Attachment A

Building Envelope Modification Design Report

Introduction

Henning Larsen Architects have prepared a detailed building design for the Cockle Bay Park development as part of the application.

This document identifies the areas in which the current design refines the Stage 1 SSD DA approved envelope, explains the reasoning for doing so and identifies the envelope modifications accordingly. The modifications are a result of detailed design development and refinement of some of the scheme's fundemental elements, as a natural progression of the design excellence competition that followed approval of the

This document includes a set of plan and section drawings which revise the Envelope concept drawings from Stage 1 SSD DA. Clarifications of envelope compliances are identified and described.

AMPCAPITAL Henning Larsen architectus & MCGREGOR COXALL Norman Disney& ARUP Smith Gung Geoffreything.studio









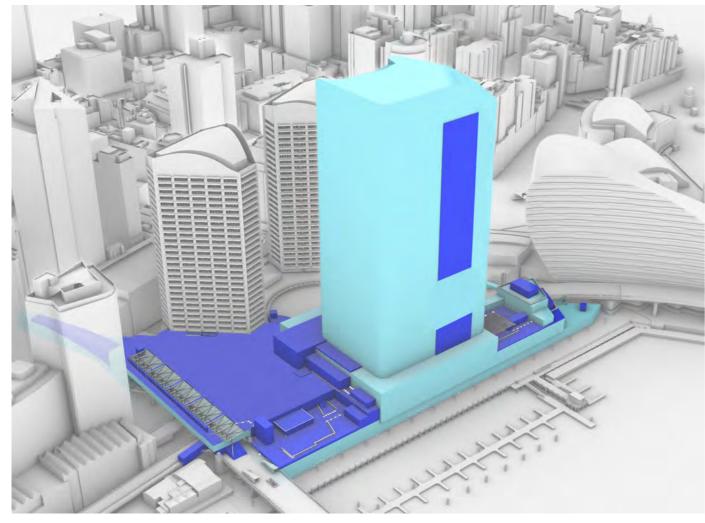


Overview

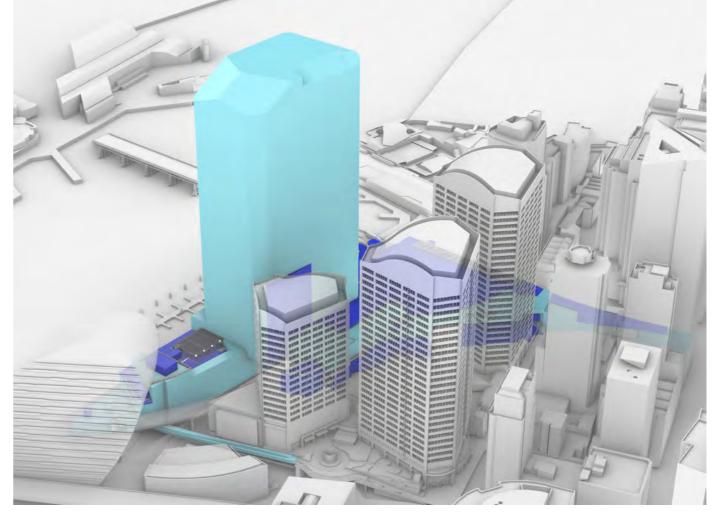
The current scheme has minor extends beyond the Stage 1 SSD DA approved envelope in the following key areas:

- Podium (North and South)
- Northern Park Landscape
- Landbridge Connections (Pyrmont Bridge, Market St Bridge and Sussex Plaza)
- Crescent Garden
- Tower facades (East and West)
- Retail pergolas at the Tower base (reducing wind turbulence)
- Darling Park (Alterations to existing building fabric)

These refinements of the design have lead to modifications to the main envelope volumes - *Podium, Landbridge Deck,* Tower Base, Tower. Connections to the Landbridge Deck at Pyrmont Bridge, Sussex Plaza and Market Street Bridge are also represented in more detail in the modifications proposal. This can be seen in the drawings in chapter 3.



View from North-West







Proposed Envelope modifications















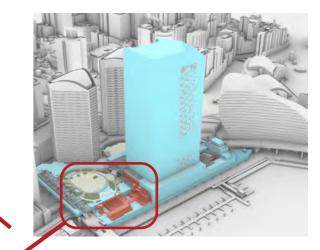
Podium North

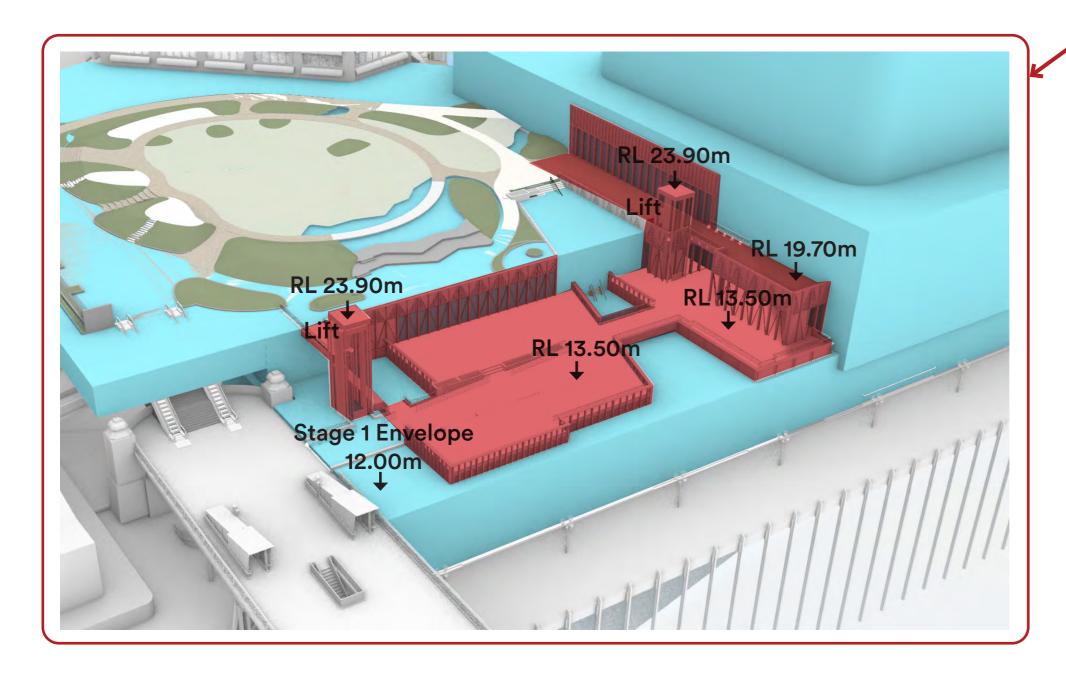
The updated scheme has pulled the built forms away from the Pyrmont Bridge heritage item as an improvement to the approved Concept Proposal and the competition scheme that had more built volume encroaching on this space.

This separation results in a more compact group of pavilions within the village forms of the podium, a new DDA compliant lift next to the Bridge and the northern circulation zone, and a generous ramp that connects Pyrmont bridge with Northern portion of the podium.

The proposed built form has been pulled back from the envelope in many areas, however the height of the building in this area has been adjusted to provide better amenity through functional floor to floor heights and enable greater flexibility in building usage in the future.

These changes would be a positive impact on the overall precinct and would not impact views, sightlines or other public amenity.













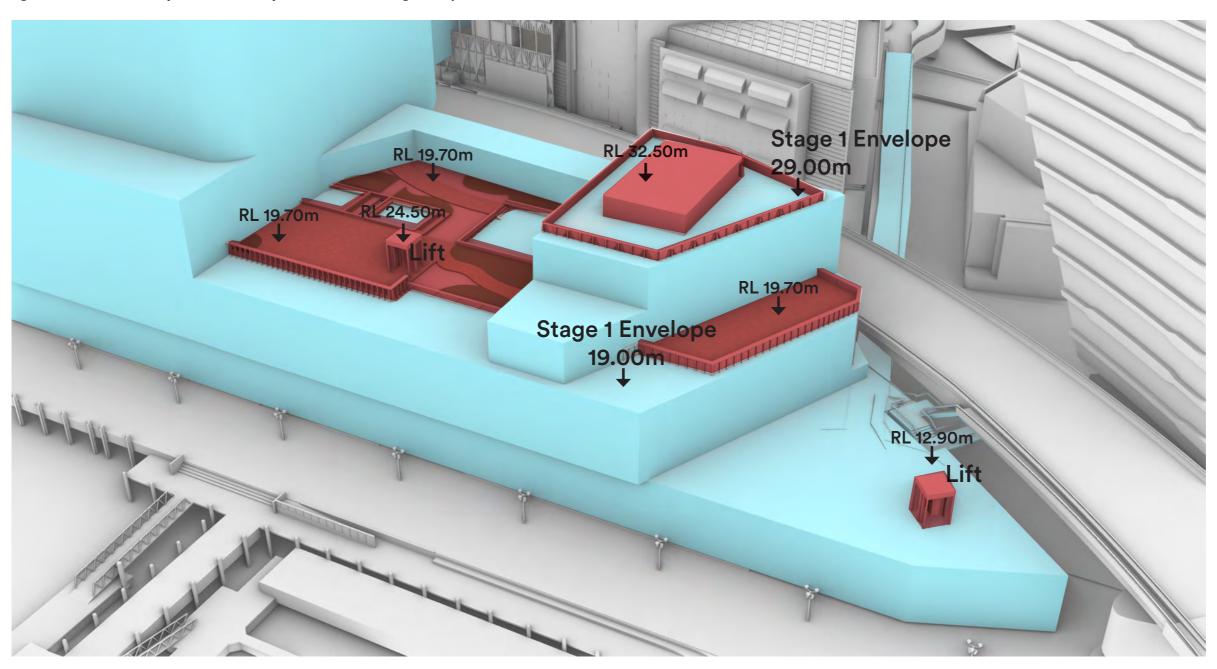


Podium South

In order to facilitate equitable access to all public open spaces and retail tenancies, a number of lifts have been designed to support the circulation requirements of the Southern end of the podium. These elements will enhance the activation of the Southern park, improve the pedestrian movement along the Level 1 street and enable access to a special destination space above the park in the southern anchor tenancy.

The scheme now also includes the provision of stair access and kitchen exhaust plant spaces on the rooftop of the Southern podium volume. Stair access will allow the rooftop photovoltaic panels to be maintained. The height of these volumes has been minimised and are not deemed to adversely affect sightlines across the development or cause impact on the surrounding amenity.

None of these volumes will adversely affect sightlines across the development or cause impact on the surrounding amenity.













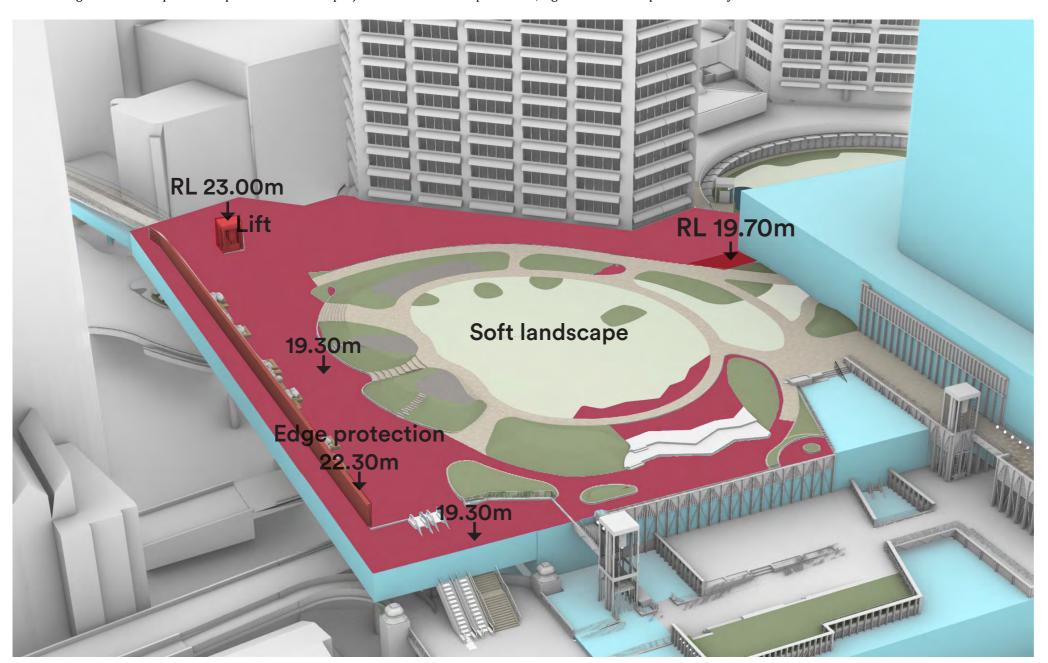
Northern Park

Refinement of the landbridge structure over the Western Distributor at the Southern end of the site has resulted in the finished floor levels of the Tower Lobby and surrounding external spaces being at a higher RL than originally envisaged. The landbridge, rises to 19.3m to allow clearance to Western Distributor roadway below.

Further, in order to provide sufficient soil depth for the desired planting, the landbridge deck's park landscape is increased at various amounts., This is detailed further in the clarifications section of this report.

A wall has been erected on the Northern edge of the park to provide protection to the Western Distributor below and is a requirement resulting from consultation with Transport for NSW (RMS) during the preparation of the Stage 2 SSD DA.

These changes would be a positive impact on the overall project and would not impact views, sightlines or other public amenity.









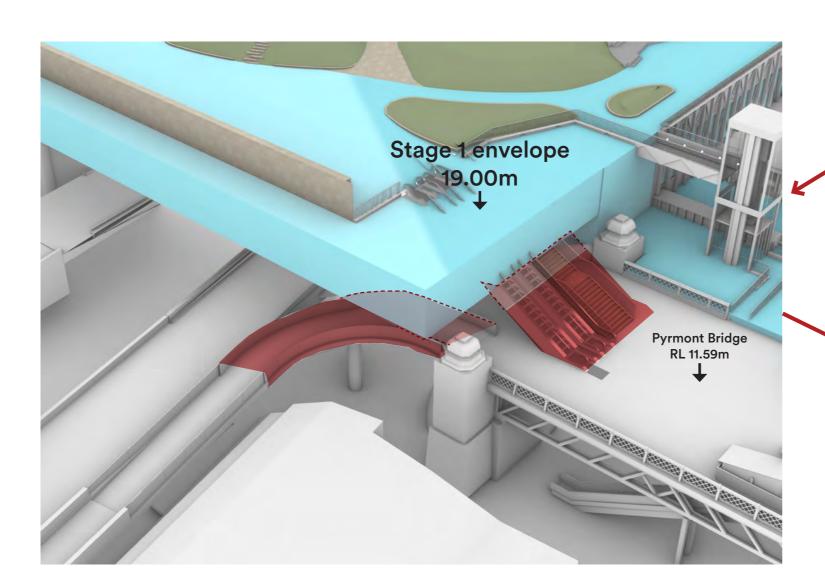


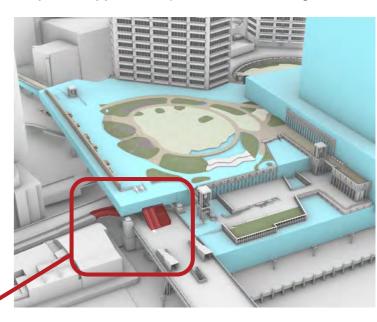


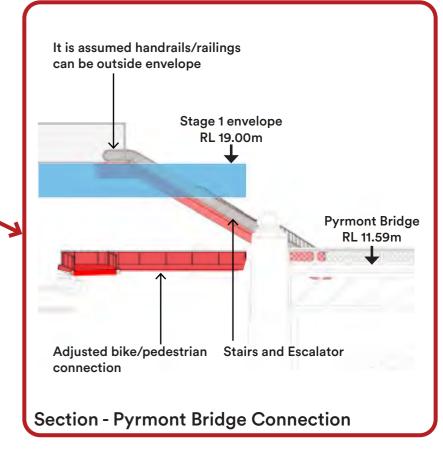
Pyrmont Bridge connection

The Stage 1 DA approved envelope did not accommodate the pedestrian connection from the landbridge onto Pyrmont Bridge. Here, the addition of stairs and escalators, plus a realignment of the Harbour Street bicycle ramp connection, improves accessiblility for pedestrians and cyclists in this area. These changes would be a positive impact on the overall project by enabling seamless pedestrian and cycle movements between Darling Harbour and the CBD through the site, connecting prominent, existing links to the new landbridge.

The proposed amendments are also designed to be are sensitive to the Pyrmont Bridge heritage item (as confirmed separately through the Heritage Impact Statement that accompanies the Stage 2 SSD DA) and would not impact views, sightlines or other public amenity.











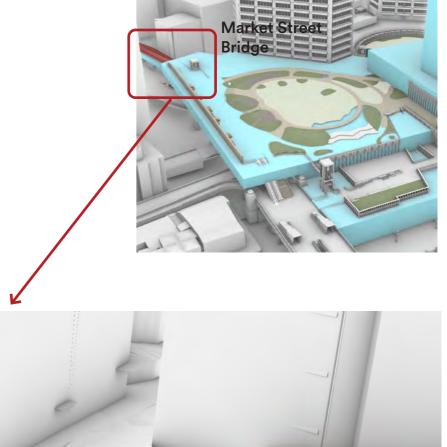


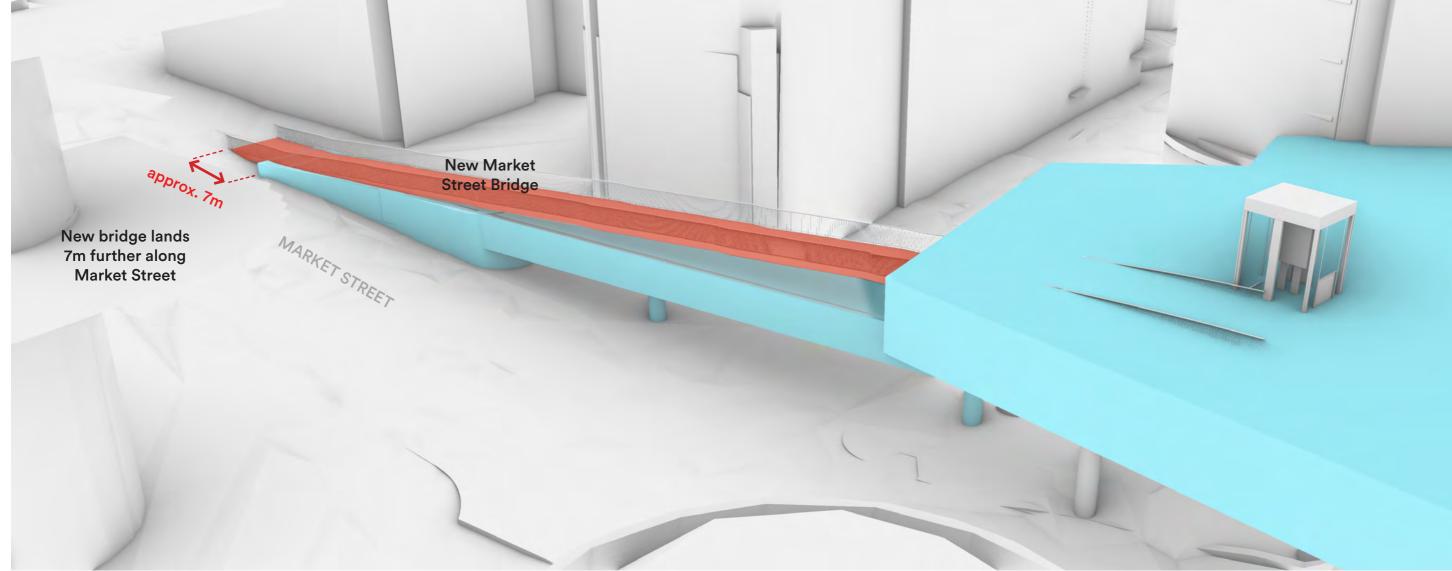




Market Street Bridge connection

In order to provide equitable access from Market Street to landbridge level and ensure clearance requirement above the Western distributor, the design of Market Street Bridge has been refined and updated. The bridge extends further along Market Street and slopes up to a higher level to connect to the landbridge and allow passage for vehicules below. The new bridge will be DDA compliant.













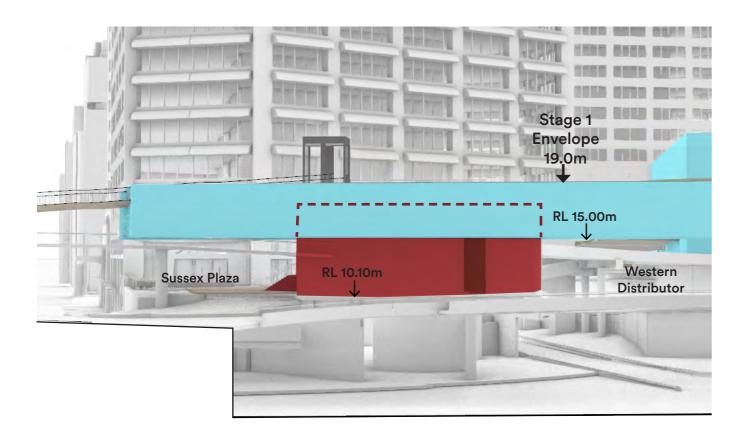




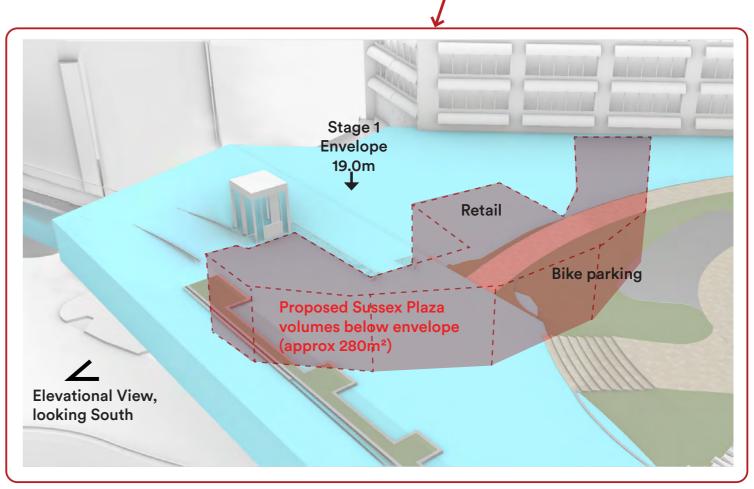


Sussex Plaza connection

The updated scheme is proposed to include the existing retail asset within the plaza at the corner of Market Street and Sussex Street, which forms part of the site but was not previously included within the proposed development. Volumes extend below the landbridge of the Stage 1 envelope, connecting to Sussex Plaza below. Stairs, escalators and a lift provide equitable access to the landbridge from Sussex Plaza. The proposal seeks to utilise and refine an existing retail space to continue to activate the Sussex Street frontage of the site, as a gateway to the precinct.



Elevational View, looking South









Crescent Garden

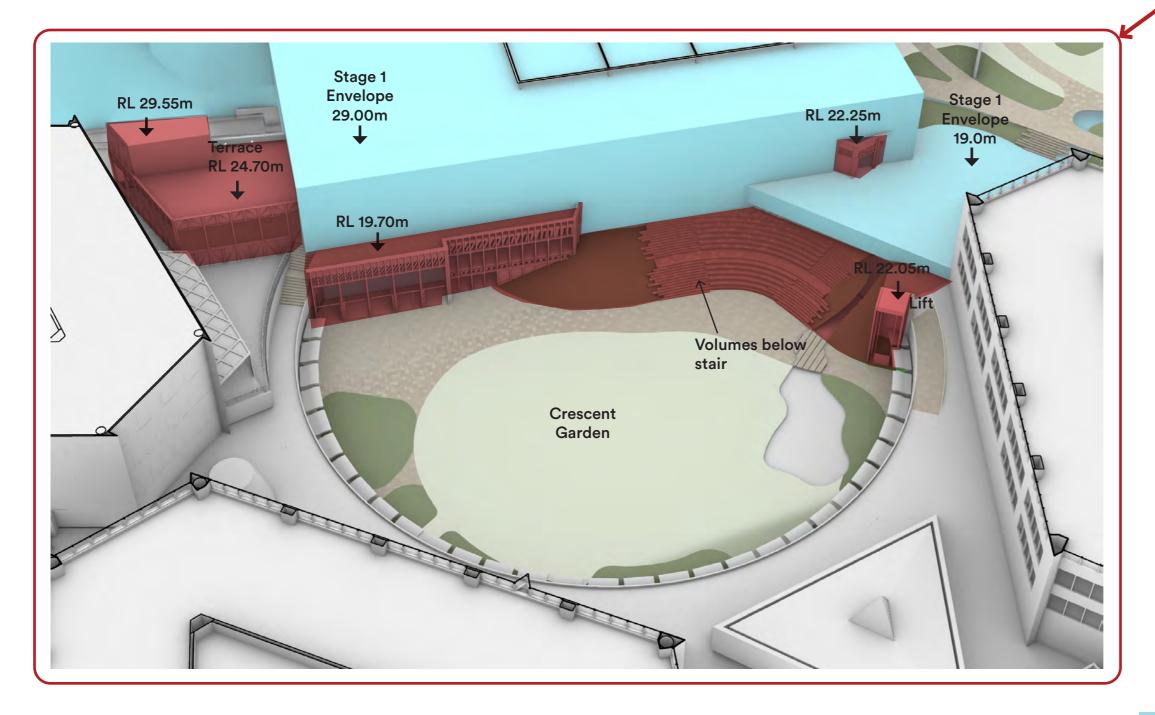
The updated scheme is proposed to include connections from the new Tower to the Crescent Garden open space and the Darling Park precinct.

The configuration of these volumes enables seamless integration with the existing Darling Park built form and brings a village typology of volumes to cresent garden.

The setting out arrangement and extents of the volumes has been guided by the structural grid of the existing building below. It will alos achieve the natural

amphitheater envisaged for this space in the adopted Design Guidelines.

These changes would be a positive impact on the overall precinct and would not impact views, sightlines or other public amenity.















Garden

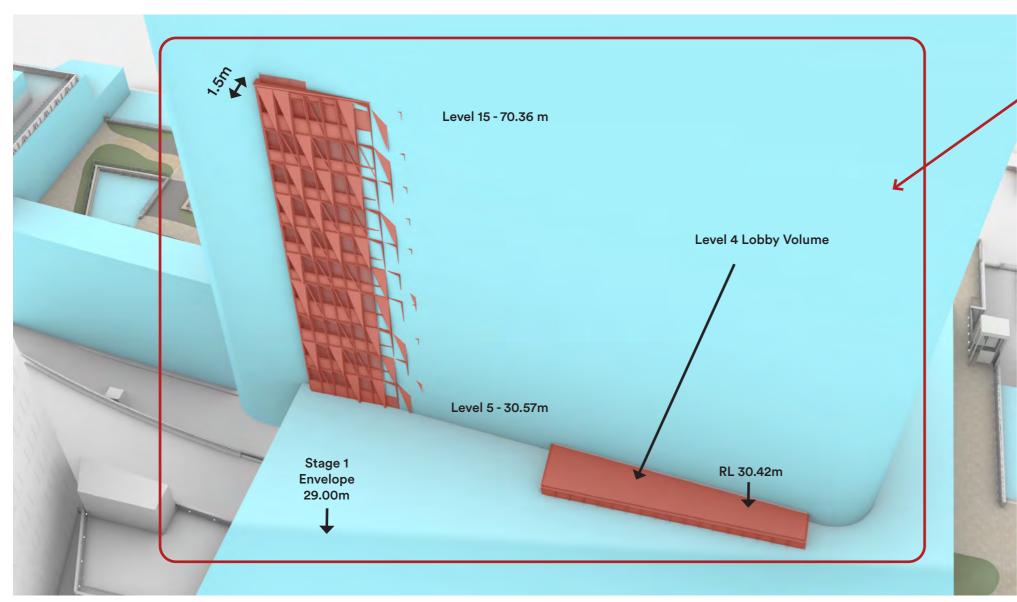
Harbour

Tower (East)

While the concurrent Stage 2 SSD DA built form has pulled back from the envelope in many areas. The building envelope is required to be modified on the low-rise eastern facade to account for an adjusted footprint of the building to provide better tower articulation, and to optimise modulation of the facade elements.

A portion of the Tower on Level 4 breaches the envelope to the North-east - a result of the raised level of the Tower Lobby on Level 3 below. This envelope breach is deemed to be minor and appropriate.

These changes would be a positive impact on the overall architecture and built form, and would not impact views, sightlines or other public amenity.



Outside the envelope:

1m - measured to the facade's glass line 1.375mm - including facade's shading elements









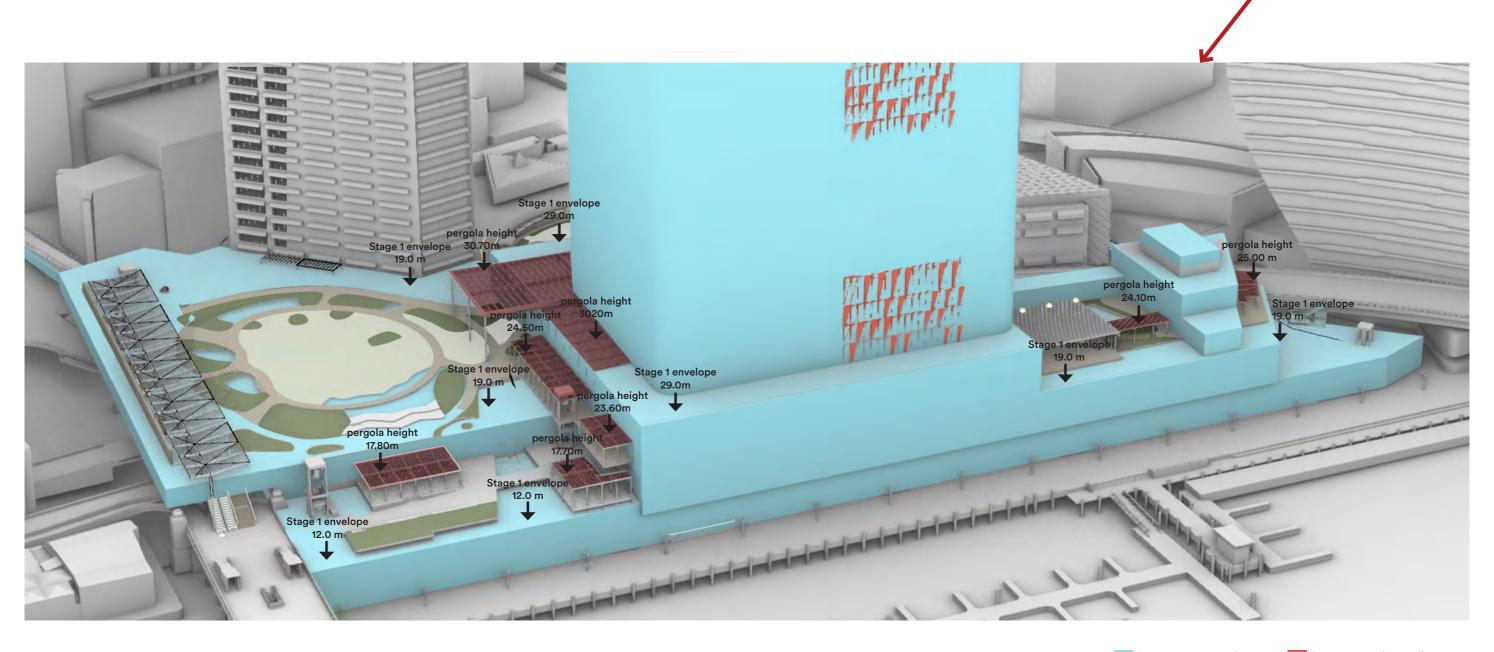




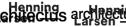
Tower - Retail Pergolas

The Concept (Stage 1) DA permits garden pavilions and kiosks beyond the building envelope where these components are within, and relate specifically to, the publicly accessible open space or the public domain. The proposed pergolas are associated with the northern and southern park spaces and, therefore, are aligned with publicly accessible open space and public domain areas. In the case of the pergolas within the public domain, these refinements, therefore, would fall within the permitted exemptions and are appropriate and supportable.

Other pergolas around the base of the Tower provide much needed solar shading and climate comfort to external areas. They also shelter vertical transport elements, such as escalators, from the rain. The pergolas close to the Tower help to reduce down draught from winds around the Tower.













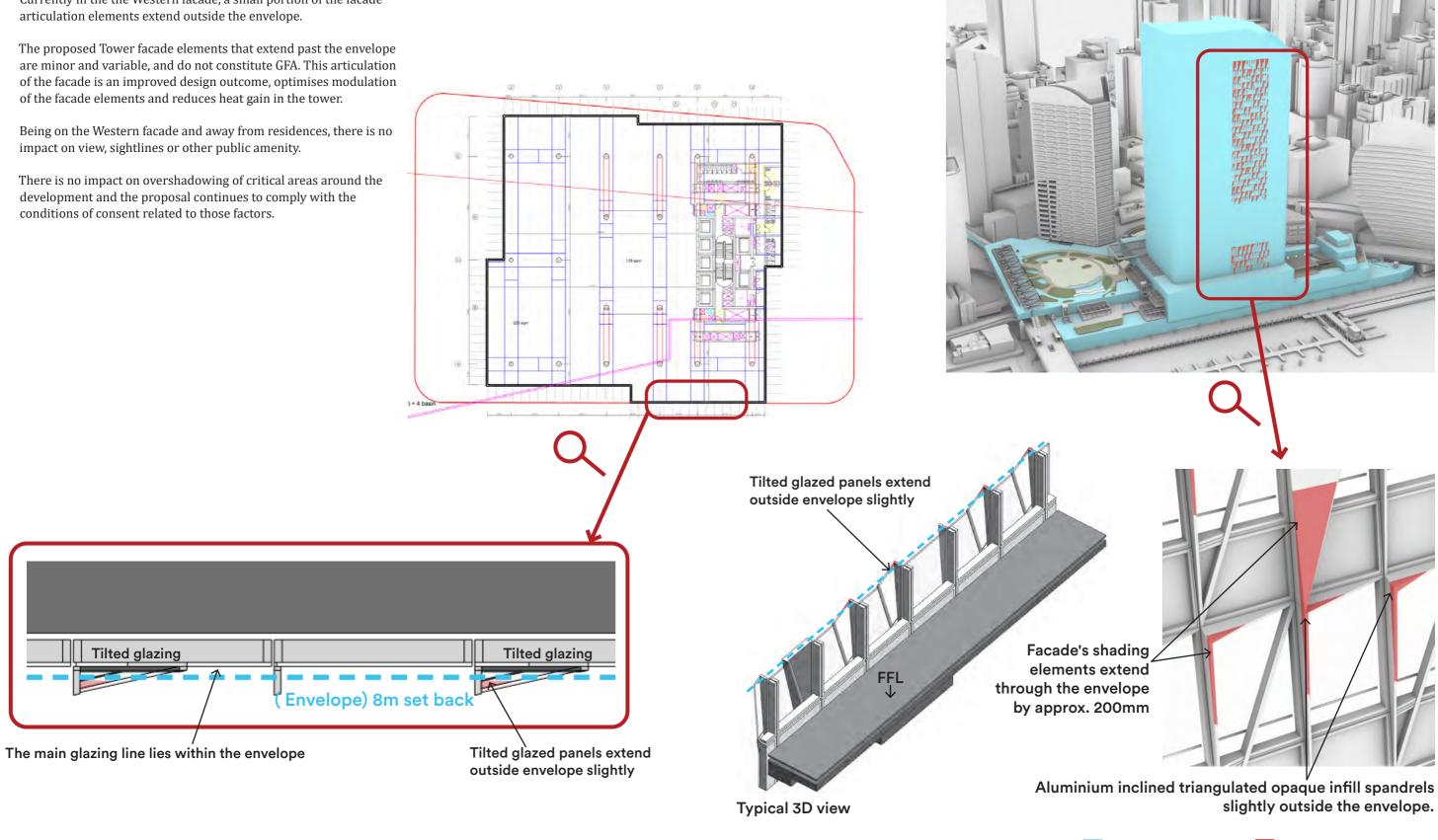
Compliance Clarification: Tower (West)

Currently in the the Western facade, a small portion of the facade articulation elements extend outside the envelope.

are minor and variable, and do not constitute GFA. This articulation of the facade is an improved design outcome, optimises modulation of the facade elements and reduces heat gain in the tower.

impact on view, sightlines or other public amenity.

development and the proposal continues to comply with the









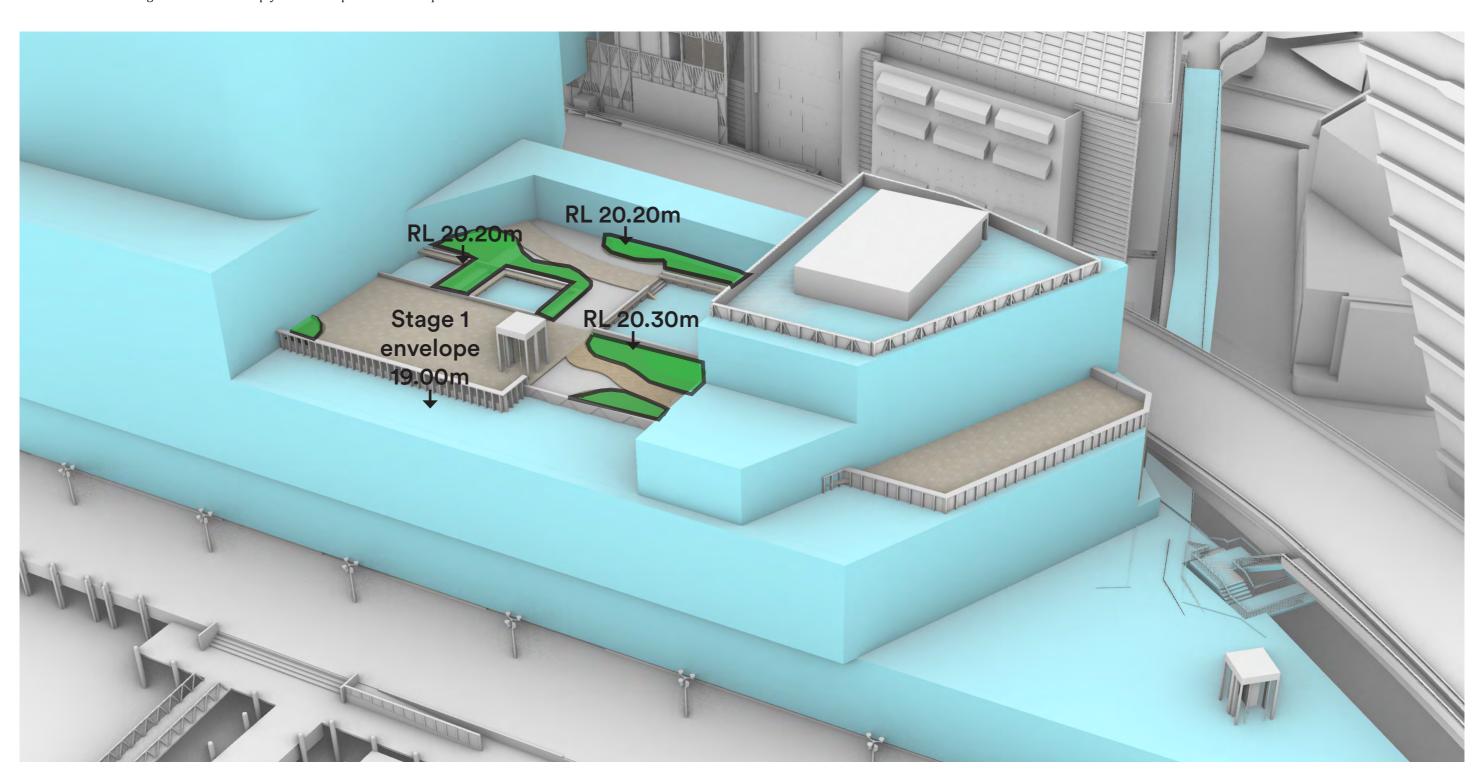






Compliance Clarification: South Landscaping

The Concept (Stage 1) DA permits balustrades(parapets) and vegetation to extend beyond the building envelope where these components are within, and relate specifically to, the publicly accessible open space or the public domain. Those components of the level change that solely relate to the build-up of soft materials for vegetation would comply within the permitted exemptions.









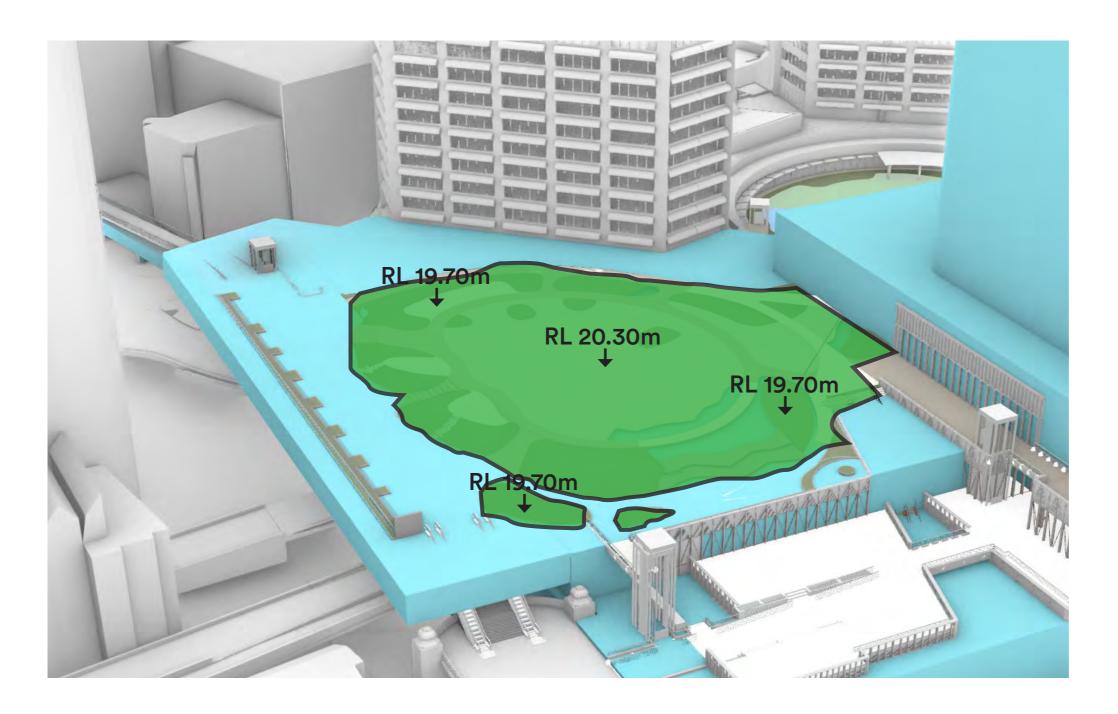






Compliance Clarification: North Landscaping

The Concept (Stage 1) DA permits balustrades(parapets) and vegetation to extend beyond the building envelope where these components are within, and relate specifically to, the publicly accessible open space or the public domain. Those components of the level change that solely relate to the build-up of soft materials for vegetation would comply within the permitted exemptions.











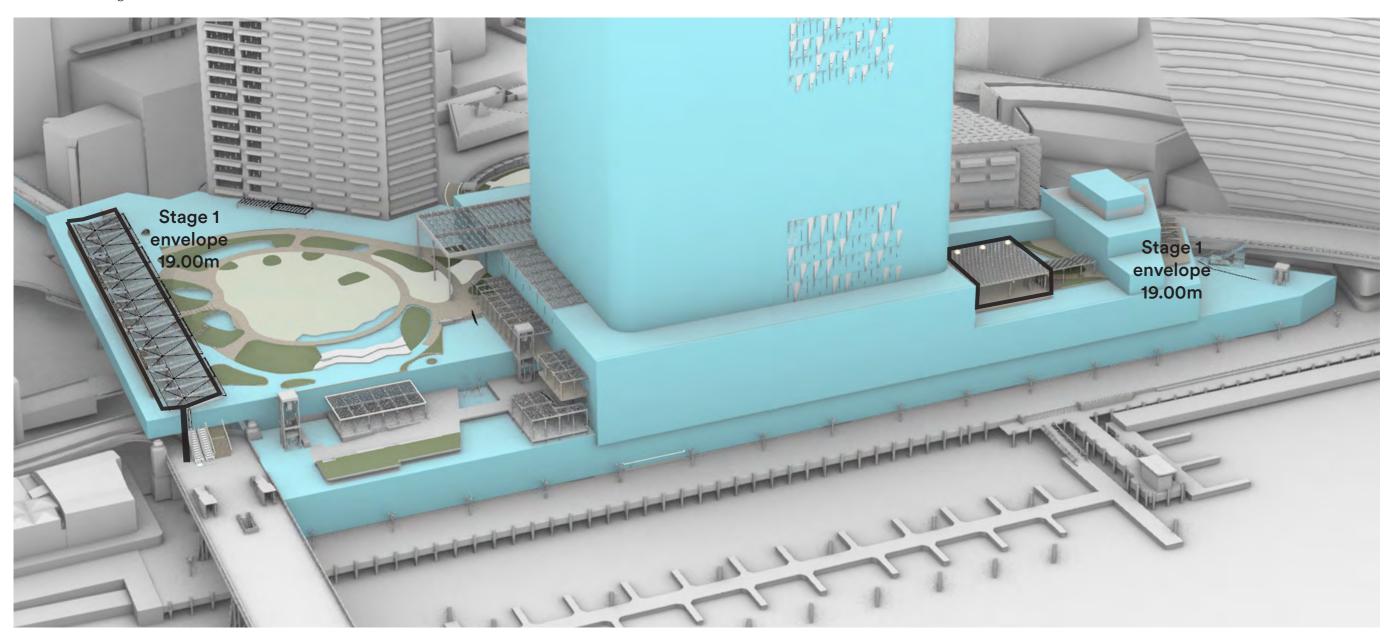




Compliance Clarification: Public Pergolas/Shading

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Others pergolas around the base of the Tower provide much needed solar shading and climate comfort to external areas. They also shelter vertical transport elements, such as escalators, from the rain. The pergolas close to the Tower help to reduce down draught from winds around the Tower.















Built form articulation

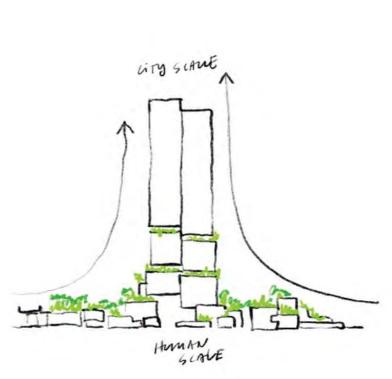
A key design objective for the project has been to create a strong sense of invitation through a human centric design approach as well as adapting the tower to its surroundings. What we have done to achieve this are the following

- The podium is broken down to a village like typology that fosters interaction between people and creates seamless vertical connections between the city, the public park and water. The Podium, or Village, does not exceed 3 levels continuously and steps back from the waterfront at certain locations to strengthen the sense of human scale and invitation.
- The stepping back of volumes continues up the tower and emphasies the human scale approach of the lower part of tower as it relates and connects with both the public park and the Village-like podium with green terraces. The lower tower volumes step away from the public domain to to meet the upper part of the tower in a seamless transition.

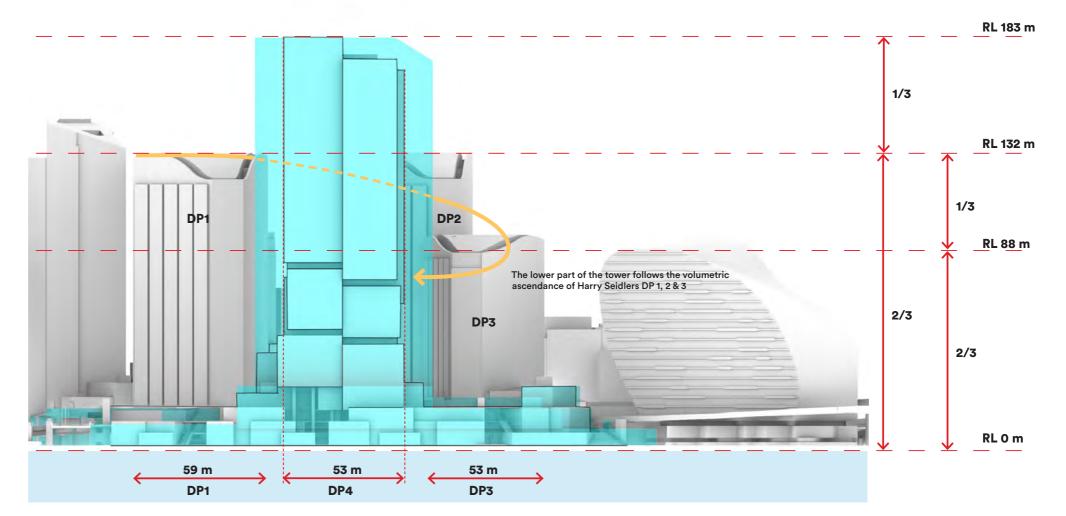
- The lower part of the tower ends at the height of Harry Seidlers Darling Park Tower 3. The transition between the lower and higher part of the tower connects to the adjacent city in proportion and articulation
- The tower is subdivided into 4 quadrants that break the bulk of the volume toto 4 slender volumes are slightly juxta-posed to break down the scale further, connects seamless with the lower part of the tower, and creates a recognizable ending to the sky, creating a clear way finding landmark for the broader city. The slenderness of the tower is amplified by the pattern of the facade that has a strong vertical movement

Our design caters for a strong connection between the human-scaled podium, the adjacent existing urban environment and the broader city skyline. The proposed gradual transition between the Village Podium and the Tower adds a considered and beautiful landmark to Sydney.

To safeguard our unique village and human scale design approach for the podium and tower, we have requested to modify how the building envelope defines the building podium, tower, and tower base.



Conceptual Diagram of overarching vision - taken from from Design Competition



Contextual Diagram of the relationship between Scale, dimension and proportions



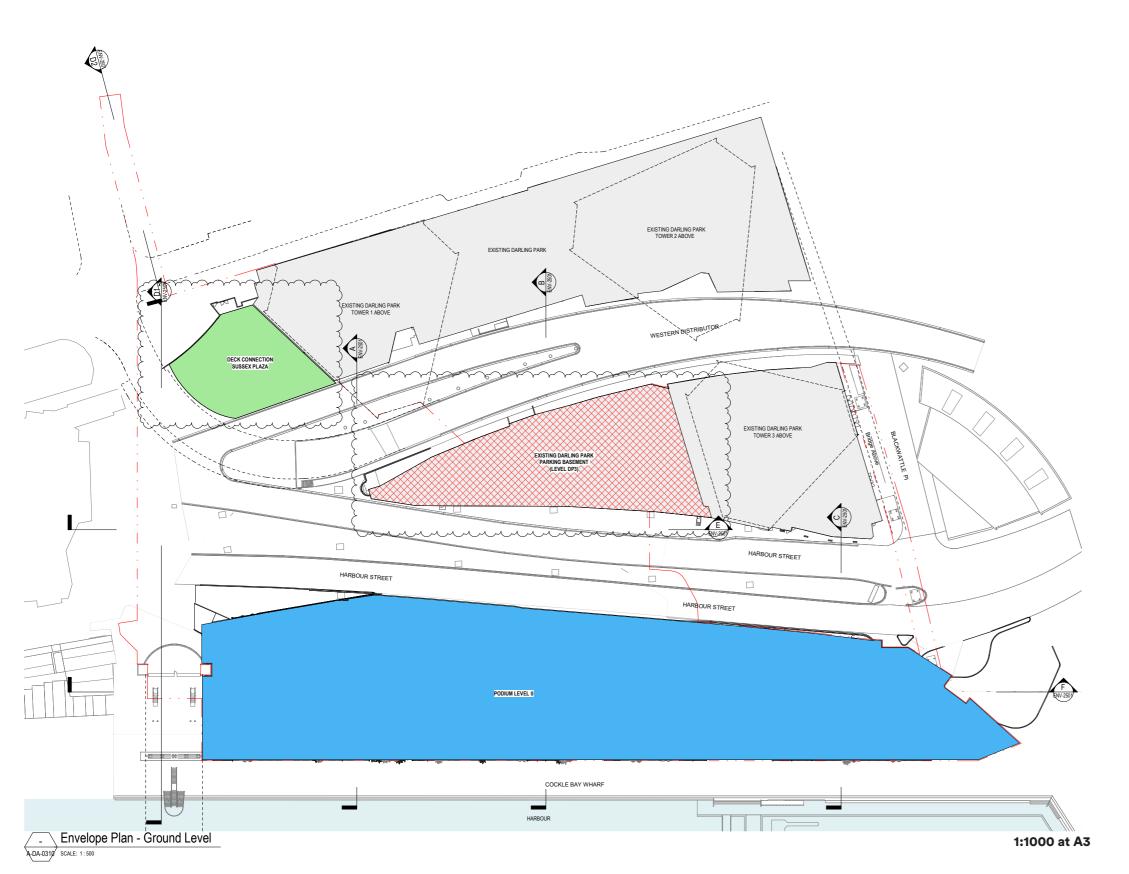








Envelope Modifications Proposal Drawings



Notes from Stage 1 SSDA Envelope Approval drawings:

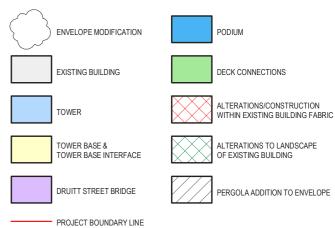
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Part B: Design Guidlines

Provide an 8m minimum /10m average tower setback from the Darling Harbour promenade to reduce visual impact of the Tower from the promenade, and reduce overshadowing to the Southern end of the promendae, whilst allowing for facade articulation

Drawings accompanied by document " SSDA Appendix A: Proposed Envelope Modifications, Stage 3B" Refer to this document for further detail.



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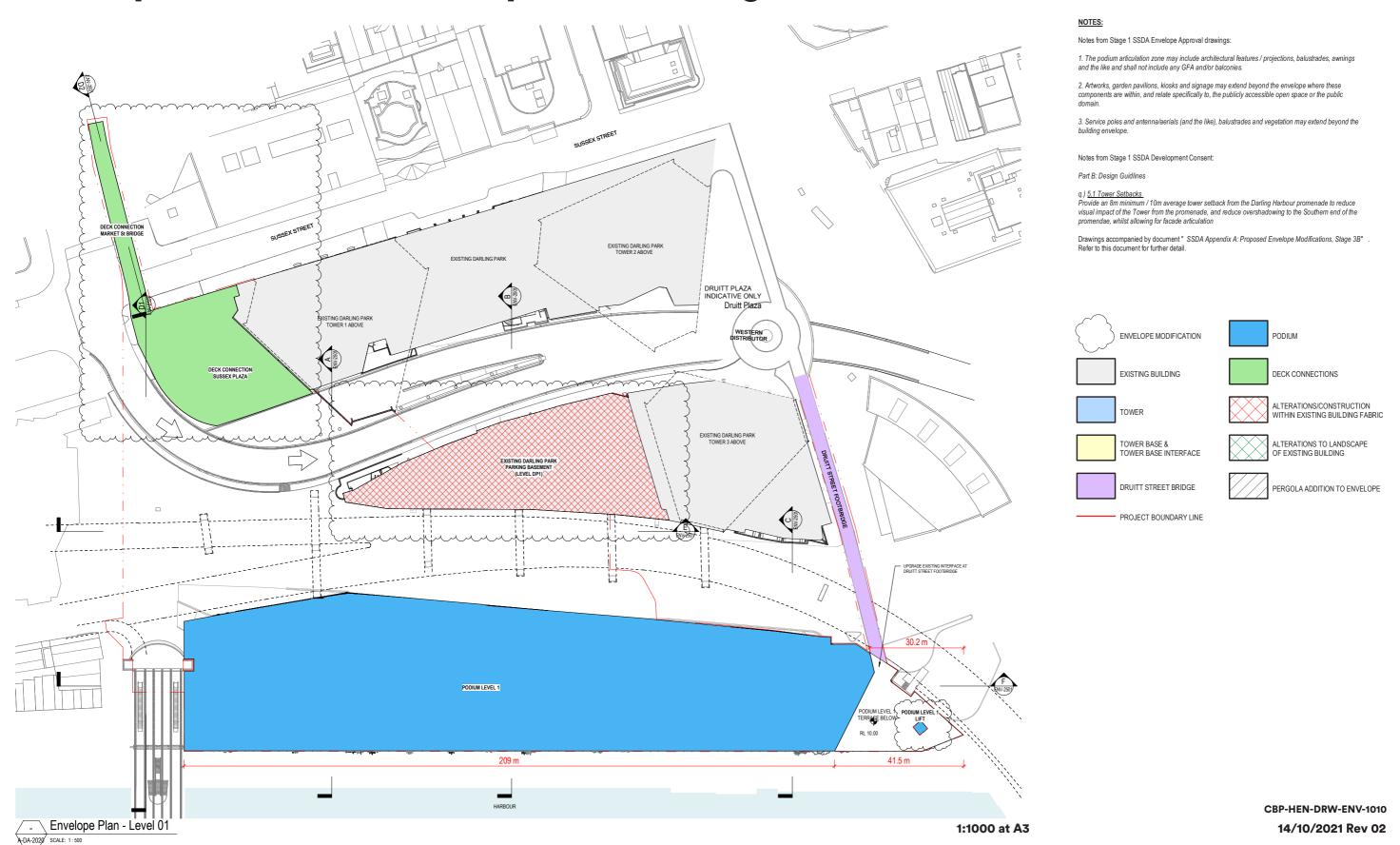








Envelope Modifications Proposal Drawings





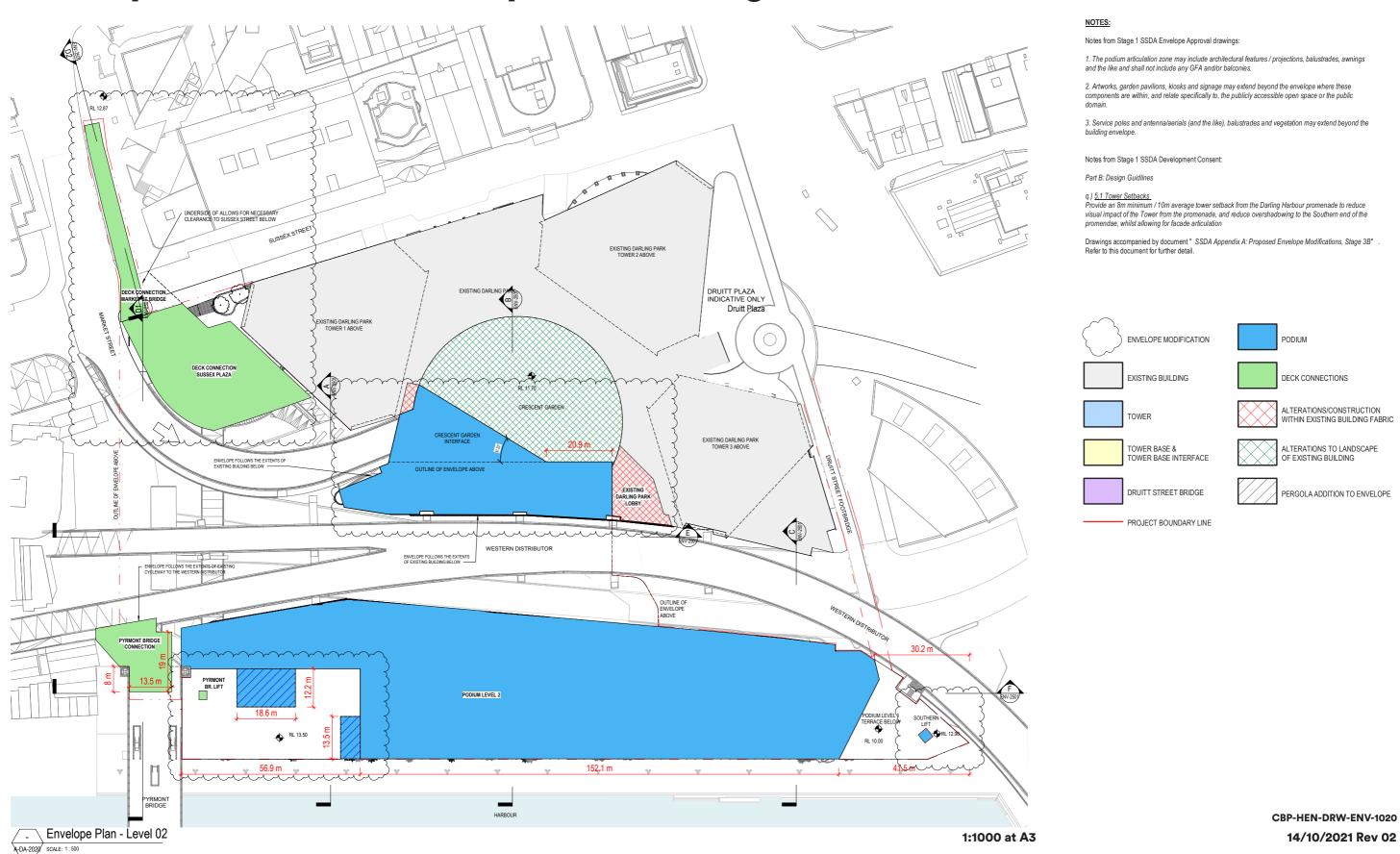








Envelope Modifications Proposal Drawings



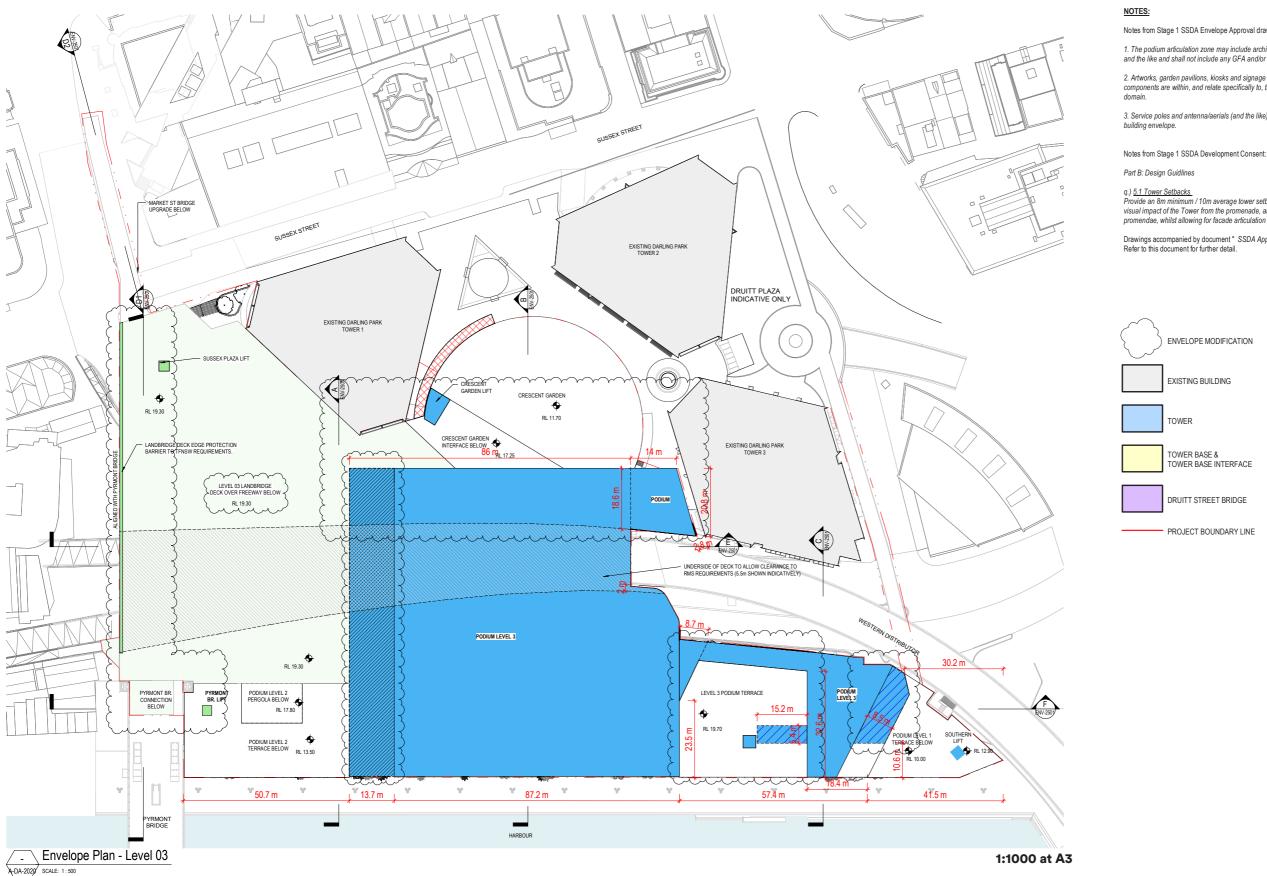








Envelope Modifications Proposal Drawings

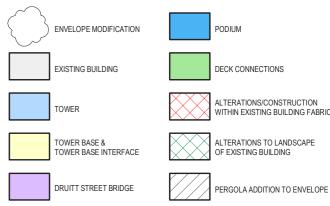


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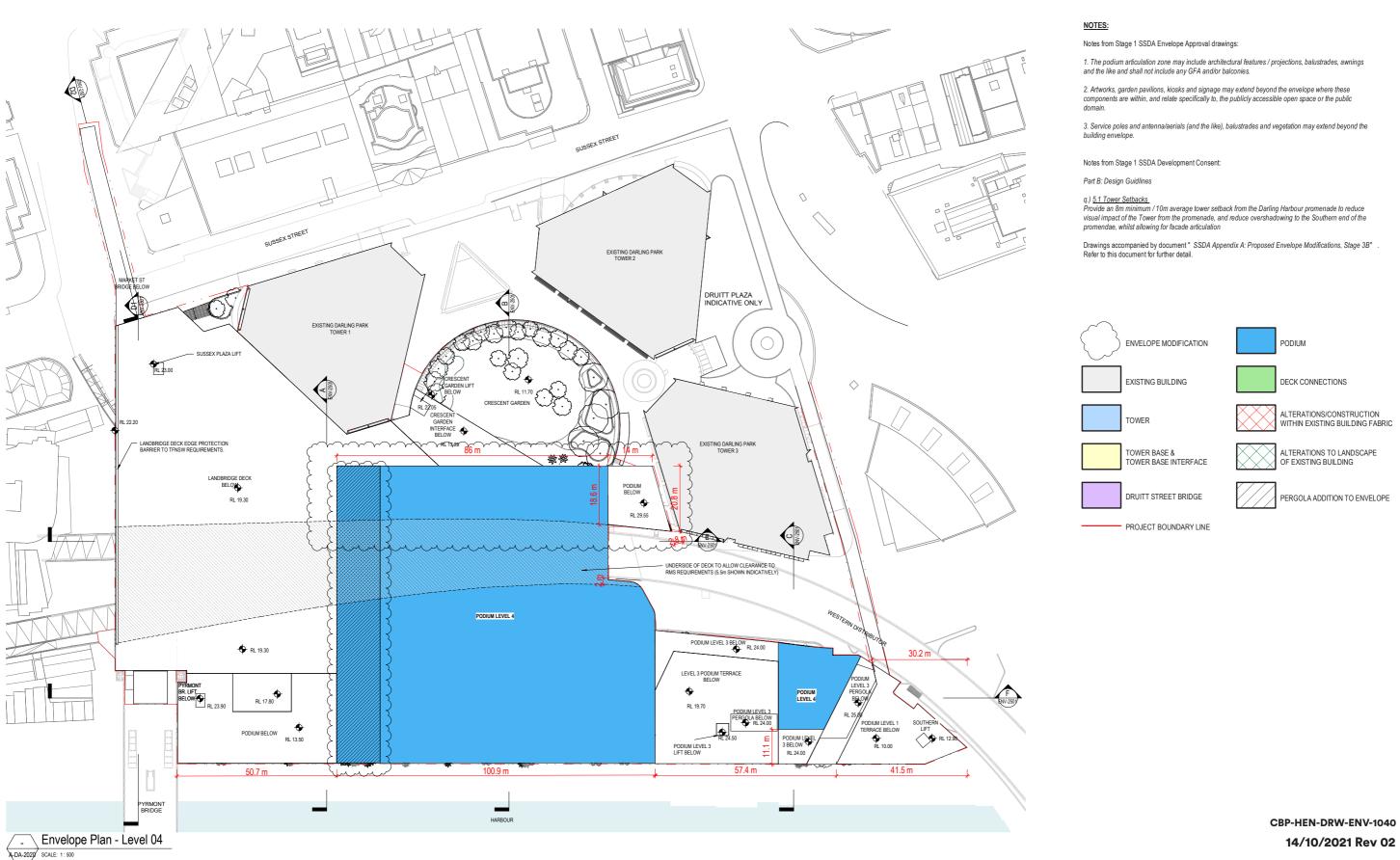
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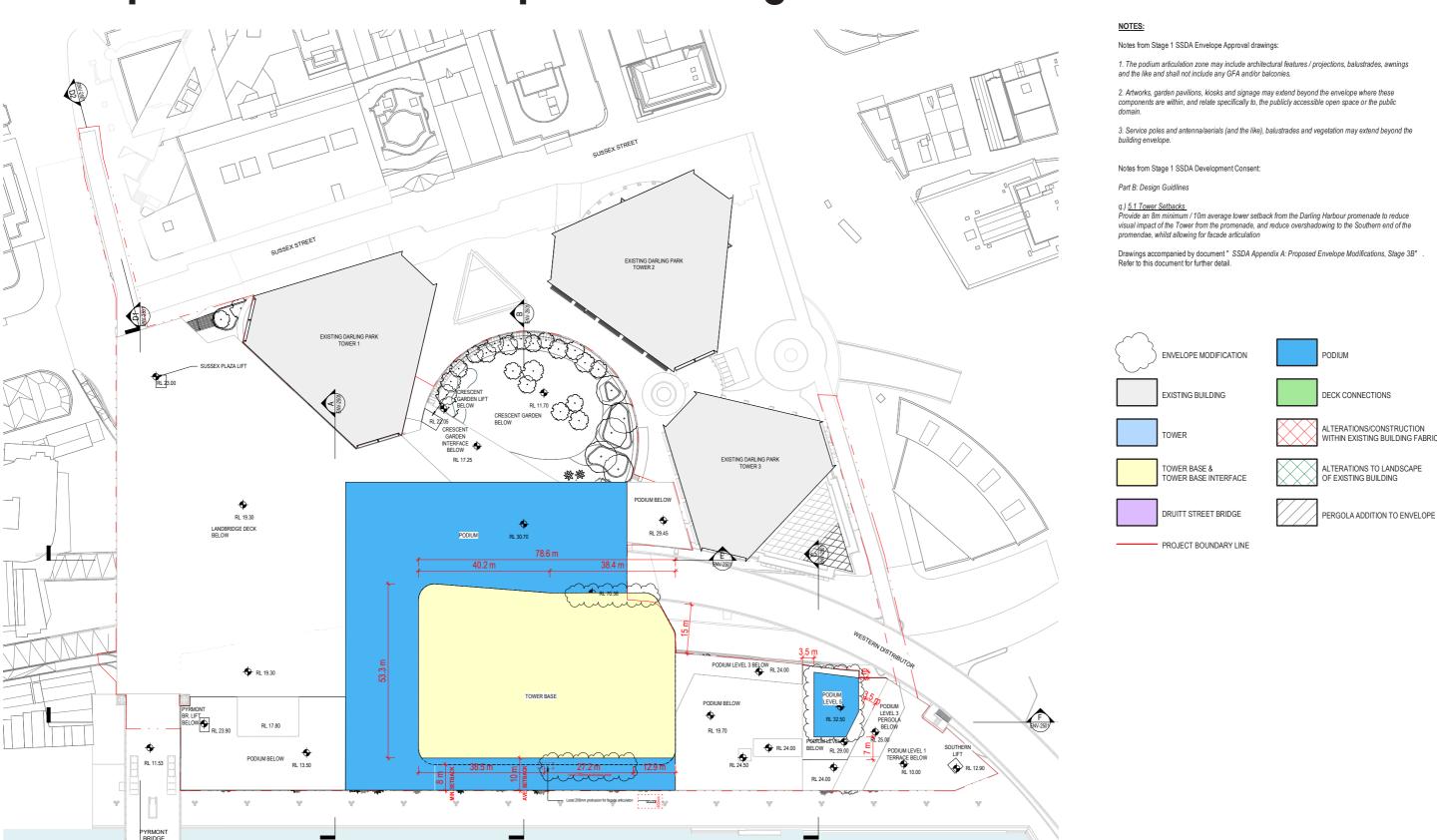




1:1000 at A3

MOD - 1 Envelope Modifications Proposal

Envelope Modifications Proposal Drawings



CBP-HEN-DRW-ENV-1050 14/10/2021 Rev 02

A-DA-2020 SCALE: 1:500

Envelope Plan - Level 05 -08





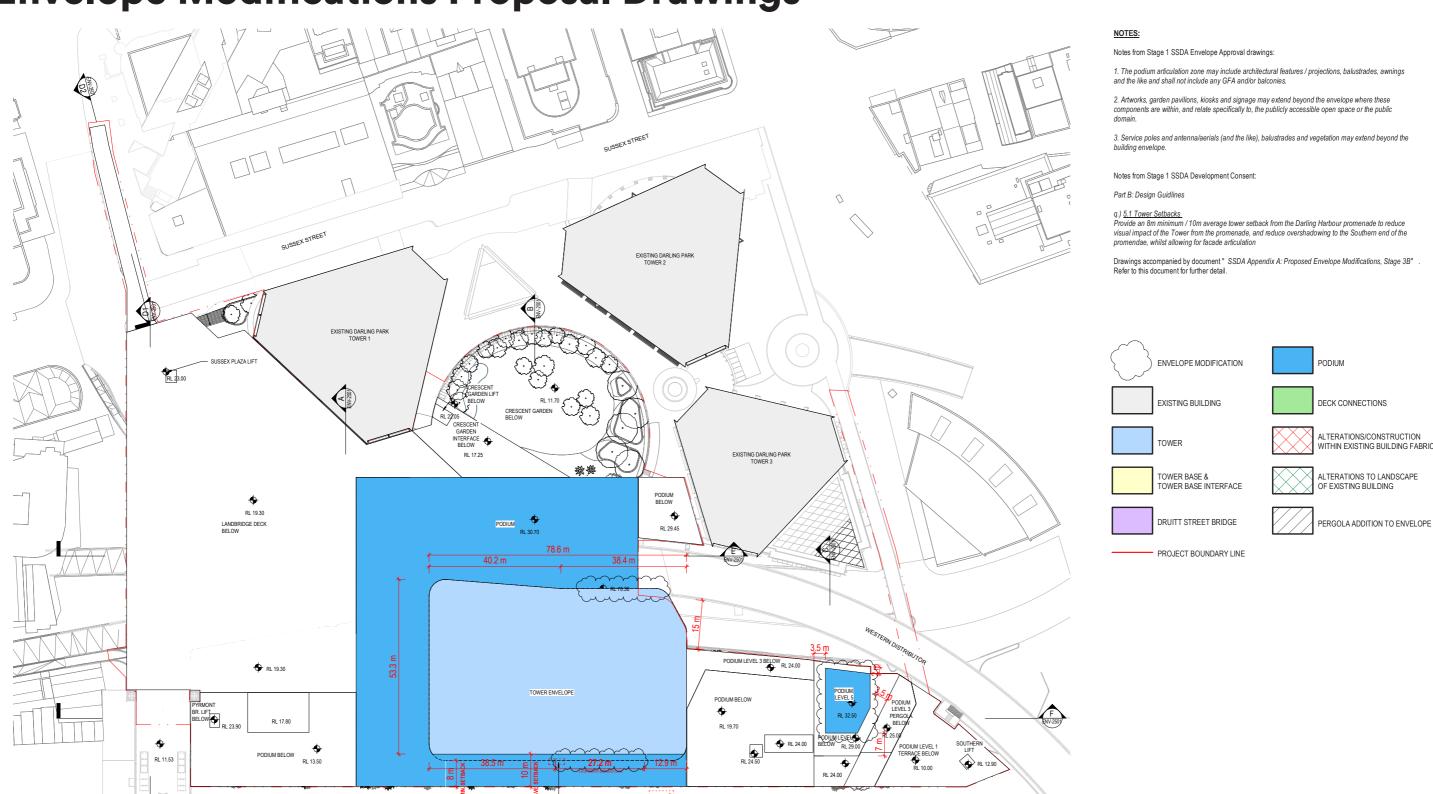




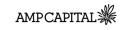
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MOD - 1 Envelope Modifications Proposal

Envelope Modifications Proposal Drawings



CBP-HEN-DRW-ENV-1060 14/10/2021 Rev 02



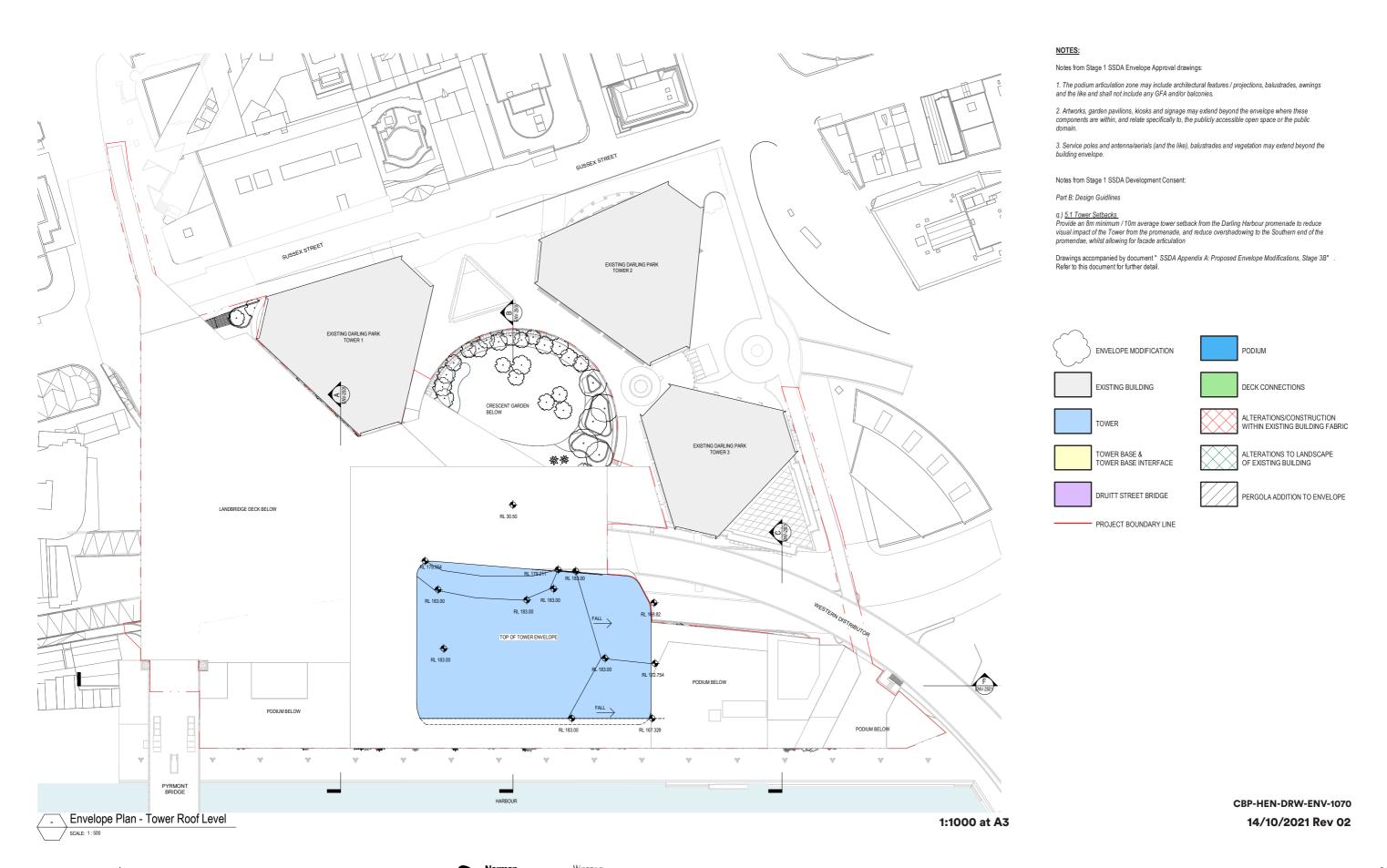


Envelope Plan - Typical Tower Level



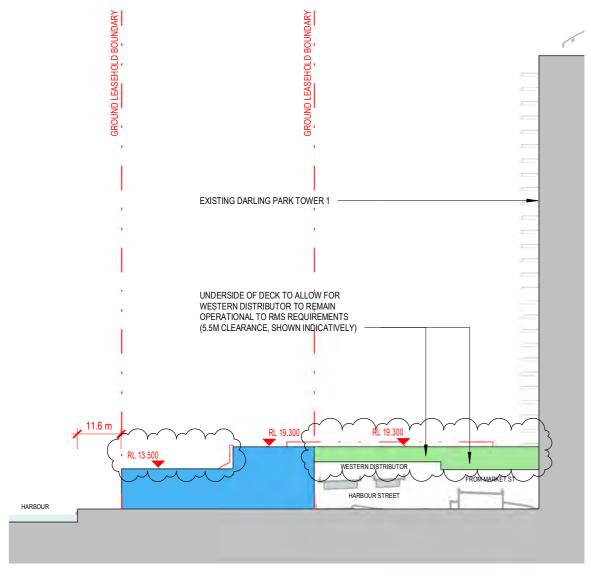








Envelope Modifications Proposal Drawings



Envelope Section AA - Through Northern Public Open Space A-DA1001 SCALE: 1:1000

Notes from Stage 1 SSDA Envelope Approval drawings:

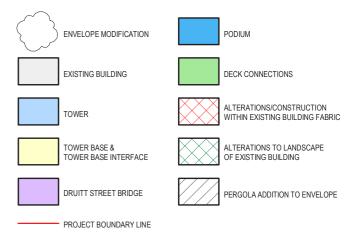
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Drawings accompanied by document " SSDA Appendix A: Proposed Envelope Modifications, Stage 3B" Refer to this document for further detail.



CBP-HEN-DRW-ENV-2501-aa 14/10/2021 Rev 02







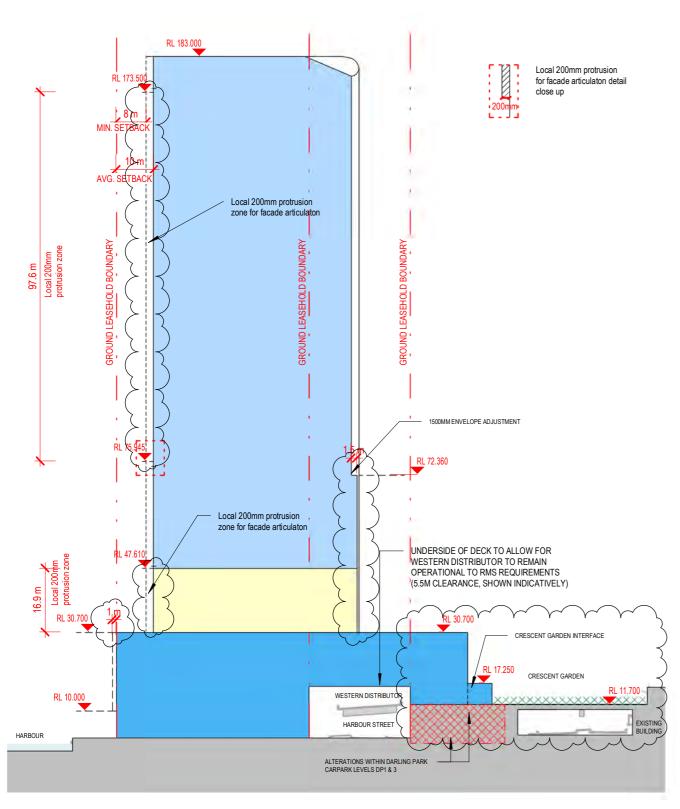








Envelope Modifications Proposal Drawings



B Envelope Section BB - Through Tower A-DA1002 SCALE: 1:1000

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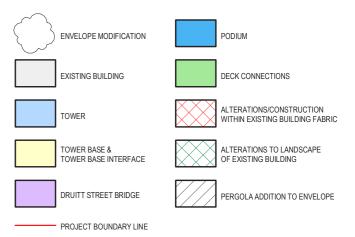
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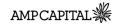
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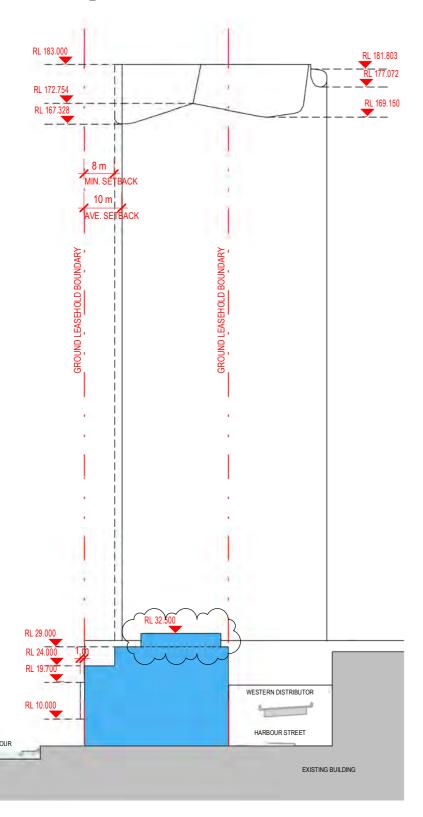








Envelope Modifications Proposal Drawings



Envelope Section CC - Through Retail Pavilion A-DA1003 SCALE: 1:1000

Notes from Stage 1 SSDA Envelope Approval drawings:

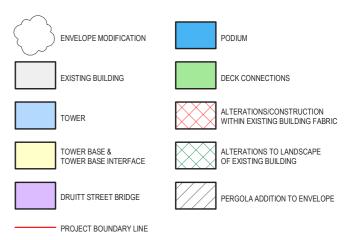
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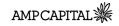
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Envelope Modifications Proposal Drawings

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NOTES:

Notes from Stage 1 SSDA Envelope Approval drawings:

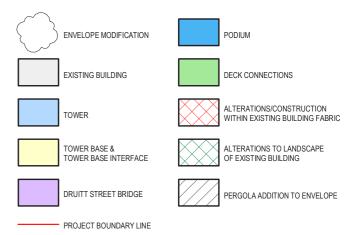
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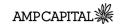
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A-DA1001 SCALE: 1:1000



Envelope Section DD - Through Landbridge

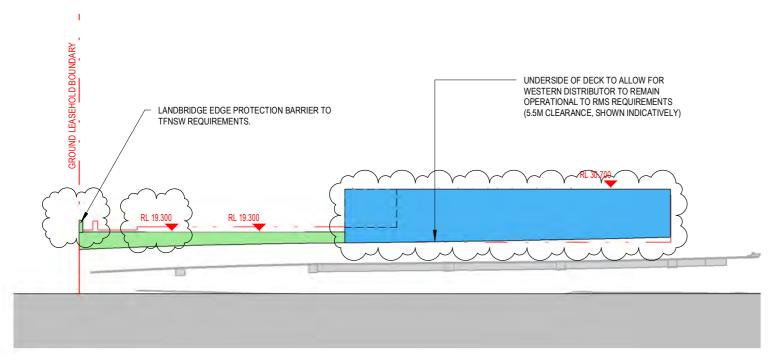








Envelope Modifications Proposal Drawings



Envelope Section EE - Across Deck A-DA1024 SCALE: 1:1000

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- 2. Artworks, garden pavilions, kiosks and signage may extend beyond the envelope where these components are within, and relate specifically to, the publicly accessible open space or the public
- 3. Service poles and antenna/aerials (and the like), balustrades and vegetation may extend beyond the

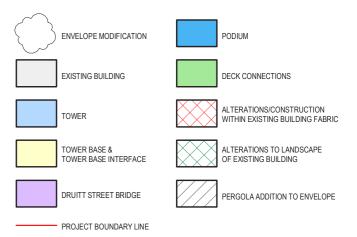
Notes from Stage 1 SSDA Development Consent:

Part B: Design Guidlines

NOTES:

Provide an 8m minimum / 10m average tower setback from the Darling Harbour promenade to reduce visual impact of the Tower from the promenade, and reduce overshadowing to the Southern end of the promendae, whilst allowing for facade articulation

Drawings accompanied by document " SSDA Appendix A: Proposed Envelope Modifications, Stage 3B" Refer to this document for further detail.



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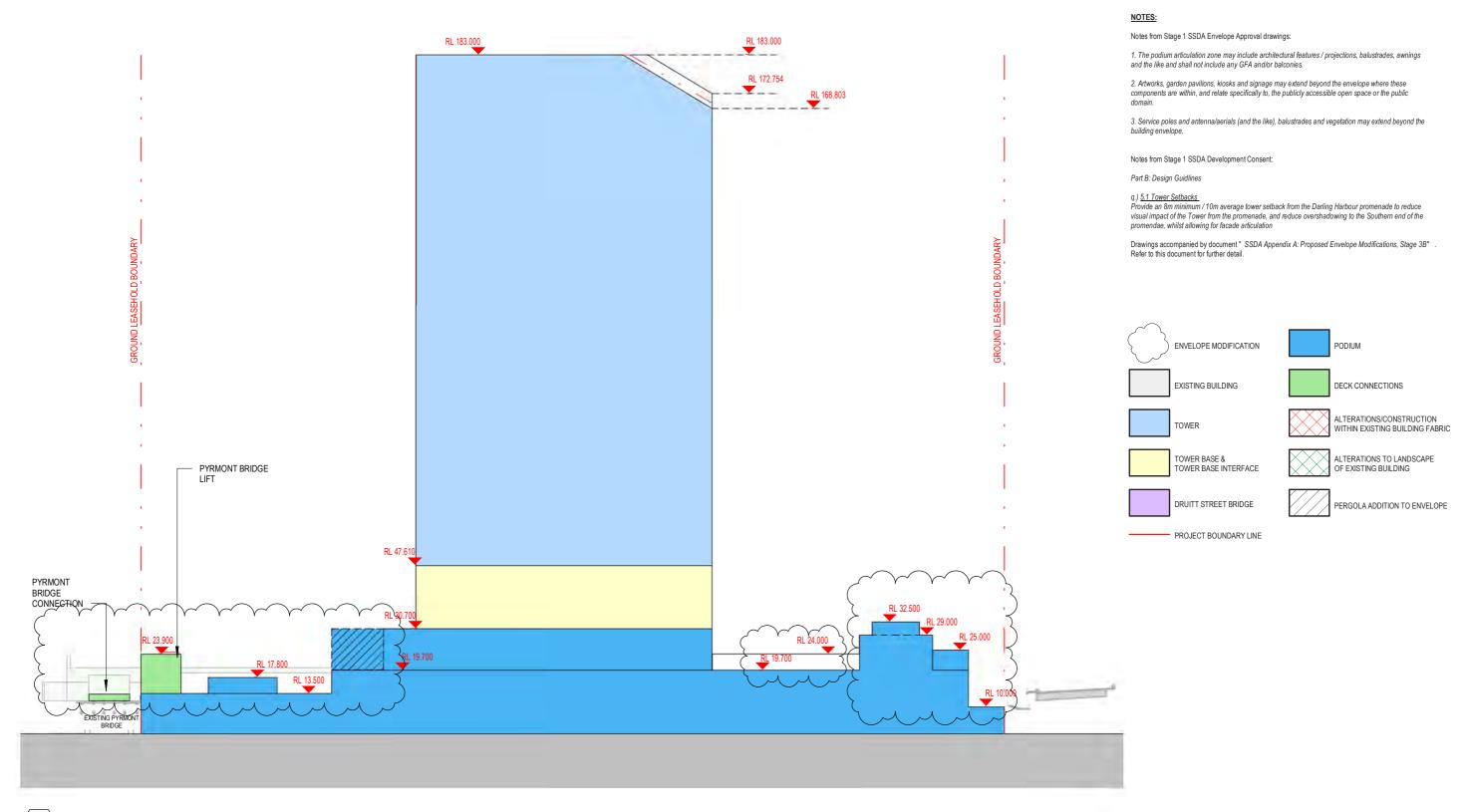








Envelope Modifications Proposal Drawings



Envelope Section FF - North to South A-DA1001 SCALE: 1:1000

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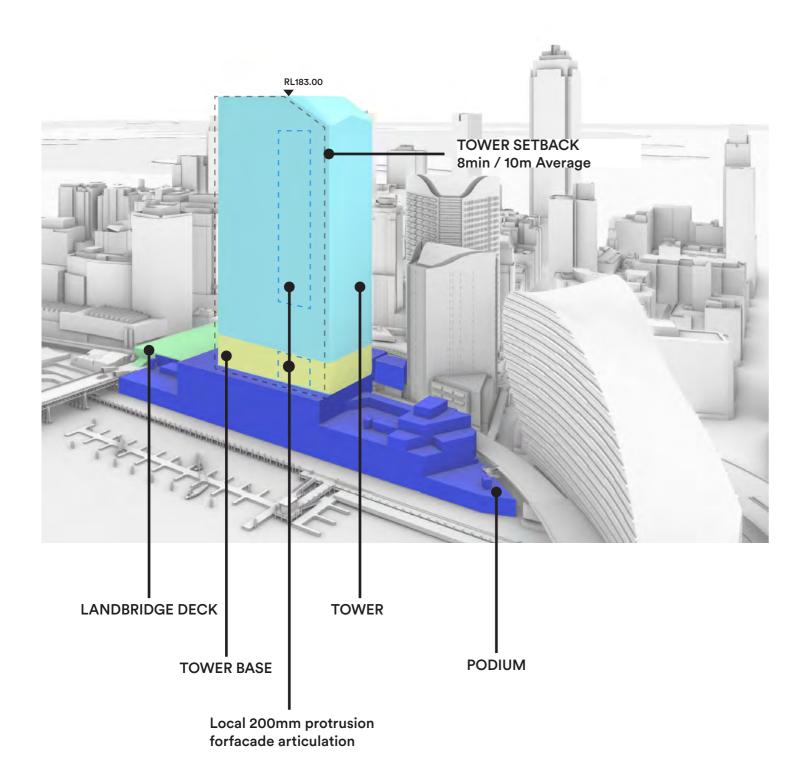


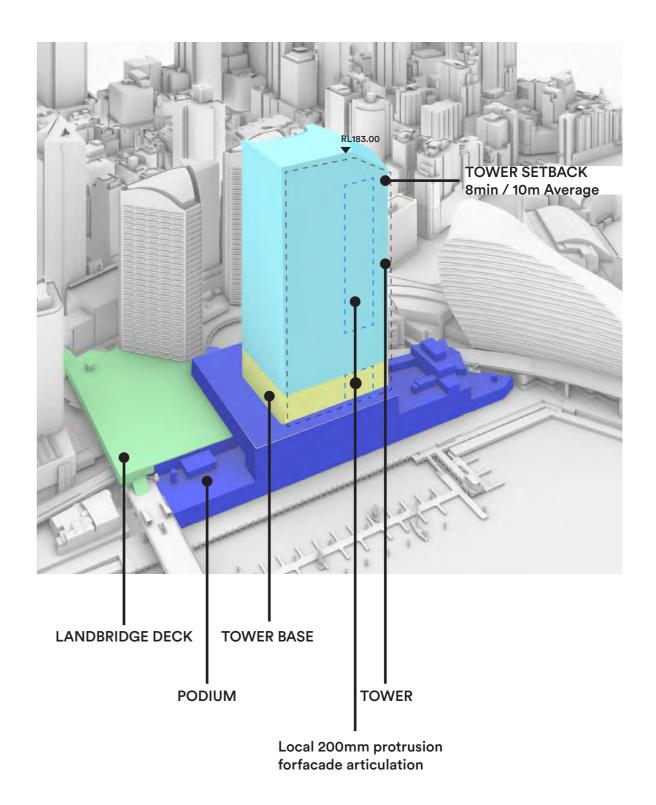






Building Envelope - 3D





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