

Cockle Bay Wharf

State Significant Development Assessment (SSD 7684)



Abbreviation	Definition
ADG	Apartment Design Guide
Applicant	DPT Operator Pty Ltd and DPPT Operator Pty Ltd, or anyone else entitled to act on this consent
CIV	Capital investment value
Code of Practice	City of Sydney Construction Hours/Noise within the Central Business District Code of Practice 1992
Concept proposal	Concept proposal for the redevelopment of the site (SSD 7684)
Commission	Independent Planning Commission
Consent	Development Consent
Council	City of Sydney Council
CPTMP	Construction Pedestrian and Traffic Management Plan
Department	Department of Planning and Environment
DIP	Design Integrity Panel
DRP	Design Review Panel
EIS	Environmental Impact Statement
EP&A Act	Environmental Planning and Assessment Act 1979
EP&A Regulation	Environmental Planning and Assessment Regulation 2000
EPA	Environment Protection Authority
EPI	Environmental Planning Instrument
ESD	Ecologically Sustainable Development
FEAR	Future Environmental Assessment Requirement
GANSW	Government Architect NSW
GFA	Gross floor area
ICNG	Interim Construction Noise Guideline 2009
LEP	Local Environmental Plan
Minister	Minister for Planning
OLS	Obstacle Limitation Surface
Planning Secretary	Secretary of the Department of Planning and Environment
RtS	Response to Submissions
SEARs	Secretary's Environmental Assessment Requirements
SDCP 2012	City of Sydney Development Control Plan 2012
SEPP	State Environmental Planning Policy
SRD SEPP	State Environmental Planning Policy (State and Regional Development) 2011
SSD	State Significant Development

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Cover photo

Perspective view east, across Darling Harbour, towards an indicative future Cockle Bay Wharf development (Source: Applicant's RtS)

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This report provides an assessment of a State significant development (SSD) application for the concept of a commercial building envelope at Cockle Bay Wharf, 241-249 Wheat Road, Darling Harbour and Stage 1 early works for demolition of existing buildings and structures (SSD 7684) (the Proposal).

The proposal now seeks approval for:

- demolition of existing buildings, structures and site improvements
- a building envelope providing a podium and tower form with a maximum height of RL 183 (reduced from an original proposal of RL 235)
- building controls and design guidelines to guide the future development within the building envelope
- maximum gross floor area (GFA) of 89,000 square metres (m²) commercial floorspace, comprising 75,000 m² office and 14,000 m² retail GFA
- between 5,500 m² and 12,000 m² of new publicly accessible open space.

The Applicant is DPT Operator Pty Ltd and DPPT Operator Pty Ltd. The proposal is located within the Sydney local government area and has a Capital Investment Value of \$649 million. The proposal is predicted to create approximately 2,320 construction jobs and 10,000 operational jobs.

Engagement

Following the submission of the Environmental Impact Statement (EIS) the application was amended by the Amended EIS and the Response to Submissions (RtS). The EIS and Amended EIS were publicly exhibited in December 2016 and November 2017 and the RtS was publicly notified in July 2018. Cumulatively, the Department of Planning and Environment (the Department) received 135 submissions in response to the public consultations, comprising 24 submissions from government agencies and the City of Sydney Council (Council) and 108 submissions from the public (103 objecting, 2 providing comments and 3 in support).

Council objected to the provision of a tower on the site and the partial additional overshadowing of its proposed future Town Hall Square (future THS) in the late afternoon on some days of the year. The other government agencies did not object to the proposal and provided general comments and recommendations.

The key concerns raised in public submissions include height, scale and location of the tower, overshadowing, heritage impacts, view loss, density/overdevelopment, traffic and car parking impacts, open space and pedestrian connectivity/public accessibility, public benefits, wind impacts and the boardwalk extension.

Key changes made by the Applicant in response to community concerns

The Department engaged an independent design advisor (Professor Peter Webber) to provide expert design advice to assist with the Department's assessment of the application and also involved the Government Architect NSW. In response to the concerns raised in submissions and by the Department, the Applicant made significant changes to the proposal, which resulted in notable built form, heritage and amenity improvements.

The key changes include:

• reduce the maximum height of the building envelope by 52 m (from RL 235 to RL 183) to improve visual impacts to Darling Harbour and solar access the future THS

- relocate the tower 42.9 m to the south (72.9 m away from Pyrmont Bridge) to improve the relationship with the State heritage listed Pyrmont Bridge
- provide a tower envelope that allows flexibility in the final location of the future tower, to be confirmed through the detailed design process
- increase tower setback from Darling Harbour promenade by 5 m (from 3 m to 8 m) to ensure the tower does not dominate the foreshore promenade
- provide a minimum of 5,500 m² publicly accessible open space as an important public benefit and to improve pedestrian movement between the CBD and Darling Harbour.

The Department notes the first two of these changes ensure that there is no additional overshadowing of any part of the future THS on any day before 4:00 pm. This is consistent with Council's existing solar protection controls to similar public open spaces within the CBD, including the adjoining Sydney Square and Town Hall steps.

Assessment

In its assessment of the proposal, the Department has carefully considered the issues raised in submissions, the Applicant's response to these issues and the expert advice of the Department's independent design advisor.

Open space

The Department supports the significant increase in publicly accessible open space on the site $(6,500 \text{ m}^2, \text{ comprising } 5,500 \text{ m}^2 \text{ north of the tower and } 1,000 \text{ m}^2 \text{ south of the tower})$ and improved site permeability. The Department considers these components of the scheme represent a considerable public benefit.

The publicly accessible open space will be available 24 hours a day, seven days a week and shall include active and passive open spaces and landscaping that significantly enhances the character, appearance and enjoyment of Darling Harbour. The public open space extends over and hides the Western Distributor and re-establishes a strong visual and physical connection between the CBD and Darling Harbour. The size of the space, including the variety of pedestrian routes, represents a vast improvement to existing east-west pedestrian connectivity, which is currently only possible via three pedestrian bridges.

The location of the publicly accessible open space fronting Darling Harbour and its relationship to adjoining buildings ensures that it will receive excellent solar access at all times throughout the year.

The Department does not support the extension of the existing 5 m wide Cockle Bay boardwalk or the use of the publicly accessible open space for events as insufficient justification has been provided for these elements of the development. These elements therefore do not form part of the Department's recommendation (ToA A6 and Modification B2).

Density, design excellence, envelope form and heritage

The Department supports the increase in density as it has strategic merit, noting it will provide a significant increase to employment generating floorspace, has excellent access to public transport and is conveniently located to the CBD. In addition, the density has acceptable impacts in terms of its built form, traffic and amenity.

The Applicant has committed to a design excellence strategy (DES), which includes a competitive design process to select an architect/design team and to ensure the development achieves design excellence. The Government Architect supports the DES and the Department recommends Terms of Approval (ToA) A14 to A18 to secure the DES and ensure the design excellence competition jury is retained throughout the design development of the project.

After careful consideration the Department concludes the proposed maximum tower height (RL 183, approximately 42 storeys) and location is acceptable noting the independent design advisor supports the proposal and the tower makes a positive built form contribution to the city skyline and Darling Harbour. Darling

Harbour is also characterised by a variety of building heights and scales including tall buildings adjacent to the harbour and the proposed tower envelope, which is located centrally within the site, is in the most appropriate location in terms of its visual, heritage and amenity impacts.

Following its initial assessment and in response to community and Council concerns the Department has recommended amendments to the tower built form controls (TBFCs) and design guidelines that reduce the width of the tower and the tower base to ensure they are slender and elegant (Modification B1 and Future Environmental Assessment Requirement (FEAR) C1). The Department has also reduced the depth of the podium articulation zone to prevent the development overbearing the Darling Harbour promenade (Modification B2). Subject to these amendments and limitations the Department concludes the development is capable of providing an appropriate built form for the site.

Following the amendment of the building envelope to relocate the tower to the south and pull the podium away from Pyrmont Bridge, the Department is satisfied the future development can be designed to ensure it does not have an adverse heritage impact on the Pyrmont Bridge, Corn Exchange or Shelbourne Hotel heritage items. Archaeological impacts will be considered in detail as part of future DA(s) (FEARs C10 and C11).

Amenity impacts (overshadowing, view loss, solar access and wind)

The Department notes the future THS is overshadowed by existing buildings at various times throughout the day. On the most affected day (9 September) it would receive significant direct sunlight between 12:30 pm and 4:00 pm and is therefore capable of providing a high quality open space. The proposal does not overshadow any part of the future THS before 4:00 pm on any day throughout the year, which is consistent with Council's existing solar protection controls for other similar public open spaces within Central Sydney, including the adjoining Sydney Square and Town Hall steps. Due to the central location of the future THS within the CBD and Council's existing controls, the Department considers it unreasonable to protect solar access to the future THS after 4:00 pm.

The Department has carefully assessed the overshadowing impacts on Astoria Tower and although the proposal would overshadow apartments in the western elevation of the Astoria Tower, approximately 3 hours of sunlight is retained on the most affected day (28 January) and half of all apartments have secondary windows to the north. View loss impacts to Astoria Tower range between moderate to severe, however, the most affected properties retain partial views and given the site's city fringe location the interruption of existing views is reasonable in this context. The Department concludes the impacts on Astoria Tower is, on-balance, acceptable as adequate solar access is maintained and apartments retain on acceptable outlook. The Department recommends future applications (DA(s)) demonstrate solar access to Astoria Tower has been maximised and view losses have been minimised (FEAR C8 and C9)

The Department is satisfied, subject to future detailed wind assessment and mitigation measures (FEAR C26), the spaces within and around the development can be designed to achieve an appropriate comfort level for their intended purpose.

The Department notes the environmental impacts assessed (overshadowing, view loss, solar and wind impacts) have been considered in relation to the maximum building envelope and therefore represent the worst-case scenario. Nonetheless, the Department's assessment concludes these impacts are acceptable. In addition, these impacts are likely to be further reduced following detailed design of a development compliant with the recommended building envelope, TBFCs and design guidelines (Modification B1 and FEAR C1).

Traffic and parking

The Department considers traffic and parking impacts are acceptable. In particular the provision of a maximum of 150 on-site car parking spaces is less than the Sydney Local Environmental Plan 2012 maximum control, the likely

traffic generation is minor and would not have an adverse impact on the local road network or nearby intersections and the realignment and part closure of Wheat Road and the development's relationship to the Western Distributor are acceptable in principle. The Department recommends ToA A13 limiting the maximum number of car parking spaces to 150. In addition, the above traffic and parking matters will be further considered further and in detail as part of future DA(s) (FEARs C18 to C25).

Other considerations

The proposal has demonstrated it would generate significant economic and employment opportunities during and post construction and includes significant public benefits including publicly accessible open space, new pedestrian links, public art and heritage interpretation. In light of these significant benefits the Department has not recommended the imposition of contribution requirements.

The early works for the demolition of existing buildings and structures is supported, except for the demolition of the Market Street to Pyrmont Bridge pedestrian bridge as the timeframe for the replacement of this bridge is uncertain. The Department includes conditions requiring appropriate mitigation measures to protect amenity and the environment during the demolition process.

Summary of additional requirements to address community concerns

The Department recommends key conditions to ensure community concerns are addressed and the impact of the development is appropriately mitigated and/or managed, which in summary include the following:

- maximum GFA, height and car parking controls (ToA A8, A9, A13) to limit the overall amount of development on the site
- publicly accessible open space design controls (FEARs C4 to C6) to ensure the open space achieves a high standard of layout, amenity and design
- 24 hour-a-day access to the publicly accessible open space (FEAR C5) to ensure the space is publicly accessible at all times
- future DA(s) to include a detailed Heritage Impact Assessment (FEAR C10) to ensure the development does not have an adverse impact on the heritage significance of nearby heritage items
- future DA(s) to include an assessment of construction impacts (FEARs C30 and C34) to ensure the demolition of existing buildings/structures do not have an adverse impact on residential amenity.

Summary

The issues raised by government agencies, Council and the community have been addressed in the proposal, the Department's assessment report or by recommended conditions of consent.

Following detailed assessment, and subject to the recommended conditions, the Department supports the proposed building envelope and considers the envelope to be an appropriate height and location. Robust built form controls and design guidelines have been established to ensure the achievement of design excellence, the creation of significant areas of publicly accessible open space and an improved east-west pedestrian connectivity.

The proposal provides for significant public benefits including new publicly accessible open space, screens the Western Distributor, creates new and upgraded pedestrian links and provides for a significant amount of new employment floorspace. Overall the Department considers the proposal is in the public interest.

The proposal would not affect solar access to the future THS before 4:00 pm, which is consistent with Council's existing solar protection controls for other similar public open spaces within Central Sydney. Due to the future THS' central CBD location and consistent with Council's controls, the Department considers it unreasonable to protect solar access to the future THS after 4:00 pm.

The Department has carefully considered the amenity impacts on Astoria Tower and concludes overshadowing and view loss impacts are, on-balance, acceptable as apartments retain access to sunlight and partial views.

The application is referred to the Independent Planning Commission (the Commission) as Council has objected to the proposal, more than 25 public objections have been received and the Applicant has made a political disclosure statement.

The Department considers the proposal is approvable, subject to conditions of consent outlined within this report. This assessment report is hereby presented to the Commission for determination.



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1.1 Introduction

This report provides an assessment of a State significant development (SSD) application for the concept of a commercial building envelope at Cockle Bay Wharf, 241-249 Wheat Road, Darling Harbour and Stage 1 early works for demolition of existing buildings and structures (SSD 7684) (the Proposal).

The proposal seeks approval for:

- demolition of existing buildings, structures and site improvements
- a building envelope providing a podium and tower form with a maximum height of RL 183
- building controls and design guidelines to guide the future development within the building envelope
- maximum gross floor area (GFA) of 89,000 square metres (m²) commercial floorspace, comprising 75,000 m² office and 14,000 m² retail GFA
- between 5,500 m² and 12,000 m² publicly accessible open space.

The application has been lodged by DPT Operator Pty Ltd and DPPT Operator Pty Ltd (the Applicant). The site is located within the Sydney local government area (LGA).

1.2 Darling Harbour Precinct

The Darling Harbour Precinct covers an area of 60 hectares on the western edge of the Sydney Central Business District (CBD) and largely surrounds the waterfront at the southern end of Darling Harbour. The Darling Harbour Precinct extends from Paddy's Markets in the south to the Sydney Aquarium and the Maritime Museum in the north (**Figures 1** and **3**).



Figure 1 | Darling Harbour Precinct (outlined red) and the site (red star) (Base source: Nearmap)

The development of Darling Harbour began in the mid-1800s with the establishment of industry, railway lines, yards and depots. Up until its decline in the 1960s the immediate area around Darling Harbour supported intensive industrial uses, such as wharfage and associated port functions, rail freight yards, and heavy manufacturing industries (mills, works, and coal handling facilities) (**Figure 2**).



Figure 2 | Aerial view showing the approximate location of the site circa 1937 (left) and view looking north-east across the Darling Harbour Precinct during the construction of the Western Distributor (right) circa 1972 (Source: Applicant's EIS)

Opening around 1972, the new Western Distributor (**Figure 2**) had a significant physical impact on Darling Harbour and changed traffic and pedestrian movements on immediate surrounding streets, including the closure of Pyrmont Bridge to vehicles. By the start of the 1980s Darling Harbour comprised a series of empty warehouses and rarely used wharfs and rail infrastructure.

The NSW State Government announced the redevelopment of Darling Harbour Precinct in 1984 for the 1988 Australian Bicentennial celebrations, which included the construction of the original convention, exhibition and entertainment centres, the monorail and other cultural facilities. This established Darling Harbour as a premier waterfront destination, characterised by a mix of recreational, tourist, entertainment and business functions.

Recently Darling Harbour has undergone further significant urban renewal, including the development of ICC Sydney (Sydney international convention, exhibition and entertainment facilities including Tumbalong Park) and major redevelopment at Darling Square, IMAX, the Four Points by Sheraton and the Goods Line pedestrian link / public open space (**Figure 3**). The western edge of the CBD has also been the subject of significant redevelopments, including the construction of tall buildings within the Barangaroo Precinct to the north of the site.



Figure 3 | The Darling Harbour Precinct (outlined yellow) including key developments within the precinct. The site is indicated by red star (Base source: Nearmap)

1.3 The site

The site is located towards the north-eastern corner of the Darling Harbour Precinct on the south-eastern foreshore of Darling Harbour / Cockle Bay. The site is irregular in shape and has an area of approximately 2.5 hectares (24,900 m²) (**Figures 3** and **4**).

The site is bounded by Darling Harbour, a marina and the foreshore promenade to the west, Pyrmont Bridge and Market Street to the north, Sussex Street, Harbour Street, Darling Park and the Western Distributor to the east and the IMAX redevelopment site, Darling Harbour public domain and the Western Distributor to the south and south-east.

While the site is owned by the State Government (managed by Property NSW (PNSW)), the Applicant has a long-term lease over the majority of the site (until 2088).

Cockle Bay Wharf occupies the western half of the site and consists of a building up to three storeys (approximately 8,200 m² GFA) including bars, restaurants, cafes and the Home Night Club, together with a hard-paved waterfront promenade / public domain along the Darling Harbour foreshore. The building is constructed of concrete/masonry, includes three wooden drum feature towers and is not a State or local heritage item.

The north-eastern portion of the site contains walkways and stairs connecting Market and Sussex Streets to Pyrmont Bridge. A former monorail station is located adjacent to the walkway and urban plaza and a restaurant / café is located adjacent to Darling Park Tower 1 fronting Sussex Street.

The site does not contain any local or State listed heritage items. However, it is located adjacent to Pyrmont Bridge and the Corn Exchange, 173 Sussex Street, which are both listed on the State Heritage Register (SHR).

The Shelbourne Hotel, 200 Sussex Street, is located opposite the site and is a locally listed heritage item under the Sydney Local Environmental Plan 2012 (SLEP 2012).

There are three publicly accessible east-west pedestrian routes within the site, which connect the CBD to Darling Harbour, as follows (**Figure 4**):

- Pyrmont Bridge link, located at the northern end of the site connecting Market and Sussex Streets to Pyrmont Bridge, Cockle Bay Wharf and the foreshore
- Cockle Bay link, located centrally within the site and connecting Crescent Garden at Darling Park to Cockle Bay Wharf
- Druitt Street link, located at the southern end of the site and connecting Druitt Street to Cockle Bay public domain at the southern end of Cockle Bay Wharf.



Figure 4 | Aerial view of the site (Base source: Nearmap)

The Western Distributor and Wheat Road pass north/south adjacent to, and through, the site. The Western Distributor divides the site and creates a significant visual and physical barrier between the CBD and Darling Harbour.

Wheat Road is a one-way northbound, single lane local road located beneath the Western Distributor that connects to Harbour Street in the south and Shelley Street in the north and provides service access to the site, the IMAX development and King Street Wharf. It also provides for kerbside set down/pick up (2 spaces),

controlled parking (12 spaces), disabled parking (6 spaces) and on street loading (3 spaces). Currently, all service vehicles departing the site, and the IMAX site, are required to travel north along Wheat Road and exit via Shelley Street.

The site is well served by public transport and is within walking distance to key connections including:

- local bus services along Druitt Street approximately 100 m to the south-east of the site
- Convention Centre light rail stop 350 m to the west and Pyrmont light rail stop 450 m to the north-west at the opposite end of Pyrmont Bridge
- Town Hall Station 450 metres to the south-east and Wynyard Station 650 metres to the north-east
- Darling Harbour Ferry terminal 770 m to the north and Pyrmont Bay Ferry Wharf 450 m to the north-west
- George Street CBD light rail 400 m to the east (under construction).

1.4 Surrounding context

The site is set within a diverse urban context on the edge of the CBD and the buildings surrounding the site vary in use and architectural design and form (**Figure 5**), including:

- to the north is the Pyrmont Bridge, Western Distributor, the 12 to 27 storey Four Points by Sheraton hotel and the 2 to 3 storey Corn Exchange
- to the east is Darling Park, which comprises three tower buildings up to 32 storeys (130 m) and a large circular publicly accessible garden space known as Crescent Garden
- to the south is the Western Distributor, the IMAX redevelopment approval for a 25 storey mixed-use hotel building and foreshore public domain works (currently under construction) and the Ausgrid exchange building
- to the west, on the opposite side of Darling Harbour, is the 4 storey Harbourside Shopping Centre, the 35 storey Sofitel hotel building and the ICC Convention Centre.



Figure 5 | Aerial view of the site and the surrounding context (Base source: Nearmap)

More broadly, Darling Harbour includes the following tall buildings, which front the foreshore:

- to the north, within the Barangaroo Precinct, are three existing tall commercial towers, up to 49 storeys (RL 209), and the 71 storey (RL 275) Crown Sydney Hotel Resort tower, which is currently under construction
- to the west, on the opposite side of Darling Harbour, is the 35 storey (RL 133) Sofitel hotel.

The closest residential property to the site is a 33 storey residential tower known as Astoria Tower, 222-228 Sussex Street, which is located approximately 100 m to the east of the site and fronting Sussex Street (**Figure 5**).

In addition to the Darling Harbour foreshore, there are three significant publicly accessible open spaces near the site (**Figure 6**), including:

- Crescent Garden, located within Darling Park and adjoining the eastern boundary of the site
- Tumbalong Park, located approximately 250 m south of the site
- Sydney Square, located approximately 300 m south-east of the site

The City of Sydney Council (Council) intends to develop a new public open space, known as Town Hall Square (approximately 4,400 m² in size), on the eastern side of George Street opposite Sydney Town Hall. This new open space will be located approximately 450 m south-east of the site (**Figure 6**).



Figure 6 | Aerial view showing the location of existing and proposed publicly assessible open spaces (outlined in green) nearby the site (outlined in red) (Base source: Nearmap)

1.5 Previous approvals and other relevant applications

1.5.1 Approval history

The site has been the subject of a number of applications relating to the existing tenancies within the Cockle Bay Wharf development. However, none of these are considered relevant to the current proposal.

1.5.2 Other relevant applications

On 16 June 2014, the former Planning Assessment Commission (Commission) approved a SSD application (SSD 5397) for the demolition of the IMAX building and construction of a 20 storey building for office, retail and entertainment uses.

On 28 June 2018, the former Planning Assessment Commission (Commission) approved a SSD application (SSD 7388) for the demolition of the IMAX building and construction of a 25 storey building for hotel and serviced apartments and retail and entertainment uses.

Of the two IMAX redevelopment approvals the most recent approval (SSD 7388) is being constructed.

The Department is also assessing a concept SSD application (SSD 7874) for the redevelopment of Harbourside Shopping Centre, on the opposite side of Darling Harbour, including:

- a building envelope providing a podium and tower form with a maximum height of RL 166.35
- maximum GFA of 87,000 m² for residential and non-residential uses
- open space and pedestrian links.



The key components of the proposal (as amended by the Amended EIS and Response to Submissions (RtS), refer to **Table 2** and **Section 5.5**) are summarised at **Table 1**. **Appendix B** contains a link to the Applicant's SSD application and RtS.

Table 1 | Main components of the proposal

Component	Description
Proposal Summary	A concept proposal for a new commercial building envelope, with a maximum GFA of $89,000 \text{ m}^2$ and height of RL 183 and early works / demolition
	Demolition of:
	o Cockle Bay Wharf buildings and structures
Demolition	o two pedestrian bridge links across the Western Distributor
	o monorail station/infrastructure
	Building envelope including:
	o maximum tower height of RL 183
	o maximum tower base and podium height RL 29
	o tower setbacks including:
	minimum 8 m from Darling Harbour promenade
Building Envelope	average 10 m from Darling Harbour promenade
	o maximum deck over the Western Distributor height RL 19
	• 5 m wide and 204 m long extension to the Darling Harbour boardwalk adjoining the
	promenade
	Druitt Street bridge
	• Tower built form controls to limit the size of the tower within the building envelope, including:
	o maximum tower façade length fronting Darling Harbour of 60 m
Tower Built Form Controls	o maximum tower footprint of 3,000 m ² (GFA and any internal void)
	o average tower floor plate size 2,350 m ² GFA
	o maximum tower volume 65% of the envelope
	• Design guidelines to inform the detailed design of the development, comprising:
Desire Calidati	o Urban Design Principles
Design Guidelines	o Open Space Design Principles
	o Built Form Design Principles
	• Competitive Design Excellence Strategy, which includes a competition framework to
Design Excellence	select a design team that is capable of delivering design excellence across the entire
	precinct, implemented prior to any future development applications

Uses and Gross floor area (GFA)	 o 75,000 m² o 14,000 m² Publicly accessibility o minimum or Pyrmont Britishing 	le open space, comprising: f 5,500 m² open space locate	ed north of the tower and south of
Road infrastructure upgrades and access	o part closure o provision o Road at the o provision o southern er	northern end of the site	-
Car parking	Maximum of 150	employee car parking space	S
	Bicycle parking in	n accordance with the followi	ng rates:
	Land use	Employee rate	Visitor rate
Bicycle parking	Commercial	1 per 150 m ²	1 per 400 m ²
	Retail	1 per 200 m ²	1 per 300 m ²
	Open space	1 per 1,000 m ²	1 per 200 m ²
Capital Investment Value (CIV)	• \$649,559,000		
Jobs	 2,320 constructi 10,000 operation		

The proposed development is shown at **Figures 7** to **11**.

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Figure 7 | Components and layout of the building envelope (Base source: Applicant's RtS)



Figure 8 | The western elevation of the maximum building envelope facing Darling Harbour (Base source: Applicant's RtS)



Figure 9 | Indicative tower development (Source: Applicant's RtS)



Figure 10 | Indicative deck, open space and podium development (Source: Applicant's Amended EIS)



Figure 11 | Indicative design of the northern open space and podium adjacent to the Darling Harbour promenade (source: Applicant's Amended EIS)

The proposal has been amended by the Amended EIS and RtS as discussed in detail at **Section 5.5**. A summary and comparison the key amendments to the proposal are provided at **Table 2** and **Figure 12**.

Component	EIS	Amended EIS	RtS	Difference between EIS/RtS
Tower envelope height (max)	RL 235	RL 195	RL 183	-52 m
Tower envelope setback (min)	3 m	6 m	8 m	+5 m
Tower distance from Pyrmont Bridge:	30 m	65 m	72.9 m	+42.9 m
Total GFA (max), comprising:	110,000 m ²	89,000 m ²	No change	-21,000 m ²
o Commercial GFA (max) o Retail GFA (max)	o 85,000 m ² o 25,000 m ²	o 75,000 m² o 14,000 m²		o -10,000 m² o -11,000 m²
Car parking	200 spaces	150 spaces	No change	-50 spaces



Figure 12 | Comparison between the EIS (left), Amended EIS (middle) and RtS (right) indicative schemes (top) and building envelopes (bottom) (Base source: Applicant's RtS)



3.1 Greater Sydney Regional Plan and Eastern City District Plan

The Greater Sydney Commission's (GSC) role is to coordinate and align planning to shape the future of Metropolitan Sydney. In March 2018, the GSC published the Greater Sydney Region Plan (the Region Plan) and the associated District Plans.

The Region Plan outlines how Greater Sydney will manage growth and change and guide infrastructure delivery. It sets the vision and strategy for Greater Sydney, to be implemented at a local level through District Plans. The site is located within the Eastern City District.

The proposal is consistent with the Region Plan, as:

- it fosters productivity through a growth in jobs within the Harbour CBD, and in doing so, supports integrating land use and transport contributing to a walkable and '30 minute city', through an increase in employment floorspace in a highly accessible part of the Harbour City (Objectives 14 and 18)
- it provides new publicly accessible open space, supporting the creation of new places that bring people together and enhance the environment (Objectives 12 and 13)
- it facilitates tree planting and landscaping on a new deck over the Western Distributor and the podium, contributing to increasing the urban tree canopy and the creation of accessible and enhanced open space (Objectives 30 and 31).

The Precinct is located within the Eastern City District Plan area. The proposal is consistent with the objectives of the Eastern City District Plan, as it will create new publicly accessible open space (Planning Priority E6), contribute to a stronger and more competitive Harbour CBD (Planning Priority E7), foster the creation of the '30-minute city' (Planning Priority E10), grow investment, business opportunities and jobs within the Harbour CBD (Planning Priority E11), improve the enjoyment of Darling Harbour (Planning Priority E14), increase the urban tree cover and deliver high quality open space (Planning Policies E17 and E18).

3.2 Sustainable Sydney 2030

Sustainable Sydney 2030 sets out the City of Sydney's vision to make Sydney a more Global, Green and Connected metropolis by 2030.

The proposal will contribute to several strategic directions in Sustainable Sydney 2030, as it will deliver significant job growth to contribute to a globally competitive and innovative city (Strategic Direction 1), improve pedestrian connectivity between the CBD and Darling Harbour (Strategic Direction 4), and create new publicly accessible open space and public domain (Strategic Direction 5).



4.1 State significant development

The proposal is SSD under section 4.36 (development declared SSD) of the EP&A Act as the development has a CIV in excess of \$10 million (\$649,859,000) and is located within the 'Darling Harbour Site', which is identified as an SSD site under clause 2 of Schedule 2 of State Environmental Planning Policy (State and Regional Development) 2011 (SRD SEPP).

4.2 Consent authority

In accordance with Clause 8A of the SRD SEPP and section 4.5 of the EP&A Act, the Independent Planning Commission (Commission) is the consent authority as:

- Council has made an objection
- a political disclosure statement has been made
- there are more than 25 public submissions.

The Application is therefore referred to the Commission for determination.

4.3 Permissibility

The Darling Harbour Development Plan No.1 (DHDP) is the principal environmental planning instrument (EPI) that applies to the site. Clause 6 of the DHDP states that development including commercial facilities, parks and gardens and demolition of existing works may be carried out with consent.

The proposal is therefore permissible under Clause 6 of the DHDP.

4.4 Secretary's Environmental Assessment Requirements

On 23 June 2016, the Department notified the Applicant of the Planning Secretary's Environmental Assessment Requirements (SEARs). The Department is satisfied that the EIS and Amended EIS adequately address the requirements of the SEARs to enable the assessment and determination of the application.

4.5 Mandatory matters for consideration

The following are the relevant mandatory matters for consideration:

- the matters in section 4.15(1) of the EP&A Act
- relevant EPIs
- objects of the EP&A Act
- Ecological Sustainable Development
- Environmental Planning and Assessment Regulation 2000 (EP&A Regulation).

4.5.1 Section 4.15(1) matters for consideration

The matters for consideration under section 4.15(1) that apply to SSD in accordance with section 4.40 of the EP&A Act have been addressed in **Table 3**.

 Table 3 | Section 4.15(1) Matters for Consideration

Section 4.15(1) Evaluation	Consideration			
(a)(i) any environmental planning instrument	Satisfactorily complies. The Department's consideration of the relevant EPIs is provided below and in Appendix C of this report.			
(a)(ii) any proposed instrument	Not applicable.			
(a)(iii) any development control plan	Under clause 11 of the SRD SEPP, development control plans (DCPs) do not apply to SSD. Notwithstanding, consideration has been given to the Sydney Harbour Foreshores and Waterways Area Development Control Plan 2005 (SHFW DCP) at Appendix C			
(a)(iiia) any planning agreement	No existing planning agreements apply to the site.			
(a)(iv) the regulations Refer Division 8 of the EP&A Regulation	The application satisfactorily meets the relevant requirements of the EP&A Regulation, including the procedures relating to applications (Part 6), public participation procedures for SSD and Schedule 2 relating to EIS.			
(a)(v) any coastal zone management plan	The site is within the Coastal Environment Area and Coastal Use Area under the State Environmental Planning Policy (Coastal Management) 2018 (Coastal SEPP). Consideration has been given to the requirements of the Coastal SEPP at Appendix C			
(b) the likely impacts of that development including environmental impacts on both the natural and built environments, and social and economic impacts in the locality,	Appropriately mitigated or conditioned - refer to Section 6 of this report.			
(c) the suitability of the site for the development	The site is suitable for the development as discussed in Sections 6 of this report.			
(d) any submissions	Consideration has been given to the submissions received during the exhibition of the proposal. Refer to Sections 5 and 6 of this report.			
(e) the public interest	The proposal is in the public interest. Refer to Section 6 of this report.			

4.5.2 Environmental Planning Instruments

Under section 4.15 of the EP&A Act, the consent authority is required to take into consideration any EPI relevant to the development. Therefore, the assessment report must include a copy of, or reference to, the provisions of any EPIs that substantially govern the project and that have been taken into account in the assessment of the project. The following EPI's apply to the site:

- State Environmental Planning Policy (State & Regional Development) 2011 (SRD SEPP)
- State Environmental Planning Policy (Infrastructure) 2007 (ISEPP)
- Darling Harbour Development Plan No 1 (DHDP)
- State Environmental Planning Policy No. 55 Remediation of Land (SEPP 55)
- State Environmental Planning Policy (Coastal Management) 2018 (Coastal SEPP)
- Draft State Environmental Planning Policy (Remediation of Land) (draft SEPP 55)
- Draft State Environmental Planning Policy (Environment) (draft Environment SEPP)
- Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005 (SHC SREP)

The Department has undertaken a detailed assessment of these EPIs in **Appendix C** and is satisfied the application is consistent with the requirements of the EPIs.

4.5.3 Objects of the EP&A Act

Decisions made under the EP&A Act must have regard to the objects as set out in section 1.3 of that Act. The Department has considered the proposal to be satisfactory with regard to the objects of the EP&A Act as detailed in **Table 4**.

 Table 4 | Consideration of the proposal against the objects of section 1.3 the EP&A Act

Ob	jects of the EP&A Act	Consideration
(a)	to promote the social and economic welfare of the community and a better environment by the proper management, development and conservation of the State's natural and other resources	The proposal will promote social and economic welfare by increasing employment opportunities and through the creation of new public open space and deck over the Western Distributor facilitating improved pedestrian connectivity between Darling Harbour and the CBD. The proposal would not impact on any natural or artificial resources, agricultural land or natural areas.
(b)	to facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment,	The proposal includes measures to deliver ESD (Section 4.5.4).
(c)	to promote the orderly and economic use and development of land,	The proposal involves the orderly and economic use of land through the efficient redevelopment of an existing inner-city site that is in close proximity to existing services and has excellent public transport access. The proposal will facilitate redevelopment of the site for commercial and retail purposes, the merits of which are considered in Section 6 .
(d)	to promote the delivery and maintenance of affordable housing,	The proposal, being a commercial and retail development, does not include any affordable housing, and is not required to do so.
(e)	to protect the environment, including the conservation of threatened and other species of native animals and plants, ecological communities and their habitats,	The project involves redevelopment of an existing inner city site and will not adversely impact on any native animals and plants, including threatened species, populations and ecological communities, and their habitats.
(f)	to promote the sustainable management of built and cultural heritage (including Aboriginal cultural heritage),	The proposal does not have an adverse impact on nearby heritage items and the Department has also recommended the future applications include a Heritage Interpretation Strategy (Section 6.6).
(g)	to promote good design and amenity of the built environment,	The proposed building envelope, subject to conditions, has acceptable impacts as discussed at Section 6.4 . The built form controls and Design Excellence Strategy, which includes a design competition, ensure a high standard of design for any future development.
(h)	to promote the proper construction and maintenance of buildings, including the protection of the health and safety of their occupants,	Future development applications will include detailed report(s) confirming the development is capable of meeting relevant construction standards.
(i)	to promote the sharing of the responsibility for environmental planning and assessment between the different levels of government in the State,	The Department publicly exhibited the proposed development as outlined in Section 5 , which included consultation with Council and other public authorities and consideration of their responses.

 (j) to provide increased opportunity for community participation in environmental planning and assessment.

The Department publicly exhibited the application and also held a community meeting, as outlined in **Section 5**.

4.5.4 Ecologically Sustainable Development

The EP&A Act adopts the definition of ESD found in the *Protection of the Environment Administration Act 1991*. Section 6(2) of that Act states that ESD requires the effective integration of economic and environmental considerations in decision-making processes and that ESD can be achieved through the implementation of:

- the precautionary principle
- inter-generational equity
- conservation of biological diversity and ecological integrity
- improved valuation, pricing and incentive mechanisms.

The development proposes ESD initiatives and sustainability measures, including targeting:

- a 6-star Green Star Design and As Built rating
- a 5-stars NABERS Energy Commitment Agreement
- a 4-stars NABERS Water Commitment Agreement for the commercial office component.

The Department has considered the project in relation to the ESD principles. The Precautionary and Intergenerational Equity Principles have been applied in the decision making process by a thorough assessment of the environmental impacts of the project. Overall, the proposal is consistent with ESD principles and the Department is satisfied the future detailed development is capable of encouraging ESD, in accordance with the objects of the EP&A Act.

Council recommends future development application(s) (DAs) be required to provide robust and innovative benchmarks and sustainability initiatives that are commensurate with the scale of development and go beyond the minimum standards (i.e. 5-stars NABERS Energy and 4-stars NABERS Water).

The Department agrees with Council that future DA(s) should strive to improve on the minimum standards, particularly as the Applicant intends to deliver a development that achieves design excellence. The Department therefore recommends a future environmental assessment requirement (FEAR) requiring future DA(s) achieve the proposed ESD initiatives and sustainability measures and targets, as well as exploring the potential to achieve increased stretch targets of:

- a 5.5-stars NABERS Energy Commitment Agreement
- a 4.5-stars NABERS Water Commitment Agreement for the commercial office component
- incorporation of dual reticulation recycled water system to reduce pressure on existing water/wastewater infrastructure.

4.5.5 Environmental Planning and Assessment Regulation 2000

Subject to any other references to compliance with the EP&A Regulation cited in this report, the requirements for Notification (Part 6, Division 6) and Fees (Part 15, Division 1AA) have been complied with.

4.6 Other approvals

The Department has recommended Terms of Approval (ToA) in accordance with the following requirements:

 section 4.22 of the EP&A Act, all physical works and subsequent stages of the concept proposal are to be subject to future DA(s)

- section 4.24 of the EP&A Act, the determination of future DA(s) cannot be inconsistent with the terms of the concept approval
- section 4.37 of the EP&A Act, any subsequent part of the development that is not SSD pursuant to the SRD SEPP is to be determined by the relevant consent authority.

The Department has recommended Terms of Approval (ToA) in accordance with the above requirements.



5.1 Department's engagement

On 2 December 2016, the Applicant lodged the EIS for the redevelopment of Cockle Bay Wharf. The application has been revised twice by the Amended EIS and the RtS.

In accordance with Schedule 1 of the EP&A Act and Part 6, Division 6 of the EP&A Regulation, the Department publicly exhibited the EIS and the updated Amended EIS. The Department also publicly notified the RtS. A summary of both public exhibitions and the notification of the application is provided at **Table 5**.

During the public exhibition/notification periods (**Table 5**), the application was displayed on the Department's website, at the NSW Service Centre and at the City of Sydney Council's office. The Department also notified adjoining landholders, Council, relevant Government agencies and all submitters received in response to each exhibition/notification in writing.

Consultation Stage	Exhibition / Notification Period (website, physical and letters)	Public exhibition notice date (newspaper publication)	Submissions
EIS	15 Dec 2016 until 14 Feb 2017	14 Dec 2016 and 11 Jan 2017	52 submissions comprising:
	(61 days)	Central Courier, Sydney Morning Herald and Daily Telegraph	 8 Government agencies Council 43 public / special interest
Amended EIS	16 Nov 2017 until 15 Dec 2017 (29 days)	15 Nov 2017 Central Courier, Sydney Morning Herald and Daily Telegraph	 41 submissions comprising: 8 Government agencies Council 32 public / special interest
RtS	11 Jul 2018 until 8 Aug 2018 (28 days)	No publication	 42 submissions comprising: 8 Government agencies Council 33 public / special interest

Table 5 | Summary of public exhibitions and notification of the application

In addition to the above statutory community engagement, the Department held a community meeting with local community groups and stakeholders on 19 December 2016, to explain the proposal, the application process and understand initial comments these groups had.

The public and Government agency submissions are summarised at **Section 5.2** to **5.4** and at **Appendix D**. The Department has considered the comments raised in all submissions at **Section 6**.

5.2 Summary of submissions

A summary of the submissions is provided at **Table 6** and a summary of the issues raised in submissions is provided at **Sections 5.3** and **5.4**. Copies of the submissions can be viewed at **Appendix B**.

Table 6 | Cumulative summary of submissions

Submitters		Submissions			
	EIS	AmEIS	RtS	Total	
Government agencies				24	
Transport for New South Wales (TfNSW)				3	
Roads and Maritime Services (RMS)				3	
Heritage Council				3	
 Office of Environment and Heritage – Greater Sydney Planning Team (OEH) 	\checkmark	\checkmark	\checkmark	3	
NSW Environment Protection Authority (EPA)	\checkmark	\checkmark	\checkmark	3	
Sydney Trains				2	Comment
Sydney Water				2	
Sydney Airport Corporation (Sydney Airport)				2	
Ausgrid				1	
RMS Maritime Planning			\checkmark	1	
Civil Aviation Safety Authority (CASA)				1	
City of Sydney Council (Council)	\checkmark			3	Object
Special Interest Groups				15	
Alex Greenwich MP				3	
National Trust of Australia			\checkmark	3	
Pyrmont Action				3	Object
 Tianlong Ribbon (IMAX) 				2	0.0,000
Sydney Harbour Association	√			2	
Ultimo Village Voice				1	<u> </u>
NSW Business Chamber				1	Support
Community				93	
	\checkmark		\checkmark	73	Object
• < 5 km	\checkmark		\checkmark	2	Support
	\checkmark		\checkmark	2	Comment
• 5 – 10 km	\checkmark	\checkmark		11	Object
• > 10 km				5	Object
TOTAL				135	

5.3 Key issues – government agencies

Government agency submissions provided comments, and none objected to the proposal. The key issues raised in submissions are summarised in **Table 7**.

 Table 7 | Government agency submissions to the EIS, Amended EIS and RtS exhibitions of the proposal

TfNSW	
EIS	TfNSW does not object to the proposal and provided the following comments:
	• the entry to the Druitt Street bridge and cycleway connections should be improved

-				
	changes to Wheat Road traffic movements should consider the IMAX redevelopment.			
	TfNSW recommended a condition requiring the preparation of a Construction Pedestrian and Traffic Management Plan (CPTMP).			
Amended EIS	TfNSW reiterated its comments provided in response to the EIS exhibition.			
	TfNSW recommended two conditions in addition to the CPTMP, requiring:			
RtS	 the entry to the Druitt Street bridge and cycleway connections be improved changes to Wheat Road traffic movements to consider the IMAX redevelopment. 			
RMS				
	RMS stated it did not support the proposal (as exhibited) and raised the following concerns:			
	• the Western Distributor must remain open during construction and the proposal should confirm the likely construction methodology			
EIS	 adequate fire safety, access (for maintenance/repair), security provision beneath the deck any structural piers must not have an adverse impact on the structure/operation of the Western Distributor 			
	 the proposal must not adversely impact the structural integrity of the Western Distributor the proposal should consider the road infrastructure changes approved for the IMAX redevelopment 			
	 consideration of the operational / safety impacts of the redesign and realignment of Wheat Road is required 			
	• RMS does not support the alteration of the Harbour Street/Blackwattle Place intersection traffic signals to allow a right turn.			
	Notwithstanding, RMS suggested conditions of consent to address the above comments in the ever the application is recommended for approval.			
	RMS does not object to the proposal. However, it reiterated its concerns provided in response to the EIS exhibition and raised the following additional concerns:			
	 adequate lighting is required beneath the podium 			
	external material should not cause unacceptable glare to motorists			
	• air quality should not be adversely impacted over and in the vicinity of the Western Distributor			
	necessary measures should be taken to prevent any falling objects onto the Western Distributor			
	works over/in the vicinity of the Western Distributor must meet relevant durability specifications			
	all structure/works built over the Western Distributor must maintain appropriate clearance			
Amended EIS	 access arrangements with adjoining development should be investigated from a road safety perspective 			
	 the proposal should accommodate 12.5 m truck turning paths and prevent loading dock vehicle conflicts 			
	 vehicles exiting the drop-off zone should be held at a stop sign 			
	 a CPTMP and Maintenance Traffic Management Plan (MTMP) is required 			
	• a Demolition and Reconstruction Plan is required demonstrating RMS can undertake works to its bridges at the end of their service life.			
	RMS confirmed it would support the addition of a priority left-turn only exit, instead of signalised righ turn from the Harbour Street/Blackwattle Place intersection.			
	RMS updated its recommended conditions of consent to take account of the above additional comments.			
	RMS reiterated its comments provided in response to the Amended EIS exhibition. In addition, it confirms it supports:			
RtS				
RIJ	 the Applicant consulting with RMS regarding impacts on the Western Distributor 			

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Heritage Counc	il
EIS	 The Heritage Council does not object to the proposal. However, raised the following concerns: inconsistencies in the archaeological strategy should be addressed and a clear methodology provided a Maritime Archaeological Assessment is required all elements above Pyrmont Bridge deck level should be further set back from the bridge to further open up views to and from the bridge and minimise visual impacts the level 2 direct pedestrian bridge connection from the podium outdoor space to Pyrmont Bridge and minimise should be deleted an assessment of the visual impact of the proposal on the heritage values of Pyrmont Bridge and the SS South Steyne is required. The Heritage Council recommended standard archaeological conditions to appropriately manage the archaeological resources on-site and throughout the life of the project.
Amended EIS	 Heritage Council confirmed its previous concerns about inconsistencies has been addressed. However, it reiterated its concern about the SS South Steyne and also provided the following additional comments: the Maritime Archaeological Assessment should be updated to include limited test excavation, a wider analysis area, improved mitigation measures and comment on dredging and extent of impact the use of hollow piles during construction is not supported. The Heritage Council reiterated its recommended standard conditions and suggested new conditions relating to demolition and excavation works, unexpected archaeological finds, maritime heritage and the SS South Steyne.
RtS Sydney Trains	 The Heritage Council reiterated its comments provided in response to the Amended EIS exhibition. In addition, it provided the following additional comments: the relocation of the tower envelope further to the south appropriately minimises the visual impact on the heritage values of Pyrmont Bridge as the S.S. South Steyne has now been permanently moved from Darling Harbour and the proposal would not have any impact on it, no further assessment is required the future design/location of the elevated pedestrian bridge (connecting Market Street and Pyrmont Bridge) should minimise visual/heritage impacts on the Corn Exchange and the Shelbourne Hotel the Heritage Interpretation Strategy, public domain artwork and design features can be addressed at future detailed application(s). The Heritage Council recommended an additional condition regarding the protection of the Corn Exchange and Shelbourne Hotel.
EIS	Sydney Trains does not object to the proposal and recommended conditions of consent to protect the CBD Rail Link (CBDRL) corridor.
Amended EIS OEH	Sydney Trains reiterated comments provided in response to the EIS exhibition.
EIS Amended EIS and RtS	OEH does not object to the proposal and recommended an Aboriginal cultural heritage assessment be undertaken prior to the determination of the concept proposal. OEH reiterated comments provided in response to the EIS exhibition.

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EPA		
EIS	The EPA does not object to the proposal and recommended an unexpected finds protocol be implemented to address site contamination.	
Amended EIS and RtS	EPA reiterated comments provided in response to the EIS exhibition.	
Sydney Airport C	Corporation (Sydney Airport) and CASA	
	Sydney Airport does not object to the proposal and provided the following comments:	
EIS	 the tower height penetrates the prescribed airspace for Sydney Airport (156 AHD) and the proposal therefore requires 'controlled activity' approval from the Department of Infrastructure & Regional Development & Cities (DIRDC) 	
	DIRDC approval may be required for the use of cranes to construct the building	
RtS	• a surveyor should notify Sydney Airport of the finished height of the building.	
	CASA does not object to the proposal and confirmed the proposal requires controlled activity approval from DIRDC.	
	Sydney Airport reiterated comments provided in response to the EIS exhibition.	
Sydney Water		
EIS	Sydney Water does not object to the proposal and provided information on water and wastewater infrastructure and confirmed a separate Section 73 Compliance Certificate is required in accordance with the <i>Sydney Water Act 1994</i> .	
Amended EIS	Sydney Water reiterated comments provided in response to the EIS exhibition.	
Ausgrid		
Amended EIS	Ausgrid does not object to the proposal and recommended conditions relating to the supply of electricity, conduit installation, underground cables and the design of the building adjacent to existing substations.	
RMS (Maritime Planning)		
RtS	RMS (Maritime Planning) does not object to the proposal and made no comments.	

5.4 Key issues – Council, community and special interest groups

5.4.1 Council's submissions

Council objects to the proposal, as summarised in **Table 8**.

Table 8 | Summary of the objections and key issues raised in Council's submissions

Council	
EIS	Council objected to the proposal on the following grounds:
	• the proposal is inconsistent with the SHC SREP and the DHDP is out of date
	• the development should be subject to a competitive design excellence strategy
	 inappropriate height, scale and bulk of the tower
	 the provision of a 'flexible' building envelope is not supported
	 unacceptable overshadowing, wind and public / private view loss impacts
	 the land bridge would be perceived as private space
	 the projection of the building into the promenade and reduction of the promenade width is not supported

	• the boardwalk extension reduces the width of the harbour and is not supported				
	 adverse heritage impact on Pyrmont Bridge 				
	no residential uses should be permitted on the site insufficient sublic loss of the (classifier and permitted in the site)				
	insufficient public benefits / developer contributions.				
	Council stated, despite the amendments, it maintains its objection. Council reiterated its concerns, with the exception of its comments on the provision of a flexible envelope, land-bridge, residential use and Pyrmont Bridge heritage raised in its original submission.				
	Council provided the following additional comments:				
	• built form controls should include the proportion of the envelope that can be occupied				
Amended EIS	 architectural roof features should not exceed the building envelope 				
	 the development would adversely overshadow the future Town Hall Square 				
	 views along Market and Druitt Street should be preserved and improved 				
	the revised Pyrmont Bridge connection adversely impacts the Corn Exchange building				
	the open space should be publicly accessible and appropriately landscaped				
	the development should include improved ESD features / initiatives				
	car parking should be further reduced and servicing/loading should be considered				
	 pedestrian and cycleway access to / through the site should be improved 				
	 a contamination site investigation will need to be carried out as part of future DA(s). 				
	Council maintained its objection and reiterated its concerns with the exception of its comments on buil form controls. Council provided the following additional comments:				
RtS	• the proposed design excellence strategy includes insufficient information about the process of delivering design excellence				
	 the podium and tower setbacks should be increased 				
	• the reduction of the maximum tower floorplate to 3,000 m ² is an improvement, but should be further reduced				
	• the tower should be sited further over the Western Distributor and away from the foreshore				
	 the 60 m tower width building control should be reduced further 				
	 the reduction of overshadowing of Cockle Bay foreshore and Sydney Square is an improvement 				
	 competition design brief and future DA(s) should include an assessment of the heritage impact of the Pyrmont Bridge bridge link. 				

5.4.2 Community and special interest group submissions

A total of 108 public submissions (including special interest groups) were received in response to the public exhibitions of the EIS and Amended EIS, and the public notification of the RtS. Submissions comprised 103 objections, two comments and three in support. The key issues are summarised in **Table 9**.

A detailed breakdown of the issues raised in submissions in response to each of the three consultation stages is provided at **Appendix D**.

Table 9 | Cumulative summary of the public submissions as a proportion of the total submissions made

Issue	Proportion of total (108) submissions	
Objections and Comments		
The tower is too close to / dominate public domain and foreshore	77%	
Excessive height, bulk and scale of the tower / podium	76%	
Overshadowing	60%	
Out of character with existing scale of development	53%	
Adverse heritage impact on Pyrmont Bridge / Darling Harbour	52%	
Adverse impact on views from the public domain	44%	

Density / overdevelopment	40%
Traffic and car parking impacts	26%
Loss of private views	26%
 Lack planning controls for the site and non-compliance with Council's controls 	16%
Wind impacts	14%
Pedestrian connectivity and public accessibility	12%
Insufficient public open space	6%
Inadequate public benefits / community facilities / developer contributions	6%
Boardwalk extension adversely reduces the width of the harbour	5%

Other issues raised in public submissions (less than 5%) included:

Objection

- inadequate community consultation
- noise impacts
- adverse impact on property values
- sets a precedent for future developments
- inadequate public transport
- air quality impacts
- loss of privacy
- the loose-fit tower envelope will be filled in its entirety
- solar reflectivity / glare
- insufficient justification for office accommodation in this location

<u>Support</u>

- improved pedestrian access
- the open space is a public benefit
- the proposal revitalises / visually enhances the area
- increased employment opportunities
- hides the Western Distributor.

5.5 Amended EIS / Response to submissions

Following each exhibition / notification of the application, the Department placed copies of all submissions received on its website and requested the Applicant to provide a response to the issues raised.

The Amended EIS (lodged on 1 November 2018) and RtS (lodged on 5 July 2018, and subsequently amended) include additional information and justification in response to the issues raised during the public exhibition and notification of the proposal.

The Amended EIS and RtS also include amendments to the proposal and the tower built form controls. A summary and comparison the key amendments are provided at **Tables 10** and **11**.
Table 10 | Summary and comparison of key amendments to the proposal

Component	EIS	Amended EIS	RtS	Difference between EIS/RtS
Site area	21,900 m ²	24,900 m ²	No change	+3,000 m ²
Tower envelope height (max)	RL 235	RL 195	RL 183	-52 m
Podium envelope height (max)	RL 31	RL 29	No change	-2 m
Tower envelope width fronting Darling Harbour (max)	88 m	72 m	78.6 m	-9.4 m
Tower base envelope width fronting Darling Harbour (max)	104 m	71.8 m	86.5 m	-17.5 m
Tower envelope setback (min)	3 m	6 m	8 m	+5 m
Tower envelope setback (avg)	8 m	No change	10 m	+2 m
Distance from Pyrmont Bridge:				
o Tower envelope	30 m	65 m	72.9 m	+42.9 m
o Tower base envelope	10 m	65 m	No change	+55 m
Total GFA (max), comprising:	110,000 m ²	89,000 m ²	No change	-21,000 m ²
o Commercial GFA (max)	o 85,000 m²	o 75,000 m ²		o -10,000 m ²
o Retail GFA (max)	o 25,000 m ²	o 14,000 m ²		o -11,000 m ²
Open space (max)	12,000 m ²	15,000 m ²	12,000 m ²	No change
Open space (min)	-	-	$5,500 m^2$	+5,500 m ²
Car parking	200 spaces	150 spaces	No change	-50 spaces
Overshadowing of Town Hall Square:				
- avg annual additional overshadowing (hours)(max)	12	5.4	2.46	-9.54 hours
- duration of overshadowing (days)(max)	70	62	48	-22 days
- peak day overshadowing % change (max)	2.9%	1.5%	0.8%	-2.10%

Table 11 | Summary and comparison of key amendments to the tower built form controls

Tower Built Form Controls	EIS	Amended EIS	RtS	Difference between EIS/RtS
Width of tower envelope fronting Darling Harbour (max)	65 m	50 to 60 m	60 m	-5 m
Tower footprint (max)	-	$3,575 \text{ m}^2$	3,000 m ²	-575 m ²
Volumetric envelope utilization (max)	-	60%	65%	+5%

In addition to the key changes summarised at **Table 10** and **11**, the Amended EIS / RtS included the following changes to the proposal:

- include the Druitt Street pedestrian link, the former monorail station and realign and expand the pedestrian link to Pyrmont Bridge across the deck
- exclude Pyrmont Bridge from the site and remove the pedestrian link connecting the podium to Pyrmont Bridge
- amend to the dimensions of the southern component of the podium envelope adjacent to the IMAX redevelopment
- expand the podium building envelope to the south of the tower and along the eastern boundary with the Western Distributor
- commit to a design excellence strategy and process comprising a competition framework to select a design team that is capable of delivering design excellence
- amend of the definition of the northern publicly accessible open space to exclude commercial spaces and pedestrian thoroughfares from the minimum (5,500 m²) space calculation.

5.6 Independent design advisor

Following the submission of the Amended EIS and in consideration of submissions received, the Department raised concerns about the height, form and location of the tower envelope and its impact on amenity in terms of potential overshadowing and private view loss.

Concerns were raised in public submissions that there was a lack of planning controls applying to the site. Council raised concern the DHDP was not a contemporary planning instrument and does not include appropriate planning controls for the site.

In light of these concerns, the complexity of the proposal and the absence of built form planning controls for the site, the Department engaged an independent design advisor (Professor Peter Webber) (the independent design advisor) to provide independent expert design advice to assist the Department's assessment of the application.

In order to address concerns raised in submissions and to mitigate the impacts of the proposal, the Department convened design workshops between the Applicant and the independent design advisor to allow the Applicant to explore alternative design options for the site and for the independent design advisor to peer review the proposal on an iterative basis. Workshops were held on three occasions being on 23 February, 29 March and 2 May 2018.

The key outcomes from the design workshops resulted in further reductions to the height the tower envelope resulting in reduced overshadowing of Town Hall Square and increased tower setbacks from the foreshore and Pyrmont Bridge (**Table 10** and **Figures 12** and **13**).

Following consideration of the RtS, the independent design advisor prepared a final design report including his independent expert design advice (**Appendix E**).

The independent design advisor supports the proposal and made the following key comments:

- the visual impact of the tower will be a critical issue at the detailed design stage. It is important that the built form controls are robust enough to deliver a building that meets the design objectives. In particular the tower should:
 - o not be overly assertive visually
 - o minimise view impacts

- o be elegant and discreet
- o include appropriate materials and finishes
- the tower location is appropriate and is the result of detailed analysis of options
- the precedent for towers adjacent to the harbour has been established by other sites in the immediate area
- the setbacks and podium height ensure a 'human scale' is achievable along the waterfront
- the future design of the tower and landscaping should ensure wind impacts are minimised
- relatively few properties have private views that are affected, although in several cases these appear to be notable
- a substantial quantity of public open space is proposed, and this could be considered as a reasonable off-set for the inclusion of a tower. The open space should:
 - o be conserved in perpetuity with permanent public access
 - o comply with the minimum/maximum built form controls
- the existing Cockle Bay Wharf buildings are unremarkable and there is a good case for their removal.

The recommendations of the independent design advisor are given further consideration in Section 6



Figure 13 | Amendments to the tower and podium height and tower location negotiated during the Department's assessment of the application (Base source: Applicant's RtS)



6.1 Key assessment issues

The Department has considered the EIS, Amended EIS, RtS and the issues raised in submissions in its assessment of the proposal. The Department considers the key assessment issues associated with the proposal are:

- density
- design excellence
- building envelope
- open space and connectivity
- heritage
- parking, traffic and access
- contributions and public benefits
- early works (demolition).

Each of these issues is discussed in the following sections of this report. Other issues were taken into consideration during the assessment of the application and are discussed at **Section 6.10**.

6.2 Density

The proposal includes a maximum commercial GFA of 89,000 m², comprised of 75,000 m² office GFA and 14,000 m² retail GFA. The proposed maximum GFA is 80,800 m² greater than the GFA of the existing Cockle Bay Wharf development (8,200 m²).

Concern was raised in public submissions about the density of the development and that it represents an overdevelopment of the site.

An acceptable density is ultimately informed by the appropriateness of the built form and having regard to potential impact of the floorspace such as, traffic generation, amenity impact and demand on existing/future infrastructure.

As discussed at **Section 6.4** the Department supports the overall building envelope and built form controls and design guidelines have been recommended to limit the maximum dimensions of the tower within the envelope.

The Department considers the site can accommodate a greater density than what has been established by the existing Cockle Bay Wharf development, as:

- the building height and scale is appropriate in this context and has acceptable visual and heritage impacts (Sections 6.4 and 6.6)
- amenity impacts including overshadowing and private view loss have been minimised (Section 6.4)
- the proposal provides significant additional publicly accessible open space (Section 6.5)
- the design excellence strategy will ensure design excellence in the detailed design and the creation of a welldesigned development that is integrated into it immediate context (**Section 6.3**)
- traffic generation is acceptable and would have limited impact on the road network (Section 6.7).
- the proposal includes appropriate and proportionate public benefits (Sections 6.8).

In addition, and as discussed in **Section 3**, the Department considers the increase in commercial accommodation has strategic merit, particularly given it will provide a significant increase to employment generating floorspace, has excellent access to public transport and is conveniently located to the CBD.

The Department concludes the proposal does not unreasonably impact on the surrounding area, despite an increase in density above the existing development, and results in significant public benefits.

To ensure the density of the development is not exceeded, the Department recommends a ToA, which sets a maximum commercial GFA of $89,000 \text{ m}^2$, comprised of $75,000 \text{ m}^2$ office GFA and $14,000 \text{ m}^2$ retail GFA.

6.3 Design Excellence

While the proposal seeks concept approval for a maximum building envelope, GFA, tower built form controls and design guidelines to guide the design of the future development, the Applicant has also provided a Design Excellence Strategy (DES) to ensure the future development exhibits design excellence.

The DES proposes a design competition to identify a design team (rather than a specific winning architectural design) that is capable of delivering design excellence across the entire precinct, and a concept design for both the built-form and open space.

The design competition is to be run as follows:

- prepare a competitive design process brief (Brief) to be endorsed by the Department's and GANSW
- commence the competition after determination of the concept approval (this application) and the endorsement of the Brief
- invite expressions of interest from at least 10 architectural and urban design competitors, from which up to six are selected to participate in the competition
- each team to submit their entry to a competition jury (Jury) comprising to six members (three selected by the Applicant and three by the Department/GANSW)
- a mid-point review allow teams to present their draft proposals as 'work-in-progress'
- the Applicant may appoint an advisory panel and technical panel, which would be available to provide advice to competitors and the Jury
- the Jury will select the winning team and concept based on selection criteria contained within the Brief
- to retain design integrity, the Jury will review the proposal prior to lodgement of the DA(s).

Council is concerned the DES includes insufficient information about the process of delivering design excellence, and should be updated to include:

- public domain and interface components
- ESD targets
- confirmation the Jury composition complies with the GA Guidelines
- clarification of the roles of technical advisors, GANSW, consent authority and Applicant during the midpoint review.

The Department sought advice from the GANSW about the proposed DES. The GANSW initially raised concerns about the Jury composition, advisory and technical panels, securing design integrity and competition requirements. However, following revisions made by the Applicant the GANSW endorsed the DES subject to the DES establishing a Design Integrity Panel (DIP) to advise on the proposal prior to the lodgement of the DA(s) and review of the project by the State Design Review Panel (SDRP).

The Department considered the DES against the GANSW's draft Government's Architect's Design Excellence Competition Guidelines (GA Guidelines), and consistent with the advice of the GANSW, the Department supports the amended DES and recommends FEARs requiring the following:

- future DA(s) is to be subject to a competition in accordance with the DES as endorsed by the GANSW
- establishing a site specific DIP to ensure design integrity in the detailed building design prior to the lodgement of the first DA
- the scope (or terms of reference) of the DIP is to be finalised in consultation with the GANSW and approved by the Planning Secretary before the DIP meets and prior to lodging the first DA
- the DIP is to remain engaged to oversee the project through the assessment process, including consideration of issues raised in submissions and the Applicant's response to submissions.
- prior to lodgement of a DA, or during the exhibition period, the proposal should be presented to the SDRP.

The Department has considered Council's recommended amendments to the DES and notes, as discussed at **Sections 4**, **6.4** and **6.5**, design matters relating to public domain and interface and ESD are addressed in recommended FEARs. As the competition entrants will need to ensure the detailed design meets the requirements of all FEARs, the Department does not consider it necessary to duplicate these requirements within the DES.

6.4 Building envelope

The proposal seeks concept approval for a commercial building envelope comprising a tower, tower base, podium and deck (over the Western Distributor). The proposal includes the following building envelope parameters (**Figure 14**):

- a maximum of 89,000 m² commercial GFA
- a maximum building envelope height of RL 183 m (approximately 42 storeys, including podium)
- tower envelope width of 78.6 m (fronting Darling Harbour) and depth of 53.3 m
- minimum tower envelope setback from the Darling Harbour promenade of 8 m with an average tower setback of 10 m.



Figure 14 | Axonometric view (south-east) of the maximum building envelope, height and dimensions (Base source: Applicant's RtS)

The Applicant contends that the tower envelope (78.6 m wide x 53.3 m deep) will be 'loose fit', meaning it is larger than necessary to allow flexibility around the location of a tower within the building envelope. To ensure a future tower does not fill the building envelope in its entirety, the proposal includes tower built form controls (TBFCs) (**Table 11**), which are in addition to the building envelope parameters (above) and limit the maximum tower width, footprint and floorplate and volumetric fill within the loose fit envelope. These TBFCs will inform the design competition and the assessment of future DA(s) for the detailed building design.

The proposal also seeks approval for design guidelines, which will further inform the detailed building design and will also be considered during the design competition and in the assessment of future DA(s). These provide guidance on a range of matters including urban design, open space and built form consideration, the design guidelines are provided at **Appendix F**.

While the proposal does not seek approval for the detailed building design, the Applicant has provided an indicative design illustrating how the proposed GFA could be accommodated within the parameters set by the building envelope, the TBFCs and design guidelines (**Figure 15**).



Figure 15 | Indicative tower development (Source: Applicant's RtS)

Concerns were raised in public submissions and by Council about height, bulk and scale, view loss, overshadowing and wind impacts.

The Department acknowledges the concerns raised in submissions. In addition, the Department notes the DHDP (the EPI applicable to the site) does not include planning controls relating to building height, scale, setbacks or floor space. Further, due to the location of the tower in relation to Darling Harbour and the bulk and scale of the building envelope the proposal could potentially result in a visually dominant building with adverse amenity impacts.

Consequently, the Department sought the advice of an independent expert design advisor to assist in its assessment of the application. The independent design advisor has given conditional support for the building envelope as summarised at **Section 5.6** and quoted at **Appendix E**.

In response to the concerns raised and consistent with the independent design advisor, the Department required the Applicant amend the building envelope (**Table 10**), including the following key changes:

- reduce the maximum height of the tower by 52 m (from RL 235 to RL 183)
- reduce the maximum GFA by 21,000 m² (from 110,000 m² to 89,000 m²)
- relocate the tower a further 42.9 m south of Pyrmont Bridge (from 30 m to 72.9 m)

- increase the minimum tower setback from Cockle Bay foreshore by 5 m (from 3 m to 8 m)
- reduce the maximum number of days to which part of Town Hall Square experiences additional overshadowing after 4:00 pm by 22 days (from 70 to 48 days).

Having carefully considered the location, scale and form of the amended building envelope the Department considers the key issues in the consideration of the building envelope are:

- height and form
- overshadowing
- view impacts
- wind.

6.4.1 Height and form

Envelope height and tower location

The proposal seeks approval for a building envelope consisting of a tower, podium and deck with maximum heights of (**Figure 14**):

- tower: RL 183 m (approximately 42 storeys, including podium)
- podium / tower base: RL 29 m (approximately 5 storeys)
- deck height over the Western Distributor: RL 19 (approximately 3 storeys).

The tower component of the building envelope is roughly rectangular in shape (measuring 78.6 m wide x 53.3 m deep) and located centrally within the site fronting Darling Harbour.

Concern was raised in public submissions about the height, bulk and scale of development, the visual impact of the tower including the impact on the character of Darling Harbour. Many submissions recommended the tower height should be significantly reduced so it provided a built form transition that stepped down to the Darling Harbour foreshore.

Council objected to the height, bulk and scale of the development and to the principle of the provision of a tall building in this location. Council recommended the location of the tower should be moved further east over the Western Distributor.

The Applicant contends that the proposed height and location is appropriate because:

- the site is located at the interface between the CBD and Darling Harbour and the building envelope provides for a height and built form that is responsive to this context and the character of the area
- the character of the surrounding area has evolved in recent years and accommodates tall buildings immediately adjacent to the harbour
- several alternative locations, heights and massing options have been tested (a selection of which are shown at Figure 16). A single, centrally located tower form represents the best outcome for the site and surrounding area as it minimises visual, view-loss and overshadowing impacts and maximises pedestrian and visual permeability and the provision of open space
- the tower location does not have an adverse impact on Pyrmont Bridge, view loss and the surrounding context
- due existing site constraints, structural complexity (**Figure 17**), impact on views, and removal of a visual link to Market Street (its future street address) the tower cannot be relocated further to the south.

The Applicant has submitted a Visual and View Loss Impact Assessment (VVIA) in support of the application and provides perspectives of the building envelope as seen from key vantage points as shown at **Figures 18** to **21**.



Figure 16 | Various development forms tested by the Applicant during the design development of the proposal (Base source: Applicant's RtS)



Figure 17 | Structural complexities related to construction of a tower in a southern location (Source: Applicant's RtS)



Figure 18 | Existing (left) proposed (right) view south from Peacock Point Balmain East (Source: Applicant's RtS)



Figure 19 | Existing (left) proposed (right) east from Murray/Union Street intersection and the western entrance to Pyrmont Bridge (Source: Applicant's RtS)



Figure 20 | Existing (left) proposed (right) east from the western (Harbourside) Darling Harbour promenade (Source: Applicant's RtS)



Figure 21 | Existing (left) proposed (right) view from the southern Darling Harbour promenade (Source: Applicant's RtS)

The independent design advisor supports the revised tower height and location stating:

- the inclusion of a significant area of publicly accessible open space is a reasonable off-set for the provision of a tower on a site
- with skilful design a satisfactory scale of development along the foreshore could be achieved
- the tower envelope location is the result of a detailed analysis of all available options
- the existing Cockle Bay Wharf buildings are unremarkable and there is a good case of their removal
- the podium height ensures a 'human scale' is achievable along the waterfront
- other sites in the immediate area include towers adjacent to Darling Harbour.

In order to thoroughly assess the appropriateness of the height of the building envelope and tower location, the Department has carefully considered the surrounding built form context (**Figure 22**).





The Department notes that in the past Darling Harbour was characterised by taller towers in the CBD stepping down to the foreshore and central open spaces creating a notional 'valley floor' urban form. Over the past 10 years Darling Harbour has undergone a period of dynamic renewal and urban rejuvenation and the recent development of Barangaroo, ICC facilities, Darling Square, the Sofitel and the IMAX redevelopment have transformed the character of Darling Harbour. In particular, these developments include tall buildings close to the foreshore and central open spaces, which strongly frame and define those spaces (**Figure 22**).

The Department considers the prevailing character of Darling Harbour is no longer primarily defined by buildings gradually stepping down to a valley floor, instead the Department considers the area is now characterised by a variety of building heights, scales and designs some very tall and close to the harbour and others more diminutive and recessed from the harbour. In addition, this new prevailing character makes a positive contribution to the visual experience within Darling Harbour and reinforces its role as a vibrant focal point and diverse tourist and entertainment precinct at the western edge of the city.

The Department has considered the visual impact of the proposal within the key vantage points (**Figures 18** to **22**) and considers the provision of a tower in this location, and up to RL 183, would be consistent with the broader visual character of Darling Harbour, noting the existence of tall buildings within Barangaroo and the Sofitel on the opposite foreshore of Darling Harbour. In addition, the VVIA has demonstrated that the proposal would not have an unacceptable visual impact when viewed from the west at key vantage points on the opposite site of Darling Harbour, from Pyrmont Bridge or in distant perspectives. The Department concludes the proposal strikes an appropriate balance between the protection/enhancement of views and the delivery of significant high quality public open space and commercial/retail tower.



Figure 23 | Perspective aerial view looking north-east across Darling Harbour and the CBD (Source: Applicant's Amended EIS)

The Department has carefully considered the proposal against the prevailing character of Darling Harbour and in the context of the expert design advice and considers the tower height and location are acceptable as:

- amendments negotiated by the Department (**Table 10**) substantially reduce the height of the tower and provide a tower envelope that responds more appropriately to its context and an improved tower location that is sensitive to the State heritage listed Pyrmont Bridge
- the independent design advisor supports the height and the location of the tower and considers a satisfactory scale of development along the foreshore could be achieved in the detailed design
- the proposed tower height and location is consistent with the character and contributes to the visual experience and vibrancy of Darling Harbour, which is now characterised by a variety of building heights and scales, including tall buildings adjacent to the foreshore.

- the tower height would not be overbearing or overly dominant when viewed from key vantage points within the surrounding public domain (**Figures 18** to **22**) and would contribute positively to the CBD skyline and eastern side of Darling Harbour
- the tower location facilitates the creation of publicly accessible open space (**Section 6.5**), which is a significant public benefit and provides a reasonable visual separation for the tower
- while the tower would alter the view from the existing public domain, it would not obstruct key views to or from the harbour or obstruct views towards significant or iconic landmarks
- other built form options explored by the Applicant have significant undesirable built form impacts (Figure 16), including monolithic wall-like building(s), squat inelegant building(s), reduced open space, awkward built form relationship with the IMAX redevelopment and/or adverse heritage impacts on Pyrmont Bridge
- the development would be subject to the building envelope parameters, TBFCs and the design guidelines, which establish acceptable built form controls for the site (noting the absence of such controls in the DHDP)
- the detailed design of the tower would be subject to:
 - a design competition to ensure it achieves design excellence (Section 6.3)
 - TBFCs and design guidelines (as amended by the Department at **Section 6.4/Appendix F**) to ensure the tower would not fill the building envelope in its entirety and is slender and elegant
- the tower envelope location represents the best outcome for the site in terms of overshadowing, view loss, and heritage impact (Sections 6.4 and 6.6)
- the tower envelope has an appropriate setback from the podium edge / promenade as discussed at Section 6.4, which ensures the tower is suitably recessive and does not have an overly dominant impact on the promenade
- The tower is unable to be moved further south or east due to construction complications/complexities resulting from the need for significant cantilever over the Western Distributor.

In addition, the Department considers the height of the podium, tower base and deck are acceptable as:

- amendments negotiated by the Department (**Table 10**) have substantially reduced the height of the podium adjacent to Pyrmont Bridge, the IMAX redevelopment and the Darling Harbour promenade
- the independent design advisor considers the podium height ensures a 'human scale' is achievable along the waterfront (**Figure 24**)
- stepped terraces are provided north and south of the tower providing for a varied podium height and relatable scale of development adjacent to the foreshore
- the podium height would not challenge the visual dominance and heritage significance of Pyrmont Bridge
- the tower base height differentiates it from the main podium and creates an appropriate plinth for the tower
- the deck height visually hides the Western Distributor and is also capable of providing appropriate clearance to the Western Distributor while providing improved pedestrian connections between the CBD and the foreshore (**Section 6.7**).



Figure 24 | Perspective view looking north along the foreshore promenade (notional overhang contained within building envelope) (Source: Applicant's RtS)

Bulk and scale

The proposed tower envelope is 78.6 m wide fronting Darling Harbour and 53.3 m deep. As discussed at **Section 6.4**, the tower envelope is loose-fit / larger than necessary to allow flexibility at the design competition / detailed design for the location of a tower within the building envelope.

The proposal includes TBFC (**Table 11**) to limit the maximum tower width, footprint and floorplate and volumetric fill within the loose fit envelope once the tower location has been finalised. The controls are intended to ensure the tower does not fill the building envelope and therefore encourages a slender/elegant tower.

Tower Built Form Controls	Proposed Control	Indicative Scheme	Difference (+/-)
Tower width fronting Darling Harbour (max)	60 m	52.5 m	-7.5 m
Tower footprint (max)	3,000 m ²	2,500 m ²	-500 m ²
Average tower floor plate	2,350 m ²	1,883 m ²	-617 m ²
Volumetric envelope utilisation	65%	62%	-3%

Table 11 | Comparison between the tower built form controls and the indicative scheme

Concern was raised in public submissions about the bulk and scale of the tower and that it would dominate the harbour. Council recommended the TBFCs further reduce the tower footprint and width of the western façade to reduce its perceived bulk when viewed from Darling Harbour.

The Applicant has stated the maximum tower width TBFC is appropriate as it is no greater than the maximum widths of the neighbouring Darling Park Towers 1 and 2. The Applicant has provided an indicative scheme demonstrating how a detailed tower/development might appear and respond to the building envelope parameters, TBFCs and the design guidelines (**Figure 25**).



Figure 25 | Proposed building envelope (left) indicative massing (middle) and indicative scheme (right) (Base source: Applicant's RtS)

The Applicant does not propose any built form controls specific to the tower base, podium or the deck.

The independent design advisor considered the visual impact of the tower will be a critical issue at the detailed design stage, and it is important that the TBFCs are robust enough to deliver a building that meets the design objectives. In particular the tower should:

- not be visually overly assertive
- minimise view impacts
- be elegant and discreet
- include appropriate materials and finishes.

The Department acknowledges the site is subject to a number of key constraints, including its proximity to the Western Distributor, Darling Harbour, heritage items and neighbouring buildings and its narrow east/west width, which complicate the design and construction of a building on the site. In this context, the Department supports the principle of a larger tower envelope to provide some flexibility for future tower location (within the building envelope) to respond to the site's constraints and to ensure design excellence is not unduly constrained.

Notwithstanding the above, the Department agrees with the independent design advisor that the controls need to be sufficiently robust to ensure the future tower is slender, not overly assertive and minimises visual impacts. The Department has therefore considered controls relating to the tower, tower base and tower setbacks, articulation and exclusions below.

Tower

The Department notes the TBFCs allow for a 60 m wide tower fronting Darling Harbour, whereas the illustrative scheme shows a 52.5 m wide tower (7.5 m narrower than the TFBCs) (**Table 11** and **Figure 25**).

The Department considers 'tower width to Darling Harbour' is the most important of all the TBFCs to ensure the future tower results in a slender and elegant building proportions, as the western elevation will be the most visible/frequently seen tower elevation within public vantage points. In addition, compliance with the tower width control would also dictate the extent other built form controls are/could be reached as it imposes the most restriction on the tower.

The Department considers the width of the indicative scheme as it fronts Darling Harbour (52.5 m), coupled with the maximum height (RL 183), results in a slender and elegant tower (**Figure 15**). The tower proportions appropriately respond to the site's context without overwhelming or overbearing Darling Harbour or having an adverse visual impact on the surrounding area (**Section 6.4.1**). The Department considers the width of the indicative tower (52.5 m) is the maximum the site can comfortably accommodate, and an increase of width beyond that would result in bulk, scale and tower proportions that would have negative visual impacts.

However, the Department is concerned the TBFCs are not sufficiently robust in their current form to achieve the desired built form outcomes demonstrated by the indicative scheme. The Department therefore recommends the maximum width of the tower be reduced by 7 m (from 60 to 53 m) as:

- the width of the indicative scheme (rounded up to 53 m to allow some flexibility) is considered to be the maximum width that can be considered acceptable give the location and height of the tower and its relationship to Darling Harbour
- a tower greater than 53 m wide would:
 - o be overly assertive when viewed from Darling Harbour having a dominant and adverse visual impact
 - not result in a tower with elegant proportions, noting other elegant tall towers that have achieved design excellence within the vicinity of the site have done so within envelopes narrower than 60 m fronting the harbour (eg Crown Sydney Hotel Resort at 45 m and the Sofitel at 35 m)

- the Applicant's visual (and overshadowing and view loss) justification for the tower is based on the proportions of the indicative scheme
- 53 m is within the tower width range previous contemplated by the Applicant (Table 10)
- the Darling Park Towers 1 and 2 have the following attributes, and therefore cannot reasonably be used as justification for the maximum tower width on the site:
 - the towers are setback 62 m and 76 m from Darling Harbour and visually associated with the cluster of CBD buildings rather than the Darling Harbour
 - the towers are triangular rather than square/rectangular and the three principle elevations of each tower are 48 m wide, with the maximum width of 60 m occurs through the centre of the building rather than the façade
 - while the towers have a blunt-ended triangle shape, which visually reduces their perceived width, the tower proportions are still considered bulky and fail to achieve slender tower forms.

The Department recommends the tower width built form control should apply to the width of the tower along its entire east-west depth, not just the part of the tower fronting Darling Harbour. This amendment is necessary to ensure the width of the parts of the tower not fronting the harbour (i.e. any part behind the harbour fronting elevation) does not expand beyond the maximum width of 53 m.

The Department notes the above change to the tower width TBFCs is likely to mean a future tower is unlikely to reach the remaining TBFCs maximum controls (footprint, floor plate and volume) noted at **Table 11**. To avoid any confusion/doubt during the detailed design stage the Department recommends a note be included with the TBFCs confirming the tower width control is the primary control and in the case of any inconsistency with the other TBFCs the tower width control takes precedent.

The Department also recommends amendments to the design guidelines to ensure the detailed design of the tower is slender, elegant and achieves design excellence.

Tower base

The tower base envelope is 86.5 m wide fronting the harbour (**Figure 26**) and the proposal does not include any specific built form controls or design guidelines to guide the width or design of the tower base.

The Department notes the width of the tower base building envelope was reduced from 104 m to 71.8 m in the Amended EIS and increased to 86.5 m in the RtS. The Applicant has not provided any justification to support the final chosen width of the tower base (86.5 m).

The Department notes the indicative scheme includes a tower base/plinth (of approximately 66 m wide), which although wider than the tower is a discreet component of the overall development that is subservient to the tower and the remainder of the podium.

The Department supports the principle of providing of a tower base/plinth, noting the indicative scheme provides an appropriate interface/transition between the main podium and the tower. However, as there is no control limiting the width of the tower base, the Department is concerned that the envelope may be filled in its entirety (86.5 m wide / 33.5 m wider than the tower). The Department considers such an outcome to be inconsistent with the scale and proportions of the tower (as amended above) and would dominate the foreshore.



Figure 26 | Tower base building envelope and width (Base source: Applicant's RtS)

The Department recommends the tower base should be no wider than 73 m, being 20 m wider than the maximum width of the tower (53 m), as:

- this allows 10 m either side of the tower, which is considered ample built form to create an appropriate interface/transition between the podium and the tower and relationship to the foreshore
- 73 m is similar to the width previously proposed by the Applicant in its Amended EIS (**Table 10**) and the tower base of the indicative scheme
- the proposed width provides a suitable amount of flexibility not to hinder the design excellence process
- the indicative scheme has demonstrated a discreet tower base is a possible and a desirable outcome.

The Department therefore recommends:

- the TBFCs be amended to include a maximum tower base width control of 73 m
- design guidelines be updated so that the tower base provides an appropriate plinth for the tower and interface/transition between the tower and the podium

Tower envelope setbacks, articulation and exclusions

The proposal includes a varied tower setback fronting Darling Harbour and an architectural articulation zone to the podium / tower base (that projects into the foreshore promenade). In addition, the Applicant suggests certain works should be allowed to occur outside the building envelope.

The Department has considered each of this matters below.

Tower setback (to the west)

The proposal sets a minimum tower envelope setback of 8 m, with an average of 10 m, from the edge of the podium / foreshore promenade (minimum 19.6 m setback from Darling Harbour) (**Figure 27**).

The Applicant has stated the tower setback provides an appropriate visual relationship to Darling Harbour and minimises overshadowing impacts on the promenade. In addition, the setback also allows for flexibility of built form treatments.

Council recommended the minimum tower setback from the promenade be increased by 2 m from 8 m to 10 m.

The independent design advisor confirmed the building envelope setback is adequate achieve a 'human scale' of development along the promenade.





The Department considers the proposed tower envelope setback to the west, being a minimum of 8 m with an average of 10 m, to be acceptable as:

- the amendments negotiated by the Department (**Table 10**) increased the tower setback by 5 m (from a minimum of 3 m to 8 m) from the promenade
- the independent design advisor concluded the setbacks are appropriate and the development is capable of providing a relatable scale along the promenade
- the setback ensures the tower is stepped back from the podium edge and Darling harbour reinforcing the 'human scale' built form along the foreshore promenade
- the setback, as a minimum, allows for appropriate design flexibility during the competitive design excellence process and detailed design stage
- the combination of a minimum and average setback allows for greater variation in the design and form of the western façade of the tower, which the Department considers to be the most important façade in design/visual impact terms
- a minimum 8 m tower setback from the promenade allows the tower to be suitably recessed from Darling Harbour and not have an overly dominant impact on the promenade.

Podium and tower base articulation zone

The proposal includes an articulation zone to part of the podium and all of the tower base. The articulation zone projects a maximum of 3 m from the western face building envelope over the Darling Harbour promenade and its use/fill is limited to a maximum of 40% of the zone volume (**Figure 28**).



Figure 28 | Podium articulation zone section (top) and axonometric view (bottom) (Base source: Applicant's RtS)

The Applicant has confirmed the articulation zone is intended to accommodate variable architectural features/projections, balustrades, awnings and other features. In addition, the zone provides flexibility for innovative design solutions along the promenade façade without eroding the usable floorspace within the building.

The Department notes the existing Cockle Bay Wharf building is set back from the promenade by a minimum of 3.5 m and existing restaurant awnings and outdoor seating areas are contained wholly within the site. There are a number of minor instances where planters and stairs project into the promenade.

The Department notes the proposed podium building envelope does not include any setback(s) from the promenade, which is approximately 12 m wide in this location.

The Department does not object to the provision of an articulation zone to the western elevation of the podium and tower base building envelope, as it encourages innovative responses to the design of the elevation and may support the design excellence process. It also provides opportunities to benefit pedestrian amenity through architectural features such as awnings and louvres. However, the Department considers the provision of a 3 m deep articulation zone is excessive and recommends it be reduced by 2 m, to no more than a maximum of 1 m, as:

- a 3 m projection would reduce the width of the promenade (above ground floor level) to 9 m and is therefore likely to have an overbearing impact on the Darling Harbour promenade
- a 3 m projection would have a perceived privatising effect on the promenade and the pedestrian experience. In addition, the projection would impact on pedestrian views north and south along the promenade
- the envelope depth (between 37 m and 51 m deep) is capable of largely internalising architectural features without significant adverse impact on usable floorspace.

Subject to the above amendment, the Department does not consider it necessary to limit the use/fill of the articulation zone to 40% noting the existing development includes minor projections into the Darling Harbour Promenade (approximately 1 m deep).

The Department recommends a FEAR requiring the concept drawings be amended showing the articulation zone:

- reduced to a maximum depth of 1 m
- limited only to architectural features/projections, balustrades and awnings, and exclude any commercial floorspace and balconies.

Envelope exclusions

The concept drawings include an annotation confirming the following features can extend outside of the building envelope: balustrades, parapets, roof features, services poles and antenna/aerials, awnings, artworks, garden pavilions, kiosks, vegetation, signage and structures.

Council recommended roof features should be contained within the building envelope.

The Department considers roof features, awnings, parapets, business and building identification signage and structures should be contained wholly within the building envelope, as:

- such features can be substantial in size and may have additional unexpected visual and amenity impacts
- in the absence of any justification or detailed information the consideration of this aspect of the proposal is premature.

The Department considers artworks, garden pavilions, kiosks and signage should only be permitted outside the building envelope where they are within/relate specifically to the approved publicly accessible open space and/or public domain. In particular, the Department notes, due to the limited height of the deck and podium relative to the open space and public domain, compliance with the building envelope could prevent the potential inclusion of the above features within the development.

The Department does not object to the exclusion of balustrades, service poles and antenna/aerials and vegetation as these features are minor aspects of the development and would have negligible visual or amenity impacts.

The Department recommends a FEAR confirming the features which can extend beyond the building envelope and also recommends the current annotation on the concept drawings be deleted.

6.4.2 Overshadowing

More than 60% of public submissions raised concern about the potential overshadowing of public spaces and residential apartments. In addition, Council objected to the proposal on the grounds that it overshadowed the proposed Town Hall Square public open space.

The Department considers the key areas potentially overshadowed to be:

- Town Hall Square
- Astoria Tower
- Cockle Bay foreshore, Sydney Square and Tumbalong Park
- Crescent Garden.

The Department's assessment of overshadowing below has therefore focused on these areas.

Town Hall Square

Council has proposed to establish a new public open space opposite Sydney Town Hall on the corner of George Street, Park Street and Pitt Street, to be known as Town Hall Square (future THS). The future THS is located approximately 440 m east of the site (**Figure 6**), has an indicative area of approximately 4,400 m² and is currently occupied by a 10 storey commercial building.

Council objected to the proposal as it would result in additional overshadowing of part of the future THS and raised concern the proposal would set a precedent for additional overshadowing of the square over time.

Council recommends the height of the tower not exceed a height plane varying from RL 155 to RL 175 to prevent any overshadowing of the future THS.

While the SLEP 2012 does not currently prevent overshadowing of the future THS, the draft Central Sydney Planning Strategy (CSPS) proposes to include new sun access planes in the SLEP 2012 limiting building heights in the CBD / surrounding areas to prevent overshadowing of the future THS (between noon and sunset at any time throughout the year). The draft sun access planes would limit the height of the proposed tower envelope to between RL 155 and RL 175. The draft CSPS has not been exhibited and therefore does not have statutory planning weight.

Overshadowing

The application includes an assessment of the predicted overshadowing impact of the proposal on the future THS (the Solar Study). To provide a realistic representation of potential overshadowing from the envelope, the Solar Study has analysed the overshadowing caused by two indicative tower buildings (each RL 183 tall and 60 m wide) located at the northern and southern ends of the concept envelope (**Figure 29**), together with shadows cast by existing buildings.

The Solar Study has assessed the overshadowing of both tower locations during the solar protection period in the draft CSPS (noon until sunset throughout the year) and also on the days of the year the future THS would be most affected by each of the indicative towers located at the northern and southern end of the concept envelope (the peak days).



Figure 29 | Indicative northern (top) and southern (bottom) tower massing locations analysed by the Solar Study for the THS site overshadowing impacts (source: Applicant's RtS)

A summary of the predicted overshadowing is provided at **Table 12** and shadow diagrams indicating the future THS overshadowing on peak days are provided at **Figure 30**.

Table 12 | Additional overshadowing of the THS site

Impact	Northern Tower Location	Southern Tower Location
Maximum number of days THS experiences additional overshadowing	48 days per year	46 days per year
Days during autumn and spring equinoxes that THS experiences the most additional overshadowing	1 April and 9 September	27 March and 14 September
The day THS experiences the most additional overshadowing (peak day)	9 September	14 September
Maximum annual additional overshadowing at any one point (hours)	6.8 hours per year	5.5 hours per year
Annual average additional overshadowing (hours)	2.46 hours per year	1.42 hours per year
Peak day overshadowing % change	0.8%	0.52%
Peak day maximum overshadowing of THS at any one point (minutes)	14 minutes	12 minutes





Figure 30 | Shadow diagrams indicating overshadowing (peak day) of the future THS from indicative towers in a northern (top) and southern (bottom) envelope location (source: Applicant's RtS)

Table 12 and **Figure 30** confirms the proposal would result in additional overshadowing of the future THS in the late afternoon (after 4:00 pm) and that a tower location at the northern end of the building envelope would result in slightly more overshadowing of the future THS than a tower location at the southern end. In addition, the Solar Study confirms:

- overshadowing would occur for a maximum of 48 days in the year being 24 days around each equinox (autumn and spring)
- the overshadowing would occur between 25 30 minutes in the late afternoon from 4:00 pm to 4:30 pm (5:00 pm and 5:30 pm during daylight savings) on peak days
- the degree and duration of overshadowing reduces either side of the peak days.

The Applicant contends the overshadowing of the future THS is acceptable noting there is no statutory control protecting sunlight to the future THS (as the CSPS has no statutory weight). Furthermore, only a small portion of the future THS is affected for a limited period throughout the year and the proposal includes a significant new north facing public open space.

The Applicant has also confirmed that should the tower be amended to prevent any additional overshadowing of the future THS as suggested by Council it would reduce the building height by 35 m / approximately 6 storeys and 14,100 m² GFA (approximately 16% of total GFA) and adversely alter the proportions of the tower.

To limit the development's overshadowing, the Applicant proposes overshadowing controls and design guidelines (**Table 13**).

Additional Overshadowing of THS	Southern Tower Location	Northern Tower Location	Proposed Control
Maximum duration of overshadowing (days per year)	46 days	48 days	50 days
Maximum annual average additional overshadowing hours	1.42 hours	2.46 hours	2.5 hours
Maximum peak day overshadowing % change	0.52% increase	0.8% increase	1% increase

Table 13 | The TBFCs and design guidelines THS overshadowing controls

Department's consideration

The Department notes that given its inner-city location surrounded by tall buildings, the future THS is likely to be overshadowed by existing buildings at various times throughout the day. On the most affected day (9 September), however, it would continue to receive significant direct sunlight between 12:30 pm and 4:00 pm and is therefore capable of providing a high quality open space during this time, when it is expected to be used most for active/passive recreation.

The Department also considers the Solar Study's assessment approach, which considers two indicative tower locations rather than the entire building envelope, is reasonable as:

- the northern and southern tower locations overlap and therefore, together, they cover the maximum extent of overshadowing and all potential tower locations within the envelope
- the TBFCs prevent the use of the entire building envelope and therefore the assessment of the entire building envelope would not give a true representation of the potential overshadowing impacts.

The Department notes the draft CSPS has not been exhibited and therefore does not have statutory planning weight and there is no certainty that the sun access controls will come into force as proposed. In the absence of any specific control for the future THS the Department notes that existing controls protecting solar access to other similar public open spaces (at Clause 6.19 within the SLEP 2012) in the CBD do not protect solar access after 4:00 pm at any time throughout the year, for example:

- Australia Square Plaza, Chifley Square, Government House Place, Lang Park, Macquarie Place, Martin Place, Pitt Street Mall, Prince Alfred Park are protected to no later than 2:00 pm
- Sydney Town Hall steps and Sydney Square (which are adjacent to the future THS) are protected to no later than 4:00 pm.

Having carefully considered the Solar Study, together with Council's comments, the Department considers the impact of a tower in a northern location (being the tower location with the greatest impact) on solar access to the future THS is acceptable for the following reasons:

- the proposal does not affect solar access to the future THS before 4:00 pm at any day throughout the year
- the future THS would not experience any additional overshadowing after 4:00 pm for 317 days a year
- there is no existing precedent to protect solar access to similar public open spaces in the CBD after
 4:00 pm in the SLEP 2012, including the immediately adjoining public spaces (Town Hall steps and Sydney
 Square) and there are currently no statutory planning controls protecting solar access to the future THS
- in the context of an inner City location, surrounded by tall buildings, it would be unreasonable to protect solar access to the future THS after 4:00 pm
- any overshadowing of part of the future THS after 4:00 pm is limited to:
 - a maximum of 48 days per year (split into 24 days around each equinox, being autumn and spring)
 - a maximum of approximately 30 minutes on the most affected day (being 9 September), and reduces thereafter
 - the late afternoon between 4:00 pm and 4:30 pm (5:00 pm and 5:30 pm during daylight savings),
 which is outside the peak demand times (which the square would be used for active/passive recreation) including the lunchtime period
- in response to Council's initial concerns the Applicant amended the proposed height and location of the building envelope (**Table 10**), which has significantly reduced the overall overshadowing impact on the future THS
- the further reduction in height necessary to remove all overshadowing of the future THS would adversely affect the vertical proportions of the building envelope and jeopardise the ability of the site to provide a slender/elegant tower that achieves design excellence and is appropriately integrated into its context
- the proposal facilitates the creation of a significant new public open space at the northern end of the site (minimum 5,500 m²), adjacent to the harbour that is likely to be unaffected by significant periods of overshadowing.

The Department does not consider the approval of the building envelope would set a precedent for additional overshadowing of the future THS as any development of surrounding land would be the subject of separate development applications, assessed on their merits and would be subject to height, floor space ratio and other planning controls in place at the time.

While the Department supports the above, it does not support the Applicant's proposed controls in relation to solar access to the future THS after 4:00 pm (**Table 13**) as they exceed the maximum overshadowing assessed above (i.e. tower in a northern location).

To ensure that the future development within the envelope does not create any additional overshadowing of the future THS, beyond that assessed and supported, and endeavours to minimise overshadowing impact in its detailed design, the Department recommends a FEAR and design guidelines establishing the following maximum overshadowing controls consistent with the maximum overshadowing assessed and supported:

- no additional overshadowing of the future THS before 4:00 pm at any time throughout the year
- options be explored to minimise loss of solar access at the detailed design stage after 4:00 pm
- no overshadowing the future THS after 4:00 pm beyond the maximum overshadowing impact of a tower in a northern location, being:
 - maximum 48 days throughout the year
 - maximum 30 minutes on the peak day
 - maximum 2.46 hours annual average overshadowing

• maximum 0.8% overshadowing increase on the peak day.

Astoria Tower

Concern has been raised in public submissions the proposal would overshadow the western elevation of the Astoria Tower.

The Astoria Tower is a 33 storey residential tower located approximately 100 m east of the site. The western elevation of the Astoria Tower, on Sussex Street, faces the site through a gap between Darling Park Tower 1 and Tower 2 (of approximately 35 m).

On its western elevation, the Astoria Tower contains 52 apartments (two apartments per floor) with living rooms, bedrooms and balconies facing the site. Living rooms on the northern side of the western elevation also have a second aspect via windows to the on the northern elevation (**Figures 31** and **32**).

The overshadowing analysis initially submitted in support of the proposal indicated that due to the location of Darling Park Tower 1 and the orientation of the Astoria Tower, apartments on the western elevation do not receive direct sunlight after midday at mid-winter. The proposed building envelope therefore would not result in additional overshadowing of the Astoria Tower in mid-winter.

The State Environmental Planning Policy 65 – Design Quality of Residential Apartment Development – Apartment Design Guide (ADG) recommends controls for new residential developments including their impact on existing residential buildings. While the proposal does not include a residential component, the ADG is a helpful guide to assess impact on adjoining existing residential development. The ADG recommends at least 70% of apartments in urban areas receive at least 2 hours of solar access between 9am and 3pm in mid-winter.

However, in response to concerns raised in submissions and the Department's request for additional information, the Applicant provided additional overshadowing analysis, which considered the overshadowing impact of the building envelope throughout the year, which concluded:

- on the most affected day (28 January) there is an average overshadowing increase of 13.28% across the Astoria Tower western façade from 3:45pm until sunset (**Figure 33**), which the Department notes would reduce summer heat-loading on existing apartments
- the degree of overshadowing reduces off either side of the most affected day (28 January) for a total of 229 affected days
- the building envelope maintains existing direct sunlight to the western façade between 11:40am and 2:30pm on the most affected day
- a future building in a northern position has less impact than a building in a southern position.



Figure 31 | The relationship of the existing Cockle Bay Wharf (left) and proposed building envelope (right) to the western elevation of the Astoria Tower (highlighted pink) (source: Applicant's RtS)



Figure 32 | Apartments within the Astoria Tower with a western aspect (source: Applicant's RtS)



Figure 33 | Annual existing (left) and proposed (right) hours of sun access (source: Applicant's RtS)

The Department acknowledges the proposal does not reduce solar access to the Astoria Tower in mid-winter, as the western elevation of the Astoria Tower already has no access to sunlight after midday in mid-winter. However, the western elevation has access to direct afternoon sun, through the gap between Darling Park Towers 1 and 2 outside the winter months. The Department considers it appropriate to consider the overshadowing impacts throughout the remainder of the year. The Department has carefully considered the potential overshadowing impact on the Astoria Tower and considers, on balance, the proposal to be acceptable for the following reasons:

- the western elevation of the Astoria Tower already has no access to sunlight after midday in mid-winter and, due to the location of the proposed building envelope west of the Astoria Tower, the proposal would not result in additional overshadowing at mid-winter
- west facing apartments on the northern side of the building (being half of all apartments assessed, and those with the least existing access to direct western sunlight) have unobstructed north facing windows providing direct sunlight to living rooms throughout the year (minimum of 3 hours at mid-winter)
- on the most affected day (28 January) the building envelope would maintain direct sunlight to the western façade of the Astoria Tower between 11:40am and 2:40pm (3 hours)
- the future development would be located within the building envelope and subject to the built form controls and design guidelines that limit the overall size of the development (**Section 6.4.1**). Therefore, the future development would result in less overshadowing than what is shown at **Figure 33**
- the location of the tower building envelope provides the following wider public benefits:
 - o the creation of a significant north facing publicly accessible open space (Section 6.5.1)
 - upgrade / improvement of pedestrian connectivity between Darling Harbour and the CBD (Section 6.5.2)
 - o separation from, and protection of, the heritage significance of Pyrmont Bridge (Section 6.6).

Noting the above maximum impacts, the Department recommends a FEAR requiring future DA(s) demonstrate how solar access to Astoria Tower can be improved.

The Cockle Bay promenade, Sydney Square and Tumbalong Park

Concern was raised in public submissions the proposal would overshadow the foreshore promenade. Council initially raised concern about the overshadowing of the promenade and Sydney Square. However, confirmed these concerns have been addressed by the RtS amendments to the building envelope.

The Cockle Bay promenade is located immediately to the west of the proposed building envelope (**Figure 34**). Sydney Square is located to the southern side of Sydney Town Hall approximately 320 m south west of the site and Tumbalong Park is located opposite the Exhibition Centre approximately 270 m south of the site.



Figure 34 | Shadow diagrams indicating the overshadowing resulting from the building envelope during mid-winter (based on Amended EIS envelope design) (source: Applicant's Amended EIS)

The Applicant has provided overshadowing analysis demonstrating the tower building envelope would not overshadow the foreshore promenade after 11 am during mid-winter (**Figure 34**) or cause any additional overshadowing of Tumbalong Park. The Applicant has included this as a requirement in the design guidelines.

Figure 34 shows overshadowing resulting from the proposed entire building envelope (i.e. not an indicative scheme), and the Department notes this represents the maximum possible overshadowing impact.

The Department considers overshadowing impact on the foreshore promenade is acceptable as:

- the foreshore promenade would not be overshadowed by the maximum envelope after 11am in mid-winter, and this will be improved through the detailed design
- the future tower within the building envelope is subject to the TBFCs and design guidelines that limit the
 overall size of the development (Section 6.4.1) and therefore, the future detailed design would result in
 less overshadowing than what is shown at Figure 34
- the reduction of the podium architectural articulation zone (**Section 6.4.1**) further reduces the potential overshadowing of the foreshore.

The Department notes the top of the tower envelope has been chamfered at its southern end to ensure the development does not cause any additional overshadowing of Tumbalong Park or Sydney Square. The Department is therefore satisfied the proposal would not have an adverse impact on solar access to Sydney Square or Tumablong Park.

The Department supports the overshadowing controls within the design guidelines relating to the Cockle Bay foreshore and Tumbalong Park. The Department recommends the design guidelines be amended to also require no additional overshadowing of Sydney Square.

Crescent Garden

The Crescent Garden is located east of the proposed building envelope within Darling Park. Crescent Garden is a privately owned and publicly accessible open space and is framed by the three Darling Park towers to the east and south and the Western Distributor to the west and north. Access to Crescent Garden is principally via the Darling Park lobbies, but is also achieved via a ramped external pedestrian routes connected to the Sussex Street to Pyrmont Bridge pedestrian bridge and the Crescent Garden to Cockle Bay Wharf pedestrian bridge. Due to these access arrangements, it is not obvious that Crescent Garden is a publicly accessible space and as a consequence the space is largely used by employees within the Darling Park towers.

At present approximately 70% of Crescent Garden receives more than 1.5 hours of sunlight in mid-winter. However, this would reduce to approximately 40% as a result of the proposed envelope. (**Figure 35**).

No concerns were raised in submissions or by Council about the reduction of sunlight to Crescent Garden.

The Department considers the reduction of sunlight to Crescent Garden is acceptable as:

- the eastern portion of the park (approximately 40%) retains more than 1.5 hours of sunlight in mid-winter and **Figure 35** indicates this would be during the core lunchtime period
- the future tower would be located within the building envelope and subject to the TBFCs and design guidelines that limit the overall size of the development (**Section 6.4.1**). Therefore, the future detailed development would result in less overshadowing than what is shown at (**Figure 35**)
- the loss of sunlight is offset by the creation of the new publicly accessible open space (minimum 5,500 m²) adjoining the northern boundary of Crescent Garden
- the new publicly accessible open space would provide a clear and unambiguous public access point to the Crescent Gardens and would therefore promote the use of this space.

The Department recommends a new overshadowing control within the design guidelines requiring future DA(s) demonstrate solar access to Crescent Garden has been maximised.



Figure 35 | Solar access diagrams showing the existing (left) and proposed (right) overshadowing of Crescent Garden during mid-winter (source: Applicant's Amended EIS)

6.4.3 Private view loss

Several existing and proposed residential apartment buildings east of the site enjoy a range of views of Darling Harbour and district views beyond over the site. The impact of the proposal on these views is a key issue in the Department's assessment.

The Applicant provided a VVIA. The VVIA provides a comprehensive analysis of the view impacts of the proposed development, characterising the view loss at the affected premises. It takes into account:

- the height, orientation and location of the affected buildings
- available view corridors and other foreground developments
- two indicative tower locations (northern and southern locations) within the proposed building envelope.

The VIA considered the following two properties to the east and south-east of the site are the most affected properties (**Figure 36**):

- Astoria Tower, 222-228 Sussex Street
- 60 Bathurst Street (approved DA)

The VVIA originally considered impacts on Millennium Towers (currently under construction). However, as that project has since been modified to remove residential use it no longer forms part of this assessment.

In order to ascertain whether or not the proposed view sharing impacts are reasonable the Department has followed a four-step assessment in accordance with the principles established by Tenacity Consulting Vs Warringah [2004] NSWLEC 140. The steps/principles adopted in the decision are:

- 1. Assess what views are affected and the qualitative value of those views.
- 2. Consider from what part of the property the views are obtained.
- 3. Assess the extent of the impact (Tenacity principles establish an impact spectrum including 'negligible', 'minor', 'moderate', 'severe' and 'devastating').
- 4. Assess the reasonableness of the proposal that is causing the impact.

An assessment of potential view impacts in accordance with Tenacity principles is outlined in the following sections.



Figure 36 | Aerial view of the site (outlined red) and the three properties most affected by the proposal (outlined blue, yellow and green) (Base source: Nearmap)

Astoria Tower, 222-228 Sussex Street (Tenacity steps 1 to 3)

The Astoria Tower is a 33 storey residential building located approximately 100 m east of the site. The tower contains residential apartments on all floors above first floor level with windows on all four elevations.

Due to the orientation of the building, only apartments with a western aspect have views towards the site, being 52 apartments in total. These western views are through an existing view corridor established by the separation of Darling Park Towers 1 and 2. It is these apartments the Department considers to be most affected by the development.

The Department notes the proposal impacts views from apartments at the northern end of the western façade of the Astoria Tower less than apartments at the southern end, as apartments at the northern end have:

- oblique angle western views of Darling Harbour, whereas apartments at the southern end have direct views
- an additional aspect (window) to the north, which includes city views.

The impact on westerly views from the Astoria Tower is discussed within the following sections with reference to a sample of three apartments at lower (level 7), mid (level 15) and upper (level 26) levels of the southern portion of the western elevation.

Lower portion of the Astoria Tower western façade (level 7, apartment no. 20)

In relation to view loss from the lower portion of the Astoria Tower western façade, the Department notes the following (**Figure 37**):

- these apartments have a westerly aspect from living rooms and bedrooms
- the foreground views comprise Sussex Street and the Darling Park podium framed by Tower 1 and 2. At the middle-distance, views include the existing Cockle Bay Wharf site, glimpses of water and western side of Darling Harbour foreshore at lower levels increasing for apartments at the higher levels. The ICC Convention Centre, Sofitel Hotel tower, Harbourside Shopping Centre and 50 Murray Street provide the

distant backdrop for the view with unobstructed views of sky above. These developments block western district views beyond

- the indicative southern and northern tower locations would impact approximately 60% to 70% of the middle and distant view respectively
- the Department notes, regardless of the indicative tower location, water and foreshore views and views of
 existing Darling Harbour developments, including the Sofitel Hotel tower and Harbourside Shopping
 Centre, would be obscured. Depending on the tower location, views of the ICC Convention Centre and 50
 Murray Street would be partly retained. Views of sky are significantly reduced, although partly retained to
 the side(s) of the indicative tower.

The VVIA suggests the overall impact on these views to be moderate. However, the Department considers the impact to be severe, noting the loss of mid-distance water and foreshore views and partial loss/significant change of distant backdrop developments.



Figure 37 | Existing view from living room of apartment 20 with the indicative tower in a northern location (left) and southern location (right) (source: Applicant's RtS)

Mid-portion of the Astoria Tower western façade (level 15, apartment no. 52)

In relation to view loss from the mid-portion of the Astoria Tower western façade, the Department notes the following (refer to **Figure 38**):

- all apartments have a westerly aspect from living rooms, bedrooms and balconies
- in the foreground views comprise the Darling Park podium and Crescent Garden framed by Tower 1 and 2. At the middle-distance, views include the existing Cockle Bay Wharf site and water views. Distant views include the western side of Darling Harbour foreshore and existing developments with unobstructed views of sky above. These developments block western district views beyond, however, glimpses of the upper structure of the ANZAC Bridge is visible above 50 Murray Street
- the indicative southern and northern tower locations would impact approximately 55% to 65% of the middle and distant view respectively
- the Department notes, regardless of the indicative tower location, foreshore views and views of existing
 Darling Harbour developments, including the Harbourside Shopping Centre and nearly all of the Sofitel
 Hotel would be obscured. Glimpses of water may be retained to the side of the indicative tower locations,
 becoming more expansive for apartments at higher levels. Depending on the tower location, views of the
 ICC Convention Centre and 50 Murray Street developments would be retained to varying degrees. Views
 of sky are significantly reduced, however, partly retained to the side(s) of the indicative tower. The view of
 the top of ANZAC bridge is retained when the tower is located in a southern location.

The VVIA suggests the overall impact on these views is moderate. However, the Department considers the impact to be moderate to severe, noting the significant reduction of water views, obstruction of the foreshore view, partial loss of distant backdrop developments and retention of an unobstructed view of Crescent Garden.



Figure 38 |Existing view from living room of apartment 52 with the indicative tower in a northern location (left) and southern location (right) (source: Applicant's RtS)

Upper-portion of the Astoria Tower western façade (level 26, apartment no.96)

In relation to view loss from the upper portion of the Astoria Tower western façade, the Department notes the following (refer to **Figure 39**):

- all apartments have a western and southern aspect from living rooms and balconies
- the foreground of western views comprise the Crescent Garden and the existing Cockle Bay Wharf site framed by Darling Park Towers 1 and 2. At the middle-distance western views include water, the western side of Darling Harbour foreshore and surrounding developments. Distant views include western district views including the ANZAC Bridge with unobstructed views of sky above the Darling Harbour developments
- the indicative southern and northern tower locations would impact approximately 40% to 50% of the middle and distant view respectively
- the Department notes, regardless of the indicative tower location, views of water, the western foreshore, existing Darling Harbour developments and district views would be reduced. Water views would be retained to the side(s) of the indicative tower locations, becoming more expansive for apartments at higher levels. Depending on the tower location, views of the ICC Convention Centre and 50 Murray Street developments would be retained to varying degrees. Western district and sky views of sky are significantly reduced, however, partly retained to the side(s) of the indicative tower.

The VVIA suggests the overall impact on these views is moderate to severe. The Department agrees with the classification noting the significant reduction of water views, obstruction of the foreshore view, partial loss of distant backdrop developments. Although, the Department notes that unlike the lower levels, these levels also have southern aspect views.



Figure 39 |Existing view from living room of apartment 96 with the indicative tower in a northern location (left) and southern location (right) (source: Applicant's RtS)

60 Bathurst Street

60 Bathurst Street has approval for a 26 storey mixed use building with apartments above a non-residential podium (currently under construction). It is located approximately 230 m south-east of the site. Future apartments within this building would have oblique north-western views towards the site and Darling Harbour. At middle and upper levels, these include views of water.

The Department notes the proposal would change the view from 60 Bathurst Street and would partially interrupt water views of Cockle Bay. In addition, the Department notes 60 Bathurst Street is located a significant distance from the site and the existing view is achieved across numerous intervening developments. Given the distance from the site, and as water views would be largely retained, the Department considers that the interruption of the view to the north-west is minor in nature. The Department also notes existing western and south-western district views across Darling Harbour and beyond would be unaffected by the proposal.



Figure 40 | 60 Bathurst Street north-western view from a mid-tower location (RL 57.2) towards Darling Harbour and the site. The indicative tower in a northern location (left) and southern location (right) (source: Applicant's RtS)

Reasonableness of the proposal (Tenacity step 4)

The fourth step of the Tenacity planning principles is to assess the reasonableness of the proposal that is causing the impact. The Department notes that there are no planning controls that regulate built form, such as massing and height, which apply to the site under the DHDP. In the absence of planning controls the Department has taken into account the height and location of buildings in the surrounding area and the state significance of the site.

Whilst the SDCP 2012 does not apply to the site, the controls provide a reference with respect to the consideration of view impacts. The controls recognise that outlook as opposed to private views, is the appropriate measure of residential amenity in the CBD context and that there is no guarantee that views or outlook from existing development will be maintained. The Department also notes that the Sydney Regional

Environmental Plan (Sydney Harbour Catchment) 2005 acknowledges that public good has precedence over the private good when changes are proposed to Sydney Harbour or its foreshores.

Even when a proposal complies with all relevant planning controls, the Tenacity planning principles require the question be asked whether a more skilful design could provide the Applicant with the same development potential and amenity and reduce the impact on the views from neighbours. The Applicant argues that the proposed building form has sought to respond to view sharing principles within a highly urbanised city environment. Furthermore, the Applicant asserts:

- the provision of significant public benefits (publicly accessible open space and visual and pedestrian connectivity to the waterfront) should be balanced against the retention of private views
- outlook is retained from all affected apartments and appropriate amenity is maintained and in many instances partial water views, or vistas over green space remain
- the detailed design of the development will form part of future DA(s) and would be shaped by a competitive architectural design competition.

With regard to outlook, as opposed to views, the Department considers that the distance between existing residential buildings and the proposed development (approximately 100 m) will ensure that a suitable level of outlook is maintained to all existing apartments.

The Department acknowledges that view losses as a result of the development would range from moderate to severe. However, the Department notes the key aspects of the views (such as Darling Harbour water and foreshore views) are situated at mid/distant locations from affected properties, where there is a lower expectation of view retention for development located a distance away from the water's edge. The Department considers, on-balance, as most affected properties retain partial views including sky views and in some cases glimpses of water that the view impacts are reasonable in this context.

The Department considers that the reduction in the proposal's height and scale and amendments to tower location has significantly improved its relationship to the harbour and surrounding urban context and has struck an appropriate balance between view sharing and the appropriate development of this significant site.

The Department does not consider an alternative design would achieve a better overall outcome, as a much lower scale development than proposed would still have significant impacts on views. Furthermore, the Department considers, as discussed at **Section 6.4.1**, if the proposal were further reduced in size or moved further to the north (to encroach less into the view corridor), it would jeopardise the achievement of a high standard development, would fail to maximise the use of the site and would have an adverse heritage impact on the Pyrmont Bridge and overall visual impact on Darling Harbour. Such an outcome is considered contrary to the State significance and strategic importance of this land and its ability to contribute significantly to economic growth, job creation and support the creation and delivery of the wider Darling Harbour renewal.

On this basis, and in light of the provision of an acceptable building envelope, the Department considers the proposal's impact on view loss is reasonable and acceptable.

6.4.4 Wind impacts

Concerns were raised in public submissions about the potential wind impacts on the promenade and other pedestrian pathways and spaces around the site. Council recommended the future tower be designed to minimise /manage wind impacts on Crescent Garden.

The Applicant provided a Pedestrian Wind Environment Wind Tunnel Assessment (Wind Report), which tested pedestrian level wind environments at 34 locations within and around the development. The Wind Report identifies the site is susceptible to wind from a variety of directions, with wind from the north-east, south, and

west quadrants having the most pronounced effect on the site due to downwash and channelling between the surrounding buildings.

The Wind Report predicted that development of the site will change the wind flow patterns in the area. However, wind conditions around the site, including the promenade, are predicted to remain comparable to existing conditions in most locations, and from a comfort perspective would be suitable for pedestrians sitting, standing and walking.

Within the site, the Wind Report indicated the proposed open space north of the tower and podium terraces would be generally suitable for pedestrians walking. However, within the middle of the open space and to the immediate south of the tower pedestrians may experience difficulties during windy conditions. The Wind Report concluded that these negative wind conditions can be suitably mitigated during the detailed design stage through the provision of appropriate planting and architectural treatments.

The design guidelines require future buildings to be designed to ensure wind conditions are safe and appropriate for the proposed activities in all internal and external areas of the development.

The independent design advisor recommended future DA(s) ensure wind impacts are minimised.

Overall, the Department considers the proposal is likely to have acceptable wind impacts for pedestrians within and around the development. However, it considers that the wind impacts within the public open space and future areas designated for outdoor seating would benefit from improvement to ensure these spaces have a comfortable and safe wind environment for their intended use.

The Department recommends a FEAR requiring the preparation of a Wind Assessment, including wind tunnel testing and mitigation measures to ensure spaces within and around the site are suitable for their intended purposes. The Department also recommends an amendment to the design guidelines requiring the wind impacts on Crescent Garden and the Darling Harbour promenade be reduced to be comfortable for their intended use.

6.4.5 Conclusion

The Department has considered the proposed building envelope, concerns raised in submissions and the expert design advice within the independent design advisor. After careful consideration the Department concludes the proposed maximum tower height (RL 183, approximately 42 storeys) and location is acceptable noting the independent design advisor supports the proposal, Darling Harbour is characterised by a variety of building heights and scales including tall buildings adjacent to the harbour and that it has been demonstrated the tower is in the most appropriate location in terms of its visual and amenity impacts.

The Department has recommended amendments to the TBFCs and design guidelines that reduce the width of the tower and the tower base to ensure they are slender and elegant. The Department has also reduced the depth of the podium articulation zone to prevent the development dominating the foreshore promenade.

The proposal would not result in any additional overshadowing of the future THS before 4:00 pm, which is consistent with Council's existing solar protection controls for similar other public open spaces within central Sydney.

After 4:00 pm, and with a tower in a northern location (the tower location with the most impact), the proposal would not impact solar access to the future THS for 317 days throughout the year. The proposal would result in minor and partial additional overshadowing of the future THS after 4:00 pm for a maximum of 24 days around each equinox (autumn and spring). The maximum overshadowing on the most affected day (being 9 September, around the spring equinox) would be for 30 minutes, with this impact being progressively less for days either side of the most affected day. The Department considers this impact is minor and acceptable. To prevent future

development exceeding this overshadowing impact, the Department has recommended a FEAR including controls that prevent overshadowing the future THS before 4:00 pm and set a maximum overshadowing impact to the future THS (no greater than a tower in a northern location) after 4:00 pm.

The Department has carefully assessed the impacts on Astoria Tower. The Department notes although the proposal would overshadow apartments in the western elevation of the Astoria Tower, approximately 3 hours of sunlight is retained on the most affected day (28 January) and half of all apartments have secondary windows to the north. View loss impacts to Astoria Tower range between moderate to severe, however, as the proposal would be approximately 100 m away from the Astoria Tower west facing apartments would retain an acceptable outlook and the most affected properties would retain partial views which is reasonable in this city-edge context. The Department concludes the impacts on Astoria Tower is, on-balance, acceptable and also notes the significant public benefits (**Section 6.8**) arising from the development.

The Department is satisfied, subject to future detailed wind assessment and mitigation measures, the spaces within and around the development can be designed to achieve an appropriate comfort level for their intended purpose.

6.5 Open space and connectivity

The concept proposal creates new open space and new pedestrian links through the site, upgrades existing east-west pedestrian links and proposes to extend the existing Cockle Bay boardwalk.

While the application is concept only, the proposal includes a landscape and open space design (based on the TBFCs and design guidelines) **Figure 41**. The design is indicative only and suggests an option of how the future landscaping, public domain and open space could be provided on the site, with detailed design being subject to assessment under future DA(s).



Figure 41 | Indicative development layout showing a notional location and design of northern and southern open spaces, pedestrian links and the expanded Cockle Bay boardwalk (source: Applicant's Amended EIS)

The Department considers the key assessment issues to be:

open space
- pedestrian connectivity
- Cockle Bay boardwalk extension.

6.5.1 Open space

The proposal includes the creation of between $5,500 \text{ m}^2$ and $12,000 \text{ m}^2$ publicly accessible open space and an open space control which:

- requires the provision of a minimum of 5,500 m² publicly accessible open space located at the northern end of the site, between the tower and Pyrmont Bridge (within the area outlined red in **Figure 41**) (the northern publicly accessible open space)
- defines what spaces could be included within the calculation of the northern publicly accessible open space, which initially included terraces, hard and soft landscaping, retail interfaces and transitional spaces (such as access and circulation spaces and stairs).

The publicly accessible open space is intended to be used for events and is not proposed to be dedicated to, or managed by, Council, but will be retained and managed by the Applicant.

The design guidelines submitted in support of the application (**Appendix F**) include Urban Form and Open Space Design Principles to inform the detailed design of open space(s), the key guidelines a summarised below:

- create new areas of publicly accessible open space and public domain that enhance the waterfront and Darling Harbour
- provide for permeable public spaces and improve connectivity throughout the site
- create a new civic scale pedestrian route between Pyrmont Bridge and Market Street
- facilitate major public events with the publicly accessible open space.



Figure 42 | Indicative design of the northern publicly accessible open space and podium (source: Applicant's Amended EIS)

Concern was raised in public submissions that the proposal provides insufficient public open space and that open space should be publicly accessible. Council recommended the future design of the publicly accessible open space be subject to the following requirements:

- accessible to the public at all times and should be secured through a planning agreement
- pedestrian through-routes must be maintained and unobstructed at all times
- event areas should be restricted in order to maintain access to publicly accessible open space at all times
- the publicly accessible open space over the Western Distributor must include a lawn, shrubs and trees. Planting should be incorporated into the deck and not be in raised planters and contribute to Central Sydney's urban tree canopy
- ventilation stacks from any infrastructure or building uses should not be located within the main area of publicly accessible open space
- Council's standard palette of paving, furniture, lighting and wayfinding signage and materials on the deck should be considered for suitability and durability during events.

The Department initially raised concern the definition of the northern publicly accessible open space included commercial/private spaces and areas of public domain that could not reasonably be defined as 'public open space', and these spaces should therefore be excluded from the definition and calculation of the minimum 5,500 m² northern publicly accessible open space.

The Applicant has stated the proposal provides significant publicly accessible open space, including a range of uses comprising green space, activity areas, footpaths and alfresco dining. The location of the northern publicly accessible open space ensures it will have excellent solar access and overall will provide a highly utilised, connected, permeable and activated space that is well connected to the CBD, Pyrmont Bridge and the waterfront. The detailed design of the publicly accessible open space will be subject to the outcome of the competitive design excellence process, which will be informed by the TBFCs and design guidelines.

In its RtS, the Applicant agreed public access to the publicly accessible open space should be maximised, however, considered this is best secured through its commercial lease agreement with PNSW. In addition, Council's other recommendations could can be accommodated as objectives within the competitive design excellence brief. In response to the concern raised by the Department, the Applicant revised the definition of the northern publicly accessible open space (below).

Publicly accessible open space shall include at least 5,500 sqm on the northern side of the site between the tower and Pyrmont Bridge, and may include stairs, terraces, hard and soft landscaping, associated with publicly accessible open space but shall exclude:

- retail tenancies inclusive of outdoor dining areas
- primary pedestrian thorough fares for the principal purpose of access to, from and through the development i.e. from Market Street to Pyrmont Bridge, and Market Street to the Tower

The Applicant also confirmed the 1,425 m² Level 3 terrace located south of the tower could possibly provide for 1,000 m² publicly accessible open space (southern publicly accessible open space) comprising publicly accessible open space fronting the harbour, enclosed on three side by the podium and activated with outdoor seating, as indicatively shown at **Figure 43**.

The Department considers the key assessment issues relating to open space to be the appropriate provision of publicly accessible open space on the site and the use of publicly accessible open space for major events. Both of these issues are considered below.



Figure 43 | Building envelope at the southern end of the development including indicative layout of the southern publicly accessible open space (highlighted red) and outdoor seating area (highlighted yellow) (source: Applicant's RtS)

Publicly accessible open space provision

The Department notes the Amended EIS originally proposed a maximum of 15,000 m² publicly accessible open space. However, as this calculation included all open spaces within the adjoining Darling Park development (also owned by the Applicant) it was not considered an accurate reflection of what could be provided on site. Following recalculation, it was reduced to 12,000 m².

The Department supports the provision of significant publicly accessible open space on the site and considers this component of the proposal represents a significant public benefit that would make a valuable contribution to the area through the provision of active and passive open spaces, landscaping and the substantial enhancement of the Darling Harbour foreshore. In addition:

- the revised open space control for the northern publicly accessible open space (being a minimum 5,500 m² and space inclusions/exclusions) is appropriately defined and includes acceptable limitations/controls to ensure the northern publicly accessible open space is well designed. The Department recommends a FEAR requiring future DA(s) provide publicly accessible open space in accordance with the open space control
- the northern publicly accessible open space decks over and hides the Western Distributor, re-establishes a strong visual and physical connection between the CBD and Darling Harbour, provides an appropriate public threshold to Pyrmont Bridge and creates a new space to view and enjoy Darling Harbour
- all public domain and communal landscaping works are in addition to the proposed publicly accessible open space and these works will provide an appropriate setting for the tower
- the Department does not consider it necessary to impose a maximum publicly accessible open space requirement on the development as this could artificially limit the design development of future DA(s) during the design excellence process. The Department therefore does not recommend a FEAR limiting the development to providing a maximum of 12,000 m² publicly accessible open space.

The Department notes the proposal does not include a minimum open space control for the southern publicly accessible open space, despite this space forming a key component of the indicative scheme and part of the Applicant's justification for the development (**Figure 44**). The Department considers, like the northern publicly accessible open space, the southern publicly accessible open space forms an integral part of the justification for the development and should be required in the design of future DA(s). The Department therefore recommends

the open space control be updated to require the provision of the southern publicly accessible open space, with a minimum area of $1,000 \text{ m}^2$.



Figure 44 | Indicative design of the northern and southern publicly accessible open space (source: Applicant's Amended EIS)

The Department agrees with Council the publicly accessible open space should be accessible by the public at all times. However, the Department does not consider it necessary to require this be secured via a planning agreement at this stage as there may be alternative methods for ensuring public access. To allow for the consideration of the most appropriate option for the site the Department recommends a FEAR requiring future DA(s) demonstrate how public access of publicly accessible open space will be maintained at all times.

The building envelope drawings and the indicative scheme show the northern publicly accessible open space / deck over the Western Distributor provided at one uniform level and does not step down to Sussex Street in the north-west of the site (**Figure 45**) or the adjoining Crescent Garden. The Department is concerned this could potentially result in the creation of blank inactive walls to Sussex Street and Crescent Garden. The Department therefore recommends a new design guideline requiring the northern publicly accessible open space / deck over the Western Distributor have an appropriate relationship and interface with:

- the western side of Sussex Street to activate and complement the Sussex Street streetscape
- Crescent Garden providing access and visual connection(s) to the space.

The Department recommends a FEAR requiring future DA(s) include a Public Open Space, Public Domain and Landscape Report setting out design and treatment of all areas of publicly accessible open space, private open space and public domain and their relationship with existing and proposed buildings, spaces, structures, connections and Darling Harbour. In addition, the design of the space should be accessible throughout, from Pyrmont Bridge, Sussex Street and Crescent Garden for people with disabilities.

The Department has carefully considered the proposed design guidelines and to ensure that they are sufficiently robust and provide appropriate guidance to deliver high quality publicly accessible open space, the Department recommends the following amendments:

- incorporation of Council's recommended publicly accessible open space design requirements
- inclusion of the open space control for the northern and southern publicly accessible open spaces.



Figure 45 | Interface between the northern publicly accessible open space / deck building envelope and Sussex Street (section top left) (Base source: Applicant's RtS)

Events

The design guidelines recommend the publicly accessible open space provide opportunities to enhance existing major public events at Darling Harbour (eg Vivid Festival, New Year celebrations etc) and support pedestrian access during 'event mode'. The proposal also suggests the proposed new publicly accessible open space could itself hold programmed private and public events.

In terms of facilitating events, the Department supports the intention of the publicly accessible open space to enhance major public events by providing a passive area to view the foreshore and Darling Harbour during existing events. The Department recommends a FEAR requiring future DA(s) include an Event Management Plan, including appropriate access, management and mitigation measures during major events held at Darling Harbour.

In terms of events within the publicly accessible open space, the Department notes the application does not include any information on the likely operational management, vehicular servicing, noise impact, number or frequency of events at the publicly accessible open space. Due to the absence of justification for on-site events and the complexity of site constraints, it would be premature to approve the principle of on-site events at this stage and the consideration of this matter is best addressed as part of the assessment of future DA(s).

The Department therefore recommends a ToA confirming no consent is granted for on-site events and recommends the design guidelines be amended to remove reference to on-site programmed events and markets.

6.5.2 Pedestrian and bicycle connectivity

The proposal includes the demolition of two of the existing east-west pedestrian bridges (Market Street/Pyrmont Bridge and Crescent Garden/Cockle Bay) and provision of a deck and publicly accessible open space over the Western Distributor to accommodate new pedestrian links between Darling Harbour and the CBD. The proposal also facilitates upgrades the Druitt Street pedestrian link bridge (**Figure 46**).



Figure 46 | Existing (left) and indicative (right) pedestrian connectivity through the site (Base source: Applicant's RtS)

The design guidelines require the proposal to improve eastern pedestrian connection with Pyrmont Bridge and improve the connectivity and wayfinding between Darling Harbour and the CBD.

Concerns were raised in public submissions about the pedestrian connectivity and access through the site. Council recommended:

- the Market Street to Pyrmont Bridge pedestrian link should be widened (subject to heritage considerations)
- the proposal optimise circulation and access through the site by providing clear and unambiguous routes that rationalise wayfinding
- detailed consideration of cycleway access through the site and provision of at grade access for pedestrians and cyclists, rather than stairs, lifts and escalators
- the development connect to the local bicycle routes including Market Street / Kent Street, King Street / Kent Street.

TfNSW recommended the Druitt Street Bridge pedestrian route be improved and future DA(s) investigate:

- increasing the pedestrian capacity of the Druitt Street Bridge
- providing connection(s) to the existing cycleway infrastructure on the Western Distributor with King and Kent Street cycleways.

The Applicant has confirmed its intends to improve the interface between Darling Harbour and Druitt Street and the proposal will facilitate the integration of the Druitt Street pedestrian bridge with the future built form on the site. The Applicant agrees with TfNSW's and Council's pedestrian and cycling recommendations and stated these matters could be considered as part of the design objectives for the future open space.

The Department acknowledges the Western Distributor is a significant physical and visual barrier separating Darling Harbour from the CBD in this location. The three existing pedestrian bridges (**Figure 46**) are the only connections spanning the Western Distributor in this location and these pedestrian routes are not intuitive or

direct. In addition, the Druitt Street and Crescent Garden links are not instantly recognisable as publicly accessible routes.

The Department supports the approach to deck over the Western Distributor to address the existing physical separation between Darling Harbour and the CBD and compromised east-west pedestrian connectivity. The Department notes the indicative scheme (**Figure 42**) demonstrates the proposal is capable of significantly improving access, site permeability, way-finding, design and appearance and overall pedestrian experience and these improvements represent a significant public benefit.

The Department notes the Amended EIS enlarged the application site area and included the expansion of the deck to the north and regularisation of the northern boundary. Although not shown in the indicative scheme (**Figure 42**) this amendment to the proposal could facilitate the provision of an enlarged Market Street to Pyrmont Bridge pedestrian link. The Department is satisfied the building envelope can accommodate the provision of appropriate pedestrian and cycle links and the detailed design of these links is best considered as part of the assessment of future DA(s).

To ensure the proposal provides appropriate pedestrian and cycle links the Department recommends a FEAR requiring future DA(s) include a Pedestrian and Cycle Connectivity Plan demonstrating how the development enhances connectivity and wayfinding between Darling Harbour and the CBD.

The Department also recommends the design guidelines be amended to include Council's and TfNSW's pedestrian and bicycle infrastructure and capacity recommendations.

6.5.3 Cockle Bay boardwalk extension

The Darling Harbour foreshore promenade is located outside/adjoining the western frontage of the site and comprises an 11.6m wide north/south pedestrian thoroughfare. The promenade is extended by an existing 5.4 m timber boardwalk at the southern end of the site (approximately a quarter of the way along the existing foreshore promenade outside the site) and Cockle Bay).

The proposal seeks to extend the existing 5.4 m wide timber boardwalk for the full length of the site (**Figures 8** and **47**).



Figure 47 | Proposed boardwalk extension (highlighted pink) (Base source: Applicant's RtS)

Concerns were raised in public submissions that the existing foreshore promenade is not wide enough to accommodate future pedestrian movements. Concerns were also raised in public submissions and by Council the boardwalk extension adversely reduces the width of the harbour at its narrowest point.

The Applicant has stated the building envelope maintains the current promenade width and any future extension of the existing boardwalk could provide additional capacity for north-south pedestrian movement, an enhanced pedestrian experience and engagement with the waterfront. The detailed design of the extended boardwalk would form part of future DA(s).

The Department notes the proposal (without the proposed boardwalk extension) would maintain the existing width of the Cockle Bay promenade and, as discussed in **Section 6.5.2**, the proposal would improve east-west pedestrian connectivity, site access and permeability. The Department considers these improvements would beneficially reduce the pedestrian demand placed on the Cockle Bay promenade and alleviate any existing pedestrian congestion at this point.

The Department notes this concept proposal is not the only planning pathway available to the Applicant to seek the expansion of the boardwalk, and a separate application could be made to Council for these works. In addition, the Department notes the application does not include detailed justification for the proposal extension of the boardwalk or an analysis of the potential visual, environmental and amenity impacts.

At this stage, the Department is not yet convinced of the merits of the boardwalk extension and considers it should be deleted from the concept proposal as:

- the Applicant has not provided sufficient justification for constructing over Darling Harbour
- the proposed pedestrian connectivity improvements through the site would alleviate pedestrian demands on existing foreshore promenade and the boardwalk extension is therefore unlikely to be required to address pedestrian capacity requirements
- granting concept approval for the principle of the boardwalk expansion may create a sense of entitlement at future DA stage
- alternative planning pathways are available to the Applicant to pursue the expansion.

The Department therefore recommends FEARs requiring the concept proposal drawings and the design guidelines be amended to delete reference to the boardwalk expansion.

6.6 Heritage

6.6.1 Built heritage

The site does not contain any local or State listed heritage items. However, it is adjacent to the heritage items listed at **Table 14**.

Heritage Item	Listing	Description
Pyrmont Bridge	SHR	The Pyrmont Bridge is an electric swing bridge (pedestrian) that spans Darling Harbour and has significance for its aesthetic, historical and scientific cultural values.
Corn Exchange	SHR	A rare example of wharfside warehousing and the earliest remaining market building in Sydney
Shelbourne Hotel	s170	An elaborate example of commercial Federation architecture and is listed on the s170 register.

Table 14 | Relevant heritage items nearby the site

Concerns were raised in public submissions about the impact of the proposal on the heritage significance of Pyrmont Bridge and Darling Harbour more broadly.

The Heritage Council initially raised concern about the proposal's visual impact on Pyrmont Bridge and the proposed interventions into its historic fabric. The Heritage Council also recommended the pedestrian bridge connecting Market Street and Pyrmont Bridge (across the deck) avoid visual impacts to the Corn Exchange and Shelbourne Hotel.

Council raised concern about the heritage impact of the connection of the podium/deck to Pyrmont Bridge and also recommended the pedestrian bridge connecting Market Street and Pyrmont Bridge should enhance the setting of the Corn Exchange and Shelbourne Hotel.

In response to the concerns raised, the Applicant amended the proposal by:

- relocating the tower envelope an addition 42.9 m further south of Pyrmont Bridge (from 30 to 72.9 m)
- setting the podium/deck building envelope back from the historic elements of Pyrmont Bridge so that the interface between the pedestrian link and Pyrmont Bridge is via existing modern fabric
- confirming future DA(s) will include public art and heritage interpretation.

The Applicant asserts the proposed pedestrian bridge will be appropriately separated from heritage items so not to have an adverse impact on their setting.

The Department is satisfied the amendments to the building envelope appropriately address the concerns raised and the proposed envelope ensures the detailed design of future buildings will be sensitive to the heritage significance of the Pyrmont Bridge, Corn Exchange and Shelbourne Hotel.

The Department agrees future DA(s) should demonstrate the detailed design of the development does not have an adverse impact on sensitive heritage items and recommends a FEARs requiring future DA(s) consider the potential heritage impact on Pyrmont Bridge, the Corn Exchange and Shelbourne Hotel and the inclusions of public art and heritage interpretation.

6.6.2 Archaeology

The site was used for maritime purposes between the 19th and 20th centuries and at its peak included 24 docks/wharfs facilitated by successive stages of sea wall and land reclamation. It is therefore likely that archaeological evidence of shipping and other industrial related activities remain beneath the layers of fill across the site.

The north-eastern corner of the site is located above a section of the original Darling Harbour foreshore (i.e. preland reclamation) and is likely to have been a focus of Aboriginal occupation and therefore has the potential to contain Aboriginal archaeological remains.

The concept proposal does not include excavation of a basement level beneath the podium. However, it does envisage the need for in-ground structure/foundations to support the development and is therefore likely to disturb existing archaeological remains (any excavation will be subject to future DA(s)).

A Historical Archaeological Assessment (HAA) and an Aboriginal Heritage Due Diligence Report (AHDDR) were submitted with the application, which:

- evaluate the site's potential to contain non-Aboriginal archaeological remains and their significance
- provide a high-level consideration of Aboriginal archaeological impacts.

The Heritage Council considers the non-Aboriginal archaeological remains beneath the site have the potential to be state and local heritage significance and recommends standard archaeological conditions and maritime

archaeological conditions relating to the methods for undertaking archaeological works, processes, unexpected finds, excavation and archaeological interpretation.

OEH raised concern the AHDDR is not sufficiently detailed and the concept proposal should instead be supported by a complete Aboriginal Cultural Heritage Assessment Report (ACHAR), including consultation with the Aboriginal community.

The Applicant has confirmed future DA(s) would include Maritime Archaeological Statement of Heritage Impact (MASoHI) and Maritime Archaeological Management Plan (MAMP), which will respond to the Heritage Council's conditions. In addition, a high-level assessment of archaeological impacts is appropriate given the proposal is for concept approval and future DA(s) will include detailed archaeological assessment.

The Department notes the application is a concept proposal only and therefore does not include detail of any physical works. While in ground structural works have been predicted the level of archaeological investigation required is entirely dependent upon the nature, scale and location of any sub-surface works proposed at the site in the future.

The Department considers Heritage Council's recommended conditions, which relate to detailed matters of design/construction, are best addressed as part of the future assessment of detailed DA(s). In addition, the Department is satisfied, as the proposal is for concept approval, the AHDDR is adequate at this stage.

The Department therefore recommends FEARs requiring future DA(s) include detailed Aboriginal and non-Aboriginal archaeological assessments and consultation with the Aboriginal community be undertaken prior to submission of the future DA(s).

6.7 Parking, traffic and access

Car parking provision, traffic impacts and vehicular access are key considerations of the Department's assessment of the concept proposal. The Department acknowledges on-site car parking supply has a direct link to the amount of traffic generated by the development and its impact on surrounding roads.

The current proposal is supported by a Traffic Report, which considers the potential traffic and car parking impacts on the surrounding area.

The Department considers the key assessment issues to be:

- car parking
- Wheat Road access and servicing
- traffic generation
- relationship to the Western Distributor
- bicycle parking.

6.7.1 Car parking

The proposal includes the provision of a maximum of 150 on-site, employee car parking spaces. In addition, to encourage travel modes other than private car use, the proposal also commits to provide a Travel Plan and Travel Access Guide for employees and visitors as part of future DA(s).

While some public submissions suggested that the proposal should be car-free, others suggested that insufficient car parking spaces are provided. Council has confirmed it encourages new developments within the CBD provide no employee car parking and on-site car parking should be further reduced. In addition, it recommended any car parking should be based on a Precinct Parking Plan and should not exceed the SLEP 2012 parking rates.

In response to concerns raised in submissions, the Applicant amended the proposal reducing the total number of car parking spaces by 50 spaces (from 200 to 150 spaces). The Applicant has stated the proposed maximum car parking provision for the site (150 spaces) is significantly less than the SLEP 2012 maximum car parking rate (498 spaces). In addition, future DA(s) will include detailed justification for the final number of car parking spaces.

The Department considers the proposed maximum number of car parking spaces for the site (150 spaces) is acceptable as:

- it is 348 spaces less than the maximum SLEP 2012 car parking rate
- the proposal would not have any adverse traffic impacts, as discussed at Section 6.7.3
- future DA(s) will include justification for the exact number of car parking spaces, which will not exceed the 150 space maximum
- future DA(s) will include sustainable transport measures to encourage travel modes other than private car use.

The Department recommends a FEARs limiting the maximum number of car parking spaces to 150 spaces and requiring future DA(s) include a Travel Plan and Travel Access Guide.

6.7.2 Wheat Road access and servicing

The proposal includes the re-alignment, reconfiguration and part closure of Wheat Road (**Figure 48**), comprising:

- part closure of Wheat Road through the site
- provision of new left-in, left-out connections between Harbour Street and Wheat Road at the northern end of the site
- provision of a new left-out connection from Wheat Road to Harbour Street at the southern end of the site.



Figure 48 | Part closure and indicative layout of the realigned Wheat Road, site vehicle accesses, exits and porte-cochere circulation (source: Applicant's RtS)

Other than the above changes, the application does not include any additional upgrades to existing intersections or road infrastructure outside the site.

TfNSW and RMS recommended the changes to Wheat Road should be compatible with the approved access arrangements for the IMAX redevelopment. In addition, RMS initially raised concerns about the proposed amendment to traffic signals at the Harbour Street/Blackwattle Place intersection and also recommended the proposal:

- consider the operational / safety impacts of the redesign and realignment of Wheat Road
- allow for trucks up to 12.5 m to service the site
- install stop signs within the future loading dock to prevent conflicts between vehicles exiting the site and entering the porte cochere.

Council raised concern about the adequacy of the loading and servicing arrangements for the site and recommended a Traffic Study be undertaken to address:

- the design, capacity and operation of the revised Wheat Road
- the operation and safety of the new access between Wheat Road and Harbour Street

loading, servicing, taxi and coach arrangements, including vehicle and pedestrian safety within the porte cochere.

In response to concerns raised by Council and RMS, the Applicant has amended the application and confirms it no longer proposes to amend traffic signals to allow vehicles to turn right onto Harbour Street. In addition, it agreed to the inclusion of detailed traffic assessment as part of future DA(s) and to accommodate service vehicles up to 12.5 m in length.

The Department notes the closure of Wheat Road through the site results in traffic leaving the IMAX redevelopment exiting directly onto Harbour Street, rather than travelling north along Wheat Road to Shelley Street.

The Department is satisfied the proposed amendments to Wheat Road are acceptable as:

- the right turn onto Harbour Street has been deleted from the proposal
- the proposal has demonstrated the redesign of Wheat Road and new access arrangements can operate to acceptable standards and safety requirements, and the detailed design of these works will be considered further as part of future DA(s)
- the amendments, including redirecting traffic exiting the IMAX redevelopment onto Harbour Street, would not have an adverse impact on the operation of intersections within the vicinity of the site, as discussed at **Section 6.7.3**
- the amendments would not compromise the IMAX redevelopment access arrangements
- the Traffic Report includes indicative vehicle swept paths, which demonstrate vehicles are able to enter and exit the new/amended access points without difficulty and in a forwards direction.

The Department recommends a FEAR requiring future DA(s) include a Traffic Impact Assessment, consider the design, re-alignment and part closure of Wheat Road, and address the requirements of TfNSW and Council noted above.

6.7.3 Traffic generation

Traffic generated by the development will include service vehicles, taxis, coaches and private vehicles relating to the 150 (maximum) on-site car parking spaces.

Table 15 provides a comparison between the traffic generated by the existing Cockle Bay Wharf development and the predicted traffic generation of the proposal.

Peak Period	Existing (vph)	Proposed (vph)	Difference
AM	53	128	+75 vph
PM	69	164	+95 vph

In addition to the above increase in traffic generation, as discussed at **Section 6.7.2**, the proposal includes the reconfiguration and part closure of Wheat Road through the site. This results in the redistribution of vehicles from the site and the IMAX redevelopment (which currently drive along Wheat Road to Shelley Street) onto Harbour Street. **Table 16** provides a comparison between the existing and predicted traffic flows on immediate surrounding streets.

Table 16 Comparison between the existing and proposed peak hour traffic flows (tw	o way)
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Road	Weekday AM Peak (vph)		Weekday PM	Peak (vph)
	Existing	Proposed	Existing	Proposed
Harbour Street				
- north Shelly Street access	1,790	+15	2,350	+50
- north Cockle Bay Wharf access	2,520	+155	2,575	+255
- north of IMAX access	2,575	+60	2,645	+50
Wheat Road				
- north Shelly Street Access	815	+5	390	-55
- north Cockle Bay Wharf access	90	-75	190	-180
- north of IMAX access	35	+0	120	+0
Blackwattle Place				
- east of Harbour Street	15	+0	15	+0

Note: Existing traffic volumes include IMAX site

Concerns were raised in public submissions about the potential traffic impacts of the development. TfNSW and RMS did not raise any concerns traffic generation. Council recommended a detailed traffic assessment be undertaken to establish the impact of the proposal on the road network.

The Department considers the proposed increase in traffic generation and redistribution of traffic is acceptable and would not have an adverse impact on the operation of the road network as:

- the predicted traffic increase of between 75 and 95 vph (two-way) is minor in the context of the existing traffic flows on surroundings streets and is unlikely to have a noticeable impact
- while the proposal would direct additional traffic onto Harbour Street, the part closure of Wheat Road would result in less traffic passing through local roads / Shelley Street
- there are no signalised intersections north of the site on Harbour Street / Western Distributor, which could potentially slow traffic / result in on-street queuing

• there would be minimal change to traffic flows on the remainder of Wheat Road north and south of the site.

The Department recommends a FEAR requiring future DA(s) include a detailed Traffic Impact Assessment, which considers the traffic generation and operational traffic impacts resulting from the detailed design of the development.

6.7.4 Relationship to Western Distributor

The proposal includes the principle of decking over part of the Western Distributor comprising a concrete deck / podium structure, with structural support piers located within and adjacent to the Western Distributor corridor. However, the exact design, including the location of structural components, will be confirmed during the detailed design of the development.

TfNSW and RMS have both raised concern the proposed construction of the deck may impact on the Western Distributor in terms of access for maintenance activities, road safety, structural integrity and Western Distributor operation. In addition, RMS has recommended conditions relating to the design and detailed construction and operation of the development as it relates to the Western Distributor.

The Applicant has stated the detailed design of future DA(s) will be carried out in consultation with RMS to ensure impacts on the Western Distributor and Harbour Street are appropriately managed.

The Department supports the principle of decking over part of the Western Distributor, noting the significant public benefits discussed at **Section 6.8**.

The Department notes RMS' recommended conditions relate to matters of detailed design, construction methodology and operation of the completed development. As the application is for concept approval, the Department considers matters of detailed design, construction and operation are more appropriately addressed as part of the assessment of future DA(s).

Therefore the Department recommends FEARs requiring future DA(s) include details on the design, construction and operational impacts on the Western Distributor prepared in consultation with TfNSW and RMS.

6.7.5 Bicycle parking

The application proposes future DA(s) include the provision of secure and casual bicycle parking in accordance with the SDCP 2012 bicycle parking requirements (**Table 17**) and end of trip facilities (toilets, change/locker rooms and showers).

Land use	Employee rate	Visitor rate	Maximum Parking Requirement
Commercial	1 space per 150 m ²	1 space per 400 m ²	688
Retail	1 space per 200 m ²	1 space per 300 m ²	117
Open space	1 space per 1,000 m ²	1 space per 200 m ²	90

 Table 17 | SDCP 2012 bicycle parking rates:

Council, TfNSW and RMS did not raise any concern with the proposed bicycle parking rates.

The Department notes the SDCP 2012 does not apply to the site. However, in the absence of guidance on bicycle parking for the site, it provides a useful guide. In light of this, the Department considers it appropriate to recommend a FEAR requiring bicycle parking be provided in accordance with the SDCP 2012.

6.8 Contributions and public benefits

The city blocks adjacent to the site (within the Sydney LGA) are subject to the *City of Sydney Act 1988* by virtue of the SLEP 2012. Under Section 61 of the Act, monetary contributions amounting to 1% of the total development cost are payable to Council when carrying out building projects that exceed \$200,000. The contributions assist Council in the provision of public infrastructure, community projects and facilities.

However, as the site is not located within Council's jurisdiction and the DHDP is the relevant EPI, Section 61 does not apply to the site. In addition, there is no adopted contributions plan for the site. Notwithstanding, the consent authority has the statutory power to impose contributions under Section 7.13 of the EP&A Act where a contribution is considered reasonable in the circumstances.

The Applicant has confirmed the proposal does not include a monetary contribution, as it

- provides up to 12,000 m² publicly accessible open space
- provides a deck over the Western Distributor and improvements to pedestrian connectivity between the CBD and Darling Harbour through the site
- provides public art and heritage interpretation within the development / public domain
- creates a revitalised commercial and tourist precinct consistent with the strategic vision for Darling Harbour, with an increased potential for local spending and job creation
- ultimately results in the extension to the long-term lease of the site from the NSW Government, which would include a value for money assessment in favour of the Government as per the terms of the lease agreement.

Concern has been raised in public submissions the proposal does not provide a monetary contribution towards public/social infrastructure improvements and does not include community facilities. Council recommended public benefits should be secured through a planning agreement.

Having considered the submissions and the Applicant's response, the Department is satisfied that the development would have a positive public and economic impact on Sydney and NSW. The site is expected to generate significant economic and employment opportunities during and post construction, will provide significant new retail and commercial floor space in the western part of the CBD aligning with the State Government's strategic policies as detailed in **Section 3** of this report.

The Department has considered whether there is a link between the proposed development and the need for additional public amenities and services in the local area. The Department notes that the proposed development does not propose any service improvements outside its site boundary. However, the resulting form and layout of the development would propose significant improvements through the:

- creation of new significant areas of publicly accessible open space (minimum of 6,500 m², Section 6.5)
- screening the Western Distributor through the creation of a landscaped elevated deck
- new and upgraded pedestrian linkages through the site providing for greatly improved pedestrian connectivity between the CBD and Darling Harbour
- public art and heritage interpretation
- predicated creation of 2,320 construction jobs and 10,000 operational jobs.

The Department considers the proposed public benefits are acceptable as these are proportional to the scale of development and proposed development yield on the site. In addition, the proportion of public benefits are similar to those secured by other large redevelopments within the area such as Barangaroo and the ICC facilities / Darling Square.

The Department considers burdening the development with further financial contribution requirements, in addition to the significant public benefits (above), would undermine the government's objectives of fostering the redevelopment of the Darling Harbour precinct as a premier destination for tourist, recreational, cultural and commercial facilities. Therefore, the Department does not recommend the imposition of financial contribution requirements in accordance with Section 7.13 of the EP&A Act.

In addition to the Department previous recommended FEARs relating to the publicly accessible open space, the Department recommends FEARs to secure the Applicant's commitments to the provision of public art and heritage interpretation.

6.9 Stage 1 Early Works

In addition to concept approval, the application also seeks approval for early works comprising the demolition of existing structures on the site, including (**Figure 49**):

- all existing Cockle Bay Wharf buildings and structures
- the decommissioned monorail station and associated structure
- the following two pedestrian bridges:
 - o Sussex Street to Pyrmont Bridge cable-stayed pedestrian bridge
 - o Crescent Garden to Cockle Bay Wharf enclosed pedestrian bridge.



Figure 49 | Preliminary demolition plan (source: Applicant's Amended EIS)

Demolition works are predicted to take approximately seven months.

The Applicant has confirmed that the program and methodology for the demolition works has not yet been finalised. Notwithstanding, the application is supported by a Preliminary Construction Management Plan (PCMP) and associated reports considering indicative noise, traffic, contamination and air quality impacts.

Concerns were raised in public submissions about noise impacts during construction. Council did not provide any comments on the proposed early works.

The EPA recommended all activities should be undertaken in such a way to minimise any potential impacts to the community or the environment.

The Department supports the principle of proposed demolition early works, and considers the key considerations to be the Market Street to Pyrmont Bridge pedestrian bridge, noise and other demolition impacts on the locality.

Market Street to Pyrmont Bridge pedestrian bridge

The proposal includes the demolition of the Market Street to Pyrmont Bridge pedestrian bridge and construction of a temporary replacement pedestrian bridge along a similar route (**Figure 49**).

The Market Street to Pyrmont Bridge pedestrian bridge is an important east-west pedestrian link, which is used by a significant number of pedestrians moving between the CBD and Darling Harbour/Pyrmont Bridge on a daily basis.

The bridge is visually interesting comprising a deck with pillars and cable-stays and is fully accessible (including an escalator and lift). Although connected to the southern side of Pyrmont Bridge, it is also structurally independent of the existing Cockle Bay Wharf buildings and the Western Distributor.

The Department considers the demolition of the Market Street to Pyrmont Bridge pedestrian bridge, as part of early works, is unacceptable for the following reasons:

- the future development of the site, including the provision of a replacement pedestrian link (Market Street to Pyrmont Bridge, across the deck) will be subject to a design excellence process as part of the future DA(s) approval and subsequent construction. The timeframe for the replacement of the link is therefore uncertain and the proposed temporary replacement bridge, which is likely to be inferior in visual and potentially accessibility terms, could therefore be in place for an undefined number of years
- as the existing pedestrian bridge is structurally independent of the Cockle Bay Wharf buildings, all other proposed demolition works could occur without impacting the bridge or pedestrian access
- retaining the existing link would remove the need for temporary structures/connections to be sited on the heritage significant Pyrmont Bridge.

The Department therefore does not support the demolition and temporary replacement of the Market Street to Pyrmont Bridge pedestrian bridge, as part of early works, and recommends a condition confirming that these works are excluded from the proposed early works.

Demolition noise impacts

The demolition works would generate noise, which has the potential to impact on the amenity of adjoining properties.

The proposal seeks approval for hours of demolition which exceed the Council's City of Sydney Construction Hours/Noise within the Central Business District Code of Practice 1992 (Code of Practice) by 1 hour (**Table 19**).

Day	Code of Practice	Proposed Hours of Construction	Difference +/-
Monday to Friday	7 am and 7 pm	7 am and 7 pm	Complies
Saturday	7 am and 5 pm	7 am and 6 pm	+1 hour
Sunday and Public Holidays	No work	No work	Complies

Table 19 | Comparison between the Code of Practice and proposed hours of construction for all construction works

The Applicant submitted an Acoustic Report (AR) to assess the potential noise impacts associated with the

demolition works on nearby receivers. The AR identifies the nearest sensitive receiver as Astoria Tower (100 m east of the site), other non-residential receivers identified include Darling Park Towers, Four Points Sheraton, Park Royal and Millennium Towers.

The Interim Construction Noise Guideline 2009 (ICNG) includes noise assessment level (NML) guidelines which apply to NSW. However, the Department notes the Council's Code of Practice has been tailored to respond to the Sydney CBD and has been routinely applied to construction sites in the surrounding area, including the adjoining IMAX redevelopment. The Department therefore considers Council's Code of Practice contains the relevant NML guidelines for the site.

The Code of Practice specifies the NML above existing rating background level (RBL) at sensitive receivers during construction as:

- + 5 dB(A) between 7 am to 8 am Monday to Saturday
- +10 dB(A) between 8 am to 7 pm Monday to Friday and 8am to 5pm Saturday.

The AR confirms monitoring was undertaken to determine the existing RBL applicable to Astoria Tower. The RBL was established to be $56 \, dB(A)$ and the applicable NMLs are therefore $61 \, and \, 66 \, dB(A)$.

The ICNG sets the NML for non-residential receivers at 70 dB(A) and confirms impacts above 75 dB(A) represents a point where sensitive receivers are likely to be 'highly noise affected'.

The AR predicts the proposed demolition works:

- might exceed the NML at:
 - o Astoria Tower (61 dB(A)) between 7 am and 8 am Monday to Saturday by 3 dB(A) (up to 64 dB(A)
 - o Four Points Sheraton (70 dB(A)) by 2 dB(A) (up to 72 dB(A)
 - o Darling Park Towers (70 dB(A)) by 12 dB(A) (up to 82 dB(A))
- would not exceed the NML for the Park Royal and Millennium Towers or exceed the NML for Astoria Tower between 8 am and 7 pm and therefore noise levels during these times would not be discernible from existing RBL noise environment.

The Department has considered the proposed noise impacts and considers that the impacts are acceptable given the unavoidable scale of the demolition works required and as:

- Astoria Tower would only experience a minor exceedance for a period of 1 hour Monday to Saturday and would be unaffected for the remainder of the day/week
- the noise exceedance experienced by the Sheraton is below the 75 dB(A) 'highly noise affected' threshold
- the Department notes Darling Park Towers is owned by the Applicant and therefore the Applicant is capable of managing and mitigating noise impacts on its own premises.

The Department notes the AR does not include any justification for the increase in hours of demolition beyond the Code of Practice (i.e. between 5pm and 6pm Saturday) and these hours were applied to the neighbouring IMAX development during demolition. In the absence of any justification for a variation, the Department recommends the proposed hours of demolition comply with the Code of Practice.

In order to ensure best practice demolition management is applied to the site and to minimise noise impacts where possible, the Department also recommends conditions requiring:

- demolition to be carried out in accordance with the requirements of the Code of Practice
- the preparation of a Construction Noise and Vibration Management Plan, including appropriate mitigation measures to reduce noise impacts where possible

- respite periods for demolition works that are particularly disturbing to surrounding sensitive receivers
- any noise generated during construction should not be 'offensive noise' within the meaning of the Protection of the Environment Operations Act 1997.

Other demolition impacts

The Department acknowledges the proposed demolition works may have additional impacts in terms of contamination, traffic, archaeology, waste and air and water quality.

The EPA recommended an unexpected finds protocol be implemented to manage any unexpected contamination encountered during demolition works (**Section 6.10**).

RMS requested details of any demolition works adjacent to the Western Distributor and support structures and recommended the preparation of a CTMP and MTMP.

The Heritage Council considers archaeological remains beneath the site are likely to be of state and local heritage significance and recommends archaeological and maritime archaeological conditions relating to the methods for undertaking archaeological works, processes, unexpected finds, excavation and archaeological interpretation.

To address potential impacts, the Department has recommended the suggested conditions of EPA, RMS and Heritage Council. In addition, the Department recommends conditions requiring the preparation of a Demolition Environmental Management Plan (DEMP), together with other environmental management and mitigation measures to ensure the demolition works do not have an adverse impact on the surrounding area or the environment.

6.10 Other Issues

The Department's consideration of other issues is provided at **Table 20**.

 Table 20 | Department's assessment of other issues

lssue	Consideration	Recommended Condition	
CBD Rail Link	• Sydney Trains raised concerns about construction impacts on the structural integrity and safe operation and management of the CBD Rail Link (CBDRL). Sydney Trains recommends conditions requiring future DA(s) include methodology for the protection the CBDRL. It also recommended conditions relating to detailed construction and maintenance of the development.	The Department has recommended a FEAR requiring future DA(s) include consideration of impacts on the CBDRL.	
	• The Department notes the site is located above the CBDRL rail corridor and therefore the placing of foundations and building loads in or near the proposed rail alignment may affect the structural integrity and operations of the CBDRL.	CDDAL.	
	 The Department agrees Sydney Trains' conditions relating to the protection of the CBDRL are necessary and appropriate to ensure impacts on the CBDRL are appropriate considered at future DA stage. 		
	 The Department notes the proposal seeks concept approval only and future DA(s) will be submitted to the Department for the detailed design and construction methodology. The Department therefore considers Sydney Trains' recommended conditions on construction and maintenance are best considered as part of the assessment of future DA(s). 		
PNSW	 PNSW provided landowner's consent, on behalf of the NSW Government, subject to the following conditions: 	The Department has recommended a ToAs	
	 o overshadowing of the foreshore promenade should be minimised o design development should address the Pyrmont Bridge Conservation Management Plan 2006 (a PNSW management plan) 	and FEARs elsewhere within this report to address overshadowing and	
	o public access to the roof and open space should be agreed with	heritage impacts and requirements for	

		PNSW	public access and activation.
	C	 public and private access arrangements will need to be resolved during detailed development 	
	C	 an Activation Plan should be developed and endorsed by PNSW during detailed development. 	
	C	The Department notes PNSW is able to enforce its recommended conditions as landowner and as part of its lease agreement(s) with the Applicant.	
	b fi	The Department considers the recommended ToAs and FEARs (including building envelope parameters, TBFCs and the design guidelines) ensure uture DA(s) consider overshadowing and heritage impacts and provide for appropriate activation and public access to the site.	
Contamination	V	The Applicant has submitted a Preliminary Site Investigation Report (PSIR), which confirms the site sits on partly reclaimed land and has been used for various industrial purposes in the past, including working docks.	The Department has recommended a FEAR requiring future DA(s) include
	r C	The proposal is predicted to require minimal bulk excavation and spoil emoval and any unexpected finds (contaminated/hazardous material) during piling activities would be managed under an 'Unexpected Finds Protocol' (UFP).	consideration of potential site contamination.
	• (Council recommended a detailed site investigation be carried out.	
		he EPA did not object to the Applicant's UFP approach and has ecommended:	
	C	 the disturbance of sub-surface materials during the redevelopment works be supervised by a suitably qualified person 	
	(should significant earthworks be required then an intrusive contamination assessment should be undertaken. 	
	k s	The Department notes the proposal does not include the excavation of a pasement and it is likely the entire site would continue to be covered with labs or pavement. In addition, the PSIR concludes the site is suitable for continued commercial use.	
	C ir	A detailed assessment of contamination impacts is provided at Appendix 2. In summary the Department concludes, subject to detailed site nvestigation in accordance with the PSIR, the site is likely to be suitable for ts intended use.	
		he Department recommends future DA(s) include consideration of potential site contamination.	
Utilities	p r	Ausgrid recommended consideration be given to the compatibility of proposed development with its infrastructure and proposed conditions elating to the supply of electricity, conduit installation, underground cables and the design of the building adjacent to existing substations.	The Department has recommended a FEAR requiring future DA(s) include a Utility Services Infrastructure
		Sydney Water confirmed water and waste water requirements and ecommended a Section 73 Application be made to Sydney Water.	Assessment.
	A	he Applicant has submitted a Preliminary Utility Services Infrastructure Assessment (Utilities Assessment), which confirms there is a suitable level of supply to the site, subject to any required augmentation.	
	b r	The Department notes the site is capable of being appropriately serviced by necessary utilities and is satisfied that the detailed design matters elating to utilities, including connection and augmentation, can be uddressed as part of the future assessment of detailed DA(s).	
Sydney Airport	a	The application was referred to SAC and CASA as the site is located in an area identified under the <i>Civil Aviation (Buildings Control) Regulation 1988</i> hat restricts the height of new structures to below the recommended OLS.	The Department has recommended a ToA requiring the Applicant obtain
	(" b	GAC has confirmed, as the tower building envelope penetrates the OLS 156 m AHD), separate approval will be required by the DIRDC for the building height and for any cranes / associated structures required to construct the building.	DIRDC approval for building height and cranes that penetrate the OLS prior to lodging any future DA(s)

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Construction	 Concern was raised in public submissions about noise and air quality impacts during construction. 	The Department has recommended a
	 TfNSW and RMS recommended future DA(s) be required to include a Construction Pedestrian and Traffic Management Plan (CPTMP). 	FEAR requiring future DA(s) include a CPTMP including Air
	The Applicant has agreed to prepare a CPTMP.	Quality Assessment.
	 The Department notes the proposal relates to a concept proposal only and future DA(s) will be required to include an assessment of construction impacts and propose mitigation measures where necessary. 	
	 The Department considers the assessment of the above detailed matters is best addressed as part of the future assessment of detailed DA(s) and recommends FEARs accordingly. 	
Reflectivity	 Concern was raised in public submissions about the impact of the reflectivity of the future materials of the tower. 	The Department has recommended a FEAR requiring future
	 The Applicant has submitted a preliminary Reflectivity Statement, which confirms a future development would not cause unacceptable glare provided reflectivity it kept within the 20% limit set by the SDCP 2012. 	DA(s) include a Reflectivity Assessment.
	• The Department notes the proposal relates to a concept proposal only and future DA(s) will be submitted to the Department for the detailed design of the development within the building envelope.	
	 The Department considers the assessment of reflectivity is a matter that is best addressed as part of the future assessment of detailed DA(s) and recommends a FEAR accordingly. 	
Public transport	 Concerns were raised in public submissions about the impact of the proposal on public transport. 	No additional conditions or amendments are
	• TfNSW did not raise any concern about the potential impact on public transport capacity.	necessary.
	 The Department notes the site has excellent public transport access including local bus services, light rail routes (existing and proposed), train stations and ferries. 	
	 The Department is satisfied, as the site is so highly connected to the public transport network and the broad variety of public transport options available, future employees and visitors are unlikely to have an appreciable impact on the capacity of the public transport network. 	
Community Consultation	 Concern was raised in public submissions about the extent of community consultation undertaken. 	No additional conditions or amendments are
	 The Applicant has confirmed it consulted with key stakeholders and community groups prior and following lodgement of the application, including: 	necessary.
	 pre-submission consultations with key stakeholders, including nearby residents, regulatory authorities, local community groups, and existing Cockle Bay / Darling park tenants 	
	o the Applicant has undertaken the following key consultation activities at EIS, Amended EIS and RtS stages of the application:	
	 meetings, briefings and presentations with various government agencies and key stakeholders 	
	 distribution of a community fact sheet to 1,300 nearby residences and businesses 	
	- focus groups to examine community attitudes and sentiment	
	 distributed newsletter to residents of the Astoria Towers, local community groups and local businesses and stakeholders 	
	 surveys of visitors to Cockle Bay Wharf to seek feedback on local amenity aspects and preferences 	
	- contacting local community groups to seek ideas and input.	
	 providing a mechanism via e-mail and phone for community feedback. 	
	• The Department notes it has appropriately exhibited the EIS and the Amended EIS and notified the RtS in accordance with the requirements of	

	the EP&A Act and held a public meeting with key community groups and stakeholders, as stated in Section 4 .	
	 The Department is satisfied that sufficient consultation has been undertaken to allow for the assessment and determination of the application. 	
Privacy	Concerns were raised in public submissions about the potential loss of privacy.	No additional conditions or amendments are
	 The Department notes the closest residential properties to the site are approximately 100 m to the east of the site on the opposite side of Sussex Street. 	necessary.
	 The Department is satisfied, due to the significant building separation from existing residential properties, the proposal would not result in an adverse loss of privacy. 	
Office use	• Concern was raised in public submission insufficient justification has been provided for the inclusion of office accommodation within the site.	No additional conditions or amendments are
	• The Department notes the site is located at the western edge of the CBD and is located directly adjacent to existing office towers. In addition, the development also includes a maximum of 14,000 m ² of retail GFA (an increase of 5,800 m ² more than the existing Cockle Bay Wharf), which is indicatively located within the podium level.	necessary.
	 The Department is satisfied, given its city location, the site is appropriate for office accommodation. In addition, the inclusion of retail accommodation within the podium ensures the development contributes to the tourism and entertainment qualities of Darling Harbour. 	
Development precedent	 Concern was raised in public submissions the proposed increase in building height may set a precedent for the development of other tall buildings within the locality. 	No additional conditions or amendments are necessary.
	 The Department notes any development of surrounding land would be the subject of separate development applications assed on their merits and would be subject to height, floor space ratio and other planning controls. 	
	• The Department therefore does not consider the proposal would set a development precedent.	
Property value	 Concern was raised in public submissions the proposal would have an adverse impact on property values. 	No additional conditions or amendments are
	• The Department notes matters relating to the private contracts of sale and/or value of properties are not planning matters for consideration and therefore objections based on loss of property value are not able to inform the assessment of the application.	necessary.
	 The Department has assessed the merits of the modification in detail at Section 5 of this report and concludes, subject to conditions, the modification has acceptable impacts. 	

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The Department has assessed the merits of the proposal taking into consideration the issues raised in submissions as well as the Applicant's response to these and is satisfied the impacts have been satisfactorily addressed by the proposal and through the Department's recommended conditions.

The Department supports the increase in density as it has strategic merit, noting it will provide a significant increase to employment generating floorspace, has excellent access to public transport and is conveniently located to the CBD. In addition, the density has acceptable impacts in terms of its built form, traffic and amenity impacts.

The Applicant has committed to a DES in accordance with the requirements of the GANSW, which includes a competitive design process to ensure the development achieves design excellence. The Department has recommended a ToA to ensure the design excellence competition jury is retained throughout the design development of the project.

After careful consideration the Department considers the proposed maximum building envelope height (RL 183, approximately 42 storeys) and tower envelope location are acceptable. The Department concludes a tower would make a positive built form contribution to the skyline, is compatible with the character of Darling harbour and the tower envelope, which is located centrally within the site, is in the most appropriate location in terms of its visual, heritage and amenity impacts.

To ensure the tower is slender and elegant the Department has recommended amendments to the TBFCs and design guidelines that reduce the width of the tower and the tower base. The Department has also reduced the depth of the podium articulation zone to prevent the development overbearing the Darling Harbour promenade.

The proposal does not overshadow any part of the future THS before 4:00 pm on any day throughout the year, which is consistent with Council's existing solar protection controls for other similar public open spaces within Central Sydney, including the adjoining Sydney Square and Town Hall steps. Due to the central location of the future THS within the CBD and Council's existing controls, the Department considers it unreasonable to protect solar access to the future THS after 4:00 pm.

The Department has carefully assessed the impacts on Astoria Tower and although the proposal would overshadow apartments in the western elevation of the Astoria Tower, approximately 3 hours of sunlight is retained on the most affected day (28 January) and half of all apartments have secondary windows to the north. View loss impacts to Astoria Tower range between moderate to severe, however, the most affected properties retain partial views and given the site's city fringe location the interruption of existing views is reasonable in this context. The Department concludes the impacts on Astoria Tower is, on-balance, acceptable.

The Department supports the provision of significant publicly accessible open space on the site and improved site permeability. These components of the scheme represent a significant public benefit that will make a valuable contribution to the area through the provision of active and passive open spaces, landscaping, enhancement of Darling Harbour and provision of improved east-west pedestrian connectivity. The Department has recommended a FEAR requiring the provision of an additional 1,000 m² publicly accessible open space

located south of the tower and that the publicly accessible open space and pedestrian routes are publicly accessible at all times.

Insufficient justification has been provided for the extension of the existing 5 m wide Cockle Bay boardwalk and the use of the proposed publicly accessible open space for events. The Department has recommended a ToA confirming these components do not form part of the recommended concept approval.

The future development is capable of being designed to minimise impacts on the heritage significance of Pyrmont Bridge, Corn Exchange and Shelbourne Hotel and Aboriginal and non-Aboriginal archaeological artefacts.

The Department considers the provision of a maximum of 150 on-site car parking spaces is acceptable as it is less than the SLEP 2012 maximum controls. The likely traffic generation is minor and would not have an adverse impact on the local road network or nearby intersections and the realignment and part closure of Wheat Road and the development's relationship to the Western Distributor are acceptable in principle.

The proposal has demonstrated it would generate significant economic and employment opportunities during and post construction and includes significant public benefits including publicly accessible open space, new pedestrian links, public art and heritage interpretation. In light of these significant benefits the Department considers it reasonable the proposal not be required to pay development contributions.

The Stage 1 early works for the demolition of existing buildings and structures is supported, except for the demolition of the Market Street to Pyrmont Bridge pedestrian bridge as the timeframe for the replacement of this bridge is uncertain and the bridge could be retained without hindering the demolition of all other buildings/structures on the site. The Department includes conditions requiring appropriate mitigation measures to protect amenity and the environment during the demolition process.

The application is referred to the Commission as Council has objected to the proposal, more than 25 public objections have been received and the Applicant has made a political disclosure statement.

The Department considers the proposal is approvable, subject to the conditions of consent outlined within this report. This assessment report is hereby presented to the Commission for determination.

Recommended by:

David McNamara Director Key Sites Assessments

Recommended by:

a/geor

Anthea Sargeant 1612019 Acting Deputy Secretary Planning Services



- Appendix A List of Documents
- Appendix B Relevant Supporting Information
- Appendix C Consideration of Environmental Planning Instruments
- Appendix D Summary of Submissions to the EIS, Amended EIS and RtS
- Appendix E Independent Design Advice
- Appendix F Design Guidelines
- Appendix G Summary of the Consideration of Issues Raised in Submissions
- Appendix H Recommended Conditions of Consent

Appendix A - List of Documents

List of key documents relied on by the Department in its assessment:

- Environmental Impact Statement and attachments, prepared by JBA Urban Planning Consultants Pty Ltd, dated 2 December 2016
- Amended Environmental Impact Statement and attachments, prepared by Ethos Urban, dated 1 November 2017
- Response to Submissions and attachments, prepared by Ethos Urban, dated 5 July 2018
- Letter titled 'SSD 7684 Cockle Bay Future Information Request' and attachments, prepared by Ethos Urban, dated 18 September 2018
- Cockle Bay Park Development Design Guidelines Rev B, prepared by fjmt, dated 24 September 2018
- Cockle Bay Park Development Astoria Overshadowing Assessment Rev B, prepared by fjmt, dated 3
 October 2018
- Email titled 'Cockle Bay Open Space' from Harry Quartermain dated 17 October 2018
- Email titled 'Cockle Bay Site Area' from Harry Quartermain dated 17 October 2018
- Letter titled 'Design Excellence Strategy Cockle Bay Wharf Redevelopment (SSD 16_7684)', prepared by Ethos Urban, dated 12 November 2018
- Shadow Studies North 9 September SK_181129_1.1 to SK_181129 1.12
- Shadow Studies South 14 April SK_1181129_2.1 to SK_181129_2.12
- Updated concept proposal drawings SK-1.01 to 1.07, SK-1.10 to 1.15 and SK-1.20 and 1.21 received 14 December 2018
- Independent design advice titled 'Peer Review of Amended Concept Proposal July 2018' prepared by Professor Peter Webber and dated July 2018

Appendix B – Relevant Supporting Information

The following supporting documents and supporting information to this assessment report can be found on the Department's website as follows.

- Environmental Impact Statement and Amended Environmental Impact Statement http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=7684
- 2. Submissions

http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=7684

- 3. Response to Submissions http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=7684
- Supplementary and Additional Information
 http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=7684

Appendix C – Consideration of Environmental Planning Instruments

To satisfy the requirements of section 4.15(a)(i) of the EP&A Act, this report includes references to the provisions of the EPIs that govern the carrying out of the project and have been taken into consideration in the Department's environmental assessment.

Controls considered as part of the assessment of the proposal are:

- State Environmental Planning Policy (State & Regional Development) 2011 (SRD SEPP)
- State Environmental Planning Policy (Infrastructure) 2007 (ISEPP)
- Darling Harbour Development Plan No 1 (DHDP)
- State Environmental Planning Policy No. 55 Remediation of Land (SEPP 55)
- State Environmental Planning Policy (Coastal Management) 2018 (Coastal SEPP)
- Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005 (SHC SREP)
- Draft State Environmental Planning Policy (Remediation of Land) (draft SEPP 55)
- Draft State Environmental Planning Policy (Environment) (draft Environment SEPP)
- Sydney Harbour Foreshores and Waterways Area Development Control Plan 2005 (SHFW DCP).

State Environmental Planning Policy (State and Regional Development) 2011 (SRD SEPP)

The aims of the SRD SEPP are to identify SSD, State significant infrastructure (SSI), critical SSI and to confer functions on regional planning panels to determine development applications.

The proposal is SSD as summarised at Table 21.

 Table 21 | SRD SEPP compliance table

Relevan	t Sections	Department's consideration	Compliance
3 Aims o	of Policy	T I II II	
The aim	is of this Policy are as follows:	The proposed development is identified as SSD.	Yes
(a) to ide	entify development that is State significant development,		
8 Decla	ration of State significant development: section 4.36		
	elopment is declared to be State significant development ourposes of the Act if:	The proposed development is	
(a)	the development on the land concerned is, by the operation of an environmental planning instrument, not permissible without development consent under Part 4 of the Act, and	permissible with development consent. The site is specified in Schedule 2.	Yes
(b)	the development is specified in Schedule 1 or 2.		
Schedu	le 2 State significant development —identified sites		
(Clause	8 (1))		
2 Development on specified sites		The proposed development is within the identified Darling Harbour Site and has a CIV in excess of \$10 million	Yes
Development that has a capital investment value of more than \$10 million on land identified as being within any of the following sites on the State Significant Development Sites Map:			res
()			

(b) Darling Harbour Site

State Environmental Planning Policy (Infrastructure) 2007

The Infrastructure SEPP (ISEPP) aims to facilitate the effective delivery of infrastructure across the State by improving regulatory certainty and efficiency, identifying matters to be considered in the assessment of development adjacent to particular types of infrastructure development, and providing for consultation with relevant public authorities about certain development during the assessment process.

The development provides for a commercial building with a GFA greater than 15,000 m² and therefore is a development to which the ISEPP applies. The ISEPP requires the development be referred to RMS for comment.

The application was referred to RMS in accordance with the ISEPP. RMS' submissions on the proposal are summarised at **Section 5** and addressed at **Section 6** of this report.

Darling Harbour Development Plan No.1

The Darling Harbour Development Plan No.1 (DHDP) is the principal EPI which applies to the site. The requirements of the DHDP are considered in **Table 22**.

Table 22 | Requirements of the DHDP

Re	levant Sections	Department's consideration	Compliance
30	Dbjects		
(b)	to encourage the development of a variety of tourist, educational, recreational, entertainment, cultural and commercial facilities within that area	The proposed development provides a mixed use development. The proposed development is permissible with consent.	Yes
(c)	to make provision with respect to controlling development within that area.		
6 P	ermit required for certain development		
De	velopment:		
(a)	for the purposes of tourist, recreational, entertainment, cultural or commercial facilities (other than facilities used for pawnbroking or other forms of moneylending)		
(b)	for the purpose of beautifying the landscape	The proposed development uses are	Yes
(d)	for any purpose specified in Schedule 1 may not be carried out except with a permit being obtained therefore.	permissible with consent.	
	Schedule 1 includes:		
	childcare centres, commercial premises, shops, recreational facilities, markets, parks and gardens		
8 P	ermits required for renovation and demolition		
(1)	The renovation or demolition of a building or work may not be carried out except with a permit being obtained therefore.	The proposed demolition works are permissible with consent.	Yes

State Environmental Planning Policy No. 55 - Remediation of Land

SEPP 55 aims to ensure that potential contamination issues are considered in the determination of a development application.

The EIS includes a Preliminary Site Investigation Report (PSIR), which assesses the suitability of the site for the proposed use as a commercial tower. The PSIR identified the following potential contamination issues at the site:

- presence of contaminated fill of unknown origin as a result of the site development and land reclamation
- historic ship yard, timber yard, shipping dock operations
- historic automobile garage and engineer workshops.

The PSIR did not undertake soil and ground water testing and a conclusive assessment of land contamination status cannot therefore be made at this stage. Notwithstanding, the existing site is currently entirely covered by building slabs and pavements, which prevent current site users being exposed to land contamination.

The PSIR concludes, although the development will have a different configuration to the existing Cockle Bay Wharf, the ground cover conditions and the land use scenarios of the proposed development are essentially the same as the existing conditions and therefore the site is likely to be considered suitable for the proposed commercial development with respect to land contamination.

The PSIR recommends:

- a contamination assessment be undertaken to assess acid sulfate soil conditions and to develop appropriate management options to be implemented during construction
- spoils generated from the site during construction be required to be waste classified in accordance with NSW EPA (2014) Waste Classification Guidelines prior to off-site disposal (including spoils generated from piles and columns as part of the deck structure construction)
- implementation of UFP to manage unexpected contamination encountered during construction
- the future development not contain basements
- the entire site surface will be covered by slabs and/or pavement, with no opportunity for direct access between site users and the underlying soils and groundwater
- the proposed building will be fitted with air conditioning and ventilation that will ensure that there will be minimal opportunity for any soil vapour to accumulate within buildings.

The Department recommends a FEAR requiring future DA(s) include a detailed site contamination assessment in accordance with the requirements of the PSIR.

Draft Remediation of Land State Environmental Planning Policy

The Department is reviewing all State Environmental Planning Policies to ensure they remain effective and relevant and SEPP 55 has been reviewed as part of that program. The Department has published the draft Remediation of Land State Environmental Planning Policy (Remediation SEPP), which was exhibited until April 2018.

Once adopted, the Remediation SEPP will retain elements of SEPP 55, and add the following provisions to establish a modern approach to the management of contaminated land:

- require all remediation work that is to carried out without development consent, to be reviewed and certified by a certified contaminated land consultant
- categorise remediation work based on the scale, risk and complexity of the work

• require environmental management plans relating to post-remediation management or ongoing management of on-site to be provided to Council.

The new SEPP will not include any strategic planning objectives or provisions. Strategic planning matters will instead be dealt with through a direction under section 117 of the EP&A Act.

The Department considers the development is consistent with the draft Remediation SEPP subject to the recommended conditions discussed above.

State Environmental Planning Policy (Coastal Management) 2018

The Coastal SEPP gives effect to the objectives of the Coastal Management Act 2016 from a land use planning perspective. It defines four coastal management areas and specifies assessment criteria that are tailored for each coastal management area. The consent authority must apply these criteria when assessing proposals for development that fall within one or more of the mapped areas.

The Coastal SEPP identifies the site is located within the Coastal Environment Area and Coastal Use Area.

Clause 13(2) and 14(2) confirm the Coastal SEPP assessment criteria for identified coastal areas do not apply to sites that are also located within a Foreshore and Waterways Area as defined by the *Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005* (SHC SREP).

Darling Harbour is identified as a Foreshore and Waterways Area and therefore the Coastal SEPP assessment criteria do not apply. The Department has assessed the proposal against the SHC SREP below.

Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005

The SHC SREP provides planning principles for development within the Sydney Harbour catchment. The site is located within the Sydney Harbour Catchment area, and the relevant provisions of the SHC SREP have been considered in **Table 23**.

The proposal is consistent with the planning principles outlined in the SHC SREP as it will:

- not affect the natural assets and unique environmental qualities of the harbour
- maintain public access to and along the foreshore
- provide a landmark building form that contributes to the unique visual qualities of the harbour
- provide a masterplan for the site and establish the planning framework to guide the future detailed DA(s) for the site.

Assessment criteria		Department's consideration	Compliance		
Part 1 Preliminary					
Clause 2 Aims of the Plan	This clause sets out the aims with respect to the Sydney Harbour Catchment and establishes the principles for the purpose of enabling these aims to be achieved.	 The proposal is consistent with the aims of the Plan for the following reasons: The catchment, foreshores and waterways will not be adversely affected by the proposal. The proposed development will sufficiently manage its impact on the natural environment subject to conditions of consent. The proposed retail podium levels will contribute to the culture and vibrancy of the area. 	Yes		

 Table 23 | Consideration of the relevant provisions of the SREP (Sydney Harbour Catchment) 2005

Clause 3 Land to which plan applies	Within the Sydney Harbour Catchment, particular provisions of this plan apply to the Foreshores and Waterways Area.	The site is located within the Foreshores and Waterways Area as identified in the zoning map.	Yes
Part 2 Planning Pri	nciples		
Clause 13 Sydney Harbour Catchment	Provides a set of planning principles for land within the Sydney Harbour Catchment.	 The proposal is consistent with the planning principles for the Sydney Harbour Catchment for the following reasons: the proposal is confined to previously developed land and therefore would have negligible impact on the natural environment and assets including, hydrological, ecological and geomorphological processes and water quality, future DA(s) will ensure the development sufficiently manages its impact on the environment during construction, The proposal is considered to be appropriate within its context and would not have an adverse visual impact on the surrounding area / Darling Harbour, as discussed at Section 6. Future DA(s) will need to demonstrate design excellence. 	Yes
Clause 14 Foreshores and Waterways Area	Provides a set of planning principles for land within the Foreshores and Waterways Area.	 The site is located within the Foreshores and Waterways Area and is consistent with the planning principles for the following reasons: the proposal will not have an adverse impact of the natural assets and visual qualities of the Sydney Harbour, the proposal includes pedestrian links that will facilitate public access to and along the foreshore. 	Yes
Clause 15 Heritage conservation	Provides a set of planning principles for heritage conservation	The proposal will not detract from the heritage significance of surrounding heritage items as addressed in Section 6 .	Yes
Part 3 Foreshores	and Waterways Area		
Division 1 Develop	oment Control		
Clause 16 Zones indicated on Zoning Map	Land is zoned in accordance with the zoning map.	The site is on land adjacent to the waterway zoned W1 – Maritime Waters.	N/A
Clause 17 Zoning objectives	The objectives of the W1 – Maritime Waters Zone should be met	The site is located adjacent to the W1 Maritime Waters Zone. However, the site located wholly on land and has no associated uses that directly rely on the waterway. The proposal will not affect the movement of commercial shipping, public water transport and maritime industry operations.	N/A

Division 2 Matters for consideration

Clause 20 General	The matters referred to in Division 3 must be considered by the consent authority.	The Department has considered the relevant matters below.	Yes
Clause 21 Biodiversity, ecology & environmental protection	The consent authority must take into consideration the matters listed in the clause in relation to biodiversity, ecology and environmental protection.	The proposal will not have any adverse impacts on the biodiversity, ecology or the general environment. Stormwater quality and quantity, and detailed environmental considerations and control measures will be considered as part of the assessment of future DA(s).	Yes
Clause 22 Public access to, and use of, foreshores and waterways	The consent authority must take into consideration the matters listed in this clause in relation to public access to, and use of, the foreshores and waterways.	The proposal provides for improved public access between the CBD and the foreshore without adversely impacting on watercourses, wetlands, riparian lands or remnant vegetation.	Yes
Clause 23 Maintenance of a working harbour	The consent authority must take into consideration the matters listed in relation to the maintenance of a working harbour.	The proposal will not reduce the capacity of the Sydney Harbour to function as a working harbour.	Yes
Clause 24 Interrelationship of waterway and foreshore uses	The consent authority must take into consideration the matters listed in this clause in relation to the interrelationship of waterway and foreshore uses.	The proposal tower is set back from the foreshore and future DA(s) will ensure the development improves foreshore public access.	Yes
Clause 25 Foreshore and waterways scenic quality	The consent authority must take into consideration the matters listed in relation to the maintenance, protection and enhancement of the scenic quality of foreshores and waterways.	The Department has recommended a FEAR securing a DES, including a design competition, and DIP to ensure future development achieves design excellence (Section 6.3) Furthermore, the proposal is not considered to have an adverse impact on the scenic qualities of Sydney Harbour, as discussed at Section 6.4 .	Yes
Clause 26 Maintenance, protection and enhancement of views	The consent authority must take into consideration the matters listed in relation to the maintenance, protection and enhancement of views.	The location, height and bulk of the development is considered acceptable, subject to the design of future buildings complying with the building envelope parameters, TBFCs and design guidelines.	Yes
Division 3 Foreshores and Waterways Planning and Development Advisory Committee		Development Advisory Committee	
Clause 29 Consultation required for certain	A consent authority must not grant consent to a DA unless it has referred and considered the views of the Advisory Committee.	The proposal was referred to the Advisory Committee and no response was received.	Yes

development applications

Division 4 Miscellaneous			
Clause 59 Development in vicinity of heritage items	The consent authority must assess the impact of the proposed development on the heritage significance of heritage items within the	The proposed development is located south of Pyrmont Bridge and the Corn Exchange, which are both State listed heritage items. The proposal is not considered to have an adverse impact on the heritage significance or setting of either item, as	Yes
	vicinity of the development.	discussed at Section 6.6 .	

Draft State Environmental Planning Policy (Environment) (Draft Environmental SEPP)

The Department has been working towards developing a new policy for the protection and management of our natural environment and has published the draft Environment State Environmental Planning Policy (Environment SEPP), which was exhibited until January 2018.

Once adopted, the Environment SEPP will consolidate seven existing SEPPs (including the SHC SEPP) to simplify the planning rules for a number of water catchments, waterways, urban bushland, and the Willandra Lakes World Heritage Property. The Environment SEPP will provide a consistent level of environmental protection to that which is currently delivered under the existing SEPPs. Where existing provisions are outdated, no longer relevant or duplicated by other parts of the planning system, they will be repealed.

Given that the proposal is consistent with the provisions of the SHC SEPP, the Department concludes that the proposed development will generally be consistent with the provisions of the Draft Environment SEPP.

Other Policies

In accordance with Clause 11 of the SRD SEPP, Development Control Plans (DCPs) do not apply to SSD. Notwithstanding, the following DCP(s) provide appropriate guidance for the redevelopment of the site and are considered below.

Sydney Harbour Foreshores and Waterways Area Development Control Plan 2005

The Sydney Harbour Foreshores and Waterways Area Development Control Plan 2005 (SHFW DCP) applies to sites within the Foreshores and Waterways Area as identified in the SHC SEPP. The SHFW DCP outlines guidelines to protect and enhance the ecological and landscape values of the harbour foreshore, and provides specific guidelines for water based, land-based and land/water interface developments. The relevant guidelines of the SHFW DCP are considered at **Table 24**.

lssue	Guidelines	Department consideration
Foreshore access	 Foreshore access is to be encouraged and wherever possible, public access to and along the foreshore including the inter-tidal zone should be secured or improved 	The proposal maintains and improves public access along the waterfront.
	• most desirable are foreshore links joining public open spaces or access points	

Table 24	Consideration	of relevant Sł	HFW DCP	guidelines
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Siting of buildings and structures	 where there is existing native vegetation, buildings should be set back from this vegetation to avoid disturbing it buildings should address the waterway; buildings should not obstruct views and vistas from public places to the waterway buildings should not obstruct views of landmarks and features identified on the maps accompanying this DCP where there are cliffs or steep slopes, buildings should be sited on the top of the cliff or rise rather than on the flat land at the foreshore 	The proposed building addresses the waterway and is sited to maintain similar public views from the surrounding area.
Built form	 where buildings would be of a contrasting scale or design to existing buildings, care will be needed to ensure that this contrast would enhance the setting where undeveloped ridgelines occur, buildings should not break these unless they have a backdrop of trees while no shapes are intrinsically unacceptable, rectangular boxy shapes with flat or skillion roofs usually do not harmonise with their surroundings. It is preferable to break up facades and roof lines into smaller elements and to use pitched roofs walls and fences should be kept low enough to allow views of private gardens from the waterway bright lighting and especially floodlighting which reflects on the water, can cause problems with night navigation and should be avoided. External lights should be directed downward, away from the water. Australian Standards AS/NZ1158.3: 1999 Pedestrian Area (Category P) Lighting and AS4282: 1997 Control of the Obtrusive Effects of Outdoor Lighting should be observed use of reflective materials is minimised and the relevant provisions of the Building Code of Australia are satisfied colours should be sympathetic with their surrounds and consistent with the colour criteria, where specified, for particular landscape character types in Part 3 of this DCP the cumulative visual impact of a number of built elements on a single lot should be mitigated through bands of vegetation and by articulating walls and using smaller elements; the cumulative impact of development along the foreshore is considered having regard to preserving views of special natural features, landmarks or heritage items 	The scale of the building envelope is similar to other existing developments along the eastern Darling Harbour foreshore and includes appropriate performance controls to ensure a future building makes a positive contribution to Darling Harbour. The site is well suited to accommodate higher density and a tall building being located at the south-eastern end of Darling Harbour within an existing tourist and entertainment precinct. The proposal will complement and support the recently completed Sydney exhibition, convention and entertainment facilities, and therefore further contribute to the revitalisation and modernisation of Darling Harbour. Further discussion on built form and visual impacts is within Section 6.4 . The proposal is considered to have an acceptable impact on the heritage listed Pyrmont Bridge. The separation between the site and the Bridge allows for the immediate setting of the Bridge to be protected. Further discussion on visual impacts on the Pyrmont Bridge is within Section 6.6 .
Planting	 appropriate species from those found in the surrounding landscape should be incorporated endemic native species should be used in areas where native vegetation is present or has the potential to be regenerated exotic species that have the potential to spread into surrounding bushland should be avoided existing mature trees should be retained where possible and incorporated into the design of new developments vegetation along ridgelines and on hillsides should be retained and supplemented with 	The proposal includes the provision of new publicly accessible open space. Future DA(s) will include detail of appropriate landscaping of these spaces. Further discussion on open space is within Section 6.5 .

	additional planting to provide a backdrop to the waterway	
	 a landscape plan is to be submitted with any land- based development proposal showing existing and proposed changes in contours, surface and sub-surface drainage, existing trees to be retained and removed, measures to protect vegetation during construction, and proposed planting including species and common names. 	
	Redevelopment proposals should:	
	 ensure continuous and inviting public access to the foreshore; 	
	 allow for a mix of uses to further improve the public utility and amenity of the waterfront; 	The proposal will maintain and improve public access to the foreshore. Future detailed DA(s) will include detail of how pedestrian access and public domain
Redevelopment sites	 provide public jetties and wharves for access to vessels where there is a demonstrated demand; 	
Redevelopment sites	• identify suitable areas that can be conserved and made available to the public;	upgrades will integrate with the foreshore and improve pedestrian
	• provide public road access to the foreshore park where a park is being provided; and	circulation and connectivity around the waterfront. Further discussion is
	 be designed considering the site in the broader context of the River and the Harbour. Redevelopment sites have the potential to provide a gateway and become a waterside destination for the hinterland. 	provided within Section 6.5 .
Appendix D – Summary of Public Submissions to the EIS, Amended EIS and RtS

A summary of the key issues raised in public / special interest group submissions as a proportion of the total submissions made at each stage of the Department's engagement with the community is provided in **Table 25**.

Table 25 | Summary of the public submissions as a proportion of the total submissions made at each exhibition stage

Issue	Proportion of submissions (EIS)	Proportion of submissions (Amended EIS)	Proportion of submissions (RtS)
	43 Submissions	32 Submissions	33 Submissions
Objections and Comments			
• Excessive height, bulk and scale of the tower / podium	87%	72%	61%
 The tower is too close to / dominate public domain and foreshore 	74%	74%	76%
 Adverse heritage impact on Pyrmont Bridge / Darling Harbour 	64%	28%	30%
Overshadowing	62%	36%	52%
Out of character with existing scale of development	59%	54%	39%
Density / overdevelopment	49%	51%	12%
Adverse impact on views from the public domain	44%	51%	30%
Traffic and car parking impacts	33%	21%	21%
 Lack planning controls for the site and non-compliance with Council's controls 	31%	5%	9%
Pedestrian connectivity and public accessibility	15%	8%	21%
Wind impacts	10%	13%	18%
Loss of private residential views	10%	38%	37%
Insufficient community facilities / public benefits	10%	-	6%
Insufficient public open space	8%	3%	6%
Inadequate public benefits / developer contributions	8%	3%	-
inadequate community consultation	5%	-	3%
Solar reflectivity / glare	3%	-	-
Inadequate public transport	3%	5%	-
Air quality	3%	-	-
• Noise	-	8%	-
Adverse impact on property values	-	8%	-
Loss of privacy	-	3%	-
 Boardwalk extension adversely reduces size of the harbour 	-	-	15%
Sets a development precedent	-	-	9%
• the loose-fit tower envelope will be filled in its entirety	-	-	3%
Insufficient justification for office use in this location	-	-	3%
Support			
Revitalise / visually enhance the area	3%	-	3%
Improved pedestrian access	3%	-	6%
• The open space is a public benefit	3%	-	6%
Increased employment opportunities	3%	_	-
Hides the Western Distributor	-	-	3%

Appendix E – Independent Design Advice

A copy of the independent design advice provided by Professor Peter Webber is quoted below.

COCKLE BAY WHARF RE-DEVELOPMENT -- SSD 7684

Peer Review of Amended Concept Proposal – July 2018

Following a series of reviews and comments on previous preliminary designs, the applicants have now provided a "Response to Submissions" dated 5th July 2018. This comprises detailed and comprehensive information covering all critical issues, in particular those such as overshadowing, view loss and heritage impacts, and a very detailed and thoughtful Design Report and Drawings by Francis-Jones Morehen Thorp Architects.

High-Rise Tower

The tower envelope location now proposed results from a detailed analysis of all available options, and is in my view the most appropriate. It can allow for an adequate area for open space to its north, and acceptable extent of overshadowing of public space to the south. With skillful detailed design a satisfactory scale along the waterfront concourse should readily be achievable. Any tall building on the site will inevitably impact on existing and future buildings behind, and a comprehensive assessment has been provided indicating the extent of impacts. In relation to view impacts relatively few properties would be affected, although in several cases these appear to be notable when taken together with the impact of existing buildings.

The visual impact of the tower will be a critical issue at the detailed design stage. The FJMT report contains 15 'Objectives' addressing design issues (Key Design and Massing Objectives –Tower P.53). These are generally supported, although the fourth which states the design should "...strive to reduce the perceived visual bulk" could be differently and more strongly expressed. It is important that the tower should not be over-assertive visually, should minimize view impacts, and be elegant and discreet, objectives which I consider can be addressed by skillful design of the building form and articulation, in combination with selection of appropriate materials and finishes. The Department should satisfy itself that the proposed built form building controls are robust enough to deliver a building that meets the objectives.

Public Open Spaces

There is a variety of public spaces included in the 'Concept Proposal'. The waterfront promenade is to be appropriately conserved and enhanced. With the location of the tower envelope as now proposed the podiumlevel space to the north of the tower would have excellent sunlight access and attractive outlook over the harbor. Future detailed design of the tower block in particular and the landscaping should ensure that adverse wind impacts are minimized. The design indicates opportunities for a range of pleasant spaces in the stepped areas between the podium and waterfront concourse: some could be quiet and sunny seating areas, others more active where adjacent to commercial activities.

The detailed design for the site must ensure that public spaces of the potential quality proposed in the concept design are retained in the final submission. In relation to area these should comply with the areas nominated in the Ethos Urban 'Response to Submissions' "...15,000m² of open space on the Site ..." with "...at least 6,000m² on the northern side of the site between the tower and Pyrmont Bridge...." (p.30). A separate and critical issue to be resolved is ownership and management of all these spaces to maximize benefit to the public.

Conclusion

On balance – in the absence of any statutory planning constraints - the overall design and the location of the tower building as close as this to the waterfront could be accepted on the basis that:-

- a) The precedent for such proximity has already been established for other sites in the immediate area.
- b) The existing buildings on the site are unremarkable, and there is a good case for their removal and redevelopment of the site
- c) The design has now been refined in relation to set-backs and podium heights so that a satisfactory 'human scale' along the waterfront concourse could be achieved.
- d) A very substantial quantity of potentially very attractive new public open space will be provided, and this could be considered as a reasonable 'offset' for the inclusion of a tower block.

The last of these is the prime reason why a large tower building can be supported on a site where presently there are only low-rise buildings. If the site is to be redeveloped as proposed, it is critical that these new spaces be conserved in perpetuity with permanent public access. A legal agreement, whether by way of strata title or otherwise, will be needed to ensure both that they are sensitively conserved, and that their management is of very high quality.

Professor Peter Webber July 2018

Appendix F – Design Guidelines

The proposal includes design guidelines (Cockle Bay Park Development Design Guidelines - Rev B, prepared by fjmt, dated 24 September 2018), which are intended to inform the competitive design excellence process and the detailed design of the development. The design guidelines provide guidance on a range of matters including urban design, open space and built form considerations.

The Department supports the creation of design guidelines for the development and has considered the proposed guidance within the design guidelines at **Section 6** of this report. However, the Department recommends a number of amendments to ensure the detailed design of the development achieves the design and open space objectives for the development and incorporates the various changes recommended throughout this report.

The Department's recommended amendments to the design guidelines are provided at **Table 26**.

Table 26 | The design guidelines and Department's recommended amendments to the design guidelines

Design Guidelines	Department's Recommended Amendment
Urban Design Principles	
3.1 Reconnect the City to the Harbour Reconnect the city to the harbour at this key location, repairing the urban fabric that is currently disrupted by the Western Distributor	No change
<u>3.2 Reconnect Pyrmont Bridge to Market St</u> Improve the connection at the eastern end of Pyrmont Bridge and restore the original role of this bridge as a key link between the City and Pyrmont. This will rectify the currently severed connection created by the construction of the Western Distributor.	No change
3.3 Enhance the waterfront	3.3 Enhance the waterfront
 Enhance and improve waterfront public space through: Enhanced amenity, passive & active Improved connections to retail Improved north/south movement along the waterfront Bring passive public open space closer to the waterfront Increased capacity to host large population events Improved connection to existing marine structures Improved connections to Pyrmont Bridge Improved connections to Market Street Contribute to the broader Darling Harbour foreshore experience 	 Enhance and improve waterfront public space through: Enhanced amenity, passive & active Improved connections to retail Improved north/south movement along the waterfront Bring passive public open space closer to the waterfront Increased capacity to host large population events Improved connection to existing marine structures Improved connections to Pyrmont Bridge Improved connections to Market Street Contribute to the broader Darling Harbour foreshore experience
 3.4 Contribute to the cultural experience of Darling Harbour Contribute to the cultural experience of darling harbour with the opportunity for significant enhanced cultural experiences which may include: Public art installations at Druitt Street Bridge An active rooftop Natural amphitheatre for Cockle Bay events Embedded public art in the public domain Cultural partnerships Programmed space Activated public realm Market Park 	 <u>3.4 Contribute to the cultural experience of Darling Harbour</u> Contribute to the cultural experience of darling harbour with the opportunity for significant enhanced cultural experiences which may include: Public art installations at Druitt Street Bridge An active rooftop Natural amphitheatre for Cockle Bay events Embedded public art in the public domain / open space Cultural partnerships Programmed space Activated public realm / open space Market Park

3.5 Create a new publicly accessible open space on the waterfront	3.5 Create a -new publicly accessible open space on the waterfront
Create a generous public space spanning the Western Distributor that connects to, and opens toward the harbour and city street connections	Create a generous public <u>ly accessible open</u> space <u>to the</u> <u>north of the tower</u> spanning the Western Distributor that connects to, and opens toward the harbour and city street connections
	<u>Create a publicly accessible open space to the south of</u> <u>the tower that opens towards the harbour and is</u> <u>screened from the Western Distributor.</u>
	All publicly accessible open spaces shall be publicly accessible 24 hours-a-day 7 days-a-week.
3.6 The open space is to be significant in size and location	3.6 The open space is to be significant in size and location
Provide a northern publicly accessible open space that is significant in size (6,000m ²) and location and offers a unique opportunity to transform the exposed freeway network into a significant public benefit.	Provide a northern publicly accessible open space that is significant in size (6,000 minimum of 5,500 m ²) and location and offers a unique opportunity to transform the exposed freeway network into a significant public benefit.
Provide a publicly accessible open space to the south of the tower on the podium rooftop, protected from the freeway to the east by fine grain retail space, and open to provide elevated views of Darling Harbour to the west.	Provide a publicly accessible open space to the south of the tower <u>(minimum of 1,000 m²)</u> on the podium rooftop, protected from the freeway to the east by fine grain retail space, and open to provide elevated views of Darling Harbour to the west.
3.7 Minimise impact on solar access to publicly open spaces	<u>3.7 Minimise impact on solar access to nearby publicly open spaces</u>
Minimise impact on solar access to public spaces, particularly during the winter months and during hours that those spaces are likely to be used by the public.	Minimise impact on solar access to <u>affected</u> public <u>open</u> spaces, particularly during the winter months and during hours that those spaces are likely to be used by the public.
	The tower must not result in additional overshadowing of Town Hall Square or the Cockle Bay promenade beyond the overshadowing controls at Built Form Design Principles 5.6 and 5.7.
	<u>The tower shall not cause any additional overshadowing</u> of Tumbalong Park or Sydney Square.
3.8 Preserve and enhance public vistas	No change
<u>3.8 Preserve and enhance public vistas</u> Consider important public vistas such as the view from Market Street to the harbour, which needs to be maintained and reinforced to enhance the visual connection between the city and the harbour.	No change
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	The location/design of the new pedestrian bridge connecting Market Street to the podium and Pyrmont Bridge should avoid unacceptable visual/heritage impacts on Pyrmont Bridge and the Corn Exchange building and Shelbourne Hotel.
3.11 Facilitate major public events	No change
The new public domain should provide opportunities to enhance the enjoyment of major public events on Cockle Bay and support pedestrian access during event mode.	
3.12 Improve connectivity and wayfinding throughout the precinct	3.12 Improve connectivity and wayfinding throughout the precinct
Improve the connectivity and wayfinding between the City and the harbour, Pyrmont and the International Convention Centre Sydney through intuitive pedestrian routes and desire lines.	Improve the connectivity and wayfinding between the City and the harbour, Pyrmont and the International Convention Centre Sydney through intuitive pedestrian <u>and bicycle</u> routes and desire lines.
Provide and maintain access and a commercial address for the existing and new commercial buildings	Consider cycleway access through the site and to provide at grade access for pedestrians and cyclists, rather than stairs, lifts and escalators.
	Provide and maintain access and a commercial address for the existing and new commercial buildings
3.13 Consider the future removal of the Western Distributor	No change
Consider how the urban fabric can be enhanced should the Western Distributor be demolished at some future date.	
Landbridge, podium and tower will be designed to be independent from the Western Distributor to allow for future Western Distributor removal without significant impact.	
3.14 Consider and balance private view sharing	3.14 Consider and balance private view sharing
Deliver an equitable approach to view loss, which recognises the significant role of the site's CBD location and encourages view sharing between existing residential and commercial buildings, and the new development.	Deliver an equitable approach to view loss, which recognises the significant role of the site's CBD location and encourages view sharing between existing residential and commercial buildings, and the new development.
	View loss impacts to apartments within the western elevation of the Astoria Tower shall, as a minimum, be consistent with the impacts assessed within the Visual Impact Assessment (VIA) submitted with the concept approval. In addition, within the parameters set by the building envelope and the concept approval, the design of the development shall endeavour to improve upon the impacts assessed within the VIA.
	3.15 Ecologically Sustainable Design (ESD)
	Incorporate all ESD principles in the building design including the minimum environmental standards in the ESD Development Application Design Report, Issue 3 prepared by ARUP dated 21 August 2017.
	Explore and incorporate all opportunities to achieve (or exceed) the following stretch environmental targets:
	 a) <u>5.5 star NABERS Energy based</u> b) <u>4.5 star NABERS Water based (for the commercial office component)</u> c) <u>Incorporation of dual reticulation recycled water system to reduce pressure on existing water/wastewater infrastructure.</u>

Open Space Design Principles

4.1 Create a new publicly accessible open space

Open up the northern end of Cockle Bay to the harbour to create visual + physical connections to water. Open the site and invite the city in. New public space should achieve high levels of solar access in winter and late autumn, early spring. It should be very public, responding to people movement and inviting the city in and through. 4.1 Create a new significant publicly accessible open space

Open up the northern end of Cockle Bay to the harbour to create visual + physical connections to water. Open the site and invite the city in.

The Nnew publicly accessible open space at the northern end of the site (minimum 5,500 m²) should:

- achieve high levels of solar access in winter and late autumn, early spring. It should

	 be very public, publicly accessible 24 hours-a-day 7 days-a-week, responding to people movement and inviting the city in and through provide lawn, shrub plantings and trees on structure provide planting that is set down within the land- bridge and not within raised planters exclude any ventilation stacks/flues and substations 4.1a Landscaping Landscaping within the public domain and open spaces should: endeavour to achieve tree canopy cover of at least 15% provide a mix of tree heights preference local indigenous species, in accordance with the City of Sydney's Landscape Code provide soil volumes for different tree sizes including: 39 m³ for large trees (canopy diameter up to 16m at maturity) 36 m³ for small trees (canopy diameter up to 4m at maturity) incorporate permeable surfaces where possible avoid raised planters in the public domain / open spaces due to their impact in dividing the space, additional technical requirements for irrigation, and limitation on tree growth.
4.2 Provide an improved, city scale connection between Pyrmont Bridge and Market Street	No change
Improve this main link between The City and The Bays and on to the west. A wide, intuitive connection from Market Street to Pyrmont Bridge opening onto an elevated green.	
4.3 Enhance the waterfront experience	4.3 Enhance the waterfront experience
Provide upgraded retail and generous public space to allow a moment to pause. Extend the length of the existing wharf where possible and provide clearly public gathering spaces opening out to the water's edge - adding to the safety of the upper promenade.	Provide upgraded retail and generous public spaces to allow a moment to pause. Extend the length of the existing wharf where possible that achieve a high standard of amenity, layout and design and provide clearly public gathering spaces opening out to the water's edge - adding to the safety of the upper promenade.
Provide an average 17m setback to the retail line noting some licenced seating areas to be maintained within the leasehold area encouraging a mix of spaces from active and urban to passive and relaxing. No reduction in public walkways is permitted.	Provide an average 17m setback to the retail line noting some licenced seating areas to be maintained within the leasehold area encouraging a mix of spaces from active and urban to passive and relaxing.
	Ensure the development achieves an appropriate and activated interface with the Cockle Bay promenade.
	No reduction in public walkways is permitted.
	All outdoor dining/seating shall be contained wholly within the building envelope and shall not extend into the Cockle Bay promenade.
4.4 Permeable and diverse public spaces	4.4 Permeable and diverse public spaces
Encourage fast and slow movements, allow for direct and indirect movements. Create places to discover, lookouts, quiet spaces, open greens and discrete gardens. Create connections to podium foyer and retail spaces at key levels to facilitate ease of movement and a permeability of internal and external environments. Respond to the existing Darling Park buildings, entries and shared spaces.	Encourage fast and slow movements, allow for direct and indirect movements. Create places to discover, lookouts, quiet spaces, open greens and discrete gardens. Create connections to podium foyer and retail spaces at key levels to facilitate ease of movement and a permeability of internal and external environments. Respond to the existing Darling Park buildings, entries and shared spaces.
	<u>Circulation and access through the site should be</u> optimised by providing clear and unambiguous routes that rationalise wayfinding.
	<u>Consider crime prevention through environmental</u> <u>design principles in the design of all open spaces and</u> public domain areas.
	Investigate improvements to the Druitt Street Bridge entry access point from the Darling Harbour waterfront and the remainder of the route between the

development site and Sussex Street, including increased pedestrian capacity, including during events. Investigate the provision of cycleway connections via the development between: existing pedestrian/cycle infrastructure on the Western Distributor and the King Street and Kent/Liverpool Street cycleways Market Street / Kent Street King Street / Kent Street providing for a right turn into Kent Street when travelling from Pyrmont Bridge. 4.5 Provide public spaces that enhance access to the 4.5 Provide public spaces that enhance access to the waters edge waters edge Create open spaces suitable for celebrations, viewing the Create open spaces suitable for celebrations, viewing the harbour activities and accessing the waters edge in an open harbour activities and accessing the waters edge in an open and comfortable manner. and comfortable manner. Provide facilities like the 'Cockle Bay Steps' as a space for Provide facilities like the 'Cockle Bay Steps' as a space for celebrations and informal amphitheatre. celebrations and informal amphitheatre. Provide a mix of active and urban spaces with retail as Provide a mix of active, passive, green and urban spaces passive public spaces. with retail as passive public spaces. 4.6 Upgrade the promenade No change Upgrade and enhance the public space along the waterfront promenade. 4.7 Reimagine the Crescent garden No change Open up the Crescent Garden to public view encouraging new uses and activities. Invite the public to enjoy a tranquil retreat. 4.8 Enhance clarity of public and private space 4.8 Enhance clarity of public and private space Provide clearly delineated public and private spaces. Use Provide clearly delineated public and private spaces. Use retail to create activation and create passive public spaces. retail to create activation and create passive public spaces. The publicly accessible open spaces to the north (minimum of 5,500 m²) and south (minimum of 1,000 m²) of the tower: may include stairs, terraces, hard and soft landscaping associated with publicly accessible open space shall exclude retail tenancies inclusive of outdoor dining areas and primary pedestrian thoroughfares for the principal purpose of access to/from and through the development (e.g. from Market Street to Pyrmont Bridge and Market Street to the Tower). **Built Form Design Principles** 5.1 Setbacks 5.1 Tower Ssetbacks Provide setbacks of 8m minimum / 10m average to reduce Provide setbacks of an 8m minimum / 10m average tower the visual impact of the tower from the promenade, and setback from the Darling Harbour promenade to reduce reduce overshadowing to the southern end of the the visual impact of the tower from the promenade, and promenade, whilst allowing for facade articulation. reduce overshadowing to the southern end of the promenade, whilst allowing for facade articulation. 5.2 Tower separation 5.2 Tower separation Provide adequate tower separation between the new Provide adequate tower separation between the new tower and the existing towers at Darling Park to preserve tower and the existing towers at Darling Park to achieve an the amenity of the existing and new towers and to facilitate appropriate built form relationship, consider preserve view sharing for these buildings and for buildings in the

appropriate built form relationship, consider preserve the amenity of the existing and new towers and to facilitate view sharing for these buildings and for buildings in the streets beyond.

No change

Create a tower that forms part of the Darling Park complex and is readily accessible from the circulation routes surrounding the Crescent garden.

streets beyond.

5.3 Tower address

Also create a legible, standalone tower with its own address and entrance visible and easily accessible from Market Street and Sussex Street. Car access should be provided from Wheat Road including a high quality dropoff experience.

5.4 Western Distributor constraints

5.5 Relationship to existing built form

No change

Consider the structural, construction and clearance requirements for construction over and around the Western Distributor and Harbour Street.

Consider the existing Darling Park tower forms including Consider the existing Darling Park tower forms including separation, height and breadth, so that the combined development reads as a cohesive whole. development reads as a cohesive whole. 5.6 Tumbalong Park amenity 5.6 5.5 Sydney Square and Tumbalong Park amenity The proposal should not impose any additional The proposal should not impose any additional overshadowing of Tumbalong Park and the Children's the Children's playground. playground. 5.7 Future Town Hall Square overshadowing 5.7 5.6 Future Town Hall Square overshadowing Overshadowing to the Future Town Hall Square should be minimised as far as possible, with the maximum additional overshadowing impact of: overshadowing impact of: Maximum annual average additional overshadowing Maximum annual average additional overshadowing hours 2.5 hours hours 2.5 2.46 hours Maximum duration of overshadowing period 50 days per Maximum duration of overshadowing period 50-48 annum days per annum Maximum peak day hours of overshadowing across the Maximum peak day additional overshadowing 30 square increase of 1% minutes Maximum peak day hours of overshadowing across the square increase of 1 0.8% - No additional overshadowing before 4:00 pm 5.8 Cockle Bay waterfront overshadowing 5.8-5.7 Cockle Bay waterfront overshadowing No additional overshadowing by the tower to the Cockle No additional overshadowing by the tower to the Cockle Bay Promenade during the draft CSPS control time of 11am -3pm on 21 June (mid winter). 3pm on 21 June (mid winter). 5.9 Residential solar access 5.9 5.8 Residential solar access Maintain ADG compliance of open space and living space Maintain ADG compliance of open space and living space of downstream residential buildings. of downstream residential buildings. Sun eye view analysis indicates the proposed envelope Sun eye view analysis indicates tThe proposedal shall

does not impact solar access for 222 Sussex Street (Astoria Tower) at any time on the 21st June (mid winter).

5.10 Tower form

Create an appropriate addition to the city context, creating an elegant, contemporary, urbane tower form. Complement and enhance this strategically important context with surrounding landmark buildings providing contemporary architecture and an enduring international image.

The design of the tower should achieve an architectural solution that is appropriately articulated and strives to reduce the perceived visual bulk. Create a facade design that provides good visibility, daylight penetration, energy efficiency, access to views and integration of signage opportunities, whilst eliminating the need for blinds to provide thermal control.

Create a desirable tower slenderness ratio to reduce the buildings bulk and scale, while allowing for commercial requirements such as minimum / market ideal floor plate size and minimum overall area. A desirable slenderness

5.5 Relationship to existing built form

separation, height and breadth, so that the combined

overshadowing of Sydney Square or Tumbalong Park and

Overshadowing to the Future Town Hall Square should be minimised as far as possible, with the maximum additional

Bay Promenade during the draft CSPS control time of 11am -

envelope does not impact solar access for 222 Sussex Street (Astoria Tower) at any time on the 21st June (mid winter).

Overshadowing impacts for the remainder of the year (summer, autumn and spring) to apartments within the western elevation of the Astoria Tower shall, as a minimum, be consistent with the impacts assessed within the shadow studies submitted with the concept approval. In addition, within the parameters set by the building envelope and the concept approval, the design of the development shall endeavour to improve upon the impacts assessed within the within the shadow studies.

5.10 5.9 Tower form

Create an appropriate addition to the city context, creating an elegant, contemporary, urbane tower form. Complement and enhance this strategically important context with surrounding landmark buildings providing contemporary architecture and an enduring international image.

The design of the tower should achieve provide an architectural solution that achieves design excellence, is visually interesting, appropriately articulated and strives to reduce the perceived visual bulk.

Ensure that the maximisation of gross floor area within the envelope is balanced with the creation of a building form that is proportionally elegant and exhibits appropriate facade articulation and modulation.

Create a facade design that is not overly assertive, minimises view impacts, includes high standard materials and finishes, provides good visibility, daylight

ratio for the scheme is 2.5-2.8:1, and should be no lower than 2.2:1.	penetration, energy efficiency, access to views and integration of signage opportunities, whilst eliminating the need for blinds to provide thermal control.
	Create a desirable tower slenderness ratio to reduce the buildings bulk and scale, while allowing for <u>considering</u> commercial requirements such as minimum / market ideal floor plate size and minimum overall area. A desirable slenderness ratio for the scheme is 2.5-2.8:1, and should be no lower than 2.2:1.
	5.10 Tower base
	 <u>The tower base shall provide an:</u> <u>appropriately designed and proportioned</u> <u>base/plinth for the tower to stand on</u> <u>appropriate interface and built form transition</u> <u>between the podium and the tower</u> <u>appropriate interface and relationship to Crescent</u> <u>Garden.</u>
5.11 Impact on skyline	5.11 Impact on skyline
Respond to the character and built form of the city skyline from all angles and particularly when viewed from the west.	Respond to the character and built form of the city skyline from all angles and particularly when viewed from the west.
	A balanced and contextual response should be taken to development potential and density.
	The building shall be carefully designed so that its bulk and massing does not appear overly dominant for its context / Darling Harbour, potentially through form, materials, articulation and other design approaches.
5.12 Human Scale	5.12 Human Scale
Consider human scale in the design of the podium, awnings and landscape to provide an inviting experience along the waterfront and throughout the new public domain.	Consider human scale in the design of the podium, awnings and landscape to provide an inviting experience along the waterfront and throughout the new public domain and open space(s) .
5.13 Wind Impacts	5.13 Wind Impacts
Wind conditions should be safe and appropriate for the proposed activities in all areas of the development, internal and external.	Wind conditions should be safe and appropriate for the proposed activities in all areas of the development, internal and external.
	Wind impacts on Crescent Garden and the Darling Harbour promenade should be minimised so that those spaces achieve appropriate wind environments for their use.
5.14 Workplace	No change
Create a design that strikes a balance between a premium commercial ambience and a position at the heart of a vibrant, diverse, mixed use quarter of the city.	
Consider the target office market, and capability to provide a favourable workplace to attract premium tenants. Attract a mix of tenants including top tier global tenants with evolving workplace design requirements, as well as those of today.	
<u>5.15 Views</u>	<u>5.15 Views</u>
Maximise the opportunity for views at all levels of the tower, particularly to the West, North West, North, North East.	Maximise the opportunity for views at all levels of the tower, particularly to the West, North West, North, North East.

Appendix G – Summary of the Consideration of Issues Raised in Submissions

A summary of the Department's consideration of the issues raised in submissions is provided at **Table 27**.

Table 27 Department's consideration	of key issues raised in submissions
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Issue raised	Consideration
Tower height and location	Section 6.4 considers the tower height and location and Section 6.3 considers design excellence
	• The Department negotiated a significant 52 m reduction in the height of the tower (from RL 235 to RL 183) and also the relocation of the tower 42.9 m further south of Pyrmont Bridge
	• Darling Harbour is characterised by a variety of building heights and scales, including tall buildings adjacent to the harbour, in this context the proposed tower height would not be out of character with the surrounding area.
	• The tower height would not overbear Darling Harbour and would contribute positively to the city skyline.
	• Reducing the height of the tower or changing its typology would have adverse built form and visual impacts.
	• The tower location is the result of options analysis and is the best outcome for the site. In addition, it facilitates the creation of publicly accessible open space, which is a significant public benefit.
	• The Department considers the proposed design excellence strategy establishes an appropriate framework to ensure future development on the site achieves design excellence.
Tower scale	• Section 6.4.1 considers the loose fit tower building envelope and concludes, subject to TBFCs, the provision of a loose fit tower building envelope is an appropriate response to the constraints of the site and to encourage design excellence.
	• To ensure the development provides a suitably slender and elegant tower, the Department recommends the maximum width of the tower be reduced by 7 m (from 60 m to 53 m) and that maximum width should apply to the entire building (not just the part fronting Darling Harbour).
	• In addition, the Department also recommends a new TBFC apply to the tower base envelope to ensure the future tower base is no wider than 73 m.
Tower setbacks	• Section 6.4.1 considers the tower envelope setback and concludes the 8 m minimum and 10 m average tower setback allows for greater variation in the design and form of the tower and is therefore acceptable.
	• The 8 m minimum setback is considered sufficient to ensure the tower is sufficiently recessive from Darling Harbour.
	• The 3 m articulation zone is considered excessive and is likely to have an overbearing and privatising impact on the promenade. The Department has recommended the articulation zone be reduced by 2 m (from 3 m to 1 m).
Overshadowing	• Section 6.4.2 considers the overshadowing impact on THS.
(THS)	• The additional overshadowing of THS is limited to a maximum of 48 days throughout the year and is minor in nature.
	• There would be no additional overshadowing of THS before 4:00 pm.
	 There are no current statutory planning controls protecting solar access to the THS site. A further reduction in the height of the tower envelope to remove all overshadowing of THS would result in a 35 m / 6 storey reduction in the height of the tower, which would have an unacceptable impact on the proportions of the building.
Overshadowing (properties)	 As discussed at Section 6.4.2, the proposal would result in a loss of direct sunlight to the western elevation of the Astoria Tower. However, on-balance, this impact is considered acceptable as: half of all affected apartments have access to direct sunlight from a secondary north facing window

	 on the most affected day the approximately 3 hours of direct sunlight would continue to reach the western façade of the Astoria Tower during the middle of the day. o The proposal includes significant public benefits, which on-balance, outweigh the overshadowing impact on the Astoria Tower.
View loss	• The Department has considered the view loss impacts on nearby residential properties against the Tenacity principles (Section 6.4.3).
	• The Department notes the view loss impacts to the western façade of the Astoria Tower would be moderate to severe.
	• The distance between existing residential buildings and the development ensure a suitable outlook is maintained.
	• Given the site's city edge location, the interruption of existing views that are borrowed over intervening developments is inevitable. In addition, partial views to the most affected properties are maintained.
	• The proposal has stuck an appropriate balance between view sharing and the appropriate development of the site.
Heritage impact	• Section 6.6 considers heritage impacts and concludes the proposal is capable of being designed so not to have an adverse impact on the heritage significance of the Pyrmont Bridge, Corn Exchange building and Shelborne Hotel.
	• The Department recommends future DA(s) include detailed Aboriginal and non-Aboriginal archaeological assessments and consultation with the Aboriginal community be undertaken prior to the lodgement of detailed DA(s).
Density	• The Department considers the increase in density has strategic merit as it will provide a significant increase in employment generating floorspace consistent with the Regional Plan and Eastern District Plan (Section 6.2).
	• The Department considers this increase would have acceptable amenity impacts on surrounding residents, would have acceptable traffic impacts and includes appropriate public benefits.
Traffic and car	• Section 6.7 considers traffic impacts, car parking and access arrangements.
parking	• The Department considers the provision of a maximum of 150 on-site car parking space is acceptable and would not result in a significant increase traffic generation or adversely impact on the operation of the local road network. In addition, the rate of 150 car parking spaces is less than the maximum parking controls of the SLEP 2012.
	• The design of the deck and structural components will be undertaken in consultation with RMS and TfNSW to ensure the development does not have an adverse impact on the Western Distributor.
	• The realignment and part closure of Wheat Road is acceptable and would not have an adverse impact on the performance of nearby intersections or compromise the access arrangements to the IMAX redevelopment. The detailed access arrangements would be considered as part of DA(s).
Wind impacts	• Section 6.4.4 considers wind impacts and concludes the proposal is likely to have acceptable wind impacts for pedestrian within and around the development.
	 The Department recommends the development be designed to include mitigation measures to ensure the spaces within and around the site are suitable for their intended purpose.
Open space	Section 6.5 considers open space provision and site connectivity.
provision	• The Department supports the provision of a minimum of 5,500 m ² publicly accessible open space located north of the tower. The Department also recommends a minimum of 1,000 m ² be provided south of the tower.
	• The overall provision of publicly accessible open space is considered to be a significant public benefit that will make a valuable contribution to the area through the provision of active and passive open space, landscaping and the enhancement of the Darling Harbour foreshore.

	• The Department supports the decking over of the Western Distributor and the significant improvement of the site permeability and the east-west pedestrian connectivity between Darling Harbour and the CBD.
Public benefits	 As discussed at Section 6.8, the proposal includes the following significant public benefits: creation of significant new publicly accessible open space and decking over and screening the Western Distributor new and upgraded pedestrian linkages through the site significantly improving east-west connectivity between Darling Harbour and the CBD public art and heritage interpretation creation of an estimated 2,320 construction jobs and 10,000 operational jobs. The Department considers the public benefits are acceptable and proportionate to the scale of the development and the proposed development yield.
Boardwalk extension	 As discussed at Section 6.5.3, the extension of the existing Darling Harbour boardwalk is not considered necessary to address pedestrian capacity requirements. The Department recommends the boardwalk extension be deleted from the proposal as insufficient justification has been provided about visual and physical impacts on Darling Harbour.

Appendix G – Recommended Conditions of Consent

The recommended conditions of consent (SSD 7684) can be found on the Department's website at:

http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=7684