Economic Development Queensland

Industry and business areas

PDA guideline no. 10

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Queensland Government

Contents

Introduction

Purpose of the guideline

This guideline outlines the standards for the planning and design of industry and business areas in Priority Development Areas (PDAs) in Queensland. This guideline should be read in conjunction with the provisions of PDA development schemes and interim land use plans (ILUPs). A development scheme or ILUP may specify a different standard.

In consultation with the MEDQ and other relevant parties, applicants may propose alternative, innovative solutions which do not comply with the following standards, but meet the PDA-wide criteria or related provisions of ILUPs.

Industry and business (IB) areas are primarily intended to accommodate industrial activities which do not generate dust, noise and odour emissions beyond the IB zone. IB areas provide for a wide range of industry and business uses including low impact industry, research and technology facilities, knowledge creation, entrepreneurial activities and service industries.

Non-industrial uses, such as commercial and trade retail activities, and uses that promote knowledge creation and entrepreneurial activity in industry, science and technology are encouraged in IB areas.

A limited range of other uses may also be acceptable in IB areas where it can be demonstrated that the use:

- supports or otherwise has a clear nexus with the primary uses within the area
- provides a service to the workforce within the area
- will not prejudice the establishment or operation of the primary uses within the area.

Planning and design standards

Subdivision layout

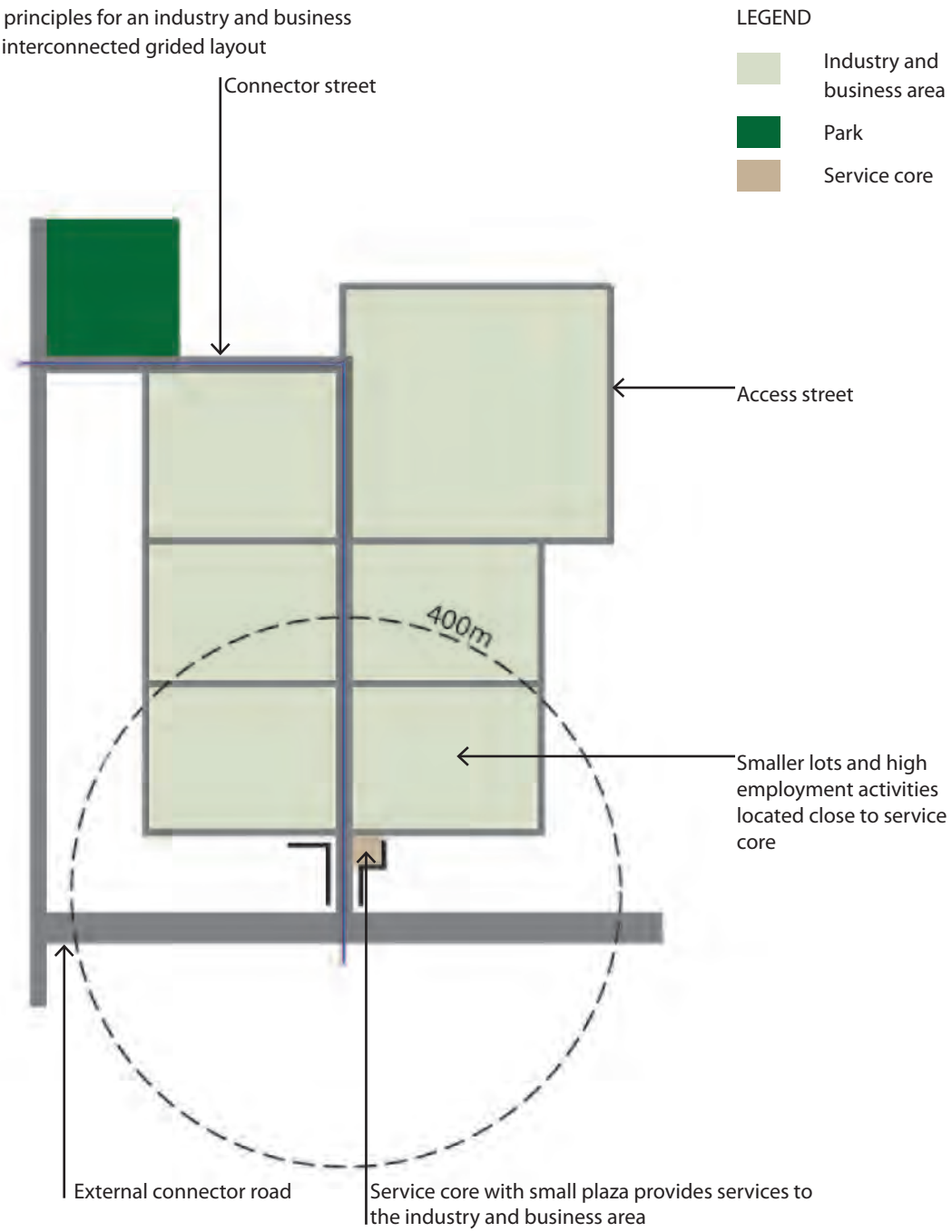
The layout of IB areas provides efficient, cost-effective and attractive sites for employment generating activities. The design and layout of these areas needs to respond to their particular settings and locational characteristics including their relationship with adjoining and nearby land uses, existing natural features and values and transport networks.

	Industry and business area
Structure	May include a service core of finer grained retail and commercial activities that act as a focus for the entire area. A service core is generally located on a major road adjacent to the main entry to the area and with good access by public transport. Higher intensity uses and uses with high employment ratios (employee to site area) are located close to the service core. Access to the area is available from a connector or higher order road, and does not require heavy vehicles to pass through residential areas. Main entry (or entries) provides a legible and attractive entry statement and identity for the area, and is characterised by high quality, attractive development. Higher impact uses are generally located centrally within the area to provide maximum separation from sensitive uses* outside the area. Intensity of uses and scale of built form generally reduce towards the edge of the area, particularly where adjoining sensitive uses. Lots generally have access from the internal street network only. Where a rail service is available, the structure should maximise benefits of rail access by maximising length of rail sidings and area of land with direct rail access.

* For the purposes of this guideline sensitive uses means any of the following: childcare centre, educational establishment, health care services, hospital, house, multiple residential, other residential, relocatable home park and short term accommodation whether existing or planned.

	Industry and business area
Internal street network	Highly connected, legible and permeable grid. Network promotes safe movements and provides direct pedestrian and cyclist access to the service core. All streets should have wide carriageways to accommodate multiple transport modes and large design vehicles (semi-trailers and possibly B-doubles). Streets should accommodate on-street parking and vehicle movements without compromising walking and cycling safety and amenity. Cul-de-sacs are undesirable and will be accepted only where no other solution is practicable and are limited in length to 120m. Where used, cul-de-sacs must be provided with a circular turning area with suitable radius to allow uninterrupted turning movement by maximum anticipated vehicle, and the space reserved for services should not be reduced to accommodate increased area of roadway.
Internal street types	Grid network of industry connector streets and industry access streets (Refer to Appendix A for more detail on indicative street types). Streets should be designed to accommodate all activities that take place in the street (such as bus stops, cycle lanes, on-street parking and emergency vehicle access), not just the roadway or vehicle movements. Servicing is undertaken internally to each site.
Lot layouts	Lots should be regular in shape capable of containing the intended form of development. Each area should be provided with a variety of lot sizes to accommodate a wide range of potential uses, including some large lots to facilitate future reconfigurations to meet emerging demands. Smaller lots preferably clustered near service centre, and larger lots located either centrally to accommodate high impact activities or on edges adjacent to sensitive uses to provide sufficient area for extensive buffering and appropriate allocation of activities on site.
Lot sizes (minimum area and frontage)	1000sqm/20 metres
Public realm	There are no specific requirements to provide parks or other open space within industry and business areas. However where there are significant waterways or other natural features, these should be protected and retained as a feature of the area and incorporated into the broader open space network including any cycle or pedestrian network. The service core should include a small plaza (in private ownership) with outdoor seating and dining opportunities to cater for the needs of the catchment workforce. Street trees are provided at the rate of a minimum of 1 per 20 metres of road length (excluding the width of crossovers) to all road frontages with a minimum of 1 tree per lot.

Figure 1: Structuring principles for an industry and business area showing highly interconnected grided layout



Built form

Buildings and other structures in industry and business areas need to be 'fit for purpose' and also play an important role in defining the streetscape and public realm, and determining the character and amenity of the area for workers and nearby residents.

	Industry and business area
Maximum site cover	75 per cent
Building height	15 metres maximum (unless taller structure required for specific industrial process)
	Suitability of building heights will be assessed on the appearance from and impact on the streetscape and nearby sensitive uses. Transitioning of building heights to be compatible with existing/proposed heights in affected areas will be required.
Building setback - street frontages	Buildings with office, showroom or customer service component may be set to the front alignment (o.0 metres) for a maximum of 50 per cent of the frontage (see Figure 2). Blank walls and facades are setback a minimum of 6 metres.
Building setback - side and rear	0.0 metres
Building setback - where any part of the side or rear boundary adjoins a sensitive land use	Setback and buffering requirements to be determined in accordance with PDA Guideline No.18 - Development interfaces. Minimum 6 metres intensively landscaped setback which includes deep planting and appropriate acoustic treatment.
Orientation	Buildings address the street frontage or frontages by: » being aligned generally parallel to the street » providing clear, legible entry points for both pedestrains and vehicles » maximising opportunities for overlooking and casual surveillance of streets, public spaces, parking areas and pedestrian/cycling paths. (See Figure 4)
Corner lots	Buildings on corners should address both street frontages, and express a strong visual appearance. (See Figure 4)

Buildings with office, showroom or customer service component may be set to the front alignment (o.0 metres) for a maximum of 50 per cent of the frontage

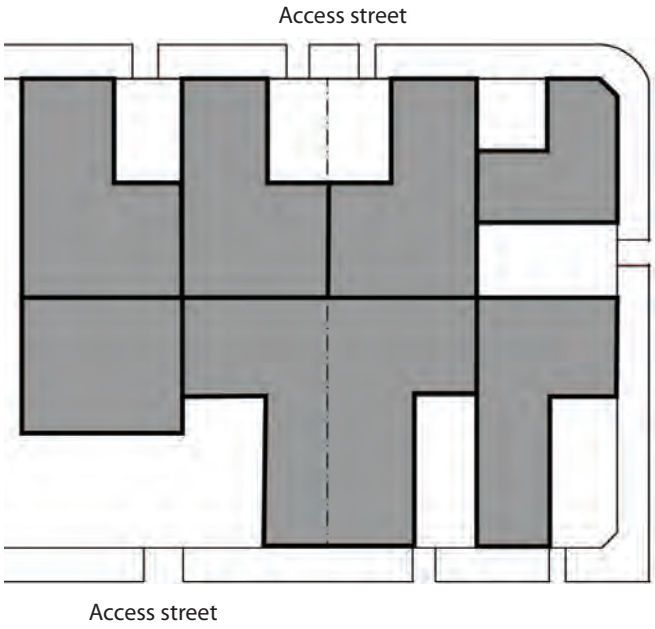


Figure 2: Front setback requirements

Figure 3: Office component set to the front alignment of the site provides an attractive streetscape response

Figure 4: Buildings on corners address both frontages

	Industry and business areas
Materials	All parts of buildings (other than roofs) that are visible from connector or higher order roads, residential areas, parks or centres are constructed predominantly of brick, painted concrete or masonry, and do not incorporate highly reflective materials.
Graffiti prevention	Buildings and other structures should be designed to minimise potential for graffiti by: » avoiding extensive unbroken surface areas » access control measures including lighting, vegetation, fencing » graffiti deterrent surface treatments
Roofs	Roof forms should be kept simple and integrated as part of the building design. Plant rooms and other roof top equipment are screened from view from adjoining streets and noise sensitive areas.
Signage	» signs attached to buildings are integrated into the building design » each lot is limited to one freestanding pole sign on each street frontage no greater than 6.0m in height. Freestanding signs may include multiple panels with one panel per occupancy (see Figure 5)

Figure 5: Freestanding signage pole

Environment and safety

Development must preserve environmental quality and community safety.

	Industry and business areas
Emissions	Emissions (including air, water and soil pollutants, noise, vibration, heat, light, radioactivity and electromagnetic radiation) and hazards must be managed in accordance with: » the Environmental Protection (Air) Policy 2008 » the Environmental Protection (Noise) Policy 2008 » the Dangerous Goods Safety Management Act 2001 and the Dangerous Goods Safety Management Regulation 2001.
Energy efficiency	Buildings must be oriented to incorporate appropriate passive solar design and day lighting, while avoiding unwanted heat gain: » all external glazing must comply with Building Code Australia Energy Efficiency Provisions - Volume Two - J2.4 using glazing calculation Method 2 Energy Index Option B » design external shading devices to protect glazed areas on the north, east, and west sides of the building » external wall insulation to be minimum total R-Value of R1.0 for all non-air-conditioned spaces and R2.0 for all air-conditioned spaces. Metal external wall sheeting to be insulated from metal studs or frames by a minimum R0.2 thermal break » external wall colours and roof colour to have a solar absorbance not more than 0.45 (i.e. avoid excess use of dark colours and zincalume) » concrete block or slab external walls must be painted » roof insulation to be minimum total R-value of R1.5 » where appropriate, buildings must include provisions for natural ventilation, such as roof ventilators and operable windows
End of trip facilities	» End of trip facilities are provided in accordance with the Queensland Development Code MP4.1 - Sustainable Buildings

Landscaping/fencing

High quality landscaping is important for amenity and plays an important role in buffering incompatible uses and activities.

	Industry and business areas
General	» landscaping themes should be simple and demonstrate a level of consistency across the entire area and include use of semi-mature trees » existing trees that would contribute to the landscaping theme should be retained » large trees and spreading ground covers are incorporated in all landscape areas » large screening shrubs to complement the scale of building are provided in areas where screening is a priority » landscaped areas located within front setbacks should be mounded, where the lot is greater than 5,000m^2 » landscaping should apply water sensitive urban design (WSUD) principles and use endemic and drought tolerant species where possible » automated watering systems are required for landscaped areas adjacent to street frontages, and are encouraged in all other areas » the use of wall and rooftop gardens is encouraged where practicable
Minimum landscape area	5 per cent of the area of the site.
Landscaping to street frontages	» tree planting will achieve a minimum 50 per cent canopy spread over the landscape area within 5 years of planting » landscaping is designed with CPTED principles in mind to reduce areas of possible concealment (see Figure 6) close to footpaths, parking areas and other publicly accessible spaces
Landscaping for sensitive uses	Landscaping within the buffer areas adjacent to sensitive uses consists of tall trees and shrubs that will form a dense visual screen with a minimum height of 4 metres within 3 years of planting.
Fencing	» street frontages should be unfenced (see Figure 7) where possible with the location of fences consistent with or behind building setbacks » where street frontage fencing is required for security purposes it should be transparent (minimum 70 per cent open) (see Figure 8) » side fencing between the street frontage and the building should also be transparent wherever possible » side and rear fences adjoining a sensitive use should be solid, low maintenance and have noise attenuating properties
Lighting	» all premises should provide external lighting to ensure adequate site security. » lighting should be located and directed to limit light spill beyond the site boundary. Australian Standard AS-4282 1997 Control of the obtrusive effects of outdoor lighting provides guidance on the use of directional lighting

Figure 6: Street trees provide shade

Figure 7: Landscape frontages instead of fencing

Figure 8: Security fencing

Outdoor areas and activities

Activities undertaken outside buildings can have a significant impact on the appearance of the industry and business area and the amenity of adjoining sites and areas.

	Industry and business areas
Amenity	» external on-site activity, storage and parking areas should be screened from view from sensitive uses and external roads. Screening can be achieved by buildings and/or landscaping including landscaped mounds (see Figure 9) » all external areas are landscaped or sealed » external on-site activity areas are located to maximise distance from sensitive uses
Parking	» the number of on-site car parks complies with the requirements in the relevant development scheme or, where the development scheme does not specify a requirement, the local authority planning scheme » on-site parking areas are located close to a building entrance and provided with appropriate night lighting (where the use is likely to operate at night) » external parking areas have at least one shade tree per 6 parking spaces with 15m^2 of deep soil and permeable surface per tree
Engineering standards	On-site parking, circulation and service areas are designed and constructed to meet the relevant local authority standards
Staff recreation space	Outdoor eating and recreation areas are provided on-site for employees and: » include seating, tables, water supply and rubbish disposal » adequate shade and weather protection » reasonable amenity (e.g. located away from noisy or unpleasant activities)

Figure 9: Landscape is used to screen car parking and service areas.

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