URBAN DESIGN STUDY - Planning Proposal

189 MACQUARIE STREET, PARRAMATTA

October 2013

GMU

CONTENTS:

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1. Introduction

1.1. THE BRIEF

GM Urban Design and Architecture (GMU) have been appointed by Toplace Pty Ltd to undertake an urban design study of the existing surface carpark site at 189 Macquarie Street, Parramatta, which is being considered for the provision of a proposed public parking facility for a minimum of 700 car park spaces with mixed use including residential uses above. The purpose of this study is to inform the proposal of the potential heights, FSR and massing that might be reasonably achievable above the proposed car parking structure on the subject site. This study has considered the broader planning framework for the surrounding city centre area and the intent of the applicable and draft controls in relation to the general and immediate context. This urban design report will form part of the supporting documentation included as part of a planning proposal for the site and also be included as part of the design brief to inform a design excellence competition for the site. In formulating the views expressed in this report, GMU has:

- Visited the site and its immediate and broader context
- Reviewed the draft Sydney metropolitan strategy and sub-regional strategy
- Reviewed the current and draft controls for the subject site, subject block and Parramatta CBD in general
- Researched previous studies done for Parramatta City Centre
- Reviewed Planning Proposals and recent approvals or DAs under assessment in the vicinity of the subject site
- Considered the site and block from various vantage points including approaching by car and public transport and its visibility from Robin Thomas Reserve
- Met with Council's staff for pre - lodgement meetings to understand their views, issues and opinions and to seek their preliminary feedback on the Planning Proposal.

1.2. METHODOLOGY

In undertaking this study GMU has conducted a desk top review of applicable and draft controls as well as a comprehensive site visit and photographic documentation of the site and its immediate surroundings. GMU has also reviewed preliminary car parking studies and correspondence between Council and the Applicant regarding Council's requirements for the site. Our desk top and site analysis has informed the creation of opportunities and constraints diagrams for the site which in turn have informed the proposed strategies for the residential component for the site. Due to rigorous requirements controlling the operational efficiency of the car parking layouts, GMU has relied on previous studies commissioned by the Applicant as a guide on a potential parking arrangement for the site. While the parking structure itself and the arrangement of parking levels have not formed part of GMU's brief, GMU has provided advice with regards to ground floor activation to the parking structure, response to the streetscape and overall transition and separation to adjoining and surrounding uses, interface to the streetscape and response to important vantage points from the public domain.

GMU conducted extensive analysis and modeling of the existing and allowable heights in the Parramatta CBD as well as the proposed height of recent proposals that have been nominated for the 'gateway' process in order to determine likely height scenarios for the centre and analyse the potential for any height increases for the subject site with the objective of providing a more sensitive and elegant built form on the subject site. A number of building envelopes and heights were tested against the existing and projected heights in the centre. GMU also conducted detailed testing of general built form options for the residential component of the proposal to be generally located above or integrated with the car parking structure. The testing included the formulation of typical floor plate layouts to understand likely vertical and horizontal access arrangements and unit distribution, general separation distances, outlook and amenity.

The analysis stage and testing of built form options for the site have informed the formulation of design principles for the site and the general conclusions and recommendations presented in the later chapters of this report.

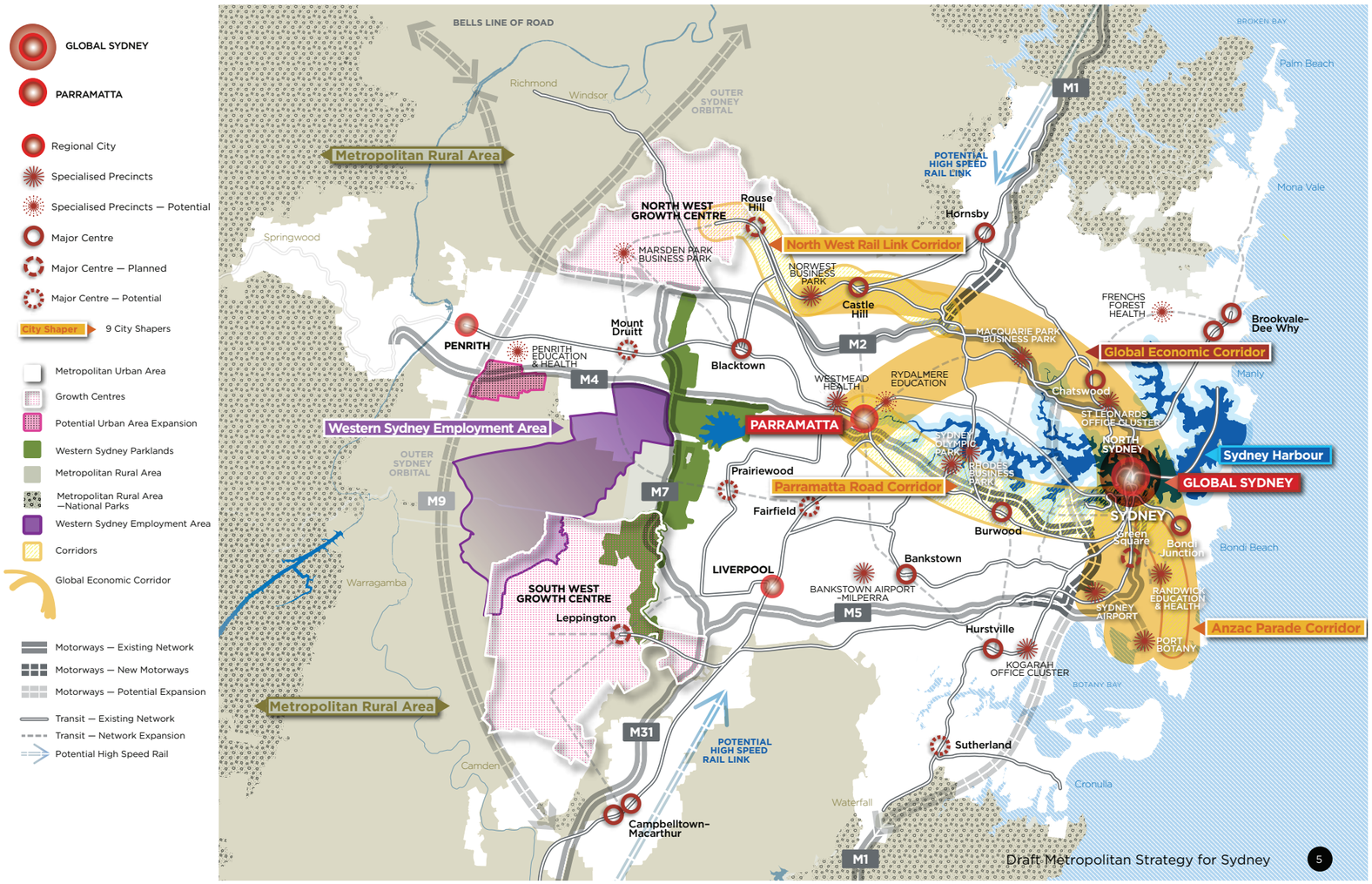
2. Broad Context

2.1. GREATER CONTEXT

GMU's analysis has included a review of the role of Parramatta within the context of the greater Sydney Metropolitan Region and its increasing status as a premier regional centre. The outcomes of the analysis point out Parramatta's incremental growth in importance and scale due to significant characteristics including transport facilities, public amenities and latent uplift potential. Important factors aiding in the growth and increased status of the centre are:

- According to the Metropolitan Strategy for Sydney to 2031, Parramatta is to become Sydney's Premier Regional City, which in the hierarchy of the strategy provides greater emphasis to Parramatta than other Regional Centres such as Liverpool and Penrith.
- In contrast to previous studies released by the Department of Planning and Infrastructure (DoP&I) i.e. City of Cities - A Plan for Sydney's Future and the Metropolitan Plan for Sydney 2036, the Draft Metropolitan Strategy has indicated that Parramatta is more important than the other regional centres.
- Plans for additional transport routes such as WestConnex will add additional capacity to the Sydney's second city and will provide a route to Parramatta from the south.
- Increase of the public transport use, where Parramatta is the station in between other major and even regional centres, such as Blacktown, Penrith, providing access to Specialised Centre - Westmead and a link to the North West Growth Centre.
- The recent changes in the height controls and recent approvals for the Gateway Process Planning Proposals, which increase the heights in the Parramatta CBD and beyond, providing heights in the range of:
  - 50m in Westmead from the previous 12m;
  - 140m in Auto Alley area from the previous 12m;
  - 117m at the northern end of Parramatta CBD at 330 Church Street, allowed from the previous 80m; and
  - 306m at the Centre of Parramatta CBD - 'Aspire' Tower in an area with maximum controls of up to 200m.

The above provides an indication of the potential for growth in Parramatta exemplified by the recent DoP&I approvals and gateway Process Planning Approvals. It is estimated that proposed improvements in the form of new traffic links such as the WestConnex Project and other initiatives by Local and State Government will help to promote further development and growth for the centre.



Vision for Sydney in 2031 - Metropolitan Strategy for Sydney to 2031 (source DoP&I website)

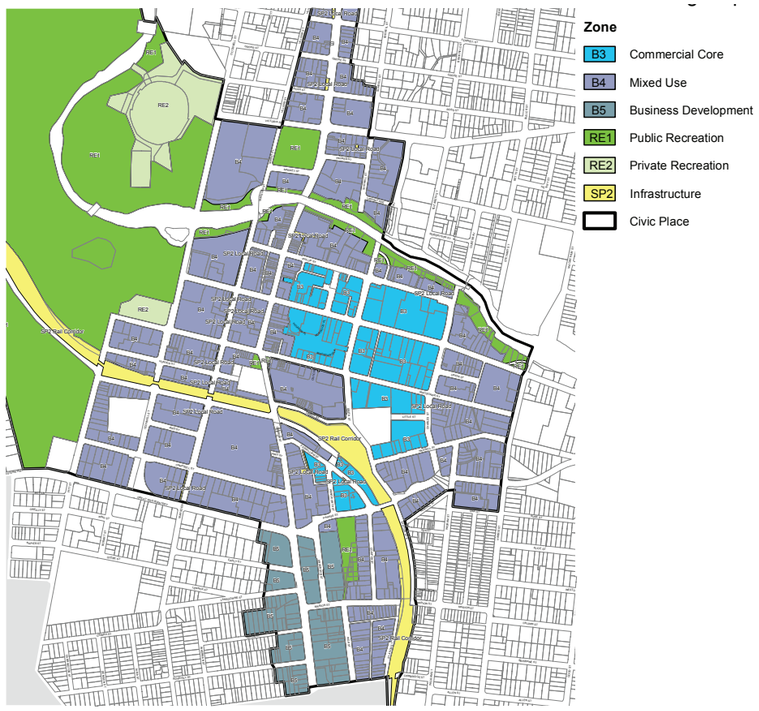
2.2. PARRAMATTA CBD CONTROLS

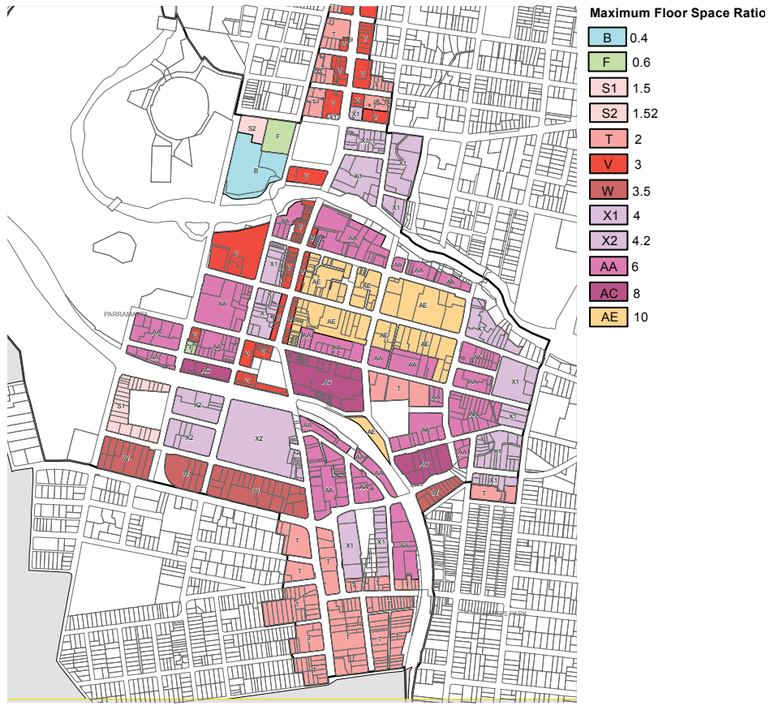
GMU's general analysis of the applicable controls has concentrated on the most relevant controls guiding built form on the subject site as well as overall built form pattern for the centre as a whole in order to understand the built form potential for the site in relationship to that of the overall centre. This analysis along with previous studies conducted by GMU in the area have helped us understand the outcomes of the existing controls, some of the underlying objectives influencing the draft controls and the combined effects of the DCP and LEP controls on the subject site and on the centre in general.

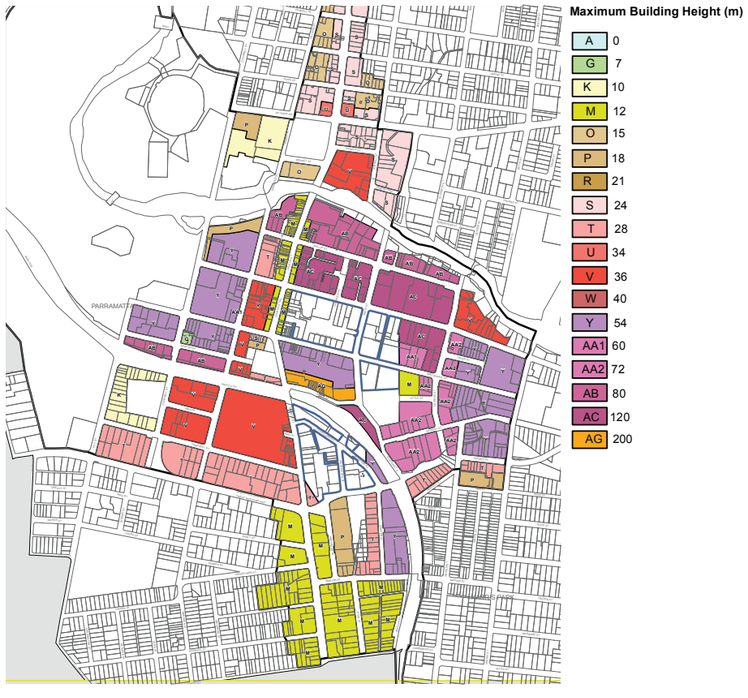
GMU's analysis points out a number of inconsistencies between the overall height and density controls which are further exacerbated by some of the DCP built form controls. The resulting outcome is a generalised limitation on the development potential for the centre and a lack of incentives for regeneration and renewal. This is exemplified by a general disconnection between the nominated allowable heights and the allowable densities permitted by the existing Floor Space Ratio (FSR) controls.

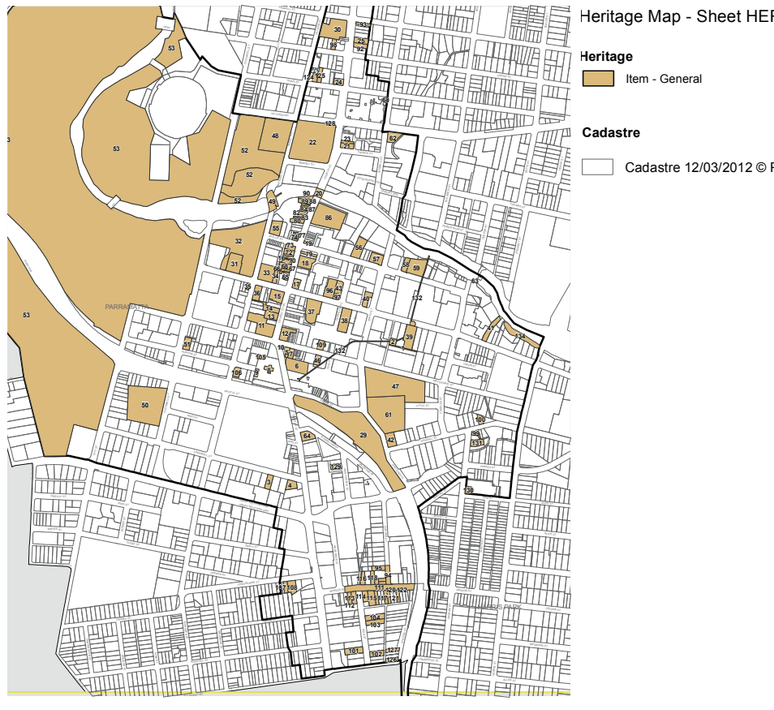
The FSR controls do not generally reach or match the allowable heights due to the impacts of desired built form outcomes imposed by the DCP controls. For instance, some setback requirements in combination with street wall height requirements concentrate a good portion of the allowable Gross Floor Area (GFA) within the lower and deeper levels of the development. This delivers, in general, a poor outcome where most sites cannot reach their full capacity in terms of heights or FSR. This is further constrained by other factors including a high number of heritage sites, flooding, existing improvements and general market conditions. The heritage constraints include a high number of heritage sites including the Barracks, Church Street and the Parramatta Park and Government House, which is of World Heritage status.

Parramatta City Centre is already constrained by the existing building stock. Due to the inconsistencies in the controls discussed above as well as heritage and other environmental and heritage factors, the controls do not provide enough incentives for redevelopment. This constrains overall opportunities for development, although it has helped in framing the existing individual character for Parramatta. Recent studies conducted by Council and proposed modifications to the applicable controls aim at rectifying some of the existing discrepancies in the controls in the hopes to stimulate future development while preserving the positive aspects of the existing character. In the interim, the onus is within the private and public sectors or private-public partnerships to investigate the real development potential of sites located within the centre, especially those that can lead to significant value add and public benefit to the community.







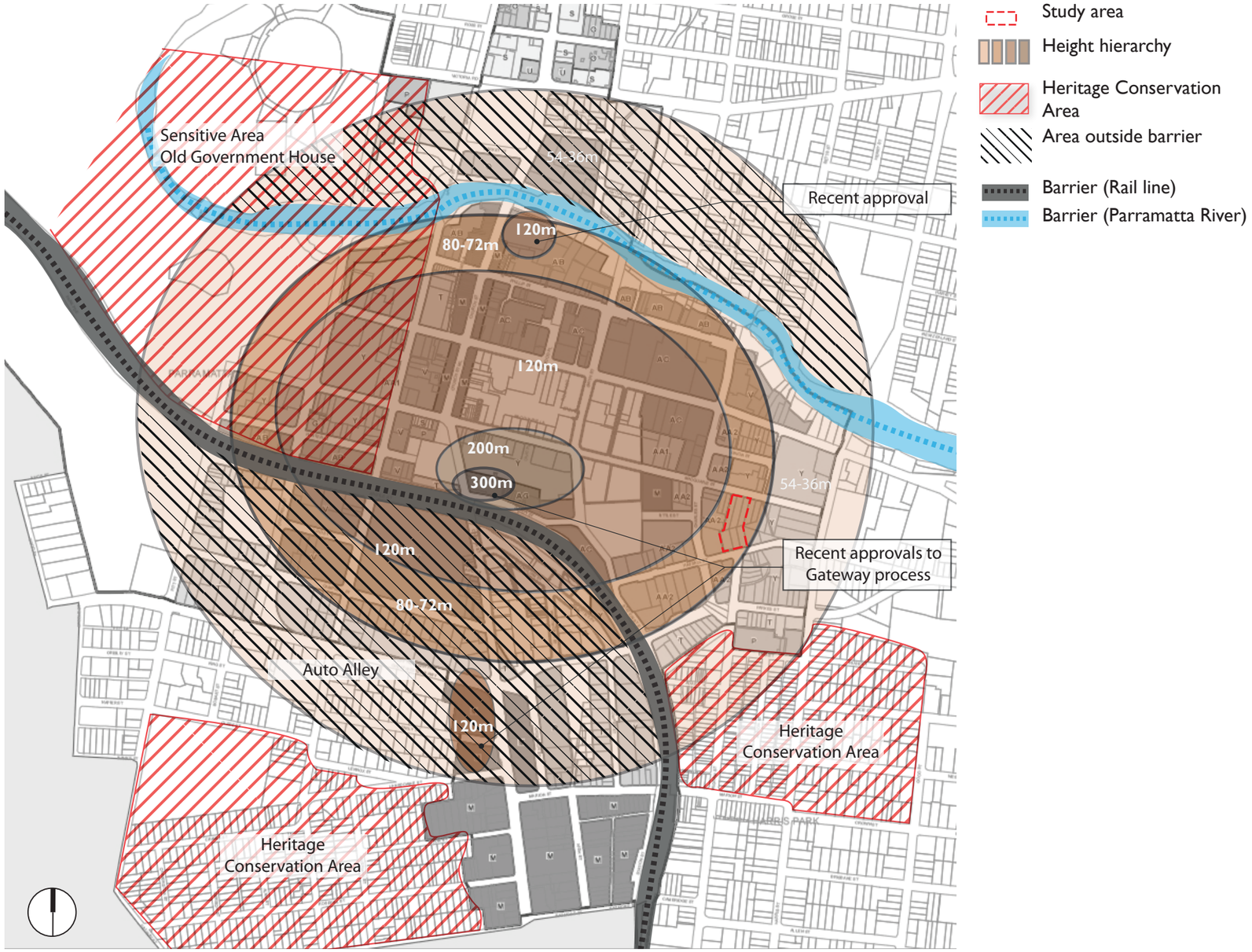


2.3. ANALYSIS OF HEIGHT AND TRANSITION

As discussed in the previous section, the applicable LEP and DCP controls provide general guidance with regards to Council's vision for the desired built form for the centre. However, due to the existing discrepancies within the controls, a more comprehensive look at the development potential for individual sites sometimes points to the need to depart from the applicable controls, especially in light of recent developments being approved on key sites or being considered as Gateway Process Planning Proposals. These recent approvals or gateway planning proposals by the DoP&I include greater heights than those allowed by Council's controls. The 'Aspire Towers' is an example of this with proposed heights of up to 306m on the edge of the Parramatta Square site (cnr of Church and Darcy Streets). There are currently a number of other development approvals with heights greater than those allowable by the applicable LEP heights, which is an indication that the overall vision for heights within the Parramatta City Centre is changing and it will continue to change toward higher development than that perhaps originally envisioned in the LEP.

With this in mind, GMU has looked at the potential distribution and increase in height for the subject site and its immediate surroundings in light of the perceived change in the vision for the height and overall scale of the centre. In general the core of the development for the centre is mostly south of the Parramatta River, north of the railway line, east of Old Government House and west of Robin Thomas Reserve. The analysis shows that the likely direction for expansion is already constrained to the north and west due to the presence of natural and heritage barriers in the form of the Parramatta River, which creates a natural break or boundary to the north of the centre; and Old Government House, which is considered a sensitive area with regards to visual impacts to the curtilage and siting of the heritage complex. Potential expansion is also somewhat constrained toward the south by the dividing impact of the railway line and the presence of larger heritage conservation areas south of Auto Alley and Parkes Street. Therefore, the reminder area left for growth is toward the east with pockets of development being also possible immediately to the south of the railway line in the area known as Auto Alley as shown on the diagram adjacent.

The potential for expansion and transition from the core outwards is greater toward the east due to the lack of natural or heritage barriers. It is also important to note that views to the Sydney CBD are also available in this direction at some heights. An accepted model for height distribution that promotes view sharing and creates a recognisable and orderly built form pattern is described as a 'bell curve' due to the resulting shape where heights at the core transition down to the lower heights in the periphery. GMU has tested the applicable and draft controls against the 'bell curve' model to visualize the emerging built form pattern for the centre in light of recent approvals surpassing the allowable heights. When studying the proposed, approved and applicable heights within the city centre it shows that the tendency of height limits for the centre has generally increased. This is due to higher developments being proposed for approval for the gateway stage starting with the 'Aspire Tower' located at the apex of the curve. This has transferable effect where an orderly projection of the curve to the rest of the centre will result in generally taller heights transitioning down to the fringe.



If the 'bell curve' strategy were to be used in determining the height on the subject site, the appropriate height for the subject site could be within and upper range between 150m and 175m taking into account the 300m 'Aspire Tower' as the upper limit at the apex of the curve. It is important, however, to consider the immediate context of the site as well as the overall height strategy to determine a good outcome for the site and its context. Therefore, GMU has also conducted a similar test but assuming that lower heights are achievable for the 'Aspire Tower'. It is important to note that taller heights can be achieved on the subject site in both scenarios – with the currently proposed 300m height for the 'Aspire Tower' and without. In the second scenario, heights reached the lower end of the range at around 150m. The test demonstrates that there is far greater height potential for sites around the core and for some of the immediately outer blocks than that allowed by the controls.

Regardless of the latent development potential of these sites in terms of additional height, it is understandable that not all sites will be able to reach the projected 'bell curve'; therefore, other factors need to be taken into consideration when formulating appropriate height projections. Factors affecting sites' potential include the age of the stock, heritage, amalgamation and strata status. While some sites will be able to achieve a more comparable height following the 'bell curve', their additional height has to be sympathetic to surrounding constraint sites in order to arrive at a desirable and orderly development pattern. Different constraints may also affect sites that still have latent development potential. For instance, flooding and prohibitive excavation costs result in decreased feasibility for redevelopment in the centre. The most effective way to overcome those constraints and assure development in the CBD is to allow greater heights or greater FSRs to match the allowable heights provided that the resulting built form results in an orderly and well defined centre.

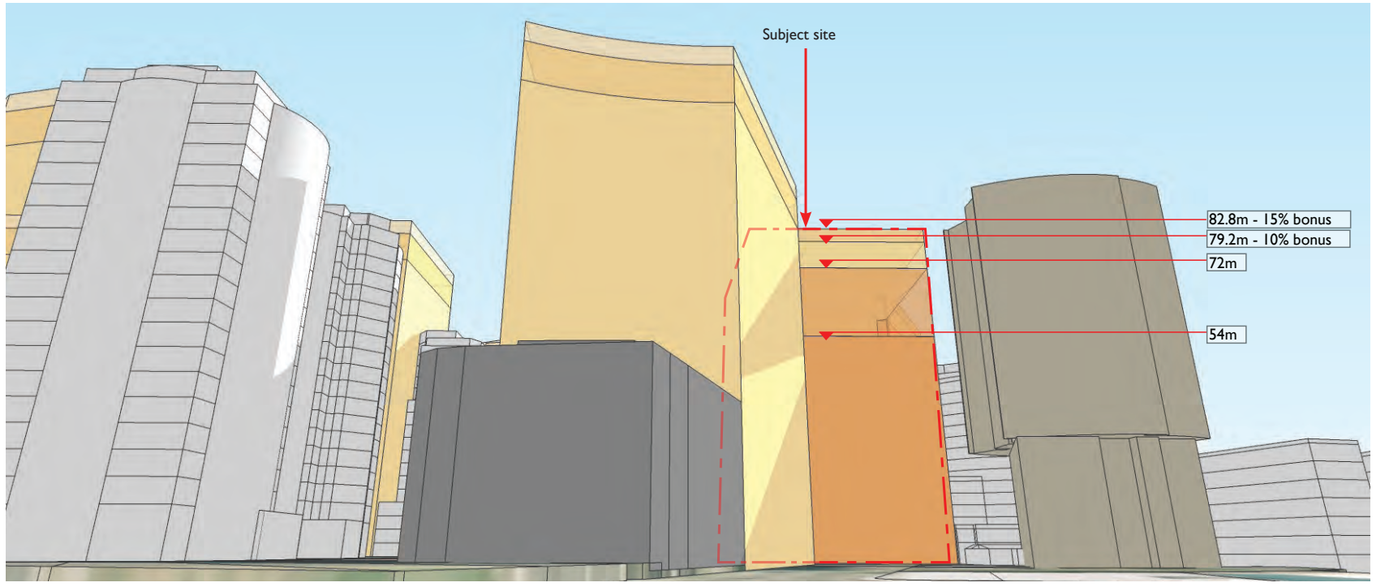
Based on the above, GMU has considered a number of height strategies for the site which take into account the existing controls as well as the projection of potential height increases in light of recent approaches and proposed approvals for the gateway stage. These strategies are discussed in the next section of this report.

2.4. COMPARISON OF ALLOWABLE HEIGHTS

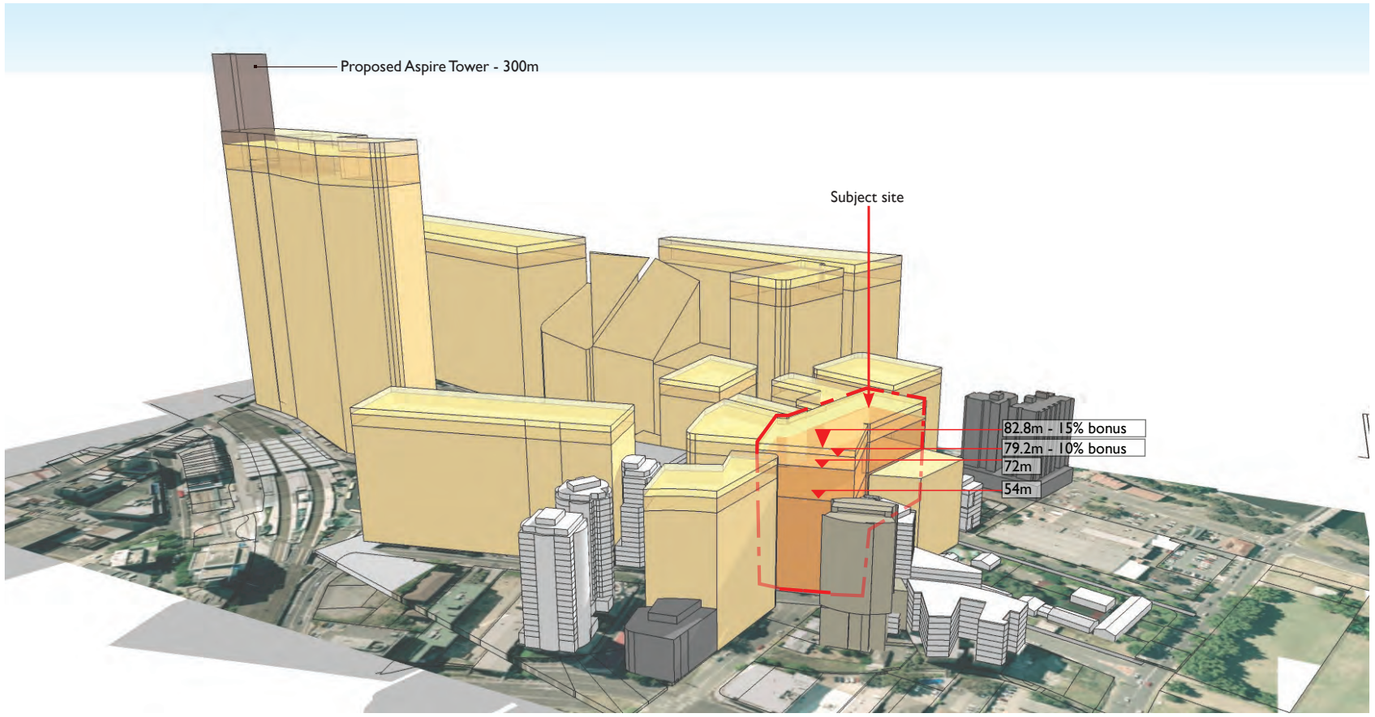
As shown on the adjacent diagrams the allowable height for the subject site is significantly below some of the current DA proposal currently under assessment, which is an indication of the natural tendency for likely development sites to require additional height and FSR. The next most significant height datum taken from the immediate surrounding is the allowable heights to the west (closer to the core) at a height of 72m. Adding a 10% bonus to the adjacent allowable height results in a height of 79.2m and a 15% bonus increase will result in a height of 82.8m. It is important to note that these heights are still significantly below the projected 'bell curve' heights ranging between 150 and 175m. They are also significantly below the projected heights resulting from a simple straight line projection of the applicable heights in the centre taking into account design excellence bonuses.

The marked difference between the applicable heights for the subject site (54m) and those of a simple straight line projection (110m) is equivalent to over 100% more height. When compared to the 'bell curve' projection 150m – 175m the difference is 170 to 220%. Although it would not be sensitive to the existing context for the site to reach the projected 'bell curve' heights, this comparison helps to illustrate the disconnection between the applicable controls and the general upward trend established by recent approvals for the gateway process. It is more reasonable to consider the height potential on the site based on a straight line projection from the centre outwards. This places the potential height for the site at an upper limit of 110m. Based on the allowable FSR for the site, GMU's testing indicates that a maximum height of 91m will allow for the applicable FSR plus bonus to be fully realized on the subject site. Additional height will result in more slender and sculptural tower form than that promoted by the current controls. It is important to note that the subject site has a similar FSR allowance than that of the adjacent site immediately to the west, which has a greater height allowance. Therefore, the current controls promote a similar scale under more restricted heights, which can lead to lower and deeper developments in the form of bulky and overdeveloped sites.

The suggested maximum height will sit comfortably within the existing surrounding context or the projected straight line projection of the applicable heights even if no additional height allowances are implemented to follow a 'bell curve' model that complements the recent approvals for the gateway review. Various built form strategies based on the proposed heights above are discussed in Chapter 4 of this report.

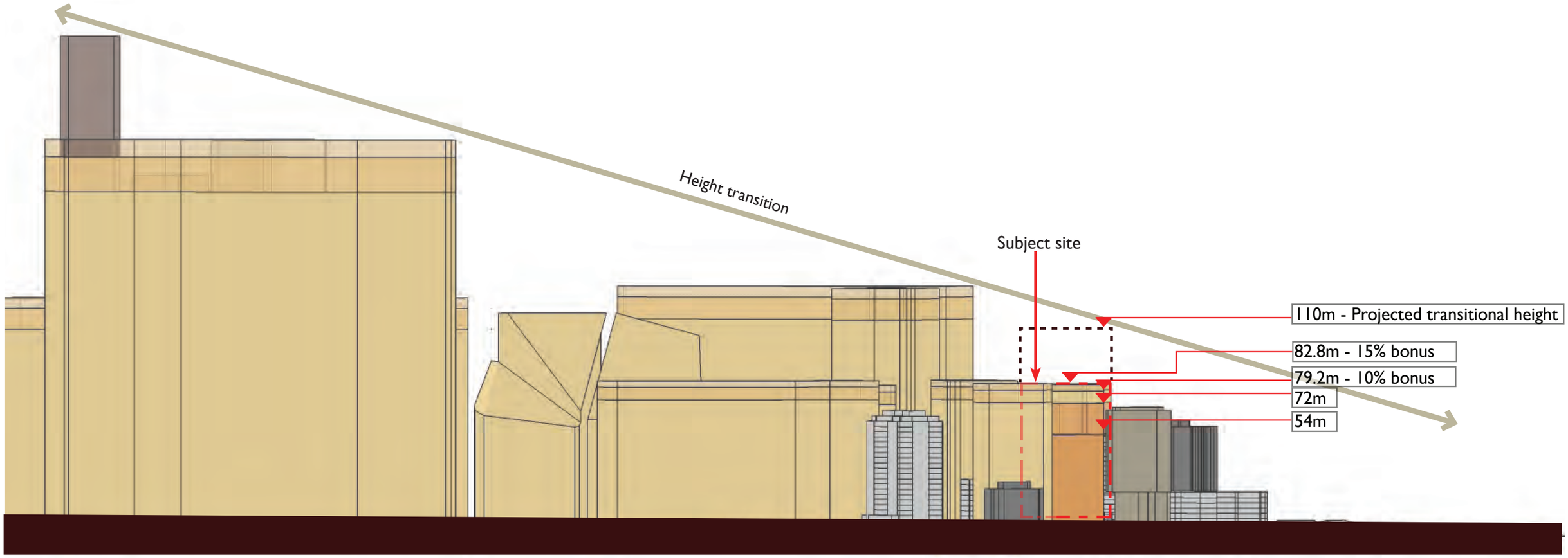


Street level view - Looking towards north along Wigram Street



Bird's eye view from south east towards north west

Subject site
Heights on subject site
LEP height of surrounding sites
Additional 10% above LEP height
Additional 15% above LEP height
Existing buildings
Approvals
DA proposal under assessment
Gateway proposal - Aspire Tower (300m)



Section looking from south towards north

Key

- Subject site
- Heights on subject site
- LEP height of surrounding sites
- Additional 10% above LEP height
- Additional 15% above LEP height
- Existing buildings
- Approvals
- DA proposal under assessment
- Gateway proposal - Aspire Tower (300m)

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3. Local Context

3.1. LOCAL CHARACTER

In understanding the local context, GMU has conducted an extensive site visit, photographic documentation and desk top review of the applicable controls in both current and draft form. The following is a summary of the existing local character in the immediacy of the subject site. A summary of applicable controls is also provided in subsequent pages.

As shown on the images adjacent, the local context is characterised by an eclectic mix of buildings of varying heights, styles and age. It can be said that the area is in transition as many new structures have been built in the immediate vicinity in recent years. Examples of this are at 111 Wigram Street and at 4 Charles Street. Heights along Hassall Street across the subject site and along both sides of the street to the east vary from single storey heritage cottages to 17 storey residential flat buildings, an example of which is located immediately to the east of the subject site at 26-30 Hassall Street. These height variations are typical throughout the area. Older and heritage sites are often characterized by lower built form centered on the lot or with setbacks to the street where more recent buildings present a podium form to the edge of the street with a street wall height ranging between 6-7 storeys. This built form tapers down significantly toward the east along the northern footpath of Hassall Street due to the existing school grounds at the end of the block. The predominant built form for that section of the street consists mainly of strongly defined street wall heights of 6-7 storeys with activated ground floor uses and car park entry points.

The built form to the west of the subject site along Hassall Street changes from the perimeter wall model where the existing residential building immediately adjacent to the western boundary sets back from all street frontages creating a 'tower in a park' setting with medium to mature vegetation defining the edge of the site. The site immediately across this property to the south follows Council's preferred built form scenario of a street wall to the edge of the street with a height of 7 storeys. GMU understands that the site on the south-western corner of the Hassall and Wigram Street intersection is subject to a DA which is likely to follow the currently applicable built form controls. The general landscape and public domain quality of Hassall Street is very poor with little in the form of mature street plantings, ground covers, pedestrian amenities or public domain improvements.

Built form and streetscape along Wigram Street (south of subject site):

Recent development 111 Wigram Street - 6 storeys street wall and up to 9 storeys above

Heritage cottage on Wigram Street

View along Wigram Street axis from the south towards the site

Built form and streetscape along Hassall Street (south and west of subject site):

New buildings to be constructed

26-30 Hassall Street - 17 storey buidling to the east of subject site presenting a blank wall toward the site

Heritage cottage (non significant and subject to redevelopment - DA under assessment)

Deloitte Building at 60 Hassall Street

20 storey building at the southern cnr Hassall and Charles St

18 storey building at the northern cnr Hassall and Charles St

Hassall Street looking west (subject site on the right)

The character along Macquarie Street to the west of Charles Street is characterized by a number of older and low density buildings that form part of the Parramatta Public School. To the east of Charles Street are a number of sites that vary in height and built form configuration. The buildings along both footpaths at the western end of the subject block, are commercial/retail facilities built to the edge of the street. The existing building across from the subject site is a residential flat building that sets back from the edge of the street with a tower form of approximately 8 storeys in height. The typology of this building is reminiscent of 1960-70's architecture with strongly accentuated external balconies. Other properties to the east are characterised by lower scale development including the school grounds on the southern footpath at the end of the block. These sites are considered to have significant redevelopment potential; however, their likely availability for redevelopment depends on changes to the legislation regarding the need to maintain or relocate school grounds near or within major centres. The landscape character along this street has a better presence along both footpaths with medium to mature trees lining the school grounds and a number of street trees along both footpaths toward the intersection with Charles Street.

The character along Wigram Street, which terminates in an axis on the subject site also has a mixed character where the predominant scale is lower density development with the exception of recent development taking place north of Parkes Street. This street has a poor landscape character and it is in need of general public amenity upgrades.

Character of Macquarie Street:

Infrastructure building (9-10 storeys)

Macquarie Street streetscape and built form - view from east - subject site on the left

9 storey residential building to the north of the subject site on Macquarie Street

Views from the east:

Build form seen from Thomas Park along Hassal Street

Build form and streetscape seen from Thomas Park along Macquarie Street

Build form and streetscape along Macquarie Street

Built form surrounding the subject site:

9 storey residential building on the south-western corner of the site

3 storey walk up building between taller element on the western boundary with a 13 storey commercial building behind facing Charles Street

Recently developed 15 storey mixed use building - western boundary, fronting Charles Street

Blank wall along the south-eastern edge of the site

Buildings fronting Hassall Street seen from the northern side of the subject site

3.2. APPLICABLE CONTROLS (LEP AND DCP)

In determining an appropriate height for the subject site, the applicable controls provide a starting point in order to understand Council's vision and desired future character for the centre.

The most relevant LEP controls affecting the built form on the site are:

- FSR of 6:1 and height of 54m

The main DCP controls for the subject site include:

- Street wall height – up to approx. 7 storeys (18-22m) to Macquarie Street and a setback above the street wall of 6-8m;
- Front setback of 2-3m to Hassall Street;
- Side setback above 36m of 9m;
- Special rear setback of 6m running east to west in the middle of site; however this is not applicable as the site is amalgamated.

Sites surrounding the subject site include the following general LEP controls:

- Sites to the west:
  - Up to 72m height;
  - Competition process is required on sites seeking height above 55m;
  - FSR applicable is 6:1.
- Sites to the south:
  - Up to 72m height and 54m to the south-east;
  - Competition process is required on sites seeking height above 55m;
  - FSR applicable is 8:1 to the south-west, 6:1 across the street to the south and 4:1 to the sites towards south-east.
- Sites to the east:
  - Up to 54m height;
  - FSR applicable is 6:1 and 4:1 further to the east.
- Sites to the north:
  - Up to 72m height on sites to north-west and 54m to the north-east;
  - FSR applicable is 6:1 to the block across the street with 72 and 54m height and 4:1 to the sites to north-east with height of 54m;
  - Competition process is required on sites seeking height above 55m.

The sites which provide design excellence, as demonstrated through a competition process, are allowed 10% design excellence bonus above the LEP FSR and height controls.

Subject site

Height hierarchy

Continuous built edge to street alignment

Continuous built edge setback (2-3m)

Setback above 18-22m (minimum 6m)

Setback above 26-30m (minimum 8m)

Special setback (minimum 6m from rear boundary)

Setback above 36-54m (minimum 9m)

Setback above 54-72m (minimum 12m)

Corner emphasis

FSR 4:1 54m 17 storeys — Indication of applicable height in metres and storeys and applicable FSR

3.3. DRAFT CONTROLS (LEP AND DCP)

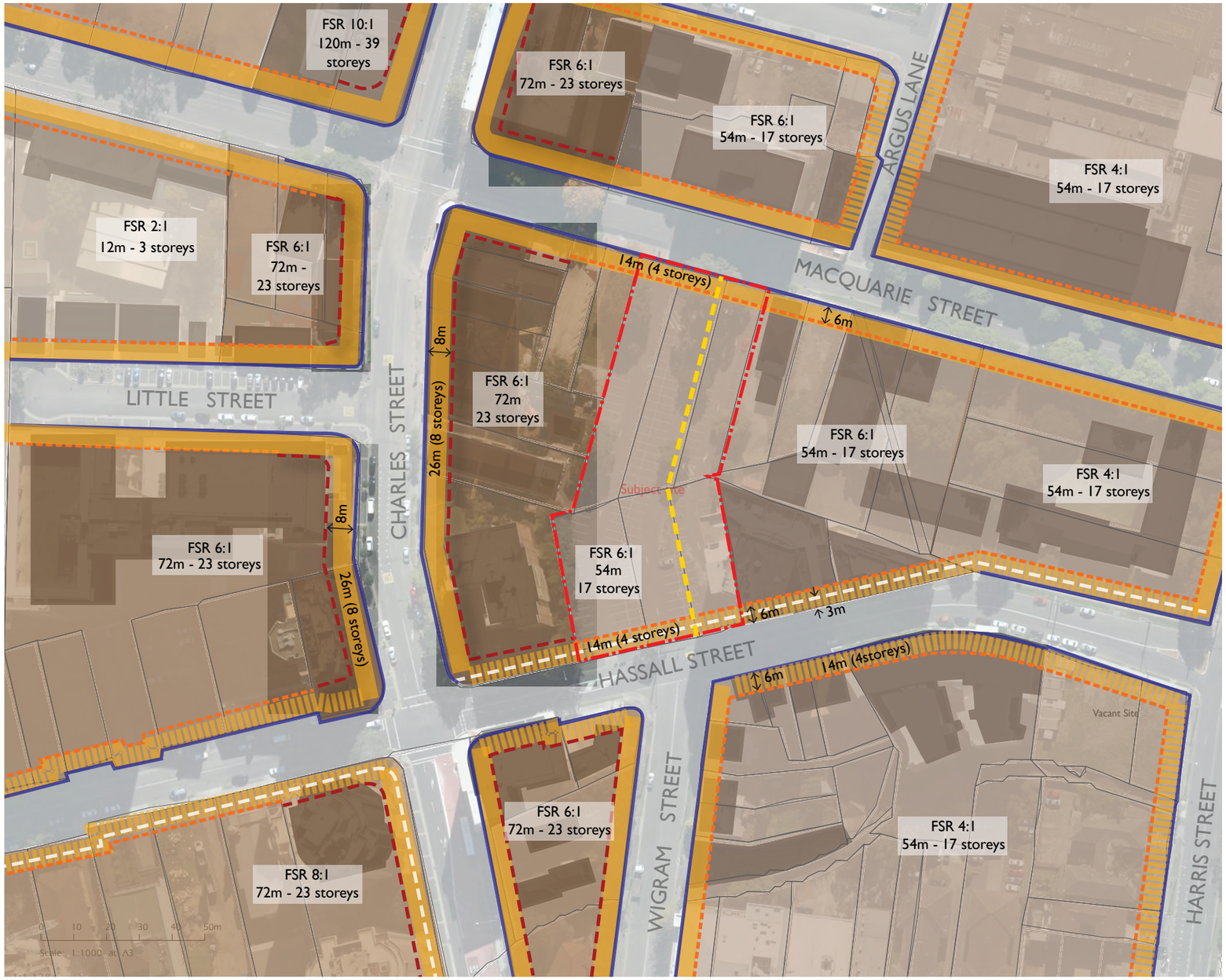
The Draft LEP which primarily seeks to amalgamate the City Centre and Parramatta LEPs has been placed on public exhibition and is therefore a matter for consideration under the Act.

The Draft DCP has also been placed on public exhibition and although the Draft DCP controls are not yet adopted and have no statutory weight, they provide an understanding of Council's vision and desired future character for the centre. The most relevant Draft LEP and DCP controls affecting the built form on the site are as follows:

- The main changes within the Draft LEP from the current LEP are as follows:
- The design excellence bonus has been increased from 10% to 15%.

The draft DCP includes additional and updated provisions for the Parramatta City Centre. The main Draft DCP controls which apply to the subject site include:

- Front setback of 3m to Hassall Street (changed from 2-3m in the current DCP) and 0m to Macquarie Street.
- A 4 Storey / 14m 'South City Centre' frontage with built form above set back 6m behind this.
- Building separation – 6m side setbacks and 12m rear setbacks are now required for building heights over 54m metres, with a zero-lot setback permitted for buildings of 26m in height in both cases. This compares to the stepped side and rear setback requirements of the current DCP.
- A new pedestrian link or arcade through the site.
- No awnings are required.
- Additional vehicle entries are not permitted from Macquarie Street.
- Above ground car parking should be fully sleeved with active uses facing Macquarie Street and sleeved at ground level with screened carparking above facing Hassall Street.



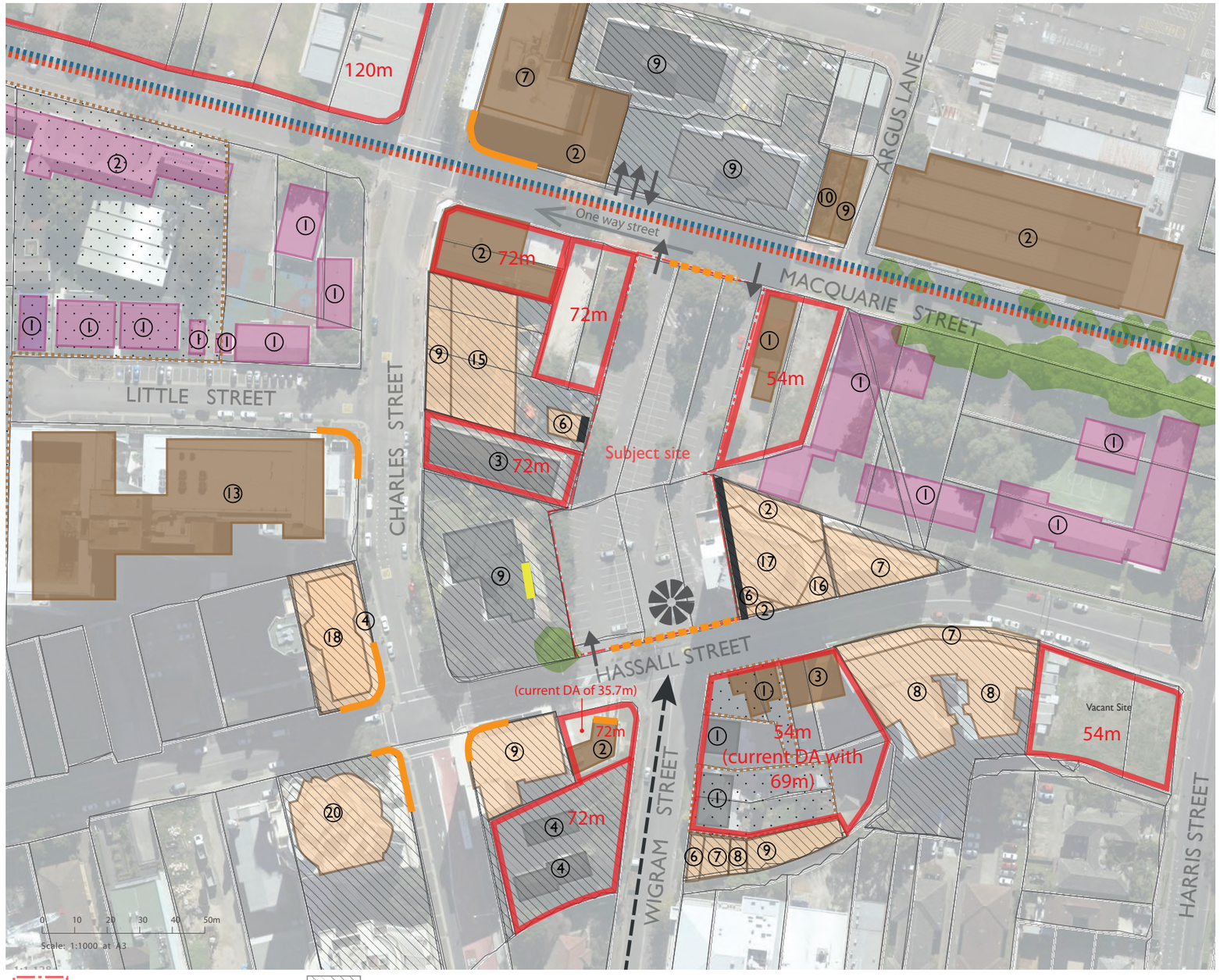
3.4. CONTEXT ANALYSIS AND OPPORTUNITIES

As part of GMU's analysis of the local context, we have documented a number of site characteristics and opportunities for the area. The characteristics for the context are:

- Streetscape to the north:
  - Existing lower scale development to the east including school grounds present high potential for re-development.
  - Macquarie Street is a one way street with traffic from east to west, providing the opportunity for residential vehicular access from a quiet and less trafficked street.
  - The existing landscape character presents the opportunity for further public domain improvements to complement the existing softer and intimate scale of the street.
  - The development to the west along Macquarie Street is of a lower scale at present however it provides an opportunity for redevelopment in the future to the height of 72m, which will help to consolidate the precinct.
  - Sites to the north-west have development potential with allowable heights of up to 120m. These set a datum for built form transitioning down to the periphery of the precinct to the east including the subject site.

- Surrounding built form to the south:
  - The existing developments along Hassall Street are larger in scale than the existing development to the north along Macquarie Street. They include heights of 20-17storeys with some smaller scale 9-7 storeys areas.
  - A new DA has been submitted and is seeking determination by the JRPP on the south-eastern corner of Hassall and Wigram Streets. This includes a height of up to 69m, or approx. 22 storeys.
  - A new DA has also been submitted and is seeking determination by the JRPP at 21 Hassall Street, which is on the south-western corner of Hassall and Wigram Streets. This includes a height of up to 10 storeys and a a street wall height of 7 storeys along Hassall Street.
  - The next development site to the south-west of Wigram Street has a development opportunity to the height of 72m (plus a further potential 7.2-10.8m subject to the design excellence bonus of 10-15%).

- Surrounding built form to the east:
  - The site to the north east includes an existing single storey development however provides an opportunity for development of at least 54m.
  - On the southern end of the eastern boundary is a 17 storey existing building which presents a blank wall to the subject site, which provides flexibility in terms of built form adhering to the boundary on the subject site.
  - On the southern end of the eastern boundary is a 17 storey existing building which provides a distinctive street wall treatment of 2 storeys to the street edge with a 6-storey street wall height above. This provides a number of street wall height alignments at the street level.



- Surrounding built form to the west:
  - The sites to the west vary in height from a 15 storey recent development on the second site from the north of the block through a 3 storey building in the middle and a 9 storey strata development on the south-western corner of the block.
  - The strata development may have less opportunity for development; however with an appropriate uplift it may provide an opportunity for redevelopment of at least 72m (plus potential 7.2-10.8m subject to design excellence bonus 10-15%).
  - The existing 9 storey apartment building on the corner of Hassall and Charles Street has private open space directed towards the subject site, which needs to be taken into account when determining setbacks and separation on the subject site.

GENERAL CONTEXT OPPORTUNITIES:

- GMU's analysis has documented a number of opportunities for the general context. These include to:
- Create a continued activated edge from the new Deloitte building at the western end towards the subject site as Hassall Street is a two-way street with many active uses along the ground floor.
- Continue the precedent of the majority of the remaining existing built form at the street level which does not provide the 2-3m setback.
- Consolidate a strong precedent for high density and high-rise development within the precinct as an extension of the developments heights along Hassall Street, which are larger in scale including heights of 20-17storeys.
- Eradicate vacant and derelict lots by complementing the new DA that has been submitted (seeking determination by the JRPP) on the south-eastern corner of Hassall and Wigram Streets, which includes a height of up to 69m, which would be approx. 22 storeys.
- Terminate the visual axis from the south along Wigram Street and provide an emphasis along the southern edge of the subject site, which could result in a taller form as a termination to the view from the south.
- Provide architectural interest with a well-designed facade treatment and active ground floor as the southern façade will be visible from a distance and on approach from south.
- Present a well-articulated and artistic design for the vehicle entry for the public carpark.
- Complement the proposed podium height of the proposed development at 21 Hassall Street as well as the existing predominat street wall height to the east of the site along both the northern and the southern footpaths. A consistient street wall height (6-7 storeys) is very predominant for the eastern segement of the street, which is the built form response sought by the current controls.
- Complement the development potential of the property further to the south-west of Wigram Street which is allowed a height of 72m (plus potential 7.2-10.8m subject to design excellence bonus 10-15%).

THE SUBJECT SITE

GMU's analysis has documented a number of site characteristics for the subject site. These are as follows:

- The site's area is approx. 5170.4sqm.
- The dimensions include 40.255m along the Macquarie Street frontage and 51.69m along Hassall Street frontage. The length of the site along the eastern edge is approximately 80m and 100m along the western edge.
- The slope of the site is approximately 2m from RL6.0 in the north to RL8.0 in the south.
- The site is subject to flooding. The 100 year ARI flood level estimated for Macquarie Street is RL 6.16 and the PMF (Probable Maximum Flood) level has been estimated to be RL 9.74. This results in a level of RL 6.66 to be applied to any entries within the development (this height includes a freeboard of 500mm).

GMU's analysis has documented a number of opportunities for the subject site. These include to:

- Contribute to the creation of an interesting skyline for the Parramatta CBD.
- Capture district views.
- Provide height transition to the edges of the centre based on new proposed heights at the centre of the CBD.
- Utilise the depth of the site to conceal bulk and scale by presenting slender profiles to the street frontages.
- Reduce overshadowing by the appropriate distribution of height through the site.
- Screen the carpark with an artistic and or innovative design and for active street frontages.
- Abut to the adjacent site to the east up to the 17th level and to provide a continuation of the street wall height to Hassall Street.
- Terminate the visual axis from the south along Wigram Street and provide emphasis along the southern edge of the subject site.
- Provide interesting facade treatments and design to respond to the view from the south.
- Provide a residential pedestrian entry along the northern edge which will activate the street and a vehicle entry for the residential part of development.
- Provide a public carpark entry along the southern frontage on Hassall Street according to the traffic analysis as discussed with Parramatta City Council.
- Integrate the design of the tower to the base of the podium in a way that allows for the tower to read as a taller more elegant point form element.
- Provide a pedestrian cross link through the site.

Based on the above, GMU have produced a number of strategies to examine different built form scenarios for the site. These are discussed in more detail in the following chapter of this report.

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4. STRATEGIES

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Based on the findings of the previous chapters, GMU has produced a number of strategies to examine different built form scenarios for the site. These include a number of variations that attempt to capture the various opportunities for the site and explore different responses to the existing built form in the immediate surroundings of the site. These options do not attempt to be prescriptive, but their aim is to provide a number of options for the site where a combination or a reinterpretation of some of the options may develop into yet a different solution or set of opportunities for the site.

These strategies include a regular form where the tower follows an archetypal rectangular or T-shape form normal to the edges of the site. The second strategy attempts a more sculptural built form with angular edges to create architectural interest and to avoid the perception of bulk at the edges of the site. The final strategy explores free form towers that partially hide the bulk toward the centre of the site and have additional architectural interest derived from free-form floor plates.

The heights proposed on the subject site generally include the applicable 54m LEP height, 72m height, 10% increase, which results in the 79.2m height and 15% increase which results in the 82.8m height. This chapter inlcudes the options in their preliminary form and further design development is documented in the following chapter with the benefit of 3D modelling and testing. The resulting built forms are tested and discussed in more detail in Chapter 5.

STRATEGY 1 - REGULAR FORM

The strategy includes two towers of regular shape, which provide a slim profile and setbacks to the east and west boundaries. The towers have approximately 1000sqm of footprint, which results in approximately 750sqm of GFA per level for each of the towers (the GFA efficiency assumed for residential towers is 75%).

The heights proposed are 30 storeys on the southern tower and 29 storeys for the northern tower. The podium is setback by 3m to the western boundary to provide a landscape setback, a possibility for a pedestrian cross link at ground level and natural ventilation to the carpark. A 2-storey height along the south-western and along the eastern boundary is provided for transition and extended setback to the residential uses on the sites next door. The podium is then set back an additional 3m up to the 6th storey to provide better built form transition to the residential development to the west at No. 2 Charles Street. A two storey street wall height is applied to Hassall Street as a continuation from the adjacent site to the east. There is approx. 2m setback above second level and additional 4 storeys are provided above also matching the street wall treatment of the existing development to the east. The towers are then setback by approx. 6-9m from the edge of podium. These setback options are tested in more detail in the following chapter where the location for the tower is brought closer to the edge of the podium as part of the futher development on this option. Final options for the configuration of the podium need to take into account the operational requirements of the car park as well as an appropriate built form response to the adjacent development and the streetscape.

This strategy assumes approximately 25% bonus above the height of 72m, which is the LEP applicable height on the sites next to the subject site. This results in a total height on one tower of approximately 91m and 88m on the other.

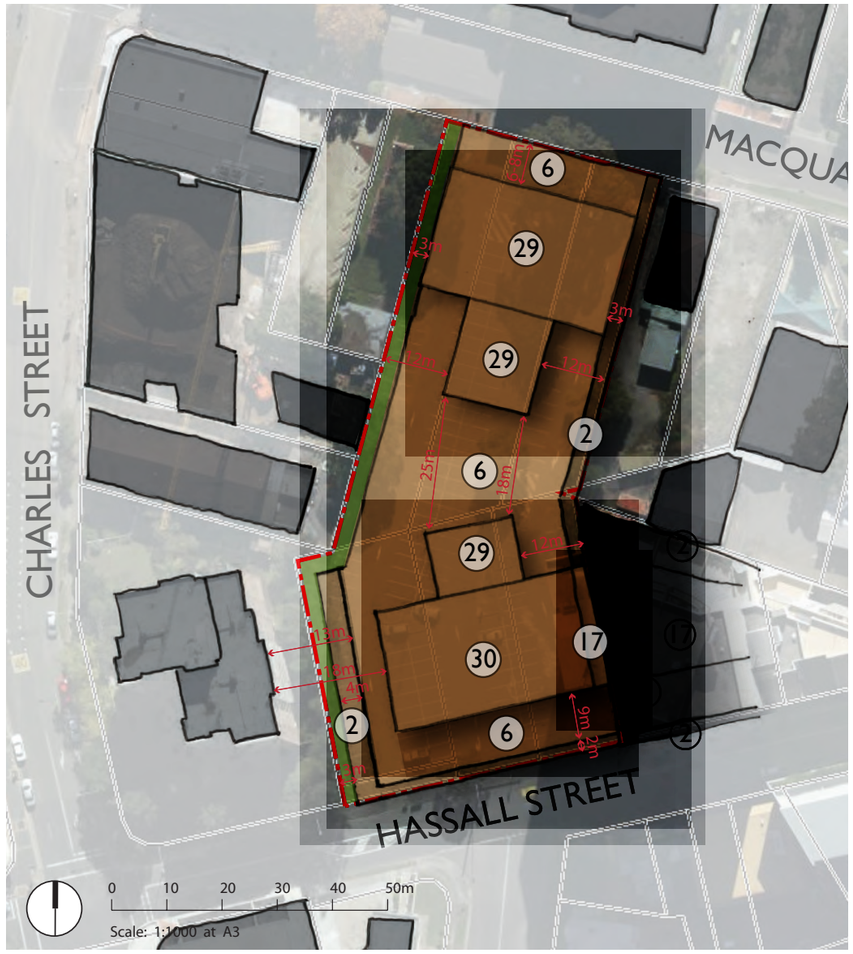
It is assumed that the FSR in a range of 6-6.6:1 for the proposed tower footprint can be achieved within this height.

Cons:

- Proposed forms may not provide interesting profile to the skyline.
- Better transition and separation is provided to adjacent residential development to the west above the second storey; however, it substantial affects the efficiency of the parking layout.
- The proposed setback to the car park footprint will not achieve 700 parking spaces over 6 levels of parking.
- Limited outlook toward north and south for each of the towers.
- Privacy and separation managed through blank walls to east and west that will require architectural interest.
- A reduction in the setback to the carpark levels would improve the efficiency of the layout and minimise the requirement to increase podium height; however, it may lead to a lack of built form transition and adequate separation to the residential building to the east and west if not addressed appropriately.
- A relaxation of activation to the first floor along Hassall Street above the ground floor results in a more efficient car park layout; however, it also results in a lack of continuity from the existing activated street along Hassall St.

Pros:

- Artistic screening to all levels of the car park elevations with potential activation and 'sleeving' to the lower two levels along Macquarie Street will add architectural interest and softening to all elevations.
- A relaxation of activation to the first floor along Hassall Street above the ground floor results in a more efficient car park layout.
- A reduction in the setback to the carpark levels would improve the efficiency of the layout and minimise requirement for increased podium heights.
- The strategy assumes two separate towers, which are designed to divide the bulk into separate slimer and vertical elements.
- The proposed podium is 6 storeys high with a 3m landscape setback generally along the western boundary and to the northern half of the eastern boundary which also provides opportunity for natural ventilation to the carpark.
- A pedestrian cross link can be achieved along the western boundary.
- The total tower heights reach up to 30 storeys, which assumes 20% bonus to the height of 72m, which is the LEP applicable height on the sites next to the subject site.
- It is assumed that an FSR ranging between 6-6.6:1 for the proposed footprints can be achieved within this height.



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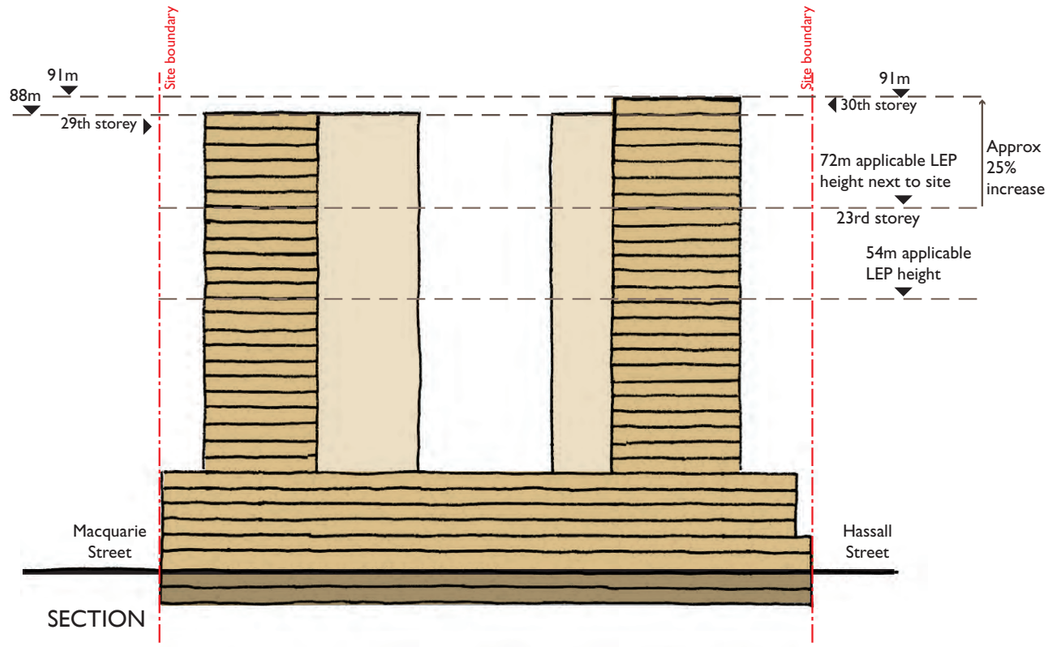

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STRATEGY 2 - SCULPTED EDGES

The strategy assumes two separate towers, which are designed to divide the bulk of the form into separate slim and vertical elements. Each element accentuates the verticality of the form in a different way when viewed from different angles providing an interesting massing all around and minimising the potential bulk. The northern tower has approximately 820sqm footprint, which results in approximately 615sqm of GFA per level and the southern tower has approximately 1200sqm footprint, which results in approximately 900sqm of GFA per level (the GFA efficiency assumed for residential towers is 75%).

The proposed podium is 6 storeys high with a 3m landscape setback to the western boundary and to the northern half of the eastern boundary which also provides opportunity for natural ventilation to the carpark. The tower separations to the residential building to the west range between 13 to 22m.

The upper tower heights reach between 28 - 29 storeys, which assume a 20% bonus to the height of 72m, which is the LEP applicable height on the sites next to the subject site. It is assumed that an FSR within a range of 6-6.6:1 can be achieved for the proposed tower footprints within this height. These setback options are tested in more detail in the following chapter where the location for the tower is brought closer to the edge of the podium along Hassall Street as part of the futher development on this option. Final options for the configuration of the podium need to take into account the operational requirements of the car park as well as an appropriate built form response to the adjacent development and the streetscape.

Cons:

- A 6 storey built form transition to the adjacent residential property to the west in the form of a continuous 3m setback along the western boundary allows for a less gradual transition to that boundary.

Pros:

- Proposed forms provide interesting profile to the skyline.
- Privacy is achieved trough redirection of outlooks and views away from surrounding properties.
- Tower separation above podium is provided to adjacent residential development to the west ranging between 13 and 22m.
- This podium option results in a more efficient car parking layout which is likely to achieve the required 700 parking spaces over the proposed 6 levels of podium.
- 'Sleeving' and activation to the two lower levels along Macquarie Street is achieved through the introduction of uses to one level above the ground floor.
- A relaxation of activation above the ground floor along Hassall Street results in a more efficient car park layout.
- This strategy results in more interesting tower forms with potential for design excellence and innovative design.

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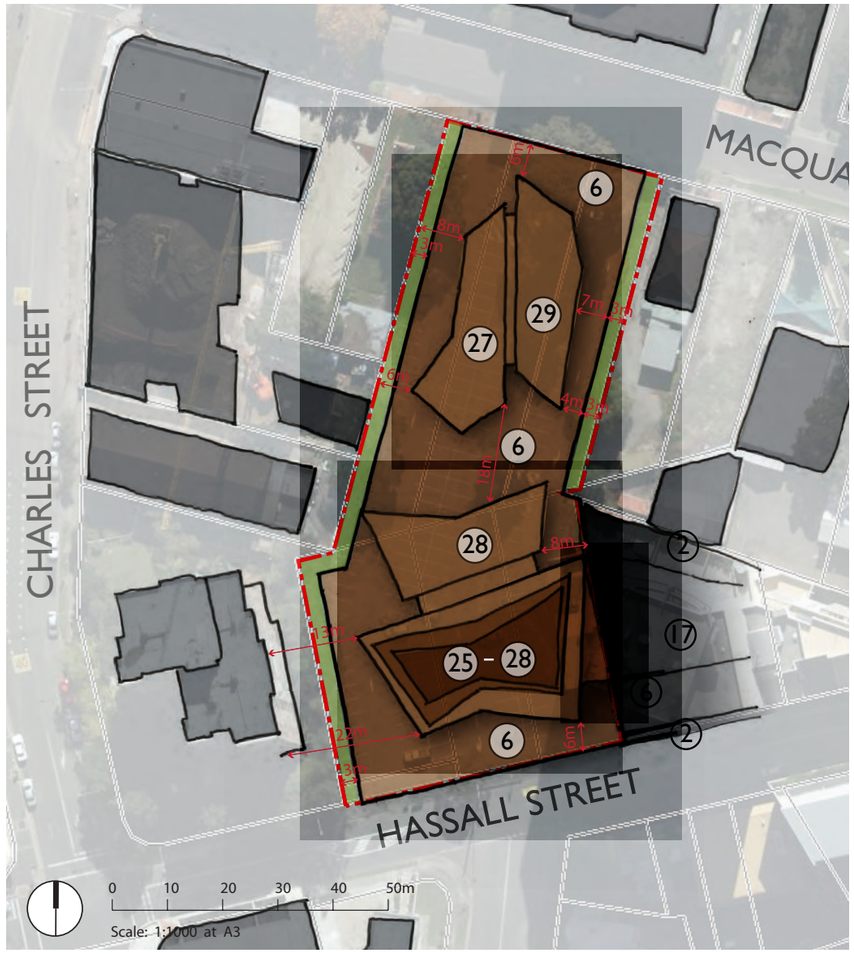

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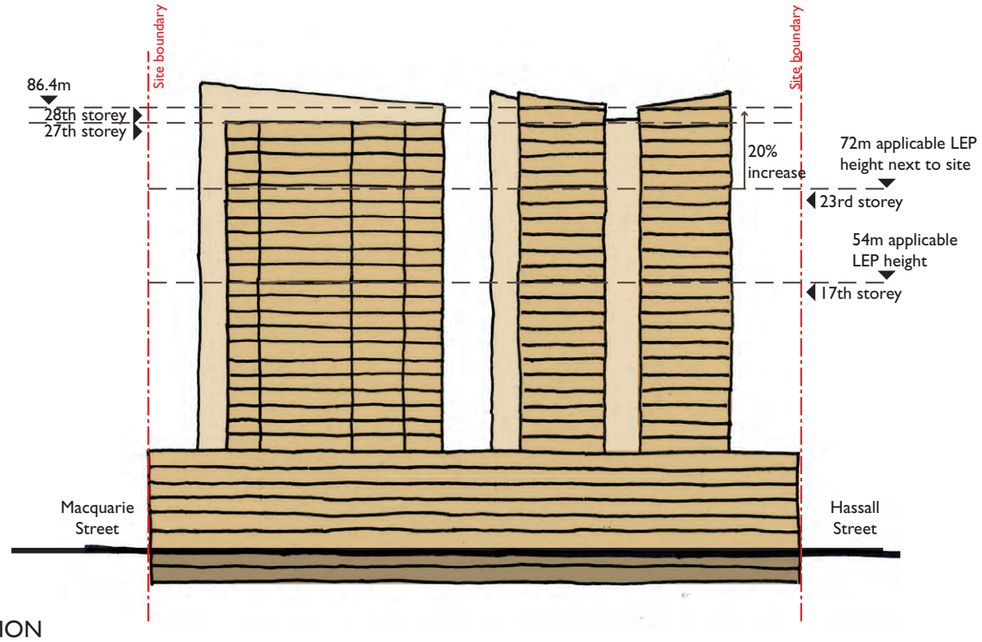

STRATEGY 3 - 'BUTTERFLY WINGS' - FREE FORM

This strategy includes curvilinear and rectangular elements encompassing a three-tower composition with free form shapes. The northern tower has approximately 555sqm footprint, which results in approximately 400sqm of GFA per level, the middle tower has approximately 688sqm footprint, which results in approximately 516sqm of GFA and the southern tower has approximately 775sqm footprint, which results in approximately 581sqm of GFA per level (the GFA efficiency assumed for residential towers is 75%).

The height of the tower is 26 storeys on the northern and southern end and the middle tower is lowered to 23 storeys. The middle tower reaches the height of 72m, which is the LEP applicable height on the sites next to the subject site. The two taller towers assume a 10% bonus in height.

The podium heights respond to the existing street wall heights on Hassall Street and the DCP applicable street wall height to Macquarie Street. The overall podium height is 6 storeys with a zero lot setback to the southern half of the eastern boundary to take advantage of a similar configuration for the neighbouring development to the east. This podium configuration also presents wider setbacks to the western boundary approximately of a minimum of 6m to provide better separation distances to the adjacent residential building. Final options for the configuration of the podium need to take into account the operational requirements of the car park as well as an appropriate built form response to the adjacent development and the streetscape.

It is assumed that the proposed tower footprint can achieve an FSR in a range of 6-6.6:1 within the proposed height.

Cons:

- Tower configuration can result in some privacy and separation concerns as layouts depend on some outlooks directly toward the side boundaries.
- Less efficient car park layouts due to increased transition and separation distances to adjacent residential development to the west which will not achieve the required 700 parking spaces over the proposed 6 levels.

Pros:

- Proposed built form delivers interesting tower forms with the majority of the massing distributed toward the centre of the site.
- Overall tower forms have the potential for design excellence and innovative design.
- Interesting silhouettes are created that help mitigate bulk.
- Free form maximises views and outlooks in all directions.

The strategies presented in this chapter will be tested in more detail against their achievable Gross Floor Area (GFA) and height and discussed in more detail in the following chapter.

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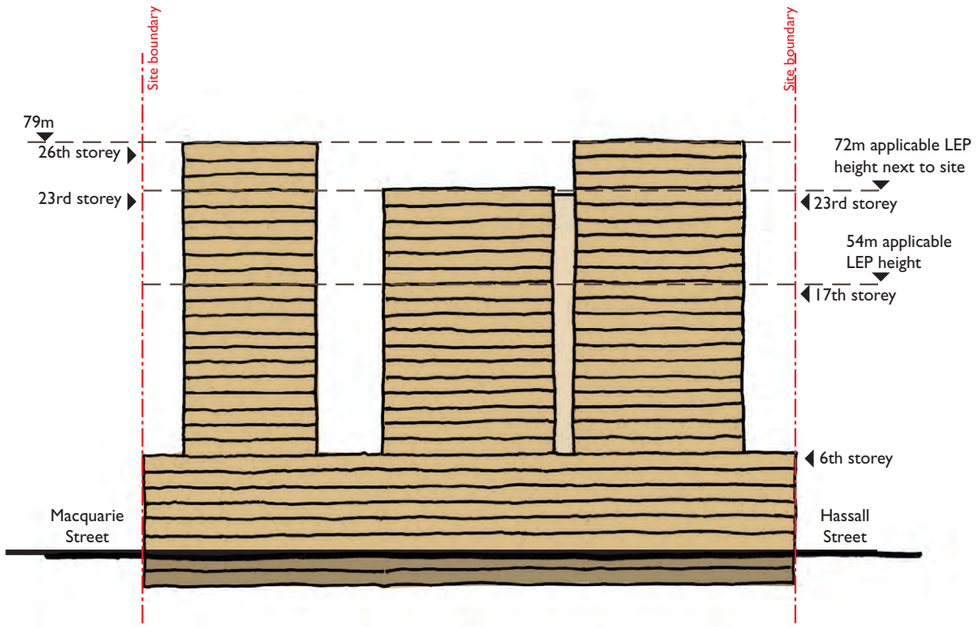

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5. Testing of Strategies

TESTING OF STRATEGIES

The strategies presented in the previous chapter are tested in more detail within this chapter and further refinements to the concepts have been applied in order to arrive at improved built form outcomes, such as the relocation of towers closer to the podium line as possible variations to the final design. Placing the towers closer to the street frontage in some of the options creates the opportunity to relate better to the street and to create a more elegant tower form that disguises the bulk of the carpark as part of the tower form. The proposed tower shape can be carried through to the lower levels in the podium as a single sculptural element. Final options for the configuration of the podium need to take into account the operational requirements of the car park as well as an appropriate built form response to the adjacent development and to the streetscape.

The following detail testing of the strategies discussed in the previous chapter also includes the calculation of the achievable Gross Floor Area (GFA) and related height. These were tested with the assistance of 3D modelling and the production of typical floor layouts. The FSRs include the applicable FSR of 6:1 exploring the 10% and 15% design excellence bonuses above the applicable FSR, which results in FSRs of 6.6:1 and 6.9:1.

A podium height of 6 storeys which was also also discussed in the previous chapter has been considered as a departure point due to the operational requirements of the carpark. However, this height also compliments the predominant podium heights along the existing streetscape, especially along Hassall Street. There are a number of existing and proposed buildings with a street wall height of 6 or 7 storeys along Hassall Street. The existing building located directly to the south-east of the subject site includes a 2 storey street wall with a 6 storey overall podium height which is an important presedent in the immediate context of the subject site and; therefore, it was taken into account in each of the following options.

A street wall height is not as clearly discernible along Macquarie Street as it is along Hassall Street; therefore, it is more difficult to ascertain an existing height datum along this frontage. The majority of lots along the southern side of Macquarie Street are occupied by the school grounds and the remainder of the sites are underdeveloped or vacant. There are many low scale buildings of 1-2 storeys with taller forms above, however these sites have great potential for redevelopment and they may change to a different street alignment and height in the future. On the northern side of Macquarie Street directly opposite the subject site are two tall built forms: a 9 storey residential building with a street setback and a switching station facility (approx.10 storeys) with no setback to the street. The closest recently developed built form with a podium height of 9 storeys is at Charles Street close to the corner with Macquarie Street.

These recent developments with greater street wall heights along or near Macquarie Street and Parramatta Council's plans for the light rail along this street suggest reasonable opportunity for uplift along this street. A compliant building envelope under the current applicable DCP conrols at 6 storeys can be made to relate to the existing lower scale with bands of material or articulation for the first two levels. Other options include indentation, shadow gaps and or changes in the material treatments.

In developing the typical layouts shown on the following pages, GMU have taken into account the general principles of SEPP 65 and a 'best practice' approach. The proposed layouts attempt to achieve high level of internal amenity and outlook as well as well-articulated building envelopes and sculptural built forms. These are described on the following pages.

STRATEGY 1 - REGULAR FORM

The strategy includes two towers of regular shape which provide a slim profile and setbacks to the east and west boundaries. The towers have 802sqm of GFA per level for northern tower and 970sqm of GFA per level for southern tower.

The production of typical floor layouts shows that each typical level can achieve approximately 9 units for the northern tower and 8 units for the southern tower with a good range of sizes and unit mix. The northern tower can achieve approximately one 1-bedroom unit, seven 2-bedroom units and one 3-bedroom unit while the unit mix for the southern tower achieves approximately two 1-bedroom units and six 2-bedroom units. Units generally have outlooks to the north and south or to the public domain or to the internal communal open space. A good number of the units have corner configurations with an opportunity for dual aspect units and large unit sizes ranging between 56-100m² for the northern tower and 57-95m² for the southern tower.

In terms of height, this strategy assumes an approximate 25% bonus above 72m, which is the LEP applicable height on the sites to the west of the subject site. This results in a total height for one tower of approximately 91m (30 Storeys) and 85m (28storeys) on the other with a total FSR of 6.6:1. Two towers of equal height up to 91m result in an FSR of 6.9:1.

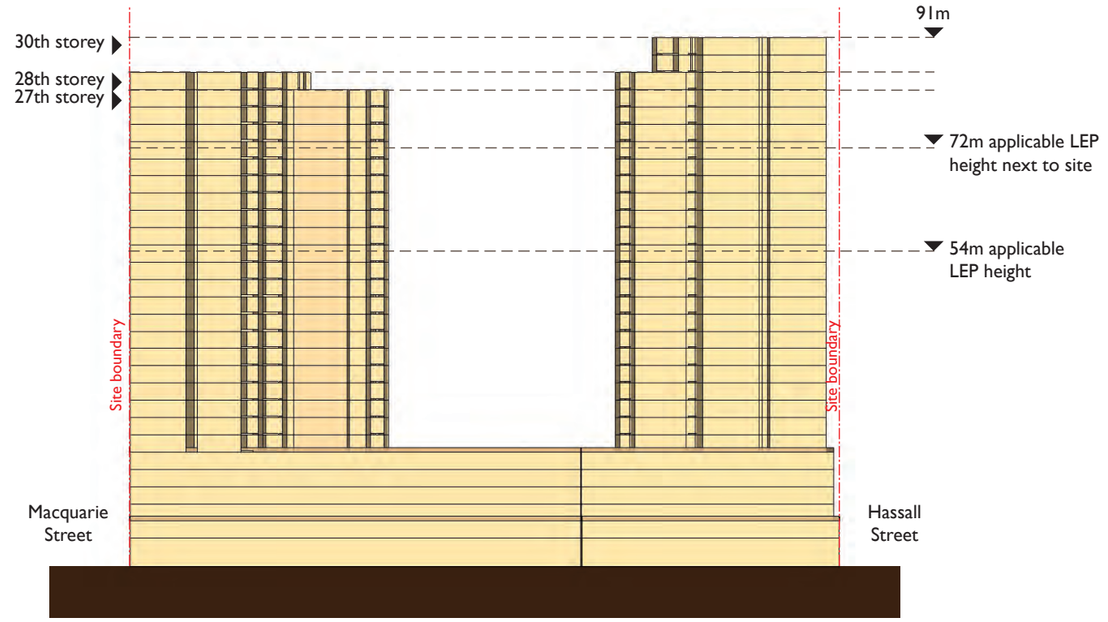
The proposed six storey podium along Hassall Street compliments the predominant podium heights along the existing streetscape, where there are a number of existing and proposed buildings with a street wall height of 6 or 7 storeys. The suggested compliant street wall height under the current applicable DCP controls at 6 storeys can be made to relate to the existing lower scale with bands of material or articulation for the first two levels including indentations, shadow gaps or changes in the facade treatments and materials.

One important outcome of the detailed testing is that the 3D modelling shows that a relaxation of the setback above the podium results in a better urban form. A nil setback allows for the tower to be seen in conjunction with the height of the podium resulting in a taller more slender proportion which also helps to conceal the bulk and scale of the podium. This also has the advantage of more accessible lobbies with more legible cores from the street edge.

Conclusion:

A compliant FSR (6.6:1) provides more articulated towers and adds architectural interest to the skyline profiles within justifiably increased heights, while additional FSR (up to 6.9:1) results in taller built forms of similar height to both streets.

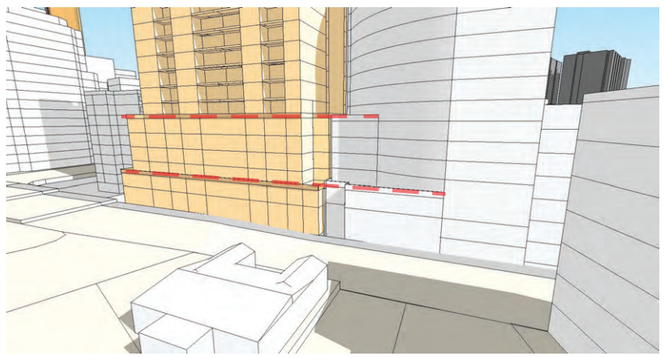
Strategy 1 - Regular Form - West Elevation



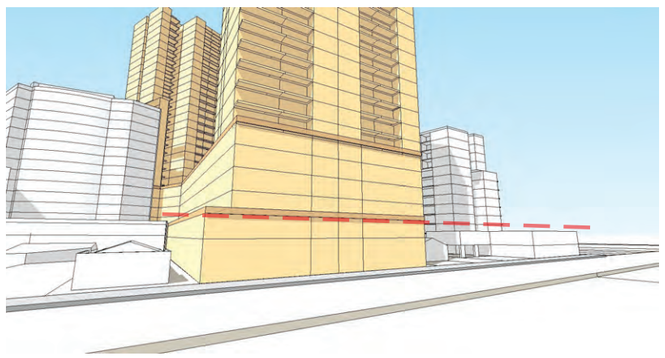
OPTION 1 - FSR 6.6:1
Maximum height: 30 storeys (91m)

OPTION 2 - FSR 6.9:1
Maximum height: 30 storeys (91m)

Strategy 1 - Regular Form - Street wall alignments



View to Hassall Street



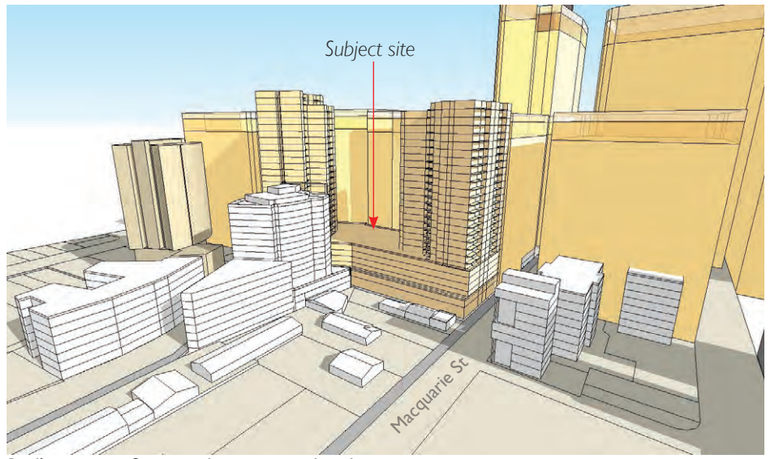
View to Macquarie Street

Strategy 1 - Regular Form

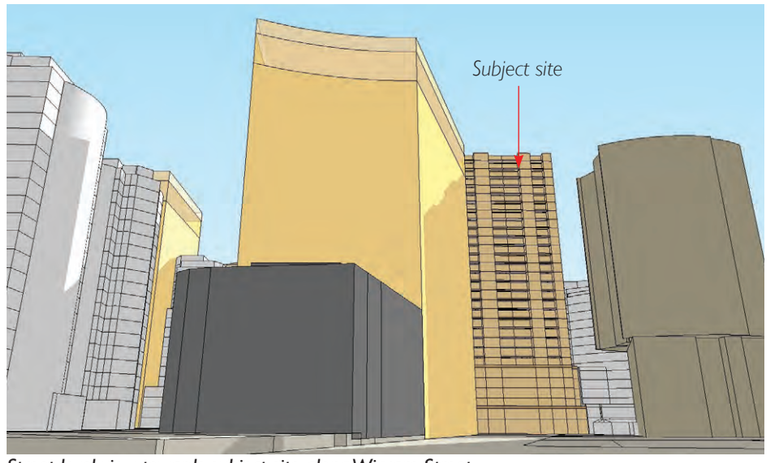
Typical tower layouts

Strategy 1 - Regular Form

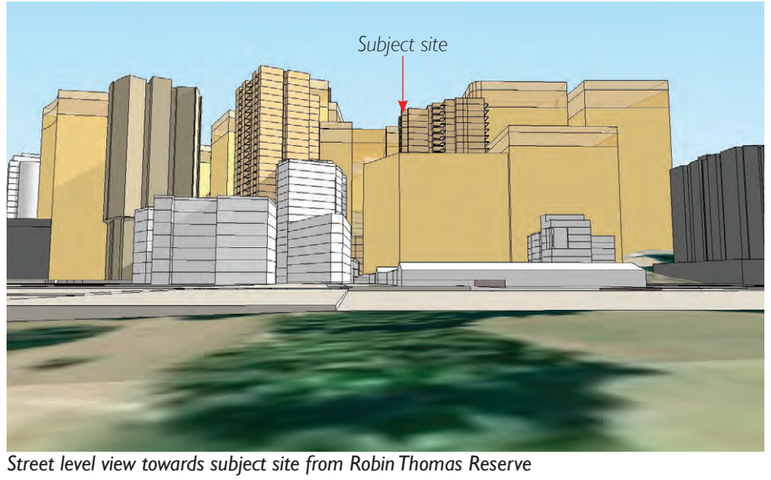
Option 1 - FSR 6.6:1



Bird's eye view from north east towards subject site

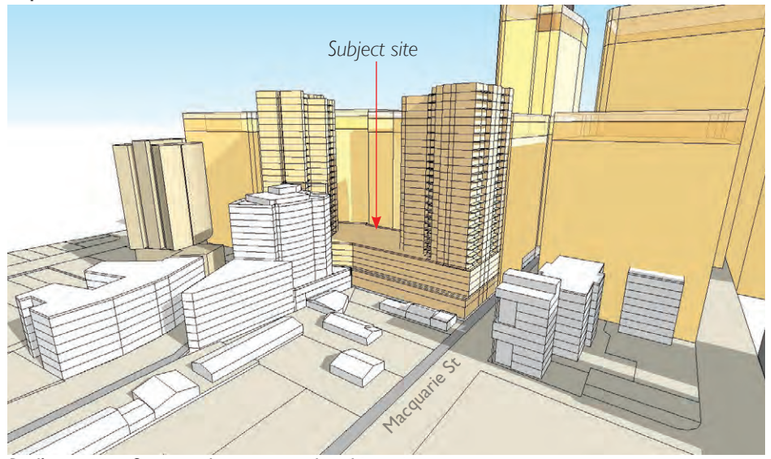


Street level view towards subject site along Wigram Street

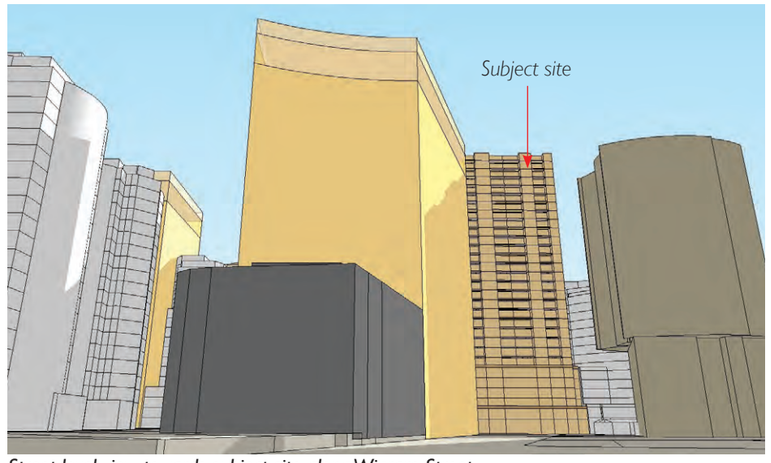


Street level view towards subject site from Robin Thomas Reserve

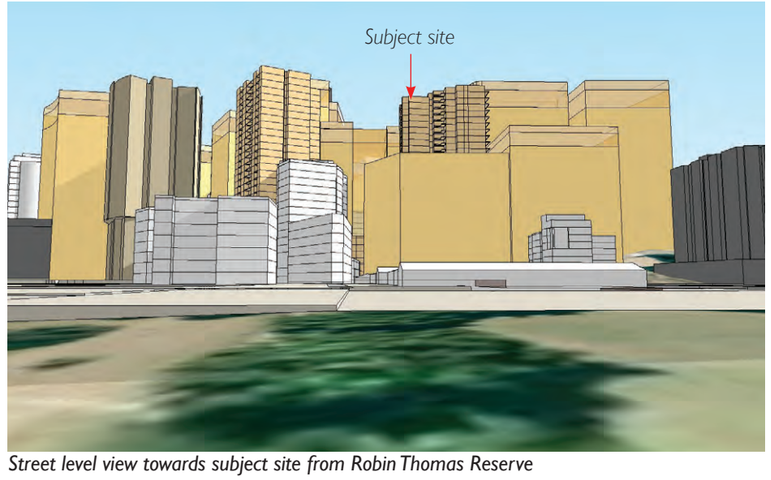
Option 2 - FSR 6.9:1



Bird's eye view from north east towards subject site



Street level view towards subject site along Wigram Street



Street level view towards subject site from Robin Thomas Reserve

STRATEGY 2 - SCULPTED EDGES

The strategy assumes two separate towers which are designed to divide the bulk of the form into separate slim and vertical elements. Angled elements accentuate verticality providing an interesting massing to all sides and minimising the potential bulk. The towers achieve 639sqm of GFA per level for northern tower and 940sqm of GFA per level for southern tower.

The typical floor layouts showed that each typical level can achieve approximately 6 units for the northern tower and 10 units for the southern tower with a good range of sizes and unit mix. The northern tower can achieve approximately five 2-bedroom units and one 3-bedroom unit. Units generally have outlooks in all directions however they are directed away from side boundaries. In general, areas for internal communal open space could be located towards the centre of the site between the two towers. A good number of the units have corner configurations with northern aspect and large unit sizes ranging between 74 to 128m² for the northern tower and 78-99m² for the southern tower.

In terms of height, this strategy assumes an approximate 25% bonus above 72m, which is the LEP applicable height on the sites to the west of the subject site. This results in a total height on one tower of approximately 91m (30 storeys) and 79m (26 storeys) on the other for a total FSR of 6.6:1. One tower at 91m (30 storeys) and the other at 85m (28 storeys) result in an FSR of 6.9:1.

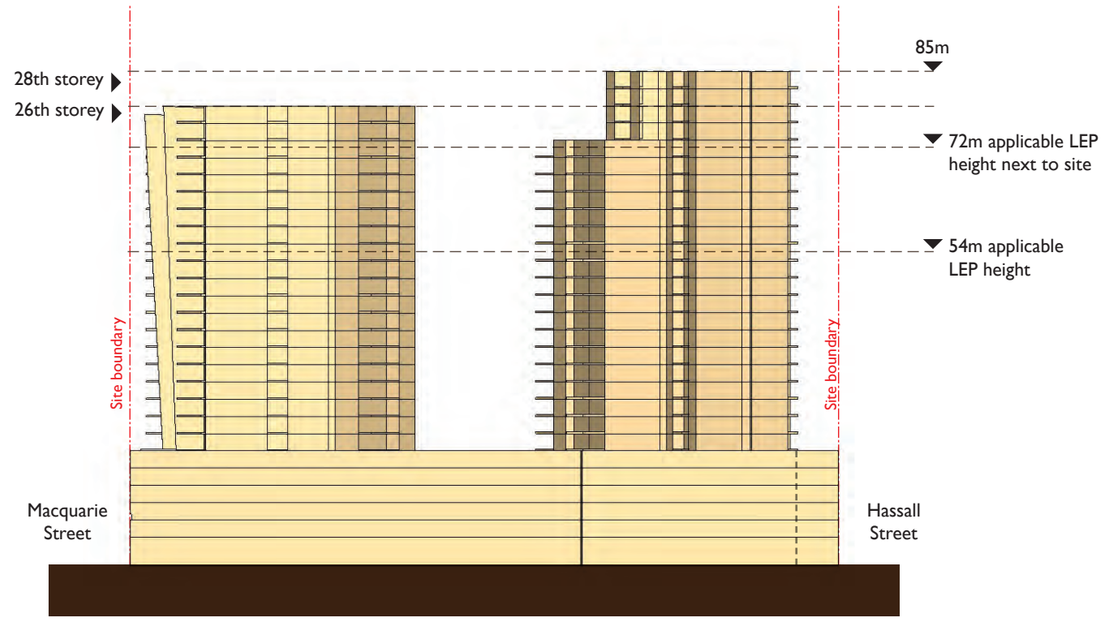
The proposed six storey podium along Hassall Street compliments the predominant podium heights along the existing streetscape, where there are a number of existing and proposed buildings with a street wall height of 6 or 7 storeys. The suggested compliant street wall height under the current applicable DCP controls at 6 storeys can be made to relate to the existing lower scale with bands of material or articulation for the first two levels including indentations, shadow gaps or changes in the facade treatments and materials.

One important outcome of the detailed testing is that the 3D modelling shows that a relaxation of the setback above the podium results in a better urban form for the tower facing Hassall Street. One design option explored as part of this strategy is a nil setback for selected parts of the tower along the Hassall Street frontage where in conjunction with the height of the podium can result in a taller more slender proportions which also helps to integrate the height of the podium as part of the tower design. This is not meant to be a prescriptive solution, but to illustrate yet another way in which the podium design can be incorporated into the overall built form provided that the operational requirements of the carpark are met. This also has the added advantage of a more accessible residential lobby from Hassall Street in alignment with the termination of the axis along Wigram Street.

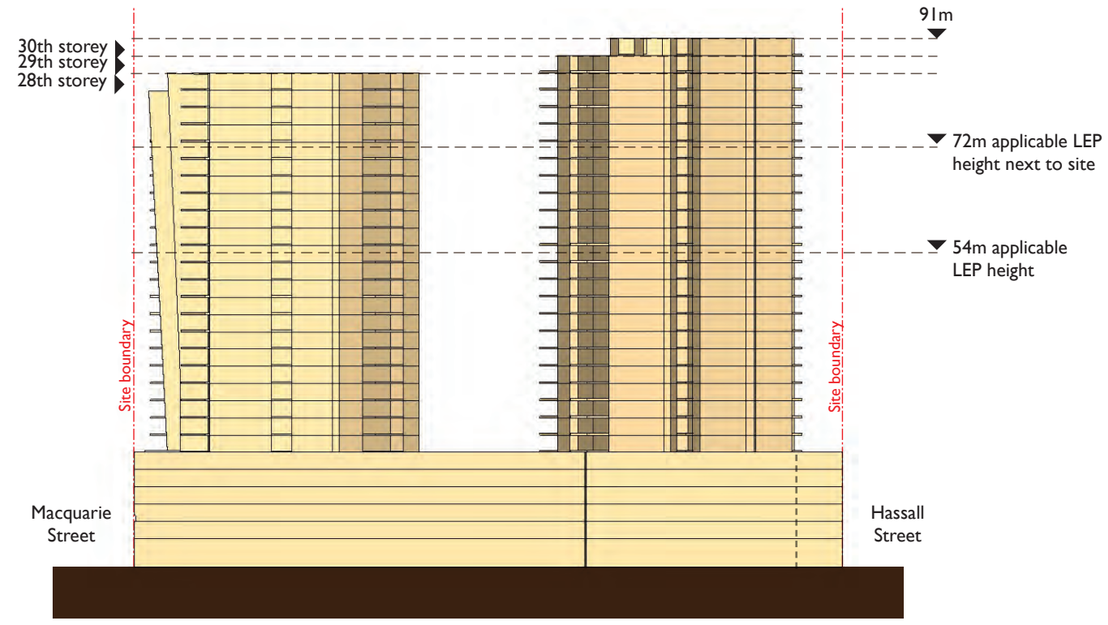
Conclusion:

A compliant FSR (6.6:1) provides more articulated towers with a lower tower to Macquarie Street which adds architectural interest to the skyline profile within justifiably increased heights while additional FSR (6.9:1) results in taller built forms of similar heights to both streets. When combined or integrated with the height of the podium on Hassall Street, this can result in a more slender and elegant point form tower as the termination to Wigram Street.

Strategy 2 - Sculpted Edges - West Elevation

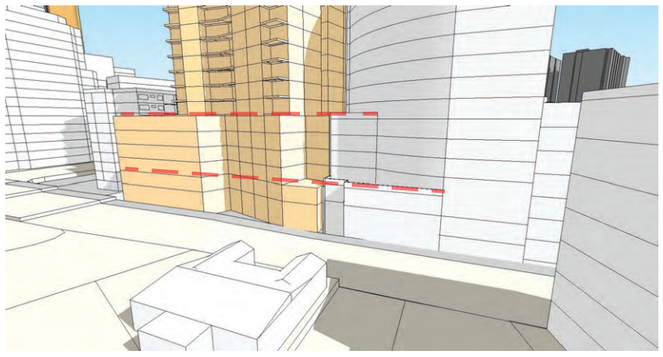


OPTION 1 - FSR 6.6:1
Maximum height: 30 storeys (91m)

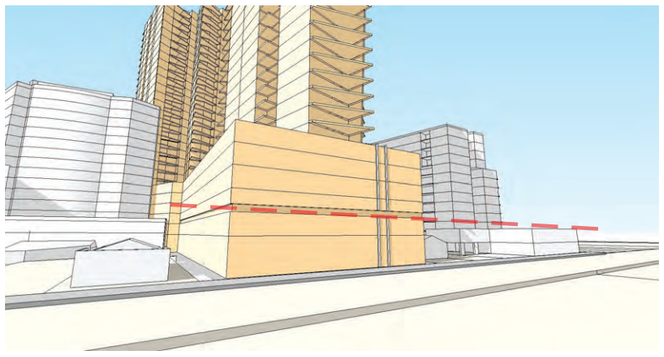


OPTION 2 - FSR 6.9:1
Maximum height: 30 storeys (91m)

Strategy 2 - Sculpted Edges - Street wall alignments

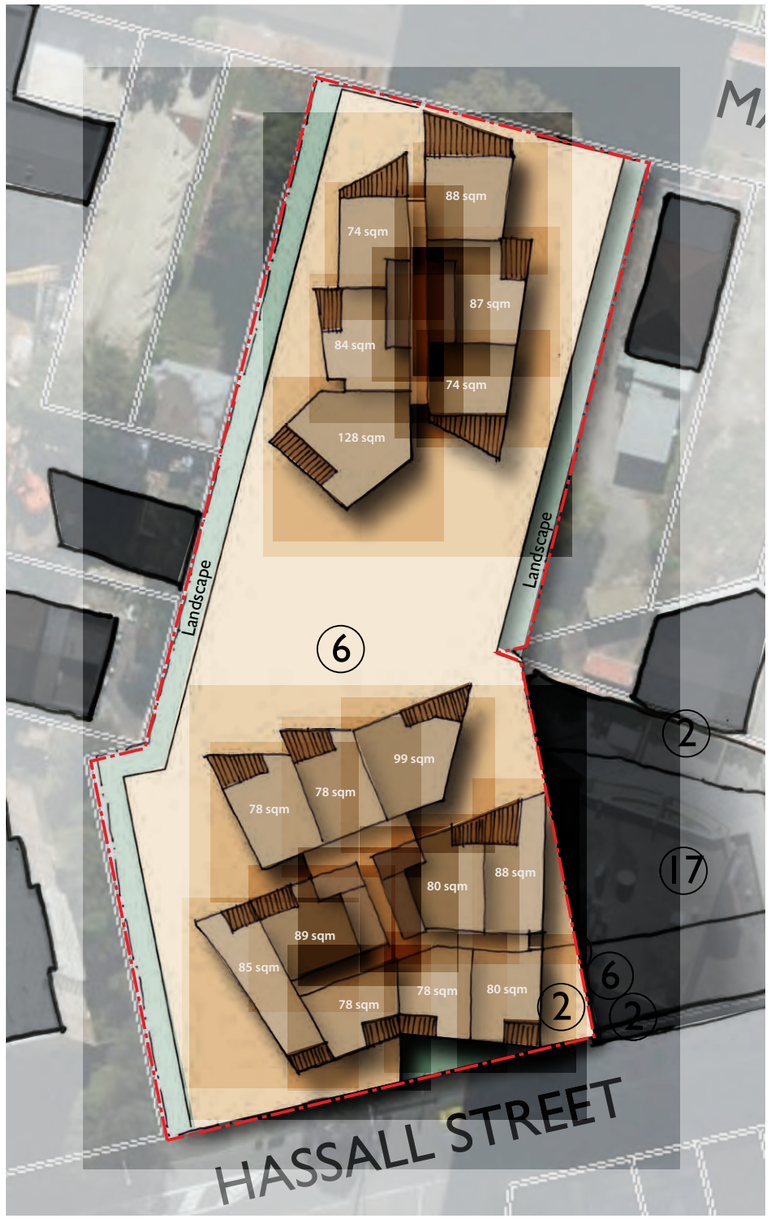


View to Hassall Street

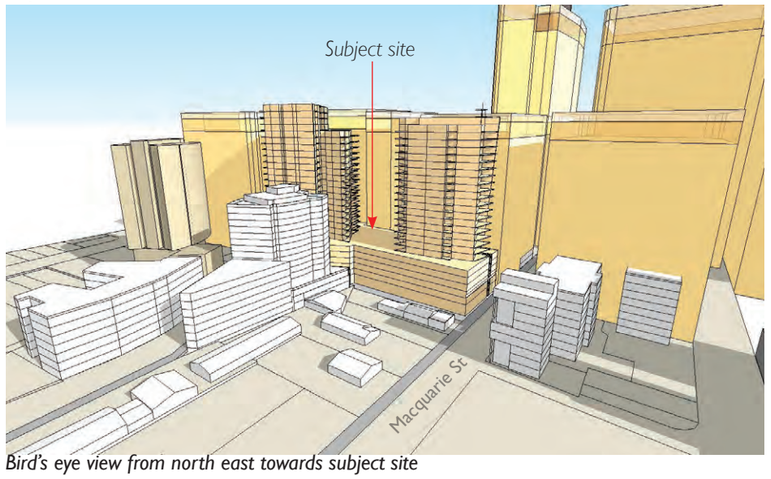


View to Macquarie Street

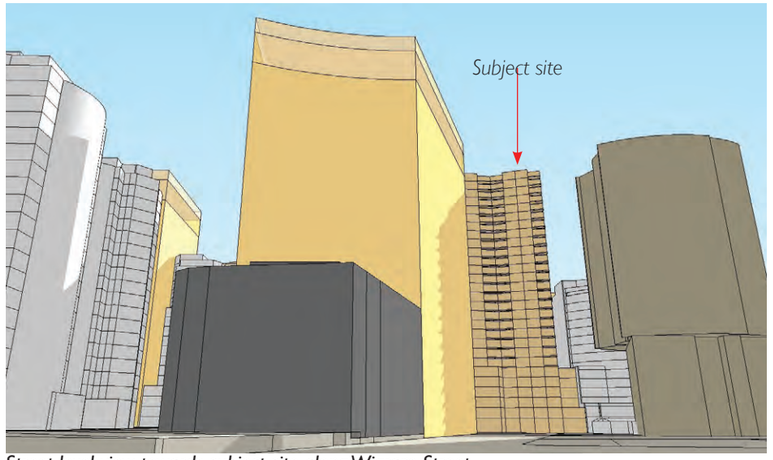
Typical tower layouts



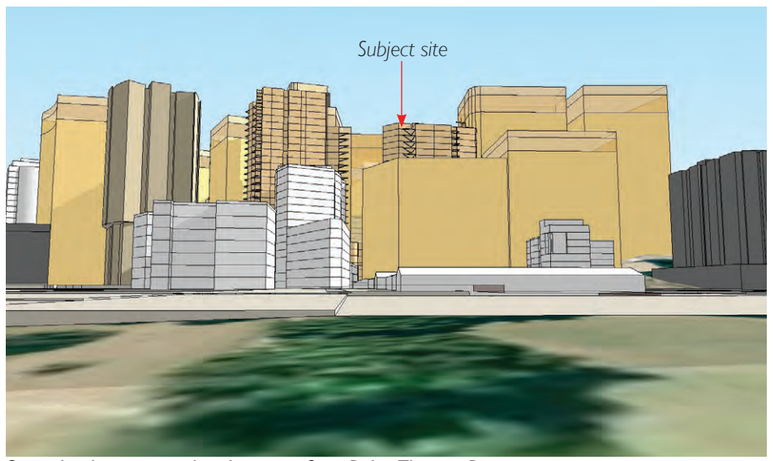
Option 1 - FSR 6.6:1



Bird's eye view from north east towards subject site

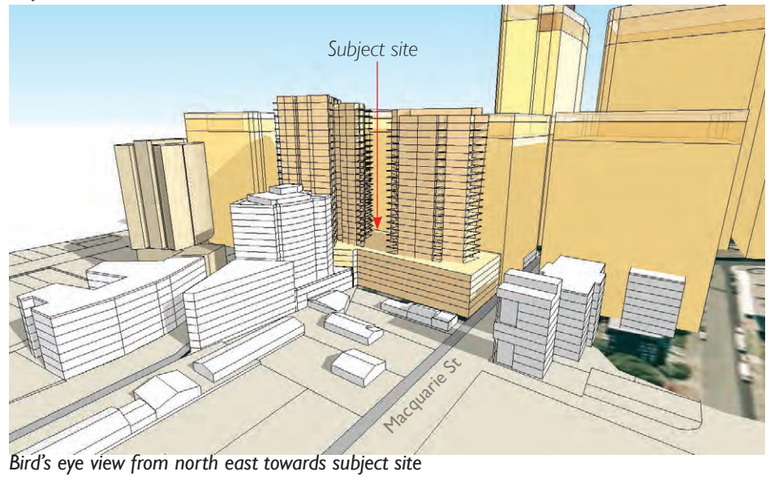


Street level view towards subject site along Wigram Street

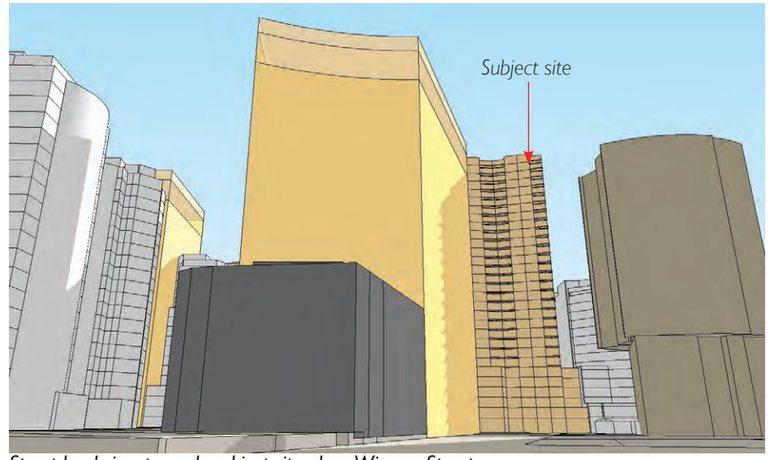


Street level view towards subject site from Robin Thomas Reserve

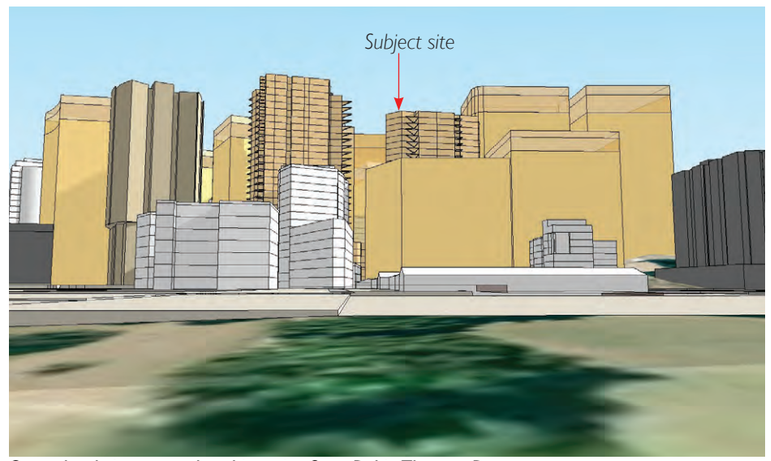
Option 2 - FSR 6.9:1



Bird's eye view from north east towards subject site



Street level view towards subject site along Wigram Street



Street level view towards subject site from Robin Thomas Reserve

STRATEGY 3 - 'BUTTERFLY WINGS' - FREE FORM

This strategy includes curvilinear and rectangular elements encompassing a three-tower composition with free form shapes. The towers achieve 430sqm of GFA per level for northern tower, 503sqm of GFA per level for middle tower and a GFA per level of 578sqm for main part of southern tower plus 322sqm up to level 17.

The typical floor layouts show that each typical level of the northern tower can achieve approximately 6 units while the combined southern towers achieve up to 13 between them. The range of sizes and unit mix include 1, 2 and 3 bedroom units in the range of 58-74m² for the northern tower. The combined southern and middle towers achieve one 1-bedroom unit, ten 2-bedroom units and one 3-bedroom unit. Units generally have outlooks in all directions however they are generally directed away from side boundaries, with a few exceptions. In general, areas for internal communal open space could be located toward the centre of the site between the two blocks. A good number of the units have varied façade lengths with mainly easterly and westerly aspects. Unit sizes range between 58 to 74m² for the northern tower and 55-103m² for the combined southern towers.

In terms of height, this strategy assumes an approximate 25% bonus above 72m, which is the LEP applicable height on the sites to the west of the subject site. This results in a total height on the northern tower of approximately 70m (23 storeys) and part 91m and part 76m (30 and 25 storeys respectively) on the southern tower for a total FSR of 6.6:1. The second option presents an FSR of 6.9:1 with the northern tower at 76m (25 storeys) and the southern towers with part 91m and part 79m (30 and 26 storeys respectively).

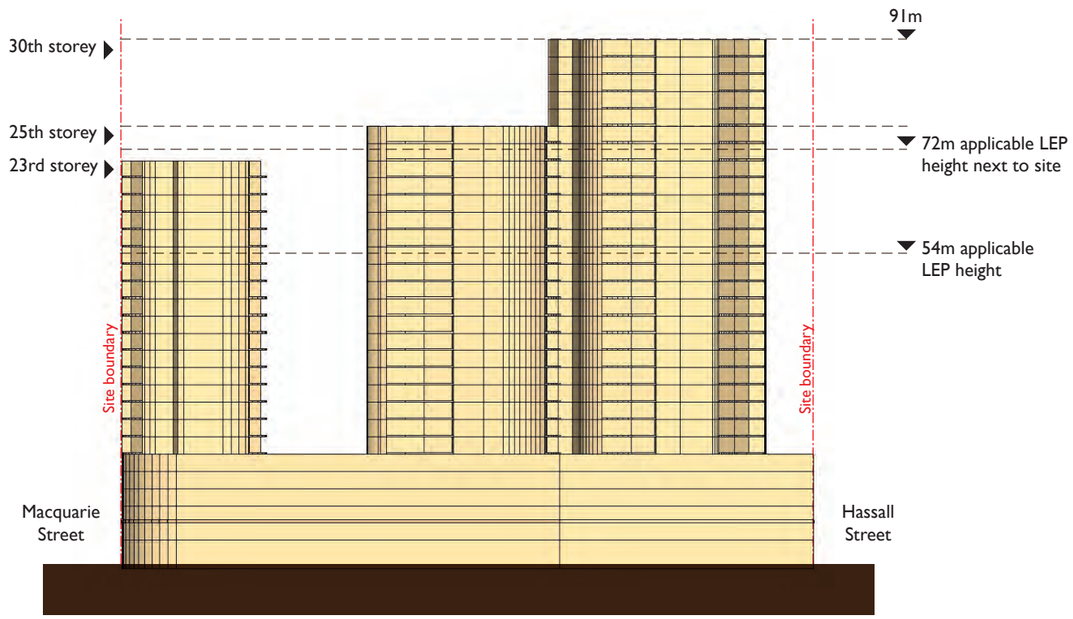
The proposed six storey podium along Hassall Street compliments the predominant podium heights along the existing streetscape, where there are a number of existing and proposed buildings with a street wall height of 6 or 7 storeys. The suggested compliant street wall height under the current applicable DCP controls at 6 storeys can be made to relate to the existing lower scale with bands of material or articulation for the first two levels including indentations, shadow gaps or changes in the facade treatments and materials.

One important outcome of the detailed testing is that the 3D modelling showed that a relaxation of the setback above the podium results in a better urban form for the tower facing Macquarie Street. A nil setback allows for the northern façade of the tower to be seen in conjunction with the height of the podium resulting in a taller more slender proportion which also helps to integrate the height of the podium as part of the tower design along that street. This also has the added advantage of a more accessible lobby with more legible cores from the street edge for the tower facing Macquarie Street. This is not meant to be a prescriptive solution, but to illustrate a different way in which the podium design can be incorporated into the overall built form provided that the operational requirements of the carpark are met. This also has the added advantage of a more accessible residential lobby from Hassall Street in alignment with the termination of the axis along Wigram Street.

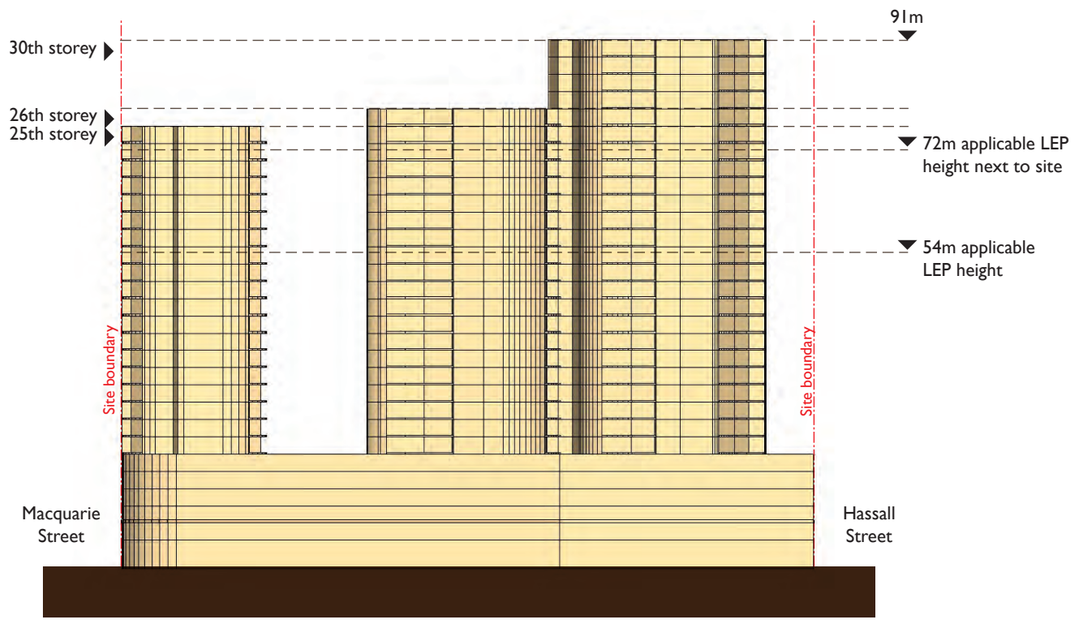
Conclusion:

An FSR of 6.6:1 provides more articulated towers and adds architectural interest to the skyline profile within justifiably increased heights; additional FSR up to 6.9:1 results in taller even more slender built forms to both Macquarie and Hassall Streets.

Strategy 3 - 'Butterfly Wings' - Free Form - West Elevation

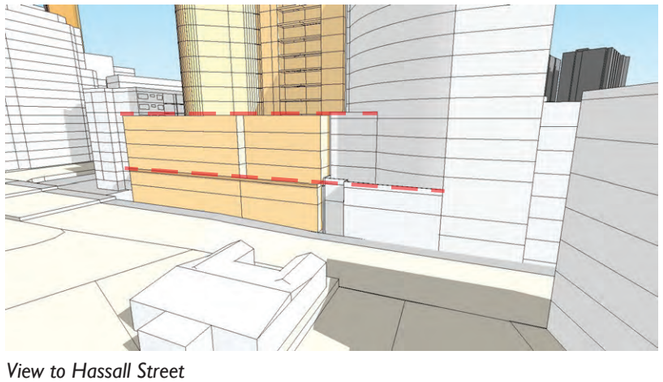


OPTION 1 - FSR 6.6:1
Maximum height: 30 storeys (91m)

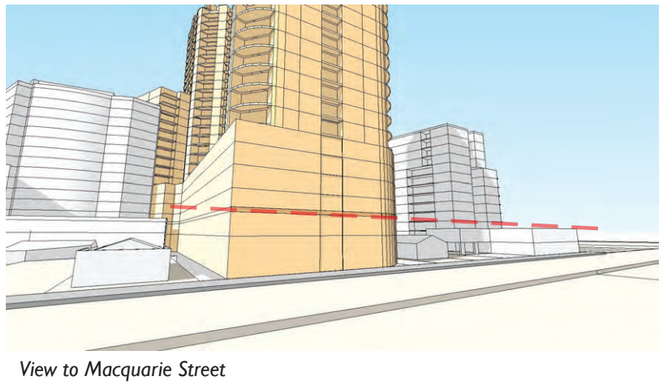


OPTION 2 - FSR 6.9:1
Maximum height: 30 storeys (91m)

Strategy 1 - Free Form - Street wall alignments



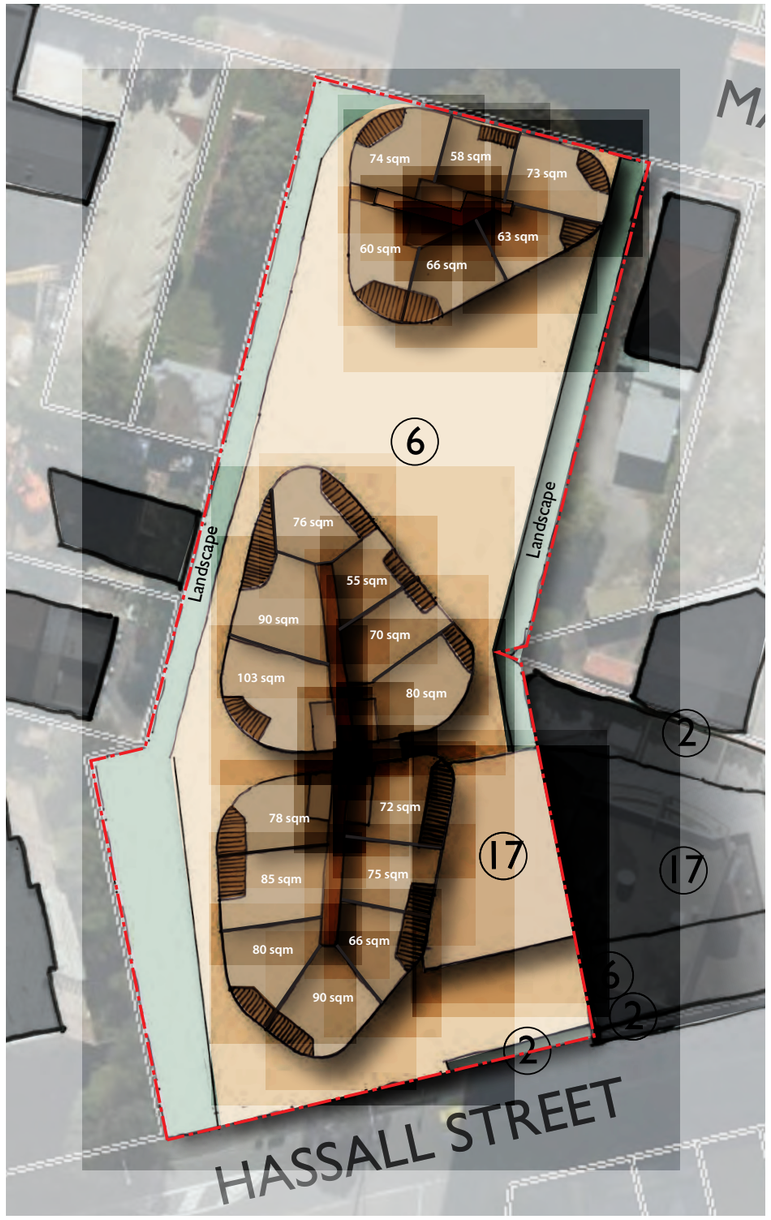
View to Hassall Street



View to Macquarie Street

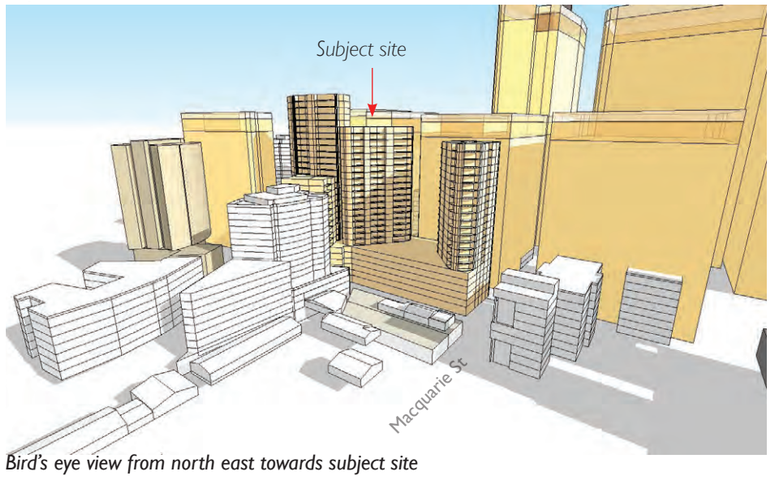
As discussed above, the applicable LEP heights have been applied on the surrounding sites with the potential 10% design excellence bonus in a three-dimensional form. The added heights result in more slender and elegant built forms.

Typical tower layouts

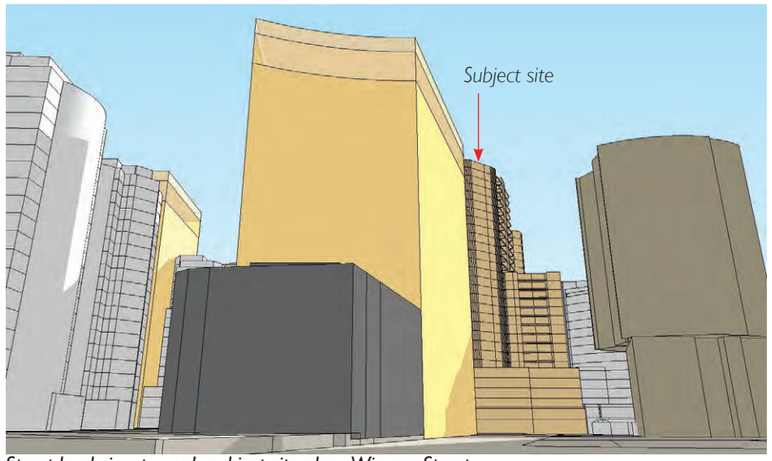


Strategy 3 - 'Butterfly Wings' - Free Form

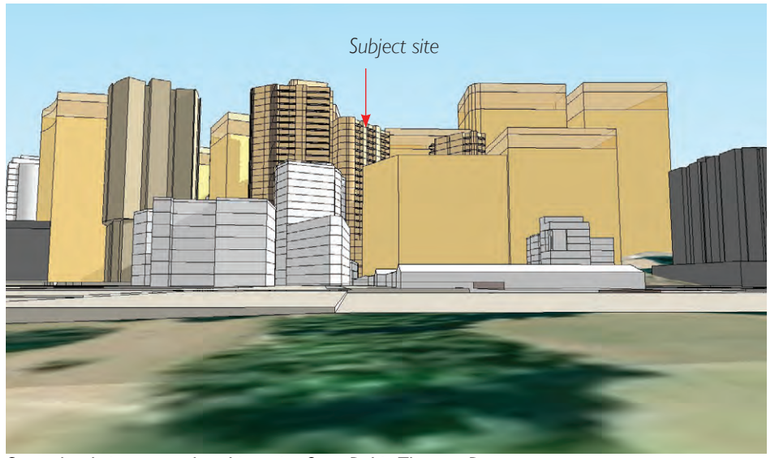
Option 1 - FSR 6.6:1



Bird's eye view from north east towards subject site

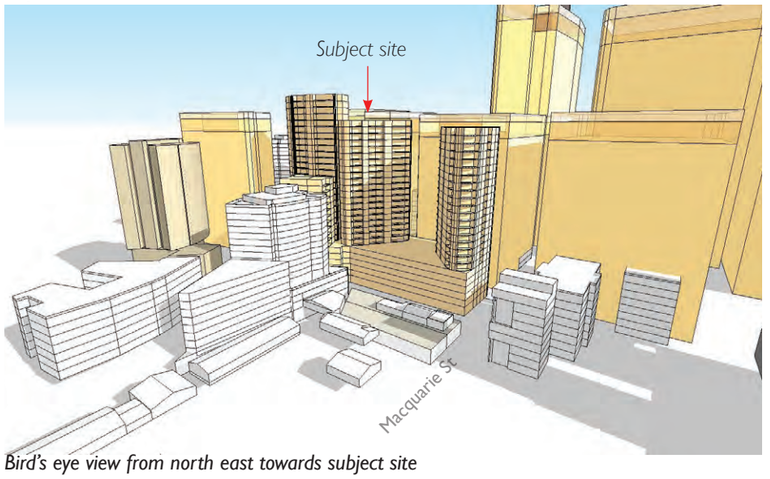


Street level view towards subject site along Wigram Street

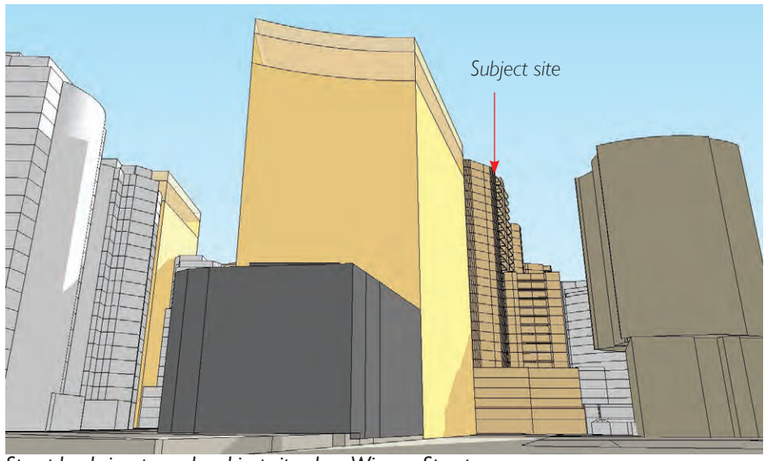


Street level view towards subject site from Robin Thomas Reserve

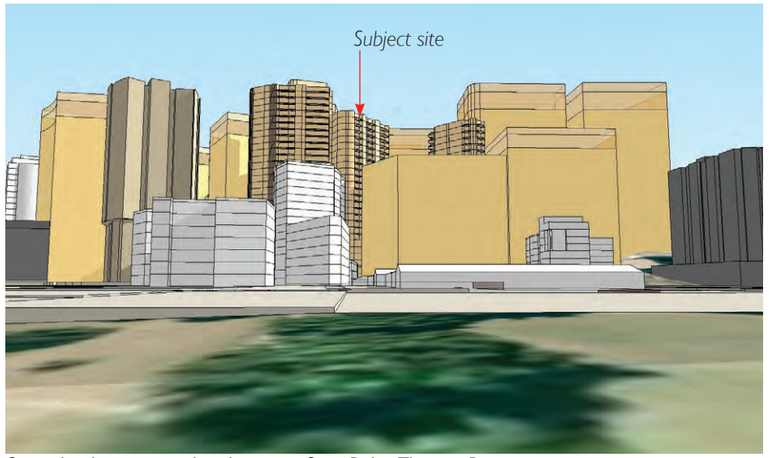
Option 1 - FSR 6.9:1



Bird's eye view from north east towards subject site



Street level view towards subject site along Wigram Street



Street level view towards subject site from Robin Thomas Reserve

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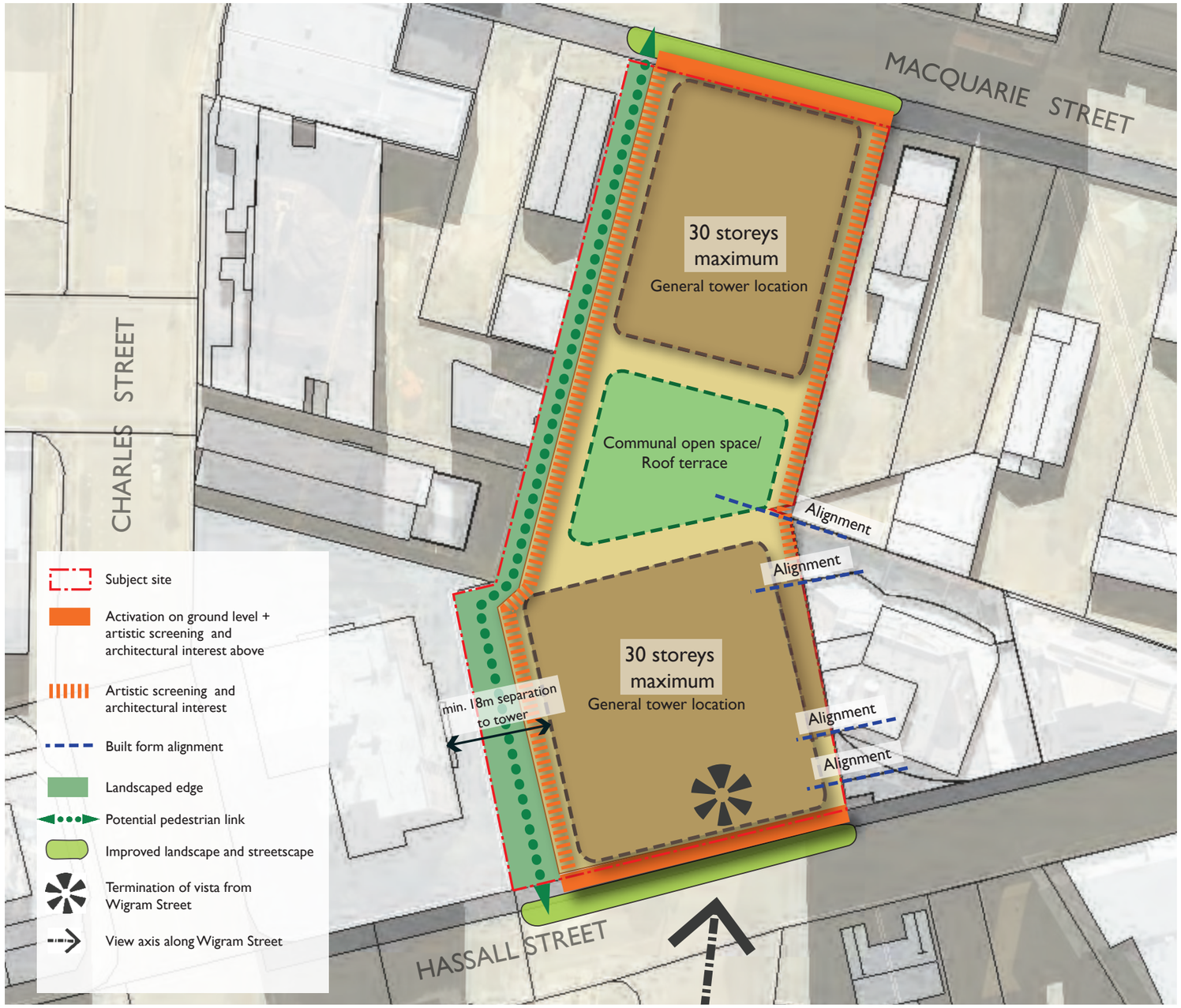
6. Built Form Strategy

6.1. BUILT FORM STRATEGY

The general aims of the Built Form Strategy for the site are to inform the best outcome for the site with regards to street wall heights, setbacks and separation distances to create an appropriate envelope for the site that respects the existing development character, recognises the need for increased height and fulfils the objectives of the controls whilst accommodating the operational requirements of the car parking layout.

The Built Form Strategy develops design principles for the site as well as key outcomes that could be sought through the design excellence competition for the site. The Principles Diagram indicates how the proposal should responds to considerations such as:

- Height
- Streetscape response, activation and/or 'sleeving'
- Separation and setbacks
- Pedestrian link
- Communal open space
- Vehicle access and servicing
- Views



Principles diagram

6.2. GENERAL DESIGN PRINCIPLES

The general design principles for the subject site are as follows:

- To strengthen the overall built form or 'bell curve' from the core to the periphery of the Parramatta CBD;
- To provide an important community benefit in the form of a public car park;
- To help regenerate and provide renewed interest to Hassall, Wigram and Macquarie Streets;
- To provide a termination to the axis along Wigram Street;
- To capture and take advantage of local and district views available to the east of the Parramatta CBD;
- To encourage high quality built form outcomes and achieve design excellence;
- To improve the landscape character and quality of the public domain for this area in particular Hassall and Wigram Streets;
- To activate the lower ground floor levels with appropriate uses;
- To achieve appropriate separation and transition to the surrounding residential developments;
- To respond sensitively to the scale, proportions and form of the heritage items in the vicinity of the subject site;
- To integrate the new built form with adjacent development especially at podium levels taking into account important alignments and predominant built forms at podium level;
- To minimise any adverse impacts on the amenity of adjoining uses in particular residential apartments;
- To achieve a safe and vibrant public domain along the streets with appropriate levels of overlooking and natural surveillance; and
- To encourage street level movement networks, pedestrian linkages and existing pedestrian desire lines between Hassall and Macquarie Streets.

The following are specific design guidelines regarding built form, amenity and design excellence:

HEIGHTS

The proposed/desired heights for the site are shown as part of the Principles Diagram on previous page and include:

- Maximum heights of up to 30 storeys (91m) for the whole of the site.

STREETSCAPE RESPONSE

The proposed principles regarding setbacks and streetscape response are shown in the Principles Diagram on previous page. They include:

- Street setbacks to attempt to provide continuity to predominant setbacks along the ground floor for adjacent development along both Hassall and Macquarie Streets, with the exception of the residential building to the west of the site on Hassall Street, which setback contravenes the objectives of the controls.
- Street frontage heights along both Hassall and Macquarie Streets are to capture key alignments and heights along the street scape.
- Street wall response is to attempt to mitigate the impacts of the bulk and scale of the car park facility through horizontal and vertical articulation as to achieve the appearance of being 'connected with the ground' as part of the car park and not appear to sit on the parking podium. Towers should be integrated with the design language of the podium.

ACTIVE EDGES

Active uses are to be provided as shown on the Principles Diagram on previous page to:

- The edges of the pedestrian link whenever possible.
- Hassall and Macquarie Streets along the ground floor and the level above the ground floor on Macquarie Street with active uses.
- Activation, sleeving and or screening to all levels of the carpark along street frontages provided that the operational requirements of the carpark are met.

BLANK WALLS

- Areas of blank walls are to be minimised throughout the development. Where they are unavoidable these facades should be treated with high quality materials and articulation to create visual and architectural interest. Wherever possible fenestrations to be provided within these walls to office or back of house areas.

SEPARATION DISTANCES

- Up to the street frontage height the development is to have a nil side setback to the adjacent property to the east on Hassall Street.
- Separation distances to the western boundary along Hassall Street to meet at least the 50% of the required separation distance by the RFDC or at least 3m for the first two storeys with additional setbacks above the second storey provided that the operational requirements for the car park are met.
- Separation distances above podium are to meet the RFDC separation distances to adjacent boundaries and in between towers within the subject site.

PEDESTRIAN MOVEMENT

The subject site will provide a pedestrian link across the site. This connection is required to provide the following:

- A link between Hassall and Macquarie Streets.
- Activation along the pedestrian link whenever possible.
- The pedestrian link may be integrated into the car park circulation where possible and where safety of pedestrians can be maintained to enable a view line from street to street.
- Daylight and visual permeability with glass roof covering allowing shelter and sunlight access for the majority of the link's length whenever practical.
- A minimum height to the pedestrian link of 2 storeys.
- A minimum width of 3m with direct visual connection from the street to the entry of the link.
- Appropriate levels of lighting at night.
- Landscape softening and attractive surface treatments.

VEHICLE ACCESS AND SERVICING

- Public vehicle access from Hassall Street to comply with Council's transport and access requirements.
- The width of vehicle and service access to both streets are to be minimised and incorporated into the building form.
- The public car park pedestrian entrance is to be separated and differentiated from the residential apartment pedestrian entrance.
- High quality design and high quality materials are to be used for the security shutters into the car park and loading areas.
- Where possible any on grade service areas are to be sleeved with other uses and not to be visible to the public domain.
- Where possible garbage is to be located in basement levels.
- Services and service access points are to be minimised along the street frontages.

COMMUNAL OPEN SPACE

- Communal open space to meet RFDC required areas with high amenities including BBQ, child play and a variety of gathering spaces for either large groups of for individual and more introspective meditation.
- Solar access of minimum 2 hours between the hours of 9 am and 3 pm on June 22nd to at least 50% of the open space area with an emphasis to maximise solar access during lunch hours.
- The open space is to be over-looked by the proposed development (minimum 90% of active edges minimum).
- High quality landscape treatments with deep soil planting for mature trees.

OVERSHADOW IMPACTS

- Development is to maintain a minimum of 2 hours solar access between 9am and 3pm on 22 June to living room windows and balconies of residential apartments to the surrounding or adjacent residential development.

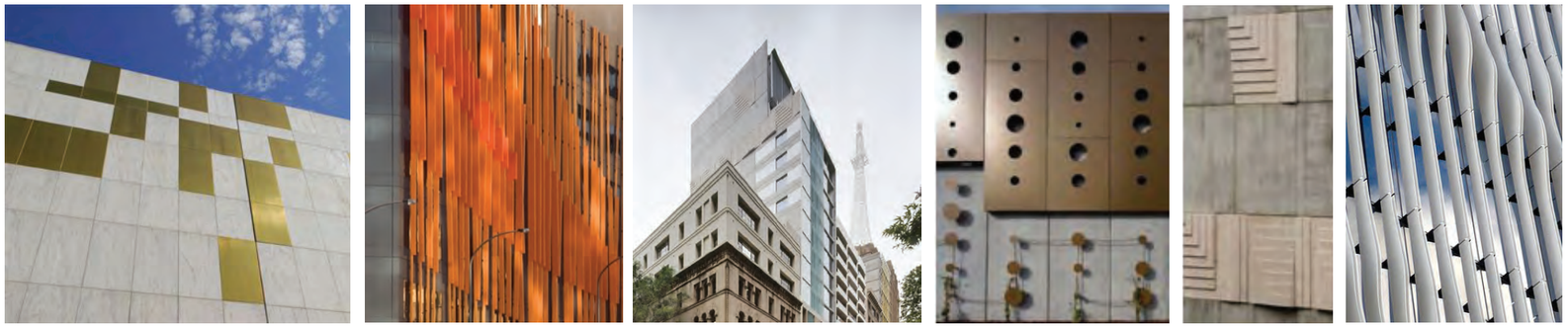
INTERNAL AMENITY

- Internal layouts are to achieve high levels of amenity and outlook.
- Development is to achieve RFDC recommended levels of solar access and natural ventilation
- Location of towers and direction of units and private open space is to achieve adequate privacy by re-directing views and outlooks away from existing and future development on adjacent sites.
- General building depths to meet the objectives of the RFDC.

DESIGN EXCELLENCE

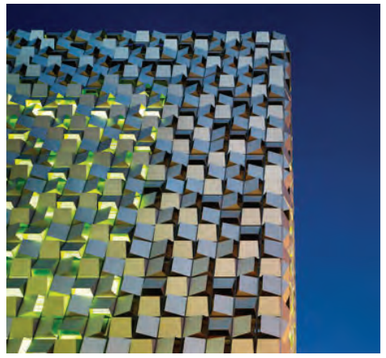
- The proposal is to achieve design excellence as per Council's Design Excellence Guidelines (Item 22B of Parramatta City Centre LEP 2007).

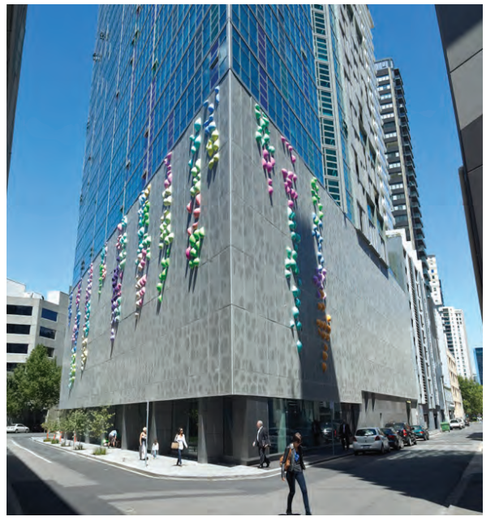
Examples of active edges.



Examples of high quality design and materials for blank walls.

Examples of high quality design and materials for vehicle access.





Precedent images for car park front and side boundaries treatment

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7. Final Recommendations

7.1. FINAL RECOMMENDATIONS

The proposed development at 189 Macquarie Street, Parramatta will offer distinct advantages and value add to the community. It will provide an important parking facility to service the Parramatta Centre as a whole while improving the urban design and amenity to Hassall, Macquarie and Wigram Streets. These overall benefits and improvements include:

- Proposed heights conform with the desire 'bell curve' model which promote view sharing through the stepping of building heights from the core of the centre.
- Additional heights that will help to reduce the visual bulk and scale with the potential for taller more slender forms that will help to consolidate the overall desired future built form for the CBD.
- Renewed interest to Hassall, Wigram and Macquarie Streets.
- Improved landscape character and quality of the public domain in particular to Hassall and Wigram Streets;
- Appropriate responses to existing built form of adjacent development especially at podium levels;
- Eradicating the negative impacts of an existing large and open surface car park site.
- Providing a termination to the vista at the end of Wigram Street.
- The creation of defined building forms along both streetscapes that relate and respond to exiting recent development that will help to consolidate the streetscape character along both Hassall and Wigram Streets.
- The provision of a landscaped pedestrian link created by interesting and high quality landscape design.

We consider that the increased heights and built form strategy can achieve high quality architectural solution to deliver a high quality and distinctive development that will achieve design excellence and enhance the sense of place of this area of the Parramatta Centre.

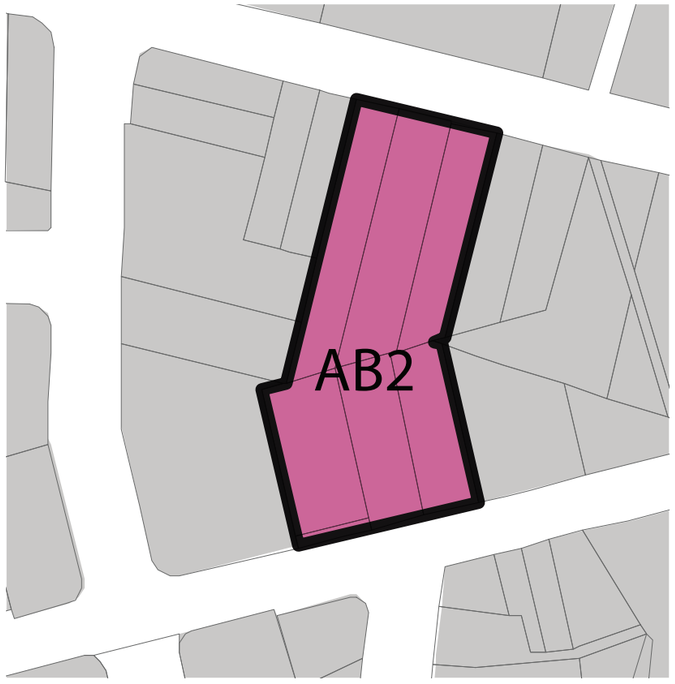
Therefore we recommend this built form strategy for the consideration of Council and encourage Council to consider allowing the proposed heights set out within this document and as presented on the map to the right.

7.2. LEP CONTROLS

The proposal is seeking to vary the height on the subject site. The following map and controls are suggested for the subject site:

HEIGHT

The proposed maximum height for the subject site is 91m (83m + 10% bonus if design achieves design excellence) or approximately 30 storeys.



Proposed Maximum Building Height map for the subject site.