3. STREETS + BUILDING PLOTS

3.4 IQ Hub on Dickson's Lane

Issue:

The IQ hub could be relocated to skin the southern car park elevation of the commercial office building so that the new Dickson's Lane and existing Macarthur Street axially align. This makes the IQ hub closer to UTS, The Goods Line (former UPN), student housing and the office campus.

Response:

Skinning the NW Plot with a IQ Hub use will not amend the Macarthur Street/ Dickson's Lane alignment as noted in the previous section.

The opportunity to include IQ use on Dickson Lane is a positive recommendation and could be considered when the Stage 2 Development Applications are submitted subject to negotiations with stakeholders and future tenants.

3.5 Conclusion

In keeping with the UDPRG the Concept Proposal establishes a hierarchy of lanes and streets. This ensures the primacy of The Boulevard axis and the containment of the new public square.

The proposed urban grain connects with the existing street grid repairing what was once a significantly disconnected site.

The continuity of existing street character and finishes within The Haymarket public domain allows for a seamless integration into the built realm. At the same time elements such as The Boulevard and Haymarket Square are opportunities to create something new for the residents and visitors within this quarter of the city – providing new quality open urban spaces within a dense local area.

The public domain including new public spaces and the building interface are designed ensure a cohesive and integrated piece of city that leaves a positive legacy for the future of The Haymarket and Sydney.

Artisit's impression of Dickson's Lane - as submitted in SSDA 5 and for information only

4. MASSING STRATEGY

4. MASSING STRATEGY

4.1 Tower setbacks

Issue:

All towers (and their Maximum Building Envelopes) must be setback at least 5 metres from any podium edge at any point.

Building cores should be setback at least 5m from the street frontage.

Response:

In heritage areas setbacks are one means of achieving a street edge that responds to, and is keeping with, the scale of the local buildings.

The provision of setbacks is also recommended within dense built environments where tall buildings and narrow streets create poor urban environments at ground level with limited natural light and potential adverse wind conditions.

Building edges

The Concept Proposal proposes ‘streets and buildings’ rather than a ‘tower and podia’ composition of development.

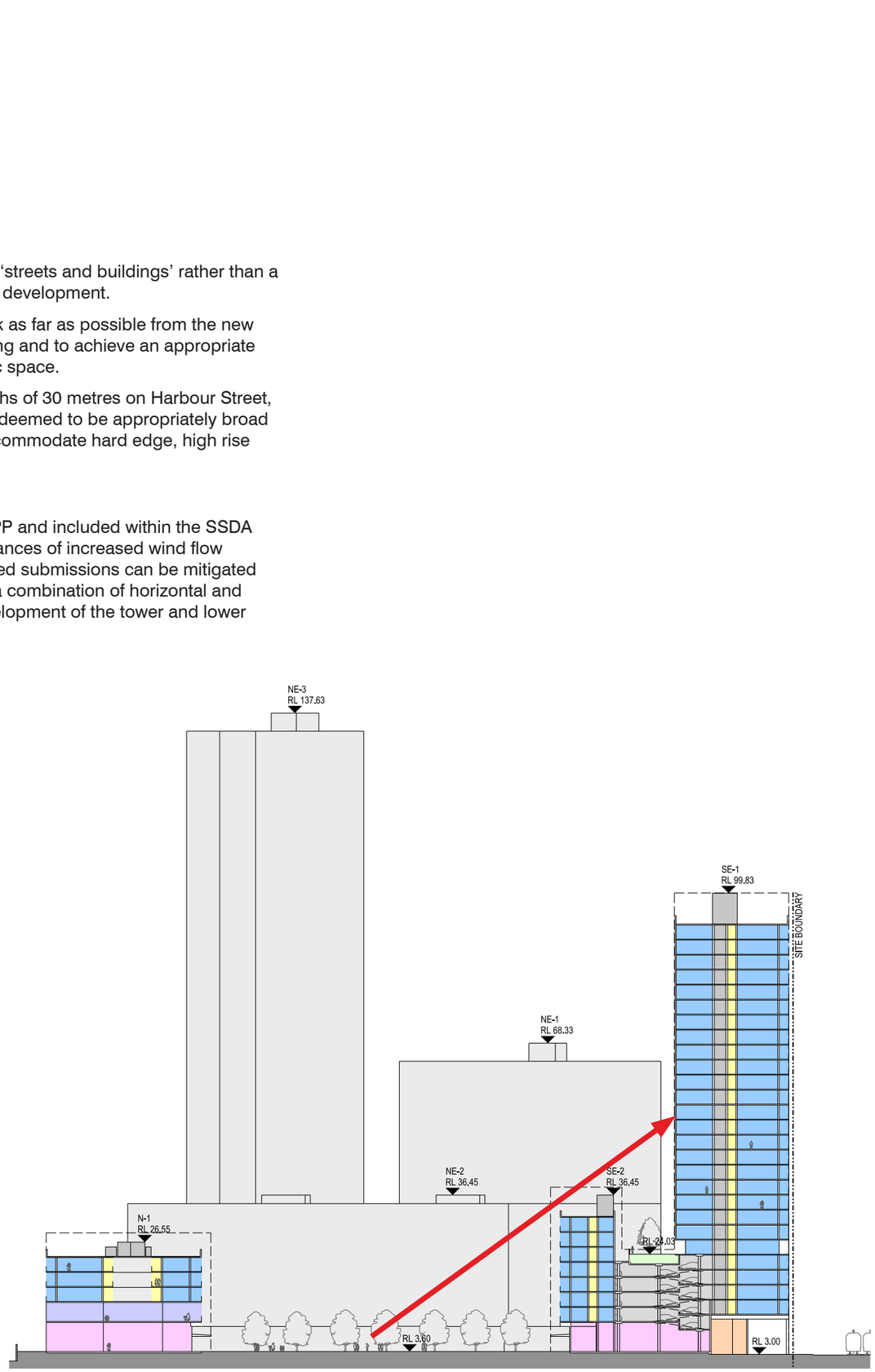
The proposed towers are setback as far as possible from the new square to minimise overshadowing and to achieve an appropriate relationship of built form to public space.

The generous existing street widths of 30 metres on Harbour Street, Hay Street and Darling Drive are deemed to be appropriately broad streets in Sydney and able to accommodate hard edge, high rise development.

Wind

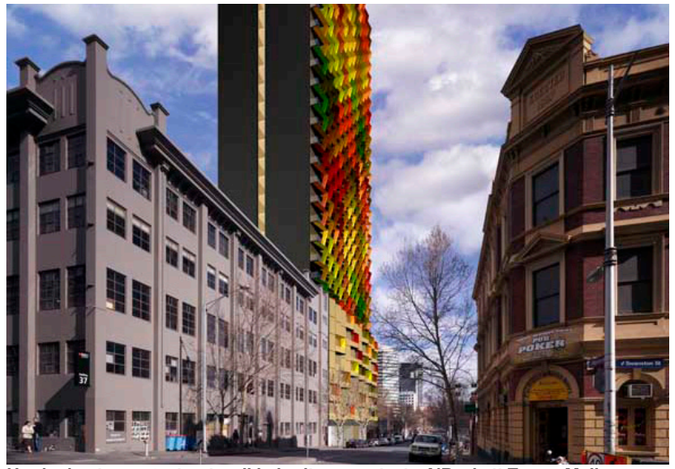
The Wind Report prepared by CPP and included within the SSDA 2 submission confirmed that instances of increased wind flow identified in testing prior to detailed submissions can be mitigated via a range of devices including a combination of horizontal and vertical wind breaks, design development of the tower and lower levels and landscaping features.

Haymarket Square with set back towers - as submitted for SSDA 2



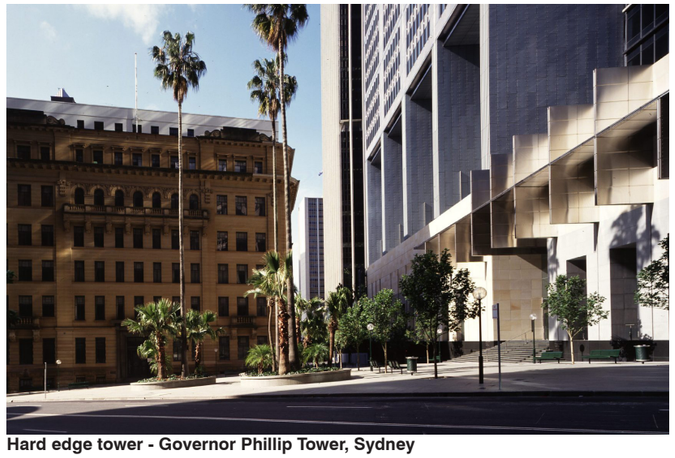
Haymarket Square cross section showing line of sight to setback towers from within square

4. MASSING STRATEGY



Hard edge tower + street wall in heritage context - A'Beckett Tower, Melbourne

Hard edge towers with re-entrants to podium - Eurocity Plaza, Nanning



Hard edge tower - Governor Phillip Tower, Sydney

Re-entrant between podium + street edge tower - King Street West, New York

Street wall

A setback or 're-entrant' between the tower and the podium creates a physical separation and allows the towers to appear to float above the 'street wall.'

This allows for a continuous reading of the 'street wall' along the existing streets.

This separation is further reinforced by a change in materiality and/or expression from the human and street scale of the 'street wall' to that of the residential towers.

The re-entrant, a common architectural feature, has been used to create positive urban design and architectural effect by Denton Corker Marshall on several projects previously.

Refer to artist's impression of SW Plot podium 'street wall' along The Boulevard on page 23.

Scale

The scale, size and separation of the towers provides the response to the city and building scale context. But the human scale is manifest in the articulation of the 'street wall.'

At this level the reading is primarily related to individual floors, the elements that people see and touch are textural and legible, and it provides a grain for users to engage with, understand and relate back to the larger building elements.

This is articulated primarily through the grid, the balconies, windows and coloured infill panels, canopies, retail frontages and lobby entrances.

All of the scales contribute to making The Haymarket a distinctive, integrated, lively and vibrant area that connects the precinct with the rest of Sydney.

Cores + lobbies

The towers holding the street edge are clearly legible from street level and create a sense of place for residents and ease of wayfinding by their visitors.

Cores are located on the street line as a result. This will create shallow, better lit and more visible residential lobbies. The exposed core walls will be clad in brick-interpretive materials ad reflect the solidity and materiality of the Haymarket area.

Refer to artist's impression of SW3 residential lobby on page 23.

4. MASSING STRATEGY

Conclusion

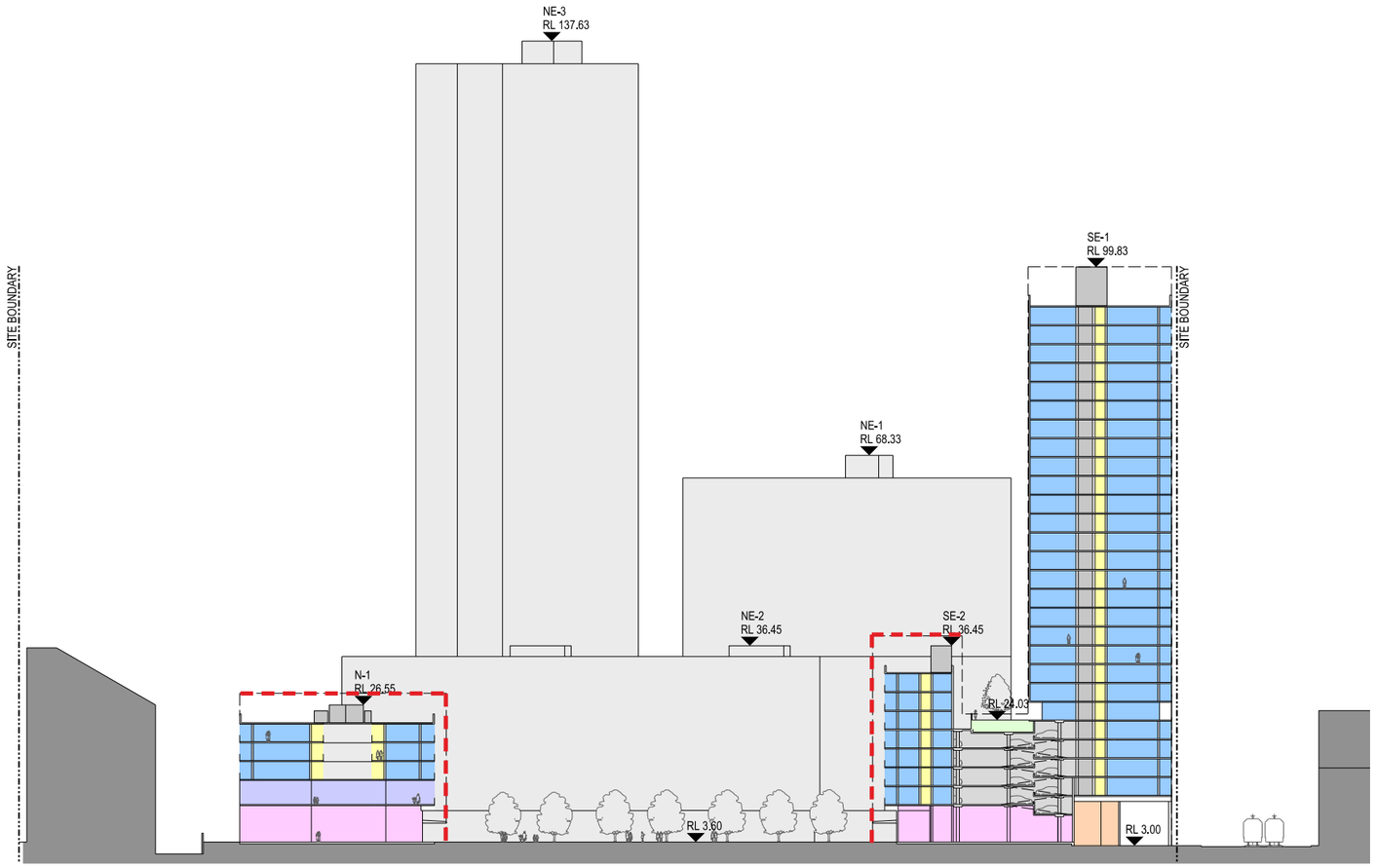
The materiality and scale of the Haymarket area is addressed by the ‘street wall’ of the urban block.

The re-entrant reinforces the distinction between street and tower form and ensures a continuous reading of street scale along the existing street.

Hay Street and Darling Drive are suitably wide streets that can accommodate large built-form development. Setbacks will have a minimal impact on the overshadowing onto these streets as their width will ensure good day-lighting at pedestrian level.

The Concept Proposal massing does not generate or exacerbate wind conditions around the site. Therefore tower setbacks for wind mitigation are not required.

Artist’s impression of tower SW Plot on corner of Hay Street and The Boulevard as submitted for SSDA 5. This has been provided for information only.



Maximum building envelope at edge of square - refer Parameter Plans for further detail

Illustrative Scheme partial section CC - as submitted for SSDA 2

4.2 Built edges to square

Issue:

The podium heights surrounding the new square should be lowered in height with green roofs to improve winter sun access into the new square and potentially raised along the surrounding streets to rebalance floor area.

The north plot building should be reduced to four storeys to improve winter sun access into the new square.

Response:

Edge of square

The maximum building envelope proposed for the square edge allows for lift overruns and plant enclosure on the roof of these buildings.

The Illustrative Scheme indicates a parapet height lower than the current maximum building envelope with rooftop plant setback to minimise the visual impact.

This reduces overshadowing of The Boulevard and Haymarket Square and maximises the natural amenity of these new public spaces.

The N Plot building height needs to be sufficient to screen the Pier Street overpass from within Haymarket Square and to hold the western edge of the grand 20 metre Boulevard.

Sunlight to Haymarket Square

Shadow studies were provided within the SSDA 2 Design Report.

These were based upon the maximum building envelope to model the worst case scenario.

These studies show that there will be a good sunlight access to parts of the Haymarket Square and The Boulevard throughout the year.

These studies will inform the retail brief to identify the best locations for food + beverage use.

Refer to the updated shadow studies included within this report which show the difference between the maximum building envelope and an illustrative scheme massing.

4. MASSING STRATEGY

4.3 Student accommodation

Issue:

It is recommended that the student housing tower(s) be shaped in plan at the northern end and reduced in height so as to avoid overshadowing of the rear publicly accessible courtyard of the Powerhouse Museum in winter and to avoid the appearance of a high visual barrier to Ultimo/Pyrmont.

Response:

The new student housing will visually define the western edge of The Haymarket and the improved pedestrian linkages at Exhibition Place, Dickson's Lane and Macarthur Street, supplemented by a coordinated wayfinding signage strategy, will integrate these communities into the city.

Plan

The student accommodation buildings provide a built edge along the western side of Darling Drive.

Located on the west side of this key axis these buildings align with the Powerhouse Museum on the Ultimo/ Pyrmont street grid.

The southern end of the DD Plot aligns with the Macarthur Street built edge and ensures good visual connectivity from Hay Street to the Powerhouse Museum.

The northern end of the Illustrative Scheme is set back to maintain line of sight to the Powerhouse Museum from Pier Street.

A break between the two blocks, as indicated in the Illustrative Scheme and articulation of the eastern elevations provides relief and visual interest along the 'street wall.'

Building height

The maximum building envelope proposed under the Concept Proposal DA (SSDA 2) allows for lift overruns and rooftop plant.

The plan constraints require increased building height to enable the student accommodation to achieve a critical mass, important in establishing a student precinct along Darling Drive.

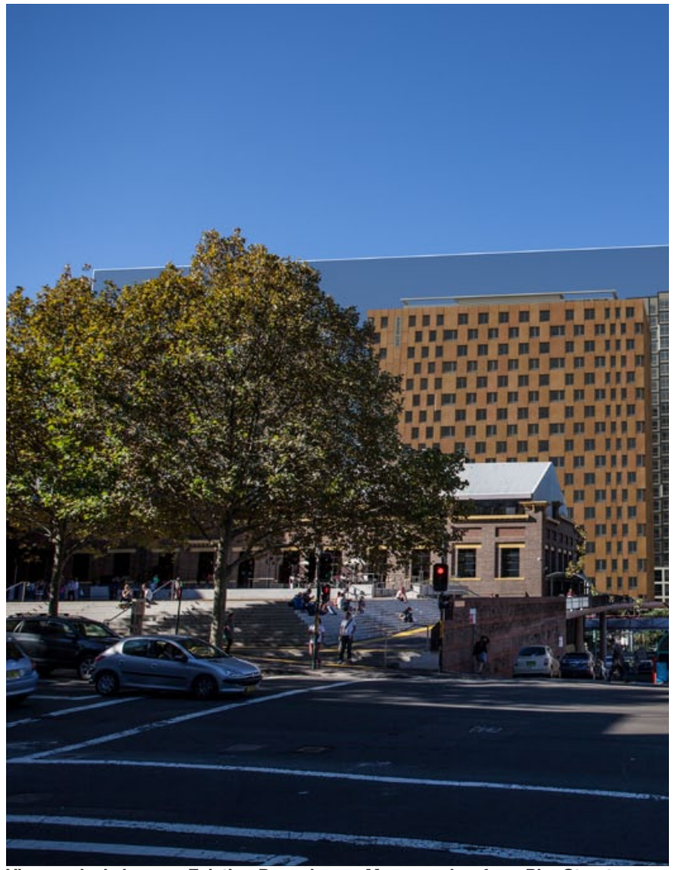
The scale of the student accommodation is consistent with that proposed for The Haymarket buildings. The twenty (20) stories is in keeping with the scale of other new residential developments which are proposed for the local area.

The Illustrative Scheme reduces the building height on the northern building to reduce the impact of overshadowing of the Powerhouse Museum courtyard garden. This massing will be confirmed during the Stage 2 Development Application

Cross section through Powerhouse Museum and DD + SW Plots within Concept Proposal (sc 1:750@ A3)

4. MASSING STRATEGY

View analysis image - Existing Powerhouse Museum view from Pier Street
Image © Virtual Ideas



View analysis image - Existing Powerhouse Museum view from Pier Street
Image © Virtual Ideas

Heritage response

The proposed design for the south building of the student accommodation west elevation (submitted for SSDA 3) relates directly to the bulk, form and materials of the Powerhouse and other warehouse buildings in Ultimo.

An abstract and visually unobtrusive treatment is proposed for the west elevation.

Within the SSDA 3 submission the patterning of the windows in this façade is inspired by brick patterns in the Powerhouse walls; the panel divisions and openings are arranged to evoke ‘hit and miss’ brick coursing, where every second brick is removed in each course to create simple openings.

The colour and texture of this façade references the materiality of masonry walls in a subtly varying warm tone that shifts from darker to lighter following the varying density of the windows across the façade.

This uniform treatment and consistent parapet height generates an architectural backdrop where the emphasis remains in the richly articulate museum building and the impact of future built form is reduced further protecting the setting of the building.

The street trees obstruct views of the student accommodation within low level views.

A landscape buffer along the light rail alignment will further soften low level views out from the museum towards the student accommodation at ground level.

Heritage precedent: The Windsor Hotel, Melbourne

4. MASSING STRATEGY

4.4 View corridors

Issue:

The Macarthur Street view corridor to the city should be respected by the deletion of the western tower within the SW Plot.

Response:

Macarthur Street

Macarthur Street is not an identified or nominated view corridor or public domain vista or vantage point in any planning controls or guidelines.

The existing public domain view from Macarthur Street is toward the southern CBD skyline. The existing skyline and foreground view is of limited visual interest and does not provide for any particular pedestrian visual connectivity to or through the existing SICEEP Site.

The Macarthur Street corridor is not a high intensity public domain corridor. Whilst it is used by pedestrians moving from the Darling Harbour precinct through to Pyrmont, the stronger pedestrian environment is via the raised walkway to the Powerhouse Museum forecourt.

As pedestrians move through the corridor the views are obstructed in part by the raised pedestrian walkway to the Powerhouse Museum.

Vehicular traffic passes relatively quickly along Macarthur Street, with views to and from the CBD relatively limited in scope and duration. It is not considered that these views are significant.

The development proposed by The Haymarket Concept Proposal, including proposed Building W2 will enclose or terminate the public domain view from this vantage point with new buildings.

Notwithstanding, as pedestrians move down towards Pier Street the public domain sight lines will remain generally as per the existing situation.

The Concept Proposal maximum building envelope proposed under The Haymarket SSDA2 has sought to provide for the establishment of ‘gaps’ to sky between the building forms in The Haymarket when looking in this direction.

JBA has prepared a Visual and View Impact Analysis that has been submitted with SSDA3 for the first of the Student Accommodation buildings.

This analysis considers the Macarthur Street views in detail and concludes that “notwithstanding the change to the CBD skyline that will inevitably result, it is considered that the proposed Residential (Student Accommodation) Building W2 will not obstruct any significant public domain views and will result in no loss or detraction from the significant aspects or aesthetics of existing public domain views in the locality.”

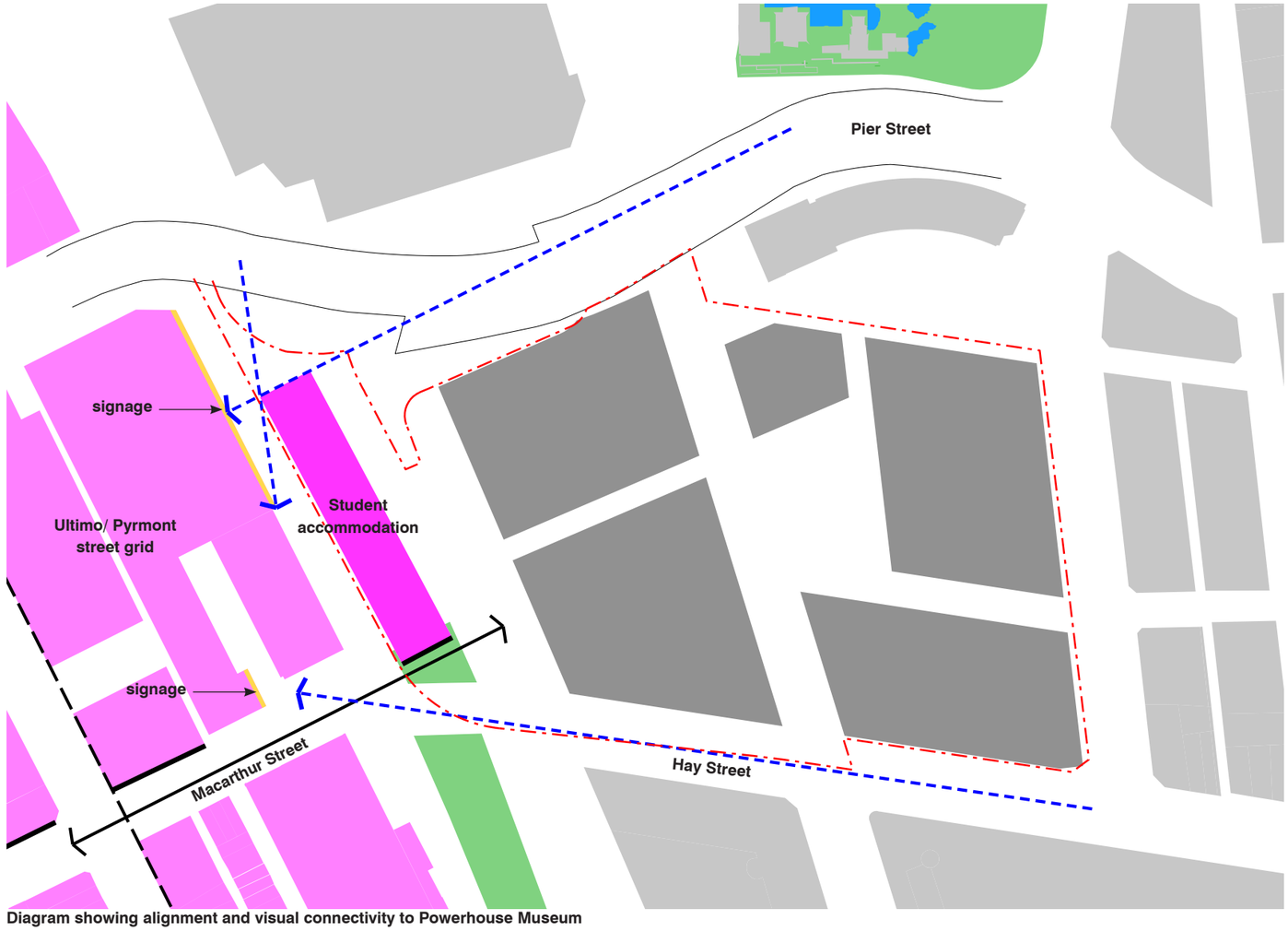
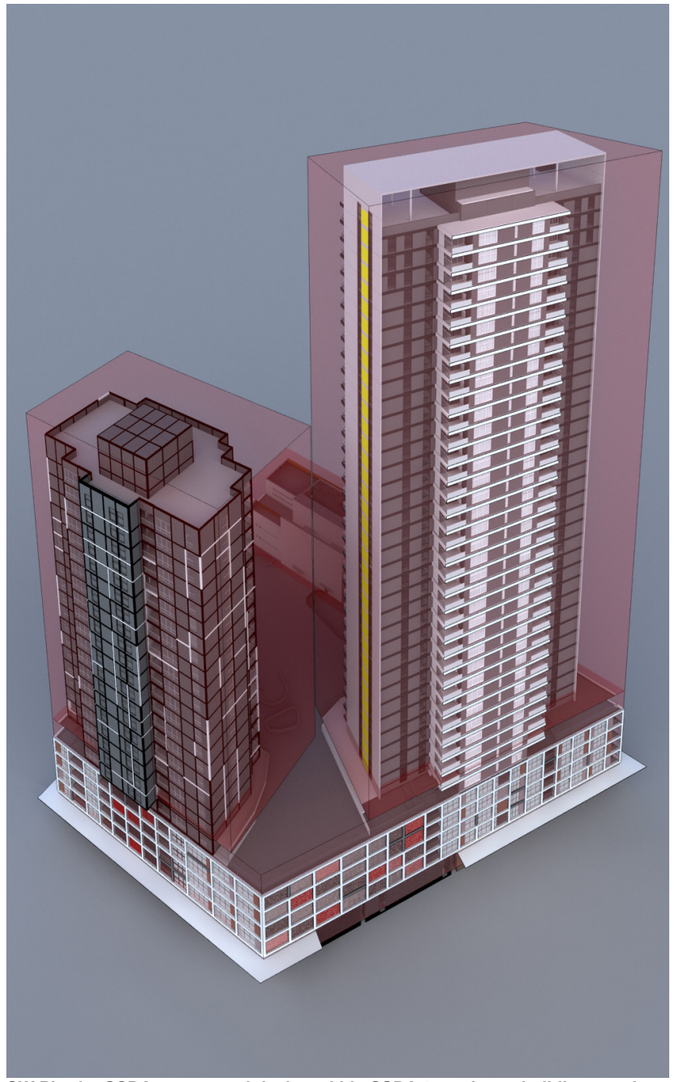


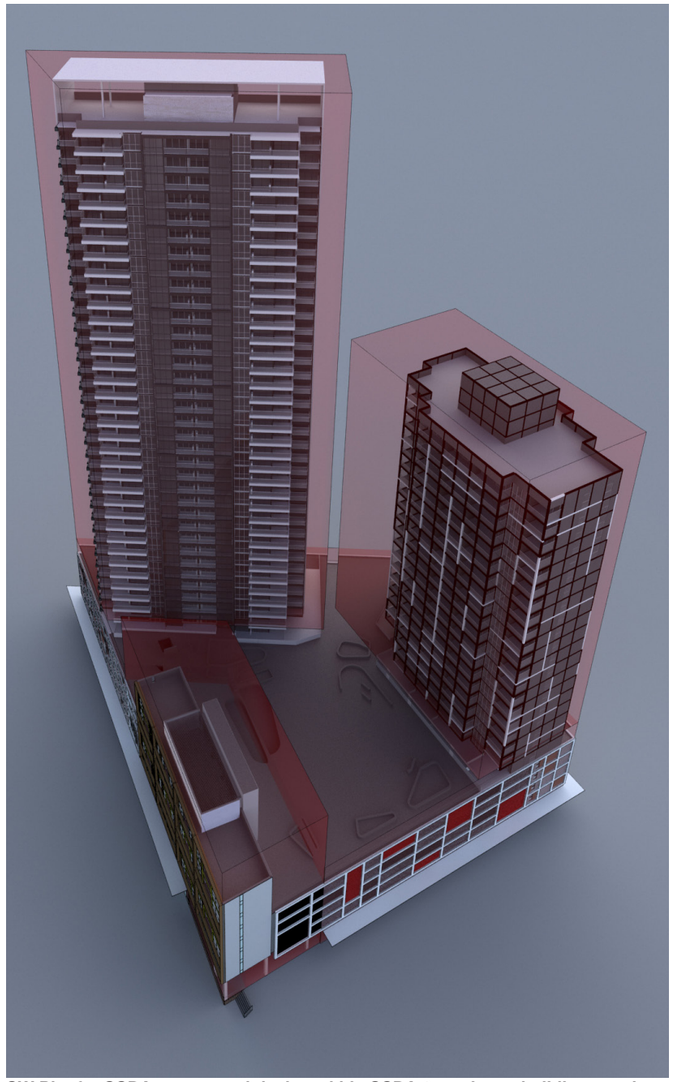
Diagram showing alignment and visual connectivity to Powerhouse Museum

View analysis image - Existing Powerhouse Museum view from Pier Street
Image © Virtual Ideas

View analysis image - Proposed Powerhouse Museum view from Pier Street (SSDA 2) Image © Virtual Ideas



SW Plot for SSDA 5 proposed design within SSDA 2 maximum building envelope - provided for information only



SW Plot for SSDA 5 proposed design within SSDA 2 maximum building envelope - provided for information only

4.5 Maximum building envelope flexibility

Issue:

The suggested Maximum Building Envelope outlines are too generous and provide permission for towers to enlarge at Stage 2 DA, further reducing insufficient tower separation.

Response:

Flexibility

The maximum building envelopes are intended to define the maximum built form extent of the development and therefore make allowance for lift overruns and rooftop plant enclosures which are required to sit above the upper-most habitable floor of the buildings.

Although the detailed design of the residential towers has not been undertaken as part of the Concept Proposal the Parameter Plans have been established based on the robust assessment of appropriate building footprints and forms.

The use of Parameter Plans to guide the future design development within the maximum envelopes ensures flexibility to accommodate design innovation to ensure a best fit solution is delivered for the site.

Maximum building envelope

The maximum building envelopes have been established as part of the development of the overall master plan. They are intended to establish the maximum parameters for the future development across The Haymarket, rather than being indicative of the future built form.

These maximum envelopes are also intended to be used in conjunction with the other Parameter Plans that have been developed to guide built form elements such as building separation.

The maximum building envelope is also to be read and used in tandem with the Design Guidelines that have been prepared to guide a range of elements of the future design, including materials and ground plane, while also allowing for flexibility, creativity and alternative design solutions.

It is intended that compliance with the maximum building envelopes combined with application of the Parameter Plans and Design Guidelines will provide designers with the framework to deliver design excellence for the city.

4. MASSING STRATEGY

4.6 Chamfered corners

Issue:

Chamfers should be provided on all corners for 2.5 metres in either direction to improve visual safety and meet Crime Prevention through Environmental Design (CPTED) principles.

The northern corner of the South-West Plot should be chamfered to enable a clear view into Dickson's Lane from the Boulevard.

Response:

Chamfered corners are usually adopted within dense, tight and congested urban settings where there are high footfalls and occasion for people to linger.

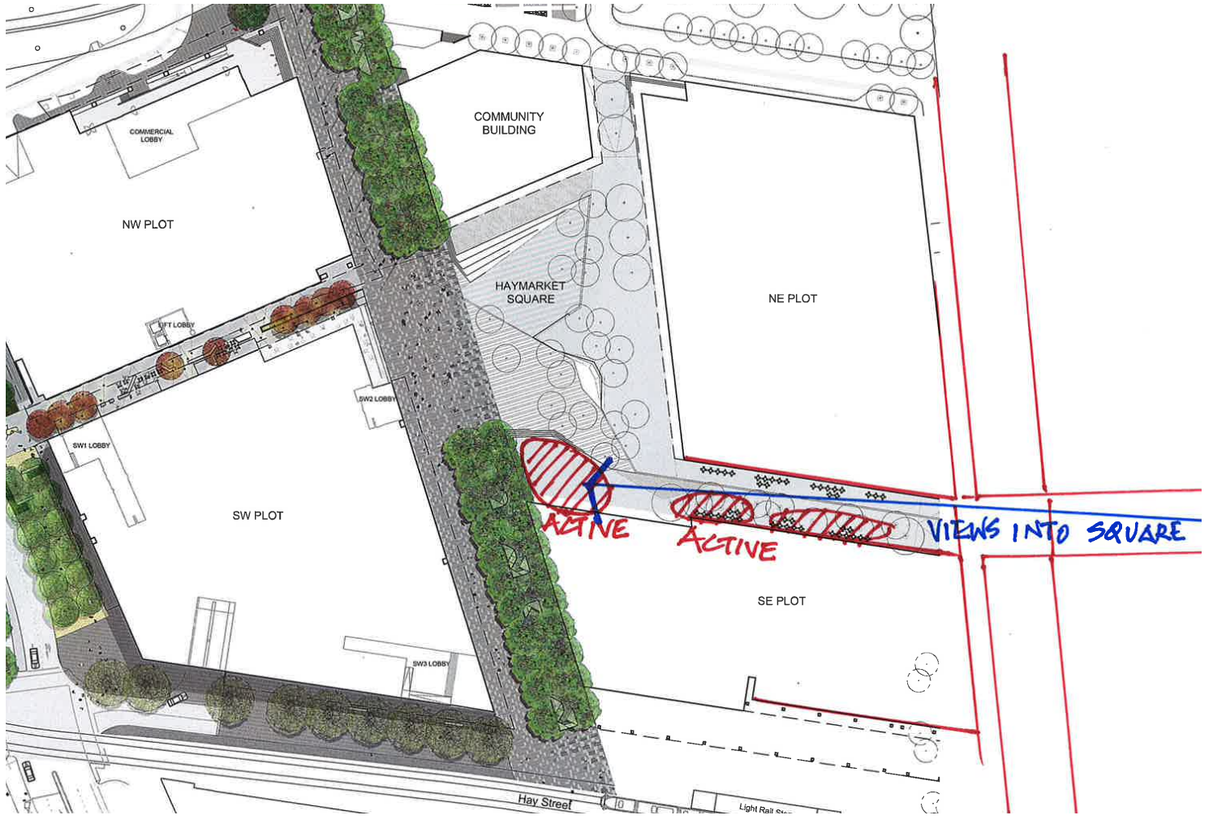
The Haymarket being a pedestrian precinct does not need to accommodate vehicle or high speed commuter cyclist sightlines, nor does it need to corral people at crossing points.

The full width of the thoroughfare is available for pedestrian and recreational cyclist use which minimise the issue of pavement blind spots.

Corners to lanes and streets are either fully glazed retail shopfronts or residential lobbies which allow for full visual safety to the 2.5 metres required and in most cases provide a wider field of view.

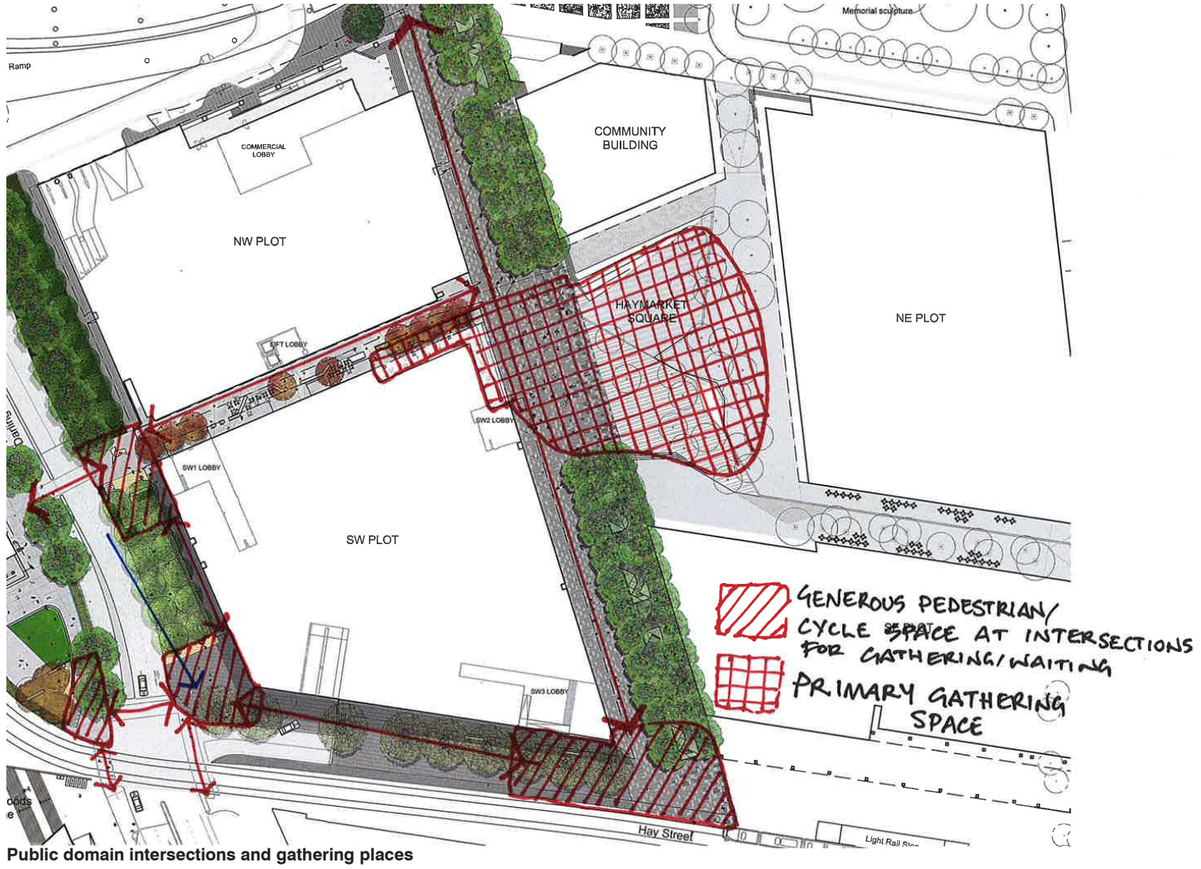
The increased site permeability will provide passers-by with choice and the mix of uses and distribution of residential lobbies provides a level of passive surveillance and sense of security.

Compared to the existing condition the new thoroughfares are at-grade, generously proportioned and travel across active and occupied spaces and provide a direct line-of-sight to connecting streets and squares.



Visual connectivity along Little Hay Street

Aerial view of Oxford Circus, London



Public domain intersections and gathering places

4. MASSING STRATEGY

Built form at ground level

Chamfered corners erode the strong street lines at ground level.

They risk making street openings appear too large and not in keeping with the character of the local street grain.

Around the square they erode the edge of the containing built-form and cause this space to bleed out.

The chamfers reduce the length of street retail frontages and suggest corner entrances to these units.

Corners become dark spaces as their increased depth below the generous canopy line limits sunlight penetration.

Public domain

People will gather and utilise the public square and the Boulevard rather than linger on street corners.

The primary street widths are generous with ample space for pedestrians and cyclists to gather without requiring additional space at crossings or intersections.

It is important that laneways are tight and allow a sense of enclosure in contrast with the main gathering spaces into which they open out.

There is not the need for chamfered corners as a safety feature for motor vehicles as the sight lines at Darling Drive intersections are clear.

There are generous areas of public domain at intersections that allow clear sight lines and provide space for waiting/congregating as required. Refer public domain intersections and gathering places diagram below.

Dickson's Lane sight lines

The current design proposal submitted for the SW Plot in SSDA 5 sets back the façade line by 3 metres at ground level on the corner of Dickson's Lane and The Boulevard which will enable clear views into Dickson's Lane.

Refer to page 28 for an artist's impression of Dickson's Lane as submitted for SSDA 5. It has been provided for information only.

CPTED

Harris Crime Prevention Services has undertaken an assessment of the proposal and has now considered the City's suggestion of chamfered corners.

Their consideration of this issue concludes that

"the definition and current building profiles adequately facilitate sight line surveillance" and "chamfering of building corners fronting The Boulevard and the Square including the northern corner of the South West Plot achieves no additional safety (security) benefits."