

### 1. HEAD OF POWER

This Policy has been adopted pursuant to *Planning and Development (Local Planning Schemes) Regulations 2015*, Schedule 2 (Deemed Provisions), Clause 4 and applies to development across the whole of the City.

#### 2. PURPOSE

The purpose of this Policy is to provide developers and the general public with a guide to the City's requirements for the provision of car parking facilities in conjunction with new development in a simple, easy-to-read document. The Policy applies to all traffic generating development within the City of Busselton.

It is not intended that this document should cover all situations. This Policy is intended to provide a practical guide to aid in the preparation of drawings to be submitted to the City. It is not meant to absolve the designer of any necessity to plan for the peculiar requirements of a particular site.

The dimensions detailed in this Policy are generally minimum requirements. Individual circumstances may require the use of dimensions different from those specified in order to provide satisfactory access and manoeuvrability conditions.

The objectives of the Policy are to establish guidelines which will:

- 2.1 result in the construction of efficient and attractive car parking areas;
- 2.2 provide reasonable access, circulation and manoeuvrability conditions;
- 2.3 provide adequate size, and number of, parking bays to meet the needs of new development; and
- 2.4 ensure vehicular and pedestrian safety.

### 3. INTERPRETATION

"Net Lettable Area" (NLA) has the same meaning as in the Model Scheme Text.

### 4. POLICY STATEMENT

#### 4.1 General Provisions

- 4.1.1 All parking for residential development (whether free-standing or as a component of retail/commercial development) shall be provided on-site.
- 4.1.2 Where, in the opinion of the City, conditions are such as to render full compliance with the provisions of this Policy impractical, the City may permit such departures as are considered to be warranted in the circumstances of the case.
- 4.1.3 An existing building altered, extended, remodelled with, or without, a change of land use, may be required to comply, wholly or partly, with the provisions of this Policy.

The City shall determine the extent of car parking required in each case, having regard to the degree of alteration, extensions and/or remodelling and the nature of the altered land use. This clause is not intended as a control or means to achieve retrospective provision of car parking to service an existing development.

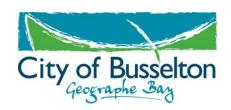


- 4.1.4 Generally, an applicant shall have regard for the provision on-site of disabled parking, staff parking and loading bays.
- 4.1.5 In some commercial and retail development in the "Business" zone, the City may consider a cash contribution in lieu of the provision of car spaces. Cash contributions are only favoured where the development is of a minor nature or, in the case of a major development, where only a minor deficiency in the total requirement for car parking cannot be met on site. The value of contributions in lieu of car spaces shall be as determined by this Policy.

#### 4.2 CBD Provisions

### Busselton & Dunsborough Central Business District (CBD) Car Parking Provisions

- 4.2.1 The Busselton and Dunsborough CBD areas are indicated in Attachment 1 and 2. Determining car parking requirements for "Business" zoned land within these areas shall be based on the following:
- 4.2.2 Within the Busselton and Dunsborough CBD "Business" zone, all new development is required to provide car parking bays on the basis of 4 car parking bays per 100m2 of NLA for all land uses. For first floor level or above office use only the parking requirement may be reduced to 2.5 bays per 100m2 NLA. Car parking for Residential use is required to be provided in accordance with the Residential Design Codes (R Codes) and shall be additional to any parking required for commercial/retail use on the same site. It is required that car parking for residential uses be provided onsite to promote the opportunity for private resident parking and reduce potential conflict with retail and commercial car parking requirements.
- 4.2.3 Where car parking cannot be provided onsite (location or access constraints) or where on site provision is not desirable in terms of traffic or pedestrian management, then cash in lieu will be required. The criteria for and requirements of cash in lieu for developments is outlined below:
  - Development within the CBD may provide up to a maximum of 100% of the car parking requirement as cash-in-lieu in limited circumstances. Generally cash-in-lieu should only represent a proportion of the parking required for a site and for larger developments (above 2000 m2 NLA) a maximum of 20% of the parking requirement should generally be met as cash-in-lieu. An applicant seeking to provide cash-in-lieu outside these guidelines is required to clearly demonstrate through submission of a traffic/parking management study the limitations of a site that necessitate the payment of cash-in-lieu of parking and how parking demand generated by the development can be accommodated.
  - Where 100% of a site is approved to be developed, the applicant shall provide a full cashin-lieu payment or provide the required number of parking bays on an alternate site within the CBD in a location acceptable to the City and which has long term security of access for public parking.
  - Where a cash-in-lieu of parking contribution is proposed, the applicant shall provide
    details of how surrounding parking facilities are proposed to accommodate the parking
    demand generated by the development in the form of a traffic/car parking management
    study.
  - Where laneway access is provided to the rear of a site in the CBD, this is to be upgraded
    to provide a servicing function and potentially staff parking/loading bays. Property owners
    may be required to provide reciprocal rights of access, to facilitate parking arrangements,
    to adjoining owners.



- 4.2.4 As an alternative to these provisions a reduction in the total number of car parking spaces by up to 10 percent may be accommodated, where acceptable alternative forms of transport are provided for. An applicant would need to justify such a reduction in the context of, for example, the type of demand created by the development, the provision of bicycle access / storage facilities or contribution towards public transport facilities or alternative transport modes.
- 4.2.5 The value of a cash in lieu contribution for car parking bays not provided on site is \$10,000 per bay and is subject to increase in line with the Local Government Cost Index (LGCI) from June 2013.

Note: No contribution towards land acquisition is required in accordance with the provision of the Scheme. The City considers that in order to provide for car parking demand in the long term, the construction of decked parking will be required in both Busselton and Dunsborough. Decked parking currently costs \$40,000 or more per bay (2013 figures). The cash in lieu contribution rate of \$10,000 therefore includes consideration of currently available opportunities for the provision of additional parking, the provision of at - grade car parking on new sites as appropriate and the construction of decked parking on consolidated sites as components of future car parking provision.

- 4.2.6 Where redevelopment of an existing approved building in the CBD is proposed then the NLA of the existing building will be deleted from the NLA of the new building for determining additional car parking requirements (i.e. existing parking bay numbers shall be retained and additional parking is only required for new floorspace established).
- 4.2.7 Where desirable to facilitate the conservation of a heritage place or to enhance or preserve heritage values of a place included on the Municipal Inventory or within a Heritage Precinct cash in lieu may be provided up to a maximum of 100% of the car parking requirement.
- 4.2.8 For new commercial/retail development in the CBD of Busselton/Dunsborough, the City shall ensure, as a condition of Planning Consent, all parking on private property is available for use by the general public. The City has discretion to restrict parking access to the general public for security and/or staff purposes.
- 4.2.9 Where new public parking is provided on a privately owned site in the Busselton/Dunsborough CBD the City will require the submission of a Management Agreement (at the applicant's cost) which provides for the parking area to be managed in accordance with the City's Parking Facilities Local Law.

### 4.3 CBD Parking Requirements: General Considerations

- 4.3.1 A review of traffic and car parking management in Busselton/Dunsborough CBD's will be commenced in 2007/08 to identify the location of future car parking requirements within these areas. When these studies are completed this car parking policy will be reviewed and alternative funding mechanism for provision of future car parking requirements canvassed.
- 4.3.2 A future Dunsborough Car Parking Study should address issues of additional car parking and possible additional land requirements to accommodate car parking for potential commercial development within the Dunsborough Townscape Area.



4.3.3 Although not formally part of this policy, the City reserves the right to consider introduction of car parking fees and a mix of other measures for funding future car parking requirements.

### **Funding**

- 4.3.4 The City will use funding attained from cash in lieu payment in accord with the requirements of the Scheme for provision of car parking facilities, including on-street and off-street (including existing rear laneways/parking areas), within the central areas of Busselton and Dunsborough.
- 4.3.5 Funding obtained by the City for parking development through a Specified Area Rate or a specific rate component, and/or any income derived from paid parking shall be used for the provision of parking in the Busselton/Dunsborough CBD areas or the enhancement of public transport servicing these areas.
- 4.3.6 To meet the parking requirements within the CBD of Busselton and Dunsborough, the City will assess the viability of implementing paid parking within these areas. This will be subject to detailed assessment and community consultation prior to consideration by the City for implementation.

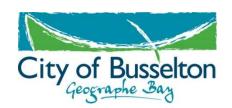
### **Privately Owned and Operated Parking Facilities**

4.3.7 The City is generally supportive of privately owned and operated parking facilities. The City shall consider and approve any financially viable option for public car parking facilities within the CBD of Busselton and Dunsborough, should it be consistent with the provisions of Local Planning Scheme No. 21 and the City's Car Parking Policy.

### 4.4 Design standards: general requirements

### **Location and Availability**

- 4.4.1 On-site car parking shall be situated in locations readily accessible to staff, clients, residents and visitors, as the case may be. The City may be prepared to accept car parking on adjoining or nearby land in the same ownership, provided that the adjoining or nearby land is:
  - appropriately zoned; and
  - consolidated with lands the subject of the development; or
  - subject of appropriate title restrictions to ensure its continued availability for the car parking use.
- 4.4.2 In residential zones, all resident car parking and manoeuvring areas must be located behind the building line and suitably screened. Visitor car parking will be considered in front of the building line, but only where suitable landscaping will screen the area and there will be no adverse effects on streetscape or traffic movement.
- 4.4.3 Except for resident car spaces and staff car spaces expressly agreed by the City, all car parking areas must be freely available to the general public. Closure of car parks at certain times for reasons of security may be approved by the City.

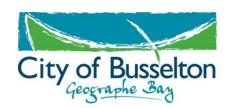


### **Special Purpose Bays**

- 4.4.5 The City may require the provision of parking bays marked exclusively for the use of motor cycles, mobility vehicles (gophers), delivery and services vehicles, taxis, buses, coaches and courier services. The City will determine the number of parking bays to be allocated for these vehicles depending on the nature of the development. All developments incorporating more than 100 bays shall provide a taxi bay or rank in close proximity to the main entrance of the development.
  - i. For developments within the 'Business' or 'Restricted Business' zones one dedicated taxi pick-up bay shall be provided for each 1000m2 of gross floor area (or part thereof) where total floor area is over 2000m2 up to a maximum of four bays, or a taxi rank to accommodate at least four taxis, in addition to general car parking requirements. Taxi pick-up bays shall be located to ensure maximum accessibility to the development.
  - ii. For developments within the 'Business' or 'Restricted Business' zones one dedicated motor cycle parking bay shall be provided for each 500m2 of gross floor area (or part thereof), in addition to general car parking requirements.
- 4.4.6 In accordance with 4.2.4, a discount of car parking requirements may be considered where a development provides special purpose bays and facilities that:
  - Are appropriate in their provision and designed and located for greatest functionality and use;
  - ii. Through their provision, can be reasonably demonstrated to reduce the demand for car parking associated with that development;
  - iii. For the provision of dedicated taxi bays, at a ratio of no greater than 3 car bays discounted for 1 taxi bay.
  - iv. For the provision of motorcycle parking bays, at a ratio of no greater than 1 car bay discounted for one motorcycle bay.

## **Reciprocal Parking**

- 4.4.7 "Reciprocal parking" Where parking facilities serve separate uses or a mixed use development and the parking demand generated by the various uses does not coincide.
- 4.4.8 The City may consider reciprocal parking arrangements where it is convinced that the demand for parking by the uses proposed will not coincide.
- 4.4.9 Where reciprocal parking is proposed the City must be satisfied that;
  - i. the parking facilities serving the proposed use will be located on the one lot; or that parking arrangements are permanent (e.g. easement, amalgamation, restrictive covenant or any other formal arrangement the City may require); and
  - ii. parking demand in the immediate and long term can be satisfied; and
  - iii. the uses being served by the parking arrangements are compatible (i.e. no overlap demand for parking facilities); and
  - iv. a proposed change of use will comply with the reciprocal parking arrangement, or will satisfy the parking requirements by other means.



### **Access Design**

- 4.4.10 Except for single residences and certain duplex proposals, all car parking spaces must be situated such that vehicles can enter and leave the site in a forward direction.
- 4.4.11 Car parking must be designed so that either ingress to or egress from each space can be achieved in one movement.
- 4.4.12 In the case of residential developments, long straight driveways are to be avoided and the use of decorative paving, e.g. brick, is encouraged. In order to reduce the volume of rainwater run-off and increase the area of landscaping, the area paved for vehicular access should be minimised.
- 4.4.13 A vehicular driveway (ingress and/or egress) should:
  - be located to the street with the lowest traffic volume;
  - have separate entry/exit if it is likely that it will be used simultaneously by vehicles both entering and leaving the site and obstruction to traffic in the street could occur; and
  - be more than 6 metres from:
  - the prolongation of the property line of any intersecting street;
  - an intersection;
  - a break in the median strip;
  - the commencement of a curve linking the carriageways of the public streets at an intersection; and
  - the approaches to "stop" or "give way" signs.
  - not be within 25 metres of any signalised intersection and preferably not within 90 metres of a signalised intersection of any major road;
  - not be closer than 1.5 metres to side boundaries;
  - be located such that any vehicle turning from the street into the driveway or into the street from the driveway can be readily seen by the driver of an approaching vehicle and be clear of all obstructions which may prevent drivers from having a timely view of pedestrians;
  - be relatively level within 6 metres of the site boundary or any footpath maximum grade 1 in 20.
- 4.4.14 Loading bays must be situated such that commercial vehicles can be positioned wholly within the bay when loading and that loading activities can occur without undue disruption to, or access to, other car spaces.

### **Geometric Standards**

Geometric standards applicable to site access and parking layout may be found in the Appendix to this Policy (Geometric Standards 1 - 7).

### 4.5 CONSTRUCTION STANDARDS

- 4.5.1 All car parking areas are to be sealed, line-marked and drained to the satisfaction of the City. Except as provided by Clause 5.3, bitumen sealing will be the minimum standard required.
- 4.5.2 Staff, resident and visitor car parking shall be appropriately marked and/or signposted.



- 4.5.3 Car parking situated in yard areas or generally behind the actual building line within industrial developments may be constructed to a suitable gravel standard only. All car parking within front setbacks and/or associated with showroom/front office use shall be sealed and landscaped to the City's satisfaction.
- 4.5.4 Car park design and construction shall include adequate provision for landscaping comprising screen, features and shade trees and shrubs (of indigenous species) as appropriate.
- 4.5.5 The City may require the lodgement of performance guarantees against the satisfactory construction, completion and establishment of car parking areas and associated landscaping.

### 4.6 MINIMUM CAR PARKING REQUIREMENTS

4.6.1 The number of on-site car parking spaces required to be provided outside the Busselton/Dunsborough CBD, for a particular land use are set out in the following table.

This table defines parking standards for a range of land uses which are most commonly encountered. The City reserves the right to define a requirement for uses not detailed according to the merits of the particular development proposed.

4.6.2 Premises with more than one use have requirements added unless common usage occurs.



LAND USE	MINIMUM NO. OF ON-SITE CAR PARKING SPACES (outside the CBD)		
ALL RESIDENTIAL			
Dwelling Units:	As per the R Codes		
OTHER RESIDENTIAL			
Residential Building or Residential Hotel or Boarding House	1.5 spaces per bed		
Professional Consulting Rooms	1 space for the residence plus 3 spaces per consultant		
TOURIST			
Motel	space per unit plus 1 visitor space per units plus provision for bus parking for 2 units or more		
Caravan Park/Chalet Park/Tent Park Bed & Breakfast Establishments	1 per site plus 1 visitor space for every 4 sites 2 spaces per dwelling plus 1 space for each guest room		
Backpacker Hostel Accommodation	0.3 per bed plus 2 bays per manager caretaker and 1 for every additional membe of staff		
Guesthouse	1 per suite plus 1 for manager plus 1 for each additional member of staff		
RETAIL AND COMMERCIAL			
Hotel	1 space per bedroom plus 1 space for every 3m <sup>2</sup> of public bar area plus 1 space for every 4m <sup>2</sup> of lounge area		
Tavern	1 space per 3m <sup>2</sup> of public area		
Restaurant/Refreshment Room	1 space per 4 seats/6m <sup>2</sup> of public area		
Licensed Club or Cabaret	1 space per 5m <sup>2</sup> of bar and lounge area		
Service Station	2 spaces per working bay and 1 for each employee		
Roadhouse	Parking shall be provided in accordance with the minimum number of on-site car parking spaces required for the uses "Shop" and "Restaurant/Refreshment Rooms".		
Shop	1 space per 30m <sup>2</sup> of net lettable area (NLA) plus 1 loading bay per development		



LAND USE	MINIMUM NO. OF ON-SITE CAR PARKING SPACES (outside the CBD)		
Takeaway Food Outlet	1 space for every 1m2 length of queuing area		
Office	1 space per 30m <sup>2</sup> of ground floor NLA. 1 space per 40m <sup>2</sup> of first or second floor NLA.		
Trade Display	NLA. 1 space per 50m <sup>2</sup> of display area or at th City discretion		
Showroom or Warehouse	1 space per 50m <sup>2</sup> of NLA plus 1 loading baper development		
Vehicle, Caravan and Boat	1 space per 100m <sup>2</sup> of display area plus spaces per working or service bay sales		
INDUSTRY			
Industry and Prescribed Premises	1 space per 50m <sup>2</sup> of NLA (minimum 5) plus loading bay per factory unit as appropriate		
Installations, Depots	1 space for every 2 employees		
COMMUNITY USES	*		
Pre-School	1 space per teacher or parent on roster Safe pick-up and set-down areas (includin off-street bus zones) shall be developed a directed by the City		
Primary School	1.25 spaces per classroom Safe pick-up and set-down areas (includin off-street bus zones) shall be developed a directed by the City		
Secondary School	1.5 spaces per classroom Safe pick-up and set-down areas (including off-street bus zones) shall be developed as directed by the City		
Tertiary Education	Subject to negotiations, the City shall ensure that all staff and student parking is accommodated on-site		
Public Library or Museum	1 space per 40m <sup>2</sup> of public floor area		
Public Hall/Place of Assembly	1 space to every 4 persons the building is designed to accommodate		
Theatre/Cinema	1 space per 4 seats		
Squash Courts	3 spaces per court		



LAND USE	MINIMUM NO. OF ON-SITE CAR PARKING SPACES (outside the CBD)		
Health Centre	1 space per 30m <sup>2</sup> of NLA		
Hospital	1 space per 2 beds		
Nursing Home	1 space per 3 beds		
Medical Clinic	5 spaces per practitioner		
Church	1 space per 5 seats		
Drive-in Theatre	1 (separate) space per employee		
NON-	URBAN		
Roadside Stall	4 spaces A minimum of 200m clear sight distance is required along all roads adjoining the site		
Wineries/Wine Tasting and Cellar Door Sales	1 space per 30m <sup>2</sup> of NLA and loading bay		
Plant Nursery	1 space per 100m <sup>2</sup> of display area and loading bay plus 1 space per 30m <sup>2</sup> of retain NLA.		

Note: Special Requirements which may impact upon car parking provision and/or design for a specified land use are italicised.

## 4.7 MINIMUM BICYCLE PARKING AND END OF TRIP FACILITIES REQUIREMENTS

## 4.7.1 Provision of Bicycle Parking Facilities

## Objective:

Bicycle parking facilities are provided on a commercial or mixed-use development suitable for the needs of workers and visitors to that premises.

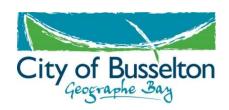
### **Provisions:**

4.7.1.1 Bicycle parking is provided in accordance with the categories of land use in Table 1.

Table 1:

Type of Land Use	Employee Parking Spaces (GFA)	Visitor Parking Spaces (GFA)	
Shop/ General Retall	2 per 300m²	2 per 500m²	
Showroom Retall/ Industry	2 per 750m²	2 per 1000m²	
Take Away Food Outlet	2 per 100m²	2 per 50m²	

Restaurant/ Bar	2 per 100m² public area	2 per 100m² public area	
Offices	2 per 200m²	2 per 750m²	
Health/ Medial Consulting Rooms	2 per 8 practitioners	2 per 4 practitioners	
Child Care Centre	2 per 4 employees	2 per 8 employees	
Multiple Dwelling/ Tourist Accommodation	2 per 4 employees	2 per 8 dwellings/ accommodation units	
Exhibition Centre, Recreation Centre, Public Building/ Place of Assembly or similar	2 per 4 employees	2 per 200m²	



### 4.7.2 Location of Bicycle Parking Facilities

### Objective:

Bicycle parking facilities are suitably located to achieve accessibility, security, attractiveness and to avoid hazards.

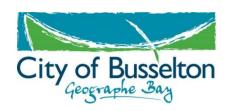
#### Provisions:

- 4.7.2.1 Bicycle parking facilities should be provided in accordance with the following:
  - a) Employee Parking Spaces High/ medium security parking with fully enclosed lockers or a security locked compound
  - b) Visitor Parking Spaces Low security facilities which the bicycle frame or tyre can be locked to (u-rails)
- 4.7.2.2 Bicycle parking facilities conform to Austroads Guide to Traffic Engineering Practice Part 14: Bicycles (as amended).

The Austroads Guide to Traffic Engineering Practice recommendations which indicates that desirably, bicycle parking facilities should:

- Enable wheels and frame to be locked to the parking device without damage to the bicycle;
- Be placed in public view (i.e. where they can be viewed by passers-by, shopkeepers, station attendants, teachers or workers);
- Present no hazard to pedestrians;
- Be easily accessible from the road;
- Be arranged so parking and un-parking manoeuvres will not damage adjacent bicycles;
- Be protected from manoeuvring motor vehicles and opening car doors;
- Be as close as possible to the cyclist's ultimate destination;
- Be in a well-lit area;
- Be protected from weather (particularly all day parking);
- Designed to fit in harmony with the surrounding environment.
- 4.7.2.3 Bicycle parking may be incorporated into the setback area of a development and may be included as part of a landscaped area of a lot/ development site.
- 4.7.2.4 Short term bicycle parking may be provided in the road reserve adjacent to a development site where a building is built up to the boundary, provided that:
  - a) A minimum clear footpath width of 1.5m directly adjacent to the building is maintained unless otherwise approved by the City;
  - b) The requirements of 7.2.2 & 7.3.1 are met.

For visitor bicycle parking facilities which are proposed in the road reserve but in accordance with the City's assessment cannot be practically located adjacent to the proposed development site, the City may accept a financial contribution equal to the quoted cost of construction of these facilities in an alternative location in the general vicinity of the development site.



### 4.7.3 Design/ Construction Standards

### Objective:

Bicycle parking and storage facilities are designed and constructed appropriately to ensure safety and optimal use.

#### **Provisions:**

4.7.3.1 Bicycle parking and storage facilities are designed and constructed in accordance with Australian Standard AS2890.3 Parking Facilities — Part 3: Bicycle Parking Facilities (as amended).

Older style bicycle parking facilities which support the bicycle by one wheel only such as toaster racks, no longer meet the requirements of the relevant Australian Standard for bicycles (AS2890.3). These parking racks can damage bicycles and are considered to offer an unacceptable risk of theft. Existing facilities should be progressively upgraded to meet the current standard.

### 4.7.4 End of Trip Facilities

### Objective:

End of trip facilities are provided which are adequate for and appropriately accessible to the number and type of users of bicycle parking facilities.

### **Provisions:**

- 4.7.4.1 For Employee Parking Spaces, secure clothes lockers are provided at a rate of 1 locker per 1 bicycle parking space.
- 4.7.4.2 For Employee Parking Spaces, showers are provided at a rate of 1 per 8 Employee/Residential Bicycle parking spaces (or part thereof).
- 4.7.4.3 Provision of showers, lockers and change room facilities should be in accordance with the following:
  - a) Located as close as practical to bicycle storage facilities;
  - b) Reflect potential demand for use, with separate male and female facilities provided (unisex may be supported for smaller facilities);
  - c) Located and developed to provide users with a high level of security;
  - d) Showers provided dispense hot and cold water;
  - e) Clothing storage may be provided in bicycle storage lockers provided there is sufficient space and hangers.

### 5. REVIEW DETAILS

Review Frequency		2 yearly		
<b>Council Adoption</b>	29/1/2014		C1401/007	
Previous	10/3/2010		C1003/069	
Adoption				

<sup>\*</sup> Policy number changed from LPP 8A to LPP 2.1 on the 11th May 2020. The change is administrative only, no resolution by Council required.



#### **APPENDIX 1 - PARKING AREA DESIGN**

#### A1 Introduction

This Appendix recommends design criteria for parking facilities, e.g. parking spaces, aisles and ramps based on appropriate design vehicle characteristics.

Wherever physical restrictions occur within the parking facility, such as on access ramps, primary circulation aisles and entry and exit aisles, the design must cater for all vehicles likely to use the facility. The 99.8 percentile car is thus recommended as the basis for design in these circumstances. The 85th percentile car is recommended as the basis for design in less critical circumstances, such as for parking spaces and aisles providing access to parking spaces and on which temporary obstructions can be tolerated. Where special circumstances apply, designers should use the data in Appendix A as a basis for assessing their requirements.

With heavy vehicles, the maximum dimension vehicle should, in general, be used as the design vehicle for each type. In some situations, the standard small rigid truck could be used as a design vehicle, if it is improbable that larger vehicles will use the facility.

Where older buildings are being renovated for a change in use, the constraints in achieving recommended design criteria are recognised. In these situations, a design to a lower standard than that recommended might be acceptable, provided the solution can be shown to be workable.

## A2 Parking Spaces and Aisles

### A2.1 Design Considerations

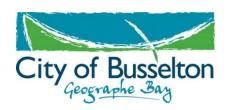
Parking space dimensions are a function of the design vehicle dimensions and door opening widths, as well as the manoeuvring area required for entry and exit to the space. Parking space and aisle dimensions are thus interdependent. Swept turning paths, based on the design vehicle's minimum turning circle, are not always suitable for determining space and aisle dimensions.

Drivers can manoeuvre vehicles within much smaller dimensions than swept turning paths would suggest. A reduction in the aisle and space dimension, however, results in an increase in the number of manoeuvres made to park the vehicle which may, in turn, cause congestion and delays. In parking areas where there is a high intensity of traffic generation and where parking turnover is high, it is recommended that vehicle(s) should be able to either enter or leave the parking space in two manoeuvres. (By definition, a reversing movement will require two manoeuvres). Ease of access to and from the vehicle also needs to be considered.

Recommended minimum dimensions allow the following horizontal clearances outside the boundaries of the design car swept turning path:

Offside: 300mm Nearside: 300mm

To summarise the relationship between design vehicles and movement areas:



#### AREA DESIGN VEHICLES

Critical 99.8% + 300mm clearance each side Non-Critical 85% + 300mm clearance each side

### **Space Lengths**

Space lengths should be determined by the overall length of the 85 percentile car plus an allowance for clearance to obstructions at either end. This would yield a minimum 5.5 metres long and as a result of the adverse consequence of a vehicle protruding into the circulating roadway disrupting vehicle circulation, a 5.5 metres space is recommended. The recommended space length does not allow for rear opening doors such as on large station wagons.

### **Acute Angle and Parallel Parking**

Parking at angles smaller than 90 degrees can reduce the required aisle width for one-way circulation, the minimum aisle width for one-way circulation being 2.8 metres for 30 degree parking. In the case of parallel parking, spaces should be longer than as recommended above.

### **Parking Turnover**

The minimum width of parking spaces varies, depending upon the parking clientele served. Narrower spaces could be considered for car parks generating with a low parking turnover, whereas car parks with a higher parking turnover should have wider spaces.

The minimum parking space width of 2.5 metres is recommended for parking facilities serving mixed patronage, i.e. short and long-staying casual parkers.

### Parking for the Disabled

Special parking spaces for disabled should be provided, at the rate of two spaces per hundred spaces provided overall. A higher proportion of spaces might be appropriate at land uses where there are high volumes of sick and infirm visitors. It is essential that these spaces should be clearly signposted both for the convenience of disabled parkers and to discourage other parkers from using such spaces. The spaces are wider than the standard space width, to assist movement into and out of the parked vehicles. Additionally they should be located as close as possible to entrances, areas or facilities which are likely to be visited by disabled persons and should be connected by pathways or ramps that conform with the Australian Standard AS 1428- 1977 "Design Rules for Access by the Disabled".

The recommended minimum widths of parking space for the disabled are 3.6 metres for angle parking and 2.5 metres for parallel parking. Parking space lengths for angle and parallel parking of 5.5 metres and 6.2 metres respectively are recommended.

The parking bay width can be reduced to 2.5 metres if the bay abuts a footpath.

### **A.2.2 Recommended Minimum Dimensions**

Based on the foregoing, the recommended minimum dimensions for parking spaces are as follows:



### Cars

For angle parking, the minimum parking space length of 5.5 metres is recommended. For parallel parking, the recommended space length is 6.7 metres.

Figure B.1 summarises the recommended minimum parking space dimensions for angle and parallel parking. Note that these dimensions are based on the 85th percentile design car, for manoeuvring in non-critical areas.

## Trucks/Buses

Parking dimensions for trucks should be determined by using the swept path templates as appropriate.

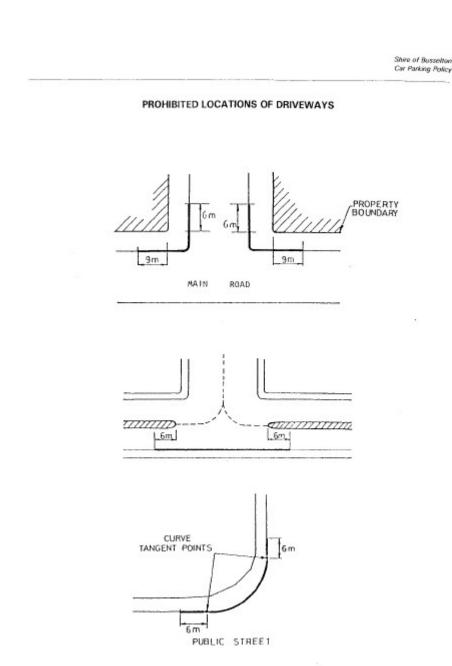
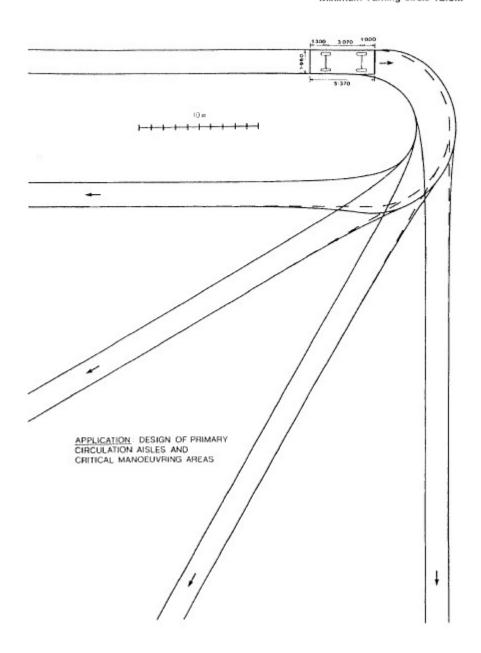




Figure A. 1a 99.8% DESIGN CAR TURNING PATH Minimum Turning Circle 12.9m





Shire of Busselton Car Parking Policy

### APPENDIX: PARKING STANDARDS

Figure A.3a 85% DESIGN CAR TURNING PATH Minimum Turning Circle 11.0m

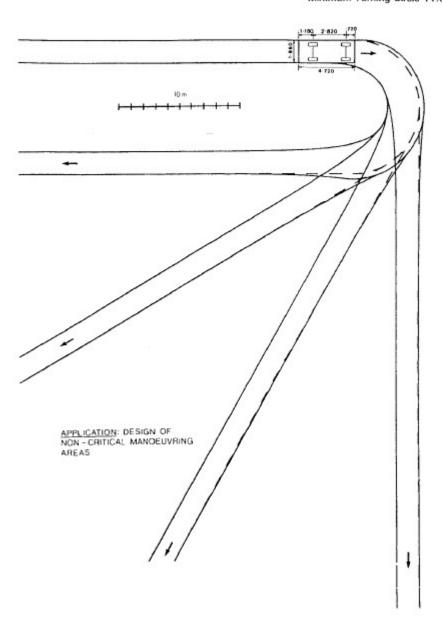




Figure A. 5a DESIGN SMALL RIGID TRUCK Minimum Turning Circle 14.4m

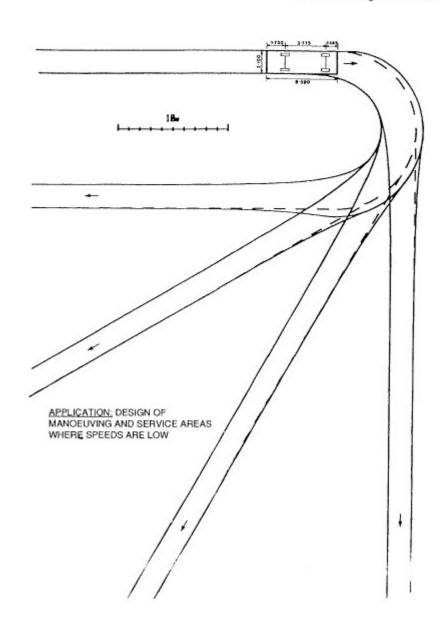




Figure A. 7a DESIGN LARGE RIGID TRUCK Minimum Turning Circle 21.65m

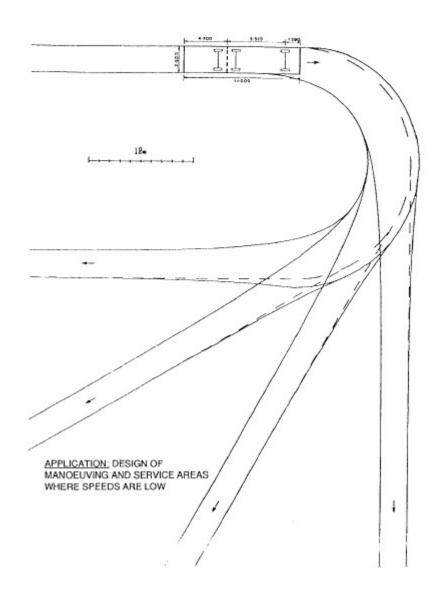




Figure A. 9a DESIGN LARGE SEMI-TRAILER TURNING PATH
Minimum Turning Circle 16.2m

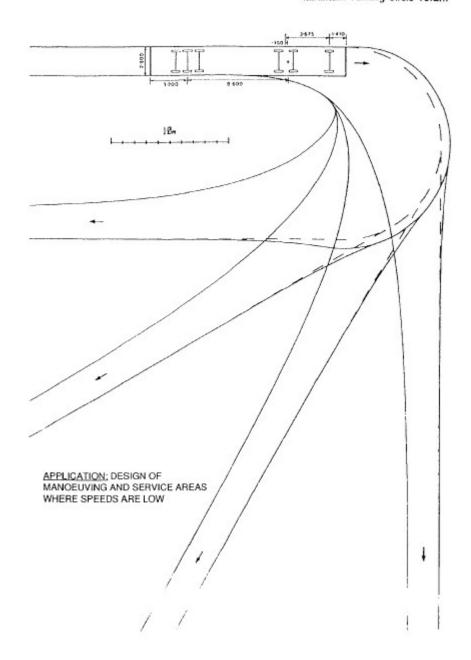




Figure B.1 RECOMMENDED PARKING DIMENSIONS for Non-Critical Manoeuvring Areas

