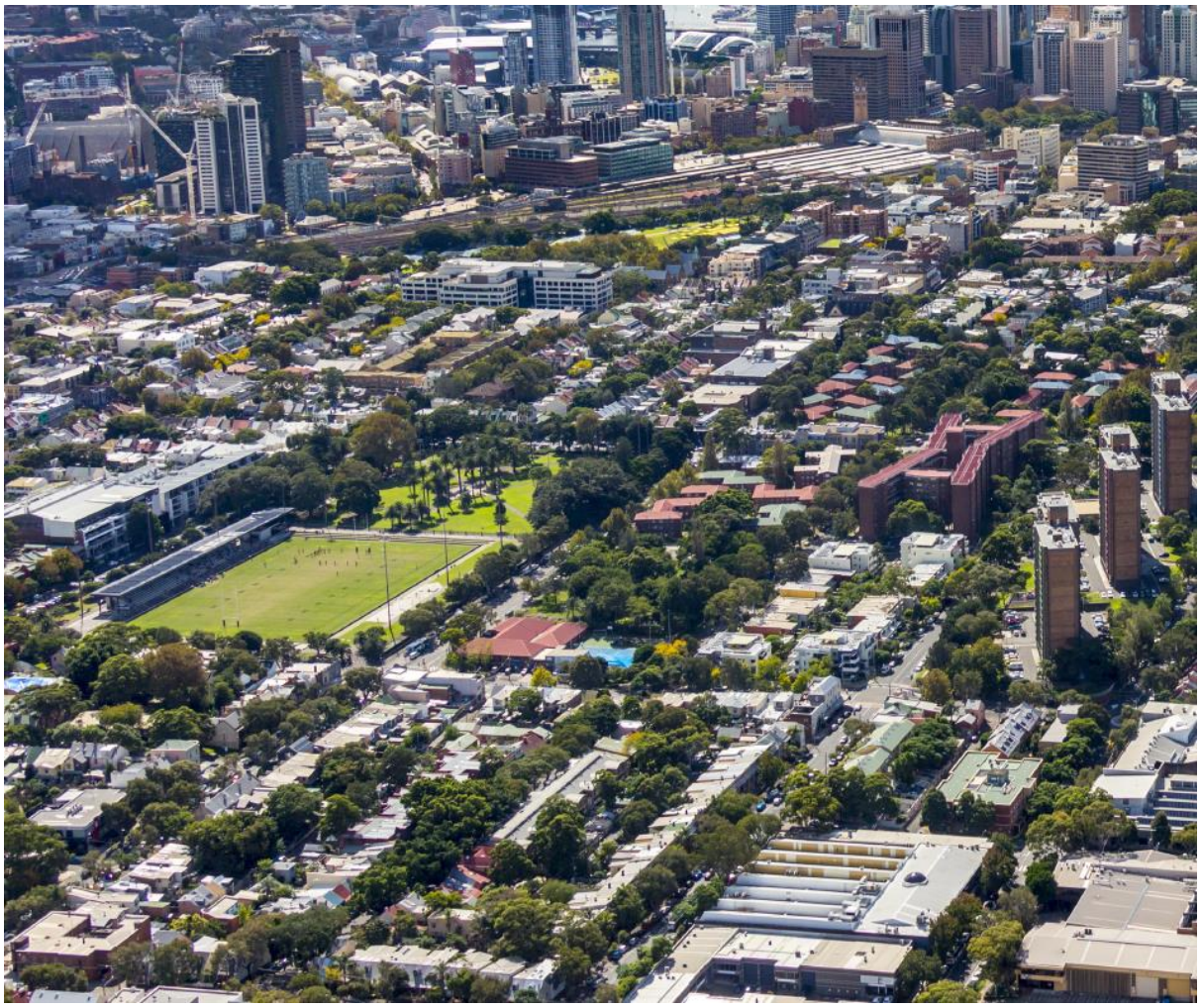
Attachment C

Draft Design Guide
600-660 Elizabeth Street, Redfern

CITY OF SYDNEY

Design Guide

600-660 Elizabeth Street, Redfern



Design Guide
October 2021

1.1 Name of Guide

This document is the Design Guide – 600-660 Elizabeth Street, Redfern.

1.2 Citation

This document may be referred to as the Guide.

1.3 Commencement

The Guide commences on the day on which Planning Proposal – 600-660 Elizabeth Street, Redfern is made.

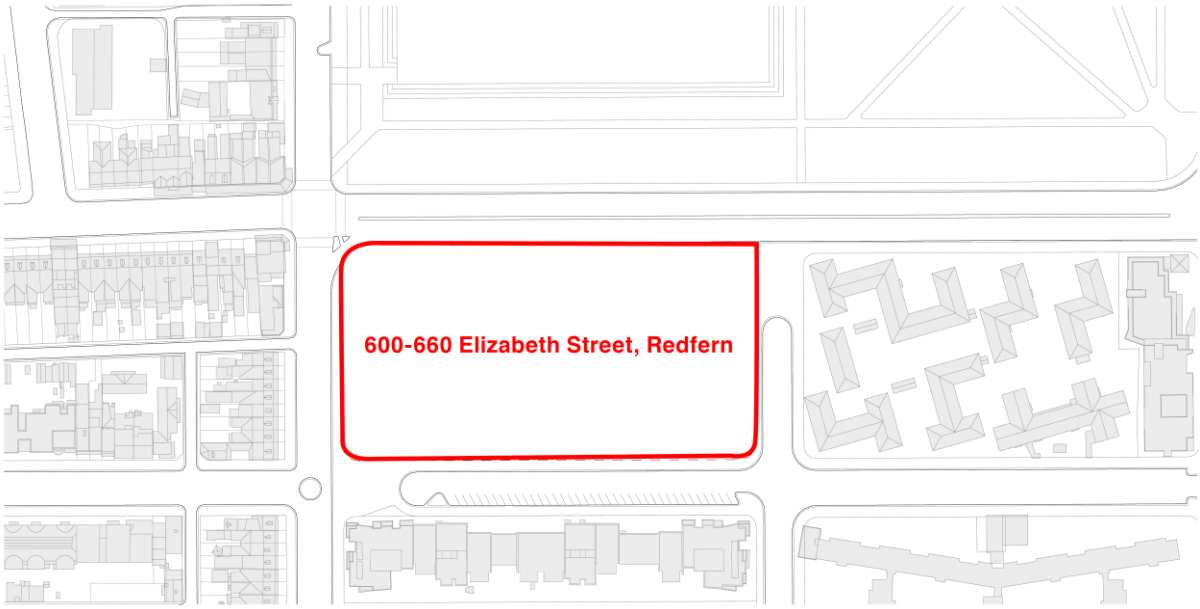
1.4 Land to which this Guide applies

The Guide applies to the land identified on **Figure 1: Land Application**

This Guide is a matter for consideration if the proposed FSR on the site exceeds 1.5:1.

Refer to Clause 1.9, Clause 6.19, Clause 6.xx 600-660 Elizabeth Street, Redfern of the Sydney Local Environmental Plan 2012 (SLEP 2012) for an additional description controls for the land.

Figure 1: Land Application



1.5 How to Use this Guide

This Guide provides design and other guidance for development within the site. It comprises a hierarchy of objectives and guidance to guide future development. Each topic area is structured to provide the user with:

(a) Objectives that describe the desired outcome(s)

(b) Guidance that provides advice of how the objectives can be achieved through appropriate design and development responses

Development needs to demonstrate how it meets the objective and guidance. The guidance sets clear measurable benchmarks for how the objectives can be practically achieved. If it is not possible to satisfy the guidance, applications must demonstrate what other responses are used to achieve the objectives.

Definitions

Guide – To lead, direct or advise in any course or action

Site – refers to the land subject to this Guide

FPL – Flood Planning Level

1.6 Relationship to Other Documents (and Instruments)

The Guide sets out specific guidance to inform future development within the sub-precinct. Development within the sub-precinct will need to have regard to this Guide as well as the relevant provisions in the Sydney Local Environmental Plan 2012 (SLEP 2012) and other relevant Environmental Planning Instruments. The Sydney Development Control Plan 2012 (SDCP 2012) is applicable to development not identified as State Significant Development. In the event of an inconsistency between this Guide and the SDCP 2012, this Guide prevails to the extent of the inconsistency.

1.7 Purpose

The purpose of this Design Guide is to supplement the provisions of the SLEP 2012 by providing more detailed provisions to guide development on land shown in **Figure 1: Land Application**

Development applications (DA) for new development will be assessed on their individual merit having regard to the SLEP 2012, this Design Guide, other matters listed in Section 4.15 of the Act, and any other adopted relevant policies that relate to development within the sub-precinct.

2.1 Desired Future Character Statement

Objective

The primary objective of this Guideline is to create development consistent with the following desired future character statement.

Future Character Statement

The future development has:

(a) substantial social and affordable housing occupying the land

(b) a PCYC or similar community facility on site

(c) very high levels of environmental performance including PV arrays that supply substantial energy, smart use of water and passive design features like external sun access and shading and natural cross ventilation suitable for Sydney's climate

(d) a rich landscape setting with substantial tree canopy cover and landscaping that screens walls that protect the interiors of buildings from flooding

(e) building heights that maintain solar access to Redfern Park throughout the year

(f) a permeable pattern of walking connections through the site that also provide on-site at grade servicing

(g) commercial, community and/or retail uses fronting Elizabeth Street at ground level

(h) a rich variety of architectural approaches, diverse apartment types, building heights and form in a collection of well-constructed, low maintenance buildings

(i) a built form that responds to the lower scale of the buildings to the south, by stepping down in height towards Phillip Street

3.1 Uses and Flooding

Objectives

(a) Provide a community facility as part of and at the same time as the redevelopment of the site

(b) Provide a range of non-residential uses fronting Elizabeth Street at ground level including commercial, retail and community uses

(c) Provide social and affordable housing

(d) Provide a diverse range of apartment types and sizes00

(e) Minimise the negative streetscape and access impacts of the high Flood Planning Level

(f) Plan for global warming induced higher level and more frequent flooding

Guidance

(1) A community facility is to be provided predominantly located within Development Section 1, as shown in blue in **Figure *2*: Community Facility Predominant Location and Development Sections** with frontages to Elizabeth and Kettle Streets and making use of the pedestrian part of Kettle Street. The final Occupation Certificate for the community facility must be issued before the first Occupation Certificate for any residential building on site.

(2) Demolition of the existing PCYC on the site is not to commence until after the new similar community facility has received a full occupation certificate.

(3) The City of Sydney and community must be consulted with on the functional brief for the community facility.

Figure 2: Community Facility Predominant Location and Development Sections

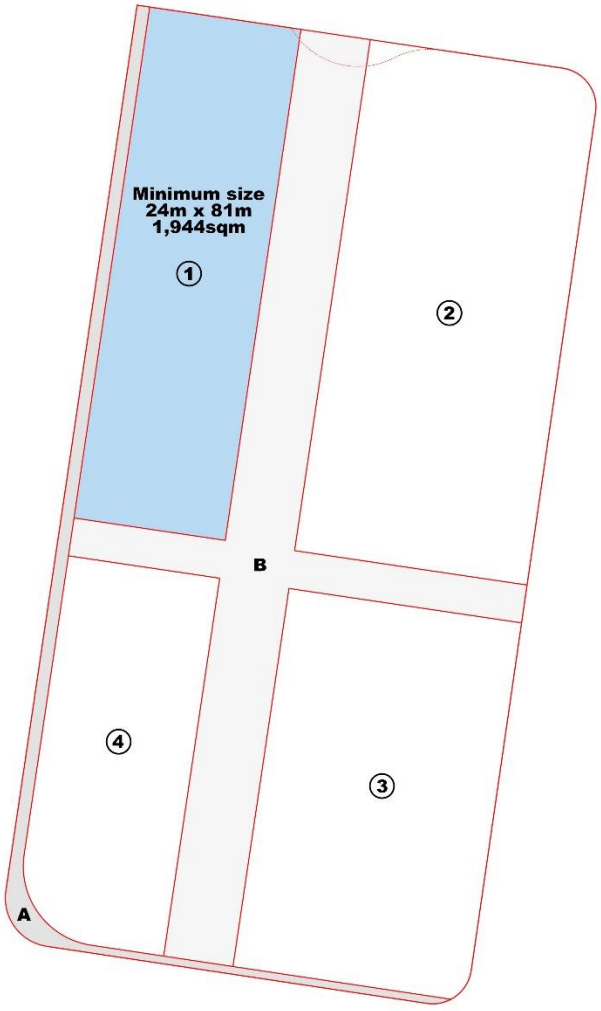


Figure 2 – Key

Subdivision into 4 development sections:

1 – Community Facility

2 to 4 – Mixed use

A – Footpath widening dedication

B – publicly accessible Access Connections (through site links)

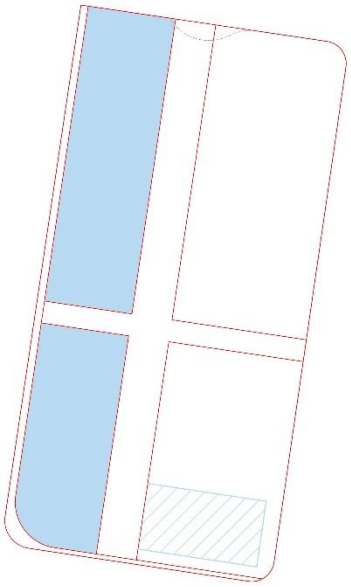
(4) Social and affordable housing is to be of an equal or higher quality than any other housing provided as part of the overall development. Higher quality includes greater amenity of the dwellings with a greater proportion receiving natural cross ventilation and sun access; longer life construction; and, lower maintenance requirements.

(5) The ground floor of development fronting Elizabeth Street shown blue in **Figure 3: Diverse Non-residential Ground Floor Uses** must be a mix of community, communal, commercial and retail uses. It may also include small residential lobbies and a small concentrated amount of services. It may not include residential apartments within 8m of the western boundaries at the ground level (or the first level above the ground where flooding requires level one to be elevated).

(6) The ground level of development fronting Elizabeth Street shown blue in **Figure 3: Diverse Non-residential Ground Floor Uses** is to have at least half of the ground floor at levels as close as practicable to the footpath level on Elizabeth Street. The construction of these areas is to be flood resistant where they are below the flood planning level (FPL). Internal tenancy lifts, isolated from flooding, will provide access to areas above the FPL. Refer to examples

(7) Community space may be constructed on Development Section 3 fronting Phillip Street shown in blue hatch in **Figure 3: Diverse Non-residential Ground Floor Uses** to activate this frontage. This space will be of robust flood resistant construction and have a low floor to ceiling height. It will be subject to flooding from time to time and so will be capable of withstanding inundation without damage and with electrical services located above the FPL have only flood resistant finishes, fixtures, fittings and loose furniture etc. Any floor space permitted in association with this community space will be in addition to any other permissible floor space, via a Cl 4.6 application.

Figure 3: Diverse Non-residential Ground Floor Uses



(8) Use flood resistant construction to allow some part of each piece of non-residential spaces to have floor levels below the FPL to engage with the street

(9) Use dense planting to screen views to high flood resistant walls at ground level

(10) Minimise the length of ramp access to on-site parking by locating the access point near the high point on the surrounding streets

(11) Account for the flood risks prevalent throughout and surrounding the site including adopting the flood hazard mapping that incorporates a minimum 10% increase in the ARI to account for climate change. All residential areas and critical infrastructure must be raised above the FPL (greater of Probable Maximum Flood (PMF) levels or 100-year ARI plus freeboard to allow for an increase in rainfall intensity of 10%).

3.2 Local infrastructure

Objectives

(a) Introduce a legible and permeable pattern of new internal access ways

(b) Create a fine-grained pattern of development Sections

(c) Widen narrow footpaths on Elizabeth and Phillip Streets

(d) Provide high quality landscaped setbacks with deep soil below to Walker, Kettle and Phillip Streets to allow existing and new street tree canopies to overhang and provide a high amenity setting for the buildings

(e) Provide on-site storm water detention

Guidance

(1) Where required by the City of Sydney, footpath widenings are to be provided in the locations identified in **Figure 4: Local Infrastructure**.

(2) Where required by the City of Sydney, dedicated easements for publicly accessible through-site links (Access Connections) are to be provided generally in the locations identified in Figure 4: Local Infrastructure. Through-site links are to be uncovered by structures (clear to the sky) and publicly accessible without impediment at all times.

(3) The southern boundary of Kettle Street is to be realigned to be straight by mutual agreement between the landowner and the City of Sydney

(4) All Access Connections are to be designed and constructed to be step free with maximum 1 in 20 gradients in accordance with the standards set out in the City of Sydney Streets Design Code and Australian Standards for access for people with disabilities.

(5) Footpaths and Access Connections are to be finished in accordance with detailed public domain plans, RLs, cross and longitudinal sections and construction specifications agreed by the City of Sydney prior to development approval.

(6) Public domain works are to incorporate underground utilities within the street reservation as agreed with the City of Sydney and in a manner that facilitates retention of street trees and new planting.

Figure 4: Local Infrastructure

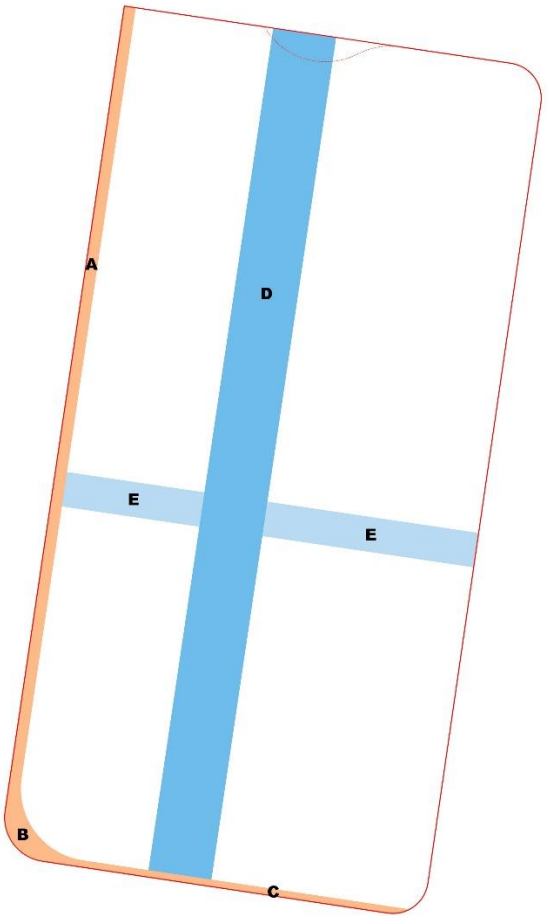


Figure 4 – Key

Dedicate land to the City of Sydney for footpath widening:

A – 2m width on Elizabeth Street

B – land at the intersection of Elizabeth and Phillip Streets having a maximum internal radius of 12.5m with a minimum dimension at the corner of 4.3m

C – 1.2m on Phillip Street

Dedicate easements for public access generally in the locations show covering Access Connections with dimensions of:

D – 10-12m wide north-south Access Connection from Phillip Street to Kettle Street

E – minimum 6m wide east-west Access Connections from Elizabeth Street to Walker Street

3.3 Tree Canopy Cover, Landscape, Deep Soil, Vehicular Access, Loading and Servicing

Objectives

(a) Maximise tree canopy cover on site

(b) Maximise deep soil provision on site

(c) Maximise the retention of existing street trees

(d) Define the permissible extent of on-site parking

(e) Minimise the impact of vehicular access and servicing on the public domain interface of the development

(f) Ensure vehicular access points are not provided from Elizabeth or Phillip Streets except at Access Connection points

(g) Ensure on-site vehicle circulation and parking is managed so as to minimize impact on surrounding streets

(h) Ensure above ground services are not located adjacent to the street within areas identified for landscaping

Guidance

(1) Landscape Areas must be provided in accordance with **Figure 5: Landscape Areas**. Landscaped areas must be comprised of Landscaped Private Open Space (LPOS) Landscaped Communal Open Space (LCOS).

   (a) LPOS must be almost entirely occupied by planting in deep soil and support tree canopy cover overhead. It may not be overhung by built elements except non-trafficable external sun shading. Where LPOS is adjacent to an apartment it must form part of that apartment's private open space and assist to manage privacy between the apartment and common areas. Where LPOS is not adjacent to an apartment it may be occupied by entry paths, stairs and ramps.

   (b) LCOS must be almost entirely occupied by planting in deep soil and support tree canopy cover overhead. It may not be overhung by built elements. It may be occupied by entry paths, stairs and ramps.

   (c) LPOS and LCOS may not be occupied by building services, substations or the like which must be integrated into the building volumes and located within the areas shown white in **Figure 5: Landscape Areas**.

Figure 5: Landscape Areas

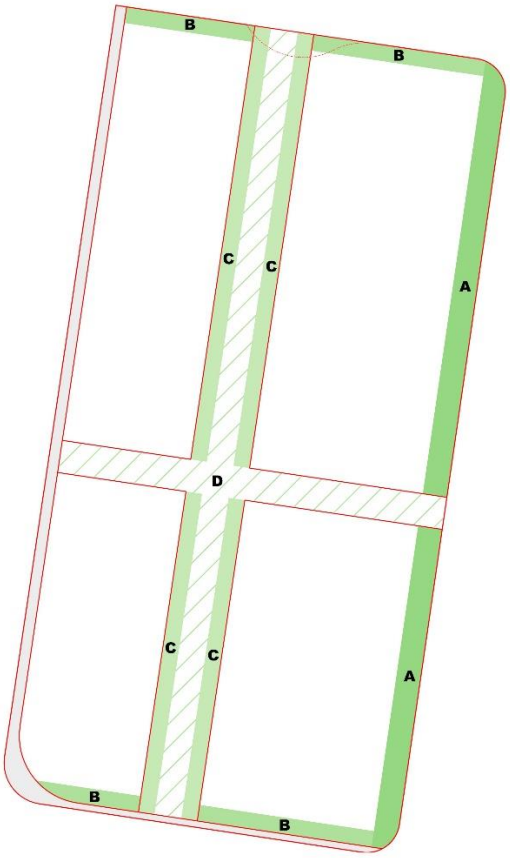


Figure 5 – Key

Provide Landscape Areas:

A – minimum 4.5m wide or where it can be demonstrated that development will not result in removal of major structural branches of street trees with trunks more than 1m from the boundary as demonstrated by a Lidar survey) – minimum 3m wide

B – minimum 3m wide

C – combined minimum of half the width of the north-south access connection, i.e. minimum 2.5m-3m on either side

A, B, C and D – soil that has no structures above or below in accordance with (2) and (3) and medium to large trees in accordance with (4).

(2) A minimum of 1650sqm of soil that has no structures above or below is to be provided on the parts of the site. This may include areas under entry paths, stairs or ramps and permeable paving. This space must be predominantly located within landscaped street setbacks (excluding footpath widenings), Access Connections and courtyards.

(3) Deep soil landscaped areas are to be provided in accordance with Figure 5 or 3.3(2), whichever is greater.

(4) To comply with 3.3(1) and (2) above, car parking and basements may not be permitted to be located on or below Access Connections or under the footpath widening areas shown at A, B and C on **Figure 4: Local Infrastructure** and A, B, C, and D on Figure 6 Landscaped Areas with the exception of a maximum of four (4) maximum 6m wide basement vehicle access passages.

(5) At least 15% of the total site area must be covered by tree canopy when trees reach maturity, demonstrated by a landscape plan prepared by a suitably qualified landscape architect.

(6) One access ramp from the street to the parking level is to be provided from Section. All other Sections will have their vehicular access via the linked basements and break through panels and will be provided with suitable easements for access across other Sections to access the ramp as required.

(7) Parking is to be provided with a floor level at least 3m below the FPL. Any parking that meets this requirement up to the maximum number of spaces permitted in SLEP 2012 will be deemed to be required parking for the purposes of determining Floor Space.

(8) Vehicle entry and exit control measures must be implemented at all site boundaries (e.g. removable bollards).

(9) The preferred vehicle circulation within the Access Connections is one way south bound with entry from Kettle Street and exit to Phillip Street.

(10) Access to Phillip Street is subject to approval by Transport for NSW and discussions must begin prior to competitive processes being undertaken.

(11) Bike parking is to be provided within the development including visitor spaces in the Access Connections.

(12) No vehicular access is to be provided from Elizabeth Street or Phillip Street.

3.4 Height of buildings

Objectives

(a) Minimise the impact of height on the character of the surrounding areas

(b) Minimise overshadowing of surrounding development

(c) Minimise the building depth of residential flat buildings to maximise daylight and natural ventilation to habitable rooms

(d) Ensure building separations meet Apartment Design Guide design criteria

(e) Ensure all buildings are provided with external sun shading appropriate to orientation and context

Guidance

(1) The height and location of development must not exceed the maximum heights above the FLP in storeys and metres and RLs in **Figure 7: Maximum Heights in Storeys**. For the purpose of this section any level of a building that has habitable areas and has a floor level above the FPL is a storey (including attics and mezzanines). There is a difference in height between the LEP RL height controls and the height in storeys to allow for lift access to roofs and plant and equipment. This difference is not intended to be occupied by additional storeys including habitable spaces.

(2) Built elements may extend up to 1.5m over adjacent Access Connections described in **Figure 4: Local Infrastructure,** but are limited to non-trafficable external sun shading.

Figure 7 (left): Maximum Heights in Storeys

Figure 8 (right): Preferred Building Arrangement

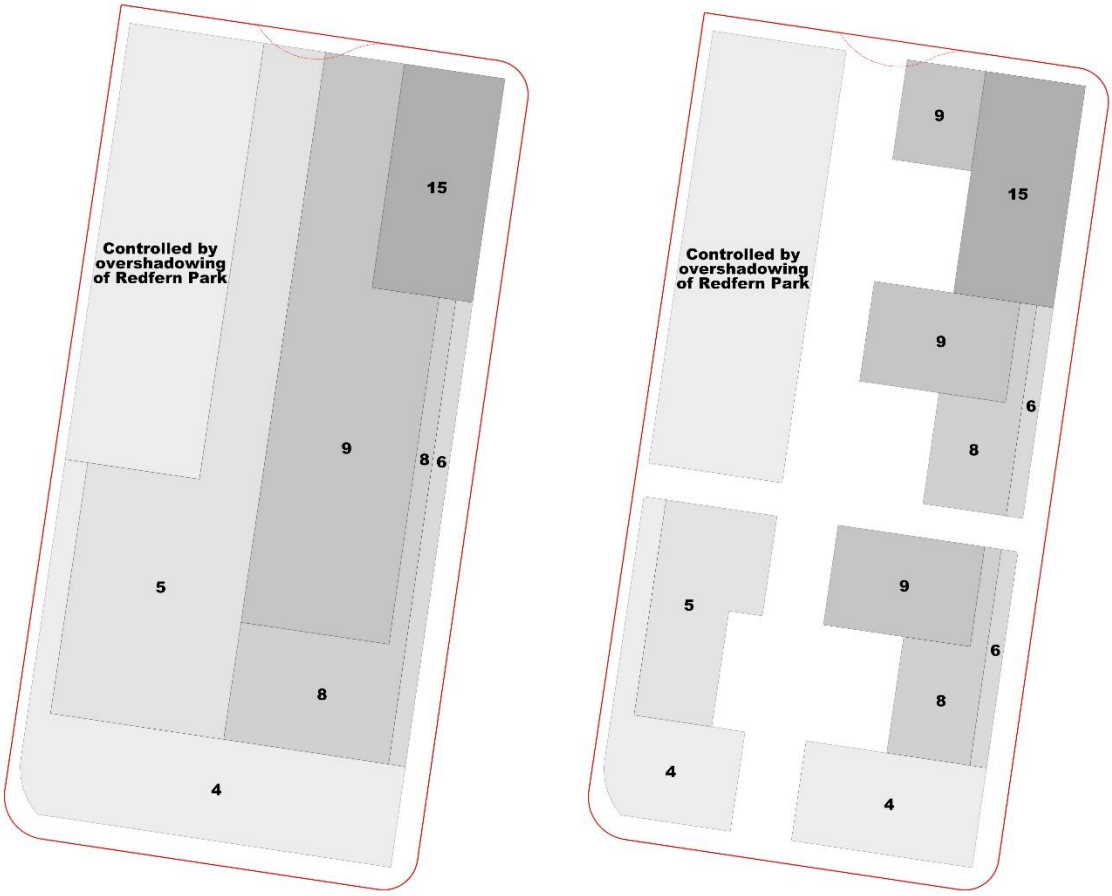


Figure 7 and 8 – Key

Black number – maximum height in storeys, extent shown as a grey area

3.5 Design Excellence Strategy

Guidance

The site will be subject to a number of competitive design processes that will ensure that at least 3 independent architectural practices are involved in the design of the buildings on the site. Each separate Section must be designed by a separate architectural practice although a master architect may coordinate the linked basement structures.

(1) Process

A single competitive design alternatives process is held with 3 competing consortium where each consortium is comprised of at least 3 practices (including at least one emerging practice).

(2) Fine Grain and Contextually Varied Architecture

Using either of the above processes will result in at least 3 architectural practices designing the buildings on the site. Each practice will respond to the context of their project and design to ensure the grain of the overall development is fine. This requirement will be reflected in the competition brief(s).

(3) Jury

For all processes the jury will be appointed by equal members nominated by the City of Sydney and the proponent. All Jury members will have sustainability, architectural, urban design or landscape architectural industry recognised expertise.

Judging criteria will include whether a highly skilled resolution of the ground plane and accessible building entries has been achieved as a primary consideration.

(4) Award of bonus floor space

The competitive processes will be for the purpose of additional floor space. The building massing described in this Guide has allows buildings depths and heights that can accommodate the additional floor space. If design excellence is not achieved then the buildings will have shallower depths not lower heights.

(5) ESD target benchmarks

The ESD target benchmarks are described in SLEP 2012 and in this Guide.

(6) Vehicle access

Indicative approval from Transport for NSW for vehicle access arrangements must be in place before competitive design processes begin.

3.6 Street trees

Objective

(a) Maximise retention of existing street trees

Guidance

(1) Existing street trees with trunks located more than 1m from the site boundary must be retained.

3.7 Sun access to the park and overshadowing

Objectives

(a) Preserve sunlight to Redfern Park all year round

(b) Minimise overshadowing of adjacent development

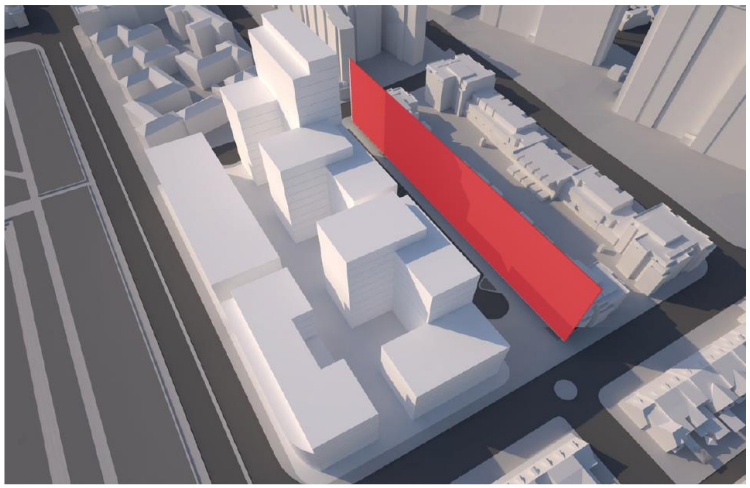
Guidance

(1) Development must result in no additional overshadowing of Redfern Park, 51 Redfern Street, Redfern (Lot 1 DP 135313 and Lot 1 DP 724757) shown in **Figure 9: Redfern Park** from 9am-3pm all year round.

Figure 9: Redfern Park (shown green)

(2) Overshadowing of the land on the eastern side of Walker Street must ensure that at least 70% of the western face of a plane formed on the alignment of the western boundary of 57 Walker Street Redfern (Lot 100 DP 1168202) for its entire length between RL 32.7 and RL 59.6 receives 2 hours of sunlight on 21 June between 9am and 3pm. The plane is illustrated in **Figure 10: Illustration of 57 Walker Street Solar Compliance Plane**.

Figure 10: Illustration of 57 Walker Street Solar Compliance Plane



(3) Overshadowing of the all properties on the south side of Phillip Street must ensure that any windows to living spaces at the rear of those properties that face their principle open space the sunlight received on 21 June between 9am and 3pm is not reduced by more than 20% of the time that the window receives at least 1sqm of sunlight for more than 15 minutes.

(4) Overshadowing of private open spaces at the rear of adjacent lots is minimised.

3.8 Apartment types, minimum number of cores and siting and layout

Objectives

(a) Provide the number of lift cores required to ensure natural cross ventilation is achieved to the required proportion of apartments in the manner described by the Apartment Design Guide and social groupings of apartments are kept to low numbers

(b) Ensure the siting and layout of apartments facing Elizabeth Street respond to the noisy environment

(c) Ensure a diverse range of apartment types are provided

(d) Ensure affordable housing meets the needs of the local community

Guidance

(1) To achieve required cross ventilation development sections must indicatively provide entirely separate vertical circulation cores:

  (a) for Section 2, at least 5 cores

  (b) for Section 3, at least 4 cores

(2) The siting and layout of Section 4 must protect habitable rooms from noise from Elizabeth Street or every habitable room facing Elizabeth Street must be provided with a noise attenuating natural ventilation plenum.

(3) privacy design elements (e.g. blades or window reveal designs) must be provided to windows within 6m of courtyard internal corners to prevent direct sight to other windows within 6m of the internal corner.

(4) Consideration should be given to allocating 10 per cent or more of the total number of affordable rental dwellings to be provided for Aboriginal and Torres Strait Islander housing.

(5) Any Aboriginal and Torres Strait Islander housing is to be culturally appropriate housing.

3.9 Ecologically Sustainable Development

Objectives

(a) Minimise energy and water use and waste generation

(b) Maximise on-site renewable energy generation, water re-use and waste recycling

Guidance

(1) Development must achieve the following minimum ratings:

(a) All development

- 6-star Green Star communities rating
- 5-star Green Star Design and As-Built

(b) Residential Development

- BASIX Energy 40**,** but only where additional floor space under Clause 6.XX 600-660 Elizabeth Street, Redfern in Sydney LEP 2012 is used
- BASIX Water 40 with a target to exceed by 5 points

(c) Commercial areas

- NABERS Energy rating of 5.5 stars
- NABERS Water rating of 4.5 stars

(2) All development must have a combination of green roofs, roof-top solar PV and communal open space on rooftops. Other areas must be designed with high albedo qualities to reflect heat.

(3) The site must be planned to minimise paved areas and maximise stormwater infiltration. All public access paving must be permeable except where accessibility requirements restrict it.

(4) All development must be designed to maximise passive design approaches including provision of external sun access and shading to all apartments except where tree canopy provides shading over an extended summer period.

(5) Where possible gas systems should be avoided. Development must demonstrate why electric systems are not suitable given the urgent need to reduce greenhouse gas emissions.

(6) All apartments should have access to external clothes drying facilities.

(7) All parts of the development must include piping for use of recycled water in irrigation, toilets and the like.

(8) Development must follow the guidance of the City of Sydney Guidelines for Waste Management in New Development

(9) Connection into the water storage located in Redfern Park should be considered in consultation with the City of Sydney.

3.11 Noise

Objectives

(a) Minimise the impact of noise on sensitive receivers

Guidance

(1) Noise from the community facility must be attenuated within the development so it does not affect adjacent sensitive receivers including apartments on the site. This includes structure borne noise.

(2) Development for the purposes of residential accommodation, must ensure that the following LAeq levels are not exceeded:

  (a) in any bedroom in the residential accommodation—35 dB(A) at any time between 10 pm and 7 am,

  (b) anywhere else in the residential accommodation (other than a garage, kitchen, bathroom or hallway)—40 dB(A) at any time

  Note: daytime noise levels adjacent to Elizabeth and Phillip Streets exceeds 70dB(A)

3.12 Wind

Objectives

(a) Ensure streets and Public Places have wind conditions that are safe and comfortable for walking and to encourage conditions that are comfortable for sitting.

(b) Ensure new developments mitigate adverse wind effects.

Guidance

(1) Development must:

(a) not cause a wind speed that exceeds the Wind Safety Standard, the Wind Comfort Standard for Walking and the Wind Comfort Standard for Sitting in Parks except where the existing wind speeds exceed the standard.

(b) not worsen, by increasing spatial extent and/or frequency and/or speed, an existing wind speed that exceeds the Wind Safety Standard, the Wind Comfort Standard for Walking and the Wind Comfort Standard for Sitting in Parks.

(c) take all reasonable steps to create a comfortable wind environment in Public Places that is consistent with the Wind Comfort Standards for Sitting and Standing.

(2) For the purpose of this section:

(a) Wind Safety Standard is an annual maximum peak 0.5 second gust wind speed in one hour measured between 6am and 10pm Eastern Standard Time of 24 metres per second.

(b) Wind Comfort Standard for Walking is an hourly mean wind speed, or gust equivalent mean wind speed, whichever is greater for each wind direction, for no more than 292 hours per annum measured between 6 am and 10 pm Eastern Standard Time (i.e. 5% of those hours) of 8 metres per second.

(c) Wind Comfort Standard for Sitting in Parks is an hourly mean wind speed, or gust equivalent mean wind speed, whichever is greater for each wind direction, for no more than 292 hours per annum measured between 6 am and 10 pm Eastern Standard Time of 4 metres per second and applies to Public Places protected by Sun Access Planes and/or No Additional Overshadowing Controls.

(d) Wind Comfort Standards for Sitting and Standing is hourly mean wind speed, or gust equivalent mean wind speed, whichever is greater for each wind direction, for no more than 292 hours per annum measured between 6 am and 10 pm Eastern Standard Time of; 4 metres per second for sitting; and 6 metres per second for standing.