

Integrated Design - Appendix B

Open & Civic Space Design



Contents

1	Introduction.....	2
1.1	How to Use This Document.....	2
2	General Design Requirements.....	3
2.1	Accessibility Standards.....	4
2.2	Recreation Opportunities and Facilities	5
3	Recreation Open Space	6
3.1	General	6
3.1.1	Design Guidelines for Recreation Open Space.....	6
4	Sports Open Space.....	8
4.1	General	8
4.1.1	Design Guidelines for Sports Open Space.....	8
5	Civic Spaces.....	10
5.1	General	10
5.1.1	Design Guidelines for Civic Spaces	10
6	Linear Linkage Open Spaces	12
6.1	General	12
6.1.1	Design Guidelines for Linear Linkage Open Spaces	12
7	Design and Delivery.....	14
7.1	General	14
7.1.1	Unstructured Play Spaces and Playgrounds.....	15
7.1.2	Public Art.....	16
7.1.3	Lighting.....	16
7.1.4	Signage	16
7.1.5	Furniture, Fixtures and Materials	17
7.1.6	Sporting facilities	17
7.1.7	Landscaping and Earthworks	18
7.1.8	Stormwater and Water Sensitive Urban Design	20
7.1.9	Natural Environmental Values	21
8	Design Toolbox.....	22
8.1	Policies, Standards and Guidelines.....	22
8.2	Best Practice Design Guidelines and Standards.....	22
9	Glossary.....	23

1 Introduction

This appendix identifies types of open and civic spaces that are expected in the region and how they should be designed and constructed. It is not intended to be a one design fits all approach but to provide a guide to achieving design principles outlined in Section 4 of the Planning scheme policy – Integrated design.

Throughout this appendix the use of the term 'should' implies that all reasonable and practicable measures must be taken to achieve the desired outcome or solution specified. The guideline is not to be regarded as prescriptive and there may be circumstances and conditions where designers will need to adopt alternative design procedures, or innovative methods, commensurate with accepted best practice.

An alternative solution may be adopted provided it has an outcome or performance at least equivalent to that presented in that particular point of the guideline. Where it is not considered reasonable or practicable to achieve the outcome, the designer may be required to provide—to the satisfaction of Council—justification for the decision and how the developments achieves the design principles outlined Section 4 of the Planning scheme policy – Integrated design.

1.1 How to Use This Document

This document leads the reader through the design process for open spaces within the Moreton Bay region.

- **Section 2** outlines the broad fundamental requirements for the provision of open and civic space in the region. This section is particularly useful for the planning and design of subdivisions.
- **Sections 3 to 6** provides specific detail relating to each open and civic space type, discussing the expectations and specific requirements for each open space.
- **Section 7** discusses aspects relating to the detailed design and delivery of an open and civic space projects in the region.
- **Section 8 and 9** provides important reference documents and definitions that aid the designer in delivering successful open and civic space projects in the regions.

2 General Design Requirements

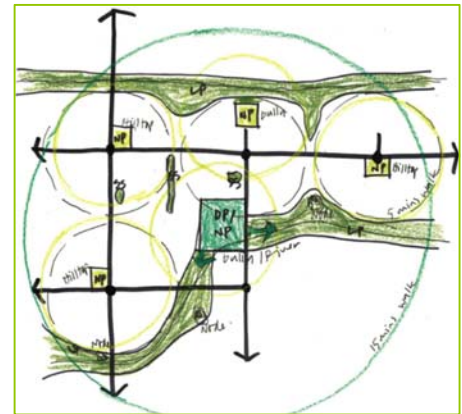
Any new residential developments within the region should demonstrate the following:

Trunk Infrastructure

Any requirements identified in the Priority Infrastructure Plan are clearly understood and catered for in the development.

Accessibility

All proposed residential dwellings are within the accessible distance of any proposed or existing local recreation open and civic space outlined in Table 2.1 – Accessibility Standards.



Physical Design

All proposed open spaces achieve the minimum design requirements outlined in the relevant Open and Civic Spaces - Section 3 to 6 such as minimum size, shape and configuration.

Recreation opportunities

All proposed open and civic spaces provide the functions outlined in Table 2.2 – Recreation Opportunities Matrix.

Embellishment and Design Standards

All proposed open spaces meet the acceptable embellishment and design standards as outlined in Section 7.

2.1 Accessibility Standards

The accessibility standards for open and civic space are identified in Table 2.1. The standards identify open and civic space catchments and the expected geographical distribution rate across the region.

Table 2.1: Accessibility Standards

Place type	Open and Civic Space Type - Acceptable maximum distance from new developments (km)									
	Recreation					Sports		Civic		Linear Linkage Local and Natural
	Local	District	Regional	Foreshore	Bushland	District	Regional	District	Regional	
Activity Centre	0.4	2.5	10	N/A	N/A	3	15	WDC ⁽³⁾	WMC ⁽⁴⁾	N/A
Urban Neighbourhood	0.4	2.5	10	N/A	N/A	3	15	N/A	N/A	N/A
Next Generation Neighbourhood	0.4	2.5	10	N/A	N/A	3	15	N/A	N/A	N/A
Suburban Neighbourhood	0.4	2.5	10	N/A	N/A	3	15	N/A	N/A	N/A
Rural Residential	N/A	3.5	10	N/A	N/A	5	15	N/A	N/A	N/A
Rural Township	0.8	2.5	10	N/A	N/A	5	15	WDC ⁽³⁾	N/A	N/A
Coastal Communities	0.8	2.5	10	N/A	N/A	5	15	WDC ⁽³⁾	N/A	N/A
Rural Area	N/A	N/A	10	N/A	N/A	N/A	15	N/A	N/A	N/A
Mountain Ranges, Forests and Waterways	N/A	N/A	10	N/A	N/A	N/A	15	N/A	N/A	N/A
Key Extractive Resources	N/A	N/A	10	N/A	N/A	N/A	15	N/A	N/A	N/A
Coast and Riverland's	N/A	N/A	10	N/A	N/A	N/A	15	N/A	N/A	N/A
Enterprise and Employment Areas	N/A	3.5	10	N/A	N/A	5	15	N/A	N/A	N/A
Special Areas	N/A	N/A	10	N/A	N/A	N/A	15	N/A	N/A	N/A

Notes

1. Refer to Moreton Bay Regional Councils Strategic Framework for further information on 'Place Types'.
2. This table identifies the acceptable distance that all new residential developments should be from a particular open space type. It is calculated as actual travel distance along the road network. Local recreation type open spaces maybe calculated along pedestrian pathways. Higher order open spaces (that have similar functions to local open spaces) contribute to the accessibility of the local network. It is understood that meeting these standards may be difficult to achieve for all new residential development. A reasonable level of accessibility must be demonstrated and agreed to by Council.

Table Key

(WDC) Within District Centre
(WMC) Within Major Centre

2.2 Recreation Opportunities and Facilities

The recreation opportunities and facilities for each open space type are identified in Table 2.2.

Table 2.2: Recreation Opportunities and Facilities

Opportunities / Facilities		Open and Civic Space Type												
		Recreation							Sports		Civic		Linear Linkage	
		Local	District	Regional	Foreshore			Bushland	District	Regional	District	Regional	Local	Natural
					Local	District	Regional							
Play areas	Large	✗	✓✓	✓✓	-	-	-	✗	-	✓	✗	-	✗	
	Small	✓✓	-	✓	-	-	-	-	✓	✓✓	-	✓	-	
Cycling & walking opportunities		✓	✓✓	✓✓	✓	✓	✓	✓	✓	✓✓	-	-	✓✓	
Seating opportunities		✓✓	✓✓	✓✓	✓✓	✓✓	✓✓	✓	✓✓	✓✓	✓✓	✓✓	✓✓	
Kick-a-bout spaces		✓✓	✓✓	✓✓	✓	✓	✓	✓	✓	✓	-	-	-	
Picnic areas		✓✓	✓✓	✓✓	✓	✓	✓	✓	✓	✓✓	-	-	-	
Multi-use activity space		✓	✓✓	✓✓	-	-	-	-	✓	✓	-	-	-	
Youth activity space		-	✓	✓	-	-	-	-	-	-	-	-	-	
Gateway statement (public art)		-	✓	✓✓	-	-	-	-	-	-	✓	✓	-	
BMX / skate opportunities		-	✓	✓✓	-	-	-	-	-	-	-	-	-	
Dog off leash		✗	✓	✓✓	-	-	-	-	-	-	✗	✗	-	
Fitness nodes		-	✓	✓✓	✓	✓	✓	-	-	✓	✗	✗	✓	
Refreshment facilities (drink taps)		✓✓	✓✓	✓✓	-	-	-	✓	✓✓	✓✓	✓✓	✓✓	-	
Public amenities (toilets)		✗	✓✓	✓✓	-	-	-	-	✓✓	✓✓	-	✓	-	
Performance / community / festival / event space		-	-	✓✓	-	-	-	-	-	-	✓	✓	-	
Kiosks or other commercial opportunities (café & restaurants)		✗	-	✓	-	-	-	✗	✓	✓	✓	✓	-	
Formal sports fields / courts / surface (lighting & irrigation)		✗	✗	✗	✗	✗	✗	✗	✓✓	✓✓	✗	✗	✗	
Change facilities (sports)		✗	✗	✗	✗	✗	✗	✗	✓✓	✓✓	✗	-	✗	
Private vehicle movement and internal parking		✗	✓	✓✓	-	-	-	-	✓✓	✓✓	✗	✗	✗	
Access to nature (bird watching, boardwalks etc.)		-	-	-	-	-	-	✓	-	-	✗	✗	-	
Outdoor recreation (bushwalking, horse riding etc.)		✗	-	-	-	-	-	✓	-	-	-	✗	✗	
Paddle and recreational boating facilities		-	-	-	-	-	-	-	-	-	✗	✗	-	
Beach facilities (beach showers etc.)		✗	✗	✗	-	-	-	✗	✗	✗	✗	✗	✗	
BBQs		X	✓✓	✓✓	✓✓	✓✓	✓✓	X	X	✓✓	X	✓✓	X	
Bus parking / drop off		X	X	✓	X	X	X	X	✓✓	✓✓	X	✓✓	X	

Table Key

✓✓ Required ✓ Preferred - Optional ✗ Not Preferred

3 Recreation Open Space

3.1 General

Recreation open spaces are designed to meet a range of traditional and passive recreation activities of the community. Seven types are catered for in the region as follows:

1. Local Recreation
2. District Recreation
3. Regional Recreation
4. Local Foreshore Recreation
5. District Foreshore Recreation
6. Regional Foreshore Recreation
7. Bushland Recreation

Refer to the *Glossary - Section 9* for further clarification on each type.

3.1.1 Design Guidelines for Recreation Open Space

Table 3.1 below and the following guidelines provide further guidance on the design requirements for recreation open space.

Table 3.1: Specific Provision for Recreation Open Space

Open space type	Population range ⁽¹⁾	Min. area – acceptable level of constrained land ⁽²⁾	Width to depth ratio	Min. width at any point	Min. road frontage	Road type ⁽³⁾	Min no. of access points ⁽⁴⁾	Min. land above 2% AEP (1 in 50 year ARI) event
Local Recreation	1000-1500	0.5 Ha – 0% (Preferred size = 1.0 Ha)	0.5	20m	40%	Collector or lower	1	100%
District Recreation	5000-8000	4 Ha - 20%	0.75	30m	30%	Collector or higher	2	80%, all internal roads and car parking
Regional Recreation	40,000+	10 Ha - 50%	0.75	30m	30%	Arterial or higher	3	50%, all formal recreation areas, internal roads and vehicle parking
Local Foreshore Recreation	No Standard	No Standard	No Standard	No Standard	No Standard	No Standard	1	all formal recreation areas, internal roads and vehicle parking
District Foreshore Recreation	No Standard	No Standard	No Standard	No Standard	No Standard	Collector or higher	2	all formal recreation areas, internal roads and vehicle parking
Regional Foreshore Recreation	No Standard	No Standard	No Standard	No Standard	No Standard	Collector or higher	2	all formal recreation areas, internal roads and vehicle parking
Bushland Recreation	No Standard	No Standard	No Standard	No Standard	No Standard	No Standard	1	all formal recreation areas, internal roads and vehicle parking

Notes

- (1) This is the estimated population size that warrants a particular park type.
- (2) This is the minimum area that can provide the desired function for each park type. A larger park size may be provided to accommodate high density areas and to meet the broad hectare supply ratios. The acceptable level of constrained land only applies to the minimum area not the total park.
- (3) Parks should be located on acceptable road type to complement the parks role and function in the community and in the overall open space network.
- (4) Suitable for maintenance and emergency vehicle access.

a) Access, location and connectivity:

- The accessibility standards are to be in accordance with Table 2.1.
- Recreation parks are to be located in a central, prominent, highly visible and accessible location in the catchment it services.
- Pathway connections are to be shared use, accommodate varying levels of mobility and provide an internal loop that connects activity nodes within the parklands. Lighting is to be provided on trunk pathways.
- Adjacent land uses are to complement the park and provide a physical and visual interface such as direct residential dwelling frontage access.
- Signage is to be provided in key locations to promote legibility of the space and enhance wayfinding within the locality.

- District and regional recreation parks are to be serviced by public transport and where possible should have dedicated public transport stops, as well as adequate off road parking.
- b) Physical design:
- Recreation parks are to have a regular and compact shape that can accommodate the recreation opportunities identified in Table 2.2.
 - Open spaces are to be reasonably level throughout, in order to accommodate provision of core infrastructure, however natural or constrained areas may have undulating terrain to provide relief in the landscape. Table 3.2 provides acceptable gradients for specific facilities.

Table 3.2: Acceptable Gradients for Specific Opportunities in Recreation Open Space

Opportunity / Facility	Acceptable Gradient
Kick-a-bout space	1% to 3%
Terraced and sitting areas	1% to 2%

- c) Character, cultural and natural design elements:
- Significant natural and cultural features are to be retained and promoted in park design when conducive to setting and function, particularly where required by legislation such as those features identified in the Register of Heritage Places or governed by Cultural heritage provisions.
 - Public art is encouraged and provided in civic/community areas, gateway spaces or in play space as interactive play. Public art should be durable and resistant to vandalism.
 - Interpretive signage is provided when cultural and environmental features are present.
 - WSUD elements may be included in the landscaping so that it does not interfere with the functionality of the park and or be at the expense of recreation activities.
 - Key viewpoints are retained and promoted. Views into and external to the park are important in maintaining and promoting sense of place.
- d) Safety and security:
- CPTED principles are used to guide the design and location of infrastructure.
 - Playgrounds are to be located at least 10 metres from private dwellings and 20 metres from external roads.
 - Bollards, slip rails, vegetation and other measures are to be used to deter unauthorised vehicle access in parks. These should be able to be removed for the purposes of Council access and maintenance purposes.
 - Landscaping is used to delineate recreational activities, activity nodes, private and public spaces and allow surveillance.
 - Vegetation features do not block views to and from the main activity areas and play equipment.
- e) User comfort:
- Public amenities, where consistent with the park classification, are provided and located close to key locations which are easily accessible.
 - Dog off leash areas are to be designed in a regular and uniform shape, located at least 30 metres from water bodies and 20 metres from recreation areas.
 - Passive recreation nodes are provided in areas which allow for sitting and nature appreciation.
 - Kiosks, restaurants, community facilities, sporting facilities and cafes may be utilised in regional and district recreation parks to activate the space.
 - Shade and shelter is provided that maximises user comfort including adequate cover of pathways, play spaces and formal seating areas.

4 Sports Open Space

4.1 General

Sports open spaces are traditionally used for playing and practising formal, organised and competitive sporting activities. They include sports grounds used for a wide range of team and individual competitions and often have associated facilities such as change rooms and spectator areas. Typical infrastructure includes irrigated sports surfaces, hard courts, cycle tracks and jumps, indoor sports centres, athletics tracks and stations, fitness stations and walking tracks. They are to also include necessary ancillary infrastructure such as competition and training lighting, clubhouses, public toilets, change rooms, storage rooms/areas, shade, spectator seating, drink fountains, litter bins, internal road network and parking facilities, signage, play equipment, informal kick-about areas and water harvesting for on-site re-use.

In most locations sports open spaces are to be multi-use and promote the shared use of facilities between a number of clubs and sporting codes. Some informal recreation opportunities may also be provided for visitors and local residents to encourage use of the park outside of formal sporting hours or for families attending sporting events. It is intended that sports parks are to be developed in accordance with a master plan of development.

There are typically two types of sports facilities planned for in the region. They are:

1. District Sports
2. Regional Sports

Refer to the *Glossary – Section 9* for further clarification on each type.

4.1.1 Design Guidelines for Sports Open Space

Table 4.1 and the following guidelines provide further guidance on the design requirements for sports open space.

Table 4.1: Specific Provision for Sports Open Space

Open space type	Population range ⁽¹⁾	Min. area – acceptable level of constrained land ⁽²⁾	No. of access points ⁽³⁾	Features above 1% AEP (1 in 100 year ARI) event	Features above 2% AEP (1 in 50 year ARI) event	Features above 5% AEP (1 in 20 year ARI) event
District Sport	30,000+	20 Ha – 20%	All playing fields/courts have adequate access	Buildings	Formal recreation areas, internal roads, hard courts and vehicle parking	Playing fields
Regional Sport	100,000+	40 Ha – 30%	All playing fields/courts have adequate access	Buildings	Formal recreation areas, internal roads, hard courts and vehicle parking	Playing fields

- a) Access, location and connectivity:
 - The accessibility standards are to be in accordance with Table 2.1.
 - Sport parks are to be generally accessible by public transport, bikeways and major roads and provide adequate vehicle parking.
 - Park design is to include well-defined internal pedestrian and vehicle access.
 - The location of formalised sporting activity must have minimal impact on residential amenity, located close to public transport stops and provide adequate off road parking.
 - Park design should consider maintenance requirements in accordance with future asset management plans.
- b) Physical design:
 - Sport parks are to have a square or of a similar compact overall shape that is reasonably flat throughout.
 - Sport parks are to utilise a number of multi-use fields of 200 x 150 metres with a slope of <1:70.
 - Fields are to be set back a safe and suitable distance from external roads or provide appropriate buffers and measures to ensure conflict between park use and vehicles is minimised.
 - Outdoor sporting fields and courts, where practical, are to be oriented in a north-south direction along the long axis.

- Playing surfaces need to be irrigated and well drained. Water sources must be suitable to meet the irrigation needs of the field for the long term.
- c) Character, cultural and natural design elements:
- Sport parks are to accommodate a range of formal and informal recreation activities and picnic and barbeque facilities.
 - Sport parks are to retain natural vegetation and other significant features where compatible with the function of the park.
 - Sport parks are to provide appropriate buffering vegetation to reduce visual impact of facilities without compromising CPTED principles and casual surveillance from adjacent residential lots and public areas.
 - WSUD elements are to be included in landscaping so that it does not interfere with the functionality of the park and or be at the expense of sporting activities.
- d) Safety and security:
- CPTED principles are used to guide the design and location of facilities.
 - Vegetation features do not block views to and from the main activity areas and play equipment.
 - Bollards, slip rails, vegetation and other measures are to be used to deter unauthorised vehicle access in parks. These should be able to be removed in designated locations to enable Council access for maintenance purposes.
- e) User comfort:
- Adequate shade and shelter is provided over spectator areas, play facilities, car parking and pathway connections to and from facilities.

5 Civic Spaces

5.1 General

Civic spaces are located in activity centres and offer residential users, visitors and employees an informal recreation space in an urban setting. Civic spaces are to be sited in a prominent, central location with a high level of pedestrian accessibility. Given the urban context and location, the park will focus on providing spaces for people to socialise, sit and enjoy the subtropical climate. A variety of colours, textures and public art is to be used to create a sense of place and identity in civic parks. Adjoining land use activities are to contribute to activating the edge and provide casual surveillance. Signage is also to be incorporated into the park design to allow legibility and activation of the space.

There are typically two types of civic spaces planned for in the region. They are:

1. District Civic
2. Regional Civic

Note: Civic Spaces should be located in accordance with a master or concept plan.

Refer to the Glossary – Section 9 for further clarification on each type.

5.1.1 Design Guidelines for Civic Spaces

Table 5.1 and the following guidelines provide further guidance on the design requirements for civic space.

Table 5.1: Specific Provision for Civic Spaces

Open space type	Location	Min. area – acceptable level of constrained land ⁽¹⁾	Min. road frontage	No. of access points ⁽²⁾	Min. land above 1% AEP (1 in 100 year ARI) event
District Civic	District commercial centres	1,000m ² – 0%	30%	1	100%
Regional Civic	Major commercial centres	6,000m ² – 0%	40%	1	100%

a) Access, location and connectivity:

- Civic space is to be located in prominent, highly visible, universally accessible and central locations.
- Signage is provided in key locations to promote legibility of the space.
- Adjacent land uses complement the park and provide a physical and visual interface.

b) Physical design

- Civic parks are to have a regular and compact shape that can accommodate the recreation opportunities identified in Table 2.1.
- Civic parks are to have sufficient flat spaces to enable practical use, however it is recognised that open space may also enable transition between areas at different elevation using universal access provision.
- The open space is to be reasonably flat throughout. Table 5.2 provides acceptable gradients for specific facilities.

Table 5.2: Acceptable Gradients for Specific Opportunities in Civic Type Space

Opportunity / Facility	Acceptable Gradient
Terraced and sitting areas	1% to 2%

- c) Character, cultural and natural design elements:
 - Civic parks take advantage of terrain and include significant landmarks such as large shade trees and features with heritage value where they occur onsite, or retain vistas to significant landscape features where external to the site.
 - Public art is encouraged and provided in civic areas or in play spaces as interactive play.
 - WSUD elements are to be included in landscaping so that it does not interfere with the functionality of the park.
- d) Safety and security:
 - CPTED principles are used to guide the design and location of infrastructure.
 - Playgrounds are to be located at least 10 metres from private dwellings or shop fronts, and 20 metres from external roads.
 - Landscaping is used to delineate recreational activities, activity nodes, private and public spaces and allow surveillance.
 - Vegetation features are not to block views to and from the main activity areas and play equipment.
 - Bollards, slip rails, vegetation and other measures are to be used to deter unauthorised vehicle access in parks. These should be able to be removed in designated locations to enable Council access for maintenance purposes.
- e) User comfort:
 - Public amenities are to be provided and located close to key locations which are easily accessible.
 - Adequate shade and shelter is provided that maximises user comfort.

6 Linear Linkage Open Spaces

6.1 General

Linear linkage open spaces include areas of connected or continuous green space that are elongated in shape and form links between key destinations within the open and civic space network. These parks may have multiple purposes which may include contributing to the conservation of habitat and scenic areas, facilitate walking and cycling corridors, serving floodway and drainage functions, and protecting water quality.

There are typically two types of linear linkages open spaces planned for in the region. They are:

1. Urban Linear Linkage
2. Natural Linear Linkage

Note: Linear linkages should be located in accordance with a master or concept plan.

Refer to the *Glossary – Section 9* for further clarification on each type.

6.1.1 Design Guidelines for Linear Linkage Open Spaces

Table 6.1 and the following guidelines provide further guidance on the design requirements for linear linkage type open space.

Table 6.1: Specific Provision for Linear Linkage Type Space

Open space type	Average min. width	Min. road frontage	No. of access points ⁽¹⁾	Features above 2% AEP (1 in 50 year ARI) event	Features above 5% AEP (1 in 20 year ARI) event
Urban Linear Linkage	15m	40%	Where required	All structures	Pathways
Natural Linear Linkage	30m	40%	Where required	All structures	Pathways

- a) Access, location and connectivity:
 - Pathway connections are to be shared use and accommodate varying levels of mobility.
 - Adjacent land uses are to complement the park and provide a physical and visual interface such as direct residential dwelling frontage access.
 - Signage and landmarks are to be provided in key locations within the park to promote legibility of the space.
- b) Physical design:
 - Parks are to be a linear shape and reasonably flat to accommodate pathways and recreation spaces.
- c) Character, cultural and natural design elements.
 - Native vegetation is to be retained and integrated into design.
 - Parks are to protect and enhance landscape amenity and environmental values through linkages.
 - Interpretive signage is provided when cultural and environmental features are present.
 - WSUD elements are to be included in landscaping so that it does not interfere with the function of the park.
- d) Safety and security:
 - CPTED principles are used to guide design and location of infrastructure and activity nodes.
 - If provided, playgrounds are to be located at least 10 metres from private property boundary and 20 metres from external roads.
 - Landscaping is used to delineate recreational activities, activity nodes, private and public spaces and allow surveillance.
 - Planted vegetation is not to block views to road, pathways and play spaces.
 - Bollards, slip rails, vegetation and other measures are to be used to deter unauthorised vehicle access in parks. These should be able to be removed in designated locations to enable Council access for maintenance purposes.

e) User comfort:

- Play spaces and fitness nodes may be included in design and be close to pathways.
- Adequate shade and shelter is provided that maximises user comfort.
- Shade should be natural where possible, with species selection to consider the distance from the activity space and potential injury from falling limbs.

7 Design and Delivery

7.1 General

The design and delivery of a successful open and civic space project cannot be accomplished by simply meeting the requirements identified earlier in this document.

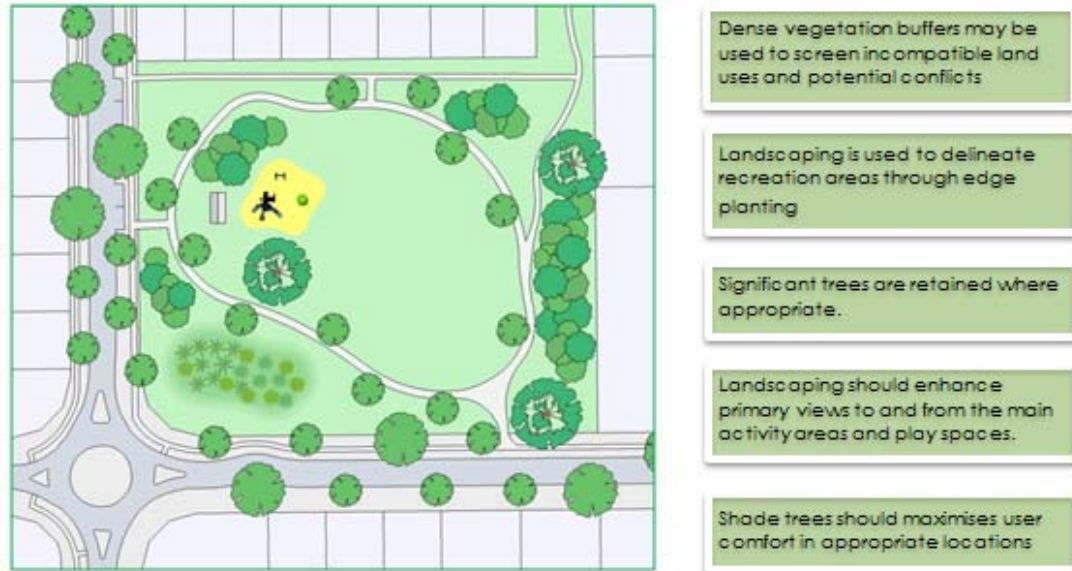


Figure 7.1 Sample Concept Design

Designs must also consider aspects relating to:

1. Unstructured play spaces and Playgrounds
2. Public Art
3. Lighting
4. Signage and Public Information
5. Furniture, Fixtures and Materials
6. Sporting Facilities
7. Landscaping and Earthworks
8. Stormwater and Water Sensitive Urban Design
9. Existing native vegetation and environmental features

Figure 7.1 identifies how these aspects can be incorporated into an open and civic space design.

The following section provides guidance on these issues.

7.1.1 Unstructured Play Spaces and Playgrounds

Playground design is to respond to the local landscape character, demographics, demands and identity, through the choice of infrastructure and colour schemes. It is also to consider the function and role the playground and parklands plays in the overall network. Playgrounds are to be safe, fun, interesting, accessible and clearly visible from the main areas of the open space.

- a) The following requirements apply to playground design and delivery:
 - i. Playgrounds and associated structures should be consolidated within a single node to allow for adequate adult supervision of children and to help reduce future maintenance costs. Larger parks may have several playground nodes as required.
 - ii. Playgrounds are to provide adequate seating adjoining the playground under shade for supervision of play. The playground is to also have 1 bin adjacent to the playground.
 - iii. Slides are installed facing south to reduce the effect of direct sunlight onto the slide surface unless otherwise shaded. Swings are to be installed facing north / south unless otherwise shaded.
 - iv. Playgrounds are to have adequate separation from areas of higher hazard such as carriageways, car park areas, bikeways and water bodies. Landform, planting or fences may be used to provide separation from areas of higher hazard.
 - v. Playground equipment is to comply with Workplace Health and Safety Standards, Australian Standards AS 4685 parts 1, 2, 3, 4, 5 and 6, ASNZS 4422, ASNZ 4486.1 and all other relevant statutory requirements, guidelines and standards;
 - vi. Playgrounds are to contain adequate subsurface and surface drainage to avoid water ponding / nuisance. A brass marker "D" should be fitted to each side of edging to indicate position of drainage pipes;
 - vii. If geofabric is installed, the matting must be secured with small cable ties or some other approved measures on all joins and around elements to ensure that the matting does not rise to the surface and create a trip hazard and ongoing maintenance issue;
 - viii. The assembly of all playground equipment using nuts and bolts are to have thread lock applied so that bolts do not work their way loose and cause maintenance issues and damage to equipment;
 - ix. Playgrounds are to have rubberised or synthetic soft fall under play equipment where displacement of soft fall mulches is likely to occur. Soft fall depth must comply with AS 4422. Consideration is to be given regarding fall zone softfall displacement under swings, fire poles and exit run-out for slides, Spica and rotating elements, carousels or spinning discs etc;
 - x. Playgrounds are to be surrounded with an edge treatment and have a minimum fall zone in compliance with AS 4685 & 4422 as a minimum or manufacturers recommendation if these exceed minimum requirements in Australian Standards.
 - xi. In cases where timber sleepers are used as footprint edging then a treatment of Synpave acrylic topcoat Terracotta non-slip/splinter containment paint is to be applied to manufacturer's instructions, with a minimum of 2 coats. Concrete edging shall be 200mm deep and 150mm wide with rolled edge;
 - xii. Where shade trees are in close proximity at mature size, the developer is to ensure that the trees are adequately protected in accordance with AS4970. The protection of trees on development sites must ensure that tree roots do not compromise the softfall or create trip hazards in the fall zone.
- b) The developer is to submit to Council certification that the playground equipment has been designed, constructed, and installed according to the manufacturer's specifications and is compliant with Australian Standards. Certification is to be provided by a certified playground audit or prior to "on maintenance".
- c) The developer is to hand over maintenance instructions, parts and service manuals and manufacturers' guarantees for the playground equipment or any other documents to Council prior to acceptance "on maintenance".
- d) The developer is to provide to Council any construction or maintenance tools supplied with the purchase of the playground equipment prior to acceptance of the works "off-maintenance".

7.1.2 Public Art

Public art is used to bring life and vitality into open and civic spaces and transform it into an attractive, unique and visually interesting place. Public art is to be designed, constructed and sited to enhance the visual amenity of the space, create a sense of place, facilitate way finding and add a social and cultural dimension to the landscape

- a) Design and delivery for public art should:
 - i. Achieve a scale that reflects the setting to enable all user groups to successfully appreciate the art.
 - ii. Provide for the safety of users, allowing for appropriate circulation space and setback from road edges
 - iii. Be functional such as providing interesting places for people to sit.
 - iv. Be constructed from materials that are resistant to vandalism.
 - v. Be low maintenance and made of durable materials. The selection of materials should consider the long term availability for future renewal and maintenance requirements.
 - vi. Be located along pedestrian/cycle thoroughfares, within identifiable community spaces and within areas where visibility is increased.

7.1.3 Lighting

Lighting systems are to influence the vitality and appearance of a place at night and enable legibility of space, lessen the risk of night time accidents, and discourage crime and vandalism.

- a) Design and delivery for lighting in open and civic spaces is to:
 - i. Be designed to minimise impact on existing and adjacent premises whilst maximising user safety and vitality of a place.
 - ii. Complement and enhance the elements within a space and be incorporated into the overall design, rather than an add-on. Creative lighting is only to be used in high profile public areas.
 - iii. To comply with relevant standards for lighting within pedestrian area AS/NZS 1158.3.1:2005 – Lighting for Roads and public spaces and AS 4282-1997 – Control of the obtrusive effects of outdoor lighting.
 - iv. Light fittings are to be appropriate for use in public spaces such as shatter proof and cool to touch glass, durable materials such as stainless steel and brass, suitability for in-ground or exterior locations and impact resistance.
 - v. Achieve a 20 year installation design life on all materials.
 - vi. To be located, where possible, to minimise the risk of damage, either on a pole out of harm's way, fixed into the ground or wall, fitted into a recess or placed on the underside of furniture.
 - vii. Whilst ensuring public safety is not compromised, measures to minimise or mitigate adverse impacts of artificial lighting on wildlife should be pursued in ecologically sensitive areas.
- b) Prior to commencement of construction, an Operational Works development approval is to be obtained for all electrical works.

7.1.4 Signage

A clear and well thought out signage system to enable users to orientate themselves within the open and civic space in relation to location of key landmarks, buildings and pathways that are accessible to the public.

- a) The planning and design of signage is to:
 - i. Establish a coordinated signage network to improve legibility and provide directional information between important destinations.
 - ii. Add value, where appropriate, to the signage network by including interpretive signs to education, inform and entertain users of the open space.
 - iii. Be practical, easy to maintain and maintain effective communication whilst minimising visual clutter within the public realm.

- iv. Utilise modern technologies, where appropriate, such as smart phones and touch screens to enhance the user's experience of the space and improve their ability to navigate through them.
- v. Signs and sign poles, stands or bases are constructed from high quality materials that require minimal ongoing maintenance. Where multiple signs are required in the same location, the signs are to be collocated on one structure where possible.

7.1.5 Furniture, Fixtures and Materials

Open and civic space furniture (including seats, bins, tables, drink fountains, bike racks etc.) is to be selected or designed so that it is accessible, comfortable, robust and simple to maintain.

- a) While contextual design is to be responsive to the particular qualities that are unique to that landscape, some specific design considerations will be common to all projects. These include:
 - i. Distinctiveness: materials and elements reflect the desired image or theme of an area. Distinct materials assist people to 'read' and navigate by reinforcing urban structures, common patterns, rhythms and themes of the site.
 - ii. Long term availability: ensuring the materials will be readily available over the long term.
 - iii. Equivalence: determining design criteria for acceptable substitutions if the preferred item is not available.
 - iv. Durability: assessing the durability of an item/material and how this bears on life cycle costs. It is to be made from materials that will last and can be suitably protected from exterior elements, such as salt spray and UV exposure. Furniture items are to come with a minimum 5 year warranty on materials and workmanship.
 - v. Maintenance: Infrastructure items are designed, constructed and located to minimise vandalism (including graffiti) and in areas that are easy to maintain.
 - vi. Safety and Public Liability: assessing fall heights, soft fall, trip hazards etc. Infrastructure items, such as shelters, are to have building approval and be certified by a RPEQ Certified Structural Engineer.
 - vii. Considerate of the environment: Infrastructure items are not located within the critical root zone or tree preservation area of habitat trees.

7.1.6 Sporting facilities

Sporting facilities are to be of a size and shape that offers flexibility and diversity for various sports and recreation activities. The design of sporting facilities is to accommodate future growth of sports and emergence of new and different sports to the area. Single use provisions are to be avoided.

- a) Where relevant, the level of provision is to be consistent with Councils Sports facility demand model and reflect current research into the minimum number of playing areas to provide for viable sporting clubs and competitions. A detailed master plan is to be developed for all sport, recreation and open space facilities that are proposed as part of community infrastructure.

Each plan must provide detail about:

- Linkages and connections
- Access/circulation and car parking
- Key components including playing fields
- Pavilions and other built infrastructure
- Amenities
- Furniture
- Shelters
- Lighting
- Fencing
- Irrigation
- Drainage
- Landscape features
- Bus parking & manoeuvring
- Storage

- b) Wherever possible, storage and maintenance facilities are to be provided within the building footprint of the main pavilion. While Council recognises the need for these facilities, it is inefficient and often unsightly for these facilities to be standalone structures.

7.1.7 Landscaping and Earthworks

Landscape design is to provide safe, attractive and functional open spaces for the residents and visitors to the region. Landscape design is also to have regard for integrity and character of the surrounding vegetation, water flows and erosion and re-establishment of native vegetation. Refer to Appendix D – Landscaping Design and Street Trees for additional information in relation to specific council requirements.

(1) Landscaping

Landscaping design in open and civic spaces should:

- a) Delineate recreational activities, activity nodes, private and public spaces and allow surveillance of the spaces.
- b) Retain existing native vegetation within setting and park function, to enhance ecological values.
- c) Provide shade in a manner that maximises user health at activity nodes (play equipment, seating areas etc.) and give regard for peak usage times, typically mid-morning, midday and after school.
- d) Have regard for and facilitate traffic management and pedestrian movement.
- e) Ensure landscaping in car park areas offer high quality amenity and are designed for long term sustainability and durability.
- f) Trees planted along pedestrian/cycle corridors will have regard for the growth requirements of the tree from infancy to maturity.
- g) Planting along park frontages is to be designed to include vehicle exclusion into mulched areas.
- h) Newly established groups of trees in grassed/turfed areas are placed in mulched garden planting beds to reduce post maintenance requirements should have a minimum distance of 2m between the edges of adjacent mulch rings or hard surfaces.

(2) Earth Works & Retaining Walls

Earth works and retaining walls in open and civic spaces should:

- a) Be designed to consider:
 - i. the natural topographical features of the site
 - ii. short and long-term slope stability
 - iii. soft or compressible foundation soils
 - iv. reactive soils
 - v. low density or potentially collapsing soils
 - vi. existing fill and soil contamination that may exist on-site
 - vii. the stability and maintenance of steep rock slopes and batters
 - viii. the visual impact of the excavation (cut) and fill and impacts on the amenity of adjoining lots
- b) Batter slopes from level ground through to ground sloped up to a 1 in 4 gradient can be turfed or have an approved landscape planting treatment. Transitions need to accommodate Council's mowing equipment to avoid scalping.
- c) Batter slopes between 1 in 4 and 1 in 3 gradient shall have an approved landscape planting treatment and must be designed to cater for safe access by maintenance staff.
- d) Batter slopes steeper than 1 in 3 gradient shall not be approved unless otherwise specifically confirmed in writing by Council. Any application for approval by Council must demonstrate that the batter treatment will be constructed with an agreed "no maintenance" landscape design as maintenance staff will not be able to maintain these slopes due to WH&S limitations.

- e) Grassed batters or embankments in Crown Land intended to be mown by wheeled equipment that fall below the level of a formed road are profiled to enable access to the bottom of the bank for ride on mowing equipment. The access strip at the toe of the mown bank is to be a minimum width of 3.0m with adequate turn around provision.
- f) Stabilisation of batters may be achieved through the use of hydro mulching, stabilisation netting, erosion protection or engineering approved retention e.g. benching, the use of retaining walls and terracing with planting.
- g) Batters that are to be planted or grassed are to be cultivated on horizontal grades to a minimum depth of 100mm with a high organic topsoil mix cultivated into the soil structure. Green couch is to be used as the dominant grass species. The batters may also be hydro mulched or planted if practical.
- h) The toe of any batters and associated drainage are to be contained within the boundaries of the site and are not extended onto neighbouring lands or into adjoining vegetation protection zones.
- i) All retaining walls over a metre high must be designed, specified, inspected and certified by a RPEQ Structural Engineer.
- j) Retaining wall surfaces prone to unsightly graffiti will be required to be coated with an anti-graffiti material or screened with appropriate planting.
- k) Retaining walls supporting private property at the boundary of public open space must be designed to accommodate pedestrian access at the toe or top of the wall for the purposes of maintenance and fire risk management. This access strip will be at least 600mm in width and have a maximum cross fall of 20%.

(3) Edging

Edging in open and civic spaces should be:

- a) Concrete or spaded edges may only be installed in linear/ linkage parks, bushland recreation reserves and sporting facilities. These edges must be constructed in accordance with the following:
 - i. The maximum mown gradient above the edge must not exceed 10% so that repeated mowing to the edge will not compromise the edge or the stability of the mower.
- b) Designed with smooth navigable lines and must be able to accommodate the operational characteristics of mowers and maintenance vehicles. Inward facing 90 degree of sharper corners are not permitted.
- c) At garden and turf interfaces, edging is to finish flush so that mowing obstacles and trip hazards are not created.
- d) Constructed from materials other than timber.

(4) Stabilisation methods

Stabilisation methods in open and civic spaces should:

- a) Turf
 - i. Only A grade turf is to be used unless otherwise approved by Council.
 - ii. Turf is to be laid with edges butted up and is to be rolled into topsoil after watering.
 - iii. Where turf is to be laid against a flush mount mowing edge, kerb or path, topsoil is to be levelled at 15mm below the hard edge.
 - iv. Narrow turf strips between back of curb and footpaths is to be avoided in high traffic flow areas.
- b) Hydro-mulching
 - i. Additives of local native tree, shrub and ground cover species are to be used in seed mixes on steep gradients to assist in preventing erosion.
 - ii. Areas proposed for hydro-mulching will be provided with adequate soil volumes for satisfactory post-germination establishment.
 - iii. A minimum germination rate of 70% of native mix with no weed incursion is required to be achieved before on-maintenance is granted.
- c) Grass seeding

- i. All seeded areas are to be prepared to achieve significant germination within the required timeframe. Grass seeding is to use a minimum rate of 1kg/ 100m² consisting of a mix of the following:
 - Jap Millet (Summer), Winter Rye (Winter) – 50%
 - Unhulled Couch – 20%
 - Hulled Couch – 30%
- d) Staking
 - i. All staking and ties are to be removed prior to the off-maintenance inspection. Any plant material unable to be self-supporting consistent with appropriate form and vigor is to be reduction pruned or removed and replaced. Plants displaying weakness or failure in root system are to be replaced.
- e) Top Soil
 - i. Use of site stripped topsoil is favoured where it can be removed from the top horizon and is free from litter, weed propagules, contaminants and rocks larger than 20mm in diameter and comply with AS4419. If the required quantity of site topsoil is unavailable, imported topsoil conforming to AS4419 is to be incorporated and blended with site topsoil to achieve a healthy and active growing medium. Imported topsoil is to be similar to naturally occurring local topsoil and suitable for the establishment and ongoing viability of the selected vegetation, free of weed propagules and contaminants.
- f) Hard Surfacing:
 - i. All hard surfacing is to comply with current Australian Standards for surface treatments.
 - ii. The selection and design of new hard surfacing considers the following:
 - *Loading* – the hard surfacing is capable of supporting the volume and weight of expected traffic.
 - *Durability* - long term sustainability requirements such as the rate of wear and tear and susceptibility to discolouration.
 - *Maintenance costs and long term maintenance requirements* - aesthetic appeal, function, safety aspects, laying cost, availability for replacement and long term maintenance requirements need to also be addressed.
 - *Design for resistance to heaving by tree roots* – additional reinforcing, deformable cushioning, rat walls, bridge beaming or flexible paving surfaces such as rubber epoxy compounds.
 - *Vegetation protection* – porous pavements are used when hard surfacing is required around mature trees. In high intensity urban areas, where trees are installed in hard surface areas, the use of porous pavement over gapgraded subgrades is mandatory.
 - *Ease of movement for users* –pedestrians, wheelchair users and people with mobility constraints require a surface that is comfortable and functional.

For further details regarding landscaping design, including planting details and species refer to Appendix D – Landscape Design and Street Trees.

7.1.8 Stormwater and Water Sensitive Urban Design

Stormwater management within open spaces is to implement water sensitive urban design best practice where appropriate. Water sensitive urban design in open spaces is to improve flood control, improve water quality, provide diversity, promote amenity and encourage social interaction.

- a) Stormwater management in open and civic spaces are to be designed to:
 - i. Fulfil a range of functions (aesthetic, environmental, recreational, microclimatic etc.).
 - ii. Not interfere with the functionality of the park and or be at the expense of recreational activities in terms of size, slope and surface.
 - iii. Open and civic space design maximise areas of turf, garden beds and pervious paving types.
 - iv. Rapidly recover from inundation, particularly for playing surfaces.

- v. Be designed to be attractive and allow for social interaction and interpretation when appropriate. It is to incorporate natural features and materials to create a natural appearance and where possible rehabilitate degraded areas.
- vi. Protect existing conservation features and values.
- vii. Be sufficiently safe in terms of the duration, depth and velocity of any inundation.
- viii. Prevent algal blooms, turbidity, pest animals (e.g. Ibis management) and promote natural biodiversity.
- ix. Consider the long term maintenance implications and costs. Plantings and lawn areas are designed to not require permanent irrigation.

For further information regarding WSUD see Appendix C - Stormwater management.

7.1.9 Natural Environmental Values

Environmentally sensitive landscapes adjoining residential areas provide important inter-urban breaks and have high social and ecological values. Consideration needs to be given to appropriate design and maintenance approaches that allow them to be integrated into the wider open space network. Natural areas need to have suitable maintenance access provided and be buffered from proposed infrastructure.

a) Specific design considerations include:

- i. Guided access such as fences, gates, signage and paths and boardwalks.
- ii. Practical means of protection for native wildlife.
- iii. Weed prevention and eradication.
- iv. Groundwater control and drainage design.

Legislative obligations for protection and environmental management need to be considered before site planning and design to achieve a balance between environmental and recreational values.

For further details regarding environmental values or conservation open spaces refer to Planning scheme policy – Environmental areas and corridors.

8 Design Toolbox

This section provides a list references to sources of further detailed design information for development within the Moreton Bay region relating to the design of open spaces.

8.1 Policies, Standards and Guidelines

- Recreational Trail Construction Guidelines
- Dog Off Leash Area Planning and Design Guidelines
- Moreton Bay Regional Council's Standard Drawings – Appendix H.

8.2 Best Practice Design Guidelines and Standards

- WSUD Multiple Uses of Open Spaces Discussion Paper 2010 (WBD)
- Crime Prevention through Environmental Design – Guideline for Queensland 2007(QLD Gov.)
- Open Space for Recreation and Sport – Planning Principles “A guide for Local Government”, Sport and Recreation Queensland 1998.
- Open Space for Recreation and Sport – Implementation Notes for the Planning Principles for Local Government Draft Report Nov 2002.
- SEQROC Issues Paper – Planning for Recreation and Sport in 2021.
- Healthy by Design – A Planners Guide to Environments for Active Living – 2004 (National Heart Foundation)
- Supportive Environments for Physical Activity (National Heart Foundation)
- Sport Dimensions for Playing Areas – 2008 (WA Gov.)

9 Glossary

Active recreation: Opportunities for physical activity such as informal sports, jogging and playground activity.

Constrained land: Includes land which restricts the ability of the park to fulfil its role within the open space network. This includes land which is compromised by any of the following constraints:

- The land is located below the flood level resulting from runoff from a 2% AEP event (1 in 50 year ARI event); or
- the land is not developable under environmentally related restrictions such as the Vegetation Management Act 1999 and Vegetation Management Regulation 2012, or relating to coastal protection or koala conservation; or
- the land contains stormwater management infrastructure unless specifically agreed upon by Council; or
- the land is located within a registered easement for the provision of power transmission links or other purposes that the local government determines similarly constrains the use of the land; or
- the land is required for attenuation of noise pursuant to applicable legislative provisions, guidelines and to satisfy a condition of development approval given over the land; or
- the land exhibits a slope greater than 25%; or the land is otherwise constrained as determined by the local government.

CPTED: Crime Prevention Through Environmental Design, through elements such as casual surveillance, design, lighting and way finding.

Fitness node: A location with outdoor fitness equipment with suitable soft fall. Equipment may be designed as part of a suite of workout combinations in a consolidated location or along a linear route.

Gateway statement: The primary pedestrian entrance point, designed to improve legibility, increase way finding opportunities and define the park. The space may have hardened surfaces, free seating, landscaping and public art.

Kick-a-bout space: A flat turfed oval or rectangular area which would facilitate informal ball games.

Multi-use activity space: A space for sports, games and gathering, typically a full or half court sized pitch with multi-goal.

Passive recreation: Opportunities for relaxing, sitting, socialising and nature appreciation in a natural setting.

Performance/community/festival/event space: A location which provides an opportunity to stage various events. They include paved areas, seating, stages and other infrastructure to facilitate expected uses. It should be designed in response to setting and context.

Picnic area: A location which provides at a minimum a shelter, picnic setting, and seating. In higher order parks, BBQs are only to be provided in accordance with Table 2.2

Play area (large): A 50m x 50m flat area which contains a variety of play equipment. The area is to have a suitable soft fall and provide a variety of play experiences suited to a range of ages and abilities.

Play area (small): A 20m x 20m area which contains play equipment with suitable soft fall. This area is to contain a set of play equipment which is tailored to meet a range of ages and abilities.

Social gathering spaces: A space which include opportunities for social interaction. This may include shaded locations for people to sit and socialise.

WSUD: Water sensitive urban design, requiring integration of the urban water cycle into urban design to minimise environmental degradation and improve aesthetic and recreational appeal.

Youth activity space: A location that may include hangout nodes (small socialising spaces), activity trails, art elements, skateable elements and other appropriate spaces for youth orientated activities.

Park Type	Description	Level of Embellishment (The provided embellishment standards are to be used as a guide only)	
Local Recreation	Local recreation type open spaces provide informal passive and active recreation opportunities for a residential neighbourhood. People can expect to walk safely and easily to access a local recreation open space. They offer informal recreational experiences such as ball games, picnicking and meeting friends. Local recreation type open spaces provide an important focal point for social interaction and should enhance the landscape amenity and biodiversity values of the local area. These open spaces are developed to a basic standard and generally contain a basic range of park facilities.	<ul style="list-style-type: none"> • Small play equipment (1x) • Softfall (400 m2) • Playground edging (80 LM) • Multi-use space (1x) • Small Shelter (2x) • Picnic setting (2x) • Pathway connections 2m wide (250 LM) • Seating (2x) • Tap/bubbler inc meter (1x) +take off point • Bin (2x) including installation • Park name sign (1x) • Landscaping (400 m2) • Shade trees (20x) 45L Pot 	<ul style="list-style-type: none"> • Park name sign (1x) • Landscaping (400m2) • Shade trees (20x) 45L Pot • Large Shade trees (20x) 100L Pot • Bollards at 1.5m around the perimeter • Slip rail (1x) • Topsoiling and turf (5000 m2) • Earthworks/drainage including suitable kick-a-bout area
District Recreation	District recreation type open spaces support the social, cultural, leisure and recreational needs of district catchment or a number of residential neighbourhoods. These parks provide a diverse range of facilities and spaces in a variety of settings to cater for large numbers of people. District parks provide opportunities for all age groups and are easily accessed by active, public and private transport options. Parks are developed to a high standard.	<ul style="list-style-type: none"> • Large play equipment (1x) • Softfall (500m2) • Playground edging (280 LM) • Multi-use space (1x) • Shelter – small (5x) • Shelter – large (3x) • Electric BBQ including installation (3x) • Picnic setting (8x) • Public toilet (1x) • Bikeway/pathway connections 2m wide (650 LM) • Dog off-leash area (1x) • Seating (15x) • Bike rack (2x) • Tap/bubbler inc meter + take off point (3x) 	<ul style="list-style-type: none"> • Bin – including installation(6x) • Park signage (2x) • Park entrance statement (1x) • Landscaping (1000 m2) • Shade trees – 100L (200x) • Bollards at 1.5m around the perimeter • Slip rail (2x) • Topsoiling and turf (10,000m2) • Car park spaces (40x) • Access road (1x) • Electrical works inc park lighting (1x) • Earthworks/drainage including suitable kick-a-bout area
Regional Recreation	Regional recreation type open spaces support the social, cultural, leisure and recreational needs of a regional catchment. Regional recreation parks are the highest standard of recreation park and are intended to be designed as destinations which highlight the region's unique cultural, environmental or landscape values. These open spaces should provide a diverse range of facilities and spaces in a variety of settings to cater for very large numbers of people. Open spaces should also be able to facilitate large community events and provide opportunities for all age groups and levels of ability. Regional recreation type open spaces service the entire region and as such have the highest level of transport accessibility including active, public	<ul style="list-style-type: none"> • Large play equipment (1x) • Softfall (800m2) • Playground edging (480 LM) • Multi-use space (2x) • Shelter – small (5x) • Shelter – large (8x) • Electric BBQ including installation (6x) • Picnic setting (24x) • Public toilet (2x) 	<ul style="list-style-type: none"> • Bin – including installation(10x) • Park signage (2x) • Park entrance statement (1x) • Event spaces/structure inc earthworks (1x) • Landscaping (25,000 m2) • Shade trees – 100L (500x) • Bollards at 1.5m around the perimeter • Slip rail (4x) • Topsoiling and turf (60,000m2) • Car park spaces (150x)

	and private transport options. This includes providing spaces for buses, vehicle parking and cycling transport.	<ul style="list-style-type: none"> • Bikeway/pathway connections 2m wide (1000 LM) • Dog off-leash area (1x) • Seating (20x) • Bike rack (3x) • Tap/bubbler inc meter + take off point (6x) • Access road (1x) • Electrical works inc park lighting (1x) • Earthworks/drainage including suitable kick-about area
Local Foreshore	<p>Local Foreshore recreation parks are located in coastal areas and provide direct access to the bay and the open ocean for local communities. They are linear in nature and vary significantly throughout the region and include a range of park infrastructure items. In some coastal communities they provide the main recreation opportunities for the local area.</p> <p>These open spaces are developed to a basic standard and generally contain a limited range of park facilities</p>	There are no embellishment standards specified for foreshore parks but rather should be designed to meet the needs of the community it serves. The embellishment list for Local recreation parks may be used as a guide.
District Foreshore	<p>District Foreshore Recreation open spaces provide informal passive and active recreation opportunities for all residents within the district catchment. They offer informal recreational experiences such as informal ball games, picnicking, BBQ, swimming, play, quiet reflection and meeting friends. These parks provide a diverse range of facilities and spaces in a variety of settings to cater for large numbers of people during varying times of the year. District Foreshore parks need to be able to adapt to peak seasonal use such as summer holidays. They provide an important focal point for social interaction and should enhance the landscape amenity and values of the area.</p> <p>Parks are developed to a high standard, connections to a cycle/path systems</p>	There are no embellishment standards specified for foreshore parks but rather should be designed to meet the needs of the community it serves. The embellishment list for district recreation parks may be used as a guide.
Regional Foreshore	<p>Regional Foreshore Recreation open spaces provide social, cultural, leisure and recreational needs of all residents within the region. They are often an attractive tourist destination for people outside of the region and have to cater for high demands throughout the year. They offer informal recreational experiences such as informal ball games, picnicking, BBQ, swimming, play, quiet reflection, interpretive art, festivals and meeting friends. These parks provide a diverse range of facilities and spaces in a variety of settings to cater for large numbers of people during varying times of the year. They provide a crucial focal point for social interaction. Regional recreation type open spaces service the entire region and as such have the highest level of transport accessibility including active, public and private transport options. This includes providing spaces for buses, vehicle parking and cycling transport.</p>	There are no embellishment standards specified for foreshore parks but rather should be designed to meet the needs of the community it serves. The embellishment list for regional recreation parks may be used as a guide.

	The park should be developed to a high standard.	
Bushland Recreation	<p>Bushland recreation type open spaces preserve important bushland landscapes and provide unique nature based recreation opportunities for the community. They serve a dual purpose in providing informal recreation opportunities and experiences while safeguarding some of the region's natural assets. They may form part of the greater green infrastructure network by providing refuge for native animals, fauna and flora but can also provide recreational opportunities that are at a scale and intensity that contribute to the natural setting. This may include:</p> <ul style="list-style-type: none"> • seating • shelters • BBQ's and picnic areas • connections to a cycle/path systems • providing opportunities for recreational trail users 	There are no embellishment standards specified for bushland recreation parks but rather should provide facilities and activities that are considerate of the sites natural setting.
District Sport	<p>District sport facilities provide enough space for a variety of playing areas such as courts, playing fields and surfaces. The facility serves several neighbourhoods or a small number of suburbs and is accessible to people by several transport modes. Vary between 10 - 30 Ha in size and cater for moderate volumes of demand and vehicle traffic.</p> <p>Typical infrastructure includes irrigated sports surfaces, hard courts, cycle tracks and jumps, indoor sports centres, athletics tracks and stations, fitness stations and walking tracks.</p> <p>They are also to include necessary ancillary infrastructure such as competition and training lighting, clubhouses, public toilets, change rooms, storage rooms/areas, shade, spectator seating, drink fountains, litter bins, internal road network and parking facilities, signage, play equipment, informal kick-about areas and water harvesting for on-site re-use.</p>	Level of provision should reflect current research into the minimum number of playing areas to provide for viable sporting clubs and competitions. A detailed master plan should be developed and approved by Council for all sport, recreation and open space facilities that are proposed as part of community infrastructure.
Regional Sport	<p>Regional sport facilities provide the highest standard of spaces and facilities for playing and practising formal, organised and competitive sporting activities. These are very large parks which can cater for high numbers of visitation and are used by both residents and visitors to the region. Are generally 30+ Ha in size and cater for large volumes of demand and vehicle traffic.</p> <p>Typical infrastructure includes irrigated sports surfaces, hard courts, cycle tracks and jumps, indoor sports centres, athletics tracks and stations, fitness stations and walking tracks.</p>	Level of provision should reflect current research into the minimum number of playing areas to provide for viable sporting clubs and competitions. A detailed master plan should be developed and approved by Council for all sport, recreation and open space facilities that are proposed as part of community infrastructure.

	They are also to include necessary ancillary infrastructure such as competition and training lighting, clubhouses, public toilets, change rooms, storage rooms/areas, shade, spectator seating, drink fountains, litter bins, internal road network and parking facilities, signage, play equipment, informal kick-about areas and water harvesting for on-site re-use.	
District Civic	District civic type spaces cater for the passive recreational needs of district commercial centres.	<ul style="list-style-type: none"> • Picnic tables (2x) • Public toilet (1x) • Hard pavement (400 m2) • Seating (including installation) (10x) • Feature infrastructure (1x) • Tap/bubbler inc meter (+ take off point) (1x) • Bin (including installation) (2x) • Park signage • Landscaping (100m2) • Feature trees • Topsoiling and turf (100m2) • Park lighting • Bollards at 1.5m around the perimeter • Earthworks/drainage
Regional Civic	Regional civic type spaces are located in major centres and cater for large gatherings such as markets and performances.	<ul style="list-style-type: none"> • Playground (high quality interactive) • Softfall (400m2) • Picnic tables (2x) • Public toilet (1x) • Hard pavement (400 m2) • Seating (including installation) (10x) • Feature infrastructure (1x) • Park lighting • Bollards at 1.5m around the perimeter • Earthworks/drainage • Tap/bubbler inc meter (+ take off point) (1x) • Bin (including installation) (2x) • Park signage • Landscaping (100m2) • Feature trees • Topsoiling and turf (100m2)
Urban Linear Linkage	Urban Linear Linkage type open spaces provide a vegetated pedestrian link in an urban context which promotes connectivity to the broader open space network and destinations with connections to the on and off road pathway system. The size and shape may vary but is to adequately facilitate pedestrian and cycling movement in a pleasant environment that provides visual relief from urban development.	<ul style="list-style-type: none"> • Bikeway/pathway connections 2m wide (200 LM) • Seating - including installation(4x) • Picnic setting (1x) • Tap/bubbler inc meter + take off point (1x) • Bin (including installation)(3x) • Park signage (2x) • Landscaping (900 m2) • Shade trees - 45L(40x) • Bollards at 1.5m centres • Slip rail (2x)
Natural Linear Linkage	Natural Linear Linkage type open spaces are typically designed to facilitate the movement of people to key destinations in a natural environment. These parks complement the natural landscape and are typically located along waterways, high ridgelines and conservation corridors. They provide informal recreation opportunities such as cycling, walking, group exercise and a place for relaxation and quiet contemplation.	<ul style="list-style-type: none"> • Bikeway/pathway connections 2m wide (200 LM) • Seating - including installation(4x) • Picnic setting (1x) • Tap/bubbler inc meter + take off point (1x) • Bin (including installation)(3x) • Park signage (2x) • Landscaping (900 m2) • Shade trees - 45L(40x) • Bollards at 1.5m centres • Slip rail (2x)