5 Design Guidelines

The following section outlines the Design Guidelines for new developments in relation to:

- Strategic Urban Design, Architecture and Landscape Architecture;
- Site Specific Urban Design, Architecture and Landscape Architecture;
- Environmentally Sustainable Development;
- Subtropical Design;
- Information and Communications Technology;
- Signage; and
- Metering

As outlined in Section 1, the purpose of these Design Guidelines is to detail the design principles to be adopted for any development proposed for or, built in, the Urban Village. Adherence to these principles is critical to the long-term success of the precinct and will be checked to ensure the design and development of buildings and spaces supports the vision for the Urban Village to provide:

- a sense of community;
- a visually interesting and attractive place;
- a highly legible urban environment, at both the pedestrian and vehicle scale;
- a friendly, human-scaled neighbourhood;
- the integration of a range of different uses into a complex and exciting urban village (rather than their separation into different land use precincts);
- sustainable change over time; and
- the integration of the new Village into the existing and evolving inner urban Kelvin Grove neighbourhood.

5.1 Strategic Urban Design, Architecture and Landscape Architecture

The radical mixed-use vision, location, and neighbourhood design of the Urban Village already makes it a special urban place, promoting economic, social and physical sustainability. The development of individual sites should also contribute to the creation of this special urban place. Therefore, the successful implementation of the Village requires adherence to several strategic design directions. These directions will only be altered in extraordinary circumstances. Consequently, proponents and their architects should demonstrate how they support the vision through these strategic ideas within the design reports and proposed plans.

1. Kelvin Grove Urban Village will set a precedent for high quality inner city development, using sustainable techniques to create a place with diverse buildings and a strong sense of human scale, which are suited to the functional, topographical and climatic influences.

   Large sites should be developed as a collection of adjacent and different buildings rather than as a single visually-integrated complex.

   Buildings should be both strongly articulated and different in appearance (as perceived by the lay person) from their immediate neighbours, with distinct materials, details and colours.

2. Buildings must be responsive to topographical, functional and climatic influences. Accordingly each elevation of a building must be different from, though related to, the others and be varied in form and detail.

3. The urban village must be overtly sub-tropical. Each building should be an expression of thoughtful, appropriate and innovative design for a subtropical urban environment, and should be obvious as such, in whole or in part, to the lay observer.

   Buildings which meet environmental outcomes, but are not overtly subtropical, will only be supported in extraordinary circumstances. The urban village should be understood by the community as a subtropical place with buildings that not only teach by performing, but also teach by being seen to perform.

4. The creation of safe environments is a key outcome for the Village. Proponents are required to address the Brisbane City Plan planning scheme policy titled Crime Prevention Through Environmental Design (CPTED).

5.2 Site Urban Design, Architecture and Landscape Architecture

Proponents and their architects should demonstrate how they support the vision of these site ideas within the design reports and through the proposed plans.

1. The buildings should focus activity on and overlook the streets and public places to create safe, active streets and parks. This can be delivered through a number of means, including active edges, transparent facades.

2. As some buildings will look down onto others, roof scapes should be carefully designed to ensure they are an attractive and thoughtful part of the design and form of the building. Plant rooms and equipment should be screened from view, and telecommunications provisions coordinated to create a logical design. Use of the roof plane as outdoor living space, garden or the like is encouraged.

3. Buildings should be of an appropriate scale in accordance with the intent for the site and help to define the public spaces and the robust structure formed by the grid of streets.

4. The public realm of streets and parks in the Village is a robust and durable framework which will accommodate change. Therefore the buildings should also be adaptable, particularly at the lower levels facing streets, to accommodate a diversity of uses over time. Musk Avenue and Village Centre buildings in particular should have sufficient floor to floor height for the ground and first floors to accommodate retail and commercial uses, regardless of the intended initial uses.

5. The entries of buildings should be designed to provide universal access, and residential development should include a proportion of universally accessible accommodation.

6. Buildings should step down sloping streets and, in principle, be aligned parallel to the streets, or in a manner which equally reinforces the structure of the street system.

7. The buildings within the Village will share a medium density inner urban environment and most sites will probably be developed to the maximum ground floor area allowable, with minimum site boundary setbacks (refer to KGUV Local Area Plan for site specific specifications). Accordingly, each building should be designed on the basis that adjacent sites will be fully developed and proponents should demonstrate that their proposals achieve maximum visual and acoustic privacy and good views for all residents. Proposals should not rely on adjacent developments for amenity.

8. While looking for an urban outcome through minimal setbacks, from time to time the Village will welcome thoughtful, functional, people orientated and integrated additions to the public realm.

9. There is potential for noise interference in some precincts and from some types of uses. Buildings should be designed to attenuate noise at the source, and ensure that noisy activities are located away from residential buildings.

10. Parking areas should not be obvious from the adjacent streets and parks. In most cases, above ground car parking structures will not be acceptable. Parking entrances should be located in non-critical areas away from retail frontages and building entrances and should, together with access ramps, be perpendicular, not parallel, to the street frontage to minimise impact upon the function and amenity of the public realm.

11. Ground floor entrances to buildings should be clearly identified with awnings, landscape development, lighting and signage. Weather protection should be provided over footpaths adjacent to the main entries of buildings.

12. Continuous weather protection is desirable along the footpaths on each side of Musk Avenue, and should be provided by all non-residential developments.

13. Garbage holding areas should be contained within the buildings and/or should not be visible from public areas.

14. External lighting should be designed to light up the buildings and ground, without overspill to other buildings or to the sky.

15. External materials should not cause unreasonable glare to other sites.

16. The landscaping of each development should have its own individual character but should relate to the landscape development within the streets and public places in terms of the quality of materials. Plant selection should reflect the local climatic conditions and a majority of the planting should require minimal irrigation in order to flourish.

17. Contributions to the public spaces and the provision of artwork and community facilities are encouraged as part of site development proposals. Buildings should incorporate public art on a corner where a bonus storey is applicable and implemented. The public art is to be reflective of the prominence and significance of the intersection.

18. The internal arrangements of the building can influence urban design and other external outcomes. Therefore, the DRC may, need to seek amendments to the internal design of buildings where applicable and in order to deliver the outcomes sought in this section.

19. In addition to complying with the BCC requirements for bicycle facilities outlined in the *Transport, Access, Parking and Servicing Code, for Residential Proposals*, all developments must achieve a minimum of 1 resident bicycle parking space per 4 lodging rooms and 1 visitor bicycle parking space per 16 lodging rooms.

5.3 Sustainable Development

Green Star Accreditation (Green Building Council)

As highlighted within Section 2, all provisions within the Design Guidelines are underpinned by environmental, social and economic sustainability principles. However this section has been developed to capture the important Sustainable Development design elements in relation to individual building sites.

The project partners want to enhance current Sustainable Development best practice in Australia today, while acknowledging practical or economic restrictions or limitations. All projects are required to demonstrate they are capable of achieving Green Star accreditation.

The table that follows sets out the compliance requirements for each of the five development types expected to be developed in the project including:

1. Office Building (including university needs)
2. Residential (apartments)
3. Retail
4. Mixed Use
5. Education

It is intended to take the principles of sustainability and translate them into specific practices to be adopted in the design and construction of the individual buildings. The criteria in the table is linked to external sustainability benchmarks that will be continually reviewed and revised to reflect changing practices and further contribute to the community sustainability goals.

The sustainability benchmarks have been established to reflect Australian best practice, are relatively cost effective and demonstrate a good overall internal rate of return. The practices relate to several areas of design and specification:

- management;
- energy efficiency;
- water management;
- transportation;
- biodiversity;
- emissions;
- indoor environmental quality;
- materials and waste management;
- social sustainability;
- innovation; and
- monitoring and implementation.

Developers should design and construct their buildings at the Village to the requirements detailed in the table below. A Green Star Professional certifies that the project will be eligible to receive Green Star accreditation, demonstrated through plans, calculations, and an applicable report.

The table below contains the Applicable Tool and the benchmark compliance requirements.

Development Type	**Applicable Tool**	**Compliance**
Office	Green Building Council's Green Star Office and Fitout sustainability design rating tools	Demonstrate the project can achieve a minimum 4 star under the Green Star Office Design and Fitout sustainability design rating tools.
Education	Green Building Council's Green Star Education tool plus meet tertiary institution energy and water benchmarks as noted in Attachment B.	Demonstrate the project can achieve a minimum 4 star under the Green Star Educational Tool (pilot).
Residential	Brisbane City Council "Sustainable Home Checklist for Units and Apartments" and the Pilot Green Star Residential Tool (6BIA) should be considered.	Demonstrate the project can achieve a minimum 4 star under the Green Star Educational Tool (pilot) OR achieve a minimum of 50 points from the BCC 'Sustainable Home Checklist for Units and Apartments'.
Retail	Green Building Council's Green Star Shopping Centres Tool (pilot)	Demonstrate the project can achieve a minimum 4 star under the Green Star Shopping Centres Tool (pilot).
Mixed Use	The applicable tool for Mixed Use varies depending on the GFA's achieved in the developments, as outlined below: MIXED USE- where the area is greater than 1000 m² applicable tools are the individual requirements for separate buildings, as outlined below. For spaces less than 1000m², the developments must comply with the requirements outlined in the compliance column. RESIDENTIAL - Brisbane City Council "Sustainable Home Checklist for Units and Apartments" and the Pilot Green Star Residential Tool (6BIA) should be considered. RETAIL - Green Building Council's Green Star Shopping Centres Tool (pilot) OFFICE - Green Building Council's Green Star Office and Fitout sustainability design rating tools.	Compliance applicable varies also, depending on the applicable tool identified in the 'Applicable Tool' column- MIXED USE- Where spaces less than 1,000m² are included, they must as a minimum achieve the following core Green Star requirements: - Environmental Management (Man: 6–2 points required) - Waste Management (Man: 7–1 point required) - High Frequency Ballasts (IEQ: 6-1 point required) - Electrical Sub-metering (Ene: 3-1 point required) - Water metres (Wat: 2-1 point required) - Recycling Waste Storage (Mat: 1-2) Documentation requirements are the same as for areas greater than 1000m². RESIDENTIAL – Demonstrate the project can achieve a minimum 4 star with the Green Star Residential Tool (pilot) and meet the requirements of BCC "Sustainable Home Checklist for Units and Apartments".

Development Type	Applicable Tool	Compliance
		RETAIL – Demonstrate the project can achieve a minimum 4 star under the Green Star Shopping Centres Tool (pilot). OFFICE – Demonstrate the project can achieve a minimum 4 star under the Green Star Office Design and Fitout sustainability design rating tools.

Subtropical Design Guidelines

KGUV strongly supports the achievement of good subtropical Design. All proposals within KGUV must comply with the requirements of the subtropical design guidelines attached in Attachment E.

Recycling- Construction Waste

It is a requirement that all proponents achieve 70% recycling of construction waste.

5.5 Information and Communications Technology

These Design Guidelines are a summary of the "KGUV ICT Requirements for Developers" document, available to download from the kgurbanvillage.com.au website which is to be utilised by developers and designers when preparing technical specifications and drawings for residential and mixed-use projects at the KGUV.

To ensure the Village is at the forefront of the development of Smart State initiatives in Queensland, the project has installed underground service routes (telecommunications pits and ducts) in addition to the normal information and communications technology (ICT) infrastructure. These project pits and ducts will suit one or more licensed telecommunication service providers.

A preferred supplier of ICT and telecommunications (a telecommunications carrier) has been appointed. The preferred supplier will provide commercially sustainable IT, data and voice telecommunications service to the Village, and possibly the surrounding community. Developers are recommended to contact the preferred supplier as early as possible in order to ensure the best technical outcomes and to gain maximum savings from infrastructure deployment.

The following requirements will connect and future proof all buildings constructed at the Urban Village.

1. Developers should provide the following ICT infrastructure to any development in relation to Building Infrastructure:
    a. A dedicated communications room with equipment rack. This room (or cupboard in small complexes) should be located on common property with unrestricted access rights for the communications provider/s to the development.
    b. Generous ducts between the pit at the property boundary and the communications room. The exact sizing of these ducts and location of any property boundary access pits will need to be determined on a site-by-site basis (subject to the scale of the development and the location of the services infrastructure).
    c. A floor telecommunications cupboard on each floor of a multilevel building (or to be located centrally in each building if only one floor).
    d. Generous riser shafts for cabling between the communications room and the telecommunications cupboard on each floor, and horizontal pathways from the telecommunications cupboard on each floor to each tenancy.
2. Developers should provide the following ICT infrastructure to any development in relation to In-Building Cabling:
    a. Provision of fibre optic cable from the property boundary to the communications room (note: this cable may be supplied by the Principal Body Corporate ICT developer).
    b. Provision of fibre optic cable from the communications room to the telecommunications cupboard on each floor. This cable should have a core that allows at least one fibre pair per tenancy, with extra spare fibres included in the core for future use.
    c. Access to free-to-air and cable (subscription) television services via an integrated MATV system (note: this may be provided by the ICT provider, but provision should be allowed for in case it is not).
3. Developers should provide the following ICT infrastructure to any development in relation to Individual Tenancy Cabling:
    a. The minimum ICT services to be provided to each unit or tenancy are two voice, two data and one video. These services are to be interfaced within the communications cupboard in each unit or tenancy.
    b. Sufficient cabling to enable these ICT services is to be provided from the relevant floor telecommunications cupboard to the patch panel in each unit or tenancy.
    c. Each unit or tenancy should be internally cabled for voice, data and video. The layout will vary depending on tenant requirements.

5.5 Signage

The following signage Design Guidelines complement and build on requirements noted in the Brisbane City Council Advertisements Subordinate Local Law 2005.

1. Signage should identify each particular site and/or building so it can be read from the street and footpath during the day and night. Simple and limited signage is preferable, sufficient to provide adequate way finding. Building identification could be as simple as the street number, at a minimum, prominently displayed near the entrance or entrances to a building, and able to be read from the street and footpath during the day and night.

   Secondary numbers such as corporate numbers (e.g. numbers or letters to identify buildings within a site) should be subservient to the street numbers.

   Building directories should be at the building entry or in the lobby, and should only be readable on approaching the entry.

   Multiple signage is generally not appropriate unless for major tenants or multiple street frontages.

2. Signs should not advertise a third party.

3. In addition to signs already prohibited by the Local Law, the following licensable signs are not necessarily compatible with sites and buildings in the Kelvin Grove Urban Village: billboard sign; electronic graphic display screen; mega banner; pole sign; projected image sign; pylon sign; temporary inflatable sign; and, vertical banner freestanding sign. These types of signs require specific consent from the Design Review Committee.

4. One-off special signage identifying a large group of buildings (e.g. QUT) will be considered on merit but should not cause confusion or compete with the overall identification of the site as the Kelvin Grove Urban Village. Commercial, university or corporate signage can be located on the building or be free-standing and may be bold in simple lettering and design.

5.6 Metering

Developments at the Kelvin Grove Urban Village will be subject to further study during the operations and maintenance phase of their life cycle. The purpose of the research is to assess the long term benefits and savings from the application of the many design and sustainability initiatives. For these benefits to be both quantified and maximised, it is important that the use of resources such as water and energy is measured and that the users (both owners and tenants) are informed about the special nature of the Village.

Developers should implement the metering and wiring guidelines specified in Attachment C.

Overview of Metering Requirements

1. Full source metering[1] of electricity, gas, water (including rainwater tanks), hot water and chilled water (where applicable) for:
   a. All individual tenancies (commercial, education and residential);
   b. All communal services; and
   c. Each building (Building level metering required to provide for reconciliation and loss assessment).

2. Full service metering[2] incorporating interactive feedback screens for:
   a. All non-residential tenancies; and
   b. 10% of residential tenancies within each development (rounded UP).

3. All tenancies to be wired in 'star configuration' to allow for future monitoring.

4. Power quality metering is provided for the building supply only.

[1] Source Metering refers to the metering of the quantities of resources we purchase. At the tenancy level in KGUV these sources may be electricity, natural gas, hot water and chilled water. At a building level these energy sources are electricity, natural gas and solar.
[2] Service Metering involves metering the actual 'service' that the end-user requires. These include water heating, lighting, entertainment, refrigeration, cooking etc