, expansive park and water views and significant 'district' and 'local' open space opportunities. A multi-faceted consideration of amenity is explored below based on the intent and objectives of the RFDC, while the principle of context is further addressed.

### 4.1 SEPP 65 Design Quality Principles

#### 4.1.1 Holistic Consideration of Amenity

The Discovery Point site provides significant amenity to its residents by virtue of:

- Expansive parks and water views (notably there is no comparable 'Rule of Thumb' relating to the amenity benefits of views);
- Close proximity to major public transport infrastructure with a station located centrally within the site and ease of access to local bus services and cycle ways;
- Close proximity to shops and other services within the site including a supermarket and a 'village square' providing retail and café experiences within the site;
- Ability of the Concept Plan envelopes to achieve other aspects of the SEPP 65 Amenity considerations including ventilation; privacy; adequate storage, indoor and outdoor space; efficient layouts; outlook and ease of access. Future DAs will be guided by the set of Development Design Guidelines, which encourage good design through a range of amenity measures.

Discovery Point is unique in many respects. Few other developments dedicate such a high percentage of site area for open space, and this should also be taken into account when assessing amenity. The Discovery Point Park is a 2.4 hectare park that remains in the site's private ownership but has a requirement for wider public access placed on its title. A range of other parks (with public access) are to be provided under the Concept Plan meaning significant areas of open space within the site and along the Cooks River foreshore are available for residents. Furthermore, at any time during the day one or more of these areas is in sunshine.

The site also has a unique structure dictated by a rail line at the north west boundary and another dissecting the site, an emerging road pattern set by the existing stages that have been built under the previous Master Plan and an established built form 'heritage arc' which frames the heritage items of Tempe House, St Magdalen's Chapel and Discovery Point Park. This structure dictates that buildings are oriented as perimeter edge buildings around carefully planned roads and a number of buildings front onto open space. The heritage arc also dictates that a number of the Concept Plan buildings face south or south east with expansive uninterrupted views. However, by virtue of their southerly aspect the apartments within these buildings have reduced solar access.

This modification responds to the objectives and better design practice for daylight access under the RFDC and demonstrates that a variation to the 'Rules of Thumb' for daylight access is acceptable with regard to site constraints, context and other factors which create amenity.

It demonstrates that the various factors affecting amenity should be weighed up and considered in unison when considering the suitability of a proposal, to evaluate its overall performance.

### 4.1.2 Principle 1: Context

SEPP 65 and the RFDC place significant emphasis on detailed and rigorous analysis of site context, opportunities and constraints to inform the design process and ultimately improve the design quality of residential flat buildings. Principle 1 of SEPP 65 indicates that *“good design responds and contributes to its context”*. This emphasis is reiterated in Part 1 and Part 2 of the RFDC, as reproduced below.

*“Good design responds and contributes to its context. Context is everything that has an impact on an area: its key natural and built features. Context includes social, economic and environmental factors as well as the physical form of the area and its surrounds. Understanding context means understanding how the*

*Inter relationships between all these factors, and between the local area and the region, will have an impact on the area in the future. Responding to the local context involves identifying the desirable elements of current character or the key aspects of character that are important to its future.*

*Understanding the local context is a key step in the process of establishing a robust urban structure which can support change and help to identify the appropriate building types and development controls for a particular situation.*

*Site analysis is an important part of the design process. 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.”*

The solar access target sought in this modification is based on what can be practically achieved under the approved Concept Plan layout. The approved Concept Plan in turn resulted from a careful and rigorous analysis of the site’s opportunities and constraints, including the existing built form, placement of perimeter edge buildings, retention of street alignments developed under the previous master plan and retention of the Heritage Arc. It also retained the quantum of GFA approved in the previous master plan in an improved configuration.

The RFDC acknowledges that where the “Rules of Thumb” cannot be met, it must be demonstrated how site constraints and orientation prevent the attainment of those standards. The following paragraphs address the Regional and Local Context for Discovery Point. A brief analysis and justification of how the built form was logically derived as the optimum outcome for the site is also described in **Appendix B**.

#### Regional Context – Employment and Open Space

Discovery Point has significant regional road access, with direct access onto the Princes Highway, providing road access to the Sydney CBD and the southern suburbs of Sydney. The site is located approximately 1 kilometre from an entrance on the M5 Motorway which provides access to the Sydney Orbital Network.

The suburb of Wolli Creek is surrounded by a number of employment lands precincts including land within Marrickville, Sydenham, Sydney Airport, Port Botany and their surrounding industrialised areas, as well as the Sydney CBD. Discovery Point is also within close proximity to numerous local, district and regional parks and recreational facilities including:

- Discovery Point Park (located within the site);
- Barton Park to the south-east;
- Kendrick Park to the north-east;
- Kogarah Golf Course, Cahill Park, Tempe Recreation Reserve, and the Cooks River Motor Boat Club to the east; and
- Mackey Park, Gough Whitlam Park, Waterworth Park, Steel Park and other parks and reserves along the Cooks River and Wolli Creek to the north-west and west.

## Local Context

The Discovery Point site and project itself has a number of significant opportunities that contribute towards significant amenity for residents, including:

### *Transport*

Discovery Point is currently highly accessible to public transport, with the Wolli Creek Railway Station located within the site providing access to the Illawarra, South Coast, Airport and East Hills rail lines. Travel times to Sydney CBD are on average 13-15 minutes by train. In addition, the Sydney Buses routes 348 and 422 provide public transport linkages to the surrounding local suburbs.

Bicycle paths are provided along Brodie Spark Drive and the riverfront to connect Madgalene Terrace to the Cooks River. The riverfront cycle paths then connect through Discovery Point Park to link back to the wider regional cycle network.

### *Open Space and Communal Facilities*

The Discovery Point site includes a major piece of public benefit in the form of Discovery Point Park. This park is a 2.3ha district park with frontage to Cooks River. Whilst the park remains in the ownership of residents' of the site, there is a requirement on title that this park provide access to members of the public.

The approved Concept Plan extends the range of recreational experiences available for residents, including:

- A new "Neighbourhood Park" at the southern end of the site.
- A new "Waterfront Park" at the northern end of the site.
- A new park above the railway corridor known as "Station Park".
- Rooftop podium communal open spaces areas including roof top pools in key locations.
- The extension of Discovery Point Park to the north along Cooks River.

Existing facilities also accessible for all Discovery Point residents include:

- the Mount Olympus communal open space area, which is a landscape regenerated area available to residents.
- Tempe House and St Magdalen's Chapel.

Furthermore, at any time of the day one or more of these sites significant open space areas will be in sunshine. Most notably, few other developments dedicate such a high percentage of site area for public open space, and this should also be taken into account when assessing the overall amenity.

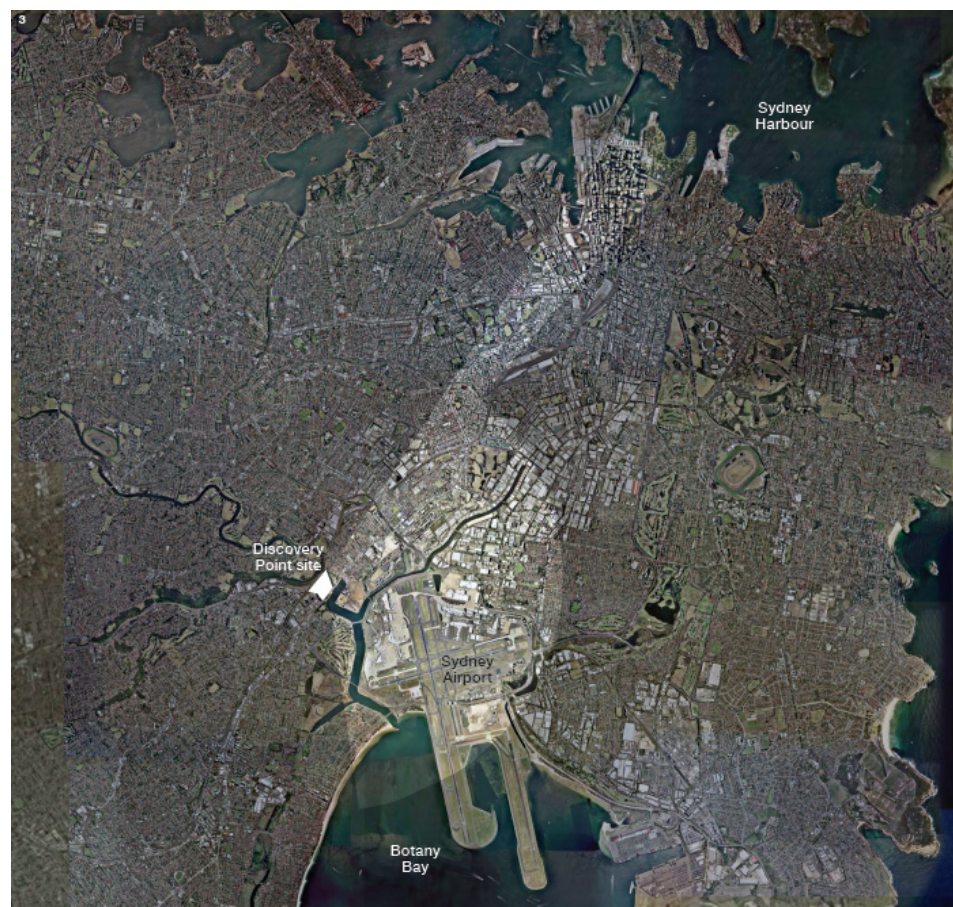
#### *Access to Retail and Services*

- Adjacent to the new neighbourhood park will be a supermarket, speciality shops and cafes. A range of other shops will flank the new neighbourhood park including retail uses in Building 2.
- The ground floor of Building 7 within the Eastern Precinct (adjoining Cooks River) is anticipated to be activated with a cafe / restaurant.
- The Concept Plan requires that a minimum of 9,000m<sup>2</sup> of non-residential floor space is required to support the residential population of the site.

#### *Access to Views and Outlook*

Due to the site's aspect and facilitated by the uninterrupted views over Discovery Point Park, a number of buildings within the development will experience significant district and regional views.

The site has views over Botany Bay, Waterworth Park, the Cooks River, Sydney CBD the airport and Kogarah Golf Course (**Figure 5**).



**Figure 5** – Key distance views from Discovery Point (lighter shading)

Source: Bates Smart



### 4.1.3 Principle 7: Amenity

The principle of amenity within SEPP 65 is clearly based on a broader range of considerations, including but not limited to access to sunlight. Principle 7 provides that:

*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.***

As outlined previously in this section “context” is viewed within SEPP 65 and the RFDC as important for establishing site and built form parameters. Context can also be a key factor in creating the amenity for apartments on a particular site. There are many instances where the amenity of a site or a development proposal is based on a range of amenity measures mentioned in Principle 7 of SEPP 65. For example, the amenity of Discovery Point is primarily a product of its location, and its access to transport, significant open space and recreational opportunities, river foreshore, access to local services and retail (supermarket), rather than its access to sunlight. As a result, there should be recognition that there are a number of contextual drivers of amenity, other than those that are outlined in SEPP 65 Amenity Principle, which can be just as important in influencing that amenity and in determining the liveability of an apartment.

In addition, by living in an urban environment, amenity factors such as access to jobs, transport, retail and services mean a resident is often willing to trade-off an apartment with full daylight access for these other benefits.

Equally, it should be recognised that the provisions of the RFDC may not be applied equally, or weighted the same, in different contexts. For example, a suburban context would have a different set of amenity considerations to a higher density urban context.

In particular, the Concept Plan addresses some of the various amenity measures for Discovery Point as follows:

- **Natural ventilation:** A minimum of 60% of apartments across the site are to be naturally cross ventilated (Condition A14).
- **Visual and acoustic privacy:** to be achieved through orientation of units, highlight windows and offsetting balconies.
- **Storage:** to be provided for each apartment in accordance with the Development Design Guidelines.
- **Indoor and outdoor space:** The Development Design Guidelines specify minimum apartment sizes for each apartment type; and minimum private open space areas.
- **Parks:** Four parks are to be provided within the site.
- **Views and Outlook:** The superior amenity benefits of views from the site and outlook from the majority of buildings over parks, rooftop communal residential podiums and pocket parks is shown at **Figure 6** below.
- **Accessibility:** All buildings are located within close walking distance to Discovery Point Park, Wolli Creek Railway Station and future retail uses.

From the above considerations, it is evident that the approved Concept Plan provides for a high quality residential environment at Discovery Point. The framework of the approval conditions and detailed controls committed to by Discovery Point Pty Ltd in the Development Design Guidelines also helps ensure each development application provides a high level of overall amenity for occupants at the detailed design stage.

## 4.2 Summary Matrix of Amenity

The following amenity matrix (**Table 2** below) sets out the range of factors which contribute to amenity on the Discovery Point site, of which solar access is one consideration. Each building will have a range of benefits summarised in the matrix below.

It is the key to our argument and is a simple, strong way of showing the overall amenity performance of each building and the site as a whole. Refer **Table 2** and **Figure 6** below.



Table 2 – Matrix of Amenity

Building	Views <sup>2</sup>	Transport Accessibility (station)	Outlook Discovery Point Park	Station Park	Neighbourhood Park	Foreshore park	Pocket Park/ Landscaped Podium	Privacy Measures	Access to Communal Facilities <sup>3</sup>	Supermarket and specialty retail	Access to cycleways
1	✓	✓			✓		✓	✓	✓	✓	✓
2	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓
3		✓			✓		✓	✓	✓	✓	✓
4		✓			✓		✓	✓	✓	✓	✓
5		✓			✓		✓	✓	✓	✓	✓
6		✓	✓	✓		✓	✓	✓	✓	✓	✓
7	✓	✓	✓			✓		✓	✓	✓	✓
8	✓	✓				✓	✓	✓	✓	✓	✓
9	✓	✓					✓	✓	✓	✓	✓
10	✓	✓				✓	✓	✓	✓	✓	✓
11	✓	✓				✓	✓	✓	✓	✓	✓
12	✓	✓					✓	✓	✓	✓	✓
13	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

<sup>2</sup> To Cooks River, Botany Bay or Sydney CBD<sup>3</sup> Swimming pools, gyms, landscaped communal podiums, Tempe House and Magdalen's Chapel



Figure 6 – Amenity Diagram

## 5.0 Macro Considerations

This section addresses the macro considerations with regards to the Section 75W modification. This justification is based on the broader strategic benefits of Discovery Point in terms of its contribution to the critical housing supply shortage in the Australian and NSW context.

### The Housing Market - Australia<sup>4</sup>

Housing affordability is a major policy concern at the National, State, metropolitan and local level. At the national level underlying demand is forecast to average 180,300 new dwellings per annum over the three years to 2013/14, which is above the estimated average for underlying demand of 171,100 dwellings in the 2006/07 to 2010/11 period.

Total dwelling supply still remains well below underlying demand, with an estimated 154,900 dwelling starts in 2010/11. Consequently, the stock deficiency estimate of 124,200 dwellings at June 2011 is expected to escalate further to a projection of 189,200 dwellings at June 2014—around one year's level of underlying demand. The greatest rise in the deficiency will be concentrated in New South Wales, Queensland and Western Australia, where the lowest levels of construction relative to underlying demand are occurring.

It is agreed by both Federal and State Government that the contributing causes of the housing crisis are inadequate housing supply in the market, complex planning systems and high infrastructure levies all of which contribute to a significant housing affordability problem.

### The Housing Market – NSW

New South Wales has experienced a sustained severe weakness in new dwelling construction since 2006 that has resulted in the state's underlying deficiency of residential housing ballooning to an estimated 87,900 dwellings as at June 2011.

Although supply is expected to experience growth in the three years to 2013/14, dwelling starts are not anticipated to match underlying demand until the end of the forecast period, leading to conditions in New South Wales becoming tighter. Residential construction activity in Sydney still remains at its lowest level since the early 1990s recession.

### The Significance of Discovery Point

Discovery Point, once fully developed will accommodate approximately 1,500-1,800 dwellings (including existing developed stages) with a resident population in the order of 3,200 to 3,800. The site is therefore an important urban growth area for the south sub-region that will assist in the current housing shortage and the achievement of Government's housing targets.

The proposed development also assists in delivering housing affordability through the delivery of a wide range of housing choices. The approved apartment mix, apartment size ranges and different orientation of apartments across the site will match housing choices for different consumer markets.

Evidence of the demand for apartments (within Discovery Point and indeed generally) can be witnessed in the selling rates of 'off the plan' sales for Stages 1 and 6 (still currently under assessment with DP&I). To date 95% of apartments within Stage 1 and 80% within Stage 6 have sold off the plan, with 85% of Stage 1 selling in only two weeks.

<sup>4</sup> LMI Housing Outlook, Australian Housing Outlook 2011-2014, Prepared by BIS Shrapnel, October 2011.

This significant pre-commitment from the Concept Plan approval, means that Australand wish to obtain approvals for a further five buildings in 2012/2013, with construction expected to commence in 2013/2014.

Discovery Point therefore meets a demonstrated strategic need that delivers and maintains housing choice, diversity and relative affordability levels for Rockdale residents. The notable entry level housing component assists in reducing housing stress in the locality.

The development's critical ability to meet key state strategic directions is also further demonstrated in **Appendix C**.



## 6.0 Examples of a Holistic Consideration of Amenity

This section outlines a range of examples where a variation to the RFDC 'Rule of Thumb' for solar access have been granted based on a more flexible approach and a greater appreciation of the holistic considerations creating amenity. These examples include DA Approvals, Part 3A Project Approvals, Land and Environment Court decisions and a recent strategic planning document produced by the City of Sydney. The alternate methods of achieving high quality residential amenity cited in these examples are relevant to the Discovery Point context.

### 6.1 Pavilions on the Park, Duntroon Avenue St Leonards

Pavilions on the Park is an Australand development approved by Lane Cove Council on 19 June 2006. This application involved the construction of four residential flat buildings, all of which were below the 70% solar access 'Rule of Thumb'. The percentage of apartments receiving solar access is outlined in Table 3.



The Site

**Figure 7** – Pavilions on the Park location St Leonards

Table 3 – Solar access requirement

Recommended Solar Access	Building A	Building B	Building C	Building D	Total
Primary Living Rooms % of units achieving 2 hours sunlight (70% target)	45%	29%	38%	41%	37%
Private Open Space % of units achieving 2 hours sunlight (70% target)	72%	61%	55%	67%	62%

The application was later modified which achieved two hours solar access to 39% of living rooms across the site and 59% of private open space areas. The percentage of solar access achieved was largely predicated on an analysis of site constraints. The site was a long thin site with a north south axis, predominantly oriented east west facing either Newlands Park to the front or the rail line to the rear (Figure 7). Northerly aspect and solar access was therefore constrained.



Figure 8 – Australand Pavilions on the Park, apartments oriented to the park

Source: AJ + C Architects

Although not achieving the solar access 'Rule of Thumb', the apartments design was motivated towards compliance with BASIX and improving the overall residential amenity. Some of the considerations relating to amenity and design included:

- The majority of apartments were afforded considerable amenity through outlook and views west towards the park.
- A high level of privacy was achieved through the orientation of the buildings towards the east and west, even though the solar access performance was lowered.

- A large amount of apartments had two or three aspects and multiple windows/open spaces from the majority of rooms;
- The apartments benefited from large amounts of natural 'daylight' by virtue of their open outlook east and west; and
- Apartments were required to have overhangs to provide adequate shading to meet thermal comfort targets established by BASIX. Whilst this further reduced the solar access performance, it was required to meet the legislated BASIX requirements and was therefore seen to have greater weight than the RFDC.

An independent verification of the superior amenity achieved by this development is evidenced in the project receiving the best medium density development at the Urban Development Institute of Australia (UDIA) NSW Awards for Excellence in 2010.

## 6.2 Royal Newcastle Hospital Site

The Royal Newcastle Hospital Site (Stages 1A and 1B)(MP07\_0133) (**Figure 9**) was granted Project Approval with a variation to the 70% 'Rule of Thumb'. The Department of Planning's Assessment Report indicates that 58% of apartments met a three hour 'Rule of Thumb' (applicable for less dense urban environments). The officer's report noted that other forms of amenity are available or that design considerations had been incorporated to demonstrate a high quality residential environment. The Department's report notes:

- *"The proponent has included a number of measures in the proposal to maximise light penetration and natural ventilation while protecting from wind and retaining access to highly desirable local views. Within the constraints posed by the site, it is considered that these measures adequately offset the impacts of southerly aspect and overshadowing."*
- *"Ocean and other district views have been a significant determinant in site planning for the RNH site and this has resulted in a substantial number of apartments with south and south easterly aspect. Protection from unfavourable south east winds has been equally important with the result that street level pedestrian and retail areas have been concentrated within a zone protected by the proposed building groups. Overshadowing by existing buildings to the north and by the proposed buildings is an inevitable result of this necessary response to local wind conditions."*
- *"The resultant development will provide a high quality living environment that responds to the constraints of the site while taking best advantage of its opportunities. In this regard, it is considered that the proposal is generally consistent with the Principles in SEPP 65 at its 'Rules of Thumb' guidelines."*





**Figure 9** – Mirvac Royal Newcastle Hospital Site

Source: Mirvac. [www.royalnewcastle.com.au](http://www.royalnewcastle.com.au)

## 6.3 Top Ryde City

Three separate DA's for residential Buildings C, D and E at Top Ryde Shopping Centre were lodged with Ryde Council in March 2011 and approved by the Sydney East JRPP in August 2011. The apartment buildings will be situated on top of the existing Top Ryde Shopping Centre (TRSC), adjacent to residential Buildings B and F, which were approved in February 2011 (**Figure 10**). Three hundred and nineteen (319) apartments were approved for Building C, D and E, in addition to 185 apartments approved for Buildings B and F. In total, the Top Ryde City residential project comprises 504 apartments.

The latest approvals are one component of the overall TRSC mixed use redevelopment. The original Stage 1 DA was approved in May 2006, and included the detailed design and construction of the TRSC as well as the building envelopes for the commercial and residential elements of the development above the podium levels. Accordingly, the building envelopes for Buildings C, D and E were determined at the Stage 1 DA stage.

It was determined during the Stage 1 DA assessment that the buildings may not meet the requirements of the RFDC in terms of solar access. Ryde Council commissioned Architectus to undertake an independent assessment of the Stage 1 DA at that time, and the following is their assessment:

*"Whilst it is desirable to maximise north facing dwellings it is not necessary. Sun shading can effectively control solar heat and glare for west and east facing apartments (and further accessed by through apartments for cross ventilation). It is also important for dwellings to be oriented to views and for buildings to reinforce street alignments. In the subject case the building envelopes are not oriented to the north because they are oriented to the view, align with streets and are located to allow solar penetration to the podium and private upper level balconies. The proposal is an appropriate response to the orientation".*

Solar Access for Building's C, D and E was addressed in the Development Application documentation. Building D had the lowest levels of compliance, and the SEE addressed solar access as follows:

*"In Building D, 17 of the apartments (17.2%) receive the prescribed level of solar access, 52.8% less than the Rule of Thumb (which equates to approximately 53 apartments). This variation to the rule of thumb should be considered within the context of the site, on which the position and orientation of the building envelope is predetermined. The envelope is long and linear and predominately north-west or south-east facing.*

*In the case of Building D, the orientation of the building provides expansive views of the city skyline towards the south-east, which provides significant amenity benefits. These views provide significant amenity to future occupants, therefore orientating the majority of dwellings to maximize these views rather than orientating them away in order to simply achieve the numerical solar access target is preferable. The open expansive views and the fact that the majority of dwellings do not face another apartment building, means that ample diffuse daylight will be available to apartments despite their south-eastern orientation."*

Design changes were incorporated across the assessment period. The application for Buildings C, D and E was approved with 50% of apartments across the three buildings meeting the 'solar access' requirements. Building D remained the lowest performing building with 40%. Council officers accepted the variation from the solar access 'Rule of Thumb' and recommended the proposal for approval by the JRPP – where it was approved.



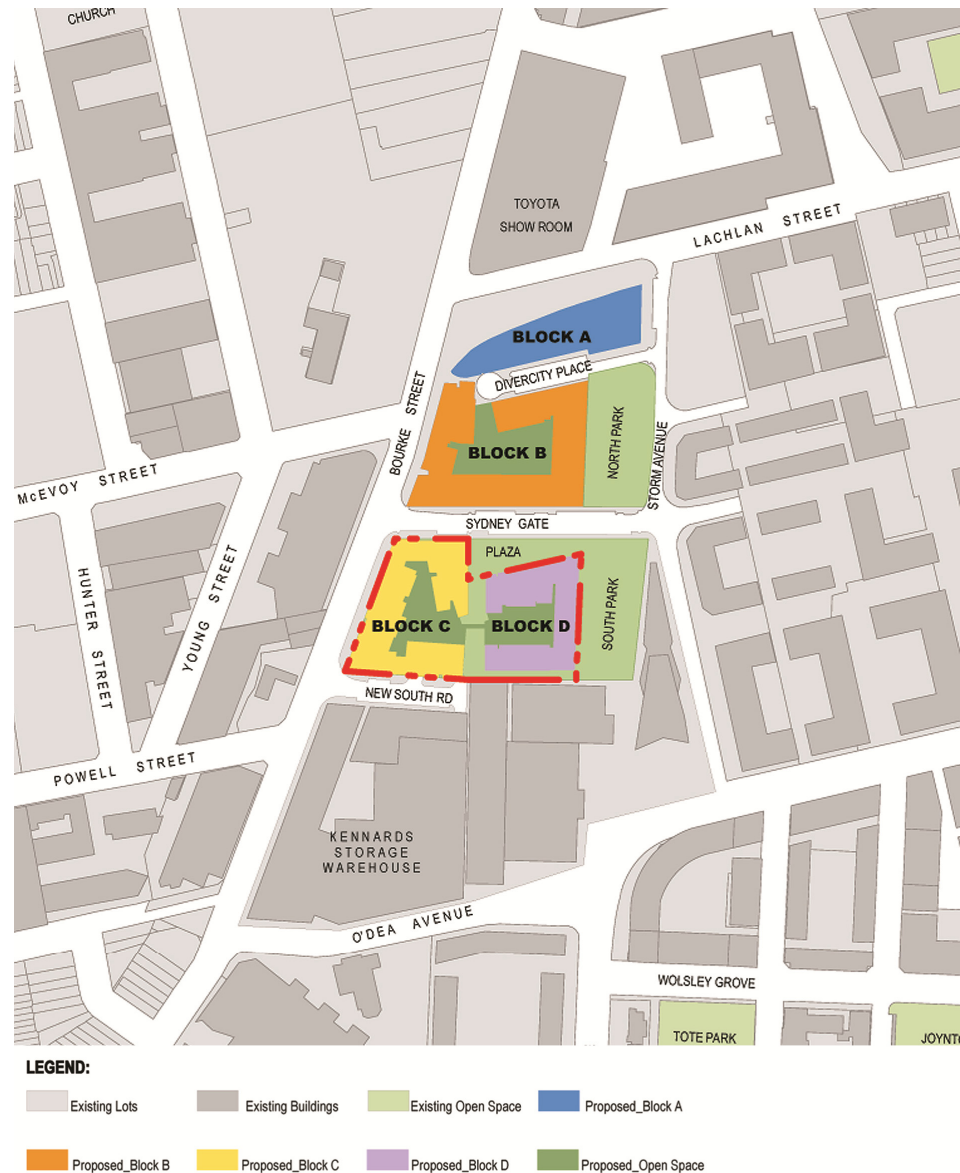
Figure 10 – Top Ryde Residential Towers

Source: Crown International. [www.toprydecity.com.au](http://www.toprydecity.com.au)

## 6.4 Sydneygate, Bourke Street Waterloo

The Sydneygate project is a mixed use residential development at the corner of Sydneygate and Bourke Street, Waterloo. The site is subject to an initial master plan approval granted in 2005 and detailed development applications have been lodged since this time.

The development has been lodged in a number of stages, with Block B approved by the Central Sydney Planning Committee (CSPC) on 25 November 2005 and the most recent stage (Block C and D combined) approved by the CSPC on 16 February 2012 (Figure 11).



**Figure 11 – Sydneygate 'master plan' site**

Source: Turner and Associates

For Block B, the CSPC and Council officer's accepted a variation to the RFDC solar access "Rule of Thumb" based on the constraints of the site. Block B achieved the 2 hour requirement to 56% of dwellings. Block C and D achieve the two hour requirement to 67% of dwellings and is currently awaiting determination.

The CPSC accepted a variation from the solar access 'Rule of Thumb' on the basis that:

- The urban form resulted from the prescribed master plan approved by Council.
- Development to the block edge, together with the orientation of the site, existing and desired street alignments and the heights applied, limited the number of apartments that met the 'Rule of Thumb'. In particular, the urban form limited the number of apartments that are north facing and not overshadowed.
- The orientation of buildings was also based around Council's desire for other amenity benefits including three through site links, two new roads dedicated to Council, a new internal private road and linear park.
- The site provided a number of significant public spaces unlike many other developments in Green Square. At any time during the day one or more of these areas were shown to be in sunshine.
- Few other developments in Green Square dedicate such a high percentage of site area for public open space, and this was taken into account when assessing amenity.

## 6.5 Bishop v City of Sydney Council

A recent Land and Environment Court judgement provided flexibility in applying the RFDC solar access 'Rule of Thumb' through allowing a holistic assessment of factors that contribute to amenity.

In the case of *Bishop v The Council of the City of Sydney (2010) NSWLEC 1364 (31 December 2010)*, the development related to a Section 96 modification to allow nine additional apartments at first floor level to an existing building addressing Botany Road, Alexandria. None of the *additional* apartments met the 2 hours daylight access 'Rule of Thumb'. Ultimately the appeal was upheld and through a range of other considerations a few of the apartments were combined and seven apartments were granted development consent.

Whilst this case provides a very different scale of development to Discovery Point, aspects on the consideration of how amenity should be measured and judged provide a useful corollary for Discovery Point.

With respect to the fact that none of the additional apartments complied with the 'Rule of Thumb', Commissioner Tuor agreed with the evidence of the applicant's expert and stated:

**25     *I accept Mr Stark's evidence that, on balance, the units will achieve an acceptable level of amenity given the constraints of the site. The size and layout of the units is reasonable, they are in close proximity to public transport, shops and other services. The balconies are large and off the living areas, they will receive some sun morning, although less than two hours. The louvres, the awning below and the setback of the units mitigate noise from Botany Road.***

The holistic consideration of a range of factors that contribute to amenity is evident here including access to transport, shops and services, sufficient balcony size and apartment layout and mitigation of noise. The same factors justifying a significant variation from the RFDC in this court case, have also been demonstrated as providing a high quality residential development in the Discovery Point context.



## 6.6 Draft Green Square Development Control Plan

There is evidence that this holistic consideration of amenity is also now being borne out through the approach of consent authorities in their strategic planning documents. For example, the draft Green Square DCP was exhibited by the City of Sydney Council between 30 November 2011 and 20 December 2011, with Council currently reviewing submissions.

The provisions of this draft DCP appreciate that given the highly urbanised nature of the Green Square Town Centre and the expected densities that will be achieved, that some sites may not fully comply with the RFDC. In such instances, Council would require development proposals to demonstrate alternative solutions to achieve high levels of amenity.

Clause GSTC 6.10 Amenity of the draft DCP (October 2011) builds in this flexibility as follows:

*Development should be in accordance with State Environmental Planning Policy 65: Design Quality of Residential Flat Development (SEPP 65).*

***Where the strict adherence to the provisions of SEPP 65 and the Residential Flat Design Code cannot be achieved, development should demonstrate that alternative solutions to ensure high levels of amenity are provided, in particular in terms of access to natural light and ventilation.***

The modification application for Discovery Point follows this line of thinking and seeks to justify a departure from the 'Rule of Thumb' through recognition of the site's constraints and opportunities and the significant other amenity benefits available to residents of the development.

## 7.0 Conclusion

The assessment of the proposed modification to the solar access target on the Discovery Point site indicate that the proposal is justified on strategic planning grounds in terms of the Concept Plan's contribution to housing supply and given a multi-faceted range of measures contribute to the residential amenity of the development.

The holistic assessment of the various amenity considerations demonstrate that notwithstanding the lower target for solar access, Discovery Point delivers a high level of residential amenity for a site in this urban context. The amenity rating is raised in particular by the development's access to public transport (and employment opportunities), extensive open space areas and in many cases views/and or outlook.

The positive market response to date indicates that the market concurs that Discovery Point has a good level of amenity and is a desired place to live.

The flexible application of the solar access provisions is consistent with several other high quality residential projects as nominated in this report.

The modification also seeks to amend the approved Building Separation plan to correct a drafting error. This change is considered minor and has no material impact on the approved Concept Plan structure.

The modification to Conditions A1, A5, B3 and Schedule 3 Condition 1 of the Concept Plan approval and to the solar access section of the Development Design Guidelines is therefore warranted in this instance.