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THE RIBBON URBAN DESIGN REPORT



Prepared for Development Approval
January 2014

HASSELL

Front cover image: The Ribbon, View of
Darling Harbour and Proposed Building
Imagery by HASSELL

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Contents

Section

00	Introduction and Executive summary	2
01	Urban Design Context	5
	Significance of The Site	6
	Planning Framework	7
	Darling Harbour Context	10
	The Future of Darling Harbour	12
	A New Scale of Development	14
	Extending Darling Quarter	18
	Evolution of the Harbour Edge	20
	Framing Cockle Bay and Darling Harbour	22
	A Landmark Building	24
	Massing Explorations	26
02	Design Principles	33
	Scale and Massing	34
	Public Domain	36
	Access	38
	Pedestrian Connectivity	40
	Solar Access	42
	Elevated Freeways	44
03	Design Elements	47
	Podium Retail, Function and Entertainment	48
	Office Tower	50
	Building Uses	52
	Active Frontages	54
	External Cinema Screen	56
	Materials and Finishes	58
	External Signage	60

Introduction

This Urban Design Report has been prepared as part of the Environmental Impact Statement prepared for “The Ribbon” development and addresses the Built Form and Urban Design requirements of the EIS.

In this report we outline the opportunity and aspirations of the Cockle Bay development site to create a landmark icon for Darling Harbour, an enhanced public domain precinct and a new gateway to the City. This report should be read in conjunction with the Visual Impact Assessment Report.

The Ribbon development comprises a building component of 74,731 sqm total Gross Floor Area plus an Urban Renewal / Landscape component of approximately 11,200 sqm. The total proposed site area for the development including the building footprint is 16,260 sqm on, and adjacent to, the site currently occupied by the IMAX Cinema, Darling Harbour, Sydney.

The proposed project comprises the following:

- _ The demolition of the existing IMAX building and the construction of a new 20 storey building and a separate 2 storey building
- _ A total Gross Floor Area of approximately 74,731 sqm for office, retail, recreation, function purposes and a new IMAX cinema
- _ 86 car parking spaces, to be located within the podium levels
- _ Upgrades to the surrounding public domain including new playground area, a prominent street address and activated edges.

Executive Summary

The Imax site represents a unique opportunity to contribute to the revitalisation of Darling Harbour and Cockle Bay together with other adjacent projects of major significance in the precinct.

The built form is derived directly from the consideration of its urban context, site constraints, adjacent development proposals and site potential. The broad planning framework for the area and neighbouring development site guidelines have been considered throughout the development of the design in the absence of specific planning policies.

Darling Harbour through its built form regeneration is becoming truly integrated with the CBD. The Ribbon delivers a building form that contributes positively to both the harbour and the park while providing a new gateway landmark to the City.

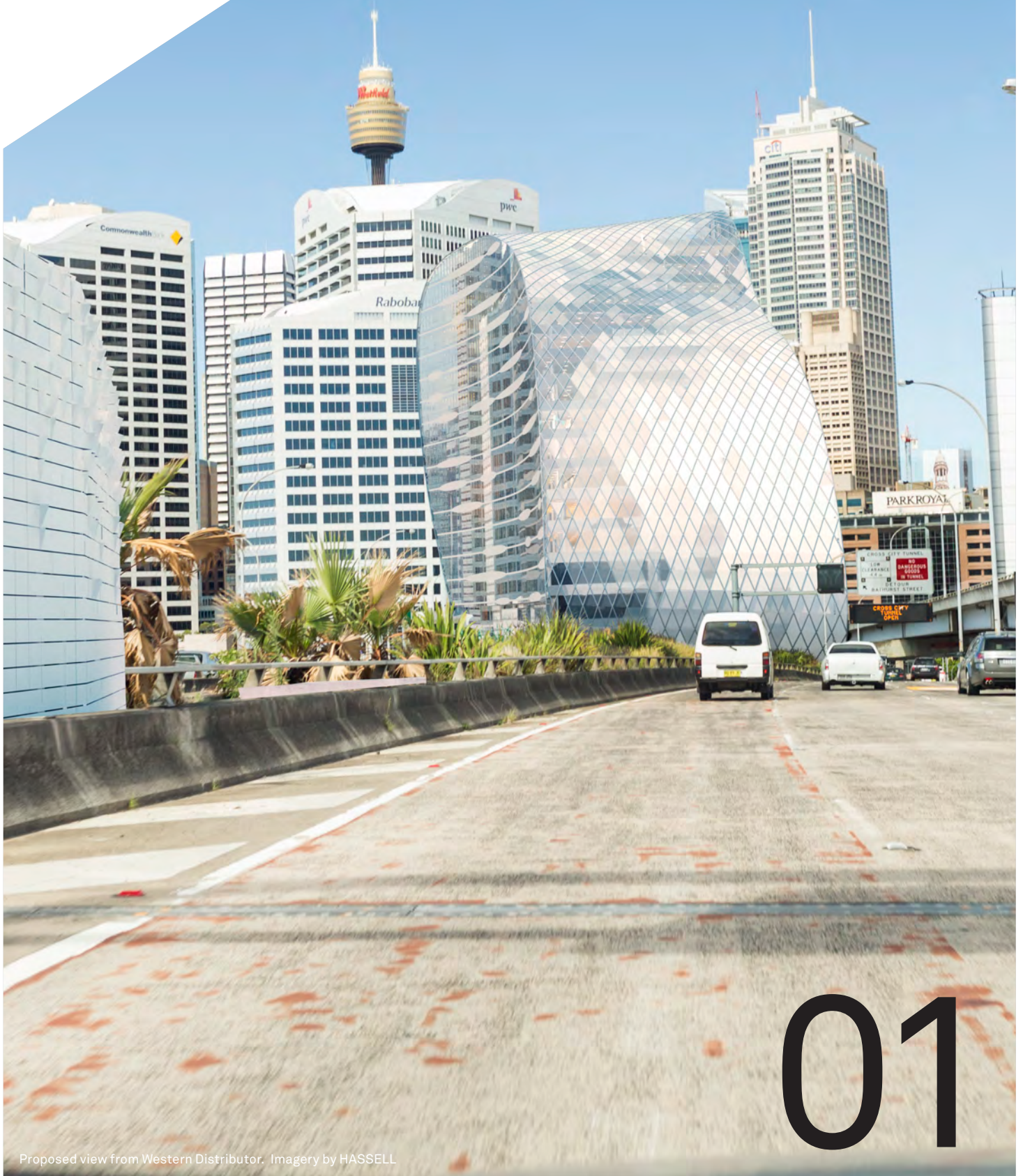
The transformation of the Harbour in coming years driven by the Sydney International Convention, Exhibition and Entertainment Precinct and Barangaroo proposals represents a new scale of development which will define the future

character of the area. The unique form of The Ribbon responds to the evolution of the skyline and change in scale directly at the harbour edge.

The site sits within a major entertainment, cultural, tourist and commercial precinct. Together with creating a spectacular waterfront experience, the proposal provides enhanced ground level activation, improved sightlines and strong and legible pedestrian links across Cockle Bay and from the Harbour through to Darling Quarter.

The distinct design of The Ribbon will provide a clear point of reference and orientation for locals and visitors. Its bold form emerging between the elevated freeways will engage with people at multiple levels providing a landmark, a Gateway to the CBD and an icon for Cockle Bay and the Darling Harbour precinct.

Urban design context



01 Urban design context

Significance of the site

We recognise both the challenge and unique opportunity afforded on this site. Together with other projects of major significance contributing to the revitalisation of Darling Harbour, The Ribbon proposal includes an enhanced public domain and the contribution of a new landmark building for the harbour foreshore and City gateway.

The Imax Theatre site represents an opportunity to dramatically remake the southern side of Darling Harbour. This critical water frontage has huge potential, currently hindered by the dominant Western Distributor. By weaving a distinct building into this compromised site, the roadways can become part of the design rather than overriding infrastructural elements. The landmark building will become an enhanced view, an icon defining the southern end of the Bay.

We believe the site requires a strong building of noteworthy character to help better define Darling Harbour, establishing a highly visible, recognisable and distinct southern frontage to the water.

The design works with possible future redevelopment of the area which may see the removal of the Western Distributor.

Whilst creating a spectacular waterfront experience for visitors to the precinct, the ground level experience is also greatly enhanced to promote a stronger pedestrian promenade across Cockle Bay and from the Harbour through to Darling Quarter. Further to this The Ribbon building will rise up between the Western Distributors creating a gateway entrance to the City of Sydney.



Darling Harbour, Australia

01 Urban design context

Planning framework

The new built form is derived from the urban context, future development proposals for Darling Harbour, the site's constraints and its potential to provide new office, retail and entertainment floorspace.

The following is a description of the broad planning framework that applies to the site as there are no detailed controls or a development control plan that sets out built form controls for development of the site or its desired future character. Therefore the new built form is derived from the urban context, future development proposals for Darling Harbour, the site's constraints and its potential to provide new office, retail and entertainment floorspace.

The Urban Design and Public Realm Guidelines prepared for the Sydney International Convention, Exhibition and Entertainment Centre (SICEEP) site have also been reviewed and considered in the design development of the proposal. However, the Urban Design and Public Realm Guidelines were specifically prepared for the SICEEP tender bid process and there are no specific guidelines or controls that relate to the IMAX site. The Urban Design and Public Realm Guideline document is not an adopted planning policy and has no statutory weight.

The Guideline contains several principles in relation to built form design, the public domain, pedestrian access, and activation of spaces that have been considered by the Design team. The urban design guidelines also illustrate that significant changes to the built form of Darling Harbour will occur as the SICEEP precinct redevelops, in particular that the public spaces in Darling Harbour are becoming enclosed by a denser and taller built form.

The statutory planning framework applying to Darling Harbour is:
State Environmental Planning Policy (State and Regional Development)
Darling Harbour Development Plan No. 1
Sydney Regional Environmental Plan (Sydney Harbour Catchment).

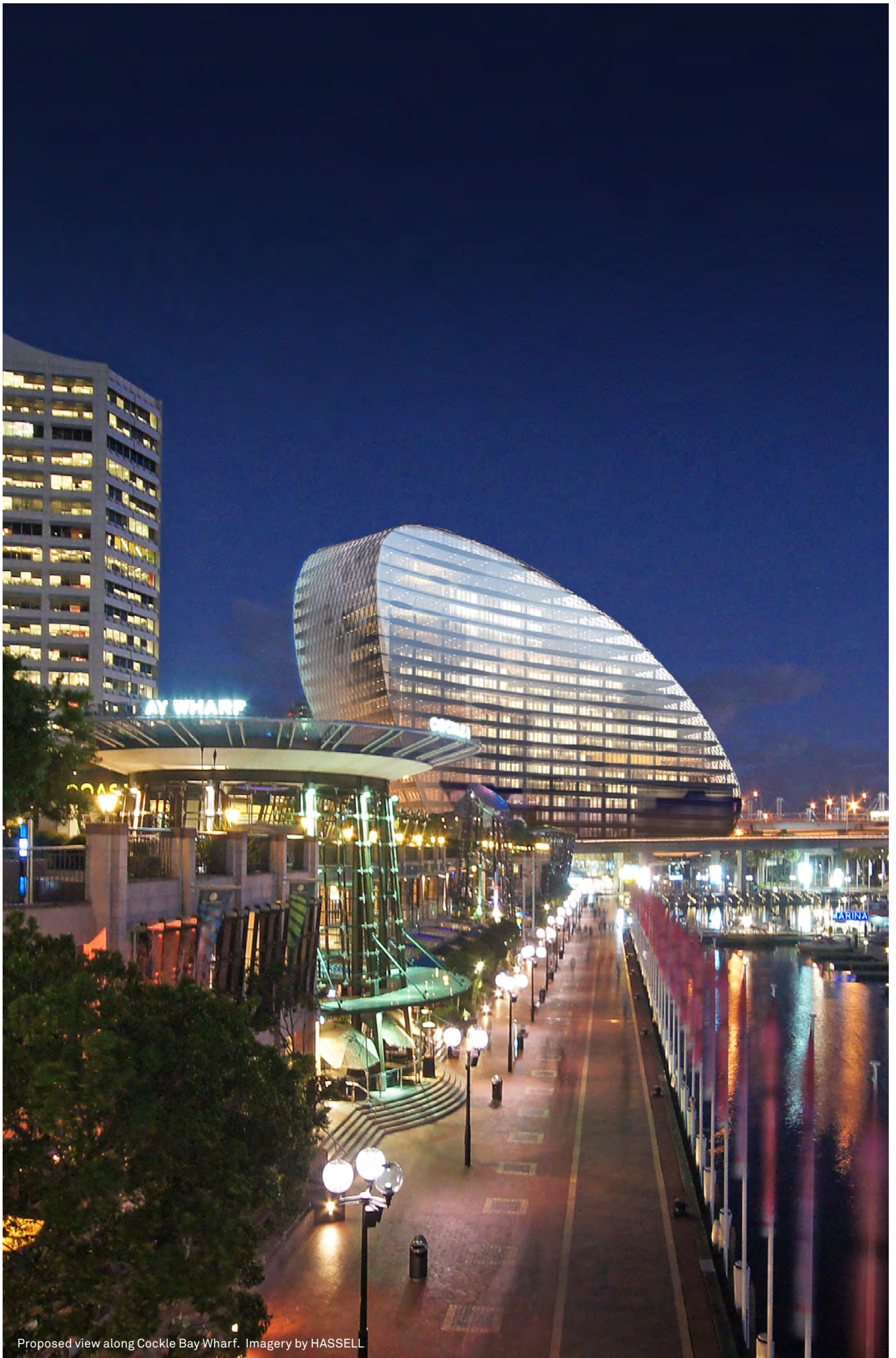
The planning instruments set out the consent authority role and broad planning framework that applies to the site. State Environmental Planning Policy (State and Regional Development) establishes that the development is State Significant Development and that the Minister for Planning is the consent authority. The Darling Harbour Development Plan regulates land use by identifying objectives for the Darling Harbour precinct and permitting a broad range of land uses including, tourist, recreational, commercial, entertainment and cultural facilities.

The Sydney Harbour Catchment Regional Environmental Plan (REP) defines the foreshore and waterways areas surrounding Sydney Harbour and identifies a range of matters that are required to be considered in any development proposal.

These matters include:
Development that is visible from the waterways must protect and enhance the unique visual qualities of Sydney Harbour
Publicly accessible vantage points and public access to and along the foreshore should be increased, maintained and improved

Access to and from the waterways should be increased, maintained and improved
Development along the foreshore and waterways should maintain, protect and enhance the unique visual qualities of Sydney Harbour and its islands and foreshores

Points above are not direct quotes but are extracts from the list of Planning Principles in the REP Part 2 Planning Principles Clauses 13 + 14



Proposed view along Cockle Bay Wharf. Imagery by HASSELL

01 Urban design context

Darling Harbour context

The site sits within Darling Harbour, a major entertainment, cultural, tourist and commercial precinct on the western edge of the Sydney CBD.

Within Darling Harbour, the site sits at the southern foreshore edge. The foreshore or waterside precinct is defined by a variety of built form elements including Sydney Aquarium, Wildlife World, Cockle Bay and the Darling Park Towers to the east, the IMAX building and Western Distributor elevated freeways to the south, and the Convention Centre, Harbourside Shopping Centre and Australian Maritime Museum to the west.

Beyond the freeway structures is the entertainment and exhibition precinct centered around Tumbalong Park including Darling Quarter, the Chinese Garden of Friendship, the Sydney Exhibition Centre and the Sydney Entertainment Centre.

The scale of this backdrop precinct proposed for significant redevelopment as per the recently preferred SICEEP proposal.

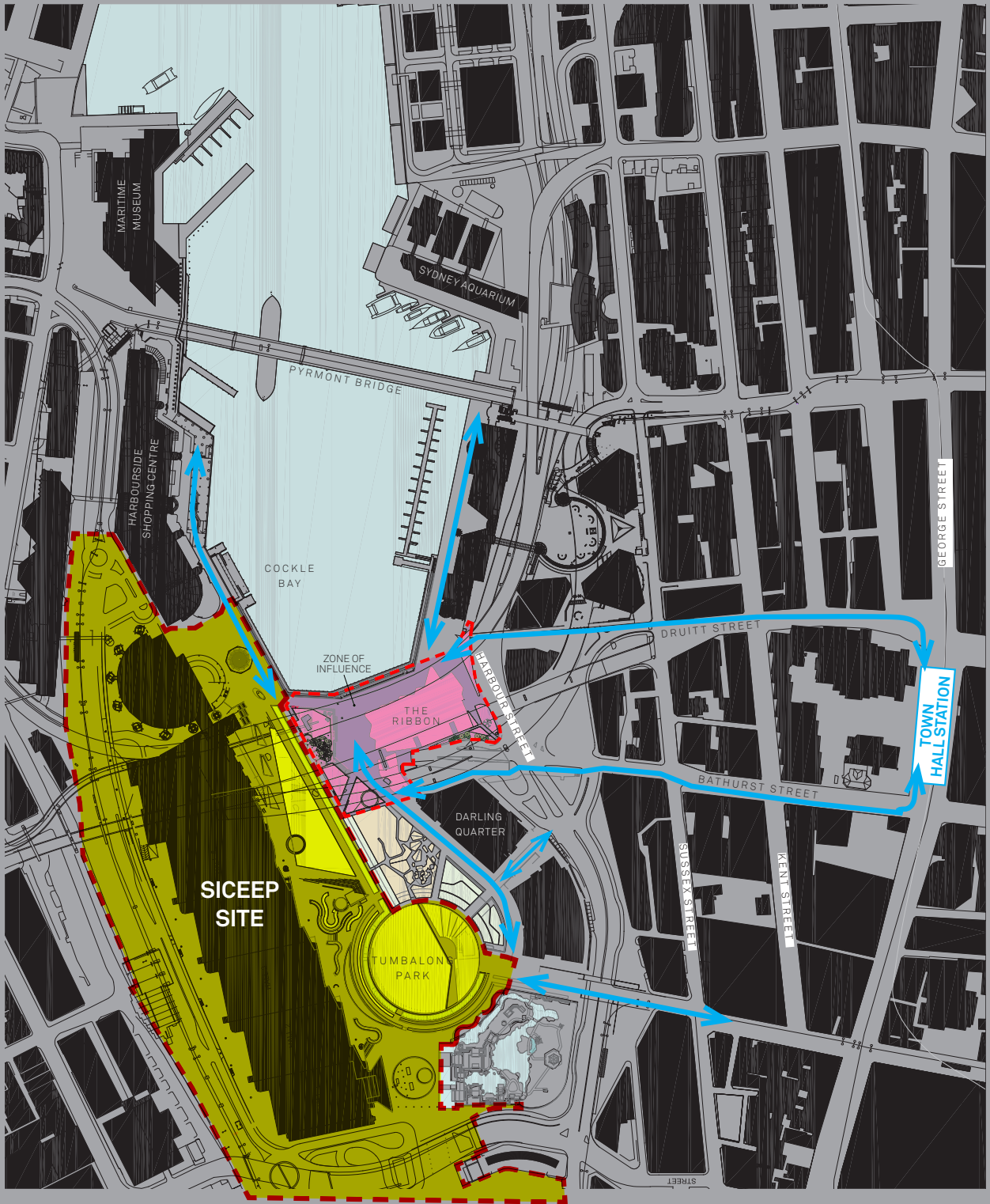
The recently completed Darling Quarter project comprising 68,000 sqm of commercial office and retail space, and the new Children's Playground is to the south of the site.

The emerging form of the western fringe of the CBD is dramatically changing. Both the Barangaroo development and the SICEEP proposal will bring taller and bulkier buildings to the foreshore edges replacing lower scale buildings or level sites on the fringe of the city.

Darling Harbour through its built form regeneration is becoming truly integrated with the CBD and will be an extension of the City.

The rejuvenation of Darling Harbour is fundamentally changing the urban form of Darling Harbour. Historically lower scale developments that were orientated to the foreshore and parkland spaces, with buildings that turned their back on the CBD, to the current scenario of much larger scale developments that is effectively an extension of the CBD.

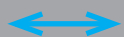
The Ribbon will define and activate the southern foreshore edge of Darling Harbour. It will deliver a building form that contributes positively to both Darling Harbour and Tumbalong Park and provide a gateway landmark on approach and departure from the City.



The Ribbon Redevelopment of 31 Wheat Road Zone of Influence



SICEEP Site



Pedestrian Links



SICEEP Preferred Plan - Masterplan view from water Image: Infrastructure NSW Website

01 Urban design context

The future of Darling Harbour

“This project will transform the western fringe of Sydney’s central business district and is the biggest and most exciting change to Darling Harbour in 25 years,” “Darling Harbour already attracts 25 million people a year and this development will create a more vibrant place on Sydney Harbour.”

Barry O’Farrell, NSW Premier
The Australian, December 11, 2012

In the coming years Darling Harbour will undergo dramatic transformation. This is primarily driven by the Sydney International Convention, Exhibition and Entertainment Precinct (SICEEP) redevelopment which will see the reframing of the harbour with more significant waterside development.

Darling Harbour is in the midst of a serious makeover. It is an exciting time for this important part of our city as we reconsider its relevance for locals and visitors alike.

The SICEEP site will become a world class events precinct and is a key part of reinforcing Sydney’s status as a global city. The project provides the opportunity to revitalise a 20 hectare precinct that runs north-south from Haymarket through to Cockle Bay, and east-west from the CBD to Ultimo.

The SICEEP proposal will introduce a wide variety of built forms into Darling Harbour including tall, large floorplate buildings for the Convention and Exhibition Centres and tower forms of 35-40 storeys at the northern and southern ends of the SICEEP precinct for residential and hotel uses.

As stated by NSW Premier Barry O’Farrell, this new scale of development is part of the evolution of the western edge of the

CBD. Darling Harbour is becoming more an extension of the city rather than a place of specific use with limited attractions for local people. The city is expanding, absorbing Darling Harbour into the fabric of the CBD.

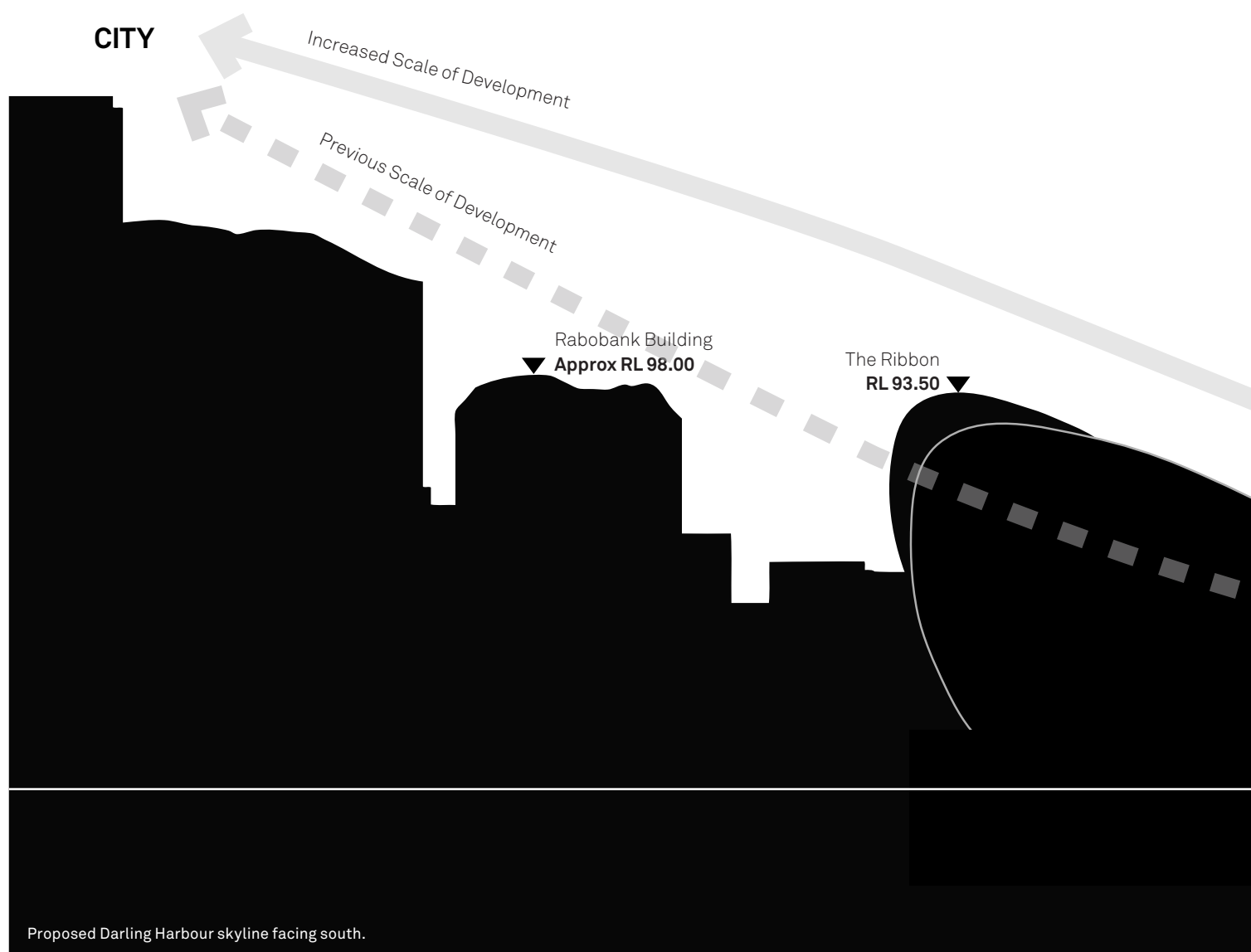
A number of residential towers are also being built in the Southern Quarter with heights of over RL 100.

One of the most beneficial changes to Darling Harbour has been the increased diversity of uses in the area, creating a more significant local community. The Ribbon will bring a high volume of workers to the area, further developing the diversity of activity in the area.

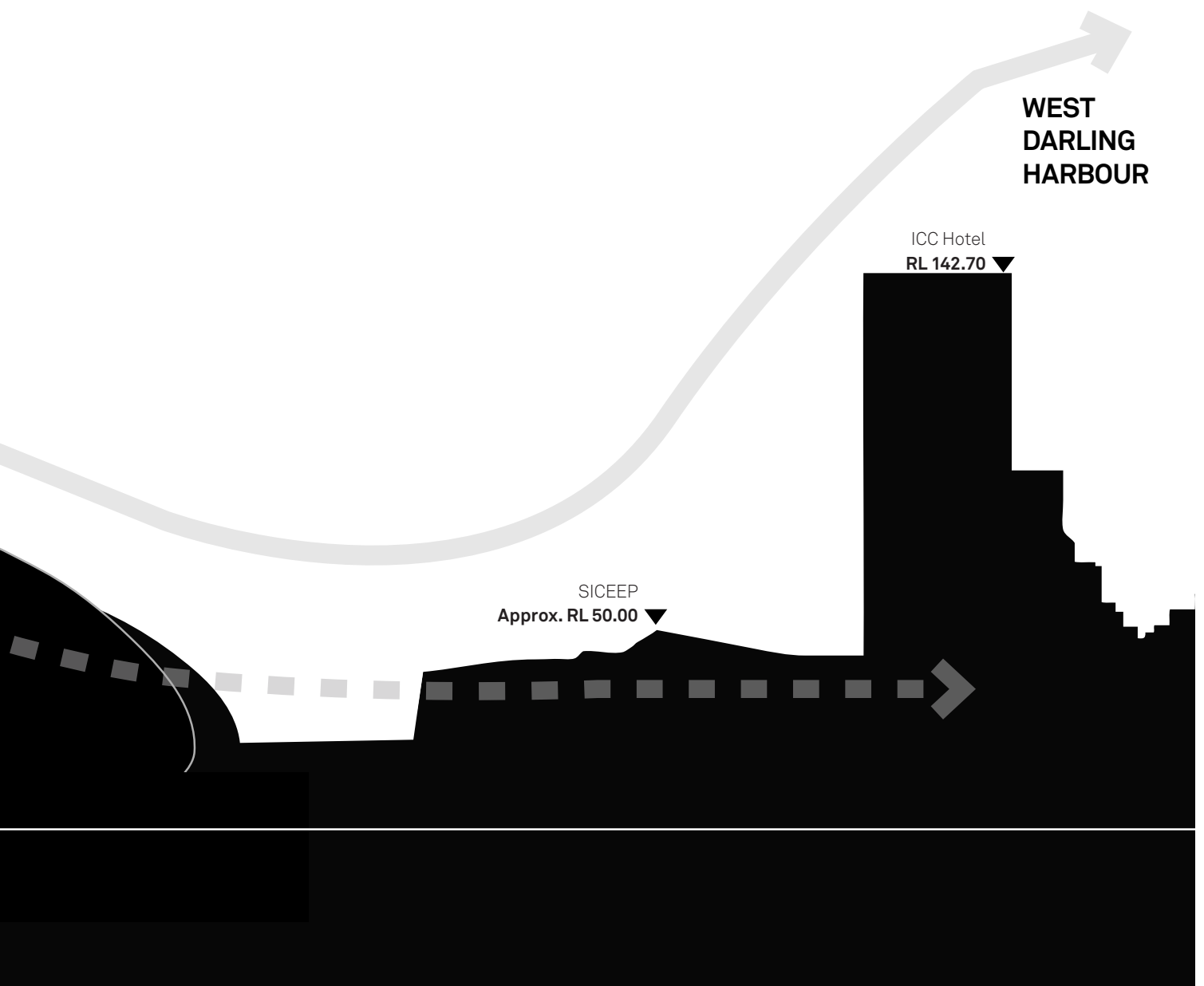
As principal designers of both The Ribbon and the preferred SICEEP redevelopment proposal, HASSELL are able to ensure seamless integration of pedestrian realm, built form and landscape design.

01 Urban design context

A new scale of
development



“The Ribbon forms a link between West Darling Harbour and the CBD. The height and scale of the proposed building is in keeping with existing and proposed buildings in the immediate vicinity”.



01 Urban design context

A new scale of development

The Ribbon forms a link between West Darling Harbour and the CBD. The height and scale of the proposed building is in keeping with existing and proposed buildings in the immediate vicinity.

It is critical to consider The Ribbon within the context of existing, but also future development, set to dramatically transform the Sydney CBD and Darling Harbour. The building has been conceived on these terms; working with new scales of development which will define the future character of the area.

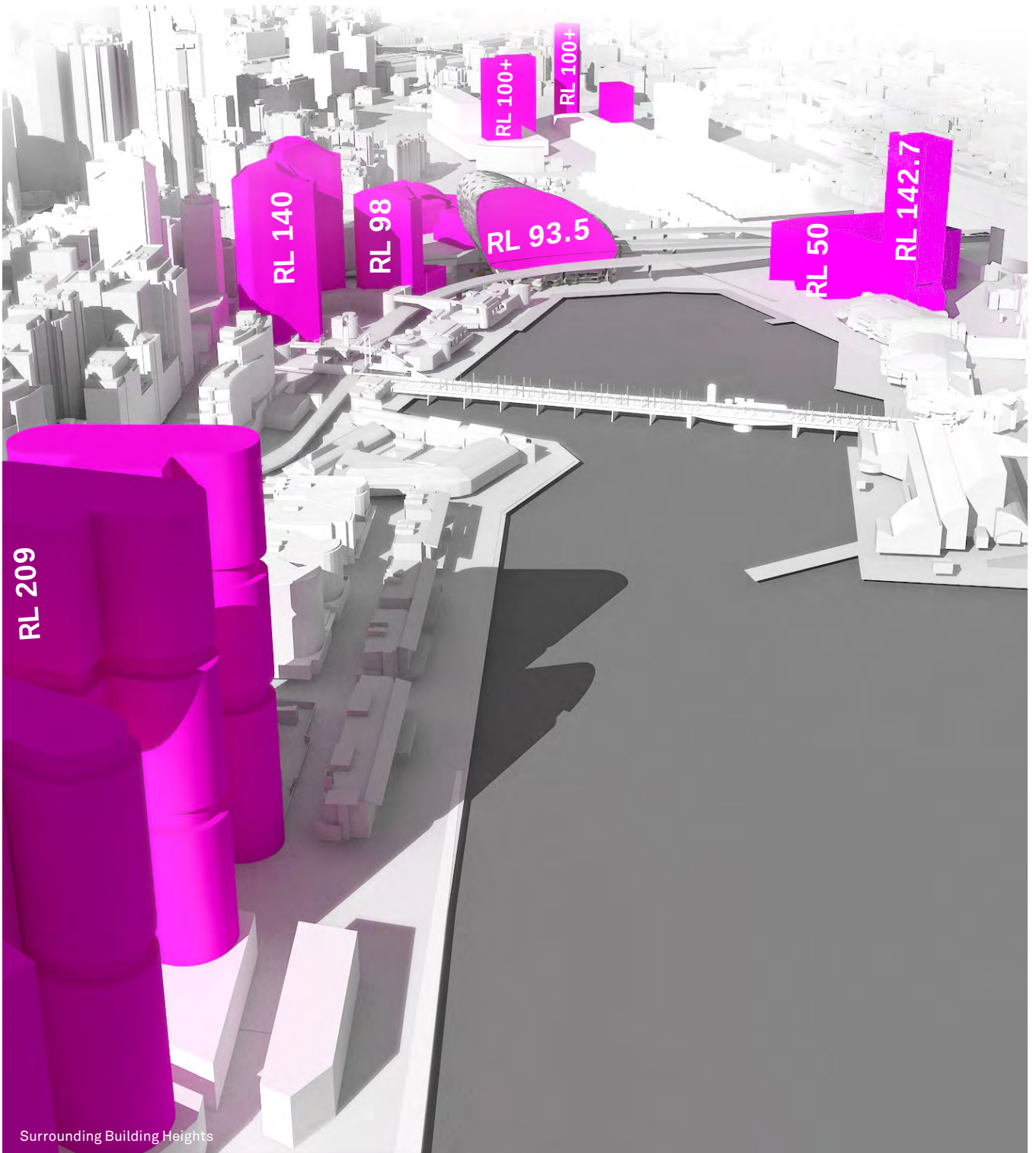
There are a number of significant towers in the vicinity which will have a strong spatial relationship with The Ribbon. The most important of these are the Darling Park Towers to the east and the proposed SICEEP Hotel Tower to the west.

The unique form of The Ribbon provides a sympathetic skyline, guided by a need to draw together the two sides of the harbour and create a more unified waterfront. At the same time The Ribbon footprint within the public domain narrows to strengthen the pedestrian links and sightlines.

The Ribbon has contextual fit as it is of an appropriate height and scale given various precedents in the area such as the Darling Park Towers.

The approval of buildings of significant height, including the residential towers to the South Quarter and the SICEEP hotel tower indicate further support for the skyline and scale of development to change in this precinct. Low rise development is being replaced with a mixture of updated, high quality buildings which reflect the growing density in this part of the city.

As the skyline drawing on the preceding page indicates, The Ribbon fits with the projected skyline of South Darling Harbour.



01 Urban design context

Extending Darling Quarter

Darling Quarter has become a distinct and extremely popular destination for locals and visitors. This innovative locale is now clearly defined and well known as a place of public gathering, recreation and commercial activity.

Darling Quarter is today a vibrant and popular public domain. The playground in particular is a raging success with people of all ages from all corners of the city and beyond. The area is crowded with families on weekends and provides a relaxed breakout space for workers during the week.

The success of Darling Quarter has transformed the harbourside precinct. Darling Quarter now stands out as a place adjacent to, but distinctly different from Cockle Bay. What was once a confusing extension of the Bay has broken away to become a highly successful piece of the City in its own right.

In our proposal Cockle Bay and Darling Quarter will be linked with stronger pedestrian level connections and sight lines by 'de-cluttering' the space. Achieved by increasing the clear public domain width through relocating the palms and carousel and extending the existing Darling Quarter playground Northward to occupy area under the elevated roads.

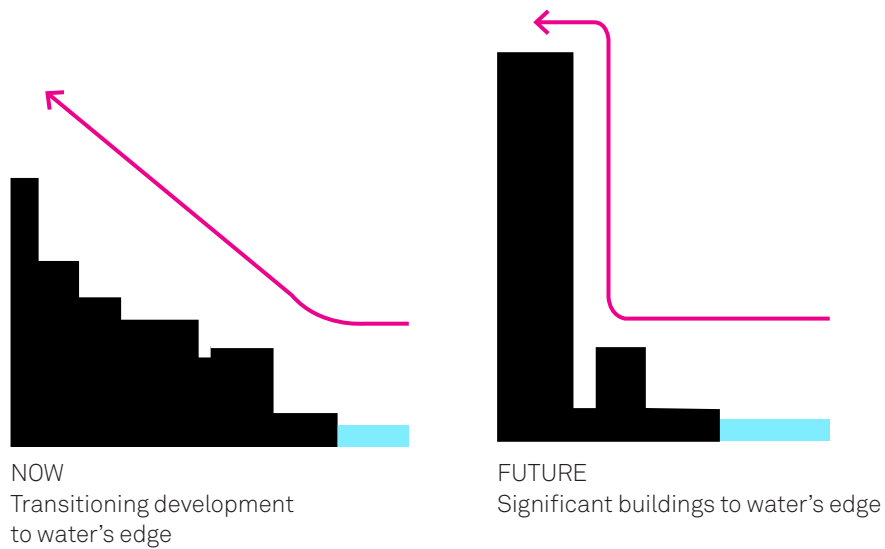
As development continues to densify and change the character of the whole foreshore area, The Ribbon will become part of the renewed character for both the Darling Harbour and Tumbalong entertainment precincts.

The newly established Darling Quarter
<http://www.aspect.net.au/wps/wcm/connect/web/w/news/news+darling+quarter+awarded>

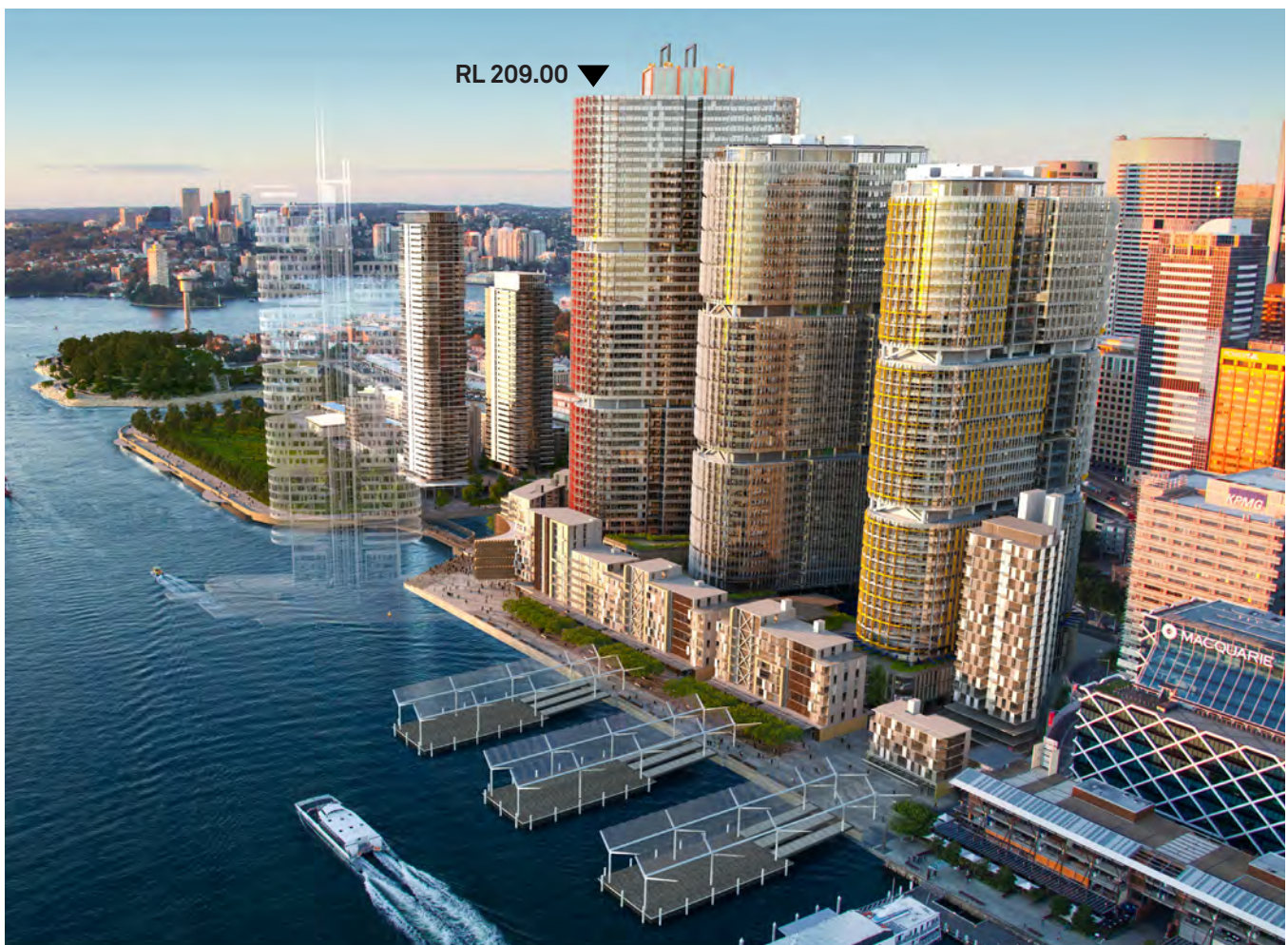


01 Urban design context

Evolution of the Darling Harbour edge



Barangaroo South Commercial Tower
Image courtesy of Lend Lease



01 Urban design context

Evolution of the Darling Harbour edge

New development at Barangaroo is dramatically transforming our harbour foreshore. The approved towers to the water's edge at Barangaroo South will stand some 200+ metres (approximately 50 storeys) above sea level.

Barangaroo is a precedent setting development, redefining the relationship between city and water in Darling Harbour through a dramatic change in scale directly at the harbour's edge.

The transition of building heights, tapering down to the water, is becoming a thing of the past. As the city expands this new high density edge condition will become more and more prevalent.

The verticality of the towers and their scale right on the water strengthens the edge and heightens the contrast between land and water.

Significant height at the water's edge also helps to frame the space of the water and in the case of Darling Harbour, with buildings on all sides, would transform the water space into more of a 'room'.

The Barangaroo development and SICEEP suggest a new direction for Darling Harbour where 'city scale' meets the harbour. The approved new building heights set a precedent for a new condition at the harbour edge, one where high density city scale buildings frame the harbour edges. We must be looking to existing, but also future developments, as we contribute to Darling Harbour's waterfront.

Barangaroo South Commercial Tower
Image courtesy of Lend Lease



01 Urban design context

Framing Cockle Bay and Darling Harbour

The Ribbon will have a significant frontage to the southern foreshore of Cockle Bay. This new building will create an important link between the city and the new development on the western edge of the Bay, together framing the southern end of Darling Harbour.

The Ribbon will have a scale consistent with development on both sides of Cockle Bay, namely the Darling Park Towers to the east and the proposed SICEEP hotel tower to the west.

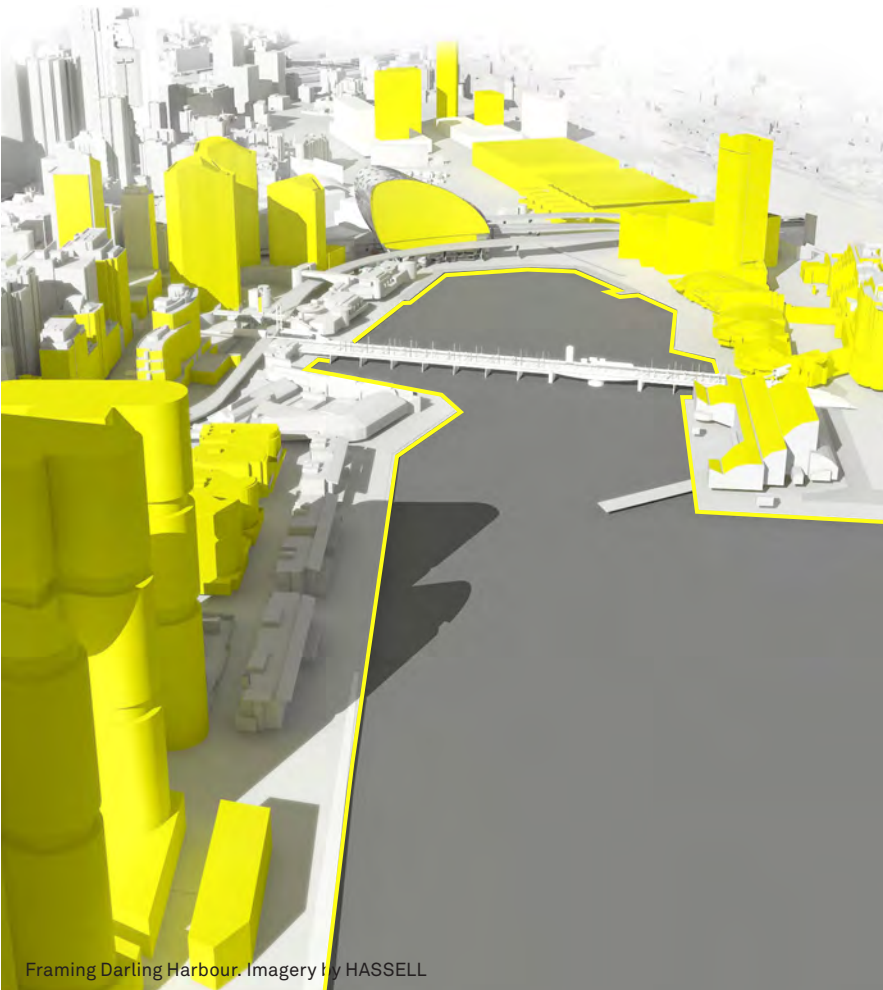
Cockle Bay is the site of many public gatherings and celebrations in Sydney. The water itself is often used as a performance zone with floating stages and water born art pieces. The Ribbon will provide a back drop to these events, establishing a harbour zone with more clarity and spatial intensity.

The Ribbon also downplays the dominant Western Distributor. With the addition of a prominent built form to the south, the highway is subdued and becomes part of the built language rather than an eyesore.



Aerial view of Darling Harbour

Imagery by HASSELL



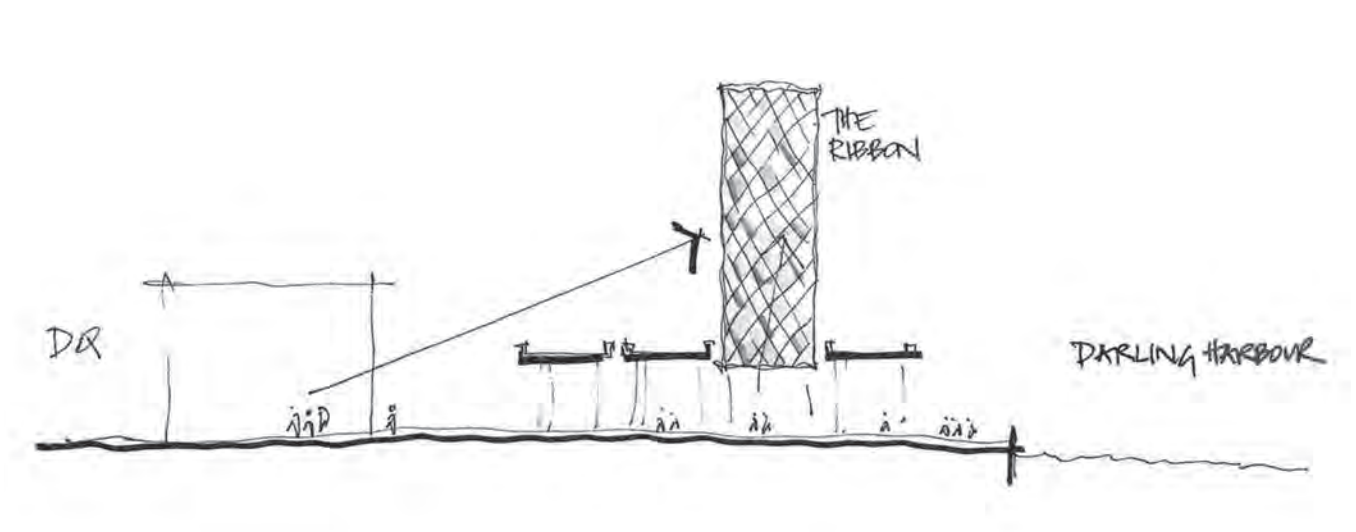
Framing Darling Harbour. Imagery by HASSELL



Existing view from Harbour Street



Proposed view from Harbour Street. Imagery by HASSELL



Sketch Section of The Ribbon between the roadways of the Western Distributor

01 Urban design context

A landmark building

The Ribbon is a landmark building an icon for Darling Harbour and a Gateway to the CBD

The distinct design and siting of The Ribbon will create a Darling Harbour landmark. The building will become a point of reference for locals and visitors and provide a clear meeting place visible from significant distances.

The Western Distributor zone is 110metres at its widest point and 50% of this zone is covered by roadways (refer to diagram on opposite page).

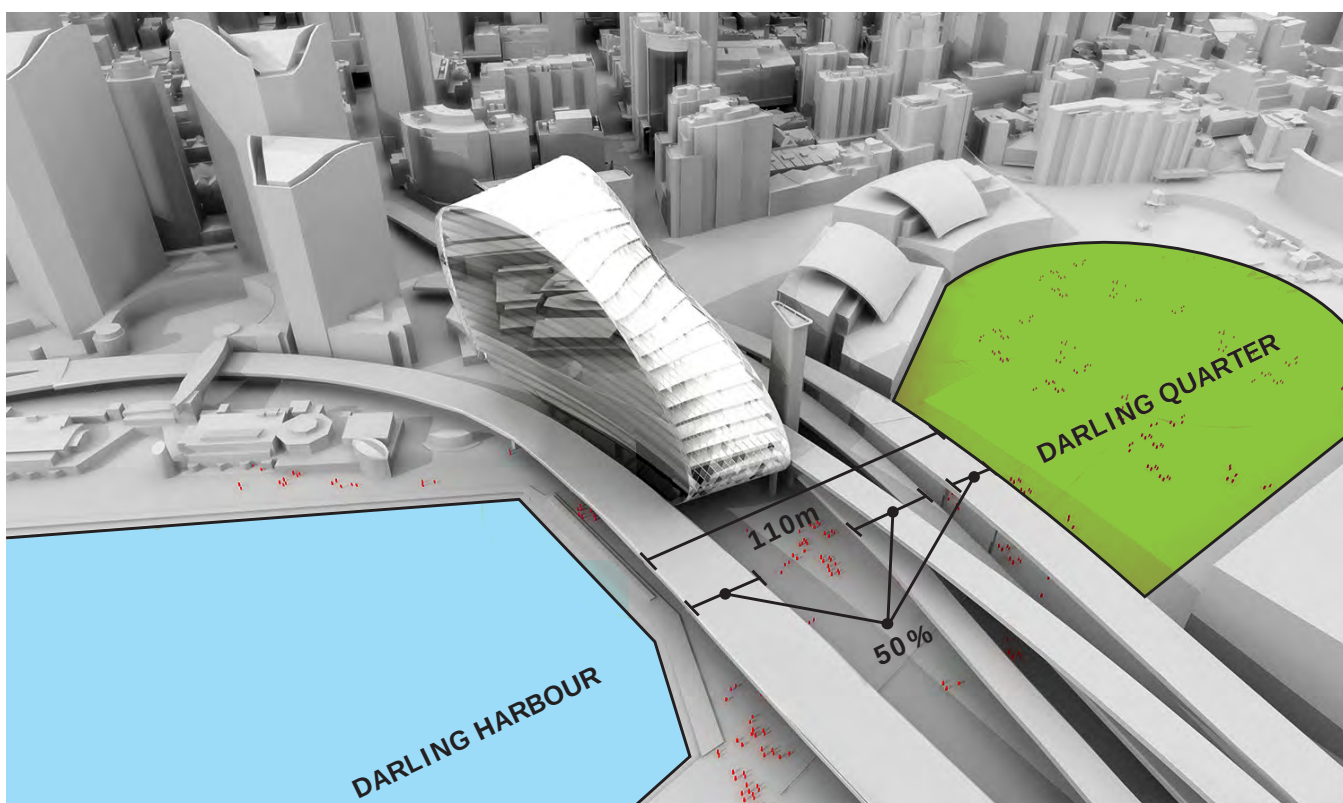
The overhead cover creates a disorienting environment underneath. The existing IMAX Theatre building is lost between the roadways and does not have a beneficial

impact on its surroundings.

The Ribbon will provide a clear point of reference and orientation for pedestrians at ground level and will substantially reduce the dominance of the freeways over the precinct.

It's bold form emerging between the elevated freeways of the western distributor, will define the entry point to the CBD from the west.

The buildings unique form will engage with people at multiple levels providing a landmark for pedestrians, an icon for Cockle Bay and Darling Harbour from the water or air and a Gateway to the CBD for motorists on the Western Distributors.



01 Urban design context

Massing explorations

During our design process, various forms were generated to explore potential envelopes for this site. The height and scale of the proposed building responds to the scale of neighbouring buildings, the “Valley Floor” concept and minimises overshadowing to Darling Quarter.

A number of massing studies were carried out to investigate potential envelopes for the building. All of the studies illustrated in this report each total the same gross floor area.

It became clear that the best approach was to draw the scale from neighbouring buildings and look to the immediate context for inspiration for the form.

The existing “Valley Floor” concept of high-rise built form within the CBD cascading down to the waterfront has been positively reinforced with the asymmetric form of Ribbon proposal due to the majority of the building mass being shifted to the city (eastern) side creating a wedge shape that fits snugly under the inferred Valley Floor line when viewed from the harbour.

Viewed from the east or west, the building’s mass takes cues from the precedent being set by future developments by framing the harbour.

We were also critically aware of the potential overshadowing impacts for the children’s playground in Darling Quarter and have achieved a level of overshadowing that does not diminish the quality of this popular new city park. Our proposal also provides for an extension of this playground.

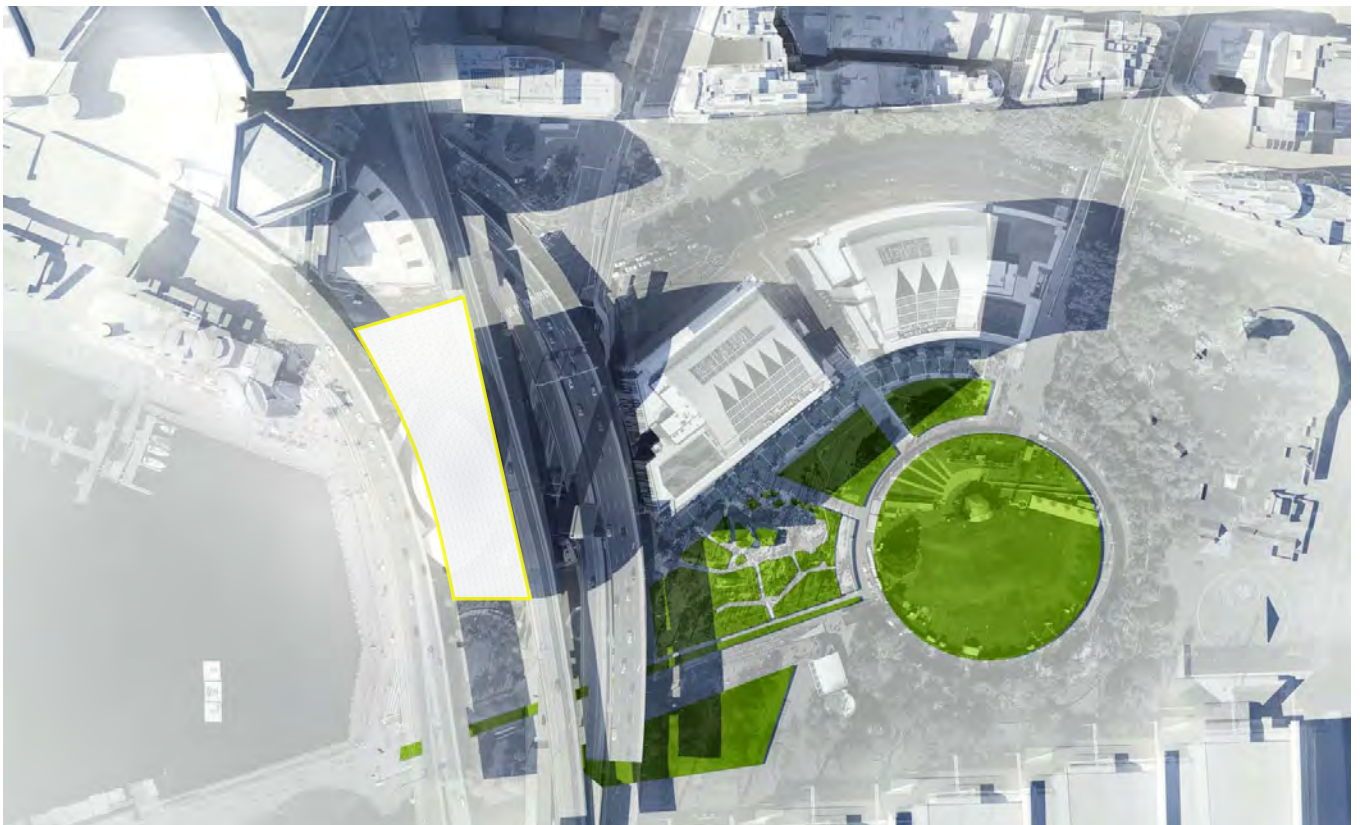
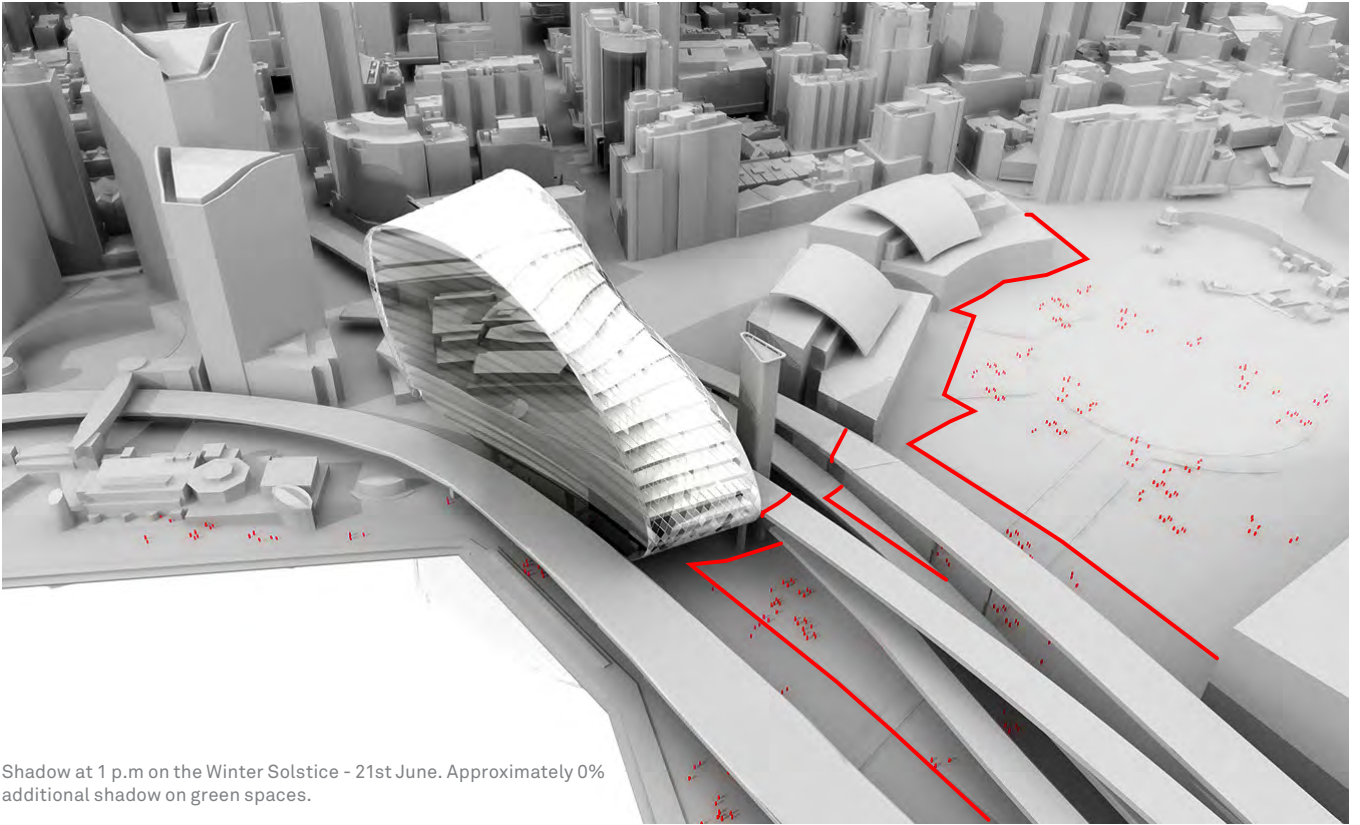
In the shadow diagrams illustrated we have calculated the percentage of shadow generated by the building mass over all green spaces in the Darling Quarter precinct. This includes the Children’s Playground, Tumbalong Park, Exhibition Green and the Village Green and equates to approximately 19,000 sqm. Commonwealth Bank Place, by architects FJMT and developers Lend Lease, was approved some years ago, before SICEEP was set to dramatically change Darling Harbour.

Today Darling Harbour is moving towards a density on par with the CBD rather than this lower scale of development while maintaining and enhancing the public spaces for patrons.

Just as the Commonwealth Place buildings frame Darling Quarter parklands, The Ribbon frames Darling Harbour, hugging the roadways and curving with the water.

01 Urban design context

Massing explorations

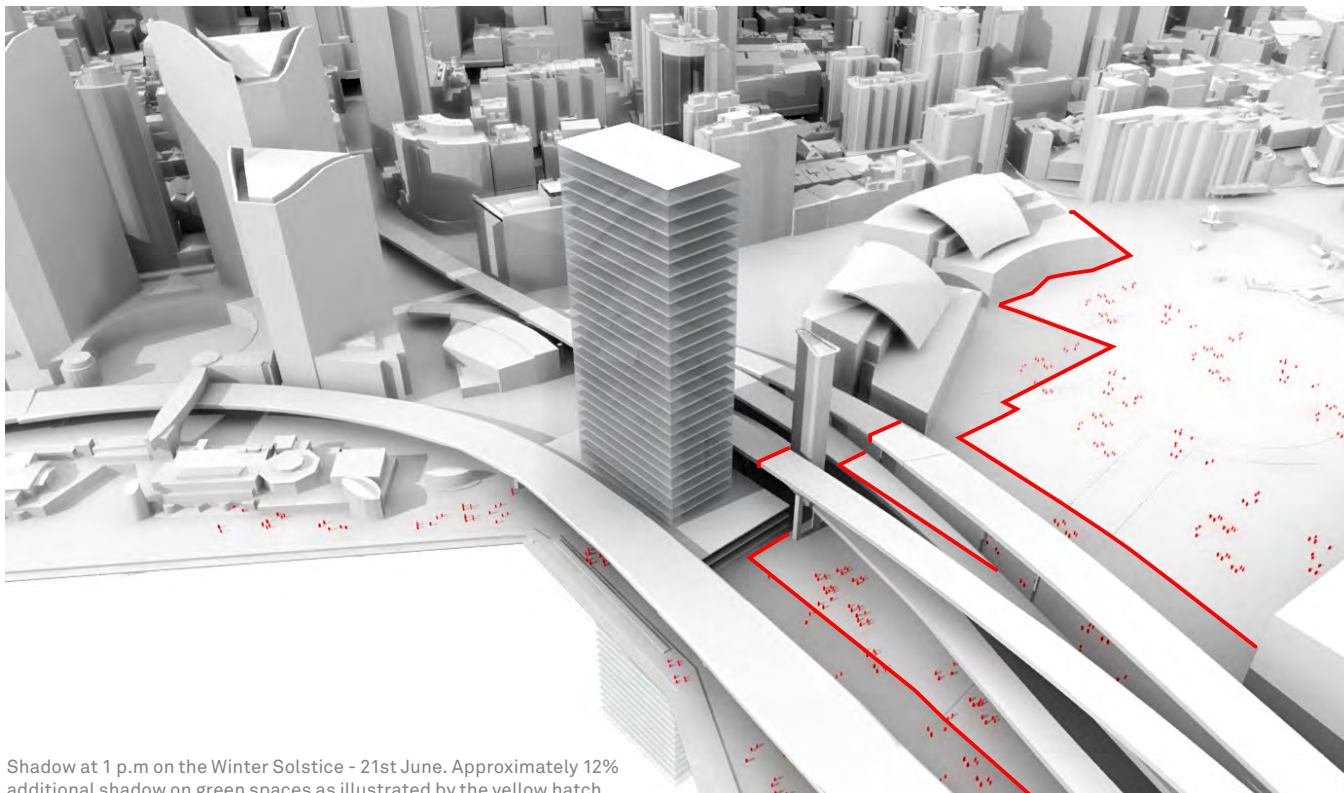


01 Urban design context

Massing explorations

Massing Study 1

A large ground floor base has a negative impact to the public domain by blocking pedestrian connections. A Single tall tower has significant overshadowing to Darling Quarter.

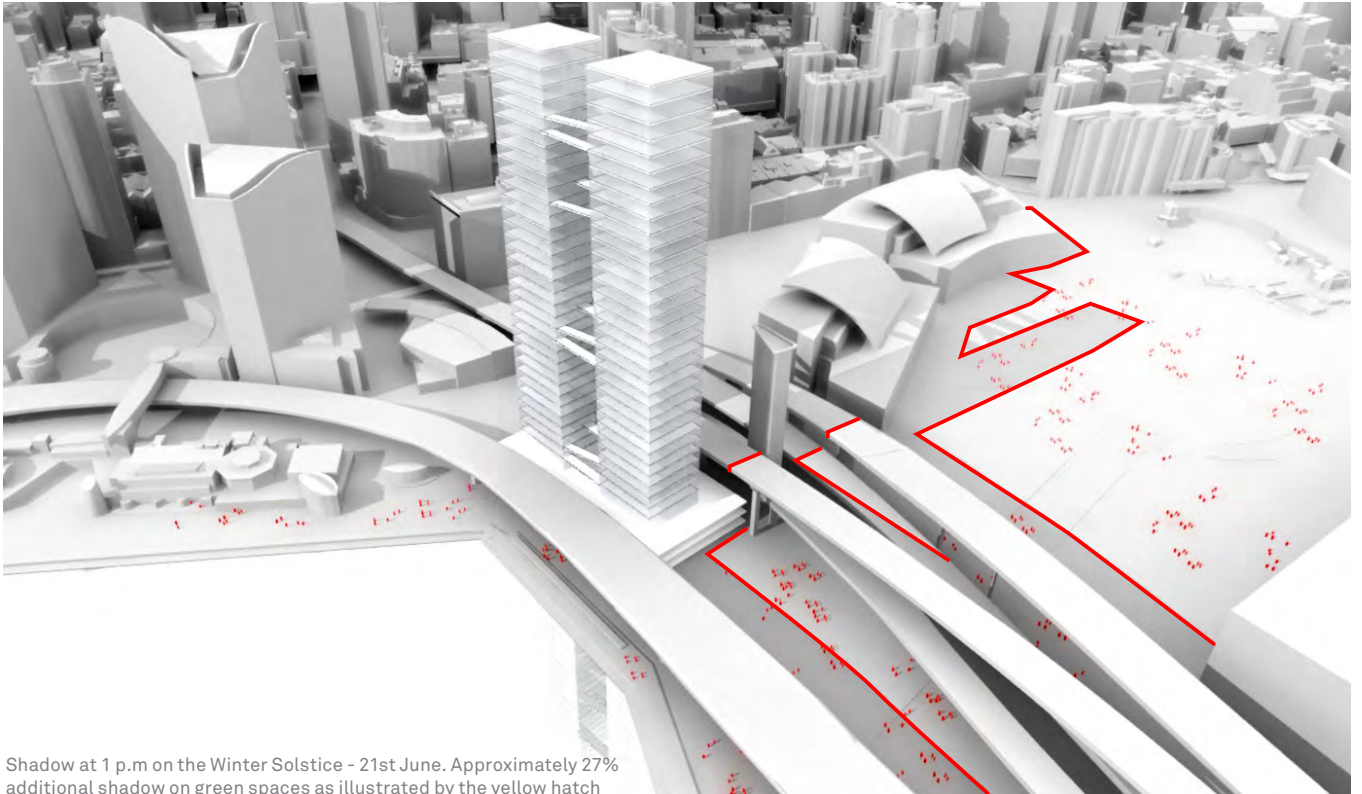


Shadow at 1 p.m on the Winter Solstice - 21st June. Approximately 12% additional shadow on green spaces as illustrated by the yellow hatch

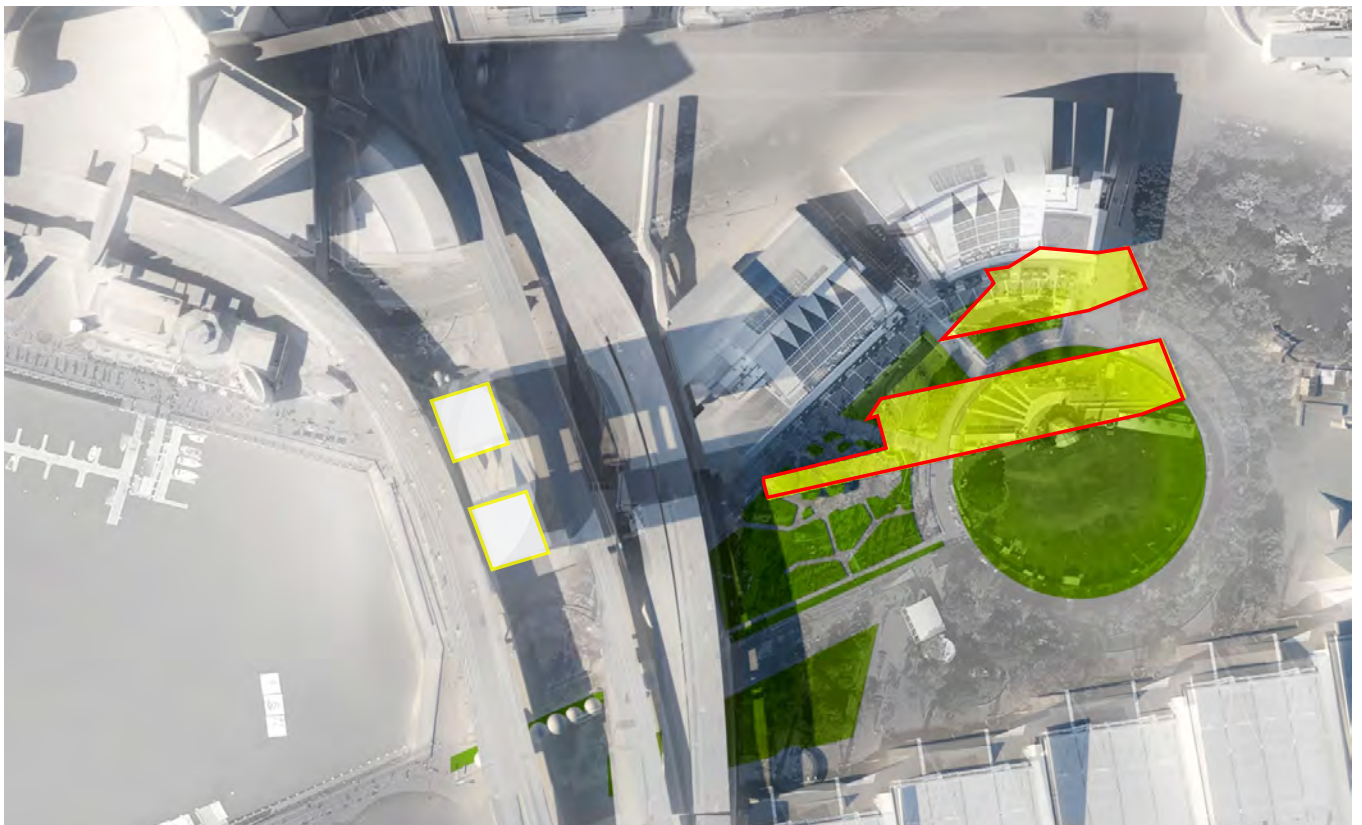


Massing Study 2

This study emphasises height by creating two thin towers on the site. The overshadowing to Darling Quarter is significant.



Shadow at 1 p.m on the Winter Solstice - 21st June. Approximately 27% additional shadow on green spaces as illustrated by the yellow hatch

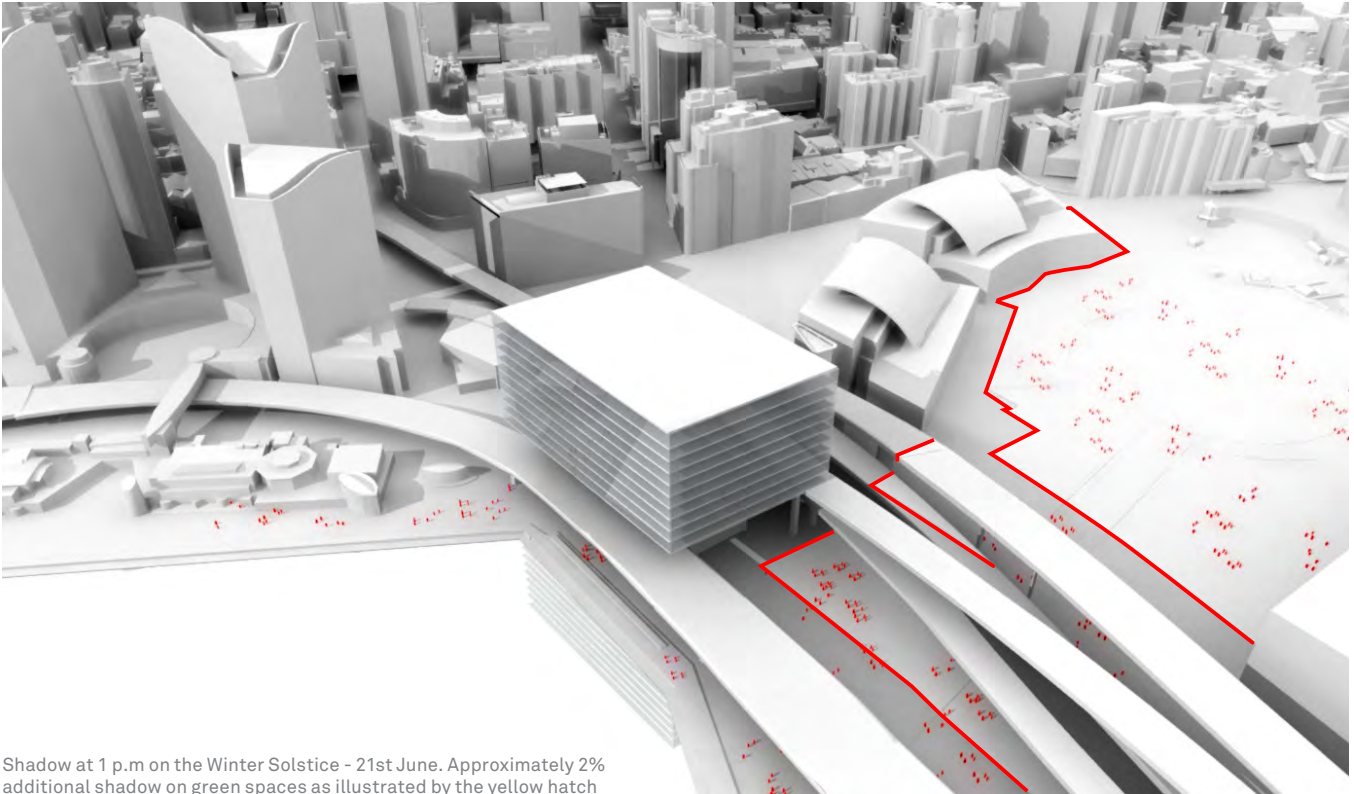


01 Urban design context

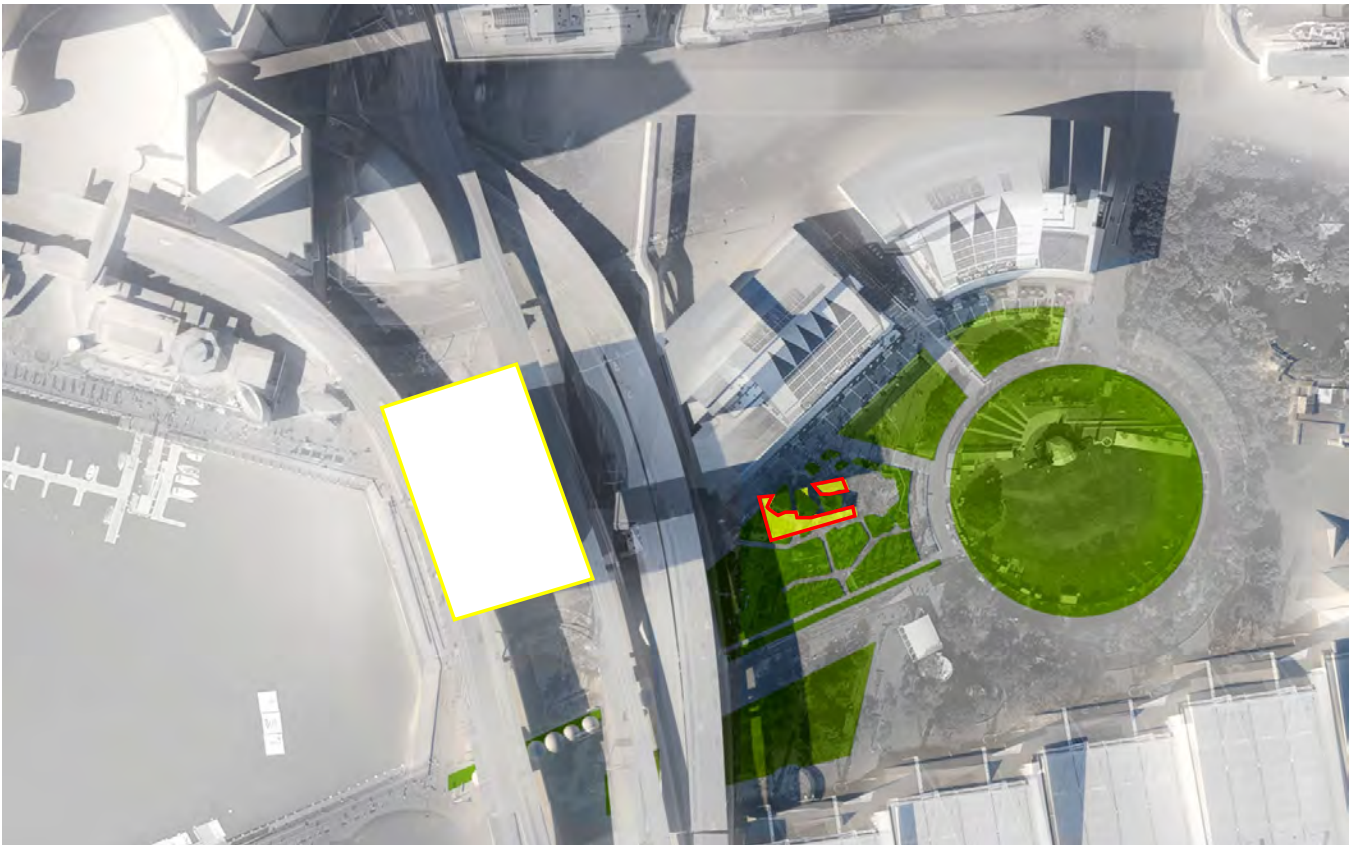
Massing explorations

Massing Study 3

This study explores a lower wider form that extends over the roadway. The bulk of the building is top heavy and not ideal.

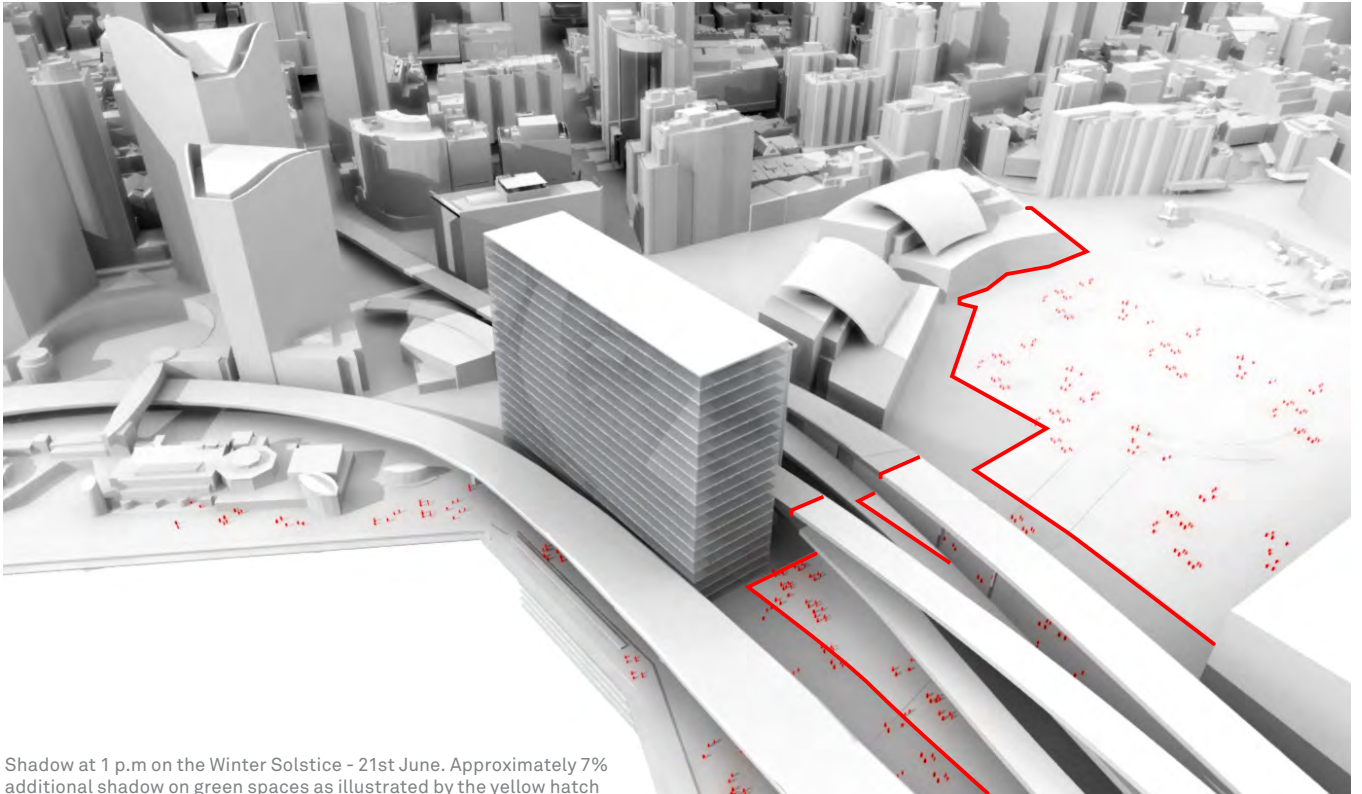


Shadow at 1 p.m on the Winter Solstice - 21st June. Approximately 2% additional shadow on green spaces as illustrated by the yellow hatch

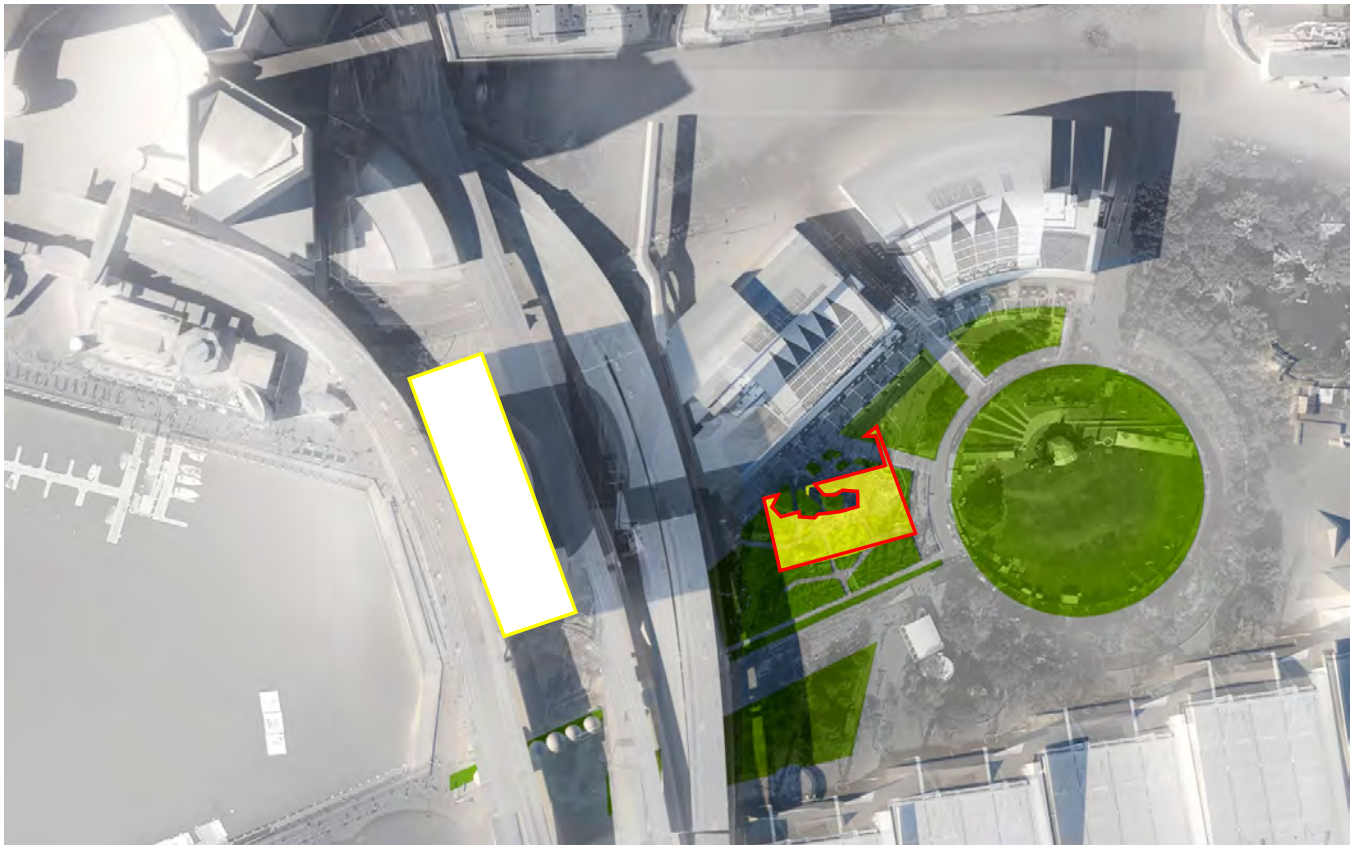


Massing Study 4

A thinner mass with a height comparable to the closest neighbouring buildings is more desirable.
The rectangular shape of this building generates significant shadow over the Children's Playground.



Shadow at 1 p.m. on the Winter Solstice - 21st June. Approximately 7% additional shadow on green spaces as illustrated by the yellow hatch

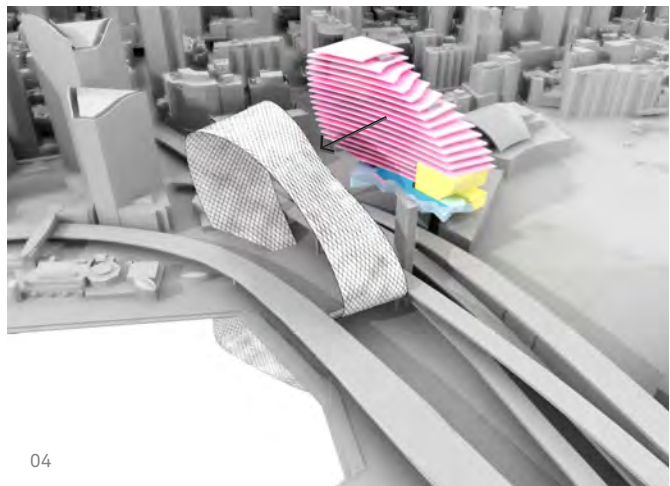
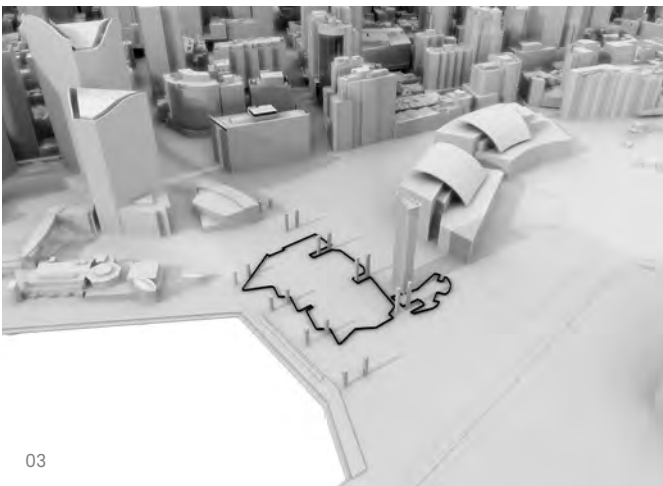
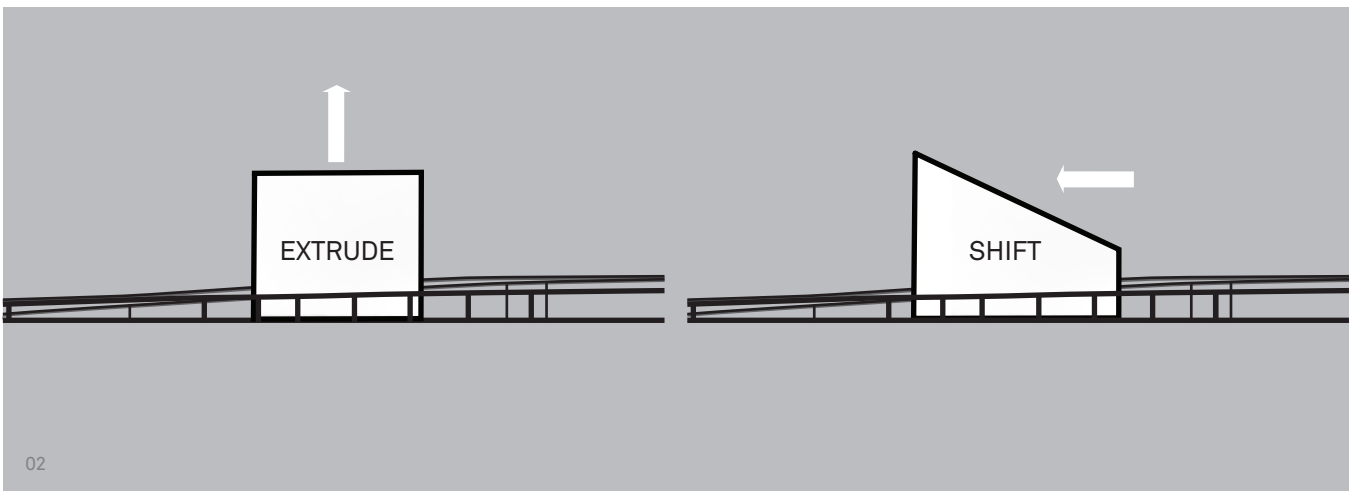


Design principles



Proposed view from Tumbalong Park.
Imagery by HASSELL

02



02 Design Principles

Scale and massing

The proposal is a direct response to the many constraints imposed on the site – both inherent and desired.

The plan responds to the shape determined by the bounding elevated roadways to the north and south, and the section, particularly the roof line reinforces the line of the “Valley Floor”. The twisting form of the east and west facade and roof responds directly to a need to minimise overshadowing to the children’s playground to the south, and increase visual connection from the southern park and Harbour Road to the waterfront. The roof form twists and dips on the southern edge allowing more

winter sun into the park, the east elevation twists at the ground floor increasing the vision cone angle from Harbour Road, and the western elevation twists from the south west to the north east increasing the vision cone angle from Tumbalong Park looking north towards the waterfront. The twisted ribbon-like form will be constructed from glass panels of varying levels of transparency carefully arranged to emphasise and amplify the twisting form.

The design strategy where form directly responds to a unique set of site characteristics and constraints has generated a uniquely original building perfectly adapted to its site.

01 Darling Harbour

02 Massing

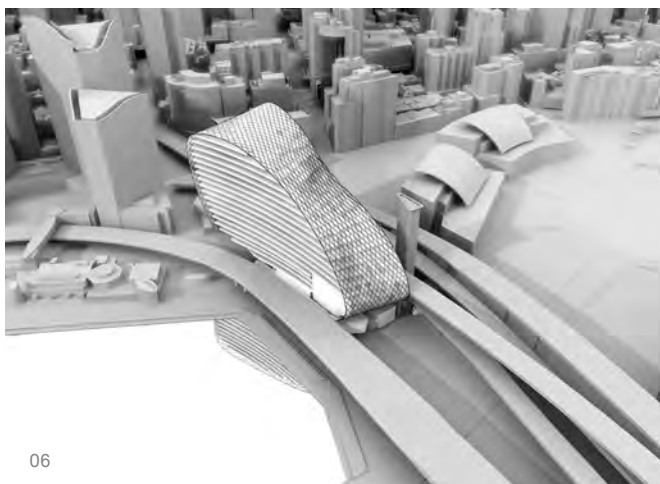
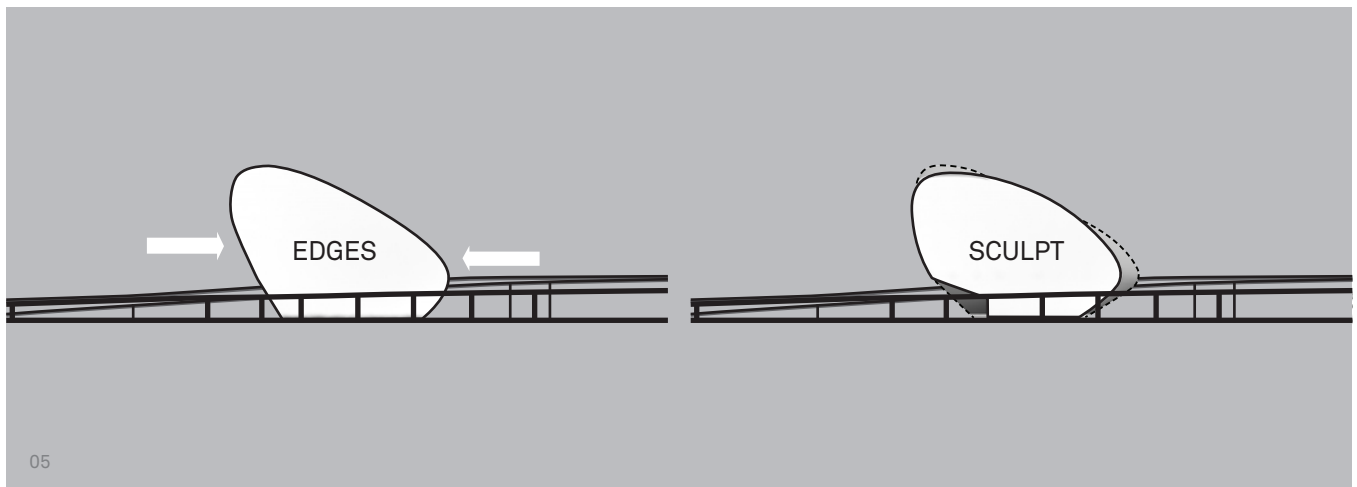
03 Lease Line

04 Retail, Entertainment and Offices

05 Moulded Form

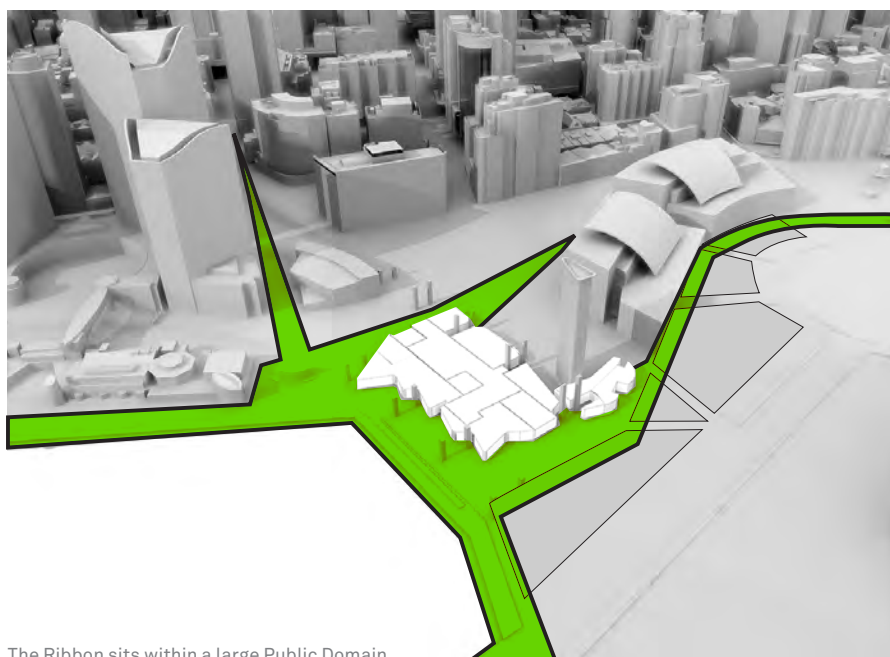
06 The Ribbon Form

07 The Ribbon Form as seen from the Western Distributor



02 Design Principles

Public domain

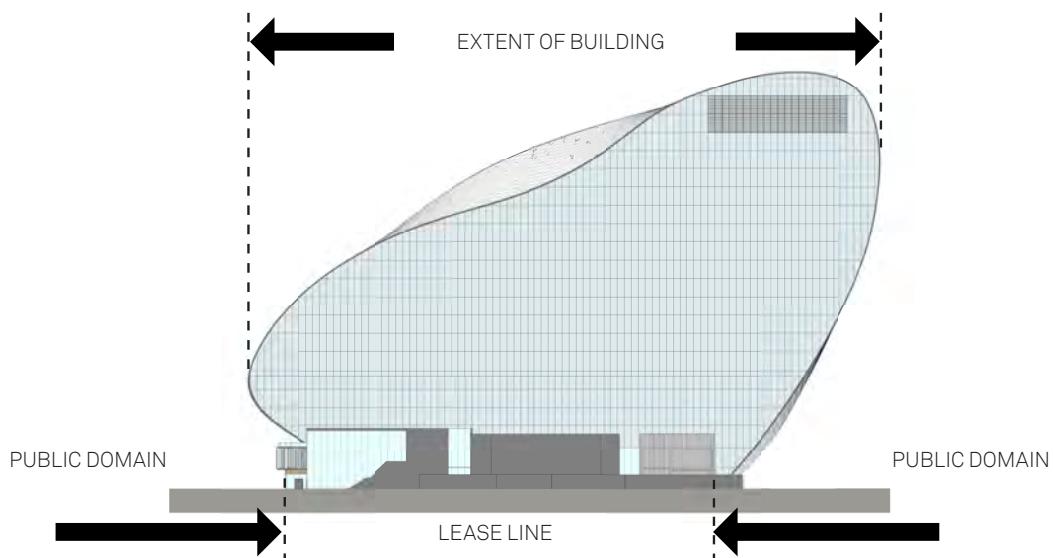


02 Design Principles

Public domain

The Public Domain and Landscape component of the project comprises an increased quality, quantity and usability of approximately 11,550 sqm of public space including improved pedestrian, visual / vehicular connections and way-finding, ensuring the enhancement of public space encourages use by people of all ages by the provision of a new playground space as an extension of the existing children's playground at Darling Quarter, and the provision of a second major public domain event space and outdoor cinema screen.

The proposal will improve the biodiversity and environmental protection of the locale through the choice of appropriate planting and materials and aims to become an exemplar of leading practice landscape architecture. Refer to the "Landscape Report" section of this EIS for further detail.



The footprint of the building has been kept to a minimum to maximise the space dedicated to the public.



02 Design Principles

Access

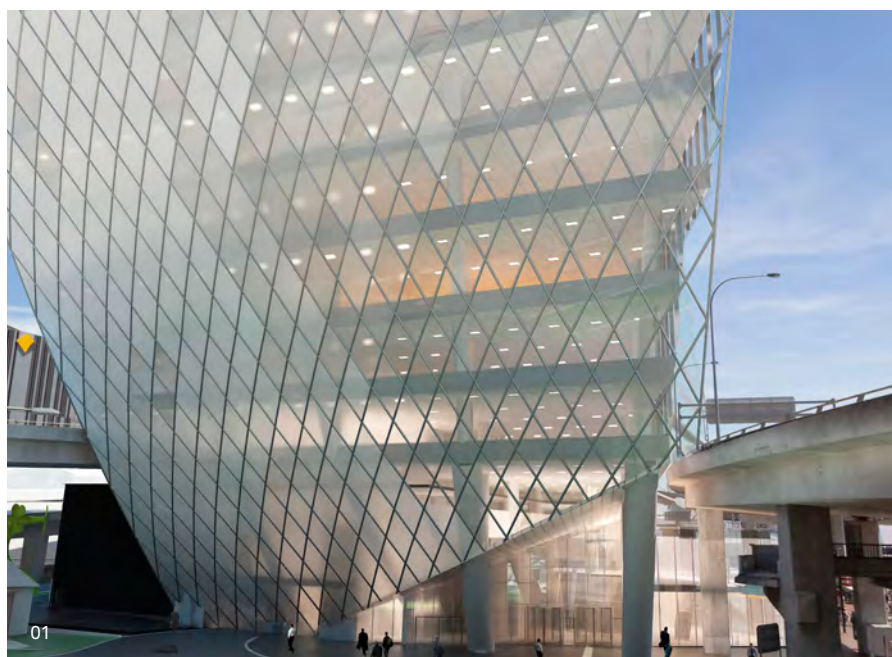
The proposed site benefits from a variety of access opportunities to the entire perimeter on the ground floor. Pedestrian and vehicular access is possible from the east via Harbour Street with pedestrian access possible for the entire northern and western elevation at GFL. On the southern sides, where the building abuts the lower elevated freeway and is away from public view, the service access points to the building are located.

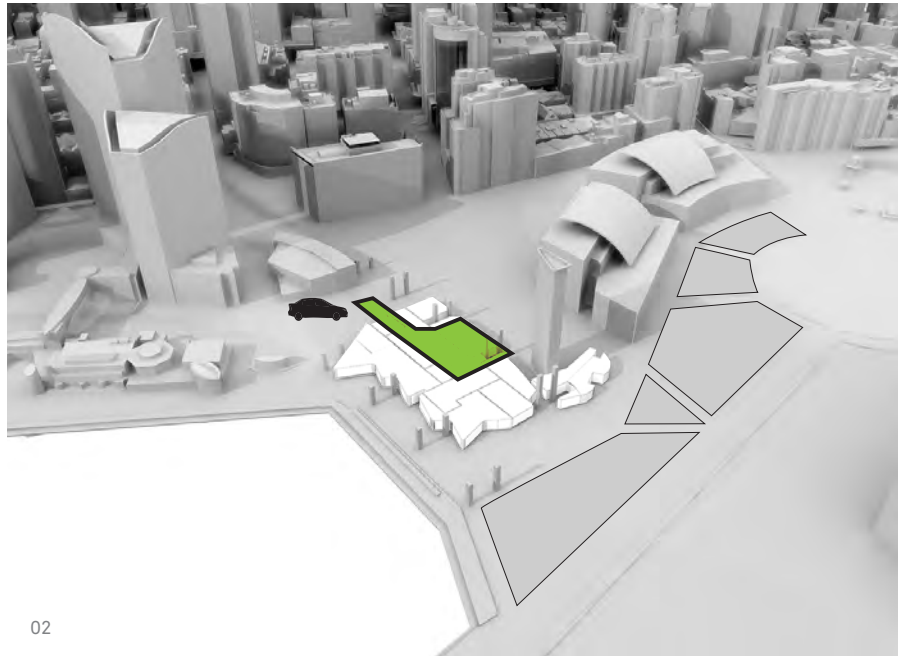
The eastern access point is an opportunity to provide a rejuvenated and major entry point into the Darling Harbour Precinct. A new shared zone plaza incorporating landscaping, vehicular drop-off / waiting and new road surfaces is proposed in this location. The entry lobbies for the Function Centre and the Commercial Office are located adjacent and will signal the

point of arrival, and assist in activation of this area that currently looks like an unfriendly “back door” into the precinct. The continuously active frontages at the ground floor level will also assist wayfinding into the precinct from the City.

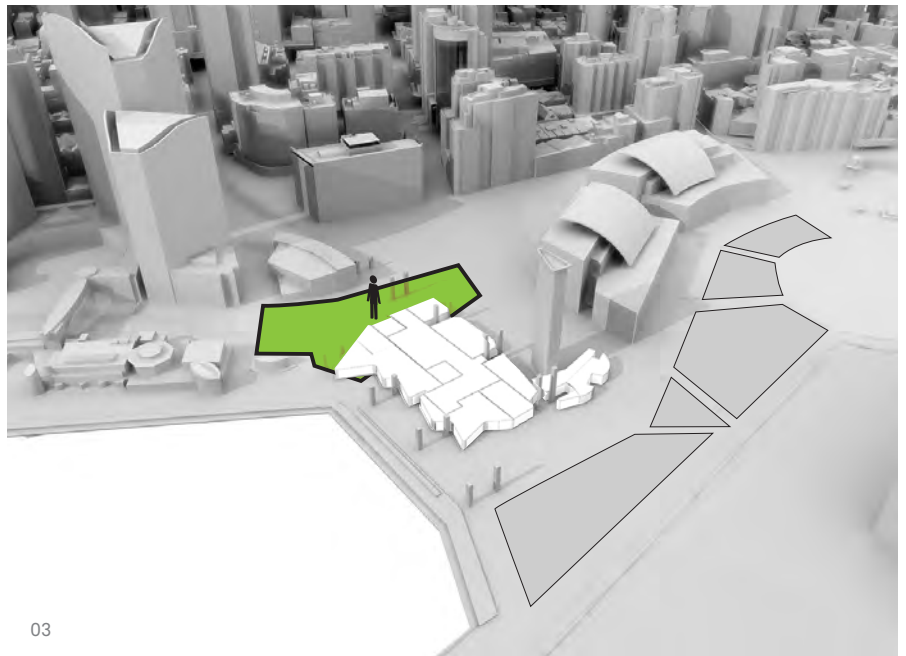
All spaces and tenancies at Ground Floor are wheelchair accessible from promenade at grade level.

Vehicular access into the building for deliveries and carparking is provided on the south eastern side off Harbour Road and the new shared zone plaza. Emergency services vehicles will also be able to access the Darling Harbour Foreshore via this plaza and also from the existing service lane to the south of the proposed site (current McDonald’s drive-thru).

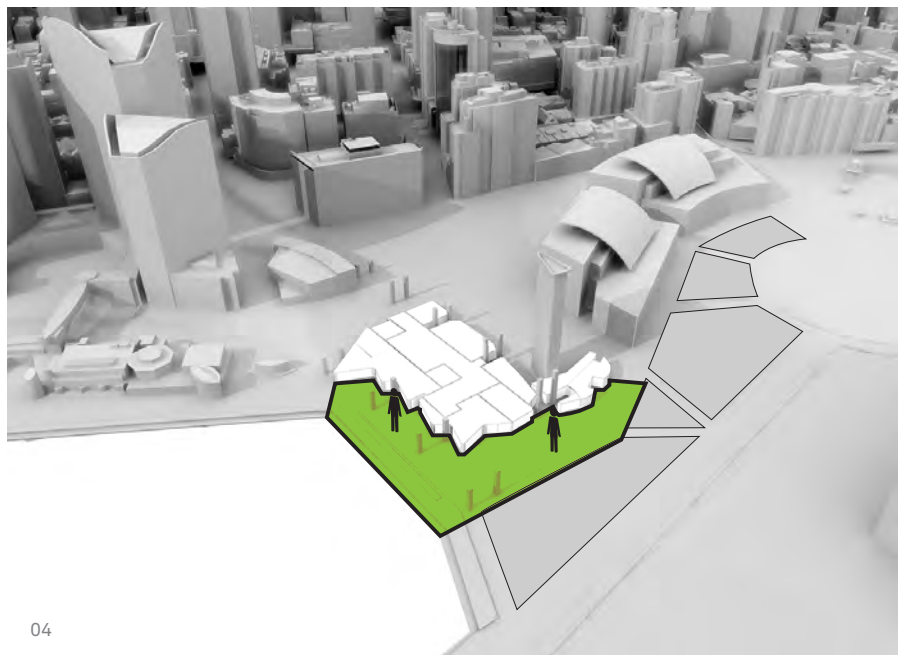




02



03



04

- 01 Office Lobby with views to Darling Harbour from Harbour Street
- 02 Vehicle and back of house access from Harbour Street

- 03 New Public Forecourt on the Eastern end of building
- 04 Ground Floor Retail is accessed from the adjacent public domain

02 Design Principles

Pedestrian connectivity

Important through site links and improved sight lines are proposed, designed to feed directly into the SICEEP development. Pedestrian flow from the south (Darling Quarter Pedestrian Boulevard and Retail Terrace) is opened up through the relocation of the palm grove and existing raised barriers and edges.

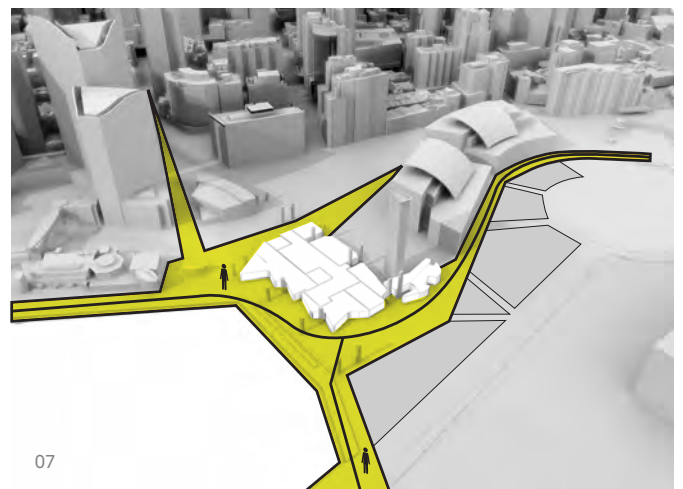
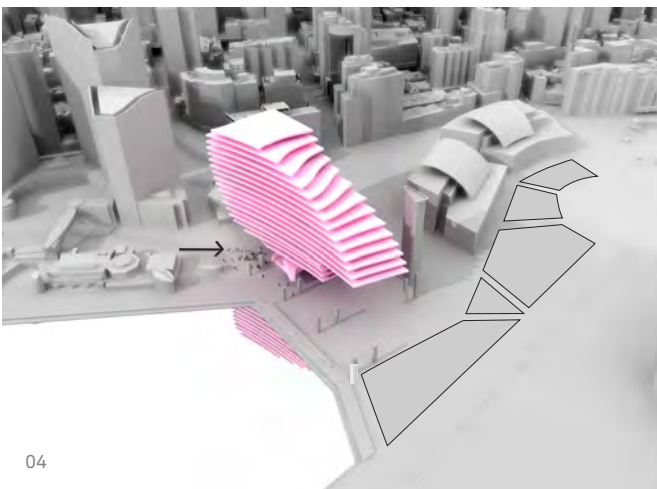
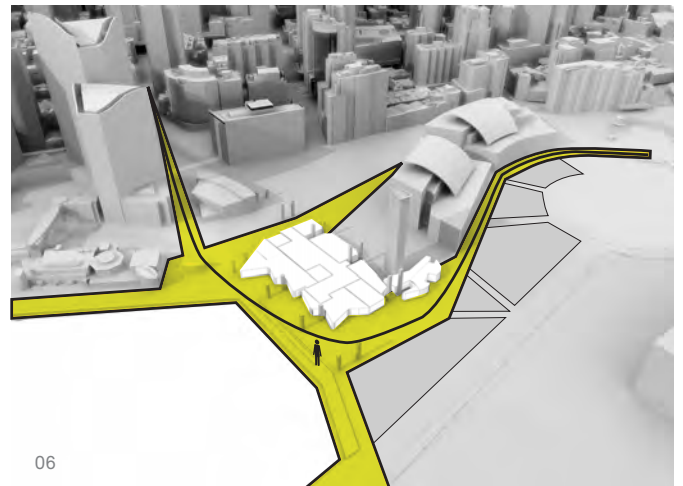
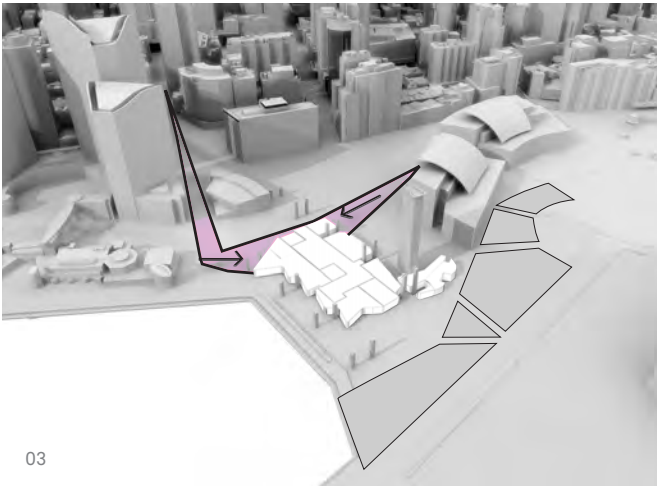
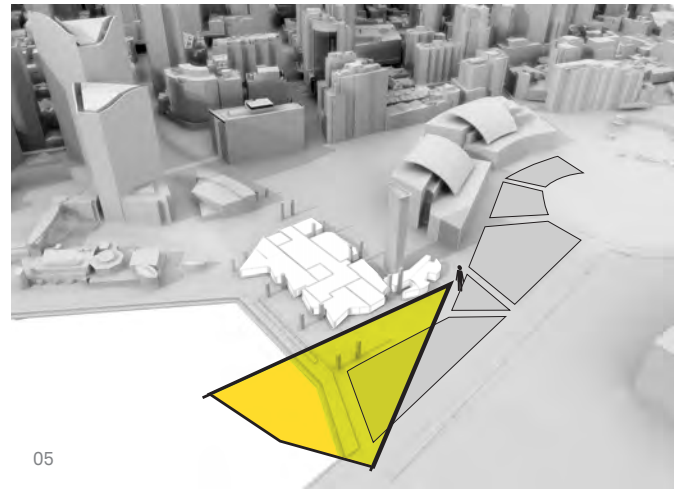
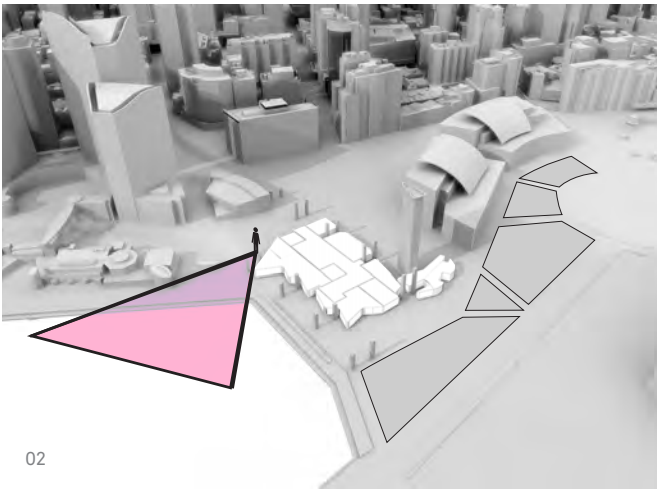
This move allows freedom of movement to the north, to Harbourside (through SICEEP) and Cockle Bay. Movement to SICEEP from the western public domain occurs via the through links provided between the new and existing playground, through the relocated palm grove and through the existing link provided at the water's edge to the north.

The entire western edge of the proposed western public domain can be flexible in its design. The current proposal delivers pedestrians to the edge of the urban stream, however further integration is dependent on the design proposals for SICEEP.

The new elevated bridge from Bathurst St as a major east west pedestrian connection to SICEEP should also be considered. The Harbour St overpass delivers pedestrians to Darling Quarter North and provides a landing point for the

public. Views from this point will need to be retained to the proposed SICEEP Convention Centre with adequate way finding apparatus crucial in providing directional information for the other Darling Harbour destinations.





01 Proposed view from
Cockle Bay Wharf.
Imagery by
HASSELL

02 Maintain Sightlines
from Wheat Road

03 New Public
Forecourt of
Eastern End of
Building

04 Commercial Lobby
Entry

05 Enhance Sight
Lines from Darling
Quarter

06 Enhance Pedestrian
Links from City

07 Enhance Pedestrian
Links to Darling
Quarter



Darling Quarter Playground ASPECT Studio. Photography by Florian Groehn.

02 Design Principles

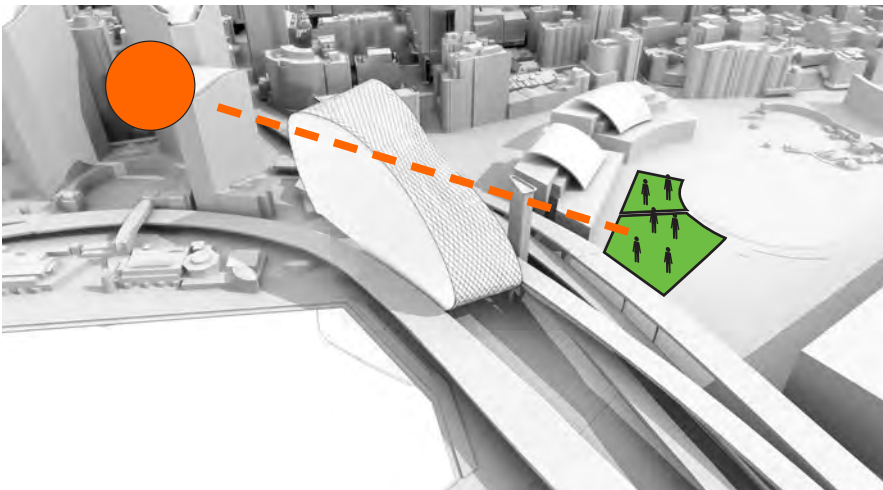
Solar Access

Above the elevated freeways, due to its northern aspect, the building benefits from exceptional solar penetration deep into the floor plates providing opportunities for highly energy efficient lighting, heating and cooling systems to be incorporated.

This could potentially compromise the solar access to areas south of the proposed development except that the proposed design minimises the impact by utilising a building envelope shape that has been “reverse engineered” from the consideration of overshadowing impacts on the children’s playground south of the development site at Darling Quarter.

Extensive computer modelling has shown by reducing the south-western corner of the building, significant reduction of overshadowing to the children’s playground is achieved with no additional impact at 1.00 p.m, 21 June when added to the pre-existing shadows cast by existing structures (47% at 1.00 p.m, 21 June). Refer to the “Solar Access Study” section of this EIS for further detail.

The final Ribbon form has no negative impact



'The Ribbon' from Tumbalong Park.
Imagery by HASSELL

02 Design Principles

Elevated freeways

The elevated freeways of the Western Distributor are a significant imposition on the proposed site dictating a footprint for the tower that is short in the north / south direction and long in the east / west direction. This is further compounded by the requirement for a minimum distance to be maintained between the building and the structures for access for inspection and maintenance.





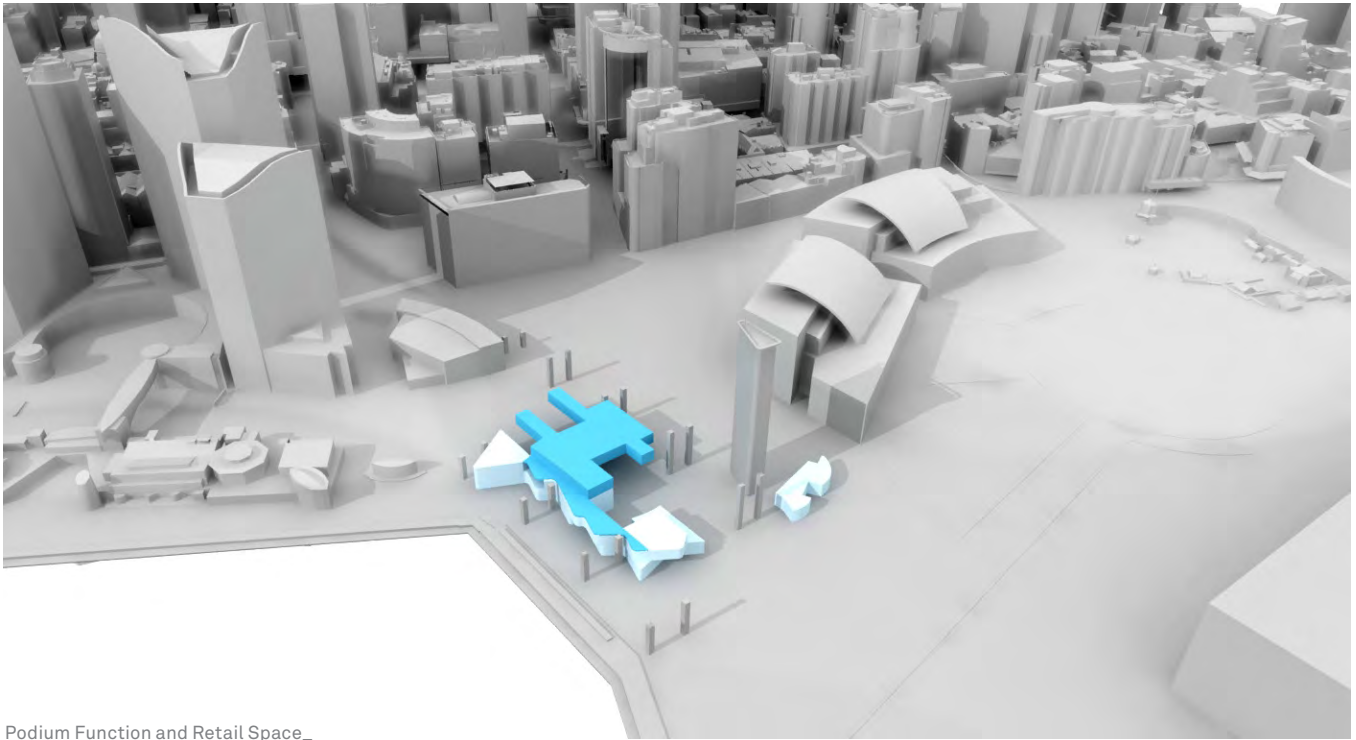
The Ribbon Form as seen from the Western Distributor. Imagery by HASSELL

Design elements

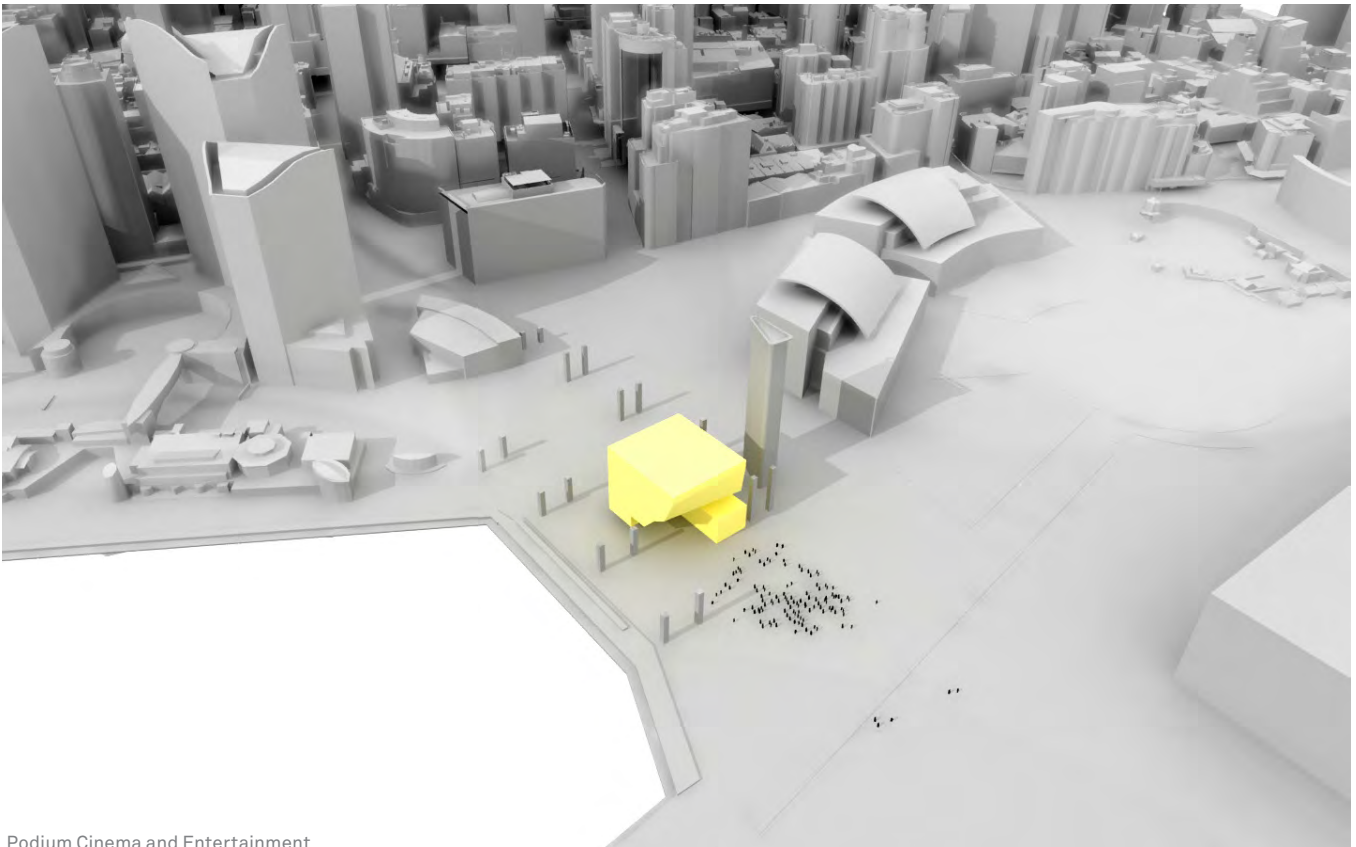


03

'The Ribbon' from Tumbalong Park.
Imagery by HASSELL



Podium Function and Retail Space_



Podium Cinema and Entertainment_

03 Design elements

Podium retail, function
and entertainment

Similar to the ground floor, the first floor podium facade also undulates in and out but at a different rate to the ground floor, avoiding freeway pylons, providing elevated spaces for dining and providing “canopy” protection to the ground floor dining areas.

The upper podium form turns the corner at the western end and returns south, providing a consistent language and canopy towards the Darling Quarter development. New amenities are provided in this location, replacing those behind the freeway pylons. Existing structures are replaced with a consistent shopfront, continuing the scale and retail language of the Darling Quarter development and providing a continuous retail promenade towards the waterfront. The design minimizes the visual impact of the roadways overhead and provides an activated facade for the length of the promenade. It also removes the unsightly views to back of house areas currently sitting behind the existing IMAX building.

Bike parking and change facilities with lockers are provided for 276 staff together with provision for parking 86 cars and bike parks for 56 visitors.



03 Design elements

Office tower

The commercial office component of the project comprises 41,470 sqm NLA PCA Premium Grade space over 15 levels each with uninterrupted views of Sydney Harbour and the city from every floor. The floor plates range in net area from 900 sqm to 3,500 sqm with potential for up to 150 sqm of tenant adaptable interconnecting voids between each two floors.

The building has been designed to achieve a GBCA 6 star rating and a 5 star plus NABERS energy and 5 star NABERS water rating and incorporates multiple best practice sustainable design initiatives including tri-generation, triple glazed closed cavity curtain wall facade with integrated blinds. Refer to the “ESD” section of this EIS for further detail.

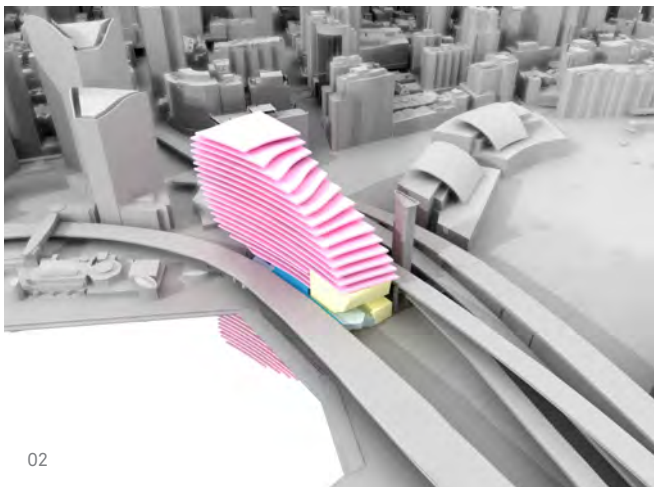
Two cores per floor are provided on the lower floors each containing lifts, fire stairs, male and female amenities and building services plant and services risers. As the building rises, the western core disappears leaving the eastern core to service the upper floors.



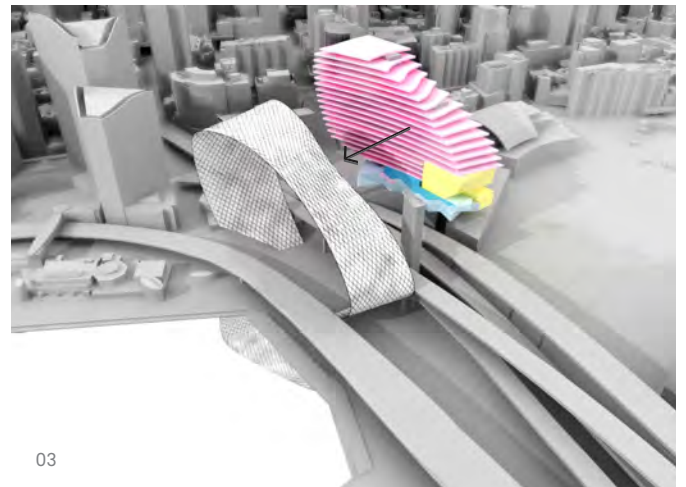
'The Ribbon' from Cockle Bay Wharf at night.
Imagery by HASSELL



01



02



03

01 Proposed workplace fitout from within The Ribbon looking North over Darling Harbour

02 Office Levels

03 The Ribbon Form

04 The Ribbon from Darling Harbour at night

03 Design elements

Building uses

The proposal comprises 54,929 sqm GFA (41,470 sqm NLA) over 15 levels of PCA Premium Grade commercial office space, 18,681 sqm GFA over 5 levels of mixed use space including 2,713 sqm retail, 3,211 sqm IMAX Cinema, a 2,156 sqm Function Centre, a 1,973 sqm Gymnasium and provision for 86 car and 276 bike parking spaces plus 56 visitor spaces. The building component of the development has a ground floor footprint area of 5,379 sqm.

The northern side of the ground floor

accommodates 948 sqm of retail tenancy space envisioned to be occupied largely by existing and new restaurant tenants. These tenancies are each two stories which will allow for both indoor and outdoor dining. The western side of the building, off the proposed new public event space, is the 400 sqm lobby for the new IMAX Cinema. Smaller tenancies such as a Gelato store are also proposed to be located here. The entry for the commercial office is located on the eastern side adjacent the proposed new arrival, drop-off and forecourt area on Harbour Road. The entries for the function

centre and gymnasium are also located here but separated from the office entry. The southern side of the development, adjacent and under the elevated roads, and therefore away from public view, contains all the back of house facilities such as building services plant areas, car and bike parking, loading, storage and security areas. Further to the south, partly under the elevated roads, is proposed a single level standalone building containing additional retail tenancy spaces, workshop space for SHFA and new public amenities.



'The Ribbon' from Tumbalong Park at dusk.
Imagery by HASSELL

03 Design elements

Building uses

Podium Level 1

Comprises the second floor of the northern retail tenancies, the entry foyer and pre-event space for the IMAX Cinema to the west, the commercial lobby space and lift access to the northeast, and the building services plant and car parking to the south and south east adjacent and beneath the elevated roadway.

Podium Level 2

Comprises a full floor dedicated function area and building services plant and car parking to the south and south east adjacent and beneath the elevated roadway.

Podium Level 3

Comprises the first level of commercial office and building services plant to the southern side adjacent the elevated roadway.

Podium Level 4

Is proposed to be a gymnasium with building services plant to the southern side adjacent the elevated roadway.

Level 1 – Level 15

Are dedicated commercial office floors

Plant Mezzanine

Building service plant is accommodated behind the main building facade and under the main building roof.



'The Ribbon' from Harbourside at night.
Imagery by HASSELL

03 Design elements

Active frontages

In order to maximise the space dedicated to public, the footprint of the building is kept to a minimum. Additional floor space is achieved at higher levels by cantilevering the building out parallel to the elevated freeways resulting in a dramatic building form and commercial floor plates of exceptional quality.

An alternative response could have been a taller building, which would severely compromise the overshadowing of the children's playground at Darling Quarter, or a building with a larger footprint which would severely reduce the area of public realm. Both alternatives were investigated but were considered unacceptable by the design team.

The facade of the building at ground level is specifically designed to engage with the waterfront and soften the visual impact of the Western Distributor overhead. The ground level, with a floor to ceiling height of over 3.5 m, reduces the apparent scale of the freeway and provides a pedestrian friendly and continuously activated frontage for the length of the building from the end of the Darling Quarter development to the beginning of Cockle Bay Wharf.

The ground floor tenancies will all be accessible on-grade without reliance on steps or ramps. The facade undulates in and out creating pocketed areas for outdoor dining away from the general flow of pedestrian traffic. The entries to the main commercial lobby and upper level function areas are located to the east of the building adjacent a new landscaped drop-off zone and plaza. This will give visual presence and increase the quality to the eastern gateway to the site which currently looks like the "back door" or service entry to the precinct.



Retail frontage to Darling Harbour.
Imagery by HASSELL

03 Design elements

External cinema screen

To the west of the building, above the proposed IMAX Cinema entrance lobby and facing the new enlarged public event space is proposed a large external screen.

It is envisioned this screen would be used for public movie screening, performances, or televised events such as the Olympic Games or the Soccer World as well as identification and business naming signage for the cinema tenant, public announcements (including government authorities), and selected use by SHFA for event promotion.

The viewing angles will be controlled so as not to contravene RMS guidelines regarding animated signage visible from roadways.



Event screen & retail facade.
Imagery by HASSELL

03 Design elements

Materials and finishes

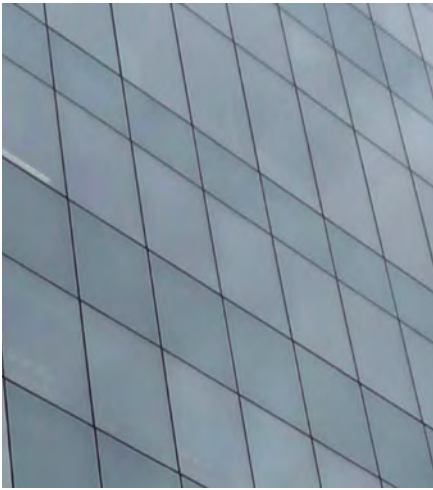
The facade material of the Ribbon is proposed to be white glass IGUs in varying levels of transparency within a triangulated grid-shell structural frame. This will achieve the desired “glow” for the building occupants internally during the day, and externally at night.

The main façade (north and south elevations) of the office tower is proposed to be clear glass within a high performance, triple glazed curtain wall system with integrated louvred blinds. The system will achieve high visible light transparency levels and low reflectivity levels. The façade framing will be white aluminium.

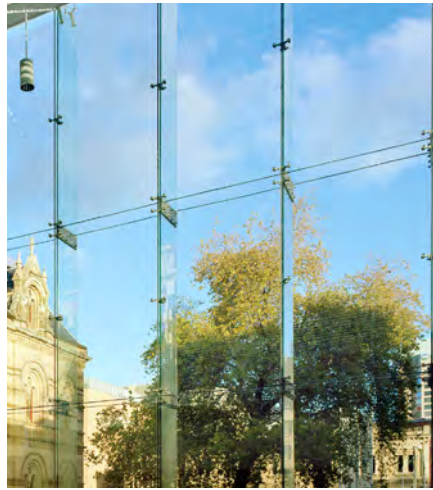
The façade to the podium levels on the north, west and east will be operable glass louvres, giving the form texture, and capturing the light from different angles. An operable louvred facade will eliminate the need for drop down plastic curtains, awnings or other external devices in the event of inclement weather. This cladding also has the effect of catching the light as you move around the building, a subtle reference to sunlight dancing on the harbour.

The southern side of the podium, adjacent the lower freeway will be clad with a low reflective, darker and subdued toned material such as natural zinc and painted aluminium composite panels. All plant rooms will be screen from view by two-way aluminium extruded louvres in a colour matching the surrounding cladding.

The upper levels of the podium, containing the Function Centre and Gymnasium fuse with the façade treatment of the commercial office. Ground floor retail and commercial office lobby facades will be clear glass.



CW:01
High performance triple glazed curtain wall facade with integral venetian blind (white)
Location: Main building facade



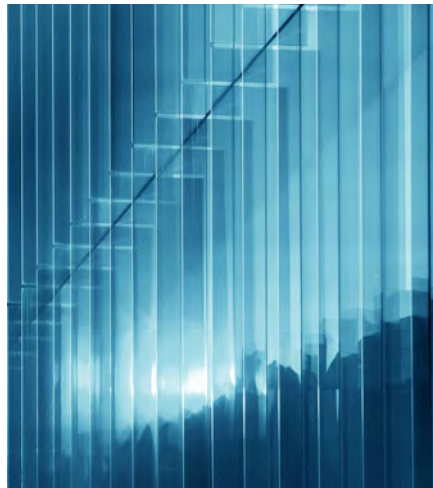
GL:01
High performance frameless glazing
Location: Ground level entry facade - Function, Office, IMAX



CL:01
Metal Cladding
Colour: Charcoal
Location: Back of house areas



CW:02
High performance insulated double glazed curtain wall
Location: The Ribbon facade



GL:02
High performance glazing with vertical screen
Location: Retail facade



CW:03
High performance frameless glazed louvre curtain wall
Location: Winter garden



LV:01
Powdercoated Louvers
Colour: Charcoal / White
Location: Plant areas

03 Design elements

External signage

Several façade zones of the building have been nominated to accommodate signage for retail tenancies and commercial office branding.

Please refer elevation drawings for signage zones together with separate signage package.



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