

5.0 Concept Plan

5.1 Introduction

The Concept Plan establishes the vision and planning and development framework for the future development of the Darling Walk site. It articulates what the Authority is seeking to achieve for future development and sets the broad parameters for the development of the site.

This section of the report establishes the key development objectives and outcomes that underpin the development of the Darling Walk site and recommends strategies to achieve these outcomes. These strategies result in actions which are detailed in the Statement of Commitments (**Section 8**).

The Concept Plan has been informed by the Darling Walk Urban Design Guidelines, prepared by Cox Richardson (**Appendix D**) and supported by technical studies which are also appended to this report. Conceptual illustrations of the urban and public domain environment have been drawn from the Urban Design Guidelines.

The guidelines provide a vision for the site, give direction on development expectations of the site, and outline key urban design objectives. As set out in **Section 7**, future Project Applications are required to be consistent with the Urban Design Guidelines.

They provide a planning and development context for the site as well as objectives, controls and illustrations on the following:

- Land Use
- Built Design and Form
 - Building envelopes
 - Gross Floor Area
 - Setbacks
 - Building Articulation
 - Building Materials
- Amenity and Public Domain Interface
- Access
 - Entry, Pedestrian Access and Mobility
 - Vehicle and Service Access
 - Loading Bays and Garbage Areas
- Sustainable Development
- Landscaping.

Section 7 of this report details the design criteria that future Project Applications will be required to meet. These criteria are based on the Urban Design Guidelines.

5.2 Concept Approval

Concept Approval is sought for:

- (a) Redevelopment of Darling Walk, Darling Harbour to provide between 64,000m² and 68,000m² GFA¹ of primarily commercial floorspace but including up to 5,000m² GFA of retail floorspace (retail and associated uses) and up to 1,000 m² GFA for recreation, cultural or entertainment uses.
- (b) A maximum of 200 car parking spaces to service the commercial buildings and a public car parking facility accommodating 600 car parking spaces.
- (c) Public Domain improvements.

The concept plan envisages a degree of flexibility between the extent of commercial and retail GFA, which will be determined at Project Application stage.

5.3 Project Objectives

Redevelopment of Darling Walk offers the most substantial opportunity in Darling Harbour for large scale development. Redevelopment of the site will offer highly significant opportunities to improve the quality of the public domain within the Darling Harbour precinct and adjoining public open space.

The key elements in the Authority's objectives for Darling Walk include:

- Activate and rejuvenate the Darling Walk site and the adjoining south Darling Harbour area.
- Create a high quality, distinctive office building of exceptional design and construction quality with complementary ground floor commercial/ retail and associated uses.
- Provide an affordable, safe, family orientated destination for visitors and Sydneysiders at Darling Harbour.
- Improve pedestrian connections between Darling Harbour Central Public Domain and the CBD from the western ends of Liverpool and Bathurst Streets via the introduction of a new major pedestrian and view corridor through the site that will serve as a major gateway between Darling Harbour and the CBD.

1 Gross Floor Area means the sum of the floor area of each storey of a building measured from the internal face of external walls, or from the internal face of walls separating the building from any other building, measured at a height of 1.4 metres above the floor.

Gross Floor Area includes:

- a) the area of a mezzanine within the storey;
- b) habitable rooms in a basement;
- c) any shop, auditorium, cinema, and the like, in a basement or attic;
- d) but excludes any area for common vertical circulation, such as lifts and stairs and;
 - any basement;
 - storage;
 - vehicular access, loading areas, garbage and services;
 - plant rooms, lift towers and other areas used exclusively for mechanical services or ducting;
 - car parking to meet any requirements of the consent authority (including access to that car parking);
 - any space used for the loading or unloading of goods (including access);
 - terraces and balconies with outer walls less than 1.4 metres high; and
 - voids above a floor at the level of a storey or storey above.

- Extension of the curved Day Street alignment through the site towards the centre of Tumbalong Park.
- Ensure new development along the Harbour Street frontage, with strong, open architectural character addressing Harbour Street and the CBD.
- Promote new active uses between the commercial edge and the Central Public Domain, including the provision of protected outdoor seating areas servicing ground floor retail and associated use spaces.
- Built form to respond to the geometry of Tumbalong Park.
- No significant increase in overshadowing to the Chinese Garden. Overshadowing of adjacent areas of the public domain is to be minimised. Some overshadowing is acceptable in areas used principally for transient pedestrian movement.
- Ensure modulation of built form height and scale between the Central Public Domain and the CBD.
- Consider the nature of existing open space, water and children's play ground as part of any reconfiguration of the site's public open space.
- Provide 200 car parking spaces to service the Darling Walk commercial development.
- Accommodate a public car parking facility providing 600 Car parking spaces (these are existing parking spaces relocated from the Entertainment Car Park to permit the future redevelopment of the Entertainment Car Park site for additional multi-purpose exhibition facilities).
- Activate commercial building roof spaces through the introduction of roof terraces and roof gardens.

5.4 Concept Principles and Strategies

The Concept Plan aims to respond to the site's contextual setting to strengthen its physical attributes and contribute towards the ongoing upgrading of Darling Harbour.

A series of principles and strategies have been established to guide the renewal of Darling Walk (**Table 3**).

Table 3 – Principles and Strategies to guide development

Principles	Strategies
Fostering connections within Darling Harbour and between Darling Harbour and adjoining CBD.	<ul style="list-style-type: none"> ▪ Extending the Day Street alignment through the site. ▪ Retain at-grade pedestrian connections and provide the proposed development with a new 20m width view and circulation corridor. ▪ Establish a new vista from Bathurst Street to Tumbalong Park to facilitate movement around the building's components. ▪ Integrate the pedestrian crossing at Day Street opposite Harbour Street to create a direct and inviting new gateway into South Darling Harbour. ▪ Ensure ground level public access generally follows the natural alignment of the vista into Tumbalong Park, to create a significant new connection between the City and Darling Harbour. ▪ Create open vistas beneath the western distributor towards the development through the reconfiguration of the existing public domain. ▪ Promote a built form that provides a continuous pedestrian promenade from Darling Walk to Cockle Bay.
Recognising and responding to Darling Harbour and CBD's established urban character.	<ul style="list-style-type: none"> ▪ Ensure future development acknowledges the geometries of the site and urban form of the adjoining CBD. ▪ Ensure future development incorporates a sense of openness and fine-grained permeability towards the city. ▪ Incorporate innovative facade treatments that positively respond to site context and issues of solar glare and thermal comfort.

Principles	Strategies
Retaining 'distinctive elements' of Darling Harbour.	<ul style="list-style-type: none"> Retain a strong sense of containment whilst addressing the Harbour Street Road frontage and the city beyond. Ensure no significant increase in overshadowing to the Chinese Garden and no significant overshadowing of adjacent areas of public domain. Ensure the proposed envelope is generally aligned with the Harbour Street site boundary in order to allow the building footprint to be set back from the geometry of Tumbalong Park. Pursue a modulated built form height and scale relationship between the valley floor and the adjoining CBD. Provide outdoor seating and dining areas associated with the development, ground floor retail and associated uses. Activate the commercial building roof spaces to facilitate breakout, relaxation and employment by office workers and their invited guests.
Enhancing the quality of the 'public domain'.	<ul style="list-style-type: none"> Provide a high quality landscape which links Darling Walk into Darling Harbour through materials. Redefine the Children's play environment and create a vibrant, active and robust destination for families. Strengthen the north-south connection through to Cockle Bay and link between the CBD and Darling Harbour / Tumbalong Park. Ensure the public domain defines a strong entry for pedestrians travelling between the CBD and Tumbalong Park. Promote a zone of seating for outdoor dining and public seating opportunities along active frontages that address the Darling Walk public domain.
Providing clear and legible arrival and entry points	<ul style="list-style-type: none"> Ensure entry lobbies are conveniently positioned for pedestrian access from the major transport hub at Town Hall and are supported by a vehicular drop-off zone along Harbour Street. Ensure upgrades to Day / Harbour Street (such as footway and other miscellaneous pavement upgrades, avenue planting to provide a gateway to South Darling Harbour) reinforce the entry axis and provide a legible and high quality address to Darling Walk.

Principles	Strategies
Ensure adequate vehicular access and car parking services are provided	<ul style="list-style-type: none"> ▪ Main vehicular movements are to be from Harbour Street, with a further northbound outbound option to Wheat Road. ▪ Ensure any proposed access ways to ramps feeding basement parking and loading area are provided perpendicular to the Harbour Street boundary and appropriately concealed within the building footprint. ▪ Avoiding disturbance of trunk services and provides a loading dock that services both the North & South buildings.

5.5 Built Form and Urban Design

The abovementioned principles and strategies have informed the development of the design criteria contained in **Section 7** and Urban Design Guidelines prepared by Cox Richardson (**Appendix D**).

The Urban Design Guidelines have informed the development of the Concept Plan and establish a set of controls which provide the basis for the formal design of the redevelopment as follows.

5.5.1 Indicative Layout

An indicative layout of the proposed development is shown in **Figure 28** and seeks to achieve:

- a building mass that is modulated in height and scale between the valley floor and the adjoining CBD;
- at least one major pedestrian and view corridor through the site, radial to the centre of Tumbalong Park measuring a minimum of 20m in width;
- the alignment of the principal corridor with the intersection of Day Street and Harbour Street;
- landscaping opportunities within the corridor;
- a building layout that complies with day light access and visual privacy requirements;
- internal atriums, breakout spaces and balconies; and
- a basement structure to accommodate various facilities including docks, storage, change facilities, waste handling, lockers and the like.

The configuration of the basement (including below ground structures required to accommodate/ bridge existing infrastructure services) may extend beyond the building footprint but not beyond the extent of the site area. The final design of the development however, will be the subject of a future Project Application.

The indicative layout at **Figure 28** is for illustrative purposes only.



Figure 28 – Indicative Building Envelope

5.5.2 Development and Building Footprints

Figure 29 shows the extent of the development footprint and building footprint. The building footprint is an indication of where the new buildings will be sited. The development footprint defines the boundary, beyond which no development (except architectural treatments for the main entry) above ground level will project.

Architectural projections/ treatments associated with the main entrance/ gateway between the two buildings may extend beyond the development footprint but only where design excellence can be demonstrated, all other architectural projections such as awnings, building shading screens and devices, architectural treatments and the like will be contained within the development footprint boundary.

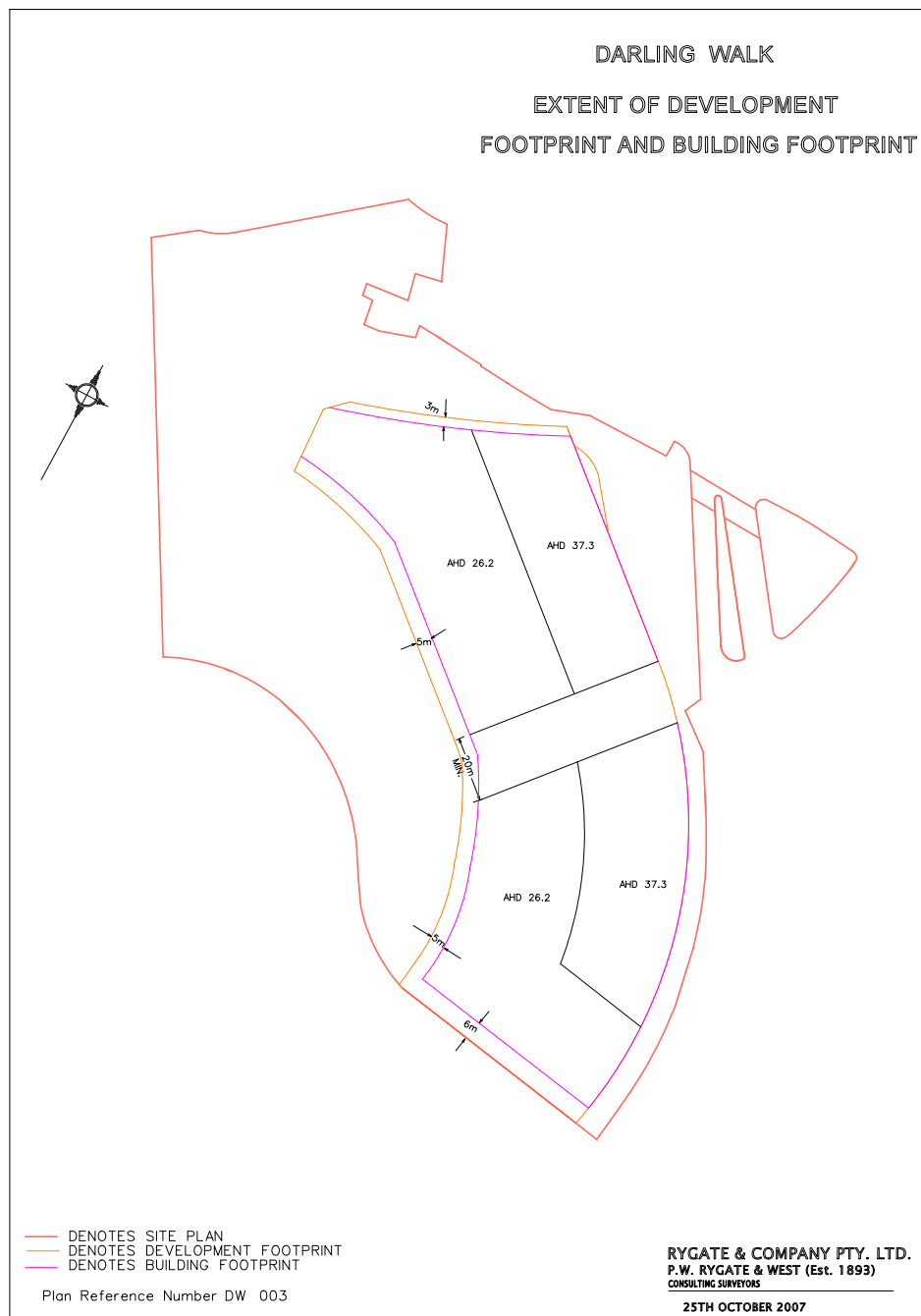


Figure 29 – Extent of the Development Footprint and Building Footprint

5.5.3 Building Height and Massing

The maximum building height of the development adjacent to Tumbalong Park will be 26.2m AHD, being approximately ground floor + 5 storeys above existing ground level (3.7m AHD). Adjacent to Harbour Street, the maximum height will be 37.3m AHD, approximately ground floor + 8 storeys above existing ground level: (Figure 30).

Minimum floor to floor heights of 4m at the ground floor, and 3.6m from first floor above will be incorporated.

Building Height for the purposes of this Concept Plan is defined as:

“The building height is to be measured to the ceiling of the uppermost habitable floor. Plant, lift overruns, architectural roof forms and parapets, communication devices, landscape and the like are permitted to exceed the maximum building heights nominated”.

Figure 31 illustrates a possible massing scenario for the proposed development, and adopts the maximum height thresholds. The final design however, will be the subject of a future Project Application.

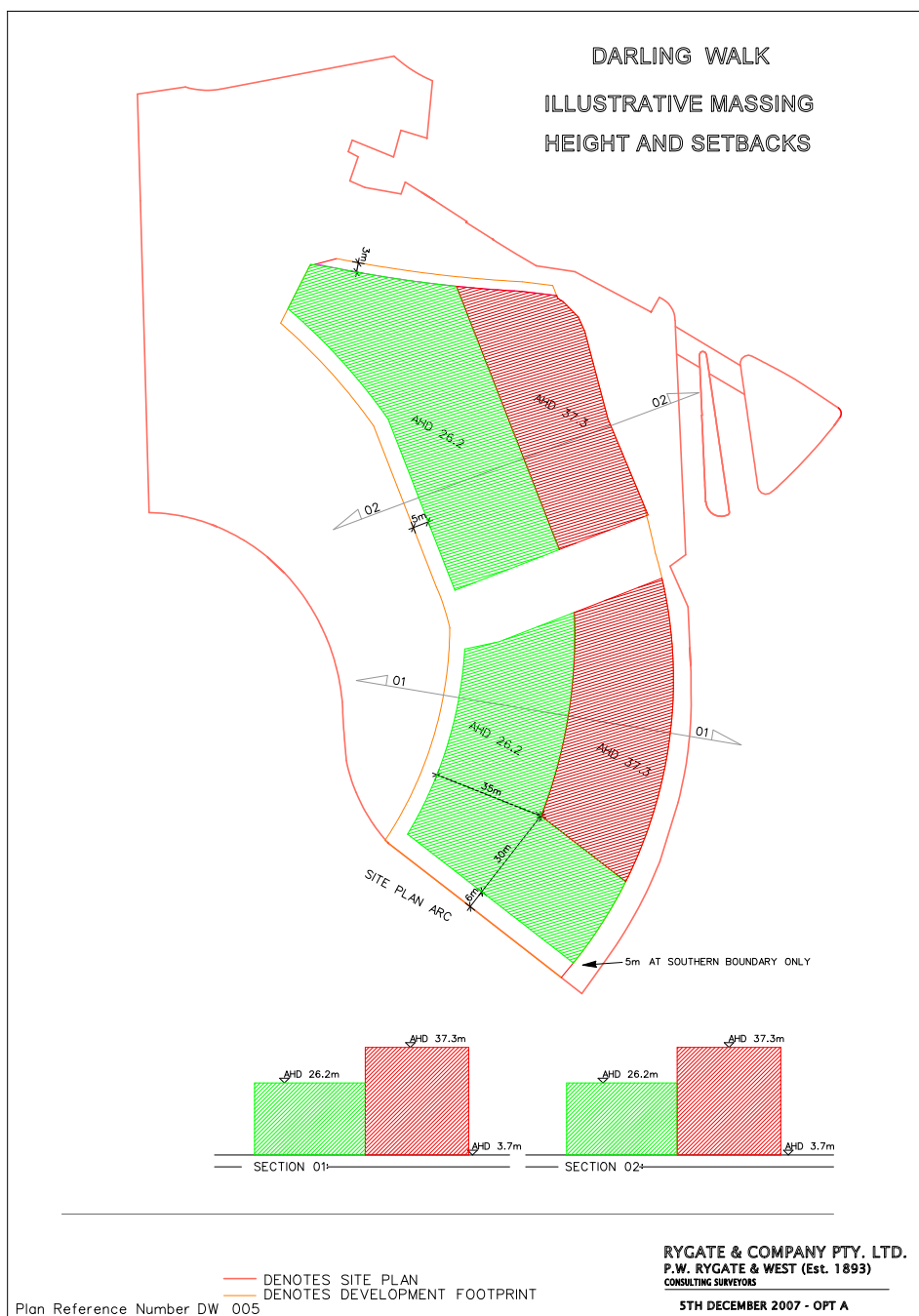


Figure 30 – Illustrative Massing, Height and Setbacks

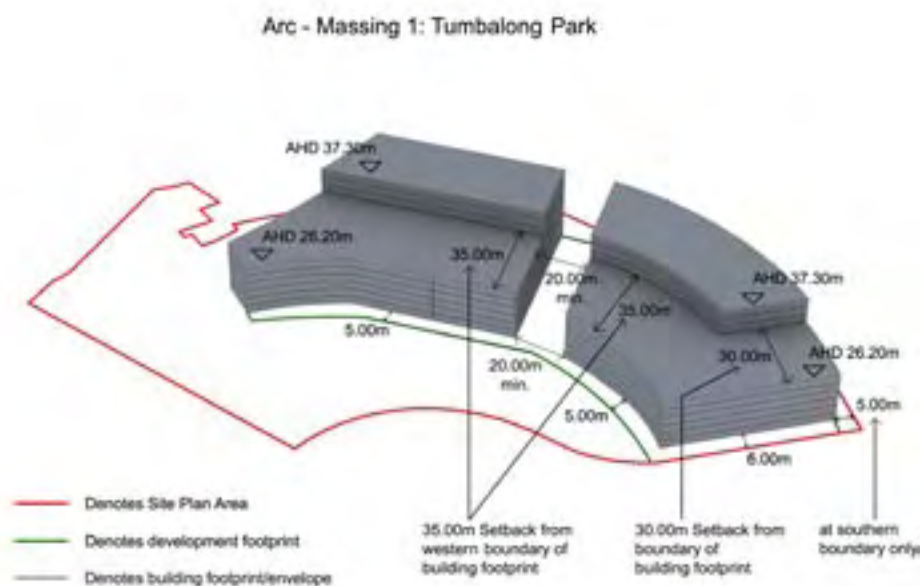


Figure 31 – Illustrative Arc Massing

5.5.4 Building Separation

At least one major pedestrian and view corridor through the site is to be included in the final design and will serve as a major gateway between Darling Harbour and the CBD. It is proposed that it will be radial to the centre of Tumbalong Park and aligned with the intersection of Day Street and Harbour Street. This corridor through the site will be no less than 20m in width and will incorporate urban landscaping. Architectural projections/ treatments associated with the main entrance and uses fronting the civic link (i.e. 20m corridor) may extend into the civic link.

5.5.5 Setbacks

The buildings will be sited to generally follow the alignment of the Harbour Street boundary from Liverpool Street to Day Street.

The setbacks relating to the proposed development are set out in **Table 4** and are illustrated in **Figure 30** above.

Table 4 – Setback Controls

Elevation	Setback	Boundary
Harbour Street	5m	From southern Harbour Street site boundary ²
Side of Southern Building	6m	From southern boundary of development footprint
Side of Northern Building	3m	From northern boundary of development footprint
Tumbalong Park	5m (Building Frontage)	From western boundary of development footprint
Tower Block	35m	From western boundary of building footprint
	30m	From southern boundary of building footprint

5.5.6 Building Materials

Building materials will be selected to generally acknowledge the material palate of Darling Harbour. It is proposed that the building will be designed to achieve the requirements of an “A” grade commercial building. This includes high quality office space that provides:

- good views, outlook and natural light;
- good quality lobby and lift finishes;
- good access from an attractive street setting; and
- high quality presentation and maintenance.

5.5.7 Land Use

The Darling Walk site will be principally a commercial office development with complimentary retail and associated uses, servicing patrons working in and visiting the precinct.

It is envisaged that the following will be provided:

- between 64,000 m² and 68,000m² GFA, of primarily commercial floorspace but including up to 5,000m² GFA for retail and associated uses and up to 1,000m² GFA of floorspace for recreational, cultural and entertainment uses;
- a maximum of 200 car parking spaces to service the commercial building
- a public car parking facility accommodating 600 car parking spaces (relocated from the Entertainment Car Park); and
- public domain improvements.

² The 5m setback is at southern boundary only. Setback along Harbour Street is irregular in width.

The Concept Plan seeks approval for the following range of uses:

- commercial offices and associated car parking;
- food and beverage establishments;
- general retail;
- places of public entertainment;
- recreational, cultural and entertainment facilities;
- attractions;
- tourist office and facilities;
- open spaces including water features and public seating;
- child care facilities;
- health centres;
- sporting facilities;
- medical facilities;
- public amenities;
- transport facilities; and
- public car park.

The final mix of uses will be determined at the Project Application stage.

5.5.8 Active Frontages

Active frontages will be incorporated within the design of the proposed building, along both the Harbour Street and Darling Walk frontages, and the building separation frontages. Active frontages supplement and reinforce vitality of developments at ground floor level. It is envisaged that generally the ground floor frontages will be retail shop frontages facing Tumbalong Park and uses including retail, food and beverage establishments. Other desirable uses along the Harbour Street frontage may include (but not be limited to) health centres, medical facilities and sporting facilities.

The northern frontage is proposed to be activated in part by the servicing of the McDonalds drive thru facility.

5.5.9 Site Lines and View Corridors

The proposed redevelopment of the Darling Walk site seeks to create attractive and uninterrupted view corridors between Harbour Street and Tumbalong Park (Figure 32). The proposal also provides for uninterrupted views from Tumbalong Park towards Darling Harbour. As set out in Section 5.5.1 a major view corridor through the site will be incorporated in the final design. The exact location of the view corridor will, however, be subject to a future Project Applications.



Figure 32 – View Corridors

5.6 Public Domain

A Public Domain Design Intent Plan is included at Appendix C. The Public Domain area comprises the remainder of the site outside of the envisaged development footprint, but including the civic link (i.e. 20m corridor) between the proposed commercial buildings. It is envisaged that the future design of the Public Domain area will create a variety of activity zones and will provide a high quality landscape which links Darling Walk with the remainder of the Darling Harbour precinct. The key elements to the Public Domain upgrade include:

- Reconfigured children's play area;
- Water Play area;
- Pedestrian Boulevard;
- Water Axis;
- Community Green;
- Melaleuca Grove; and
- Streetscape Upgrade.

The concept for the reconfigured children's play area is to provide a high impact play environment which is a vibrant, active and robust destination for families. It is proposed that the play area will incorporate interactive water-play features and play equipment as its defining characteristics.

The pedestrian boulevard is to be the key walkway through the site, running in a north/south direction along side the western edge of the development footprint. It is to be bound by cafes and retail areas.

A precinct green is to also be included within the Public Domain area, connecting to the children's play area and bounded by the existing Melaleuca Grove. A large terrace lawn area is proposed to create an area for passive recreation for families and workers.

In addition, the public domain is to include the civic link area, which runs between the proposed commercial buildings. It's purpose is to provide a legible and high quality address to Darling Walk for pedestrians, between the CBD and Tumbalong Park.

Whilst the specific design of the public domain area will be the subject of a future Project Application it is envisaged that the design of the Darling Walk Public Domain is to draw on its proximity to Sydney Harbour/ Cockle Bay and connections to the CBD. Water features throughout the site are to link the new landscape with the existing water theme that continues throughout Darling Harbour and the material fabric is to be high quality, simple and robust. In addition to the key elements set out above, improvements to the Public Domain area will include:

- buildings forecourts which will visually and physically extend the street and pedestrian areas;
- paved forecourts as extensions of the public domain;
- outdoor seating for the general public;
- new water features that are integrated with the proposed buildings;
- outdoor seating associated with the ground floor retail contained within a specified area which extends no more than a maximum of 5m from the line of the development footprint;
- the integration of the carousel with the new public domain; and
- suitable access arrangements for emergency vehicles.

5.6.1 Landscaping

The redevelopment of Darling Walk seeks to create a quality urban landscape environment which is consistent and compatible with the surrounding land uses. As many of the existing trees and landscaped areas will be retained as practicable and incorporated in the finalised landscape scheme.

Native trees, where practical and which are not heavily dependent on a regular water regime, will be selected to provide summer shade, winter sun and wind protection to the public domain.

In addition ceremonial trees are to be provided along Harbour Street with soft landscaped areas with a permanent subsurface irrigation system provided throughout the site at other locations.

Part of the public domain may be developed in stratum over the proposed basement car parking structure. Where soft landscaping forms part of the public domain in stratum over basements, an appropriate soil/ drainage depth (nominal 400mm) will be provided.

5.7 Traffic, Access, Transport and Parking

The following sections set out the proposed traffic, accessibility and car parking provision to be included in the redevelopment of the site.

5.7.1 Vehicular Access

Transport and Traffic Planning Associates within their Assessment of Traffic and Parking Implications (**Appendix F**) have recommended the following vehicular access arrangements:

- an ingress off Harbour Street at the Day Street intersection with a left-turn deceleration lane; and
- an egress to Harbour Street through traffic signals at the Day Street intersection including a separate left-turn 'slip lane' to the north.

It is envisaged that the ingress off the Harbour Street/ Day Street intersection will be the main point of access into the site for use by all vehicles including service vehicles, private and casual cars and the McDonalds drive-thru. The refinement of these proposed access arrangements will be detailed in a future Project Applications once the proposed scheme is developed and a detailed traffic study is undertaken.

An additional vehicle access ingress/egress point in Wheat Road, may be provided, subject to a detailed design and traffic assessment

5.7.2 Car Parking

A total of 800 car parking spaces will be provided on site, comprising:

- a public car parking facility accommodating 600 existing parking spaces relocated from the Entertainment Car Park (to enable the redevelopment of the Entertainment Car Park);
- 200 car parking spaces to service the commercial office building; and
- associated loading bays and service parking for the commercial and retail tenants.

The proposed public car park will operate 24 hours a day, seven days a week similar to the existing Entertainment Car Park and other public parking stations operated by the Authority within the precinct.

The management and pricing structure of the public car park will be similar to that of the Entertainment Car Park and will cater predominantly for Darling Harbour's diverse user groups.

The 800 car parking spaces and associated facilities are proposed to be accommodated within a basement structure. The orientation, depth, plan dimensions and configuration of the basement car park may extend beyond the development footprint but not beyond the extent of the site. The detailed design will be the subject of a future Project Applications.

5.7.3 Bicycle Facilities

The Authority supports cycling as an environmentally sustainable form of transport that should be encouraged for trips to Darling Harbour and the Darling Walk site, via the City of Sydney's proposed shared cycle route along the eastern side of Harbour Street. It is proposed that trip end facilities (such as bicycle racks, showers and lockers) will be provided as part of the redevelopment of Darling Walk which will assist access to the area. Details of the number and location of bicycle racks, showers and lockers will be provided at the Project Application stage.

5.8 Sustainable Development

The Urban Design Guidelines (**Appendix D**) detail the sustainable development objectives for the proposed development. These include:

- integrating state-of-the-art energy efficiency systems; and
- integrating water collection and stormwater harvesting systems to supply water to the public domain and water features. The collection of the stormwater harvesting arrangements may extend beyond the development footprint but not beyond the extent of the site. The detailed design will be the subject of a future Project Application.

It is proposed that the building will achieve:

- a 5 star Australian Building Greenhouse Rating for the building and tenancy fit outs; and
- minimum 5 Green star - Green Building Council of Australia Green Star – Office Design v2 rating.

The areas of focus for achieving a sustainable building include:

- Energy management
- Water management
- Indoor environment quality
- Transport
- Ecology

5.9 Staging

It is expected that future Project Application(s)/ Development Application(s) will be lodged progressively for the redevelopment of the site.

Project Applications/ Development Applications are likely to be grouped into the following indicative scope categories to reflect the following stages:

1. Former SEGA World building demolition and general site clearing, inclusive of site establishment, environmental controls, Construction Management Plan, etc.
2. Interim uses.
3. Enabling works, including infrastructure services diversions and bridging.
4. Site remediation.
5. Commercial building retention systems, bulk excavation, in-ground works and foundations, inclusive of environmental controls.
6. Commercial buildings.
7. Fitouts (including various commercial, retail etc).
8. Public Domain Works.
9. Roadworks.
10. Site interpretive strategy/ public art.

Where sufficient design resolution and approvals are in hand, some categories may be grouped.

Development of the site may involve temporary or interim uses from time to time. Such uses may include, but are not limited to, temporary landscaping and site beautification works, storage of materials, establishment of temporary site offices and marketing/ leasing suites, viewing towers etc.

Interim uses will not prejudice the long term land-use and will satisfy all relevant approval requirements.

The Concept Plan contemplates two major commercial buildings. It is intended that one Project Application will be submitted for the detailed design of both buildings, as it is a requirement that both commercial buildings be constructed simultaneously.

It is intended that the occupation of the development will be staged. Such staging may include, but is not limited to, the progressive completion and occupation of the two major commercial buildings, public car park and surrounding public domain works.

6.0 Environmental Assessment

This section of the report assesses and responds to the environmental impacts of the Concept Plan proposal. It addresses the matters for consideration set out in the Director General's Environmental Assessment Requirements (DGRs).

The draft Statement of Commitments complements the findings of this section and is at Section 8.

6.1 Director General's Environmental Assessment Requirements

Table 5 provides a detailed summary of the individual matters listed in the DGRs and identifies where each of these requirements has been addressed in this report and/or the accompanying technical studies.

Table 5 – Director General's Environmental Assessment Requirements

Director General's Requirements	Location in Report/Application
General Requirements	
The Environmental Assessment (EA) must include:	
(1) An executive summary	Executive Summary
(2) description of the site, including cadastral and title details	Section 2
(3) A Concept Plan detailing the proposed layout of the buildings, FSR, height, land uses, ancillary services and infrastructure, and any staging of the proposal	Section 5 Appendix C
(4) A description of the measures that would be implemented to avoid, minimise, and manage the impacts of the project	Sections 6, 7 and 8
(5) Signed statement from the author of the EA certifying that the information contained in the report is neither false nor misleading	Statement of Validity
(6) A Quantity Surveyors Certificate of Cost to verify the capital investment value of the project	Provided under separate cover Appendix J
Key Issues	
The Environmental Assessment must address the following key issues:	
Relevant EPIs and Guidelines	Section 3 and 6
Built Form and Urban Design	Section 6
Public Domain/ Pedestrians	Sections 5 and 6
Site Suitability	Section 6
Social Context	Section 2 and 6
Traffic, Access and Parking	Section 5 and 6
Amenity	Section 6
Public Services and Infrastructure	Section 5 and 6 Appendix G
Stormwater	Section 6 Appendix G

Director General's Requirements	Location in Report/Application
Sustainability	Section 5 and 6 Appendix D
Statement of Commitments	Section 8
Consultation	Section 4

6.2 Planning Framework Assessment

6.2.1 Darling Harbour Development Plan No.1

The objectives of the Darling Harbour Development Plan No.1 are to encourage the development of a variety of tourist, educational, recreational, entertainment, cultural and commercial facilities and to set out those uses which are deemed permissible.

The provision of commercial, retail, recreation, cultural and entertainment facilities are identified as permissible uses and meet the objectives of the Plan. The proposed development therefore is in accordance with the Plan.

6.2.2 State Environmental Planning Policy (Major Projects)

The Darling Walk site is located within the Sydney Harbour Foreshore area, identified at Clause 10 of Schedule 2 of the Major Projects SEPP. It is specified that on these sites, developments with a capital investment value of greater than \$5m (and declared by the Minister) are subject to the provisions of Part 3A of the EP& A Act. By virtue of the process which is being adopted for the approval of this Concept Plan, the proposal is in accordance with the Major Projects SEPP.

6.2.3 Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005

Within the Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005 (SREP), the Darling Walk site is identified as being within the:

- Sydney Harbour Catchment Area;
- Foreshores & Waterways Area Boundary; and
- City Strategic Foreshores Area.

Part 3, Division 2 within the SREP refers to matters which are to be taken into consideration by consent authorities before granting consent for development. Relevant considerations to the proposal are set out in **Table 6** below.

The proposed Darling Walk Development is generally consistent with the relevant provisions and matters for consideration set out in Clauses 20 to 27 of the Sydney Harbour REP.

Table 6 – SREP (Sydney Harbour Catchment) Relevant Considerations

Instruments/ Guidelines	Comment
<p>Clause 21 – Biodiversity, ecology and environment protection</p> <p>(a) Development should have a neutral or beneficial effect on the quality of water entering the waterways</p> <p>(h) The cumulative environmental impact of development</p>	<p>The proposed redevelopment of Darling Walk seeks to replace the existing development. The area is predominately a hard landscape urban park and buildings. The development footprint will be similar to existing the existing buildings and a future Project Applications will include a stormwater management plan.</p>
<p>Clause 25 – Foreshore and waterways scenic quality</p> <p>(a) the scale, form, design and siting of any building should be based on an analysis of:</p> <p>(i) the land on which it is to be erected, and</p> <p>(ii) the adjoining land, and</p> <p>(iii) the likely future character of the locality</p> <p>(b) development should maintain, protect and enhance the unique visual qualities of Sydney Harbour and its islands, foreshores and tributaries</p>	<p>The proposal seeks to regenerate and activate an under-utilised site which is in need of redevelopment within the Darling Harbour precinct. A future Project Application will meet strict design applications will meet strict urban design performance criteria (refer to Section 7) which set standards to ensure that any new development will not cause any adverse impacts and maintain and enhance the unique visual qualities of Sydney Harbour.</p>
<p>Clause 26 – Maintenance, protection and enhancement of views</p> <p>(a) development should maintain, protect and enhance views (including night views) to and from Sydney Harbour,</p> <p>(b) development should minimise any adverse impacts on views and vistas to and from public places, landmarks and heritage items,</p> <p>(c) The cumulative impact of development on views should be minimised</p>	<p>The urban design performance criteria (Section 7) seeks to enhance views from the CBD to the site (Section 5.5.9). This Concept Plan proposal does not adversely impact upon any existing views and vistas from public places, landmarks and heritage items either individually or cumulatively.</p>
<p>Clause 41 – Requirement for master plans</p> <p>(4) A masterplan does not have to be prepared for the City Foreshores Area or for Garden island, as shown on the Strategic Foreshores Sites Map, unless the Minister so directs.</p>	<p>The sites falls within the City Foreshores Area and the Minister has not sought the preparation of a masterplan.</p>

6.2.4 State Environmental Planning Policy 11: Traffic Generating Development

As specified in **Section 3**, SEPP11 requires that applications for specific types of developments are referred to the Roads and Traffic Authority (RTA) for its comments prior to determination. As part of the process in formulating this Concept Plan the RTA has been consulted and its comments have been considered.

6.2.5 State Environmental Planning Policy 55: Remediation of Land

Clause 7 specifies that a consent authority must not consent to the carrying out of any development on land unless it has considered whether land is contaminated and if the land is contaminated, it is satisfied that the land is/ can be suitable for the proposed development. A Preliminary Environmental Site Assessment of the existing built up part of the Darling Walk site is included at **Appendix I**. This report considers that the site can be made suitable for the proposed development, further discussion is set out in **Section 6.9**.

6.2.6 Draft State Environmental Planning Policy No. 66 – Integration of Land Use and Transport

Clause 9 sets out a number of considerations which consent authorities are required to take into consideration when determining an application. The DGR's however provide a list of specific requirements to be addressed as part of this environmental assessment. The Assessment of Traffic and Parking Implications, undertaken by Transport and Traffic Planning Associates (**Appendix F**) assesses these specific requirements.

Clause 11 of this document seeks that consultation with the Director General of Transport NSW (Ministry of Transport) be undertaken. As set out within **Section 3**, consultation has been undertaken with the Ministry of Transport.

Furthermore, Clause 12 requires an assessment of the accessibility of the site and proposals to minimise travel demand by car and to maximise the use of public transport. Section 2 outlines the existing accessibility of the site and the Assessment of Traffic and Parking Implications, undertaken by Transport and Traffic Planning Associates (**Appendix F**) assesses proposals to minimise the use of the car and maximise the use of public transport. Traffic, access and parking impacts are discussed in **Section 5.7**.

6.3 Site Suitability

The site is considered suitable for the proposed development as it:

- will activate and rejuvenate the Darling Walk site and the adjoining south Darling Harbour area;
- will replace an existing underused entertainment complex which is in need of redevelopment;
- will create a high quality, distinctive office building of exceptional design and construction quality;
- proposes commercial business uses, retail and associated uses, public domain and ancillary uses which are permissible and will complement the uses within the remainder of Darling Harbour;
- promotes pedestrian accessibility from Tumbalong Park and Cockle Bay and will generally incorporate existing vehicles access points;

- will provide an affordable, safe, family orientated destination for visitors and Sydneysiders at Darling Harbour;
- will retain and integrate pedestrian connections between the Darling Harbour Central Public Domain and the CBD from the western ends of Liverpool and Bathurst Streets;
- ensures new development along the Harbour Street frontage, with strong, open architectural character addressing Harbour Street and the CBD;
- promotes new active uses between the commercial edge and surrounding public spaces; and
- results in no significant increase in overshadowing to the Chinese Garden, and no significant overshadowing of adjacent areas of the public domain.

6.4 Built Form and Urban Design

A key issue with the existing building on the site and the redevelopment of the site is to retain the sense of containment to Darling Harbour whilst addressing the Harbour Street road frontage and the city beyond.

6.4.1 Massing, Heights and Setbacks

The height of the existing Darling Walk entertainment complex is 25m to the base of the central cone, which is comparatively low compared to the top of the Imax theatre (37m), the Cross City Tunnel ventilation stack (63m), and Millennium Towers Apartments (70.6m), which are located within the immediate surrounding locality.

The maximum height proposed is 37.3m³ above ground level (approx 3.6m) adjacent to the Harbour Street boundary falling to 26.2m at the Darling Walk frontage. The height provides a stepping in scale from Tumbalong Park to the high rise towers in the CBD. The building height is defined in the Urban Design Guidelines (**Appendix D**) to be measured to the ceiling of the uppermost habitable floor. Plant, lift overruns, architectural roof forms and parapets, communication devices, landscape and the like are permitted to exceed the maximum building heights.

The proposed heights and setbacks as illustrated in **Figures 30 and 31 (Appendix C)** are based on the Darling Walk Urban Design Guidelines (**Appendix D**). They ensure that there is minimal overshadowing of the Chinese Garden and Tumbalong Park as illustrated in the Solar Access plans (**Appendix E**). Furthermore, the incremental height levels provide a transition between the city high rise buildings and the Darling Harbour open space.

Table 7 illustrates the proposed development in comparison to the controls which apply to the properties along Harbour Street (as set out in the City of Sydney LEP 2005).

Table 7 – Development Control Comparison Table

Control	Proposed Development	Harbour Street Properties
FSR	Between 1.95:1 and 2.1:1	7.5:1
Height	37.3m	50m

As noted above, the Millenium Tower Apartments exceed the 50m height limit by approximately 20m. It is considered therefore that the building heights, massing and setbacks are consistent with surrounding development, and do not create any adverse environmental impact.

³ All proposed height references in this part refer to the Australian Height Datum

6.4.2 Active Frontages

The existing Darling Walk building only presents an active frontage to Darling Harbour.

The proposed development will provide a sense of containment and reinforce the geometry of Tumbalong Park, whilst the Harbour Street frontage will be the key interface with the CBD. Retail and associated uses will generally occupy the ground floor along the Tumbalong Park frontage, and uses such as medical centres and sporting facilities will be encouraged along the Harbour Street frontage. Furthermore, given that there is to be at least one major corridor through the site, active frontages at ground floor level between the buildings are also proposed.

The activation of the frontages within the development will stimulate greater pedestrian activity and visitation to the precinct overall, and avoid the creation of a blank wall or back-door relationship between Darling Harbour and the Harbour Street.

6.4.3 Views and View Corridors

The current built form of the Darling Walk building creates a visual barrier to Darling Harbour south and Tumbalong Park, which results in a relatively poor relationship with the surrounding area and poor visual legibility and continuity. The proposed Concept design will present a strong frontage to Harbour Street and the creation of a major view and pedestrian corridor between the two buildings offers the opportunity to improve visual connections between Darling Harbour and the CBD. This will provide a principal access point into south Darling Harbour, which is a central feature of the redevelopment.

Figures 33 and 34 illustrate the proposed buildings from Tumbalong Park and Harbour Street.



Figure 33 – Montage view from Tumbalong Park



Figure 34 – Montage view from Harbour Street

The proposed commercial office buildings sit on the eastern boundary of the Darling Walk precinct and are surrounded by a variety of uses including commercial, residential and entertainment uses. The surrounding residential and commercial buildings in particular, are substantially taller than the current buildings, however their existing site lines and view corridors to the site are impacted upon by the surrounding elevated road infrastructure and the Cross City Tunnel portals.

Figures 35 and **36** illustrate the proposed change in views and site line from the Millennium Towers.



Figure 35 – Existing view from Millenium Towers



Figure 36 – Proposed view from Millenium Towers

There will be a change in the composition of views from some surrounding properties, however it is considered that the proposed development will not give rise to any potential adverse privacy impacts for nearby residential developments due to the separation of the proposed development from surrounding buildings by Harbour Street. The building designs provide for a deliberate stepping in height from Tumbalong Park to Harbour Street and are significantly lower than buildings on the eastern side of Harbour Street. The development will provide significantly improved site lines and views from the CBD to Tumbalong Park and along Harbour Street.

Figures 37 and 38 illustrate the changes between the existing and proposed Concept massing scenario.



Figure 37 – Existing Sega World massing



Figure 38 – Proposed Concept massing

6.5 Social and Economic Issues

The Darling Walk precinct is a key part of Darling Harbour offering a range of family orientated and tourist activities. The site is adjacent to Tumbalong Park which is the principal green open space. The activities and functions of the Darling Walk precinct are distinct from Darling Harbour's other precincts such as the Harbourside, Cockle Bay, King Street Wharf, and the Convention and Exhibition precinct.

The redevelopment of Darling Walk provides an opportunity to reinvigorate the public domain and family orientated nature of the precinct. The ongoing evolution of Darling Harbour reinforces and enhances its role as the City's premier waterfront event and tourism node, catering for a range of activities, attractions and functions.

One of the Authority's objectives behind the redevelopment of Darling Walk is to create a lasting social asset for Sydney and Darling Harbour by embracing the contemporary complimentary family and entertainment focus of Darling Harbour.

The proposed development will have a number of significant positive social and economic impacts on the area, including:

- the proposed development will increase the supply of high quality office floor space in the western corridor of the CBD in accordance with the objectives set out in the Metropolitan Strategy;
- a commercial development of between 64,000 m² GFA and 68,000m² GFA has the potential to provide space for up to 3300 workers;
- the development has the potential to provide a range of commercial tenancy sizes that will meet the varying demands of consumers in the Sydney LGA and surrounds. In particular the site is able to accommodate a building with a large floor plate, which few sites in the CBD can deliver;
- the proposed retail and associated uses at ground level and commercial office will encourage pedestrian activity at both Harbour Street and within the Darling Walk precinct which will add variety and life to the precinct;
- the Concept Plan proposes up to 1000m² GFA of floorspace for cultural, recreational and entertainment uses. As part of the Project Application stage, the establishment of a Children's Theatre on the site will be examined;

- the new retail and commercial tenancies will provide for new opportunities to increase the range of services to residents in the locality, not just to visitors; and
- construction will provide temporary employment opportunities.

6.6 Traffic, Access, Transport and Parking

Transport and Traffic Planning Associates have prepared an Assessment of Traffic and Parking Implications, which is included at **Appendix F**. The assessment considers:

- the existing road network serving the site, traffic controls and conditions;
- the existing public transport services;
- the pedestrian network;
- the impact of the proposed development on traffic conditions;
- car parking; and
- internal circulation and servicing.

The following key points are highlighted.

6.6.1 Access

Transport and Traffic Planning Associates have assessed the operational performance of intersections surrounding the site and the potential traffic generation of the proposed development. Vehicle access for the existing building comprises:

- an ingress for northbound traffic off Harbour Street just to the north of Liverpool Street;
- a traffic signal controlled egress at the wider section of Harbour Street and Day Street; and
- an ingress located just to the north of the controlled egress.

Traffic surveys were undertaken in December 2005 which assessed the operational performance of the key intersections within the Darling Walk vicinity during the morning and afternoon peak periods. The results are set out below:

Table 8 – Traffic Survey Results

Intersection	Morning		Afternoon	
	LOS ⁴	AVD ⁵	LOS	AVD
Harbour Street/ Goulburn Street	C	33.9	D	44.6
Harbour Street/ CCT/ Bathurst Street	C	42.3	C	40.2
Harbour Street/ Liverpool Street	A	13.7	B	17.5
Bathurst Street/ Day Street	B	26.4	B	25.2

The operational performance therefore of the intersections at Harbour Street/ Goulburn Street; Harbour Street/ Bathurst Street/ Cross City Tunnel (CCT); Harbour Street/ Liverpool Street and Bathurst Street/ Day Street is considered generally satisfactory.

⁴ LOS: Level of Service

⁵ AVD: Average Vehicle Delay (secs)

The potential traffic generation as a result of the proposed redevelopment was modelled using traffic surveys undertaken at four existing CBD office buildings which monitored the traffic generation characteristics including car park and service vehicles. The results are set out below:

Table 9 – Potential Traffic Generation Results

Intersection	Morning		Afternoon	
	LOS	AVD	LOS	AVD
Harbour Street/ Goulburn Street	C	34.6	D	43.3
Harbour Street/ CCT/ Bathurst Street	D	50.5	C	40.0
Harbour Street/ Liverpool Street	B	24.5	C	33.7
Harbour Street/ Day Street	C	31.1	C	31.9

Overall, it is expected that the operational performance will continue to remain generally satisfactory and will not adversely impact on the operational performance of the access intersections.

6.6.2 Visitation and Travel Profile

Darling Harbour is a major destination for both international and domestic tourists and residents of the Sydney Metropolitan area. In 2005 there were estimated to be more than 25.86⁶ million pedestrian movements within Darling Harbour, of which some 5.3 million were by visitors who either reside or work nearby. Further, 65% of the visits to Darling Harbour were made by residents of the Sydney Metropolitan area, 18% by regional NSW and other states and 17% from overseas visitors.

Over 50% of the overseas visitors were from either the United Kingdom (24%), Germany (11%), United States (8%), Japan (6%), or New Zealand (6%). Of the Sydneysiders visitors to Darling Harbour almost 70% originate from either the west (22%), the CBD (21%), north (15%) and inner south (12%).

The proximity of Darling Harbour to the CBD and convenient access to major public transport nodes has facilitated a successful high modal share to walking, train and bus trips to and from the precinct.

A recent visitor travel survey (multiple mode responses were accepted) identified that over 73%⁷ of visitors to Darling Harbour walked, whilst 30% indicated that they used either rail or bus. A further 10% indicated travel by either monorail, light rail or ferry and 11% nominated travel by private vehicle.

⁶ Visitor Snapshot- Darling Harbour Sydney Harbour Foreshore Authority –January 2005

⁷ Source: City of Sydney –Planning Policy Unit

6.6.3 Car Parking

The Traffic and Parking Assessment report prepared by Transport and Traffic Planning Associates has considered the traffic, parking and transportation aspects of the Concept Plan for the development, and having regard to the DGR's, has concluded:-

- *“the traffic movements generated by the development can be accommodated on the access road system without any unsatisfactory road capacity or safety implications;*
- *the existing and proposed pedestrian links to and through the precinct connecting the City Centre with Darling Harbour will adequately accommodate pedestrian demands;*
- *the proposed vehicle access arrangements, which take advantage of the existing traffic signal controls, will be satisfactory;*
- *the provisions of service vehicles and set-down/pick-up activity will be suitable and appropriate;*
- *the proximity of the precinct to existing major rail and bus services as well as ferry, light rail and monorail services will act to accommodate the additional demands for public transport access;*
- *the development can adequately accommodate 600 space public parking spaces relocated from the Entertainment Centre Car Park to the south eastern sector of Darling Harbour (with convenient access to/from the Harbour Bridge, Cross City Tunnel and Anzac Bridge); and*
- *the proposal is compliant with the City of Sydney LEP 2005 criteria.”*

The key aspects of the traffic and parking assessment are outlined below:

Car Parking Overview

There are no planning controls which set parking rates for development within Darling Harbour. Therefore the City of Sydney's parking controls have been used as a guide to determine the appropriate provision of on-site car parking.

The current parking rates are set as a maximum provision and with the exception of accommodation uses, hotels, clubs, cinemas and theatres the maximum rate is based upon site area rather than floor space.

The City of Sydney is currently reviewing its parking provisions as part of the delivery of a new “City Plan” which will establish a single set of land use planning controls for the entire City of Sydney Local Government Area. The review is believed to be focussing on the development of a variable range of parking rates which could be applied to all developments throughout the LGA. The applicable rate for particular development would be determined on the basis of the site's proximity to public transport and essential services.

The proximity of Darling Harbour to Central Sydney (and public transport) dictates that the area at which tenant parking is provided within developments in the precinct should be similar (but not necessarily the same) to that which is provided for developments in Central Sydney. Having said this, recognition also needs to be given to the unique characteristics of Darling Harbour such as its functionality and the major event and tourist orientated facilities which reside within its boundaries. As a consequence of this, it is appropriate that future parking allocation as part of the redevelopment of Darling Walk reflects the needs of the development within the precinct.

Public Car Parking

Surveys conducted for the Authority throughout the year indicate that the majority of visitors to Darling Harbour, walk as part of the their arrival/departure trip. However, there are between 10-15% of visitors who rely on private motor vehicles⁸. Whilst the data is not disaggregated into modal choice by time of the day or week it is not an unreasonable expectation, that higher levels of car usage occur at night and on weekends when alternative modes such as rail and bus services are reduced.

Three major public parking stations have been provided as part of the development of Darling Harbour while earlier strategic planning for the CBD included the provisions of parking stations along the western perimeter. Whilst the existing stations located both within and on the periphery of Darling Harbour currently provide in excess of 12,500 spaces (i.e. 5,200 – Darling Harbour and 7,300 – surrounding area) development activity in recent years has lead to a substantial decline in the number of total public parking spaces available in the vicinity of Darling Harbour resulting in a net loss of approximately 2,360 spaces over that which existed 3-4 years ago. The significant loss of public parking as a consequence of redevelopment is summarised in **Table 10**:

Table 10 – Loss of Car Parking

Car Park	Original No. of Parking Spaces	No. of parking Spaces Lost
Harris Street Car Park	1,545	1,095
60-69 Quay Street	160	160
Enacon Car park, Kent Street	1,000	160
World Square Car Park	2,000	550
589 George Street	45	45
Kent Street Car Park (KENS Site)	650	350
Total Loss		2,360

Source: Transport and Traffic Planning Associates

Proposed Car Parking

A total of 800 car parking spaces will be provided on site as part of the redevelopment proposal, consisting of:

- a public car park facility incorporating 600 existing spaces relocated from the Entertainment Car Park;
- 200 car parking spaces to service the commercial office buildings; and
- associated loading bays and service parking for the commercial and retail users.

If the City of Sydney's parking provision criteria for commercial floor space is applied to the approximate 15,000m² footprint of the new development, this equates to 310 spaces, some 110 spaces more than proposed. It is therefore considered that the provision of 200 parking spaces for the commercial tenants complies with the City of Sydney parking provision criteria.

The Authority has identified the Entertainment Car Park as a potential redevelopment site subject to ongoing design investigations as part of the possible upgrading/expansion of exhibition facilities in Darling Harbour.

⁸ Visitor Snapshot-Darling Harbour January-December 2005

The potential for providing additional exhibition facilities in Darling Harbour will require the demolition of the Entertainment Car Park.

The demolition of the Entertainment Car Park (approx 2000 spaces) cannot proceed until a proportion of its existing public parking spaces are relocated to an alternative site in Darling Harbour.

To ensure the ongoing financial viability of Darling Harbour and to continue to satisfy tenant and visitor parking demands, the redevelopment of Darling Walk provides the Authority with the opportunity to relocate existing parking currently available within Darling Harbour to Darling Walk. Ultimately there will be a net decrease on the total public car parking spaces available in the Darling Harbour precinct.

Access to the Car Park

The private and public car parks will principally be accessed via the main ingress into the site from the Harbour Street/ Day Street intersection, the provision of which has been assessed above. Detailed design of the car park will be undertaken as part of a future Project Application for the development of the site.

The approval of details regarding compliance with Australian Standards in regards to matters such as turn paths, sight distance requirements, aisle widths and circulation will be dealt with in a subsequent Project Application.

City of Sydney LEP 2005

As mentioned previously, even though the City of Sydney's Traffic and Parking standards contained in Sydney LEP 2005 do not apply to the subject site, the aims and objectives of the LEP have been considered in the environmental assessment.

In particular, Clause 66 of City of Sydney LEP which details planning controls for the provision of public car parking facilities has been considered in detail. In accordance with Clause 66, this Concept Plan stipulates that all the car parking, with the exception of disabled parking will be provided below ground level.

An assessment of the proposal against these provisions is included in the Traffic and Parking Assessment at **Appendix F**.

In recognition of Darling Harbour's unique status, it is considered that the proposed public car parking facility can be supported on the following grounds:

- the public car parking facility involves the relocation of the existing public parking spaces from the Entertainment Car Park to Darling Walk and will result in a net decrease in the number of parking spaces;
- the supply of public car parking must ensure the ongoing commercial competitiveness of both businesses and the significant major cultural and entertainment attractions located within Darling Harbour;
- over the past 3-4 years there has been a net loss of over 2,000 public parking spaces in the vicinity of Darling Harbour;
- the location and layout of the proposed parking and servicing areas and the proposed access arrangements are not considered to detrimentally impact on surrounding pedestrian and road networks; and
- the site is well serviced by public transport, however, given the unique character of the precinct alternatives to public transport are appropriate and essential, particularly as there is high visitation outside of peak public transport services.

6.6.4 Accessibility to Public Transport Services

As illustrated in **Section 2**, the site is within easy walking distance of a number of public transport nodes, including Town Hall Railway Station, Central Railway Station, Darling Harbour Ferry Wharf, the Light Rail Station and a number of bus serviced streets. It is therefore considered that the site is very well serviced by public transport.

6.7 Overshadowing

Based upon the shadow diagrams (included at **Appendix E**) the development will not have an adverse overshadowing impact upon the public domain of the precinct. Some overshadowing of the public domain will occur, particularly during winter months. In addition, some overshadowing of the Chinese Garden during the morning and afternoon will occur in winter, however this is considered to have a minor impact on the Chinese Garden. As discussed in **Section 6.4** the upper portion of the building at the south west corner has been set back to minimise the overshadowing impacts on the Chinese Garden.

6.8 Infrastructure

Robert Bird Group has prepared a report on existing services and site constraints which is included at **Appendix G**. The report describes the existing provision of infrastructure and services to the site and identifies constraints and the requirements for new infrastructure to service the development.

The site is impacted by a complex range of below grade infrastructure services crossing the site or in close proximity. These include:

- major stormwater drains and channels;
- distribution mains and high voltage cables;
- telecommunications cables;
- water and gas mains; and
- RailCorp infrastructure assets (eg electricity cables).

The main potential constraints on the redevelopment of the site have been identified as follows:

- The James Street stormwater drain crosses the site from east to west.
- Electrical cables enter the site near the James Street drain and extend northwards through the site.
- The site is bounded by a significant number of Telstra Cables.
- A 4 metre diameter cable tunnel is proposed crossing beneath the site at the north west corner.

These infrastructure constraints do not preclude development of the site, however detailed building designs will need to be undertaken at the Project Application stage to ensure the proposed building structure, in particular the basements, are located clear or take account of major electrical, stormwater and sewer truck services. Detailed design will need to take into account required clearances and protection of existing assets.

Robert Bird Group has also investigated the capacity of the existing infrastructure to service the proposed development and the additional demands it may generate. The investigations found there is generally adequate capacity in the existing infrastructure services to meet the demands of the proposed development.

The former SEGA World was constructed over then existing infrastructure services, including, but not limited to, stormwater channels, sewer gravity mains, electrical distribution and Rail Corp electrical infrastructure. In addition, it was suitably designed to both bridge these existing infrastructure assets (such that they are not bearing any additional loading) and be founded at appropriate levels such that there was no impact on the infrastructure arising from the development.

This Concept Plan contemplates the same strategy for this redevelopment, which will require construction over and adjacent to existing infrastructure services.

In cases where existing infrastructure services cannot be co-ordinated and/or avoided through appropriate design, such as car park orientation, it is proposed that services be diverted in accordance with the relevant authority's requirements.

Where required, easements will be provided to allow access to infrastructure and services that affect the site. The exact location and terms of easements will be negotiated with the relevant authority, once detailed building and construction designs are known.

6.9 Environmental Management and Sustainability

Contamination

In April 2007, a Preliminary Environmental Site Assessment of the existing built up part of the Darling Walk site, was commissioned. The report is included at **Appendix I**.

The primary objective of this report was to undertake a preliminary environmental site screening to assess the likelihood of contamination of the subsurface soils and groundwater for a proposed commercial development. The assessment was undertaken in accordance with the *Guidelines for Consultants Reporting on Contaminated Sites NSW EPA 1997* and the *State Environmental Planning Policy No.55 – Remediation of Land (SEPP 55)*.

Acid Sulphate Soils

The preliminary acid sulphate soil assessment indicated that there are potential acid soil conditions present, therefore preparation of an acid sulphate soil management plan is necessary.

The requirement for an acid soil sulphate management plan to be prepared is incorporated within the Statement of Commitments.

Contamination Assessment

The contamination assessment was based upon the analysis of six boreholes across the developed part of the site. The results of the assessment found that elevated levels of benzo(a)pyrene and nickel were evident, however it is considered that the contamination at the site is in isolated hotspots.

In order to better understand the extent of the contamination it is recommended that further investigation following the demolition of the existing building is undertaken. It is proposed that additional boreholes will be taken across the entire site, including the public domain area to meet the minimum sampling density.

Further as part of the additional investigation, it is proposed that during demolition and excavation, the site is inspected by experienced environmental personnel who will assess any unexpected conditions or subsurface facilities that may be discovered between investigation locations and that further sample analysis for further contaminants will be undertaken and an occupational health and safety plan will be prepared for the contaminants encountered on the site.

Based on these recommendations it is expected that the site can be made suitable for the proposed development.

The requirement for additional investigation during demolition and excavation is incorporated within the Statement of Commitments.

Air Quality

An air quality assessment was undertaken by Holmes Air Sciences in May 2007 (**Appendix G**). Based upon the indicative massing and height designs (**Figure 30**), modelling studies were undertaken to determine the potential impact of the Cross City Tunnel ventilation stack on future buildings and the effect of the buildings on the dispersion of the plume.

The assessment concludes that there are no predicted exceedances of any air quality goals and very little change is likely in the behaviour of the plume under the influence of either building configuration.

Based upon this assessment it is considered that there will be no detrimental effect from the plume upon future buildings and their configuration will not effect the existing dispersion of the plume.

6.10 Heritage & Interpretation

There are no identified heritage items on site.

There are a number of listed items of heritage significance within the vicinity of the Darling Walk site. The items are identified on a number of statutory lists including the Authority's Section 170 Heritage Register and the State Heritage Register and include:

- Carousel under Western Concourse;
- Chinese Garden of Friendship;
- Former Hydraulic Power Company Building;

Further, the potential for unearthing archaeological relics on site is considered minimal given past site disturbance. Nevertheless, at the Project Application stage, it is proposed that an experienced and qualified heritage practitioner or archaeologist will be engaged to prepare an Archaeological Assessment and Management Plan (AAMP) in consultation with relevant stakeholders and statutory authorities, including the NSW Heritage Office. The AAMP will identify areas of archaeological potential and provide guidelines and strategies for the management of any archaeological resource.

Darling Harbour has a rich industrial and maritime heritage that remains relatively hidden, or has been lost through redevelopment.

The redevelopment of Darling Walk provides an opportunity to reveal and interpret the layers of development and the site's history, including:

- Barkers Mill
- 1830s-1840s commercial growth
- warehousing sector
- Darling Harbour as an international port
- Darling Harbour Reborn
- Darling Harbour and 2000 Olympic Games

In addition, it is proposed that an experienced and qualified heritage practitioner will be appointed to prepare an Interpretation Plan for the site in accordance with the NSW Heritage Office Heritage Interpretation Policy at the Project Application stage.

The requirement for an AAMP and Interpretation Plan is incorporated within the Statement of Commitments.

7.0 Design Criteria

Design criteria have been developed for the redevelopment of the Darling Walk site. The criteria will ensure that any future building on the site, generally respects the overall design principles identified for Darling Walk and a future Project Application for the development of Darling Walk will be required to generally satisfy them.

These design criteria are set out below and are based on the Urban Design Guidelines prepared by Cox Richardson, attached at Appendix BD.

7.1 Site Objectives

The redevelopment of the Darling Walk site should:

- Regenerate and activate the site and improve its public amenity.
- Provide a safe, family orientated destination for visitors.
- Establish the site as the primary CDB gateway for south Darling Harbour.
- Provide car parking to service the Darling Walk development and the southern Darling Harbour precinct.
- Improve the public domain within the site.
- Provide a contemporary office environment and associated retail development.

7.2 Building Envelope

A Project Application for the commercial and retail development of the site should achieve the following objectives detailed below.

Objectives

- Relate to and complement the site's context including surrounding built form, topography and waterfront location.
- Provide a transition between the CBD high rise and the open space of Darling Harbour.
- Provide a stepping of built form that increases in height from the waterfront and valley floor towards the CBD.
- Provide a sense of containment and reinforcement of the geometry of Tumbalong Park.
- Include architectural and landscape elements to articulate and activate the roofscape design and integrate rooftop plant and equipment into the design.
- Create a new 'at grade' entry to Darling Harbour South from Harbour Street.
- Comply with sustainable building design and management practices and provide acceptable internal building amenity.
- Retain permeability from the CBD to Darling Harbour and from the city, through the site to Tumbalong Park.
- Encourage north-south and/or east west atria that provide solar access.
- No significant overshadowing of the Chinese Gardens.

Controls

- Provide between 64,000 m² and 68,000m² GFA, comprising primarily of commercial floorspace, which may include up to 5,000m² GFA of retail floor space and associated uses and up to 1,000 m² GFA of recreational, cultural and entertainment uses.
- Provide at least one major view corridor through the site, radial to the centre of Tumbalong Park, with the principal corridor aligning with the Day Street/ Harbour Street intersection.
- Provide a 20m minimum width view/ circulation corridor which incorporates urban landscaping.
- Build to a maximum height of 37.3m AHD along the Harbour Street frontage.
- Built to a maximum height of 26.2m AHD along the Tumbalong Park frontage.
- Provide minimum floor to floor heights of 4.0m (ground to first floor) and 3.6m (first floor and above).
- No significant additional overshadowing of the Chinese Garden between 9.00am and 1.30pm at the winter solstice.

7.3 Setbacks

Objectives

- Provide active front ages to Harbour Street and Tumbalong Park and safe and enhanced pedestrian environments along both frontages.
- Enhance the landscape character of the Harbour Street frontage.
- Maintain an appropriate safe setback from the Western Distributor.

Controls

- Ensure the buildings generally follow the alignment of the Harbour Street boundary from Liverpool Street to Day Street and the Tumbalong Park boundary.
- Maintain the Cross City Tunnel easement alignment.
- Provide a set down area for buses along the Harbour Street frontage.
- Provide urban landscaping treatments within the side setbacks.
- Provide the following site setbacks:

Elevation	Setback	Boundary
Harbour Street	5m	From Harbour Street site boundary ⁹
Side of Southern Building	6m	From Liverpool Street building alignment southern boundary of development footprint
Side of Northern Building	3m	From northern boundary of the development footprint
Tumbalong Park	5m (Building Frontage)	Darling Walk boundary at ground level From western boundary of development footprint
Tower Block	35m	From western and southern frontages boundary of building footprint
	30m	From southern boundary of building footprint

7.4 Building Articulation

Objectives

- Provide quality architecture which compliments the Darling Harbour Precinct.
- Provide a positive contribution to Darling Walk's site attributes.
- Select material and façade treatment to enhance the appearance of the Harbour Street frontage.
- Ensure the buildings function is legible.

⁹ The 5m setback is at southern boundary only. Setback along Harbour Street is irregular in width.

Controls

- Provide non-congruous balconies, awnings or screens.
- Provide fixed and/or operable sun screens and articulate and enliven the façade.
- Select articulated elements which are integral with the building design and massing.
- Vary façade treatment, setbacks, cantilevers and materials.
- Define building entries clearly using setbacks, canopies, different materials, textures and colours.
- Articulate roofs to provide a quality roofscape. Provide for activation of the roofscape where appropriate.

7.5 Building Materials

Objectives

- Protect the Darling Harbour precinct from reflective glare.
- Select materials generally compatible in quality and durability, with the existing buildings in Darling Harbour where appropriate.
- Encourage building materials which minimise adverse impact on the environment.

Controls

- Use materials which are generally in accordance with the requirements of an "A" grade commercial building.
- Select materials that generally acknowledge the material palette in Darling Harbour and distinguish the different building functions.
- Use facades that do not result in glare that causes discomfort or threatens the safety of pedestrians.
- Minimum performance characteristics for façade glazing to be:
 - Shading co-efficient no worse than 0.36% where exposed to excessive solar loads or where no architectural shading devices are utilised.
 - Solar reflectance of generally between 6 & 14% noting that the City of Sydney generally permits up to 20%. The transparency of the façade glazing is to be enhanced where practicable after taking into consideration glare, solar load & privacy issues, and shall not exceed 14%.

7.6 Public Domain

Objectives

- Encourage activities which compliment Darling Harbour.
- Provide access for people with disabilities.
- Public and private spaces should be safe and secure.
- Ensure public access to view corridors during normal business hours.
- Co-ordinate signage through the development in accordance with Sydney Harbour Foreshore Authority – Commercial Signage Policy.
- Public art should compliment and enhance the public domain and private open space.

Controls

- Prevent creation of a wall or back-door relationship between Darling Harbour and Harbour Street.
- Create a view corridor between Harbour Street and Tumbalong Park.
- Design building forecourts to visually and physically extend the street and pedestrian areas.
- Integrate existing elevated pedestrian bridges with the development.
- Provide activated family orientated spaces at ground level.
- Provide ground floor retail at a contiguous level to the finished footpath level.
- Provide paving of arcades and colonnades (if applicable) and forecourts, as extensions of the public domain.
- Provide outdoor seating contained within a specified area which extends no more than a maximum of 5m from the line of the development footprint.
- Concentrate public domain interface at areas of maximum retail and commercial activity.
- Upgrade and integrate water body and, playground into the development.
- Integrate Carousel into the development.
- Provide active water feature.
- Design public interface zone facing Darling Harbour to accommodate large crowds for Darling Harbour events.

7.7 Access and Car Parking

Objectives

- Provide an identifiable entry into Darling Walk with safe, secure and equal access for all.
- Ensure the public (including mobility impaired people) have access to Darling Harbour public space and access corridors between the buildings.
- Avoid pedestrian/ vehicular conflict by providing safe access and circulation around the site.
- Provide lighting at the interface of the buildings.
- Maintain access for vehicles servicing Palm Grove events.
- Improve existing pedestrian links to Darling Harbour around the site.
- Maintain ceremonial/ processional access from Liverpool Street to Tumbalong Park.
- Ensure connectivity with proposed bicycle route along the eastern side of Harbour Street.
- Maintain traffic controlled vehicle access to, from and across Harbour Street.
- Provide 800 car parking spaces.

Access Controls

- Maintain access north of the Western Distributor for vehicles serving Tumbalong Park.
- Provide a development that is compliant with the Disability Discrimination Act 1992 and the BCA.
- Provide bicycle access and parking.
- Provide vehicular access primarily from the Harbour/ Day Street intersection.
- Provide easily identifiable vehicle entries for the general public and office workers.
- Locate vehicles access 3m minimum from pedestrian entrances.
- Restrict car park access width to the minimum required for efficient access.
- Provide vehicular access to the Cross City Tunnel ventilation stack.
- Provide garbage and loading areas integral with the development.

Car Parking Controls

- Provide all car parking (except disabled) below ground level and provide disabled parking compliant with the relevant codes.
- Provide no more than 800 parking spaces in total on the site.
- Provide 600 short stay public car parking spaces to be operated 24 hours/7 days per week.
- Provide 200 parking spaces for commercial tenants.
- Commercial tenant parking spaces to be clearly signposted as private parking and to not be used, leased or sold for purposes of commercial or public parking.
- Public parking spaces to be clearly signposted and to not be used, leased or sold for any other purpose.
- The design of the car park facilities to conform with AS2890.1-1993.
- Ensure that vehicles enter and leave the site in a forward direction.
- Ensure that landscaping does not affect drivers of vehicles entering, exiting or manoeuvring within the car park seeing other vehicles, pedestrians or children etc.
- Provide car park management facilities, i.e. basement car park management office.

7.8 Landscaping

Objectives

- Create a quality urban landscape area consistent and compatible with Tumbalong Park, Palm Grove and the general Darling Harbour open space.
- Use trees to create and define recreation areas and activities within the public domain, and ameliorate environmental conditions.
- Use landscape to screen and highlight views and vistas and reinforce the perimeter of Darling Harbour.
- Articulate entry and egress points such as building entries and pedestrian circulation areas.

Controls

- Select trees to provide summer shade, winter sun and wind protection to the public domain.
- Select trees not heavily dependent on a regular water regime.
- Select native trees where practical and exotic trees only where their use will improve environmental outcomes and/or special visual features.
- Provide grand and ceremonial trees along Harbour Street.
- Provide all soft landscape areas with a permanent subsurface irrigation system.

7.9 Sustainable Development

Objectives

- Integrate state-of-the-art energy efficient systems, features and controls and take into account the future operability and maintainability requirements in the design.
- Integrate water collection devices to deliver water to the public domain.

Controls

- Achieve an Australia Building Greenhouse Rating (ABGR) minimum rating of 5 stars for the base building and tenancy fit out subject to the future tenants compliance.
- Encourage all tenants to design their fitouts to achieve a rating of 5 Star ABGR.
- Achieve a Green Building Council of Australia, Green Star – Office Design v2 point rating system of 60 minimum weighted credits.
- Provide the required overall Green Star Office Design v2 rating with a focus on the following categories:
 - Energy
 - Emissions
 - Management
 - Water
 - Indoor Environment Quality
 - Innovation
 - Transport
 - Land use and Ecology.

7.10 Design Review

The Director General may appoint an independent design review panel to provide advice on the design excellence of any future buildings. The review panel may include up to three members appointed by the Director General. At least one member of the review panel is to be an officer of the Department of Planning.

The review panel will have regard to, but not limited to, the following matters:

- Whether a high standard of architectural design, materials and detailing appropriate to the building type and location will be achieved.
- Whether the form and external appearance of the building will improve the quality and amenity of the public domain.
- Whether the building will meet the design criteria detailed in Section 7 of the Concept Plan Environmental Assessment Report.
- Whether the building will meet sustainable design principles in terms of sunlight, natural ventilation, wind, reflective, visual and acoustic privacy, safety and security, and energy and water efficiency.

The advice of the review panel is to be taken into consideration by the consent authority in the assessment of any future Project Application.

8.0 Draft Statement of Commitments

The table below outlines the proposed commitments for the redevelopment of Darling Walk.

Subject	Commitment	Timing
Urban Design Excellence	1. A Future Project Applications for the office commercial and retail development of Darling Walk is required to meet the urban design performance criteria specified in Chapter 7 of the Concept Plan and Darling Walk Urban Design Guidelines prepared by Cox Richardson, dated October 2007.	With a future Project Application for the commercial buildings
	2. The detailed design of the building and public domain will generally adhere to the Concept Plan parameters formulated for the Project to ensure that the intended development outcome will be achieved.	With future relevant Project Applications
	3. The design of any rooftop plant and architectural treatment shall be integrated with the design of the building to minimise visual bulk and avoid additional overshadowing (additional being to that already contemplated in the Cox Richardson urban Design Guidelines). Rooftop plant will be adequately attenuated to avoid acoustic impacts on the development and surrounding locality.	With a future Project Application for the commercial buildings
	4. Design options for the suitable activation of the Harbour Street frontage shall be examined in detail in the Project Application Stage	With future relevant Project Applications
Infrastructure and Services	5. An infrastructure plan will be prepared to accompany Project Applications. The infrastructure plan will identify existing services, services to be relocated (if any) and augmentation of existing infrastructure.	With future relevant Project Applications
	6. All infrastructure planning and design will be undertaken in consultation with the relevant authorities.	With future relevant Project Applications
Traffic and Parking	7. A Car Park Management Plan will be prepared to the satisfaction of the Director General, that specifies charging rates, signage and conditions of use for the public car park.	Prior to the issue of an Occupation Certificate for the Public Car Park component for the works.
	8. Secure bicycle storage facilities to be provided and located respectively within the separate commercial tenant and public parking areas. Details of these bicycle facilities are to be submitted to the satisfaction of the Director General.	With future relevant Project Applications
	9. A Green Commuter Strategy shall be prepared by the Project Proponent and for approval by the Director General.	Prior to the issue of an Occupation Certificate
	10. An assessment of the final car park layout and vehicle access will be undertaken by the Project proponent to demonstrate compliance with the relevant Australian Standards.	Prior to the issue of a Construction Certificate
	11. The design and construction of roads, car parking/ loading facilities and other traffic devices and infrastructure will generally be designed and constructed in accordance with relevant Australian Standards and/ or the requirements of the relevant authority.	Prior to the issue of a Construction Certificate
	12. The Project proponent will consult with the RTA regarding and intersection and pedestrian crossing improvements required along Harbour / Day Street.	With future relevant Project Applications

Subject	Commitment	Timing
Environmental management	13. An Acid Sulphate Management Plan will be prepared and submitted with the future Project Application.	Prior to the issue of a Construction Certificates
	14. The Future Project Application will include measures for the management of any contaminated lands.	With relevant future Project Applicationss
Public Domain and Landscaping	15. A future Project Application is required to detail public domain upgrades in accordance with the Concept Plan and any relevant Sydney Harbour Foreshore Authority public domain and/or landscaping strategies.	Prior to the issue of a Construction Certificate for the Public Domain Works
	16. The Project Application proponent must execute public domain works detailed in a future Project Application, to the satisfaction of the Sydney Harbour Foreshore Authority. The works will be completed by the Project Application proponent at no cost to the Sydney Harbour Foreshore Authority. No further contributions for public amenities and public services within the site will be required. The Project Application proponent will lodge with the Authority a bank guarantee as security against the successful completion of the works to the value of the works. The bank guarantee, in a form acceptable to the Authority, will be submitted with the first Project Application. The standard of the public domain works within the site area (technical and general performance/ design criteria) will be to the satisfaction of the Authority.	With relevant future Project Application
Stormwater Management	17. A Stormwater Management Plan will be prepared detailing water collection and stormwater harvesting systems for the proposed development. The management plan is to detail water supply arrangement to the public domain and water features.	Prior to the issue of a Construction Certificates

Subject	Commitment	Timing
Archaeology Interpretation	<p>18. An appropriately experienced and qualified heritage practitioner or archaeologist will be engaged to prepare an Archaeological Assessment and Management Plan (AAMP) in consultation with relevant stakeholders and statutory authorities, including the NSW Heritage Office. The AAMP will identify areas of archaeological potential and provide guidelines and strategies for the management of any archaeological resource.</p> <p>19. An appropriately experienced and qualified heritage practitioner will be engaged to prepare an Interpretation Plan for the site in accordance with the NSW Heritage Office Heritage Interpretation Policy. The Plan will explore various cultural, social and environmental themes related to the site including, but not limited to :</p> <ul style="list-style-type: none"> ■ Barkers Mill ■ 1830s-1840s commercial growth ■ warehousing sector ■ Darling Harbour as an international port. ■ Darling Harbour Reborn ■ Darling Harbour and 2000 Olympic Games 	Prior to the issue of a Construction Certificate for commencement of basement excavation and/or remediation With future Project Applications
ESD	20. The building will achieve a minimum 5 star Australia Building Greenhouse Rating (ABGR) for the building and tenancy fit-outs; and a minimum 5 Green Star Building Council of Australia–Office Design v2 rating. A detailed ESD Strategy will be submitted with future Project Applications.	With future Project Application for commercial buildings
Wastewater Minimisation	21. A Wastewater Management Plan is to be prepared for the site. This will include an investigation of schemes to manage wastewater from the development with wastewater treated and recycled as an alternate source of non-potable water for commercial use and public open space irrigation.	Prior to the issue of a Construction Certificates
Ongoing consultation	22. Ongoing consultation with Government agencies, private landowners, and community stakeholders will take place according to established planning and development approval procedures	On-going
Crime Prevention Through Environmental Design (CPTED)	23. All future development is to be designed with reference to the principles of CPTED	Details to be submitted with a future Project Application for the detailed design of the commercial buildings

9.0 Conclusion

The proposed development of Darling Walk is consistent with the objectives of the Metropolitan Strategy “City of Cities” in that it will reinforce the major growth and redevelopment potential of Central Sydney.

The site is well located on the eastern boundary of Darling Harbour and within easy walking distance of several major public transport nodes and the Sydney CBD. The redevelopment of Darling Walk presents a timely opportunity to secure improved linkages between Darling Harbour and Sydney CBD.

Darling Walk, has traditionally been a family orientated retail and entertainment precinct. The Concept Plan proposal for Darling Walk provides an opportunity to reinvigorate the site and is the next milestone in the evolution of Darling Harbour.

The site provides an opportunity to deliver new commercial offices, consistent with the Metropolitan Strategy, and the planning objectives for Darling Harbour. In addition it will provide substantial public benefits through an upgraded public domain and family orientated facilities and services.

The inclusion of 600 existing public car parking spaces relocated from the Entertainment Car Park to permit the eventual redevelopment of this site results in a long term net decrease in the total public car parking spaces available within the Darling Harbour precinct;

The extent of parking provided is considered reasonable in that it accommodates the needs of building occupants and supports the significant major attractions located within the precinct.

Overall, the proposed development will have minimal adverse environmental effects. The key environmental issues will be effectively managed via mechanisms referred into the report and the draft Statement of Commitments. The public interest will be well served by the rejuvenation of Darling Walk as a high amenity and accessible office, entertainment and urban park precinct.

On these grounds it is submitted that the proposal should be granted consent under Part 3A of the EP & A Act.