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THE RIBBON URBAN DESIGN REPORT



Prepared for Development Approval
December 2015

HASSELL

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

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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 54,877sqm 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 23 storey building and a separate 2 storey building
- _ A total Gross Floor Area of approximately 54,877sqm for hotel and serviced apartments, retail, recreation, function purposes and a new IMAX cinema
- _ 170 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.

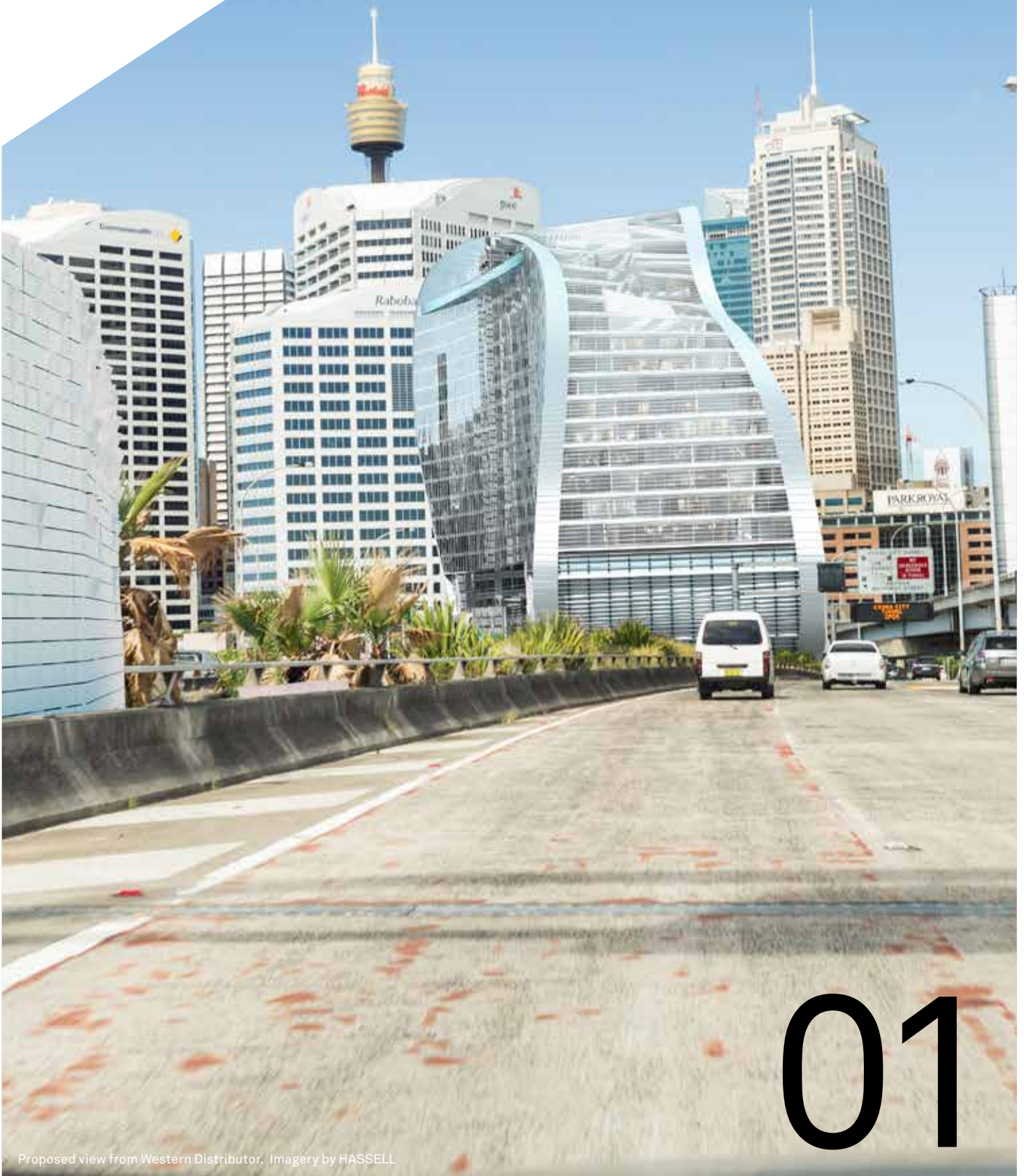
The transformation of the Harbour in coming years driven by the Sydney International Convention, Exhibition and Entertainment Precinct and Barangaroo proposals represents a new scale of development which will define the future

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, creating a spectacular waterfront experience. The proposal provides enhanced ground level activation, improved sight lines 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 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 a remarkable 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 infrastructure elements. The landmark building will become a defining element on 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 the 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 promoting 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 hotel, serviced apartments, retail and entertainment floorspace.

The following is a description of the broad planning framework that applies to the site, there are no detailed controls or a development control plan setting out the parameters for the built form of the development 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 hospitality, 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 Guidelines document is not an adopted planning policy and has no statutory weight.

The Guidelines contains several principles in relation to built form design, the public domain, pedestrian access, and activation of spaces and 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 the State Environmental Planning Policy (State and Regional Development) Darling Harbour Development Plan No. 1 Sydney Regional Environmental Plan (Sydney Harbour Catchment).

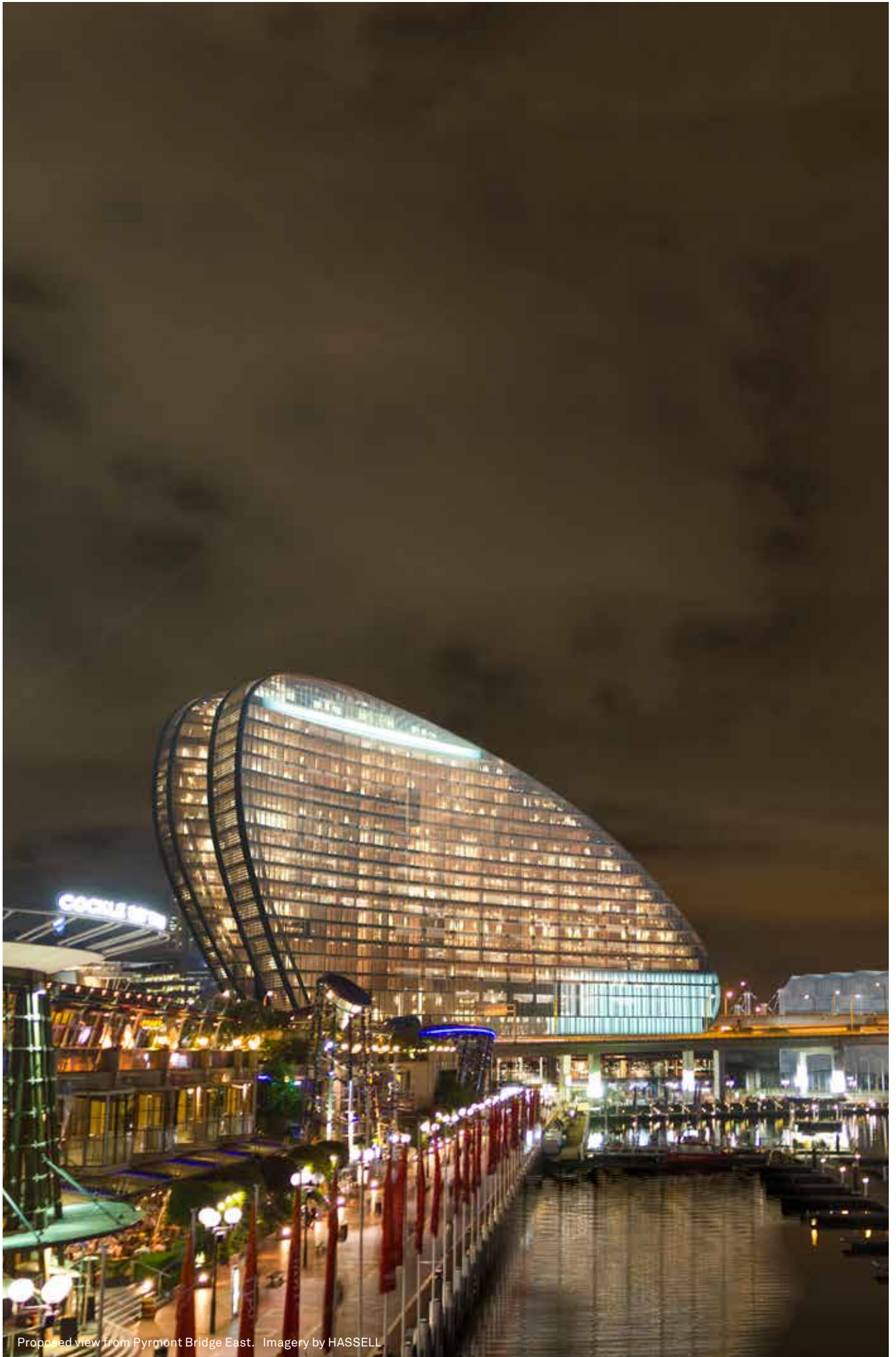
The planning instruments set out the consent authority role and broad planning framework that applies to the site. State Environmental Planning Policy (State and Regional Development) establishes that the development is State Significant Development and that the Minister for Planning is the consent authority. The Darling Harbour Development Plan regulates land use by identifying objectives for the Darling Harbour precinct and permits 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

Please note that the 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 from Pyrmont Bridge East. 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 Sydney's 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 centred 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 is reflected in the recently preferred SICEEP proposal.

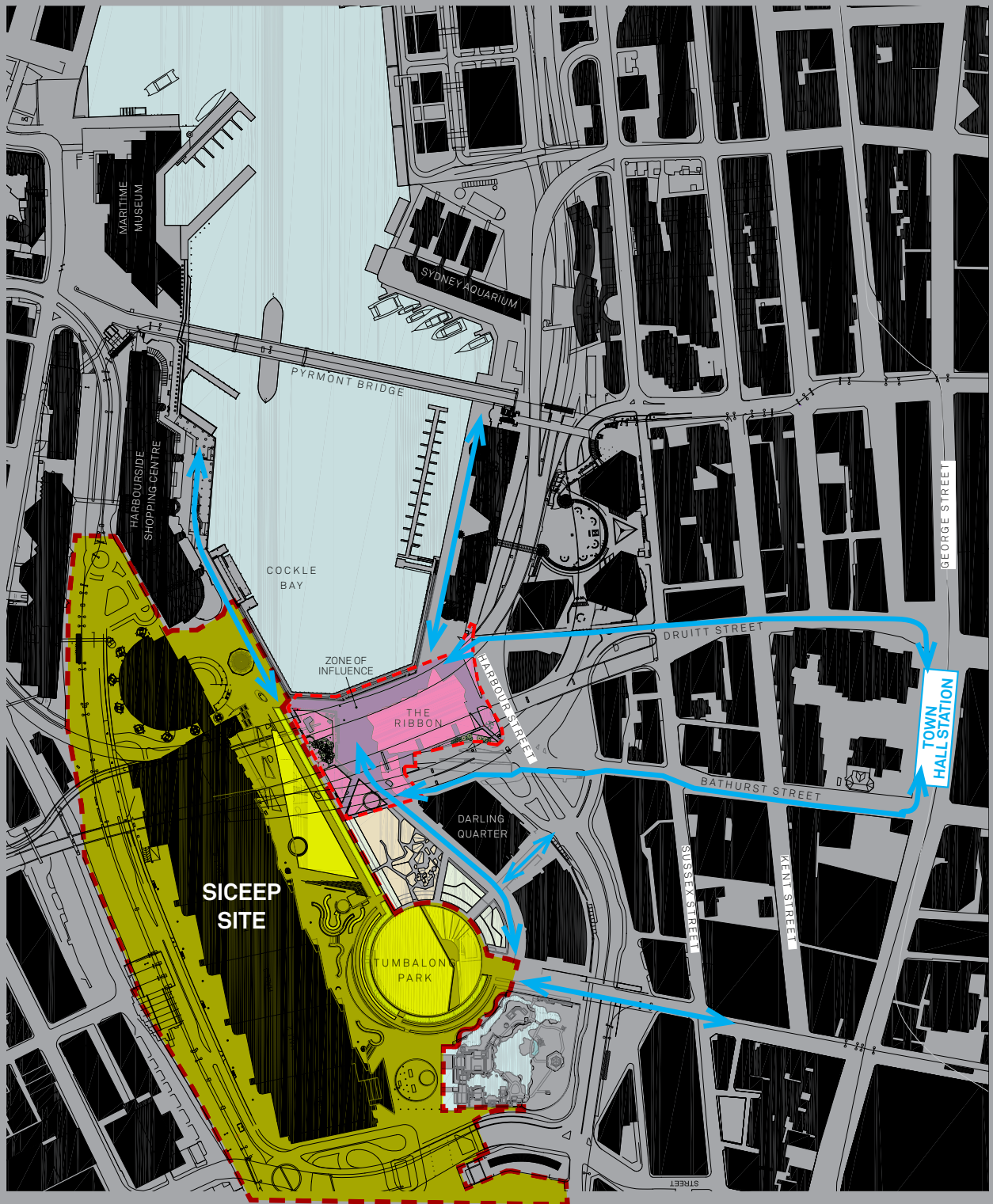
The recently completed Darling Quarter project comprising 68,000 sqm of commercial office and retail space, and the new Children's Playground is to the south of the site.

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 larger 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 its urban form. Historically lower scale developments were orientated to the foreshore and parkland spaces, these developments turned their back on the CBD. The current scenario of much larger scale developments 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, former 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 re-framing of the harbour with a more significant waterside development.

It is an exciting time for Darling Harbour 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 former 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.

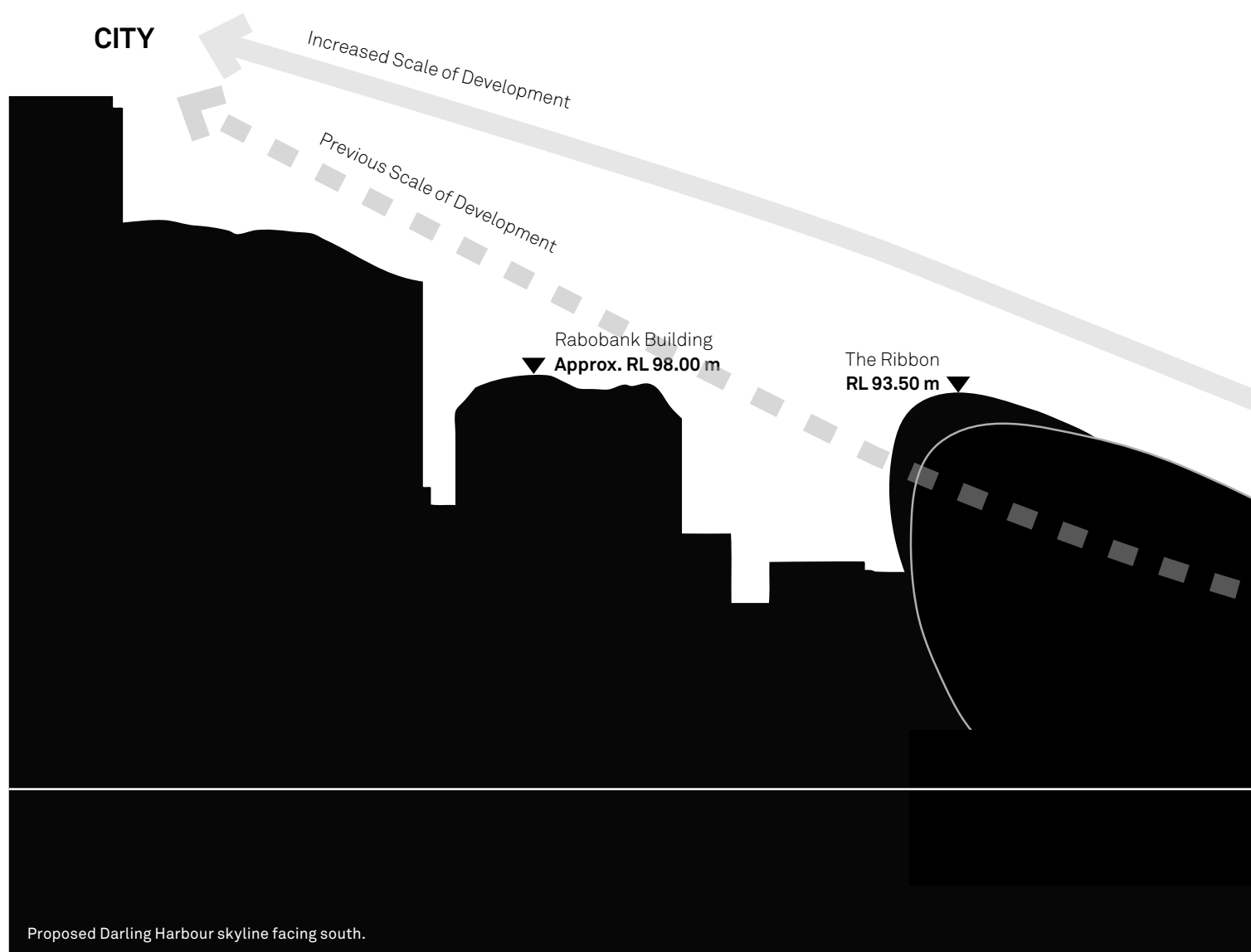
A number of residential towers are also being built in the Southern Quarter with heights of over RL 100 m.

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 contribute to this by bringing a high volume of first time visitors to the area, further developing the variety of activities in the area.

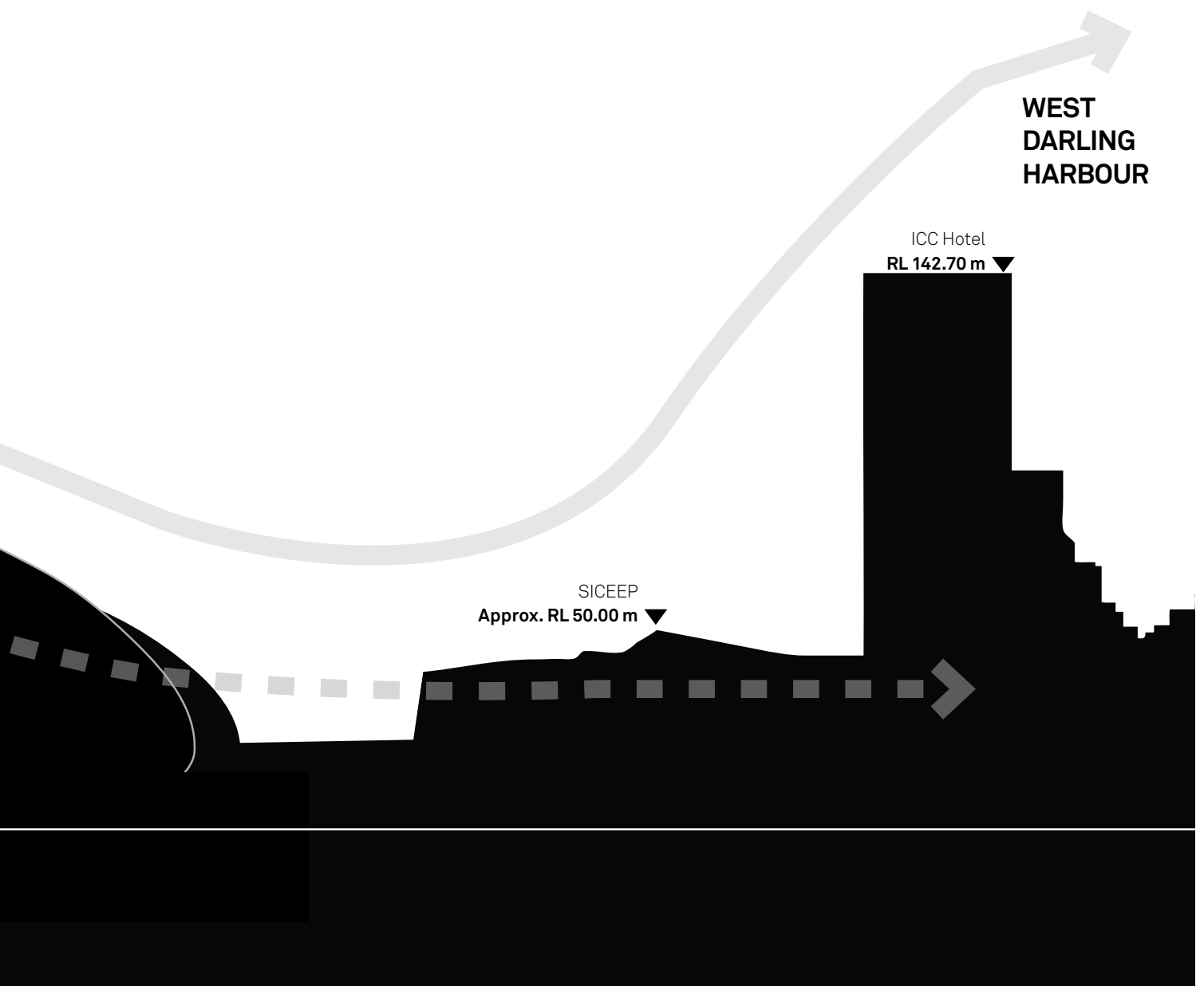
As principal designers of both The Ribbon and the preferred SICEEP redevelopment proposal, HASSELL are able to ensure seamless integration of pedestrian realm, built form and landscape design.

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.

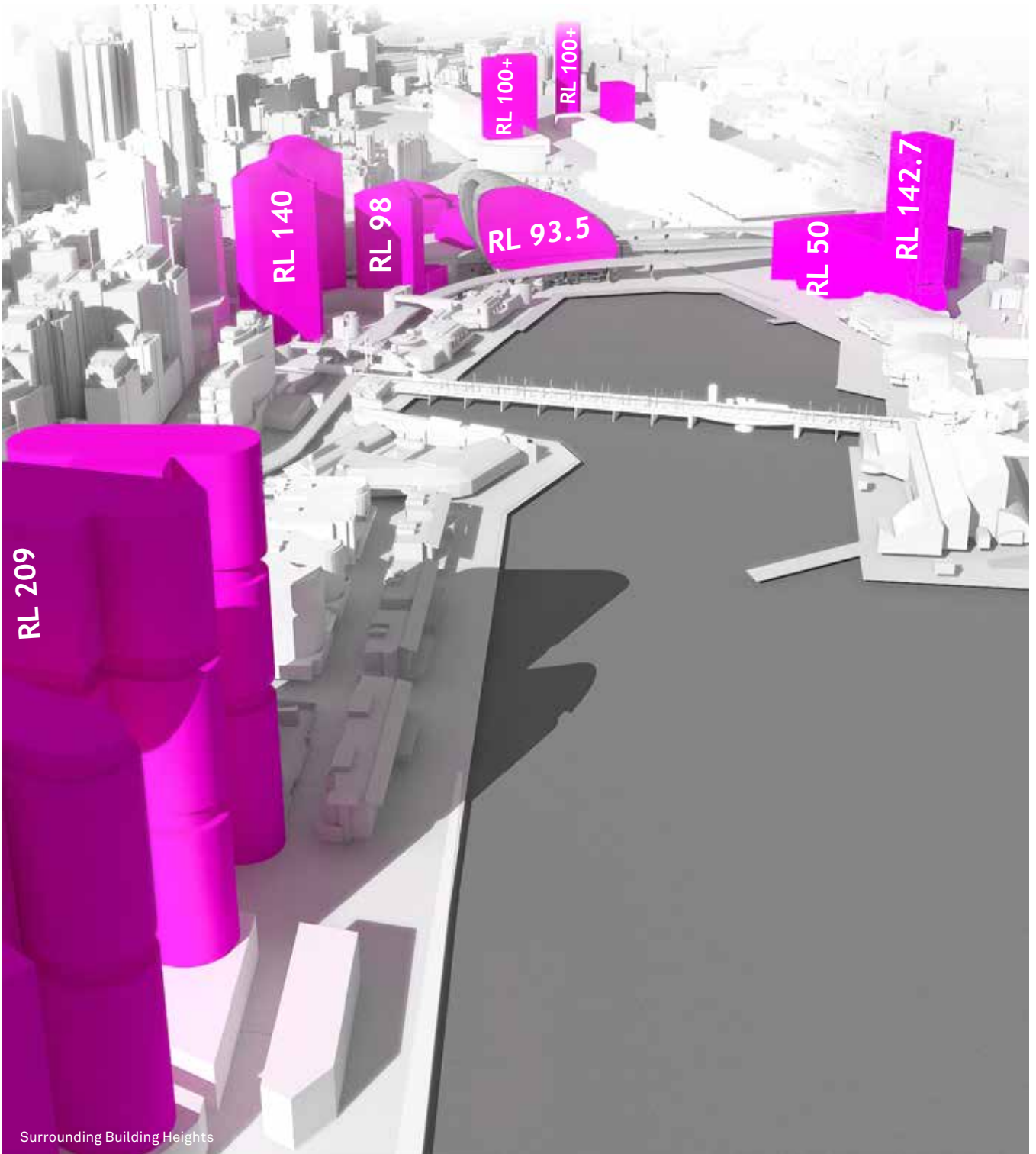
There are a number of significant towers in the vicinity which will have a strong spatial relationship with The Ribbon. The most important of these are the Darling Park Towers to the east and the proposed SICEEP Hotel Tower to the west.

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 adequately responds to the height and scale context given the 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.

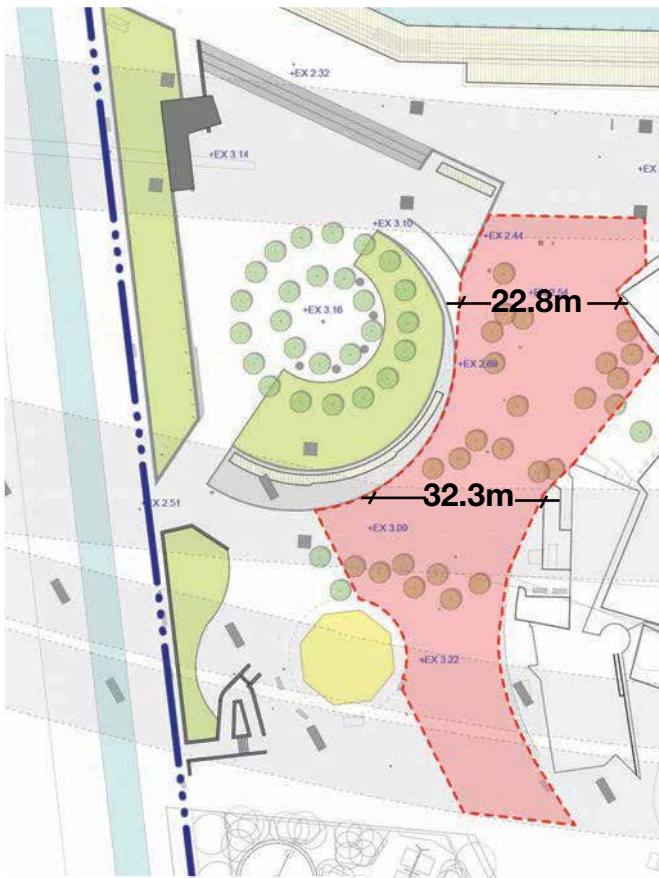
The success of Darling Quarter has transformed the harbourside precinct. Darling Quarter now stands out as a place adjacent to, but distinctly different from Cockle Bay. What was once a confusing extension of the Bay has broken away to become a highly successful piece of the City in its own right.

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 northwards 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.

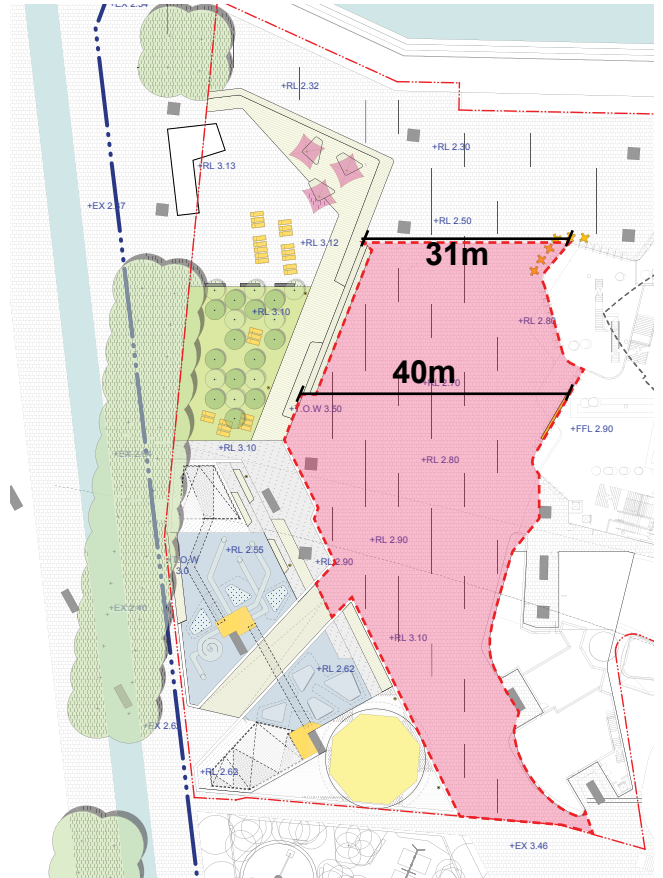
The newly established Darling Quarter
<http://www.aspect.net.au/wps/wcm/connect/web/w/news/news+darling+quarter+awarded>





Existing Public Domain
 Open Public Space

Approx 1900m²



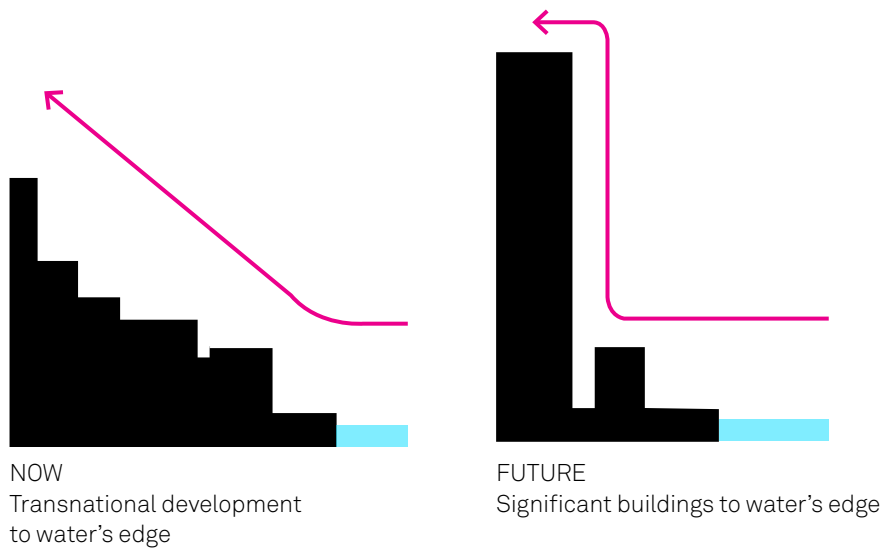
Proposed Public Domain
 Open Public Space

Approx 2330m²

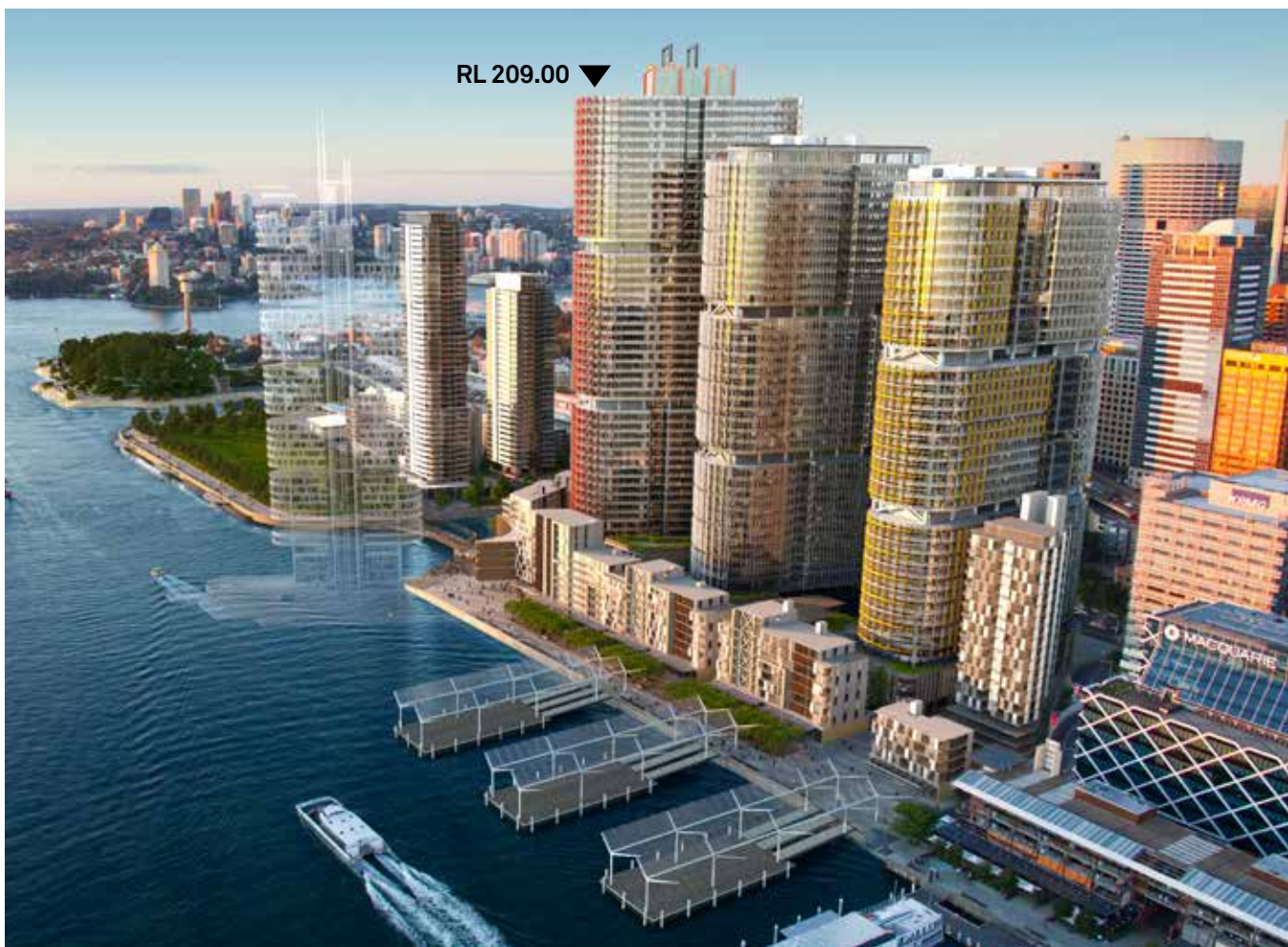


01 Urban design context

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 the 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

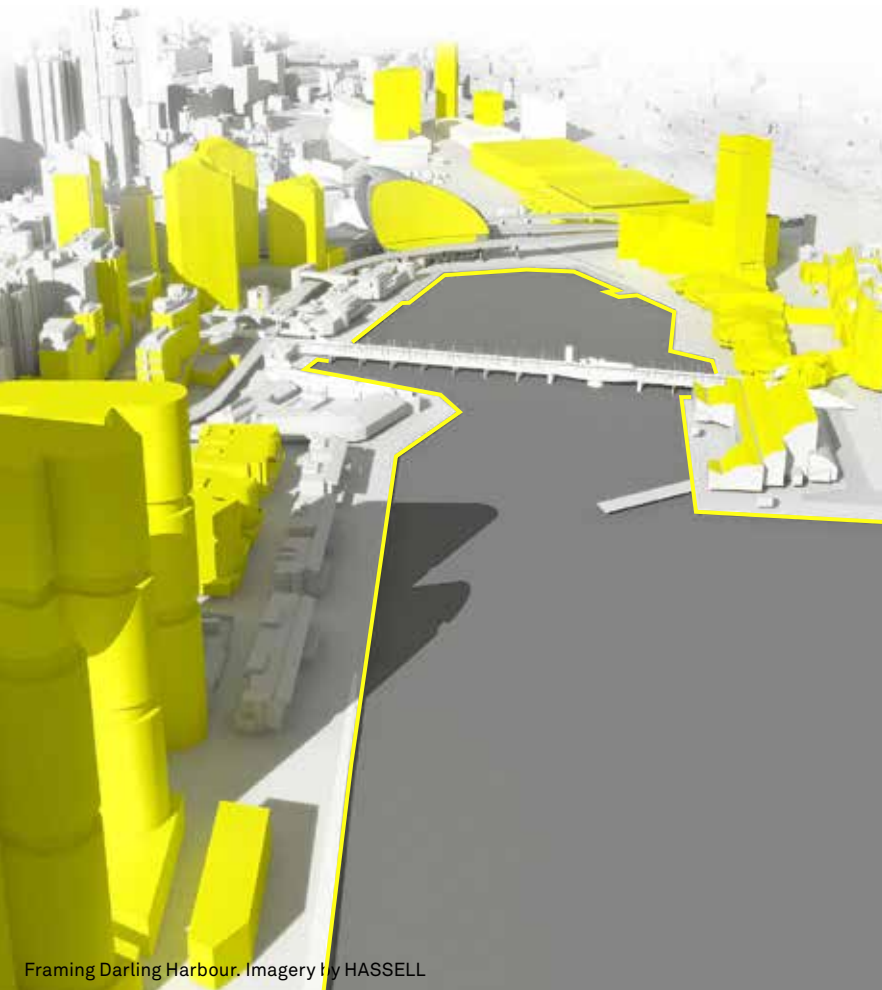
The Ribbon will have a significant frontage to the southern foreshore of Cockle Bay. This new building will create an important link between the city and the new development on the western edge of the Bay, together framing the southern end of Darling Harbour.

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 down plays 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.





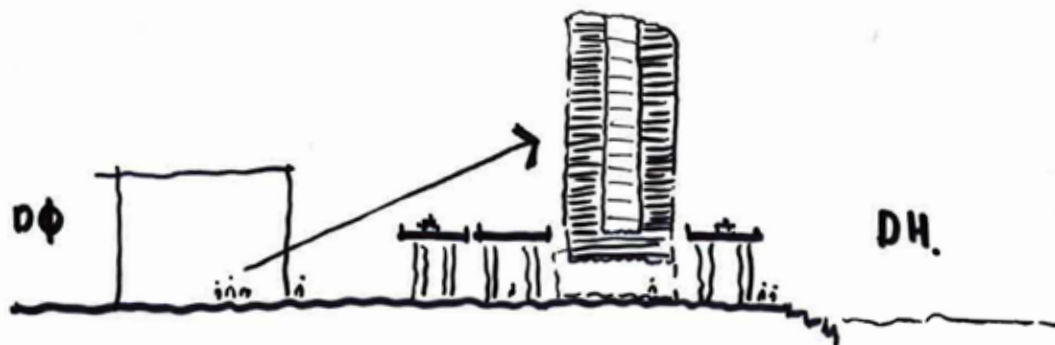
Framing Darling Harbour. Imagery by HASSELL



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 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).

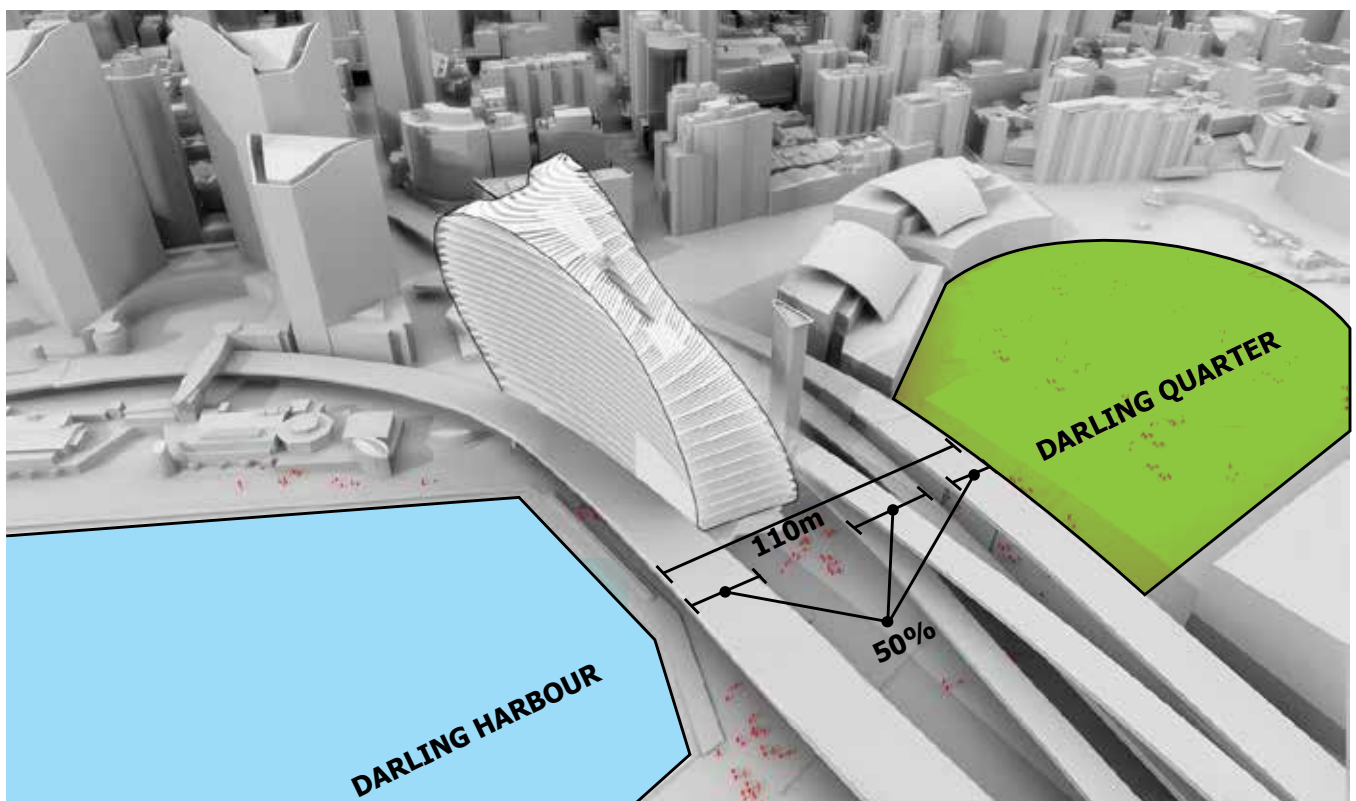
The overhead cover creates a disorienting environment underneath. The existing IMAX Theatre building is lost between the roadways and does not have a beneficial

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, a reference point 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 neighboring buildings, the “Valley Floor” concept and minimizes 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 have the same total 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 comfortably 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. The Commonwealth Bank Place, by FJMT architects and developer Lend Lease, was approved before the SICEEP was set to dramatically change Darling Harbour.

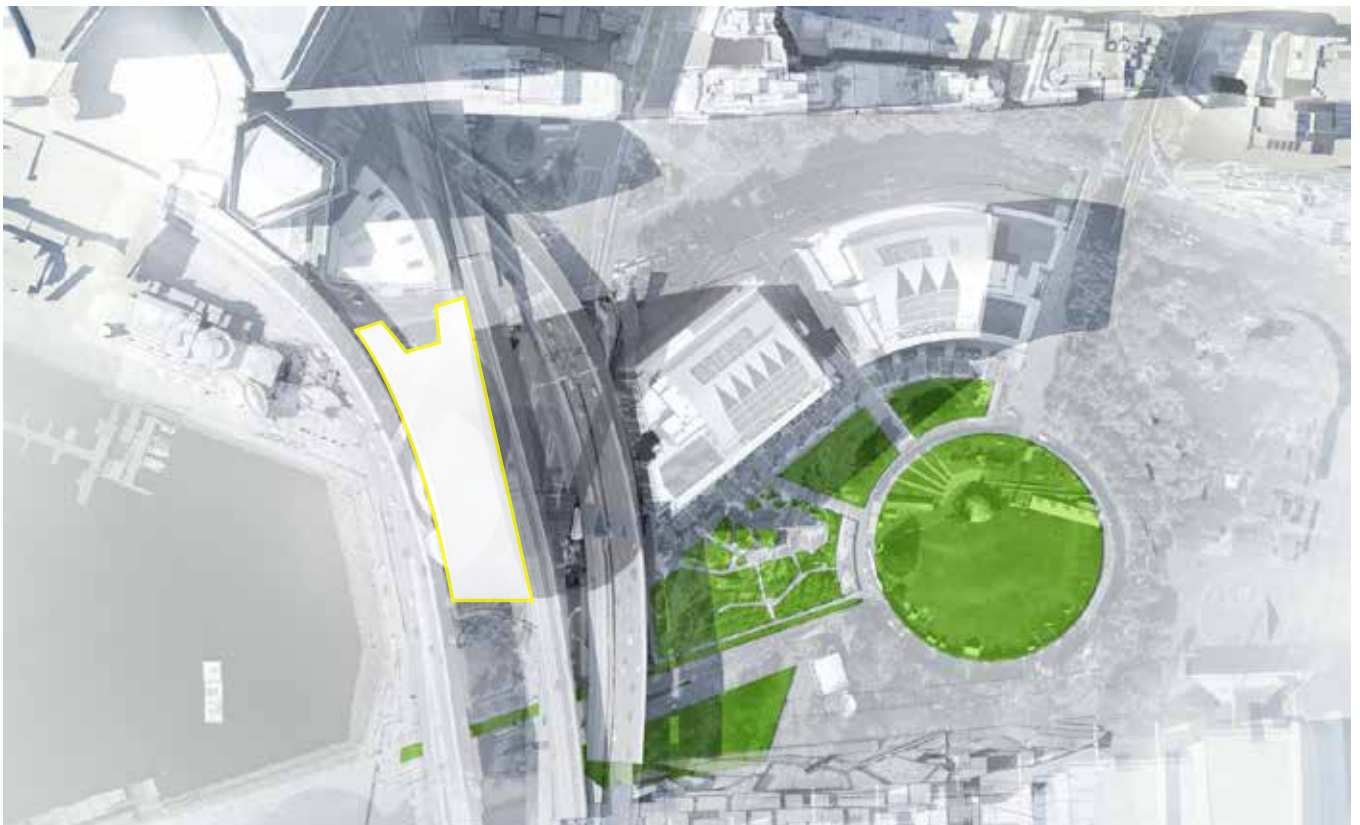
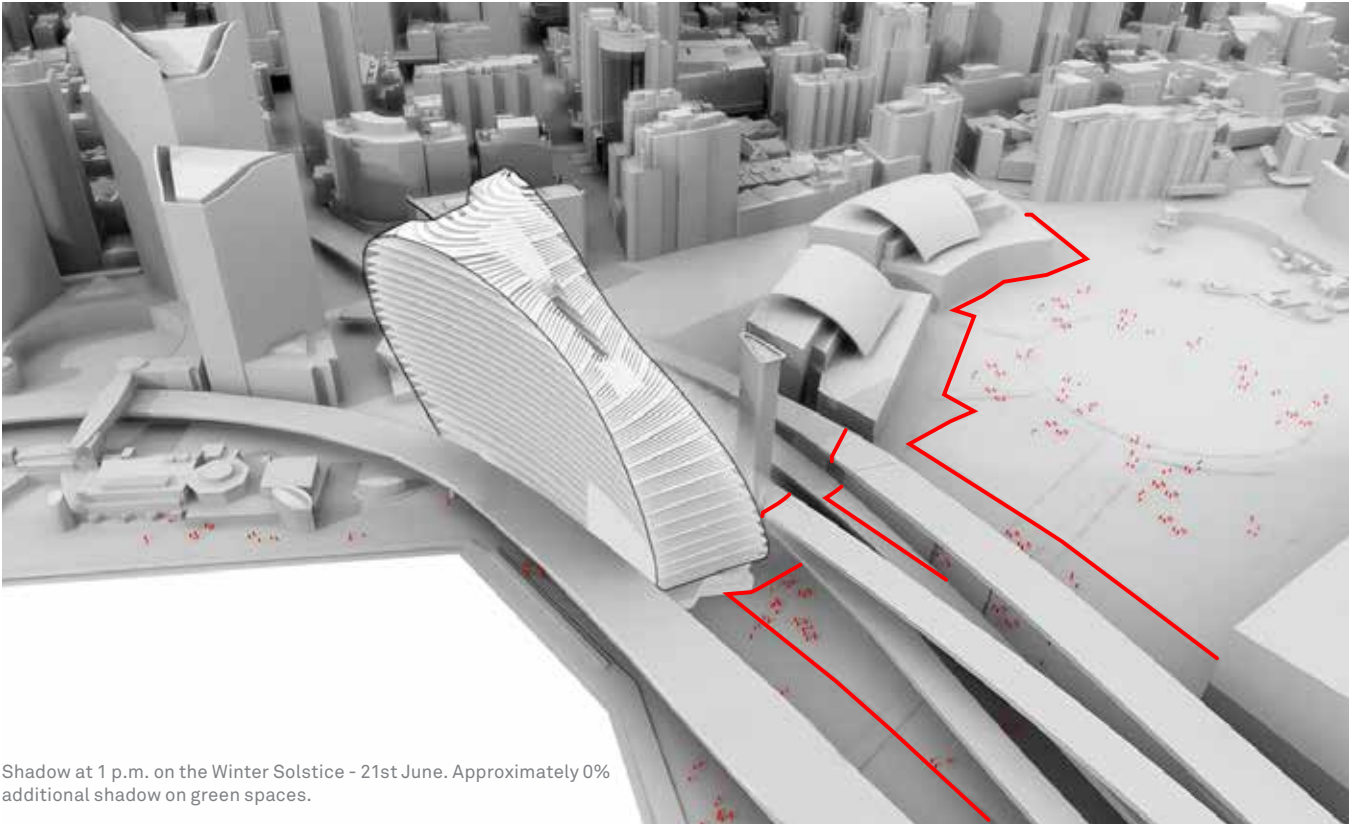
Our revised proposal reduces the overshadowing impact on the Childrens Park from 11% to only 3% from the approved DA scheme.

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, articulating the roadways and the water.

01 Urban design context

Massing explorations

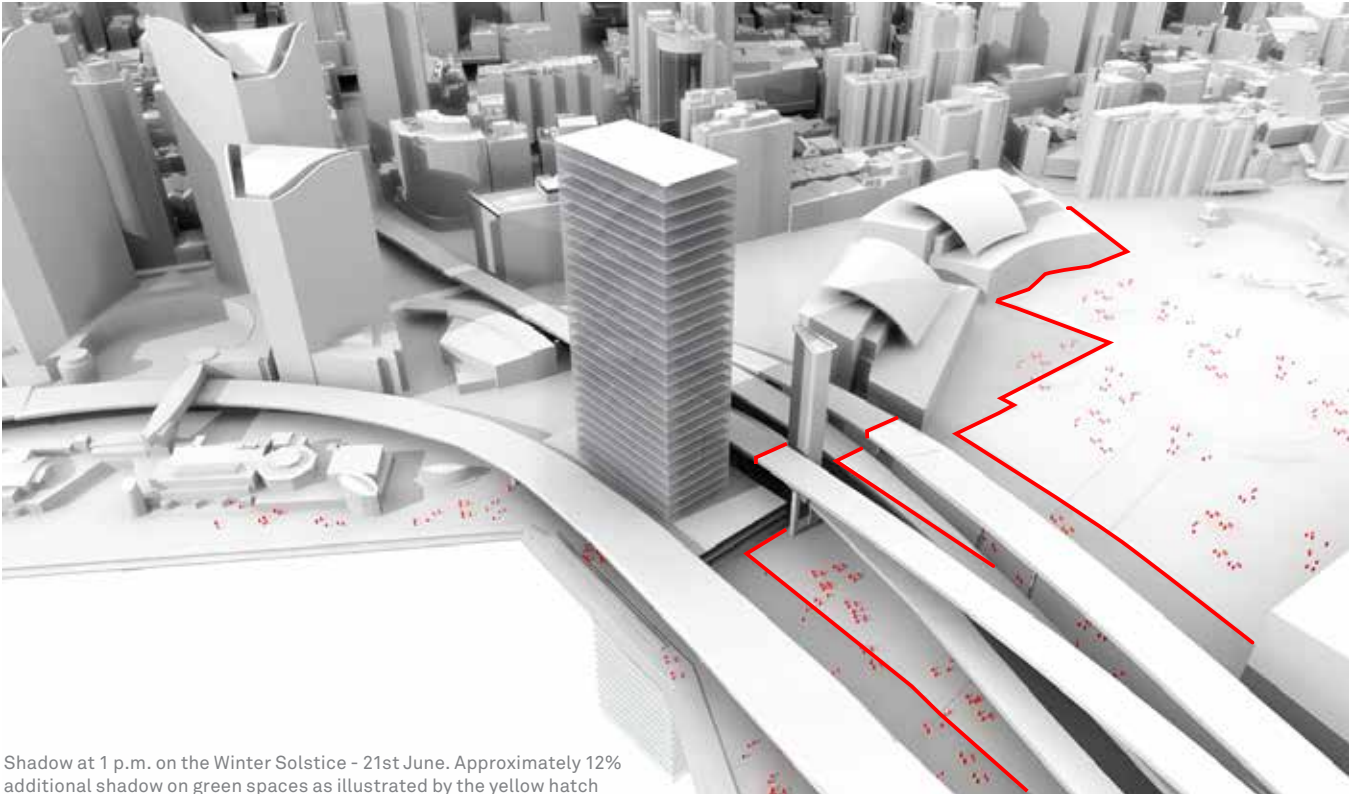


01 Urban design context

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.

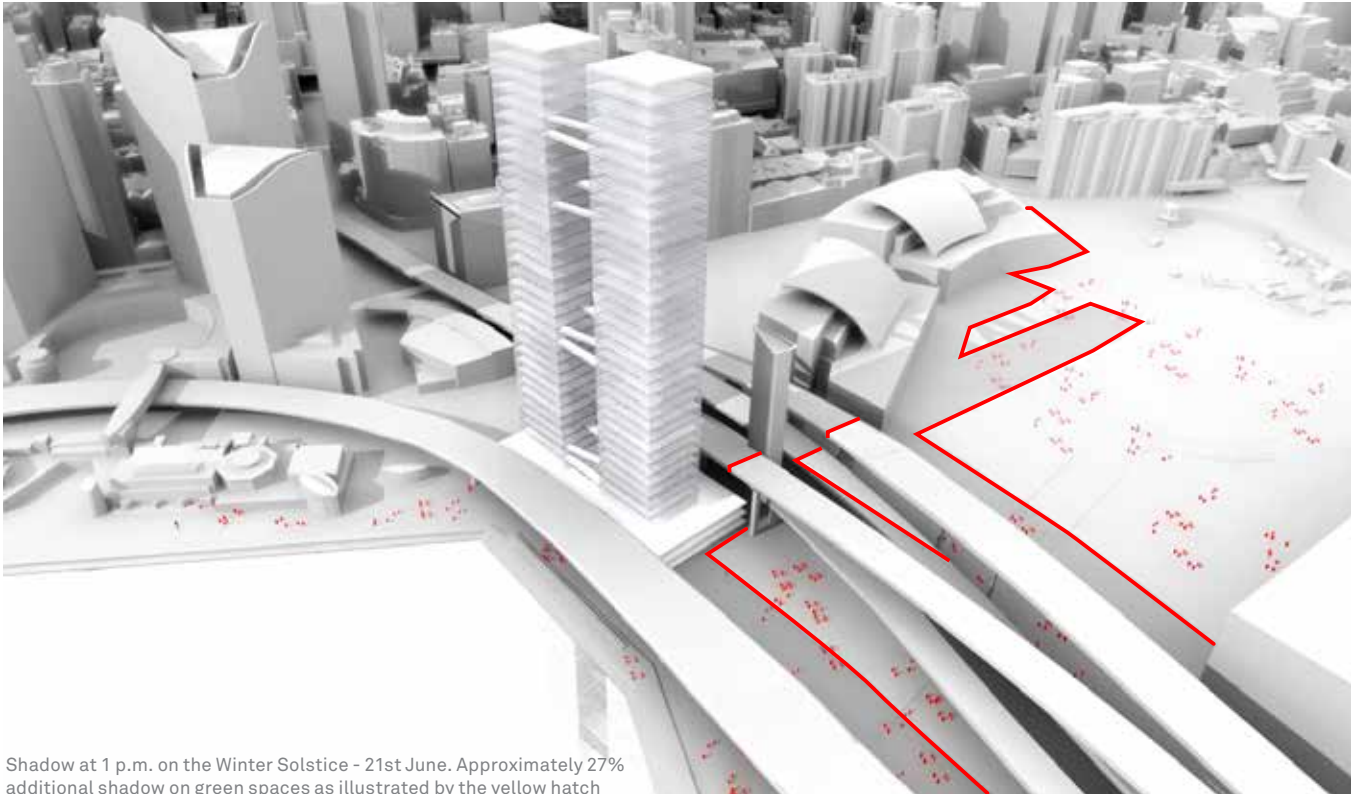


Shadow at 1 p.m. on the Winter Solstice - 21st June. Approximately 12% additional shadow on green spaces as illustrated by the yellow hatch

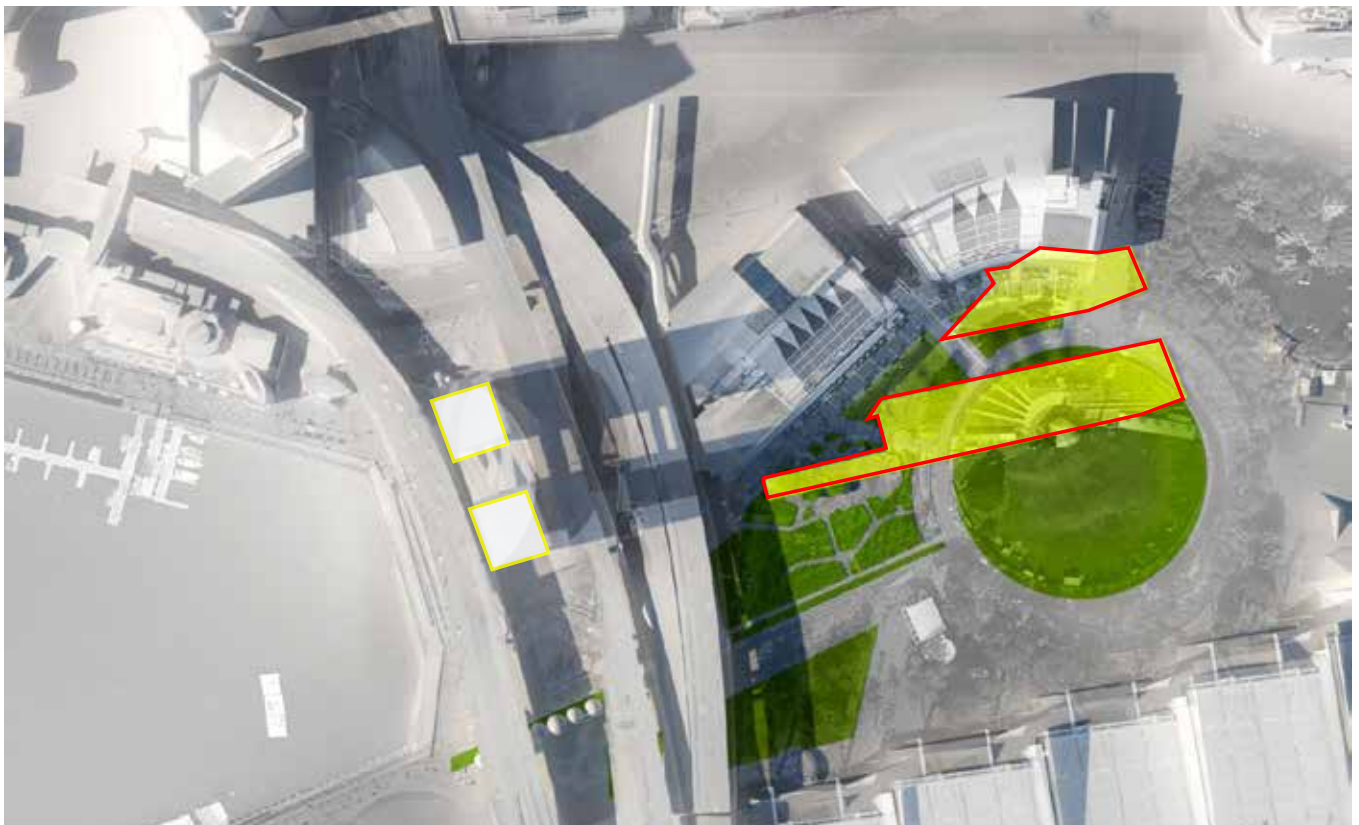


Massing Study 2

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

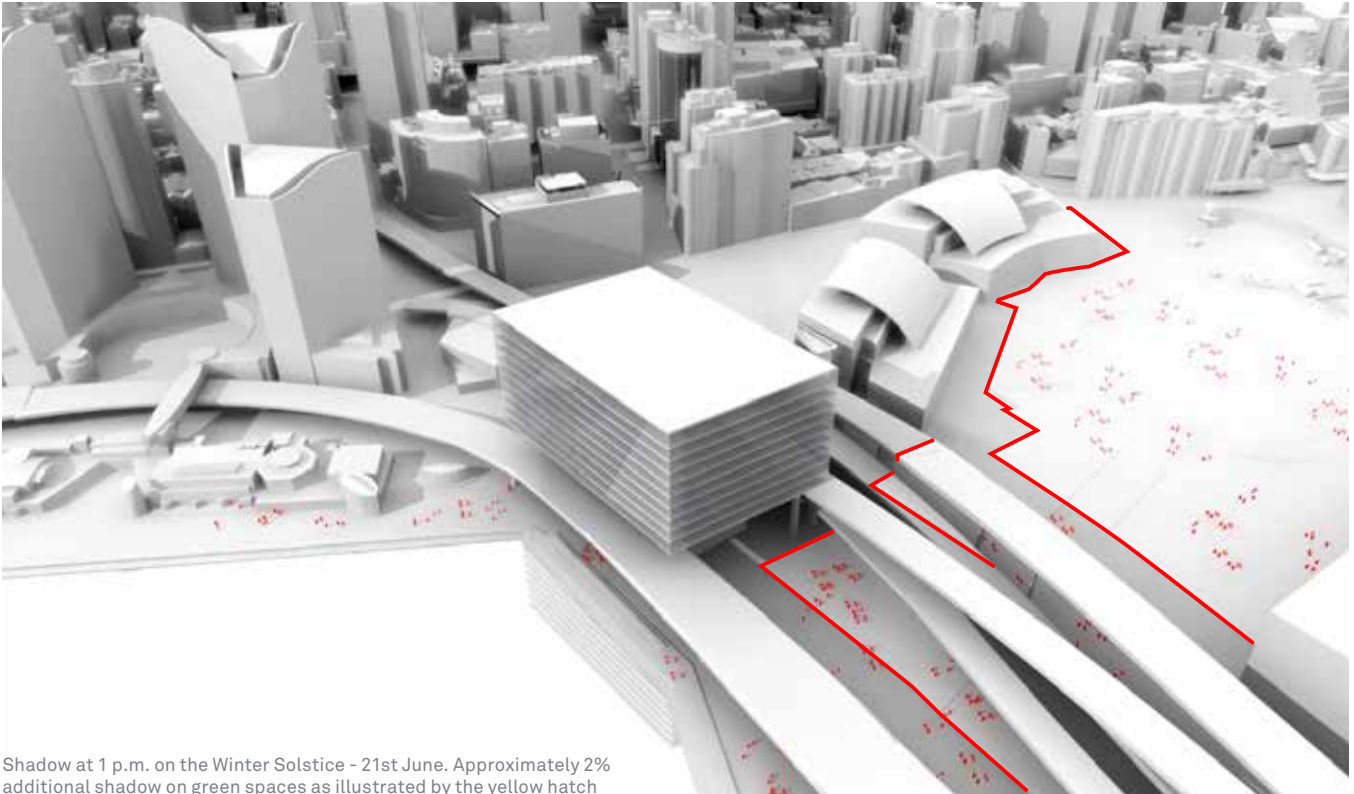


01 Urban design context

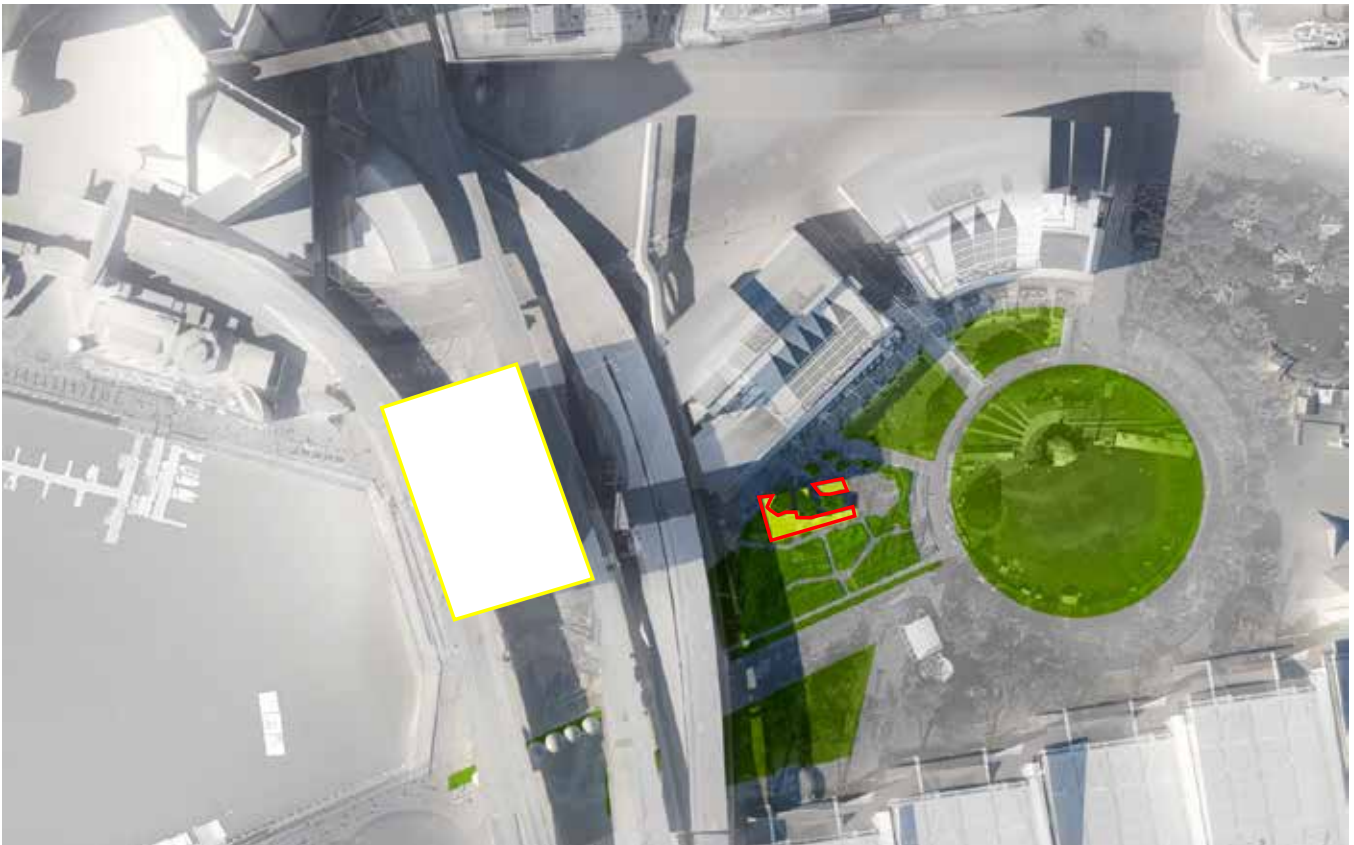
Massing explorations

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.

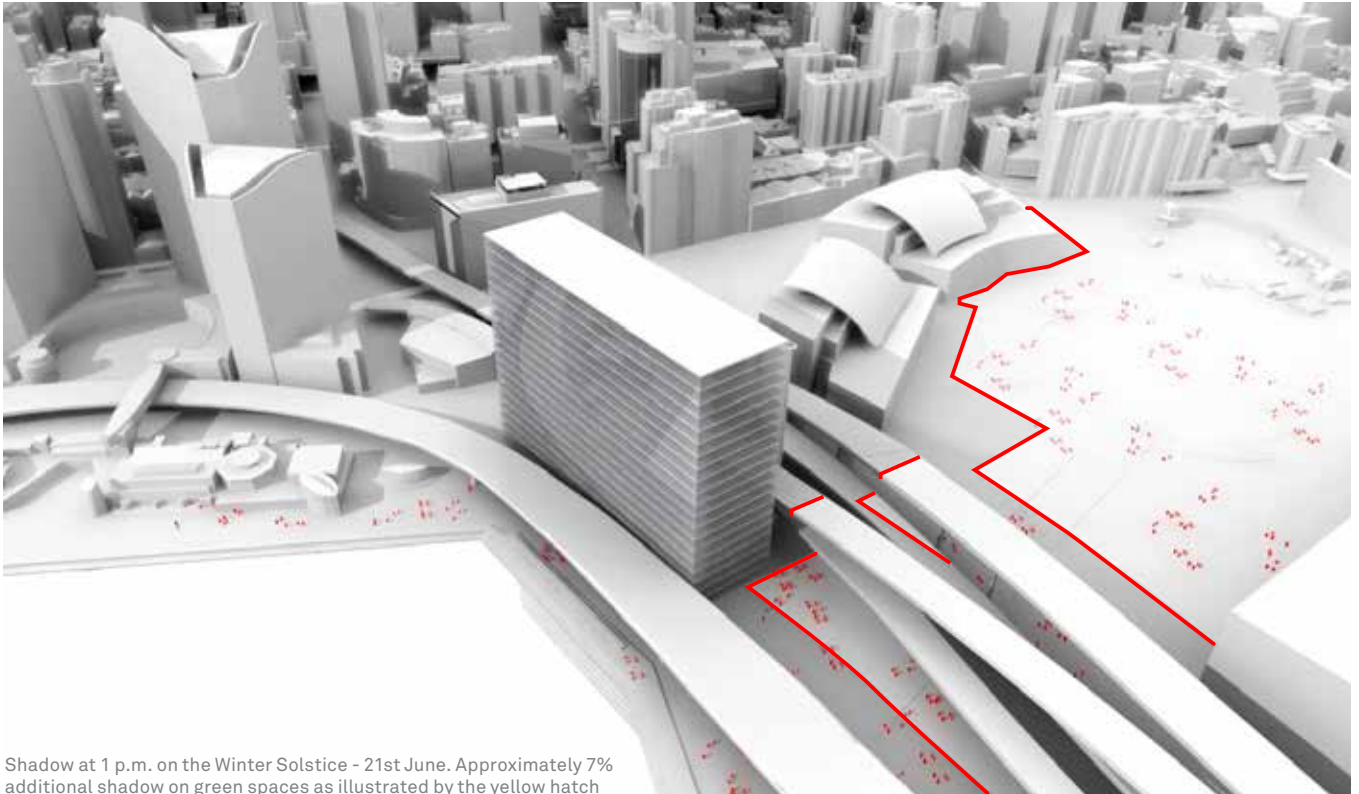


Shadow at 1 p.m. on the Winter Solstice - 21st June. Approximately 2% additional shadow on green spaces as illustrated by the yellow hatch



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

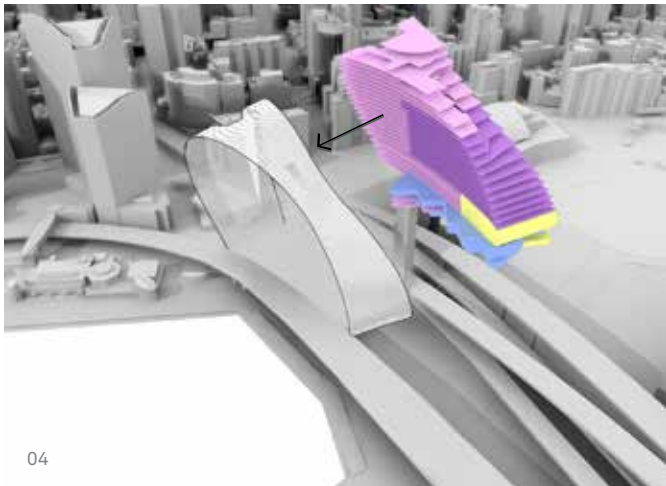
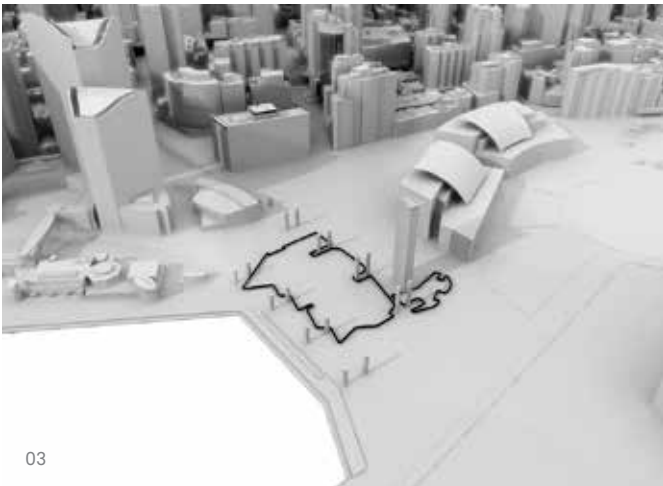
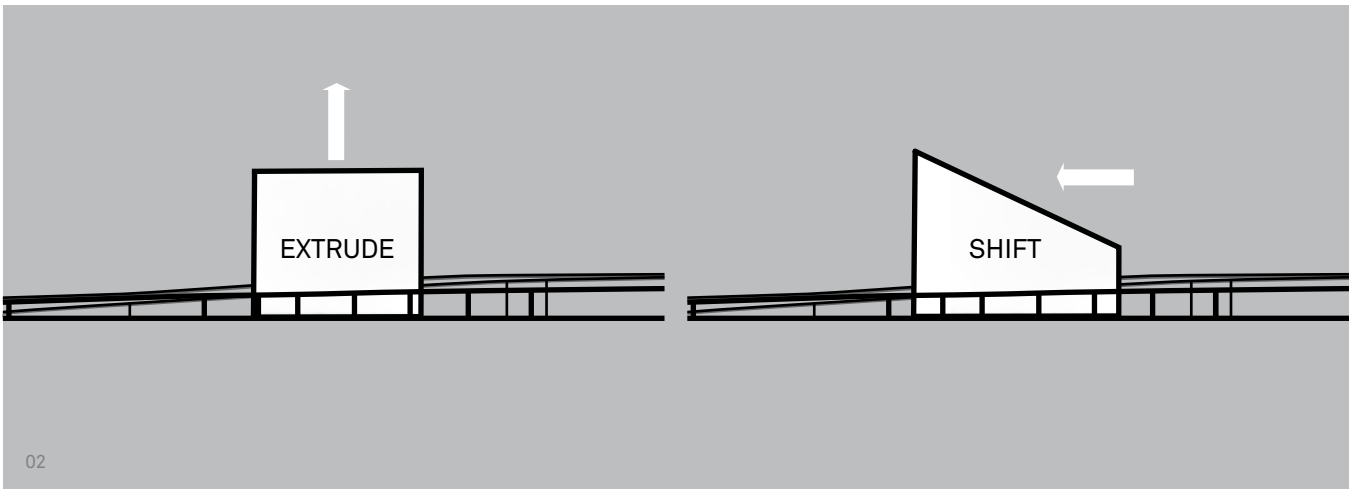


Design principles



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 turns 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 re-aligns 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 with horizontal extrusions of profiles carefully arranged to emphasise and amplify the building’s unique form.

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

01 Darling Harbour

02 Massing

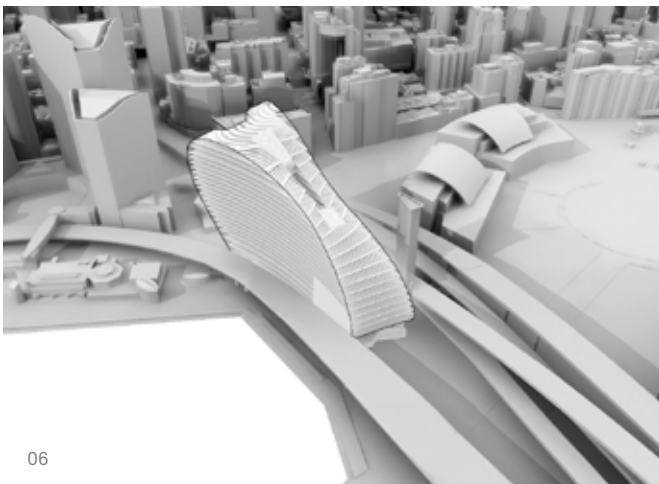
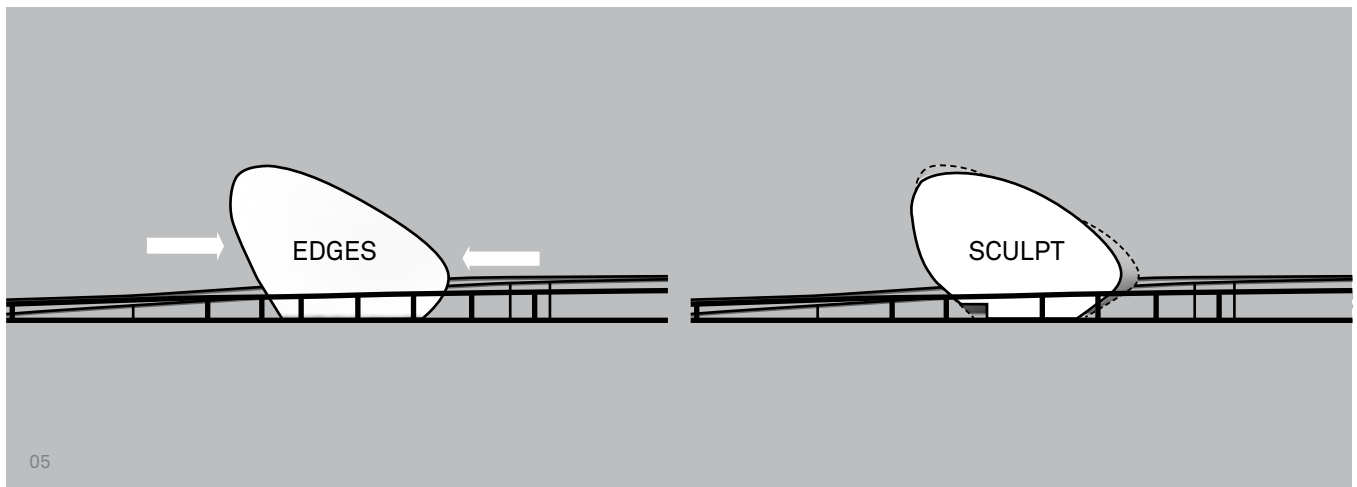
03 Lease Line

04 Retail, Entertainment, Hotel and Serviced Apartments

05 Moulded Form

06 The Ribbon Form

07 The Ribbon Form as seen from the Western Distributor

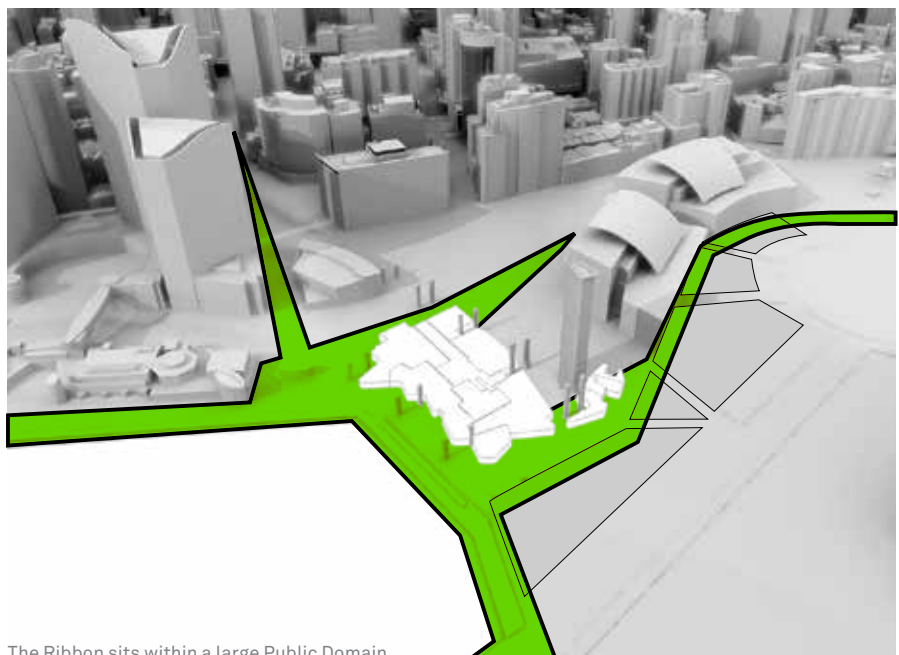


02 Design Principles

Public domain



Darling Harbour public domain.
Imagery by HASSELL



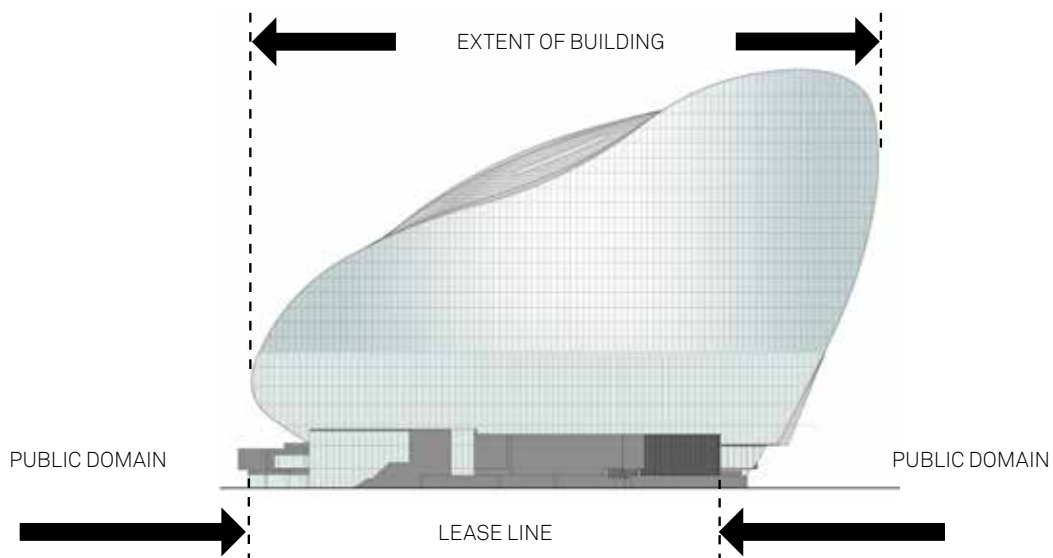
The Ribbon sits within a large Public Domain

02 Design Principles

Public domain

The Public Domain and Landscape component of the project comprises an increased quality, quantity and usability of approximately 10,600 sqm of public space including improved pedestrian, visual / vehicular connections and way-finding. The enhancement of public space encourages its use by people of all ages; 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 further enhances this strategy.

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



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 Road with pedestrian access possible for the entire northern and western elevation at GFL. The service access points to the building are located on the southern sides, where the building abuts the lower elevated freeway, away from public view.

The eastern access point is an opportunity to provide a rejuvenated major entry point into the Darling Harbour Precinct. A new shared plaza incorporating hard and soft landscape and a water feature becomes part of the Hotel arrival experience. Further enhancements like new road surfaces assist in the activation of this zone that currently is perceived as an unfriendly

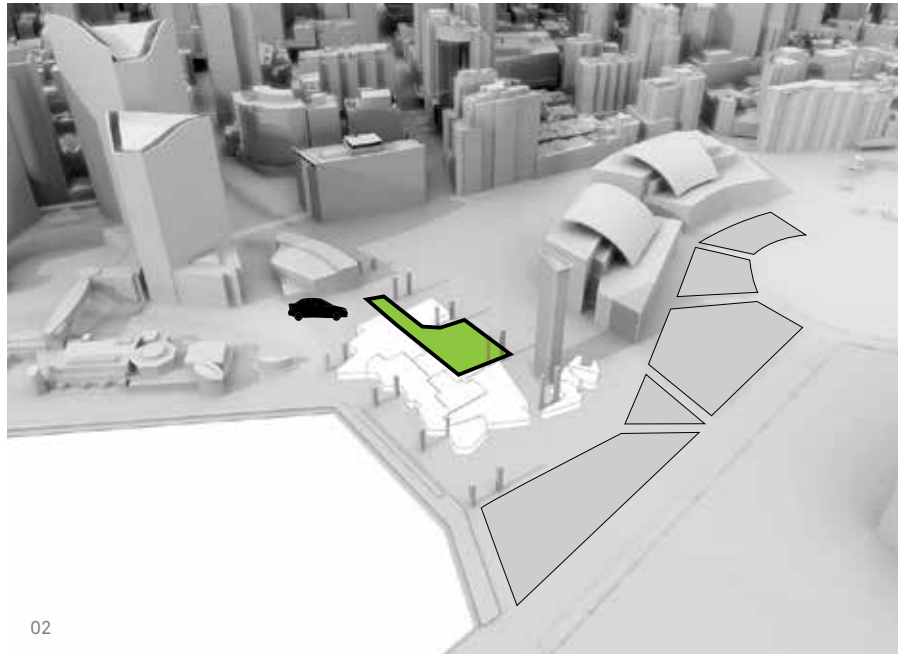
path into the precinct. The continuously active frontages at the ground floor level will also help wayfinding into the precinct from the City.

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

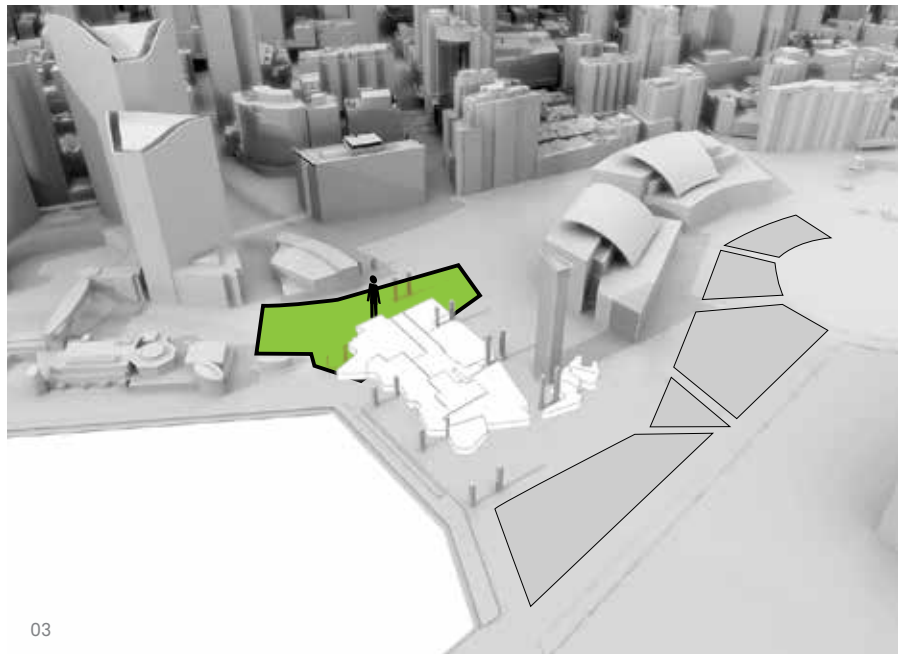
Vehicular access into the building for deliveries and car parking is provided on the south eastern side off Harbour Road.

The entire eastern zone also allows emergency services vehicles to access the Darling Harbour Foreshore via this plaza and from the existing service lane to the south of the proposed site (current McDonald's drive-thru).





02



03



04

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

- 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

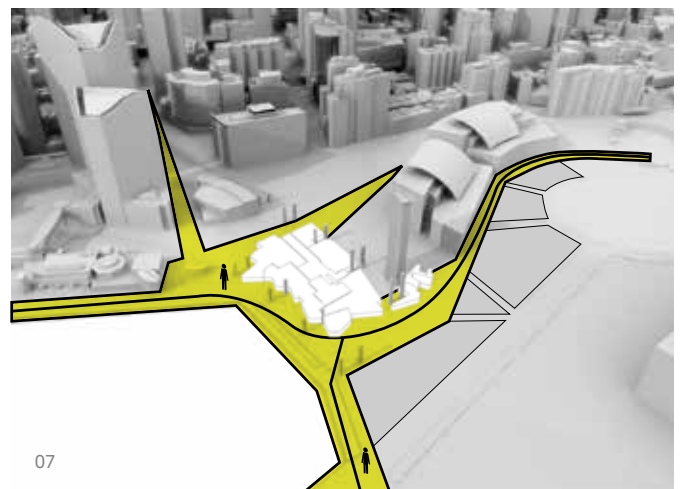
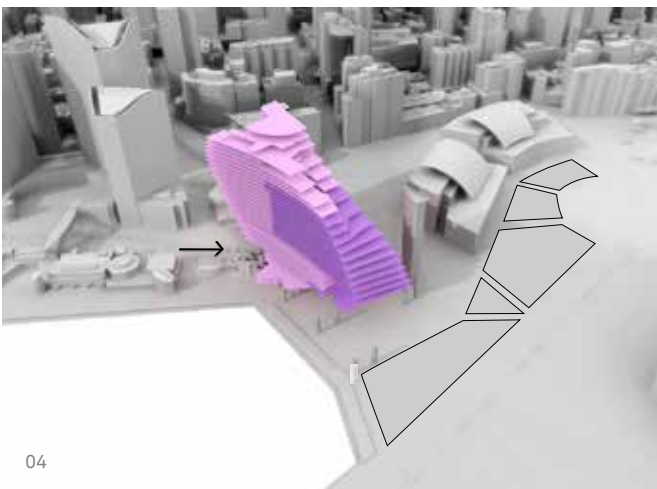
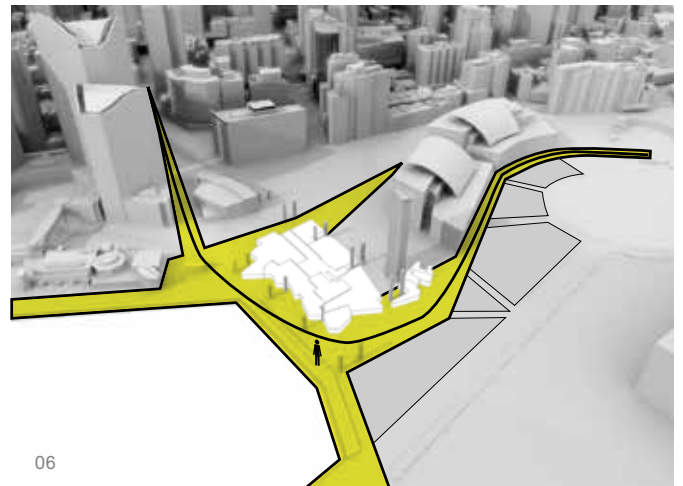
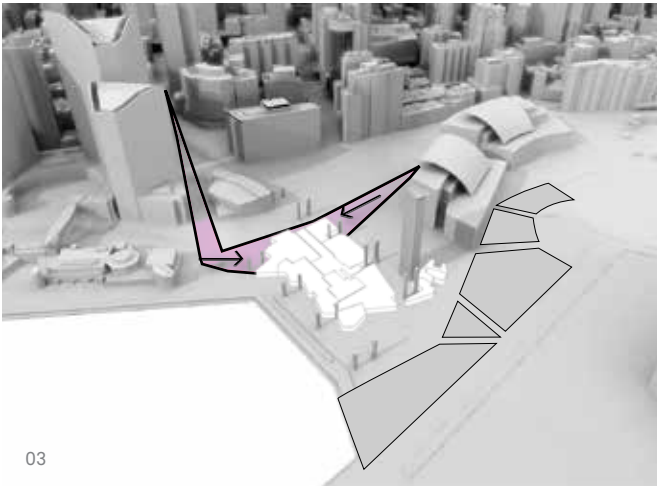
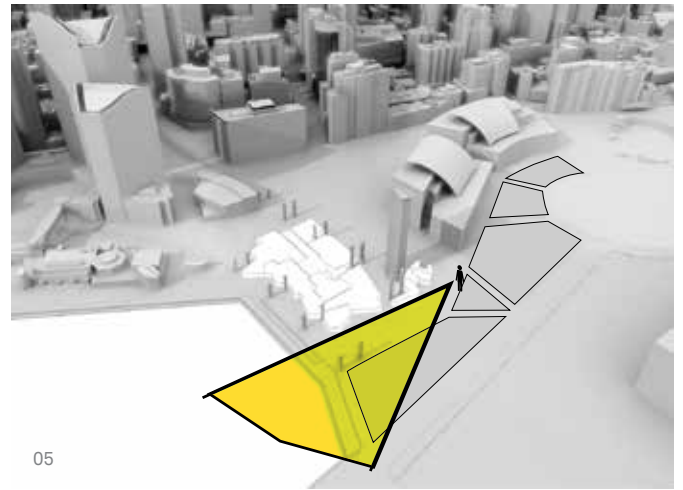
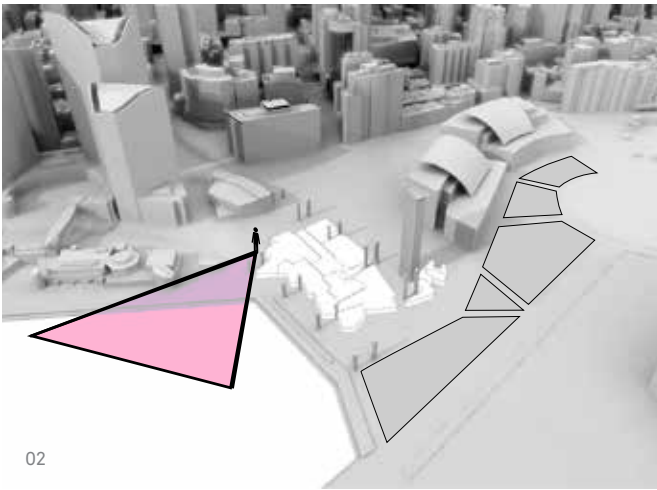
Important through site links and improved sight lines are proposed, designed to feed directly into the SICEEP development. Pedestrian flow from the south (Darling Quarter Pedestrian Boulevard and Retail Terrace) is opened up through the relocation of the palm grove and existing raised barriers and edges.

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 is flexible in its design. The current proposal delivers pedestrians to the edge of the urban stream, and will be further integrated to the SICEEP.

The new elevated bridge from Bathurst St as a major east west pedestrian connection to SICEEP is also 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 Hotel 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

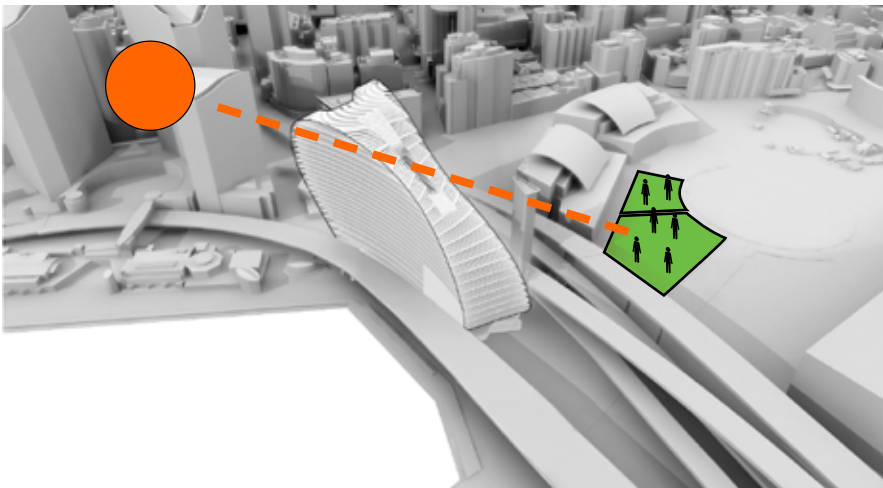
Above the elevated freeways, due to its northern aspect, the building benefits from exceptional solar penetration deep into each floor providing opportunities for highly energy efficient lighting, heating and cooling systems to be incorporated.

Our proposal has been reversed engineered to minimise the impact of the area south of the proposed development in consideration to among other things, the children's playground at Darling Quarter.

Extensive computer modelling has shown that 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 preexisting 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 limited negative impact

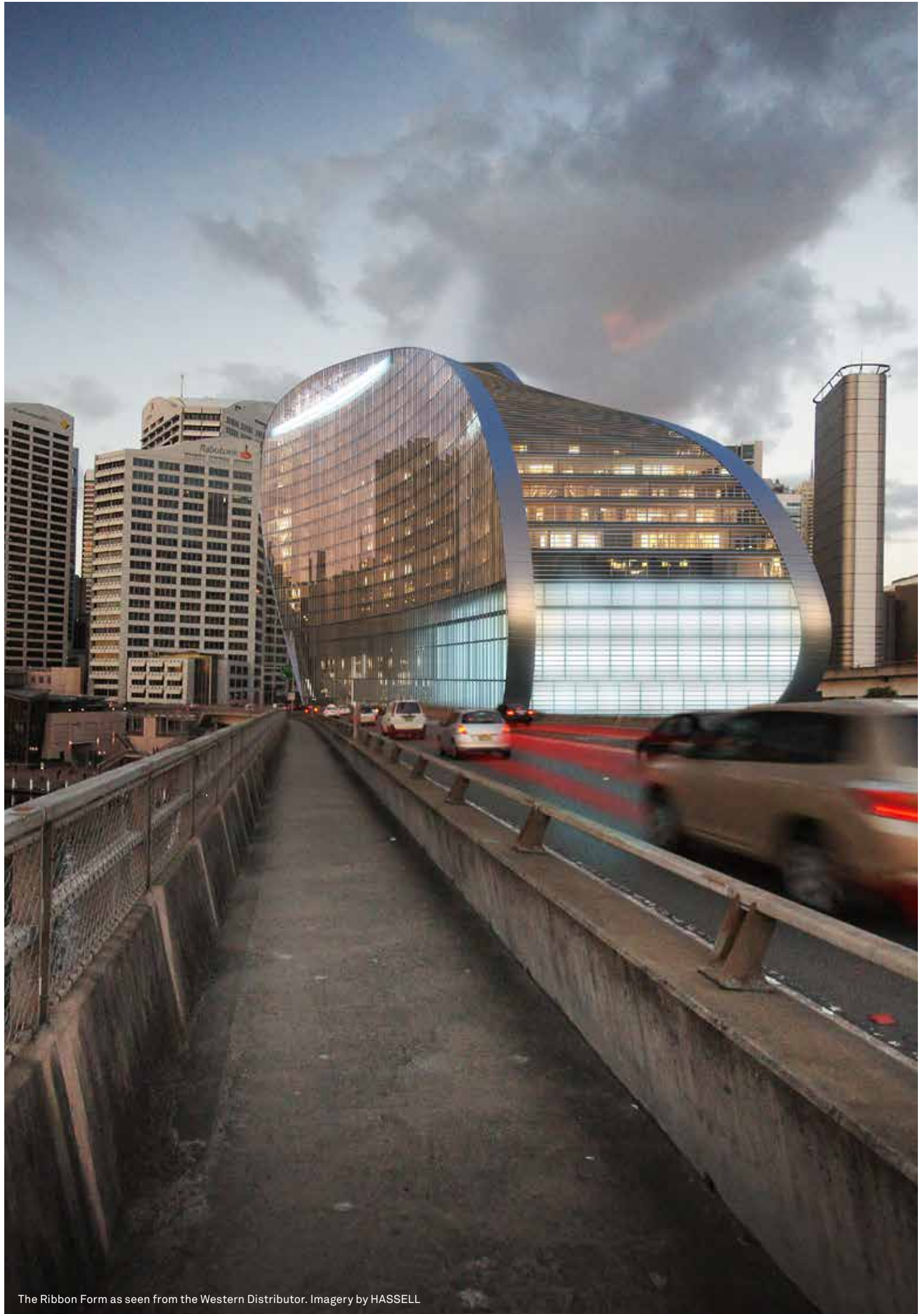


02 Design Principles

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 minimal access distance requirements between the building and the structures for inspection and maintenance purposes.





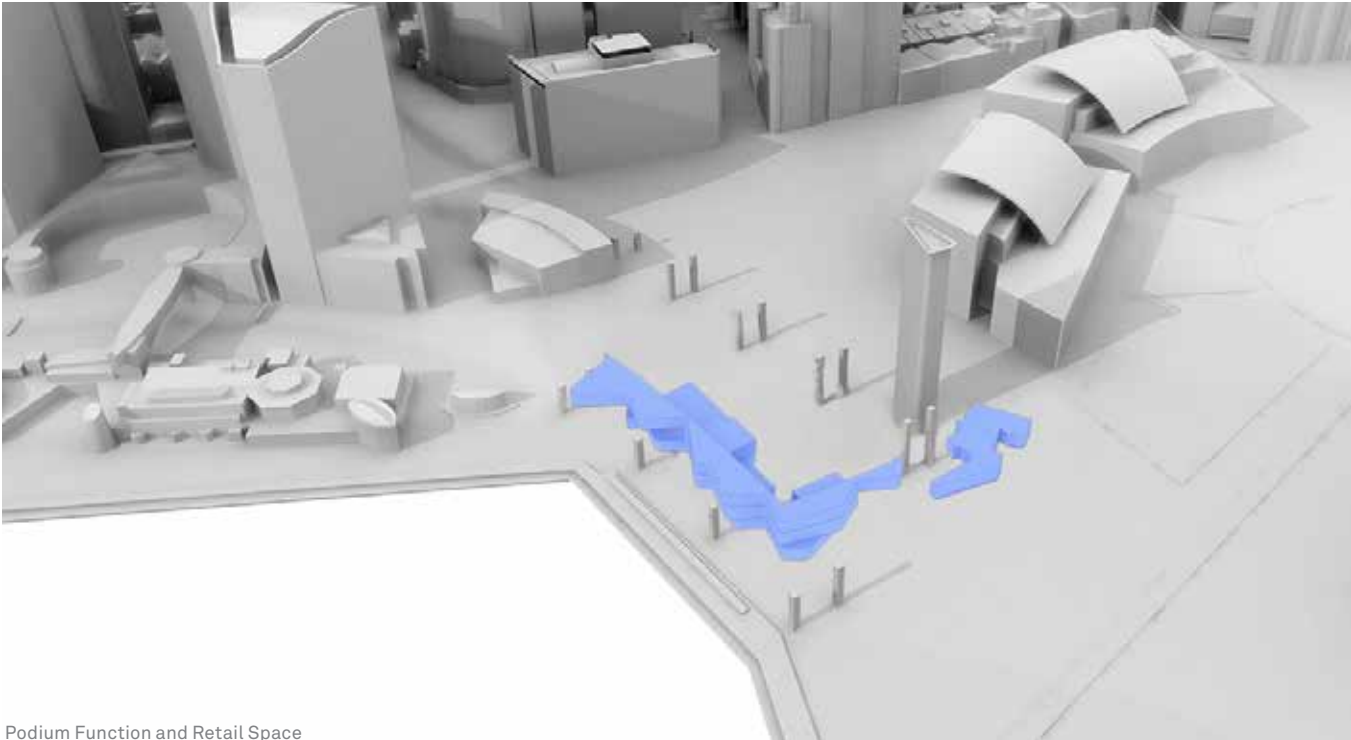
The Ribbon Form as seen from the Western Distributor. Imagery by HASSELL

Design elements

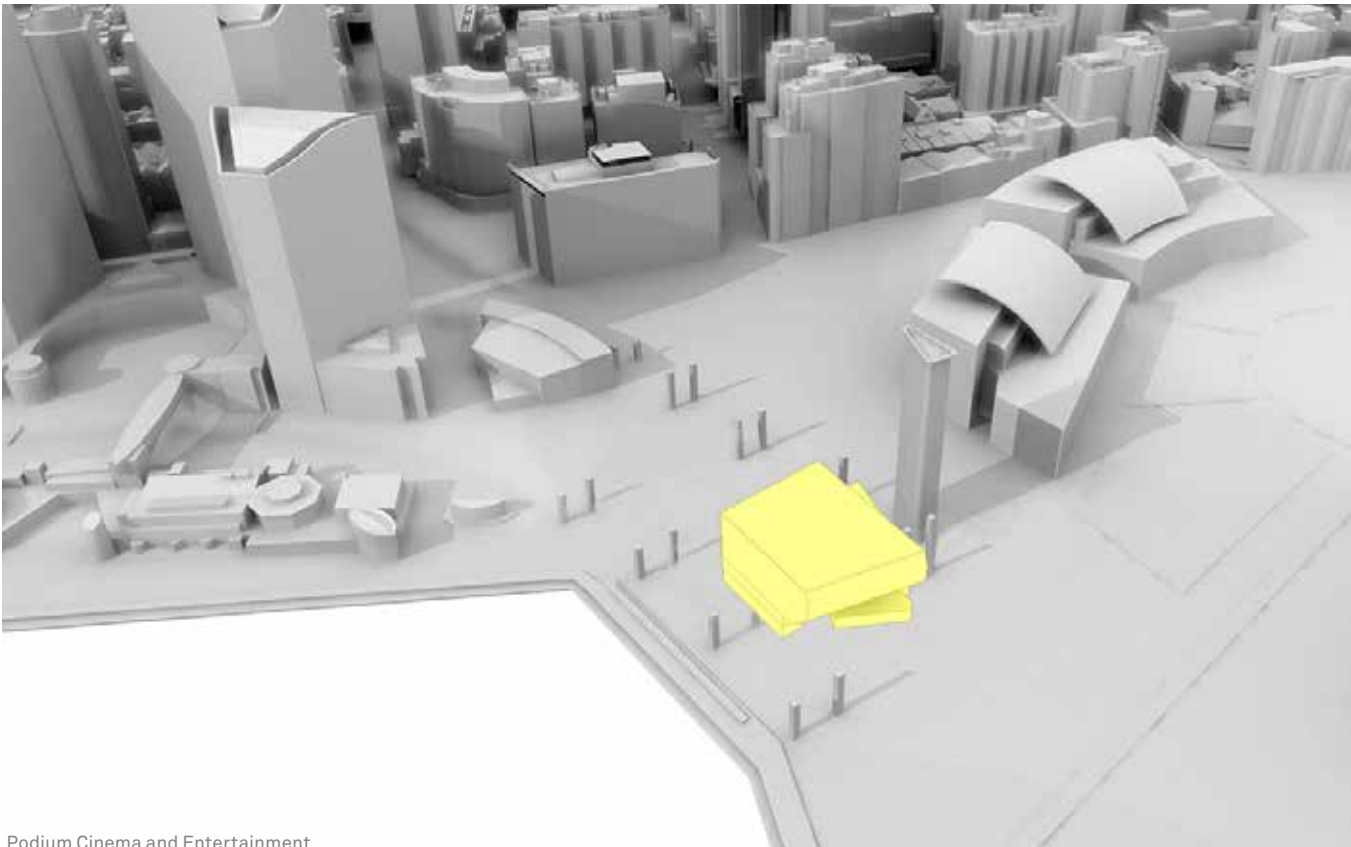


'The Ribbon' from Tumbalong Park.
Imagery by HASSELL

03



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 staff together with provision for parking 170 cars and additional bike parks for visitors.



Public domain view from Cockle Bay Wharf.
Imagery by HASSELL

03 Design elements

Hotel and Serviced Apartments

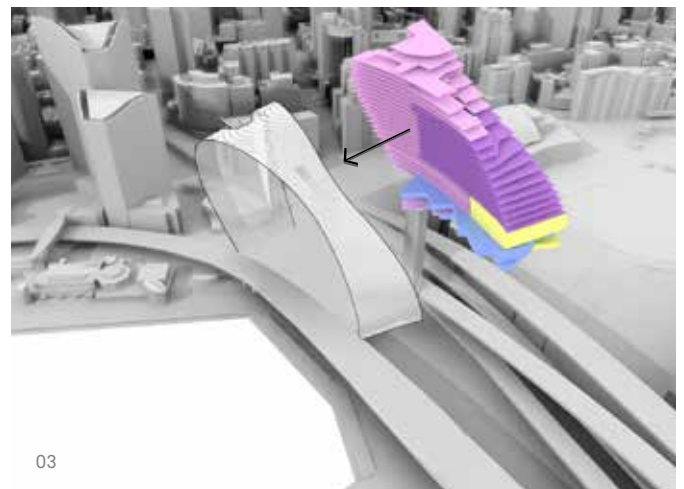
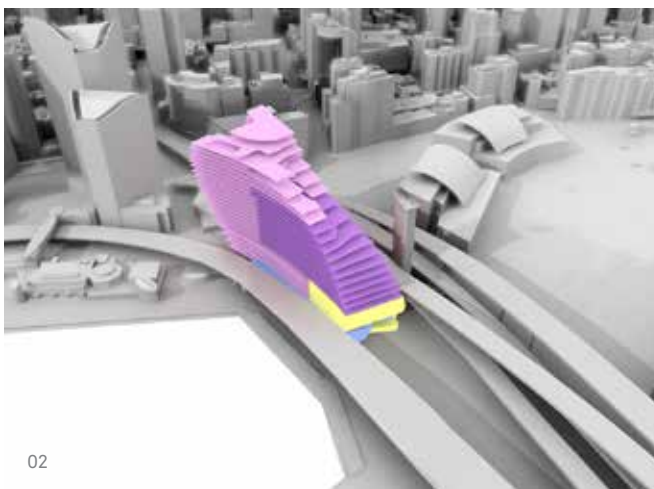
The five star Hotel and Serviced Apartments component of the project comprises 49,388sqm GFA over 23 levels; all accommodation floors have uninterrupted views of Sydney Harbour and the city. The floor plates range in area from 1,000 sqm to 3,200 sqm.

The building has been designed to achieve a GBCA 6 star rating and a 5 star plus NABERS energy and 3.5 star NABERS water rating and incorporates multiple best practice sustainable design initiatives including triple glazed closed cavity curtain wall facades, rainwater harvesting for reuse, responsibly sourced materials and healthy internal finishes. 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 and allowances for building services. 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 Proposed corner
Junior Suite looking
North over Darling
Harbour

02 Accommodation
levels

03 The Ribbon Form

04 The Ribbon from
Darling Harbour at
night

03 Design elements

Building uses

The proposal comprises 54,877 sqm GFA including 17 levels of 5 star hotel accommodation and serviced apartments, 1,799 sqm GFA over 2 levels of retail and 3,217 sqm IMAX Cinema. The hotel function facilities include a 600sqm Ballroom and over 400 sqm of meeting spaces under different configurations. Guest Facilities include gyms, swimming pools and food and beverage options. There is a provision for 170 car parking bays in a fully automated car stacker system. End of Trip Facilities provided include bike parking spaces,

changing rooms, dry room and storage areas. The building component of the development has a ground floor footprint area of 4,681 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 are also proposed to be located here.

The entry for the Hotel and Serviced Apartments and its function facilities is located on the eastern side adjacent the proposed new porte-cochere and forecourt area off Harbour Road. The southern side of the development, adjacent and under the elevated roads, away from public view, contains all the back of house facilities, building services plant areas, car and bike parking, loading, storage and security areas. Further to the south, partly under the elevated roads, we propose a standalone building containing additional retail tenancy spaces, workshop space for SHFA and new public amenities.



'The Ribbon' from Tumbalong Park
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. Located to the north east is main hotel lobby and lounge including lift access; the serviced apartments entry is a discrete path from the main lobby towards the west. The building services plant and car parking to the south and south east adjacent and beneath the elevated roadway.

Podium Level 2

Comprises almost a full floor dedicated to back of the house areas and building services with the car stacker to the south and south east adjacent and beneath the elevated roadway. A serviced apartments dedicated gym is on the north facade off the west core.

Podium Level 3

This level includes the SPA on the south east corner and Speciality Restaurant (All

day dining) along the north elevation. The main hotel kitchen and other support and building facilities and services are located to the southern side adjacent the elevated roadway.

Podium Level 4

Comprises the main function facilities including the ballroom and several meeting rooms, a business centre and the hotel's executive offices. Back of the house areas and building services are to located on the southern side adjacent the elevated roadway.

Levels 5 – 17

Accommodation floors with both hotel rooms on the eastern side and serviced apartments on the western side.

Level 18

The independent serviced apartments pool and related facilities are located on the south west, the rest of the floor is occupied by hotel accommodation.

Levels 19 – 21

Hotel accommodation including executive floors.

Level 22

The hotel pool and sky deck are located on the north side on this floor together with the pool bar lounge and associated facilities; the south portion of the floor contains main building services plant.

Level 23

This is the top floor accessible for guests, it contains the Speciality Restaurant overlooking the pool area and extensive panoramic city views; the south portion of the floor contains main building services plant.

Roof Plant

Building services 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 accomodation 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 hotel 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.



Retail frontage to Darling Harbour.
Imagery by HASSELL

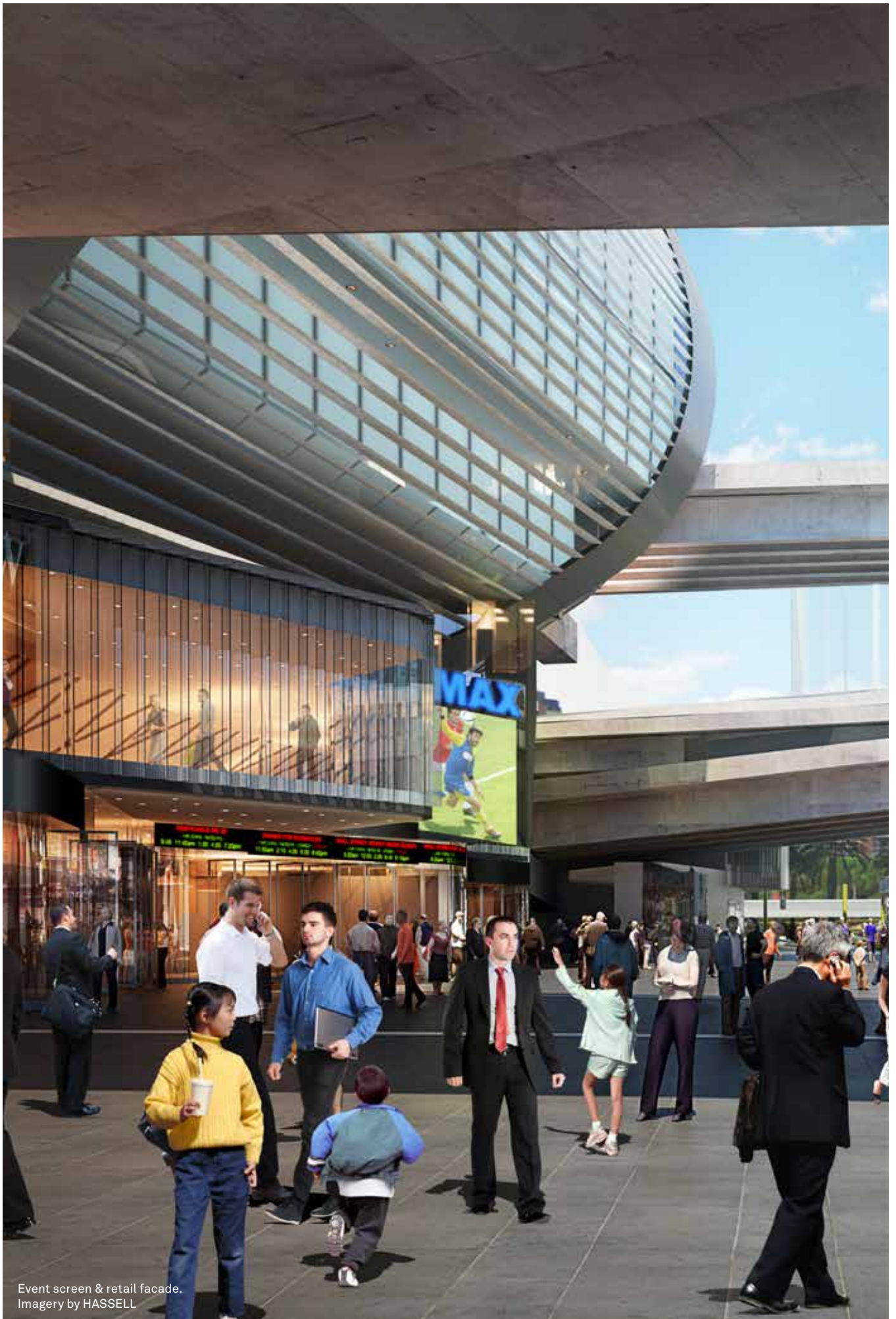
03 Design elements

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 proposed materials for the Ribbon (East and West facades and roof) are a combination of louvers and panels in a metallic silver finish highlighting the building's unique geometry. An exceptional opportunity presents itself to achieve a constant -but ever changing facade that looks different every time you come across it, day or night.

The main façades -north and south elevations- are proposed to be a high performance triple glazed curtain wall system. The system will achieve high level of visible light transparency with low reflectivity. The façade framing will be light grey aluminium.

The façade to the podium levels on the north, west and east will be a combination of fixed and operable aluminium louvres, giving the form texture, and capturing the light from different angles. This 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 Facilities fuse with the façade treatment of the hotel and serviced apartments.

Ground floor retail and hotel lobby facades will be clear glass.



CW:01

High performance triple glazed curtain wall facade
Location: Main building facade (North/South/East Cut-Out)



GL:01

High performance frameless glazing
Location: Ground level entry facade - Function, Hotel, Serviced Apartments, IMAX



FS:01:A/B/C

A: High performance modular metal panel system
B: Profiled horizontal brise solei system
C: High performance glazed system on aluminium framing
Location: Main Building Facade (West)



CW:02

High performance curtain wall facade with integrated brise solei system
Location: Main Building Facade (East Ribbon)



GL:02

High performance glazing with vertical screen
Location: Retail facade



CL:01

Powdercoated Aluminium louvers and panels
Colour: Silver
Location: Ribbon (East/West/Roof)



LV:01

Powdercoated Louvres
Colour: Charcoal
Location: Plant areas

03 Design elements

External signage

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

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



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