



Proposed 20 Storey Built Form  
**APPENDIX**

## PROPOSED FORM: 20 STOREY RESIDENTIAL BUILDINGS

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Proposed building forms apply to the Linda Street Precinct in Hornsby and relate to desired features described in the Key Principles Diagrams. Proposed forms also demonstrate high standards of urban design quality according to the State Government's design guidelines for residential flats and current market practice.

Slender building forms which are widely-separated from one another are proposed to ensure that streets are not visually "overcrowded" by "street-wall" developments, and to deliver highest possible levels of amenity for future residents. Primarily due to the minimum building separations which are specified by the SEPP 65 design guidelines, twenty storey buildings should not compromise the private amenity which currently is enjoyed by residents of three storey walk-up apartments in this locality.

Proposed forms address a number of issues which are especially-significant for high rise residential developments such as the particular need for communal areas which can stimulate social interaction between future residents, the quality of landscaping for street frontages and podium areas, and architectural design techniques that can stimulate lively facades and attractive streetscapes.

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Proposed forms incorporate best-practice urban design  
+ respond to existing characteristics of each neighbourhood

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## Residential flat buildings up to 20 storeys



### Conventional high-rise design techniques do not guarantee high standards of urban design quality:

- The development industry has a preference for very long buildings due to cost economies, such as "slab blocks" with minimal articulation that are set very close to the street:

The top illustration shows a building over 50m long, with a height stepping from 20 storeys down to eight levels next to an existing three storey apartment building (a requirement of SEPP 65 design guidelines).

- Strong "articulation" of building forms would not remedy the effect of long slab blocks:

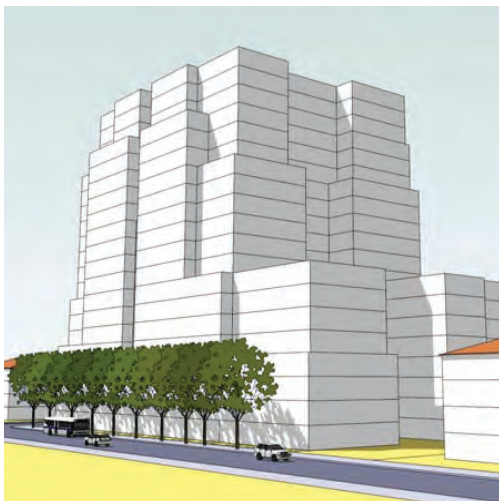
The lower illustration shows a building with "wedding cake terracing" where upper storeys are set progressively further from the site's boundaries.

- Both examples involve a "street wall" style of development which is not appropriate for tall buildings:

Visually, they result in streetscapes that are totally "enclosed", where long buildings obscure any view toward landscape or townscape backdrops or the sky;

In relation to amenity, apartments in these buildings frequently experience poor levels of sunlight and natural ventilation;

Also, they tend to favour long hotel-style corridors which don't encourage social interaction between residents.



### A higher standard of design quality is achieved by narrow buildings:

- The bottom illustration depicts buildings with "footprints" of approximately 18m x 40m.

- Buildings are separated by 24m:

Required by the SEPP 65 guidelines to provide sunlight, ventilation, privacy and deep-soil landscaping.

- Each level would accommodate six to eight dwellings:

A mix of one, two and three bedrooms.

- To promote highest standards of design quality, detailed guidelines are necessary:

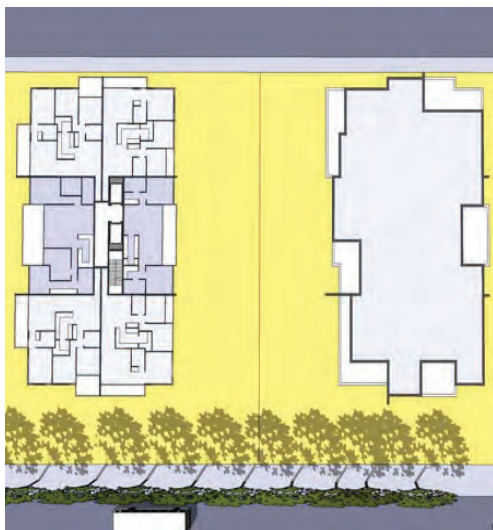
Specifying design techniques for the articulation and animation of facades;

Noting the importance of communal areas;

Nominating elements of landscape design.



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**The preferred form for 20 storey residential flat buildings involves:**

- Limits for the building footprint:
  - A width of 18m to 20m excluding balconies;
  - Depth of 35m to 40m provided that floorplans accommodate substantial "indentations" in exterior walls.
- Wide "deep soil" setbacks and separations between adjoining buildings:
  - 8m to 10m from street boundaries;
  - A minimum of 2m from laneways;
  - At least 24m between adjoining 20 storey apartment buildings (whether on the same site or adjacent properties).
- Effective articulation of the building form:
  - Achieved by asymmetric floorplans (top right-hand image) that incorporate "projecting" rooms + recessed or corner balconies and cast ever-moving patterns of shadows across each facade;
  - Accented by additional setbacks for the top-most four or five "penthouse" storeys and by ground-level podiums which project forward of tower footprints;
  - Enhanced by balconies and windows which create varied patterns (as opposed to uniform widths + regular arrangements);
  - Capped by distinctive roof forms which cast prominent shadows across facades below.
- Floorplans and development yields tailored to provide sunlight and natural ventilation:
  - SEPP 65 guidelines specify standards and the minimum proportion of dwellings in any development which must comply.
- Effective design of communal areas:
  - Particularly important because each building would accommodate 200 or more residents;
  - Primarily located upon landscaped podiums which identify semi-public "territory", and potentially including lobbies, pathways, gardens, pools, social rooms and / or gyms;
  - Important tools that promote passive security in semi-public areas.
- Service areas that are integrated effectively with the design of podiums:
  - Parking concealed within podiums or located in basement levels, and accessed from rear lanes;
  - Garbage storage areas accessed from rear lanes.





#### Important design details include:

- Vigorous-patterning of facades:
  - Since variation of floorplans and floorplates is difficult for high-rise buildings, effective articulation depends upon design measures that are “applied” to facades;
  - One effective design measure involves an “interlocking” variety of balcony shapes which are repeated in semi-regular patterns, and which may be partly-glazed to create “winter gardens”;
  - Another method involves a variety of window shapes which also are repeated to create semi-regular patterns.
- Effective social planning of communal spaces:
  - A network of “pathways” for residents and visitors to access lobbies or the street, and areas where informal social meetings may occur spontaneously;
  - Ideally located upon a podium level which designates semi-public territory, and providing a variety of semi-public and semi-private open spaces;
  - Incorporating pools and gyms in prominent “shop-front” locations.
- Discrete integration of services:
  - Entrances to garage and storage areas inserted discretely into podiums to provide unobtrusive streetscape elements.
- Comprehensive landscaping and considered design detailing for semi-public areas:
  - Rows of trees planted in deep soil setbacks along streets and laneways, as well as avenues along pathways across podium levels;
  - Shrubs and understory as feature plantings and to provide privacy screens for private courtyards at podium level;
  - Retaining walls, balustrades and privacy screens surrounding private courtyards constructed of materials that have a natural character (and providing contrasts to the otherwise-ubiquitous painted cement-rendered surfaces).

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