4.0
Built Form Principles
4.1 Introduction

The following built form principles provide guidance for future development in Logan Central. The principles for built form are grouped under five main themes: climatic responsive design, built form, external spaces and public realm interface, circulation and services, and designing for cultural expression. These are introduced below.

**Theme 1: Climatic Responsive Design**

Climate responsive design considers the impact of building design on the local micro climate; the effects of wind and rain, sunlight and shadowing, and reflection and glare. It also highlights opportunities for designing buildings with greater efficiencies in energy consumption, waste and water handling, and maximum green space provision.

**Theme 2: External Spaces and Public Realm Interface**

The treatment of interfaces, between external spaces of buildings and the public realm, plays a fundamental role in delivering successful spaces and streets. The range of architectural considerations for dealing with interfaces will respond to the different combinations of streets, spaces and buildings found within the Logan Central Master Plan.

**Theme 3: Built Form**

Built form principles outline requirements for the delivery of high quality and appropriate architecture for Logan Central. The architectural character of the area should be vibrant and diverse to reflect the area’s cultural richness and aspiration to become the true centre of Logan, through providing flexible and adaptable buildings for a mix of retail, commercial, community and residential related activities.

**Theme 4: Circulation and Services**

Circulation and services principles consider the location of service lanes and areas, building access points for both people and vehicles, as well as infrastructure including lifts, basement car parks and air conditioning units.

**Theme 5: Designing for Cultural Expression**

Designing for cultural expression principles can guide the design of public spaces, building layouts and furniture to ensure they are culturally diverse and inclusive and provide opportunities for social interaction and cultural expression.
4.2 Climate Responsive Design

Understanding Shade

/ Ensure the living areas, terraces, balconies and private open space benefit from a northerly aspect to provide usable and comfortable spaces throughout the year.
/ Deliver a fine grain of built form to allow greater opportunities to utilise natural light and reduce electricity consumption.
/ Sun-shading and screening should form an integral part of the facade design and contribute to the personality and character of the building.
/ Shade should be provided by continuous awnings.
/ Vegetation in the form of vertical gardens, urban gardens and green roofs should be an integral part of building designs to deal with shade provision.
/ Ensure an element of shade provision is incorporated into the new town square design, by using a combination of exaggerated building awnings, stand alone urban structures and substantial shade trees.

Energy Efficiency

/ Consider the total ‘lifecycle’ cost of the building that have a low carbon footprint, can be locally sourced and that could be recycled/reused in the future.
/ Orientate buildings to the north and ensure designs respond to the sub-tropical climate to maximise the benefits of natural light and solar heating.
/ Deliver a fine grain of development that designs for natural ventilation, reducing reliance on artificial climate control and therefore electricity consumption and financial expenditure.
/ A minimum Green Star rating of four stars should be pursued on larger development sites.
Urban Gardens

/ Explore housing typologies which incorporate courtyard gardens, to provide micro communities (e.g. apartment block residents) with a quiet and pleasant space of which they have ownership.
/ Opportunities for the incorporation of urban gardens on balcony spaces, roofs, private open space or in communal courtyards.
/ Deliver vertical gardens and planters as part of streetscape designs and create urban gardens that are attractive environments for workers, residents and visitors in Logan Central.
/ Investigate the incorporation of community gardens (for communal food production) into existing parks within the Logan Central Core Area and strengthen community spirit.
/ Investigate the opportunity for urban gardens in community building and the opportunity to provide an outlet for social and cultural expression.

Water Sensitive Urban Design

/ Create opportunities to collect and reuse water from buildings and urban spaces for irrigation for landscape areas.
/ Incorporate Water Sensitive Urban Design (WSUD) as an integral element in the design of new streets including bio-retention and limiting areas of impervious surfaces to improve natural percolation and storm water management.
/ Ensure new WSUD infrastructure integrates with and strengthens existing ecology and water catchment networks connecting into the site.
/ Opportunities to educate the local community about WSUD through public art.
4.3 External Spaces and Public Realm Interface

**Street Edges**

/ Buildings within the Town Centre Core should have a zero set back to create well defined urban streets, and help establish the proposed hierarchy of character areas within the Master Plan.

/ In the Town Centre Core, introduce inground tree pits and trenches within carparking zones and footpaths for the establishment of tree lined streets.

/ Opportunities to use street tree planting throughout the MPCA to define a hierarchy and roles of streets and link to the wider landscape setting through appropriate species selection.

/ Explore a variety of edge interfaces between streets and buildings which respond to the diverse range of combinations found within the Master Plan. These include, but are not limited to, interfaces between the town square, retail outlets, dining activities, commercial uses, community services, government buildings, high streets, market streets, service laneways, arterial roads, and parkland.

**Awnings**

/ Protect key pedestrian connections with continuous awnings to provide climatic comfort for pedestrians and shelter from the rain, sun and wind.

/ Opportunities for awnings to create visual distinctiveness and a style that reflects an areas character and use.

/ Buildings fronting onto the new market space within the town square should provide exaggerated awnings which shelter outdoor dining areas spilling onto the market space.
Articulation and Facades

/ At ground level the building edges should step back from the street to increase the provision of public realm spaces.
/ The mix of uses and the variety of dwelling sizes should translate through to the forms in the facade.
/ A strong commercial address should be established along Wembley Road to maximise the value of this important and highly visible location.
/ Key sites, as identified on the maximum heights plan, require a high design response with the opportunity to increase height and create a landmark or gateway through building articulation.
All new buildings within the Cultural Centre and Croydon Road Precincts are to have a ground level floor to ceiling height of 5.8-6m to allow for future flexibility and adapt to changes in use.

New development within the Town Centre Core should provide a minimum 80% activation at the ground floor where the building addresses a street, market space or pedestrian lane.

Residential building design should encourage passive surveillance through the provision of balconies fronting the street and reduced setbacks. High fences and gated communities are discouraged.

Optimise access to natural light from within the building, particularly for habitable rooms, through consideration of building orientation, depth of floorplates and general massing.

Maximise opportunities in the design to deliver natural ventilation to indoor areas.

Maximise the number of windows and entrances at ground floor level to promote active frontages and passive surveillance on more residential streets.

Clearly define building entrances and maximise the number of them at the ground level to enable distribution of activity around the building, e.g. separate retail/commercial entrances to residential and service entries.

In residential buildings, provide adjustable louvres to enable residents to control levels of sunlight, wind and privacy.

### Roof Forms

- Opportunities to utilise roof space for rainwater collection, outdoor recreation and garden space.
- Facilitate opportunities to deliver green roofs with allowances made for deep planting to ensure vegetation has the optimum conditions for growth and success.
- In roof garden design explore options to provide edible landscapes.
- Integrate servicing and lift over runs into the design of the building.
- The tops of landmark buildings can become effective wayfinding devices through providing designs which capture identity and image, and are visually distinctive.
- Incorporate viewing platforms and pavilions on roof tops for building users. These should be located on corners at key intersections or which overlook public spaces.

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**Table 2: Floor to Ceiling Heights**

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Floor to Ceiling Height Assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial Office Space</td>
<td>Min 3.2m - Max 3.5m</td>
</tr>
<tr>
<td>Residential</td>
<td>Min 3m</td>
</tr>
<tr>
<td>Ground Floor Commercial/ Retail &amp; Residential</td>
<td>Min 5.8m - Max 6m</td>
</tr>
</tbody>
</table>
Design Detailing and Materiality

/ Consider materials as part of the design response to reflect local context and also sustainable choices.
/ Use external lighting to enhance the building design and improve safety.
/ Integrate building signage and graphics into the building frontage and awnings.
/ To mitigate any risk of contributing to the urban heat island effect, reflective glass facades should be avoided, especially when adjacent to urban spaces such as the market square.
/ The materials palette should include vibrant colours, textures and patterns that reflect the 160 cultures within Logan.
/ Where possible use locally sourced material.

Landmark, Gateways and Iconic Buildings

/ Landmark/ gateway buildings to be located at key points of entry within the MPCA are well identifiable and assist in wayfinding.
/ Provide strong architectural articulation to landmark/gateway and iconic buildings.

Tiles can add colour and texture.
4.5 Circulation and Services

Laneways

- Ensure pedestrian laneways and covered public spaces create an attractive and informal environment, improve the grain of development and encourage exploration.
- Design all vehicular laneways to enable access for services, loading zones and parking for larger development sites or clusters of associated buildings.

Servicing

- Parking associated with larger development sites is expected to be accommodated in basement car parks or discretely located behind buildings where they are not visible from the street.
- Design car parking and service entrances to buildings so they do not impact main streets or have a negative impact on the public realm.
- Make provisions for loading and unloading of services related to market activity.
- Ensure all buildings provide adequate access and services for waste collection.

Building Servicing

- Consider the visual and noise impact of air-conditioning condensers and provide discrete locations for them other than residential balconies or on a main street.

Maximise the number of windows along service laneways.

Streets and laneways can be used to frame important vistas, with activated edges ensuring a vibrant pedestrian focused street is created and architectural elements used to provide climatic comfort and safety for pedestrians.

Residential apartments overlooking the communal driveway and service lane.
4.6 Designing for Cultural Expression

Life on the Street

/ Ensure building edges and the public realm allow for a diversity of uses throughout day and night.
/ Provide places and furniture for people to pause at, rest and meet along the street and in public spaces.

Housing Mix

/ Ensure residential precincts incorporate a variety of housing typologies that support private community living.
/ Include courtyard housing, rooftop terraces and productive gardens that promote social interaction between residents.

Playful furniture allows for a number of behavioral responses from people

Wide pathways cater for influxes of people and easy movement

Rooftop terrace gardens promote social interaction