

## **Insert new Schedule 11**

### **Procedures for demonstrating compliance with variation provisions for setbacks, separations and tapering in Central Sydney**

The following processes are required to be complied with to demonstrate compliance with Section 5.1.1.1(3)(a) and (b) in regards to varying Minimum Street Setbacks, Section 5.1.1.3(5) in regards to varying Minimum Side and Rear Setbacks and Building Form Separations, and, Section 5.1.1.4(3) in regards to varying Tapering provisions.

Relevant sections of the DCP are reproduced below for ease of reference.

#### ***Minimum Street Setbacks***

##### **Section 5.1.1.1**

- (3) Where noted in Table 5.2 Minimum Street Setbacks and on the Special Character Area maps, variation to Street Setbacks may be permitted to building massing that provides:
- (a) encroachment(s) 2m forward of the minimum Street Setback within the middle third of the frontage to a Public Place and provision of compensating recess(es) of equal to or greater area up to 4m behind the minimum Street Setback; or
  - (b) equivalent or improved wind comfort, wind safety and daylight levels in adjacent Public Places relative to a base case building massing with complying Street Frontage Heights and Street Setbacks (i.e. variation to massing is governed by achieving equal or better performance).

Procedures for demonstrating compliance with 5.1.1.1(3)(a) and (b) are set out in Schedule 11.

#### ***Side and Rear Setbacks and Building Form Separations***

##### **Section 5.1.1.3**

- (5) Variation to Side and Rear Setbacks and Building Form Separations may be permitted to building massing that provides equivalent or improved wind comfort, wind safety and daylight levels in adjacent Public Places relative to a base case building massing with complying Side and Rear Setbacks (i.e. variation to massing is governed by achieving equal or better performance) .

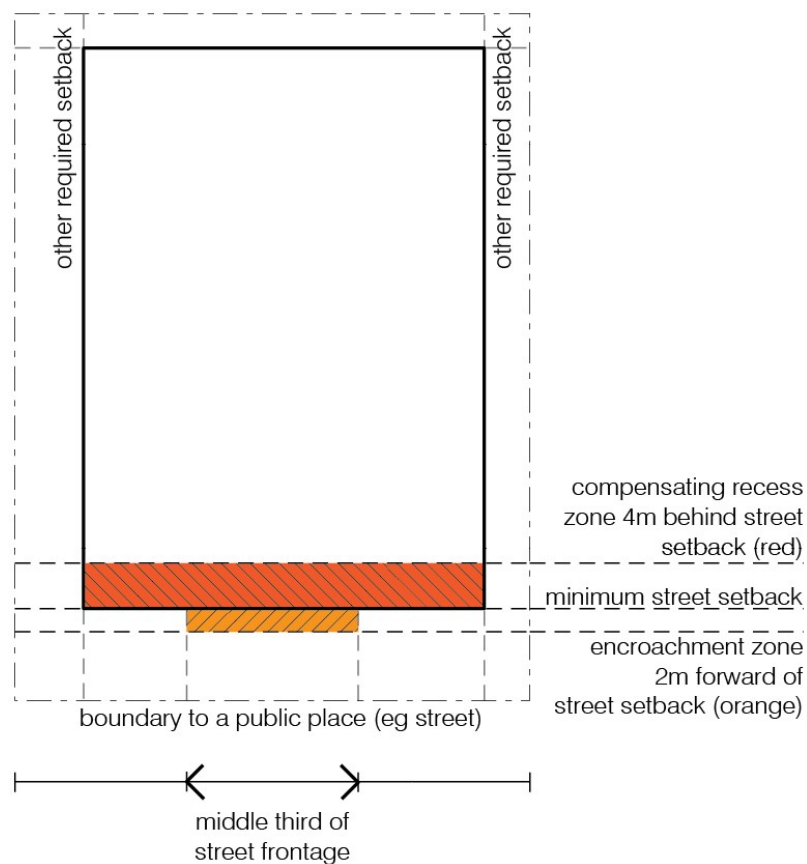
Procedures for demonstrating compliance with 5.1.1.3(4) are set out in Schedule 11.

Note: Building massing includes all building elements at all levels. For example fins, external sun shading devices, architectural features, screens, signs, awnings etc

#### Section 5.1.1.4

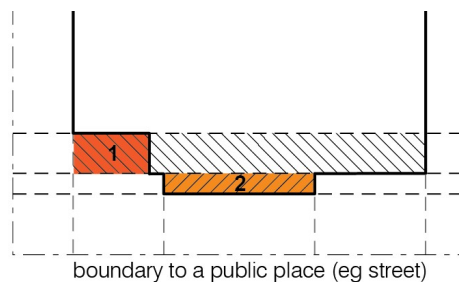
- ### ***Procedure A: Minimum Street Setback Encroachment and Compensating Recess***

(1) Building massing with a frontage to a Public Place, where each frontage is assessed independently at each floor the building, may encroach up to a maximum of 2m forward of the required Minimum Street Setback within the middle third of the frontage if it provides an equal or greater area of compensating recesses up to 4m behind the Minimum Street Setback, but not within any other required setback.



2

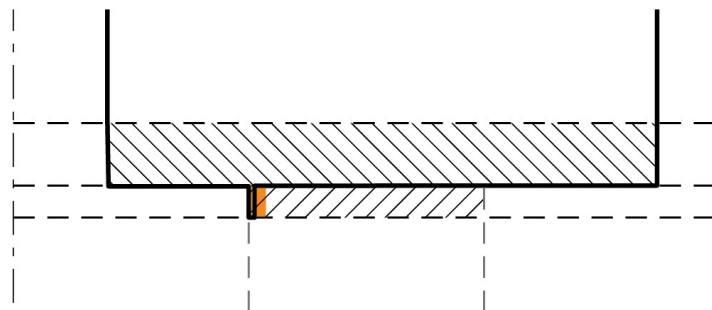
procedures for demonstrating compliance. This diagram shows area where encroachments and compensating recess(es) may occur.



**Figure 1.2:** Example showing area of compensating recess (1) equal to area of encroachment (2).

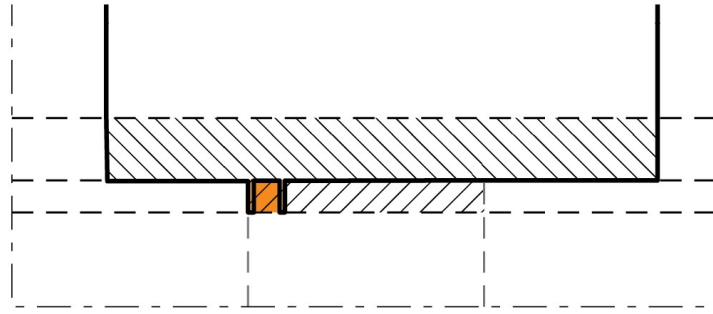
- (2) Some encroaching elements have a larger impact on daylight to a Public Place than is directly reflected in their plan area. For the purposes of assessing the area of such small or tightly spaced elements like architectural fins, any encroachments are deemed to have an area equal to their plan area except elements less than:

- (a) 1m wide – where they are treated as if they are 1m wide; and



**Figure 1.3:** Example showing a narrow fin less than 1m wide within the encroachment zone - the deemed area of the encroachment shown orange has equal depth and is 1m wide.

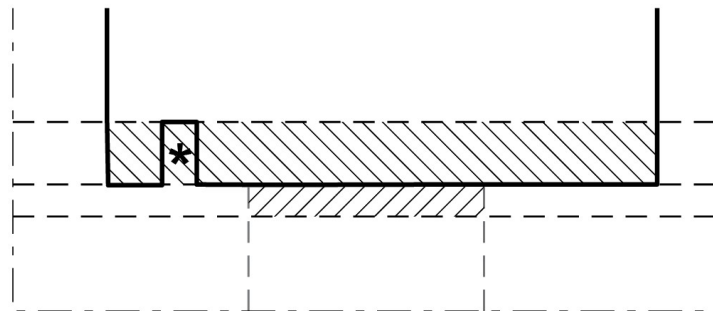
- (b) 3m apart – where they are treated as if they are a single element that has a plan area extent described by joining the element's outermost edges with straight lines.



**Figure 1.4:** Example showing 2 narrow fins less than 3m apart within the encroachment zone – the deemed area of the encroachment shown orange includes the space between the encroaching elements.

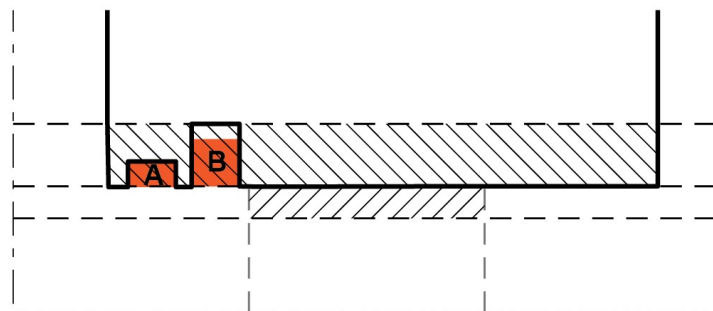
- (3) Some recesses will have a negligible or limited benefit to daylight levels in Public Places so an area of building recess will only be deemed to be a compensating recess if it is:

- (a) at least 3m wide (see example at “3” in Figure 1.2 which is not 3m wide so is not a compensating recess);



**Figure 1.5:** Example showing a slot that is not 3m wide (at the asterisk) – this is not deemed to be a compensating recess because it is too narrow to provide any daylight benefit.

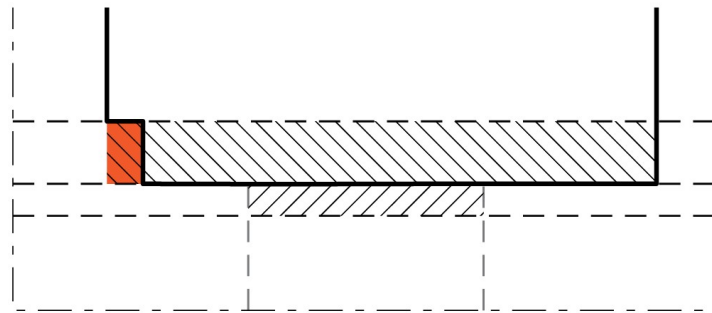
- (b) wider than it is deep (ie no narrow slots [see example at “4” in Figure 1.2 which is wider than it is deep so is a compensating recess, where as “5” in Figure 1.2 is deeper than it is wide so is only a compensating recess for that portion of the recess equal to its width]); and



**Figure 1.6:** Example showing two recesses that are both 3m wide – recess A is wider than it is deep so the full area shown red is deemed a compensating recess, recess B is deeper than it is wide so only an area with a depth equal to the width shown red is deemed as an area of compensating recess.

(c) is clear to the sky for the full height of the building.

- (4) Notwithstanding 3(a) and (b) above, the full area of a building recess contiguous with any other required setback (other than the relevant street setback) is a compensating recess.



**Figure 1.7:** Example showing a narrow deep recess that is contiguous with a required side setback – the full area shown red is deemed a compensating recess.

- (5) On corner sites, the compensating recesses for each frontage are assessed independently of each other. That part of a recess that complies with the criteria for both street frontages may be counted as compensation toward encroachments on each frontage.

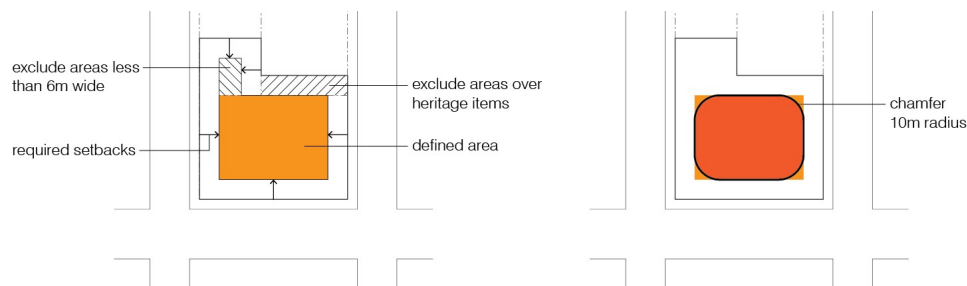
**Procedure B: Equivalent or improved wind comfort and wind safety and daylight levels in adjacent Public Places**

In order to demonstrate compliance with Section 5.1.1.1(3)(b) and Section 5.1.1.3(5) in regards to varying Minimum Street Setbacks and Side and Rear Setbacks, Building Form Separations and Tapering provisions respectively, the following procedure must be followed:

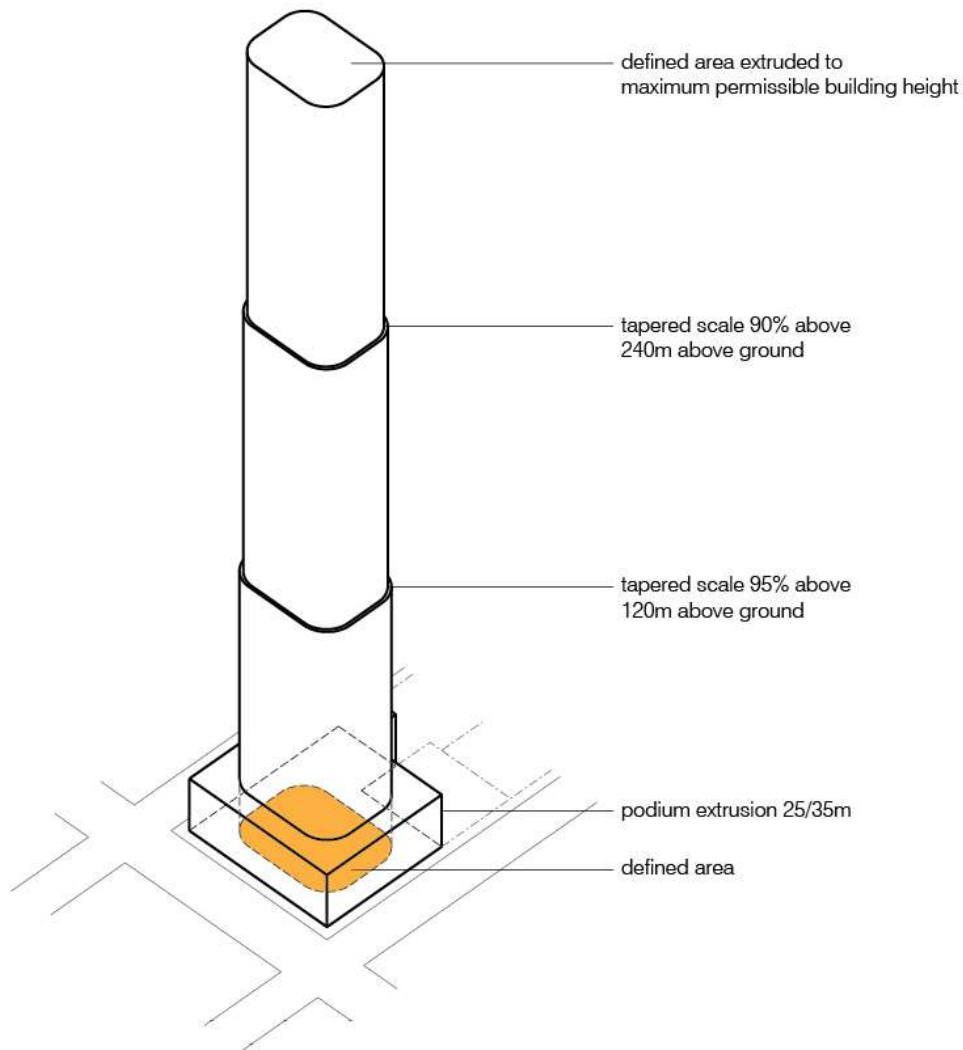
- (1) Procedure B can only be used to vary setbacks for sites larger than 1000m<sup>2</sup>.
- (2) Where (1) is satisfied, variation to relevant setbacks may be permitted to building massing that provides equivalent or improved wind comfort, wind safety and daylight levels in adjacent Public Places relative to a base case building massing with complying Height, Street Frontage Heights, Street Setbacks, Side and Rear Setbacks and Tapering.
- (3) The base case building massing with complying Street Frontage Heights, setbacks and tapering is established by modelling 3 dimensional podium and tower components as follows:

- (a) The podium is modelled by extruding the subject site boundary vertically 35m above existing ground level (as it varies around the site perimeter) for buildings up to 120m high and 25m above ground level for taller buildings.
- (b) The Tower Component is modelled by defining an area set out by the required street, side and rear setbacks, excluding areas over heritage items and Tower Component areas narrower than 6m wide. For Tower Components where at least one face is longer than 30m the resultant area is chamfered with a 10m radius at all external corners. The resultant shape is extruded to the maximum permissible building height as it varies around the site. The resulting tower form must be tapered by scaling it horizontally in both horizontal directions (X and Y) by 95% between 120-240m and by 90% above 240m above ground level.

Note: the maximum permissible building height excludes architectural roof features but includes all other relevant controls including LEP height controls, Sun Access Planes, No Additional Overshadowing Controls, Special Character Area height and setback controls, View Controls Airport restrictions etc.



**Figure 1.8:** Defining the base case tower component area and building massing



**Figure 1.9:** Tapering the base case tower building massing

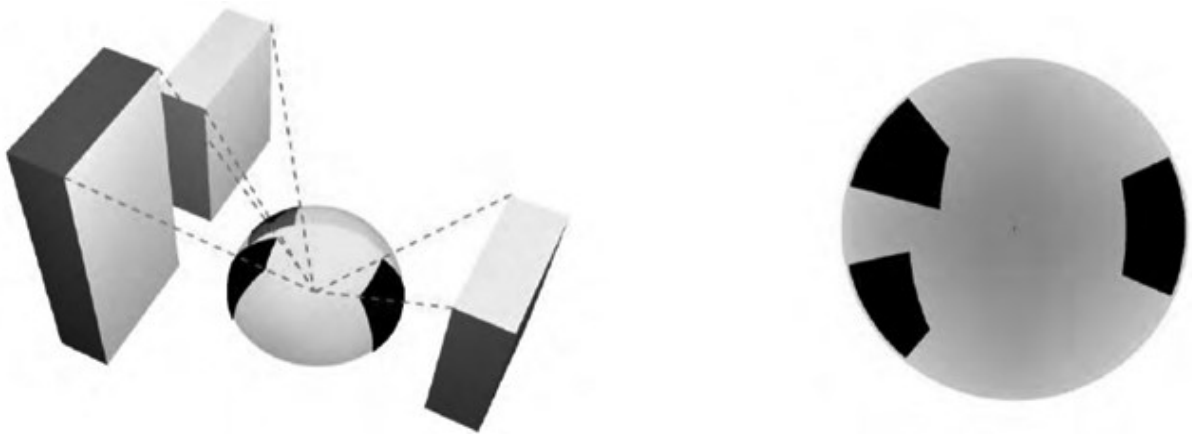
- (4) To demonstrate equivalent (improved) wind comfort, wind safety and daylight levels in adjacent Public Places relative to the base case building massing (established in (3) above), the following must be modelled and reported for the base case building massing and the proposed scheme wind speeds as defined by Section 5.1.9 Managing Wind Impacts, Sydney DCP 2012 for comfort and safety.
- (5) the average annual daylight level (which may be approximated by the average Sky View Factor)

Note: Sky View Factor (SVF) means the extent of sky observed above a point as a proportion of the total possible sky hemisphere above the point. SVF is calculated as the proportion of sky visible when viewed from the ground (as an abstract horizontal surface) up. SVF is a dimensionless value that ranges from 0 to 1. A SVF of 1 denotes that the sky is completely visible to the horizon in all directions; for example, in a flat terrain. When a locations has topography or buildings blocking view to any part of the sky, it will cause the SVF to decrease proportionally.

- (6) Wind speeds must be measured within the existing city form in areas where wind speeds are likely to change as determined by a wind report.
- (7) Daylight levels or SVF must be measured within the existing city form (including developments under construction as if they were completed) and should exclude any elements within a Public Place e.g. trees and awnings to a distance of at least 50m from site boundaries.

In this document “equivalent” wind speed and daylight/SVF is to be understood as very slightly “better than” at a high level of accuracy. For example a SVF of 0.10001 is equivalent to a SVF of 0.10000 by being very slightly better than it.

For wind speed the comfort values should be averaged and compared. The categories are not relevant in demonstrating equivalence.



**Figure 1.10:** Sky View Factor means the extent of sky observed above a point as a proportion of the total possible sky hemisphere above the point.



## **Sydney DCP 2012 - Tower Cluster Areas and Design Excellence Procedure Amendment**

### **1. The purpose of this Development Control Plan**

The purpose of this Development Control Plan (DCP) is to amend the Sydney Development Control Plan 2012 (SDCP2012), adopted by Council on 14 May 2012 and which came into effect on 14 December 2012.

The draft provisions progress key moves proposed in the City of Sydney's Draft Central Sydney Planning Strategy (the Strategy) following feedback from the Department of Planning, Infrastructure and Environment on Planning Proposal Central Sydney.

These provisions only relate to new Tower Cluster Areas and Design Excellence Procedures, with supporting planning controls contained in the amended Central Sydney Planning Proposal and the original Sydney DCP 2012 Central Sydney Planning Strategy Amendment.

### **Central Sydney Planning Proposal**

The Central Sydney Planning Proposal provides for additional floor space on select sites up to 50% and additional height. These sites are restricted to Tower Cluster Areas and subject to new Design Excellence procedures.

Proposed new buildings (or altered buildings) that rely on increased FSR must undertake an architectural design competition where any additional floor space is subject to demonstrating design excellence, which is at the discretion of the consent authority.

Proposed new subclause 6.21(7A) of Sydney LEP 2012 details the minimum requirements for accessing up to additional 50% floor space.

These proposed DCP controls compliment new subclause 6.21(7A) in Sydney LEP 2012, providing clarity on procedure, process and minimum assessment requirements.

For a more complete understanding of the land use and planning controls being proposed for Central Sydney, this draft DCP should be read in conjunction with the amended Planning Proposal, original Sydney DCP 2012 Central Sydney Planning Strategy Amendment, the amended Competitive Design Policy, the Strategy and its technical appendices.

### **2. Citation**

This amendment may be referred to as the Sydney Development Control Plan 2012 – Tower Cluster Areas and Design Excellence Procedure Amendment.

### **3. Land Covered by this Plan**

This plan applies to land identified on the Sydney LEP 2012 Tower Cluster Map. This land is shown in Figure 1 below.

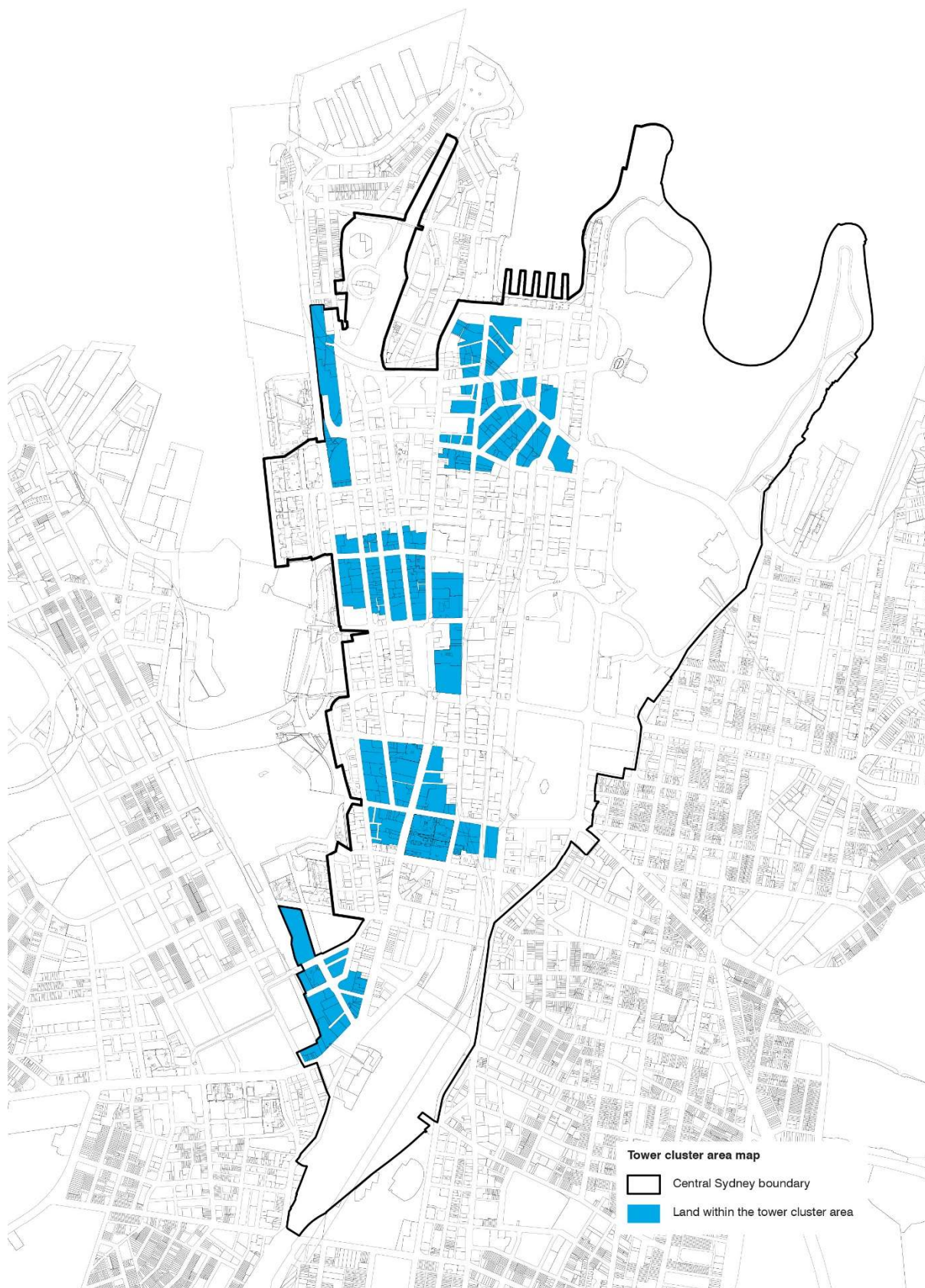


Figure 1 – Tower Cluster Area Map

#### **4. Relationship of this plan to Sydney Development Control Plan 2012**

This plan amends the Sydney Development Control Plan 2012 in the manner set out in Schedule 1 below (amendments shown ***bold and italics***).

#### **Schedule 1 – Amendment to Sydney Development Control Plan 2012**

##### **[1] Section 3.3 – Design Excellence and Competitive Design Processes**

###### **Introduction**

This section contains objectives and provisions to guide design excellence and fine grain urban form in significant development. All buildings contribute to the urban and public domain character of a city. It is important that design excellence is a fundamental consideration in the assessment of development applications.

In recognition of the additional cost of a competitive design process, a successful design competition that achieves design excellence can be awarded additional building height or floor space of up to 10% or one floor whichever is the greater.

***To recognise and provide for the pre-eminent role of business, office, retail, entertainment and tourist premises in Central Sydney Tower Cluster Areas, a successful design competition that achieves design excellence can be awarded additional floor space of up to 50%.***

The following DCP provisions complement Clause 6.21 under the Sydney LEP 2012 and must be read in conjunction with the City of Sydney Competitive Design Policy and the Model Competitive Processes Brief.

The City of Sydney contains a number of urban renewal areas and large development sites. Within these areas it is important that development achieves high design quality standards and design variety. The following objectives and provisions aim to achieve design excellence through the application of competitive design processes.

Refer to Section 3.1.10 Sites greater than 5,000sqm, Section 3.3.8 Site specific development controls plans and Stage 1 development applications.

###### **Provisions**

###### **3.3.1 Competitive design process**

- (1) In accordance with Clause 6.21(5) of the Sydney LEP 2012 any of the following development is subject to a competitive design process:
  - (a) buildings greater than 55m in Central Sydney and greater than 25m outside of Central Sydney;
  - (b) development having a capital value of more than \$100,000,000;
  - (c) development in respect of which a development control plan is required to be prepared under Clause 7.22 of the Sydney LEP 2012;

- (d) development for which the applicant has chosen such a process.
- (1A) *In accordance with Clause 6.21(7A) of Sydney LEP 2012 a building demonstrating design excellence in a Tower Cluster Area must:***
  - (a) be located in a Tower Cluster Area on the Tower Cluster Areas Map**
  - (b) *The unencumbered area of the subject site must be greater than 2,000 square metres, excluding areas of the site that are occupied by:***
    - (i) *heritage items***
    - (ii) *public places (streets, lanes, parks, squares, areas above or below major infrastructure like railway bridges, viaducts)***
    - (iii) *other open spaces, e.g. valued private open spaces, easements, common access, lane, and***
  - (c) *contain or proposes only Commercial Premises, Centre-based child care facilities, Community facilities, Educational establishment, Entertainment facilities, Function centres, Health Services facility, Hotel or motel accommodation, Information and education facilities, Light industries and ancillary uses such as parking, utilities and storage.***
- (1B) *For the purposes of 6.21(7A) a building demonstrating design excellence means a building where the design of the building (or the design of an external alteration to the building) is the winner of an architectural design competition and the consent authority is satisfied that the building or alteration exhibits design excellence.***
- (2) The competitive design process must be undertaken in accordance with the City of Sydney Competitive Design Policy and using the Model Competitive Processes Brief.
- (3) The competitive design process is to be undertaken in accordance with a Design Excellence Strategy approved by Council as part of an associated site-specific DCP or concepts stage development application (Stage 1 Development Application).
- (4) The competitive design process is to be undertaken before the detailed Stage 2 Development Application is submitted.

### **3.3.2 Design excellence strategy**

- (1) The Design Excellence Strategy is to define:
  - (a) the location and extent of each competitive design process, where each competitive design process is to be limited to a single development site or street block.

- (b) the type of competitive design process(es) to be undertaken: an open or invited architectural design competition or competitive design alternatives. ***Competitive design alternatives is not available for buildings seeking to demonstrate design excellence in a Tower Cluster Area.***
- (c) the number of designers involved in the process(es)
- (d) how fine grain and contextually varied architectural design is to be achieved across large sites
- (e) whether the competitive design process is pursuing additional floor space or height
- (f) options for distributing any additional floor space or height which may be granted by the consent authority for demonstrating design excellence through a competitive design process
- (g) the target benchmarks for ecologically sustainable development

***(1A) In addition to clause (1), buildings seeking to demonstrate design excellence in a Tower Cluster Area, the Design Excellence Strategy is to:***

- (a) ***demonstrate compliance with the City of Sydney Competitive Design Policy***
- (b) ***establish a compliant base case building massing envelope in accordance with 5.1.1 Built Form Controls***
- (c) ***document a minimum 3 alternative massing envelopes that comply with Schedule 11***
- (d) ***provide detailed environmental impact tests and compare the base case building massing envelope and alternative massing envelopes, including:***
  - (i) ***overshadowing of protected public spaces***
  - (ii) ***public view protection planes***
  - (iii) ***Sydney Airport Prescribed Airspace***
  - (iv) ***Special Character Area, street frontage heights, setbacks, tower heights and contextual analysis***
  - (v) ***compliance with tower massing and tapering requirements of any relevant development control plan or guide***
  - (vi) ***wind tunnel testing and compliance***
  - (vii) ***wind and daylight equivalence form testing, and***
  - (viii) ***underground infrastructure.***

- (d) *provide an indicative FSR for each massing envelope where the envelopes and estimated FSRs assume:*
- (i) *a 15 metre architectural roof feature zone for sites where the maximum height of the building is determined by Sun Access Planes, No Overshadowing Controls or Public View Protection Planes*
  - (ii) *a 30 metre architectural roof feature/construction zone where the maximum height of the building is determined by Sydney Airports Prescribed Airspace (excluding the Obstacle Limitation Surface)*
  - (iii) *5 metres clear floor to floor for ground and first floors and allowances for new pedestrian links and public domain improvements supported by urban design analysis*
  - (iv) *3.85 metres floor to floor for typical commercial floors and structural transfer zones at steps in the building massing*
  - (v) *3.3 metres floor to floor for typical hotel floors and structural transfer zones at steps in the building massing*
  - (vi) *A full floor plant level at least for every 20 occupied levels at minimum 6 metres floor to floor should be provided for plant and equipment with no floor space*
  - (vii) *Minimum 15 per cent of the design envelope for architectural articulation (not occupied by floor space, structures, sun shading or the like)*
  - (viii) *Minimum 750mm facade depth for facade and external shading elements*
  - (ix) *Minimum 16 per cent floor space exclusions allocated to building core and other internal non-floor space elements*
  - (x) *Vehicle access, servicing, services, balconies, voids or other areas are not counted as floor space and should be determined from demonstrated best practice or reference designs.*
- (e) *The base case building massing envelope, the alternative massing envelopes and indicative FSRs will form part of the endorsed Design Excellence Strategy and the competitive design brief*
- (f) *Council may amend the indicative FSRs within the endorsed Design Excellence Strategy based on the assessment of the Concept Plan application*

### 3.3.3 Award for design excellence

- (1) In accordance with Clause 6.21(7) of the Sydney LEP 2012, the consent authority may grant up to 10% additional floor space or height to a building where design excellence is achieved through a competitive design process.
- (1A) In accordance with Clause 6.21(7A) of the Sydney LEP 2012, the consent authority may grant up to 50% additional floor space where design excellence is achieved through a competitive design process.***

### 3.3.4 Awarding additional height

- (1) Additional height available under Clause 6.21(7) of the Sydney LEP 2012 must be located on the building which is to be subject to the competitive design process.
- (2) Awarding additional height is at the discretion of the consent authority and is dependent on achieving design excellence with the additional height included in the design
- (3) Despite 3.3.4(1) and (2) a building demonstrating design excellence in a Tower Cluster Area may have a building height that exceeds the maximum height shown for the land on the Sydney LEP 2012 Height of Buildings Map, but must not exceed any sun access controls, public view protections or aircraft operations related controls, as per Clause 6.21(7A)(e).***

### 3.3.5 Awarding additional floor space

- (1) Additional floor space available under Clause 6.21(7) **and Clause 6.21(7A)** of the Sydney LEP 2012 will be pro-rated by the area covered by the competitive design process, as a proportion of the total developable site area.

#### **Clause 6.21(7)**

Additional floor space bonus (%) = {Competitive design process site area / (Lot area – Land to be dedicated area)} x 10

**or**

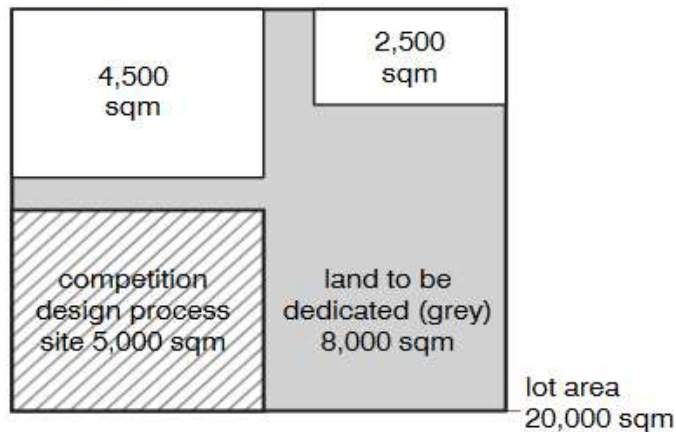
#### **Clause 6.21(7A)**

**Additional floor space bonus (%) = {Competitive design process site area / (Lot area – Land to be dedicated area)} x 50**

For example, if a competitive design process covers half the developable site area, then the maximum additional floor space will be up to 5%.



A further example is shown below:



A competitive design process undertaken on the hatched site would result in a maximum floor space bonus of up to:

$$\{5,000\text{sqm} / (20,000\text{sqm} - 8,000\text{sqm})\} \times 10 = 4.17\% \text{ floor space bonus}$$

- (2) Awarding additional floor space is at the discretion of the consent authority and is dependent on achieving design excellence and the capacity of the developable site area to absorb the additional floor space without environmental impacts.

### 3.3.6 Distribution of additional floor space

- (1) In distributing any additional floor space within the site area covered by the competitive design process, the following considerations must be appropriately addressed:
  - (a) Site and context analysis
  - (b) Public domain layout, including levels, uses, access and circulation, dedications and hierarchy of spaces
  - (c) Built form massing and dimensioned envelopes
  - (d) Overshadowing analysis
  - (e) Stormwater management strategy
  - (f) Traffic management and servicing strategy, parking numbers and location
  - (g) Ecologically sustainable development strategies and benchmark commitments (including connection to green infrastructure), and
  - (h) Heritage impact statement
- (2) ***In addition, for Tower Cluster Area sites subject to Clause 6.21(7A) of Sydney LEP 2012, distributing any additional floor space within the site area covered by the competitive design process, the following considerations must be appropriately addressed:***



- (a) **Where variations to Minimum Street Setbacks, Minimum Side and Rear Setbacks, Building Form Separations and Tapering controls under Sydney DCP 2012 are proposed, a Procedure B: Wind and Daylight Equivalence report is to be prepared in accordance with Schedule 11 of Sydney DCP.**

**To allow multiple options to be explored during the design competition applicants are required to test at least three massing options as part of the Concept Plan (see 3.3.8).**

**Note: where variations to Sydney DCP 2012 Minimum Street Setbacks, Minimum Side and Rear Setbacks, Building Form Separations and Tapering controls are required for feasibility, the onus is on the proponent to demonstrate at an early stage that variations comply with equivalency variation tests in relation to wind impacts and daylight/sky view factor. Importantly equivalency results still require urban design and streetscape analysis to determine their acceptability.**

- (b) **A quantitative wind effects report is to be prepared by a suitably qualified wind specialist testing the base case building massing envelope and alternative massing envelopes. The report is to detail findings and compliance of wind tunnel testing conducted in accordance with Sydney DCP 2012 controls including Schedule 11, where appropriate. The report is to identify all locations and elements requiring wind management.**

**Note: Wind tunnel testing is a mandatory requirement. This wind tunnel testing will also apply where setback and separation variations to Sydney DCP 2012 are proposed.**

- (c) **Provision of appropriate architectural roof feature and construction zones.**

**Note: Construction methodology for envelopes within 30 metres vertically of an airspace protection surface (excluding the Obstacle Limitation Surface) must be provided demonstrating no temporary penetrations of surfaces are required for cranes and other construction equipment.**

**A detailed site survey and demonstrated compliance via an envelope analysis of airspace protection charts detailed below is required <http://www.sydneyairport.com.au/corporate/community-environment-and-planning/planning/airspace-protection.aspx>**

- (d) **Proposed new buildings (or altered buildings) must be capable of achieving best practice National Australian Built Environment Rating System (NABERS) performance that exceeds established minimum requirements of Sydney DCP 2012, as demonstrated through Energy Commitment Agreements.**

### 3.3.7 Public art

No change.

### 3.3.8 Site specific development control plans and stage 1 development applications

A site specific development control plan or a stage 1 development application is required under Clause 7.20 of Sydney LEP 2012 for certain categories of development. The development control plan must address the issues set out in Clauses 7.20(4) and 6.21 Design Excellence of Sydney LEP 2012.

- (1) The following documentation is to be provided as part of a site specific development control plan application:
  - (a) Site, context and development options analysis;
  - (b) Public domain layout including levels, uses, access and circulation and dedications;
  - (c) Built form massing and dimensioned envelopes;
  - (d) Distribution of uses and floor space areas;
  - (e) Overshadowing analysis;
  - (f) Stormwater management strategy;
  - (g) Traffic management and servicing strategy and parking numbers and location;
  - (h) Ecologically sustainable development strategies and benchmark commitments (including connection to green infrastructure);
  - (i) Heritage impact statement;
  - (j) Design excellence strategy;
  - (k) Landscape concept plan;
  - (l) Public art strategy; and a
  - (m) Staging plan.
- (2) The site, context and development options analysis is to document at least three different and realistic site development options and is to provide an analysis of each option.
- (2A) ***For Tower Cluster Area sites subject to Clause 6.21(7A) of Sydney LEP 2012, this option analysis is to incorporate the analysis described in 3.3.2.***
- (3) A design excellence strategy is to be provided that defines:

- (a) the location and extent of each competitive design process, where each competitive design process limited to a single development site or street block.
- (b) the type of competitive design processes to be undertaken: an architectural design competition, open or invited; or competitive design alternatives;
- (c) the number of designers involved in the processes;
- (d) how fine grain and contextually varied architectural design is to be achieved across large sites; and
- (e) options for distributing any additional floor space area which may be granted by the consent authority for demonstrating design excellence through a competitive design process.

**(3A) *For Tower Cluster Area sites subject to Clause 6.21(7A) of Sydney LEP 2012, if appropriate, the Stage 1 DA or Site Specific DCP will be determined with an envelope capable of achieving the indicative maximum FSR demonstrated to be appropriate by the Design Excellence Strategy.***

***The endorsed Design Excellence Strategy, including the base case building massing envelope, the alternative massing envelopes and indicative FSRs will inform the competitive design brief with the Architectural Design Competition to explore design excellence in relation to built form, massing and FSR.***

***Final FSR will be applied for at Stage 2 and assessed and determined by the consent authority at this time.***

- (4) A detailed Public Art Strategy, prepared by a suitably qualified person and consistent with the City of Sydney Guidelines for Public Art in Private Development is to be submitted with a Stage 1 DA or Site Specific DCP.