# Appendix C – Proposed Development Standards A Conceptual Draft

This appendix provides a conceptual draft of how the development standards referred to in Section 5 of the submission could work if moved into SEPP 65. The draft is complex and the City would welcome the opportunity to provide further commentary regarding the drafting instructions for the development standards for the PCO.

#### **6A** Residential flat development must comply with the following development standards:

- (a) visual privacy and separation,
  - (i) Windows to a *habitable room* or an *open side of a balcony* must be separated by open space that is open to the sky, from side boundaries, rear boundaries, centrelines of streets and *blank walls* (including *blank walls* of the same development) for at least as follows:
    - I. for a height up to 4 storeys above ground level (existing) 6m;
    - II. for a height over 4 storeys and up to 8 storeys above ground level (existing) 9m;
    - III. for a height over 8 storeys above ground level (existing) 12m.
  - (ii) Windows to a *non-habitable room* must be separated by open space that is open to the sky, from side boundaries, rear boundaries, centrelines of streets and *blank walls* (including *blank walls* of the same development) for at least as follows:
    - I. for a height up to 4 storeys above ground level (existing) 3m;
    - II. for a height over 4 storeys and up to 8 storeys above ground level (existing) 4.5m;
    - III. for a height over 8 storeys above ground level (existing) 6m.
  - (iii) Windows to a *habitable room*, or an *open side of a balcony* must be separated by open space that is open to the sky, from *habitable room* windows of a different apartment, an *open side of a balcony* of a different apartment, *common rooms* and *common circulation* in the same development for at least as follows:
    - for a height up to 4 storeys above ground level (existing) 12m;
    - II. for a height over 4 storeys and up to 8 storeys above ground level (existing) –18m;
    - III. for a height over 8 storeys above ground level (existing) 24m.

- (iv) Windows to a *habitable room*, and or an *open side of a balcony*, must be separated by open space that is open to the sky, from *non-habitable room* windows of a different apartment in the same development for at least as follows:
  - for a height up to 4 storeys above ground level (existing) 9m;
  - II. for a height over 4 storeys-and up to 8 storeys above ground level (existing) 13.5m;
  - III. for a height over 8 storeys above ground level (existing) 18m.
- (v) Windows to a *non-habitable room* must be separated by open space that is open to the sky, to *non-habitable room* windows of a different apartment, in the same development for at least as follows:
  - I. for a height up to 4 storeys above ground level (existing) 6m;
  - II. for a height over 4 storeys and up to 8 storeys above ground level (existing) 9m:
  - III. for a height over 8 storeys above ground level (existing) 12m.
- (vi) When the adjoining land zoning is an R zone that does not permit residential flat development, an IN, E, SP and W zones an additional 3 metres must be added to the separation to any boundary of that land.
- (vii) Separation is:
  - the straight line distance from one to another. Landscape elements including trees and planted screens, screens and other privacy devices are not to be considered as interrupting this distance as the separation also contributes to outlook, acoustic privacy and access to natural light and ventilation;
  - II. also applied within a recess, notch or indent in the building form, light wells and courtyards;
  - between windows, balconies and common circulation of the same development that are set at angle of 90 degrees or more where the distances can be equal to half the separation required at the height up to 4 storeys for the full height of the building;
  - to a blank wall that is set at angle of 90 degrees or more from the plane of the wall containing the subject window or an open side of a balcony 0m; and,
  - v. for common circulation around common open spaces 0m.
  - VI. between blank walls 0m.

- (viii) A recess, notch or indent in a building façade that has a window or balcony must have a plan depth measured from the plane of the facade less than the width of the recess, notch or indent.
- (ix) An apartment that is on land within 25m of a rail corridor, the road corridor for, freeway, a tollway or a transitway or any other road with an annual average daily traffic volume (based on the traffic volume data published on the website of the RTA) of:
  - I. 40,000 or more vehicles and rail corridors, the floor level of an apartment must be elevated above the surface of a road or rail tracks:
    - for a distance up to 15m measured horizontally from the edge of the closest traffic lane or rail tracks –at least 8m vertically; and,
    - for a distance over 15m but less than 25m measured horizontally from the edge of the closest traffic lane or rail tracks elevated at least 4m vertically
  - II. 20,000 or more vehicles, the floor level of an apartment must be elevated above the surface of a road or rail tracks for a distance up to 15m measured horizontally from the edge of the closest traffic lane –at least 4m vertically.
  - 111. 20,000 or more vehicles and rail corridors, for a distance up to 25m measured horizontally and vertically from the edge of the closest traffic lane or rail tracks, an apartment must have an air supply source located on a wall on the opposite side of the building from the road and include defensive noise shielding or attenuation measures to windows and openings on the road or rail side.

NOTE: In this clause, *freeway*, *tollway* and *transitway* have the same meanings as they have in the *Roads Act 1993*.

# (b) solar and daylight access,

- (i) Every *habitable room* must have a window or windows in an external wall with a total minimum glass area not less than 10% of the floor area of the room. This area is calculated exclusive of light borrowed from an adjoining room. More than 50% of the total minimum area must be below 1.5m above the floor level of the room.
- (ii) When standing or sitting in any part of any *habitable room* part of the glass of a window must be directly visible.
- (iii) Every part of any habitable room must be no less than 8m from the glass of a window in an external wall. [or "must have a ceiling height to room depth ratio of at least 1:2.5"][Note: A higher ceiling height to distance ratio is, for example 1:2]
- (iv) No more than 15% of the number of apartments in a development, the glass of the *primary window* of the *primary living space* and the primary open space can receive no direct *sunlight* on the winter solstice between 9am and 3pm.

- (v) At least 70% of the number of apartments in a development the glass of a window or windows of the primary living space and the primary balcony or primary private open space must receive direct *sunlight* on the winter solstice between 9am and 3pm for at least 2 hours.
- (vi) At least 50% of the minimum required area of the primary communal open space must receive direct sunlight on the winter solstice between 9am and 3pm for at least 2 hours.

# (c) common circulation and spaces,

- (i) The maximum number of apartments entered from a common corridor system and circulation *core* on a single level is eight.
- (ii) The maximum number of apartments entered from a lift *core* for all levels of a building that has a height of less than 35m above ground level (existing) is forty.
- (iii) Common circulation and spaces must have *Daylight* and natural ventilation.
- (iv) Where the floor level of an apartment is within 1 metre of the adjacent ground level (finished) and the apartment or its associated open space is within 6m of a street it must have access directly from the street.
- (v) The pedestrian pathway or route from the street to any lobby must be direct and clear.
- (vi) Primary common open space must be separate from any common circulation space or common landscape area and must have an area of at least equivalent to 5m<sup>2</sup> for each apartment up to a maximum of 25% of the site area and have a minimum dimension in any direction of 6m.
- (vii) Common open space must contain the following minimum deep soil areas:
  - In Zones B1 to B3 inclusive, B4 zones where the floor space ratio is greater than
     2.5:1 and B5 to B8 inclusive 0% of the site area.
  - II. In other than B zones and B4 zones where the floor space ratio is less than 2.5:1 for sites with an area less than  $650m^2 6.25\%$  of the site area.
  - III. In other than B zones and B4 zones where the floor space ratio is less than 2.5:1 for sites with an area more than 650m<sup>2</sup> and less than 1500m<sup>2</sup>- 10% of the site area.
  - IV. In other than B zones and B4 zones where the floor space ratio is less than 2.5:1 for sites with an area more than 1500m²- 15% of the site area.
- (viii) Deep soil areas must allow for suitable tree planting in relation to the amount of deep soil provided.

# (d) apartment layout,

- (i) The *floor area* of a studio apartment with one bathroom must not be less than 35m<sup>2</sup>.
- (ii) The *floor area* of an apartment with one bedroom and one bathroom must not be less than 50m<sup>2</sup>.
- (iii) The *floor area* of an apartment with two bedrooms and one bathroom must not be less than 70m<sup>2</sup>.
- (iv) The *floor area* of an apartment with three bedrooms and two bathrooms must not be less than 90m<sup>2</sup>. If there is only one bathroom the minimum area can be reduced to 85m<sup>2</sup>.
- (v) The calculation of the *floor area* in (i) to (iv) above excludes the floor area of any additional bathrooms.
- (vi) The floor area of a *main bedroom* (excluding the wardrobe) must not less than 10m<sup>2</sup> measured only where a minimum width of 3m (excluding the wardrobe) in two perpendicular directions exists.
- (vii) The floor area of *other bedrooms* must not less than 9m<sup>2</sup> (excluding the wardrobe) measured only where a minimum width of 2.7m (excluding the wardrobe) in two perpendicular directions exists.
- (viii) The minimum width in any direction of a living room (excluding any storage as required by (h)) in a studio apartment or a one bedroom apartment must not less than 3.6m.
- (ix) The minimum width in any direction of a living room (excluding any storage as required by (h)) in a two bedroom apartment should be not less than 3.9m.
- (x) The minimum width in any direction of a living room (excluding any storage as required by (h)) in a three bedroom apartment should be not less than 4.2m.
- (xi) The *main bedroom* of an apartment and a *studio apartment* must have wardrobe a minimum size of 1.8m long, 0.6m deep and 2.4 high. Other bedrooms must have a wardrobe of a minimum size of 1.2m long, 0.6m deep and 2.4 high.
- (xii) Overall building depth must not exceed 18 metres, except in the following circumstances:
  - I. Where the ceiling height to building depth ratio is at least 1:6.NOTE: A higher ceiling height to building depth ratio is, for example 1:5
  - II. For the extent of the *core*, provided that the maximum depth of apartments either side of the core is no more than 8m.
- (xiii) The maximium depth of an apartment is 8m.

(xiv) Residential flat developments that contain more than 20 dwellings must provide a mix of dwellings consistent with the following percentage mix:

I. Studio: 5 - 10%;

II. 1 bedroom: 10 - 30%

III. 2 bedroom: 40 - 75%; and

IV. 3 or more bedroom: 10 - 100%

- v. The maximum percentage of 1 bedroom apartments may be more than 30% provided that the numbers of studio dwellings and 1 bedroom apartments combined does not exceed 40% of the total apartments proposed.
- (xv) To improve universal access to all apartments, every apartment must be designed to achieve the Livable Housing Design Guidelines Silver standard and for developments containing:
  - 10 apartments or more and less than 30 apartments, 10% achieve the Livable Housing Design Guidelines Platinum standard
  - II. 30 apartments or more, 15% achieve the *Livable Housing Design Guidelines*Platinum standard

# (e) ceiling heights,

- (i) The minimum *ceiling height* of any *habitable room* in an apartment must be at least 2.7 metres which requires a floor to floor height of 3.1m.
- (ii) The minimum *ceiling height* of any non-habitable room in an apartment must be at least 2.4 metres which requires a floor to floor height of 2.8m.
- (iii) The ground floor (including any car parking) in a mixed use development or a B zone must have a *ceiling height* of at least 3.6m which requires a floor to floor height of 4m.
- (iii) The first floor level above the ground floor (including any car parking) in mixed use development or a B zone must have a *ceiling height* of at least 3.2m which requires a floor to floor height of 3.6m is required.
- (iv) Any above ground car parking level (except for as provided for in (iii) above) must have a *ceiling height* of at least 3.2m which requires a floor to floor height of 3.6m is required.

#### (f) balconies and private open space,

- (i) A *primary private open space* or *balcony* must be located adjacent to and be directly accessible from the living room, dining room or kitchen
- (ii) For at least 75% of apartments with a floor level lower than 35m above ground level (existing) a primary private balcony must be provided as follows:
  - I. For *studio* apartments at least 4m<sup>2</sup> area with no minimum width
  - II. For 1 bedroom apartments at least 8-m<sup>2</sup> area with a part that has a minimum size of 2m by 2m
  - III. For 2 bedroom apartments at least 10-m² area with a part that has a minimum size of 2m by 2m
  - IV. For 3+ bedroom apartments at least 12-m<sup>2</sup> area with a part that has a minimum size of 2m by 2.5m
- (iii) At ground level or on a podium the primary private open space must have a minimum area of 15m2 with a minimum width in any direction of 3m.
- (iv) in plan more than 25% of the perimeter of a balcony must be open outwards and not be enclosed by walls

# (g) natural ventilation,

- (i) Every *habitable room* must have a window in an external wall with a minimum *effective* openable area not less than 5% of the floor area of the room. This area is calculated exclusive of ventilation borrowed from an adjoining room.
- (ii) At least 60% of the number of apartments in a development with a floor level below 35m must have *natural cross ventilation*.
- (iii) Every part of any habitable room must be no less than 7m from the openable part of a window in an external wall. [or "be no further from the openable part of a window in and external wall such that the ceiling height to room depth ratio is at least 1:2.5"]

[Note: A higher ceiling height to distance ratio is, for example 1:2]

#### (h) storage,

- (i) In addition to storage in kitchens, bathrooms, bedrooms and storage for bicycles, the following volume of storage must be provided:
  - I. For studio apartments at least 4m<sup>3</sup>
  - II. For 1 *bedroom* apartments at least 6m<sup>3</sup>

- III. For 2 bedroom apartments at least 8m<sup>3</sup>
- IV. For 3 or more *bedroom* apartments at least 10m<sup>3</sup>
- (ii) At least 50% of the storage provided in (i) above must be located within the apartment interior (i.e. not on a *balcony*, in private open space or a basement)

#### (i) parking.

- (i) The minimum number of car parking spaces required for residents of a residential flat development for sites within 800m of a railway station or light rail stop in nominated inner and middle ring metropolitan Sydney areas <sup>1)</sup> zero;
  - NOTE: <sup>1)</sup> Includes the local government areas: Ashfield, Auburn, Bankstown, Botany Bay, Burwood, Canada Bay, Canterbury, City of Sydney, Hurstville, Kogarah, Lane Cove, Marrickville, Leichhardt, North Sydney, Parramatta (City Centre), Randwick, Rockdale, Ryde, Strathfield, Waverley, Willoughby, Woollhara
- (ii) The number of visitor car spaces are must not exceed a maximum of 1 space per every 10 apartments.
- (iii) One bicycle parking space for each apartment must be provided in a location that is secure, undercover and easily accessible from both the public domain and common areas.

#### 6B Development control plans cannot be inconsistent with SEPP65 Development Standards

The provisions of a development control plan under Division 6 of Part 3 of the Act, whenever made, are of no effect to the extent to which they aim to establish standards with respect to any of the following matters in relation to residential flat development that are inconsistent with the <u>following development</u> standards:

- (a) visual privacy and separation,
- (b) solar and daylight access,
- (c) common circulation and spaces,
- (d) apartment layout,
- (e) ceiling heights,
- (f) balconies and private open space,
- (g) natural ventilation,
- (h) storage
- (i) parking.

#### 3 Definitions

(1) In this Policy:

<u>Ceiling height</u> the vertical distance between the finished floor level and the underside of the finished ceiling level.

#### Deep soil

Effective Openable Area (EOA) the minimum area of clear opening of a window that can take part in providing natural ventilation. The effective openable area of a sliding or hung sash window can be measured in elevation. Hinged windows such as casement, awning and hopper windows may measure the diagonal plane from the edge of the sash to the jamb and add the triangles at either end up to a total area of the window opening in the wall. Obstructions within 2m of a window reduce the effective openable area as measured in elevation. Fly screens and security screens will reduce the effective openable area by half. Windows required to be child resistant must be calculated with the restricting device in place. [Note: this is not as described in the ABCB advisory note on the Protection of Openable Windows June 2013.]

**Floor area** means the sum of the floor area of an apartment or a room measured from the internal face of external walls, or from the internal face of walls separating the apartment or a room from any other apartment or common area, or other rooms, measured at a height of 1.4 metres above the floor, and includes:

- (a) the area of a mezzanine, and
- (b) habitable rooms in a basement or an attic.

but excludes:

- (c) plant rooms and other areas used exclusively for mechanical, hydraulic or electrical services or ducting, and
- (d) car parking (including access to that car parking), and
- (e) terraces and balconies with outer walls less than 1.4 metres high, and
- (f) voids above a floor at the level of a storey or storey above.

#### **Balcony**

Blank wall a wall without windows or balconies

**Building** as defined by the BCA.

**Building depth** is the overall cross section dimension of a building envelope. It includes the internal floor plate, external walls, balconies, external circulation and articulation such as recesses and steps in plan and section.

<u>Ceiling height</u> is measured vertically from finished floor level to finished ceiling level <u>Common circulation</u>

#### Common landscape area

#### Common open space

**Core** vertical circulation (lift and/or stairs) within a building. A single core may include multiple lifts serving the same floor area

**Courtyard** communal space at ground level or above a structure (e.g. podium), formed by the building and enclosed on 3 or more sides and open to the sky

**Daylight** consists of both skylight (diffuse light from the sky) and sunlight (direct beam radiation from the sun). Daylight changes with the time of day, season and weather conditions

<u>Deep soil</u> areas of soil unimpeded by buildings or structures above and below ground within a development and a minimum dimension of 6m. Deep soil zones exclude basement car parks, services, swimming pools, tennis courts and impervious surfaces including paved paths, car parks, driveways and roof areas

**Development standards** means the provisions identified in Clause 6A

### **Duct**

Habitable room includes a bedroom, living room, lounge room, music room, television room, kitchen, dining room, sewing room, study, playroom, family room, home theatre, sunroom and common rooms; but does not include bathrooms, laundries, water closets, pantries, walk-in wardrobes, corridor, hallway, lobby, photographic darkroom, clothes-drying room, and other spaces of a specialised nature occupied neither frequently nor for extended periods. If an area includes functions of a habitable room and a non-habitable room it is considered a habitable room. Note a corridor, hallway or lobby are a maximum of 2m wide. If these spaces are wider than 2m and allow other uses usually found in habitable rooms, they are considered to be habitable rooms. A kitchen that is a separate room and not part of a living or dining room can be considered a non-habitable room but must have a window that provides the minimum requirement of light and air.

**Livable Housing Design Guidelines** Livable Housing Design Guidelines Second Edition 2012 or the latest version

*Main bedroom* the main bedroom within an apartment, every apartment apart from a studio has one main bedroom

Natural cross ventilation is equal to the compliance requirements of the green star multi-residential v1 2009 IEQ-22 Natural Ventilation Guideline with the following addition: a breeze path is an area in plan described by straight lines that connect the outer extents of openings. The breeze path must occupy at least 25% of the primary living space and main bedrooms. To be naturally cross ventilated an apartment must be either a through apartment with windows on opposite sides of the building or

corner apartment on an external corner of the building (not on a notch, slot or indent in the façade) with windows on perpendicular walls.

The aim or purpose of providing natural cross ventilation is not solely to improve the thermal performance of buildings and must be provided independently of any requirement of BASIX.

Natural ventilation has several benefits: no running cost, zero energy consumption and low maintenance. It is also regarded as healthy, having less hygiene problems with ducts, and filters etc. and the 'naturalness' in the way that it connects with the outside is seen as a psychological benefit.

The use of *ducts*, even if they are not mechanically assisted, does not constitute natural cross ventilation.

Natural cross ventilation is more beneficial in summer. In winter, adverse cooling from natural cross ventilation can be controlled by limiting the opening of windows or the use of warm clothing. The availability of natural cross ventilation can expand a person's comfort zone, especially in summer.

Natural cross ventilation also removes air borne pollutants, smells and naturally produced CO2 from the indoor environment.

**Non-habitable room** spaces of a specialised nature not occupied frequently or for extended periods, including bathrooms, laundries, water closets, pantries, walk-in wardrobes, corridor, hallway, lobby, photographic darkroom, and clothes-drying room. A corridor, hallway or lobby are a maximum of 2m wide, spaces wider than 2m are habitable rooms.

# Open side of a balcony

**Other bedroom** a bedroom that is not the main bedroom

**Primary balcony** the balcony connected to the living room

<u>Primary common open space</u> the principal area of common open space, usually the largest consolidated area for the active use of residential, for example seating, BBQ space, play space, roof terrace

**Primary private open space** the principal area of private open space, usually the largest consolidated area

<u>Studio apartment</u> an apartment consisting of one habitable room that combines the functions of a bedroom and a living room

<u>Sunlight</u> the direct beam radiation from the sun. The aim or purpose of providing sun access is not to improve the thermal performance of buildings and must be provided independently of any requirement of BASIX.

Sunlight has physical and psychological health benefits. In winter, when there is generally less sunlight, these benefits are greater and sun access is more desired. Sunlight is particularly beneficial for younger and older groups of the population. It also lessens the need for and the cost of artificial

heating and artificial lighting. The availability of sunlight can expand a person's comfort zone, especially in winter.

For the glass of a window to be defined as receiving sunlight the amount of sunlight on the surface of the glass must be a minimum of 1m<sup>2</sup>.

For a balcony or open space to be defined as receiving sunlight the amount of sunlight must be a minimum of 1m<sup>2</sup> measured horizontally on a plane at the maximum height of the balustrade of the balcony or the ground level of the private open space.

For communal open space to be defined as receiving sunlight the amount of sunlight is measured at ground level of the communal open space.

When determining the sunlight received all other existing buildings (including fences and any other structures) and landform, but not vegetation that may obstruct the sun must be taken into account. If a DCP or an environmental planning instrument has defined building envelopes these should be considered as buildings even if they are not yet extant.

# Window a window in an external wall

Storeys the number of storeys includes all levels of the building predominantly above ground level (existing) or internally within a site from the top of a podium and includes mezzanines, attics and balconies but not roof terraces

# 30 Standards that cannot be used as grounds to refuse development consent or modification of development consent

- (1) A consent authority must not refuse consent to a development application for the carrying out of residential flat development (or refuse an application for the modification of development consent) on any of the following grounds:
- (a) **ceiling height**: if the proposed ceiling heights for the building are equal to, or greater than, the minimum recommended ceiling heights set out in Part 4 of the Apartment Design Guide Clause 6A (e),
- (b) apartment area: if the proposed area for each apartment is equal to, or greater than, the recommended internal area for the relevant apartment type set out in Part 4 of the Apartment Design Guide Clause 6A (d).
- (c) car parking: if the proposed car parking for the building is equal to, or greater less than, the recommended minimum amount of car parking set out in Part 3 of the Apartment Design Guide Clause 6A (i).

Note. The Building Code of Australia regulates the minimum ceiling heights for residential flat buildings.