ACT Government

RECREATION FACILITIES

MUNICIPAL INFRASTRUCTURE STANDARDS 21

Transport Canberra and City Services

APRIL 2019

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1 RECREATION FACILITIES

1.1 General

Recreational facilities: Elements and spaces within the open spaces network ranging from high order District parks to lower level micro parks.

This document covers design of recreational facilities of play spaces, skate parks, fitness parks, fitness trails, and dog parks.

1.1.1 Responsibilities

1.1.1.1 Objectives

Requirement: Design and document recreational facilities managed by TCCS that provides the following:

- Improve quality of life and liveability by enhancing learning and facilitating social interaction.
- Promote active living and healthy lifestyles.
- An appropriate level of coverage of recreational facilities to surrounding residents/population.
- Robust recreational spaces that minimise whole of life costs.
- Opportunity for play spaces to engage with water sensitive urban design.
- Consideration for climate change adaptation to improve the resilience and amenity of the built environment.
- Appropriate responses to natural and built environment, heritage and cultural context of the area.
- Consideration to safety in design, operation and demolition.
- Consider *Crime Prevention Through Environmental Design (CPTED).*
- Signage to *MIS 22 Signage* for urban parks and open space.
- Consideration for maintenance.
- Consideration of heritage and culture.

1.1.1.2 Scope of design

All factors that influence the design shall be considered including:

- Environmental conditions and requirements
- Site conditions and functional requirements
- Requirements of affected authorities
- Design approvals
- Surrounding land use and dwelling density
- Community expectations (see **General Design Considerations**)

1.1.1.3 Designer's qualifications

Requirement: The design of all recreational facilities shall be by a Registered Landscape Architect (AILA).The proponent shall submit evidence of designer's AILA Registration to TCCS.

Play spaces shall be certified by an independent certified playground safety inspector, who can demonstrate level 3 certification to *AS4486*. Certification is to be undertaken at Design Acceptance and Operational Acceptance.

Design of paths, drainage, and other relevant structures shall be undertaken by engineers who can demonstrate their current registration on the *National Professional Engineers Register.*

Evidence of designer's qualifications and experience: Submit to TAMS as part of Design Acceptance submission.

Evidence of playground safety inspector's qualifications and experience: Submit to TAMS as part of Design Acceptance submission. Submit to TAMS as part of Operational Acceptance submission.

1.1.1.4 Precedence

Where any document issued, except legislation or the Territory Plan, referenced in this Municipal Infrastructure Standard (MIS) includes technical requirements that conflict with this MIS, consult with the service authority and TCCS for clarification.

1.1.2 Cross references

1.1.2.1 Commonwealth Legislation

The following Commonwealth Legislation is relevant to this Standard:

Aboriginal and Torres Strait Islander Heritage Protection Act

Australian Capital Territory Planning and Land Management Act

Disability Discrimination Act

Environment Protection and Biodiversity Conservation Act

Work Health and Safety Act

1.1.2.2 ACT Legislation

The following ACT Legislation is relevant to this Standard:

Discrimination Act

Emergencies Act

Environment Protection Act

Heritage Act

Legislation Act

Lakes Act

National Capital Plan

Nature Conservation Act

Planning and Development Act

Planning and Development Regulation

Pest Plants and Animals Act

Public Unleased Land Act

Territory Plan and related Codes

Tree Protection Act

Utility Networks (Public Safety) Regulation

Water and Sewerage Act

Water Resources Act

Work Health and Safety Act

1.1.2.3 Act Government Strategic Documents

The following strategic documents prepared by various Directorates of the ACT Government are relevant to this Standard:

ACT Climate Change Adaptation Strategy

The ACT Planning Strategy – Planning for a sustainable city

Active 2020: A Strategic Plan for Sport and Active Recreation in the ACT & Region 2011-2020

Canberra Plan; Towards Our Second Century

The City Plan 2014

Towards Zero Growth – Healthy Weight Action Plan

1.1.2.4 International Convention

The following International Convention is relevant to this Standard:

UN Convention of the Rights of the Child, Articles 12, 23 and 31

UN Convention on the Rights of Persons with Disabilities.

1.1.2.5 Design Standards

This Design Standard references the following component Standards:

MIS 05	Active travel facilities design
MIS 10	Fences, guardrails and barriers
MIS 14	Public Lighting
MIS 16	Urban open space
MIS 18	Irrigation
MIS 20	Street and park furniture
MIS 22	Signage for urban parks and open space
MIS 24	Soft landscape design

1.1.3 Referenced documents

The following documents are incorporated into this Design Standard by reference:

1.1.3.1 Standards

AS 1428	Design for Access and Mobility
AS 1428.1	Part 1: General requirements for access – New building work
AS 1428.2	Part 2: Enhanced and additional requirements - Buildings and facilities
AS 1428.3	Part 3: Requirements for children and adolescents with physical disabilities
AS 1428.4	Part 4: Means to assist the orientation of people with vision impairment: Tactile ground surface indicators
AS 1428.5	Part 5: Communication for people who are deaf or hearing impaired
AS 1547	On-site domestic wastewater management
AS 1657	Fixed Platforms, Walkways, Stairways and Ladders - design, construction and installation
AS 1926.1	Swimming Pool Safety – Part1: Safety barriers for swimming pools

AS 2316.1 Artificial Climbing Structures and Challenge Courses – Part 1: Fixed and mobile artificial climbing and abseiling walls

AS NZS 3000 Electrical Installations

AS 3533.4.2 Amusement Rides and Devices – Part 4.2 Specific Requirements - Contained Play Facilities

AS 3600 Concrete Structures

AS 3661.2 Slip Resistance of Pedestrian Surfaces - Part 2: Guide to the reduction of slip hazards

AS 4174 Synthetic Shadecloth and Amendment 1:1996

AS NZS 4360 Risk Management

AS 4373 Pruning of Amenity Trees

AS NZS 4422 Playground Surfacing – specifications, requirements and test method

AS 4486.1 Playgrounds and Equipment – Part 1: Development, installation, inspection, maintenance and operation

AS 4586 Slip Resistance Classification of New Pedestrian Surface Materials

AS 4685 Playground equipment and Surfacing – Development, installation, inspection, maintenance and operation

AS 4685 Playground Equipment and Surfacing – Parts 1, 2, 3, 4, 5, 6 and 11

AS 4989 Trampolines – safety aspects

AS 4970 Protection of Trees on Development Sites

1.1.3.2 Other Publications

Healthy Spaces & Places http://www.healthyplaces.org.au

ACT Crime Prevention and Urban Design Resource Manual, Planning and Land Management, ACT Department of Urban Services, Canberra

ACT Crime Prevention Through Environmental Design General Code(CPTED)

Residential Zones Development Code, ACT Government

Royal Lifesaving Society of Australia Guidelines

The Good Play Space Guide 'I Can Play Too' Play Australia in collaboration with Victorian Government

Play Australia Resources

ACTmapi (for the location of Registered Trees and significant plants and animals)

Guidelines to shade – A practical guide for shade development in New South Wales. Cancer Council NSW

Proprietary products: To *TCCS Products previously considered for use list*

1.1.4 Interpretations

1.1.4.1 Abbreviations

General: For the purposes of this standard the following abbreviations apply:

AILA: Australian Institute of Landscape Architects

CPTED: Crime Prevention Through Environmental Design

CRP: Community Recreation Parkland

DDA: Disability Discrimination Act

TCCS: Transport Canberra and City Services Directorate, ACT Government and its successors

1.1.4.2 Definitions

General: For the purposes of this Design Standard the definition given below applies:

Accessible Play: Playgrounds or play elements that provide DDA compliant access to part or all of the space/element.

Active living: A way of life that integrates physical activity into daily routines.

Active Recreation: Recreation activities that involve physical input or interactions. Examples include running, ball games, climbing and riding.

Active Travel Route Alignments (ATRA): The spatial alignments of the five ATN route types as detailed in this Design Standard. Routes include both planned future routes where the alignment remains unfixed and existing routes where the alignment is defined.

Active Travel Infrastructure Practitioner Tool (ATIPT): A web-based user interface that provides access to spatial mapping of the route alignments for walking, cycling and equestrian routes (ATRA) as well as access to planning and design policies, guides and other information relevant to the planning and design of active travel infrastructure in the ACT. The tool is available for use by all stakeholders including government agencies, developers and consultants.

Biodiversity: The variety of life on earth, comprising countless species living in different but inter-dependent ecosystems. Variability among living organisms in terrestrial, marine and other aquatic environments (and the ecological systems of which they are part) includes:

- Diversity within species and between species; and
- Diversity of ecosystems.

Climate change: The Intergovernmental Panel on Climate Change defines climate change as “a change in the state of the climate that can be identified (e.g. using statistical tests) by changes in the mean and/or the variability of its properties and that persists for an extended period, typically decades or longer. It refers to any change in climate over time, whether due to natural variability or as a result of human activity.”

Climate Change Adaptation: Actions by individuals or systems to avoid, withstand or benefit from current and projected climate changes and their impacts. Adaptation reduces a system’s vulnerability or increases its resilience to the effects of climate change. Various types of adaptation can be distinguished, including anticipatory (proactive), autonomous (spontaneous) and planned (deliberate) adaptation (IPCC).

Crime Prevention Through Environmental Design (CPTED): An analytical tool used to redesign and modify the built environment to reduce opportunities for crime. CPTED focuses on the effective design and use of the built environment to reduce the incidence and fear of crime and improve quality of life.

Inclusive Play: Playgrounds or play elements that provide equal play between differently able persons.

Natural Play Spaces: Play spaces which engage with natural, non-manufactured items such as logs, boulders, plant materials, paths and surfaces, changes of level and other landscape elements.

Passive Recreation: Recreation activities that are not about physical movement or activity. Examples of passive recreation include nature gazing, reading, having a picnic and talking.

Passive surveillance: Also referred to as natural, informal or casual surveillance. Surveillance undertaken by a person which is incidental to the primary purpose of their presence. Passive surveillance occurs as people go about their daily lives. Environments that foster greater human activity or are designed to allow passive surveillance can improve the actual and perceived safety of an area.

Path: A paved off-road facility of varying width and surfacing for shared use by pedestrians and cyclists. All paths, including paths adjacent to streets, are shared by pedestrians and cyclists in the ACT, differing from NSW and Victoria where cyclists over 12 years of age are not permitted to ride on paths unless appropriately designated.

Playground or Play Space: An area designed for children's play, including the site, natural features, built landscape, and any manufactured equipment and surfacing.

Street and park furniture: A term used to describe all of the peripheral objects that help create functional and appealing outdoor spaces for public use.

Trail: An off-road facility for walking and/or cycling or horse riding with a surfacing to suit the general recreational purpose and its intended user group(s). May be coincident with, and share the same facilities as, a Community Route.

Urban Open Space: Unleased territory land within the urban area set aside for public use.

Water Sensitive Urban Design (WSUD): An approach to urban planning and design that aims to integrate the management of the urban water cycle into the urban development process. Categories of users

Wayfinding: The National Heart Foundation Australia refers to wayfinding as the manner in which people orientate themselves in their physical environment and navigate from one place to another. It incorporates the processes of knowing where you are, where you are going, the best way to get there, recognising when you have arrived at your destination and knowing how to leave the area. It can also include indications of where people should not go.

1.2 User categories

1.2.1 Age groups

General: Recreation facilities are used by all age groups and people of differing levels of physical and mental development. It is aknowledged that abilities and skills are not neccissarily age dependent, however, age categories provide a general guide to designers on the expectation for recreational opportunities and activities for various recreationalspaces and facilities. Recreational user groups are broken into the following age categories:

- Toddler 1-4 years old;
- Junior 5-9 years old;
- Pre-teen 10-13 years old;
- Teenagers 14-17 years old; and
- Adults 18+ years old.

1.2.1.1 Toddlers

General: Toddlers are in a stage of development where they are first learning to crawl, walk and interact with their environment and other people. Play focuses on development of fine motor skills, balance, creativity, and social role play/interaction.

Toddlers play spaces should be supervised by carers at all times. The degree of supervision should allow children to explore the environment assisted or independently but carers should always be visible to the toddlers.

1.2.1.2 Junior

General: For the junior age group play focuses on gross motor skills, balance, creativity and social role play. Juniors are moving beyond early development and begin to test their limits. Environments which challenge their coordination and abilities assist in health development. Play spaces should offer levels of challenge. Juniors typically engage in more complex social activities and play spaces should facilitate group activities and cooperative play. This age group is also more active and engages in activities such as running and ball games which require more space.

Juniors are still typically supervised by carers, the level of supervision should allow for some feeling of independence by the child.

1.2.1.3 Pre-teen

General: Pre-teens are typically more mobile and independent. Play focuses on more complex social interactions (ball games etc), and activities that have higher levels of physical and intellectual challenge.

This age group typically has little to no direct supervision by carers, but carers may be nearby or within calling distance.

1.2.1.4 Teenagers

General: Teenagers have typically developed basic fine and gross motor skills and are confident with movement and creativity. Play focuses on increasingly complex social interaction and more challenging physical and intellectual activities.

This age group typically has no direct supervision by carers; carers may not be present in the play space.

For physical recreation and exercise, exercise equipment, open space, sports and associated infrastructure are important in promoting active living.

1.2.1.5 Adults/carers

General: Adults engage recreational facilities at a number of levels.

In play with children assisting their development, in a supervisory capacity and amongst other adults. Play spaces should assist adults and carers to provide appropriate levels of supervision and interaction with the various age groups as described above.

For physical recreation and exercise, exercise equipment, open space, sports and associated infrastructure are important in promoting active living.

1.3 Types of recreational facilities

1.3.1 Play spaces

The three categories of play spaces are designated to provide varying levels of play facilities, as outlined in **Planning concepts**, however the level of facility provided should respond to surrounding dwelling density and typology. A neighbourhood park located adjacent multi unit dwelling blocks or a large number of compact blocks should provide a higher level of public amenity than a neighbourhood park in a low density residential setting.

Play spaces are predominantly active recreation spaces that should also provide opportunity for passive recreation for carers and children such as seating and tables.

1.3.1.1 Local Neighbourhood Play Spaces

These play spaces are located in open space classified either as Pedestrian Parkland or Neighbourhood Park. They provide the most easily accessible open space and play opportunities in residential areas. Not every local park needs to have a formal play space, but each need to offer outdoor play opportunities.

Refer to **Siting, layout and design, Landform, Supervision and passive surveillance** and **Local Neighbourhood Play Spaces**

1.3.1.2 Central Community Play Spaces

These play spaces shall be reasonably prominent in the community, they are typically larger and more complex than local neighbourhood play spaces and should only be located in open space classified as Central Community or CRP.

Refer to **Siting, layout and design, Landform, Supervision and passive surveillance** and **Central Community Play Spaces**

1.3.1.3 District Play Spaces

These are typically large parks and play facilities located at a site with landscape, cultural or environmental qualities or attractions, such as lakeside or beach, attracting visitors from further than just the immediate neighborhood or community. Facilities associated with a District Park include barbecues, picnic tables, toilets and fitness equipment.

Refer to **Siting, layout and design, Landform, Supervision and passive surveillance** and **District Play Spaces**

1.3.2 Other recreational spaces

1.3.2.1 Natural Play Spaces

Natural play spaces can be located in any level of play space. Natural play spaces provide opportunities for creative play, using elements from the landscape such as sand, trees and rocks to encourage children to climb, jump, explore and have fun.

Refer to **Siting, layout and design, Landform, Supervision and passive surveillance, Local Neighbourhood Play Spaces, Central Community Play Spaces** and **District Play Spaces**

1.3.2.2 Skate Parks

Skate parks may be located in District Parks, Central Community Parks and CRP sites. Each site for a skate park will be considered, on an individual basis, based on its merits and how it will meet community expectations.

Refer to **Skate park setback requirements** and **Skate Parks**

Small spaces or collections of wheeled play and skate elements may be located in association with Local Neighbourhood, Central Community or District Play Spaces.

Refer to **Siting, layout and design, Landform, Supervision and passive surveillance, Local Neighbourhood Play Spaces, Central Community Play Spaces** and **District Play Spaces**

1.3.2.3 Learn to Ride Centres

Learn to Ride Centres may be located in District Parks, Town Parks, and CRP. Each site for a Learn to Ride Centre will be considered, on an individual basis, based on its merits and how it will meet community expectations.

Refer to **Learn to Ride Centres**

1.3.2.4 Bike tracks

Bike tracks may be located in any level of open space. Each site for a bike track will be considered, on an individual basis, based on its merits and how it will meet community expectations.

Refer to **Bike tracks**

1.3.2.5 Fitness Stations

Fitness stations are spaces with multiple pieces of fitness equipment. Large fitness stations may be located in District Parks, Central Community Parks and CRP sites.

Refer to **Fitness equipment, Local Neighbourhood Play Spaces, Central Community Play Spaces** and **District Play Spaces**

1.3.2.6 Fitness Trails

Fitness trails are a series of small stations as part of a fitness trail, such as through a suburban open space network or around a landscape feature (e.g. a lake) in a town or district park. Fitness trails may be located in any level of open space.

Refer to **Fitness equipment**

1.3.2.7 Dog Parks

Dog parks are fenced areas for dogs and their carers to exercise and socialise. Dog parks have large catchments and shall be appropriately located to provide adequate separations from other uses in regards to adverse traffic and noise generation. Each site for a dog park will be considered, on an individual basis, based on its merits and how it will meet community expectations.

Refer to **Dog park setback requirements**, **Dog Parks** and **Unenclosed Dog Trails**

1.3.2.8 Stages and Amphitheatres

Stages and amphitheatres provide community facilities for events and performances. Stages and amphitheatres within large catchments are typically located in district parks or town parks. Each site for a stage or amphitheatre will be considered, on an individual basis, based on its merits and how it will meet community expectations.

Refer to **Stages and Amphitheatres**

1.3.2.9 Micro Parks

A micro park is a small, human-scale, intimate place of high amenity. A micro park is designed to create usable public space in locations that have been identified as underutilised, under realised and/ or limited in the activities that are supported by the existing infrastructure.

Micro parks are unique spaces that will vary in use and level of facilities, the designer shall consult with TCCS on what facilities and amenities they wish to provide in a micro park. The inclusions will be assessed on a case by case basis. Facilities should be robust and require minimal maintenance.

1.4 General design considerations

1.4.1 Consultation

Responsibility: Consult with the TCCS and other relevant authorities during the preparation of design. In addition to the requirements of this Design Standard, identify the specific design requirements of these authorities.

1.4.2 Public consultation

Non-statutory Consultation: Undertake public consultation on designs if such action is required by the project brief.

1.4.3 Existing site condition

Requirement: Obtain plans from all relevant utilities and other organizations whose services, trees, important ecological habitats or other assets exist within the area of the proposed development. Plot this information on the relevant drawings including the plan and cross-sectional views. As a minimum, designs should refer to 'Dial-before-you-dig' information that is readily available in most areas.

Responsibility: Confirm service plans accuracy with onsite inspection and also potholing/tracing if deemed necessary.

Requirement: An accurate survey shall be obtained when planning for the development / upgrade of play spaces (contour and feature plan) including full site investigation for underground and overhead services.

Where there are existing services or proposed infrastructure such as underground services, irrigation systems, major paths or other established outdoor activity areas, play spaces shall:

- Not be sited within reservations for overhead powerlines;
- Avoid services; and
- Minimise the degree to which services will require modification.

1.4.4 Safety in design

Requirement: Implement safety in design processes in accordance with the *Work Health and Safety Act.*

1.5 Planning concepts

1.5.1 Siting, layout and design

General: The siting of recreational facilities shall make use of natural and landscape features to provide:

- Shade;
- Shelter from wind; and
- Create visual harmony with the surrounding area.

Consider: The siting shall consider opportunities and constraints such as:

- Fire, fire management and emergency access;
- Landform;
- Stormwater and overland flow;
- Existing vegetation;
- Supervision and passive surveillance;
- Roads and car parks;
- Services;
- Buildings;
- Other park facilities; and
- Maintenance access.

The landscape context needs to be considered when designing spaces to minimise potential negative impacts of wildlife, such as, attracting pests and potentially harmful animals. Designers shall undertake reasonable mitigation measures including placing caps on tree watering coils.

Requirement: All design considerations are subject to legislative requirements, Australian standards and relevant polices and guidelines as outlined in **Cross References** and **Referenced Documents.**

1.5.2 Landform

General: Each recreational facility has its own grading and spatial requirements. It is preferred that play equipment and fitness stations be sited in gently graded areas of open space. The area needs to accommodate a reasonably large open space, suitable for play equipment structures and their necessary safety clearance areas, and so terracing within safe limits can be achieved and to avoid the introduction of excessive level changes to a play space. Flat sites generally have lower construction costs and accordingly may be more cost effective to maintain but surface and subsurface drainage need to be carefully considered.

Consider: Sloping sites can offer many advantages but need to be designed with care. Sloping sites can be exploited to:

- Provide access to elevated areas;
- Divide space;
- Provide a sense of enclosure;
- Maximise play opportunities (sliding, rolling);
- Integrate “natural” play features (drainage swales, rock scrambles);
- Provide viewing opportunities;
- Provide integrated seating (terraces, seating walls); and
- Compliment fitness trails with steps or small graded tracks.

Requirement: Where sloping play spaces and recreational facilities are used designers shall:

- Establish how graded routes can make all areas accessible;
- Provide accessible paths of travel to and through the play space, including into the heart of the activity area and to social spaces in accordance with requirements of *AS1428;*
- Ensure ball play areas and courts do not fall away to roads or car parks; and
- Respond to broader circulation routes, entry points, pedestrian crossings and car parking.

Left image - Slopes provide opportunity for separation of spaces
Right image – Changes in level offer opportunity for climbing and scramble play

1.5.3 Supervision and passive surveillance

General: Provide developments with an increased level of safety for users and the wider community.

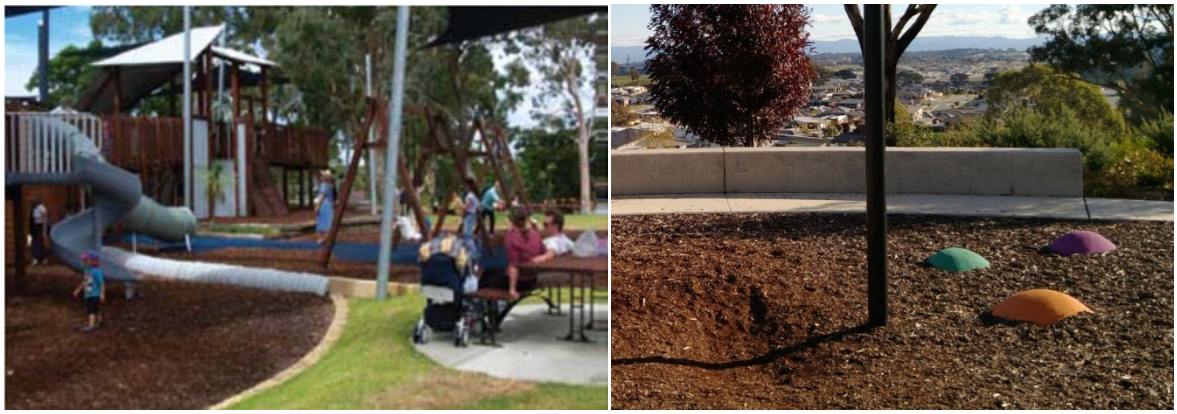
The functional relationship between a play space, fitness equipment and other use areas of the open space setting should be considered.

Requirement: Supervision of play spaces shall:

- Provide a range of carer facilities that:
  - Offer clear sightlines, there shall be no visual obstructions from landscape features that are not obstructed by landscape features such as low limbed trees, shrubs and hedges, walls or level changes;
  - Encourage parents and carers to participate in the play experience. These considerations are especially important near play equipment catering for younger ages (toddler and junior children); and
  - Encourage interaction between parents and carers.
- Incorporate passive surveillance, such as busy pedestrian pathways, surrounding streets, residences and other use areas;
- Provide shade and seating to carers; and
- Provide adequate space and suitable surfaces for prams.

Consider: To encourage passive surveillance:

- Avoid planting medium to large shrubs near play spaces, trees in grass are preferred;
- Low flexible shrubs (up to 0.6m at maturity) may be used where deemed necessary for design intent, or for unmowable grades (between 1:4 and 1:3). The design of planting areas near play spaces shall consider desire lines, waste accumulation and maintenance access. Rockery and shrubs may harbour snakes in some areas so should be avoided or carefully detailed;
- Nearby paths and hard pavement areas should be accessible, connected and free from hazardous trip points and be easily maintained;
- The CPTED recommendations of crime risk assessment as outlined in the *ACT Crime Prevention and Urban Design Resource Manual;*
- Encourage walking and cycling which overlooks the recreation facilities;
- Signage in accordance with *MIS 22 Signage* for urban parks and open space; and
- Lighting to roads and public spaces (*AS 1158 Parts 2 and 3.1*)



Left image - Carer seating and social space associated with play space
Right image – A seating wall also creating a sense of enclosure and can be used for balancing play

1.5.4 Play equipment siting setback requirements

Requirement: Play equipment in play spaces shall have the following setbacks:

- 10 metres from the edge of a building or major structure;
- 20 metres from adjoining residential property lines, the edge of any access street, collector road or car park pavement area (some existing play spaces may be closer);
- 30 metres from arterial road pavements;
- 20 metres from hazards such stormwater drains, through/trunk cycle paths and playing fields; and
- 100 metres from pad-mount substations. Note play spaces may be located closer with special provisions for the pad-mount substation as identified in *ActewAGL Electrical networks Management system – Procedure No: EN 4.4 P12 Siting Requirements for Padmount Substations*.

Fences are not to be considered a substitute for proper direct clearances.

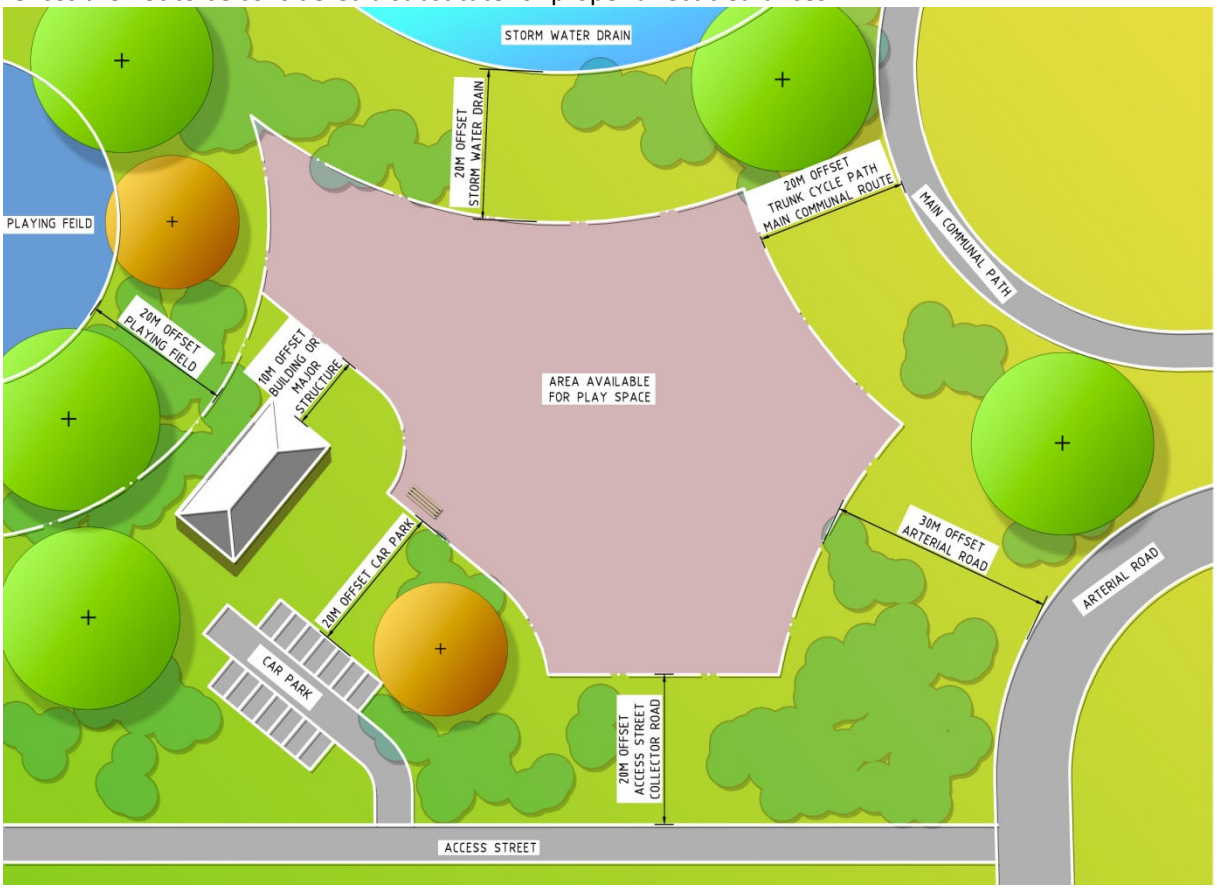


Figure 21-1 Play Space Siting and Setback Requirements

1.5.5 Skate park setback requirements

Requirement: The active skating area (bowls, ramps etc) of a skate park shall have the following setbacks:

- 5 metres from the edge of a building or major structure;
- 80 metres from adjoining residential property lines;
- 5 metres from the edge of any access street, collector road or car park pavement area;
- 5 meters from street and park furniture;
- 30 metres from arterial road pavements;
- 10 metres from hazards such stormwater drains and playing fields;
- 5 metres from through paths/ trunck cycle paths; and
- 100 metres from pad-mount substations. Note play spaces may be located closer with special provisions for the pad-mount substation as identified *in ActewAGL Electrical networks Management system – Procedure No: EN 4.4 P12 Siting Requirements for Padmount Substations*.

Fences are not to be considered a substitute for proper direct clearances from the above listed.

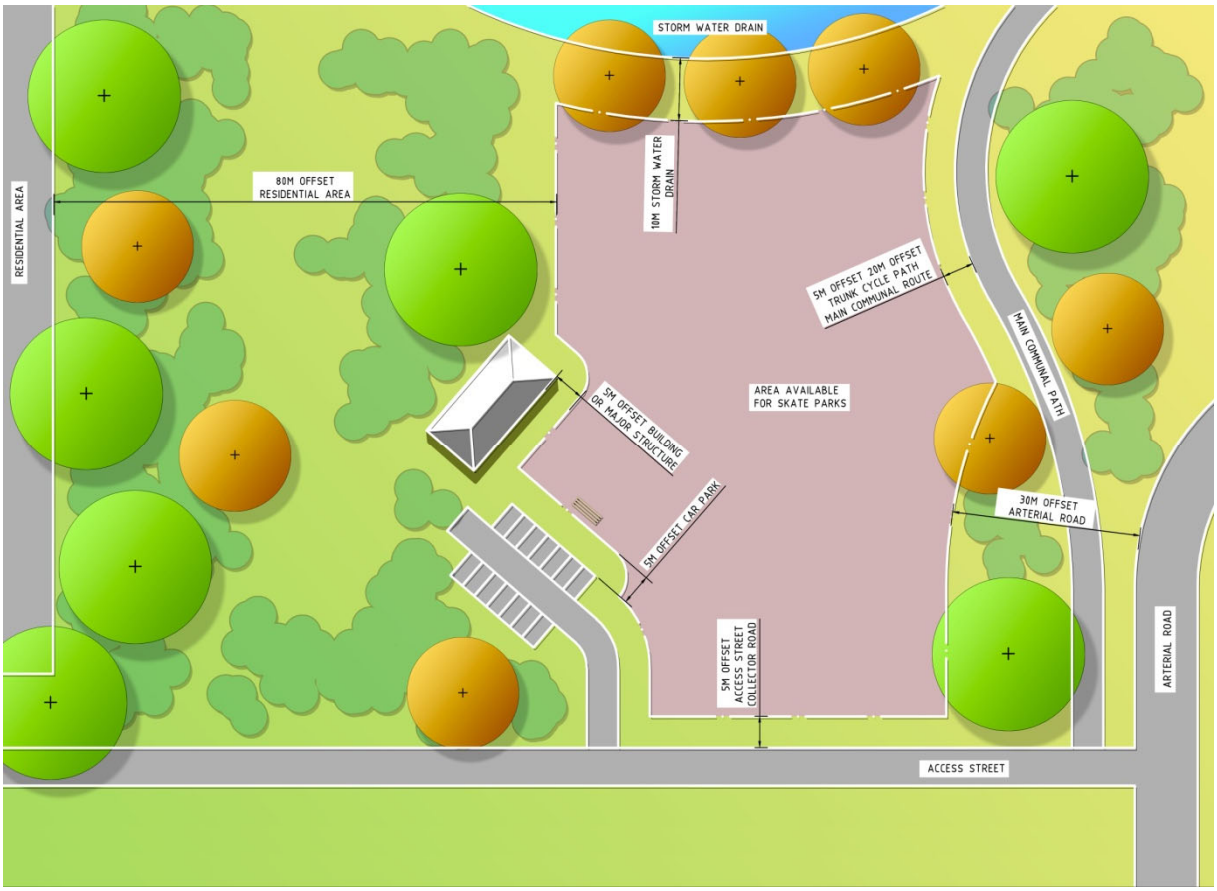


Figure 21-2 Skate Park Siting and Setback Requirements

1.5.6 Dog park setback requirements

Requirement: Dog parks shall have the following setbacks from boundary fence:

- 10 metres from the edge of a building or major structure;
- 20 metres from adjoining residential property lines;
- 5 metres from the edge of any access street, collector road or through/trunck cycle paths;
- 30 metres from arterial road pavements; and
- 100 metres from pad-mount substations (refer *ActewAGL Electrical networks Management system – Procedure No: EN 4.4 P12 Siting Requirements for Padmount Substations*).

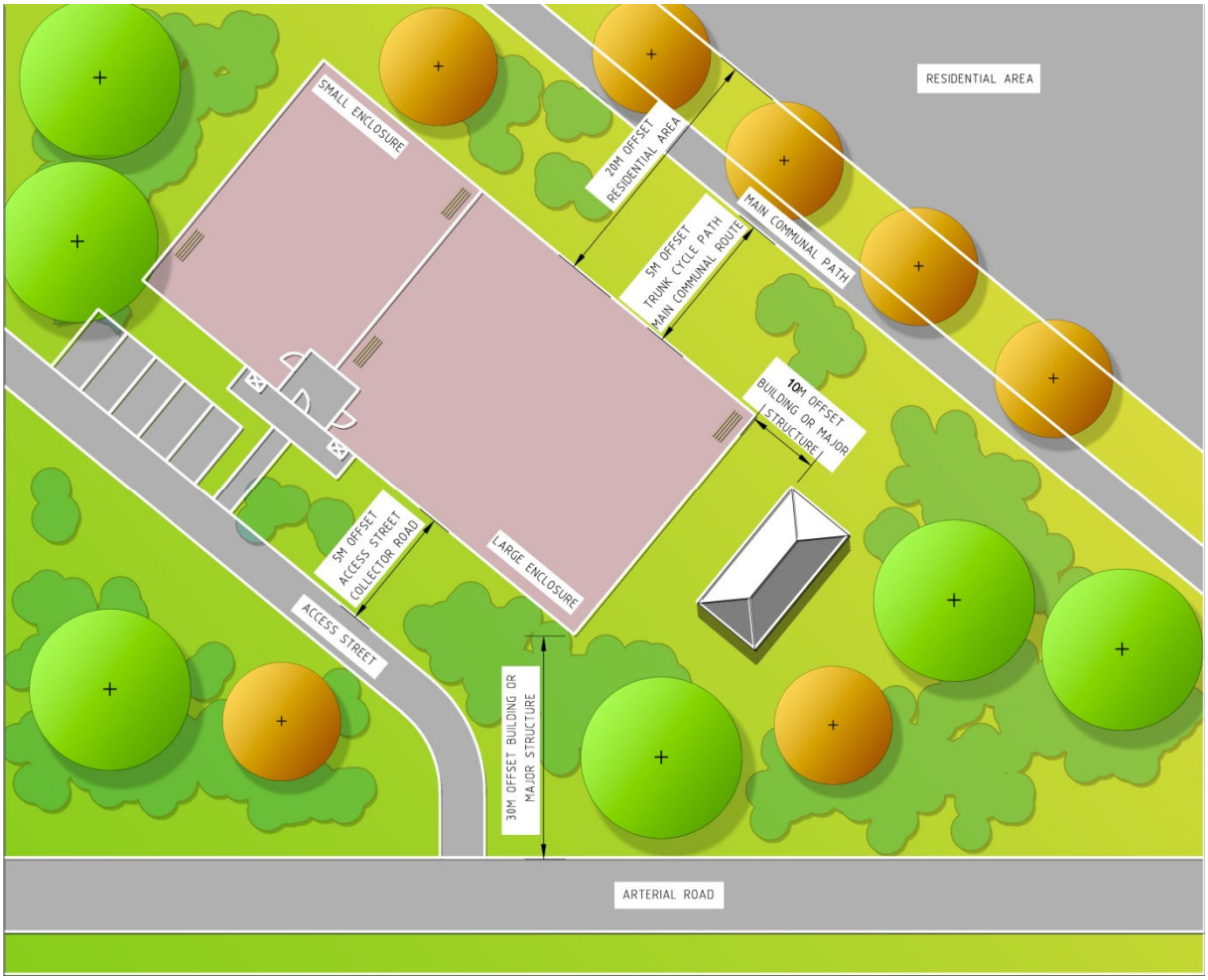


Figure 21-3 Dog Park Siting and Setback Requirements

1.5.7 Maintenance and emergency vehicle access

General: Maintenance vehicle access will be required (such as for mowing, rubbish removal, watering, topping up sand or mulch, as well as emergency access).

Requirement: The design of play spaces, and recreational facilities shall allow for vehicular maintenance access to all play equipment, softfall, fitness equipment and other infrastructure. Maintenance access to can be provided via:

- Removable bollards;
- Gates; and
- Kerb crossings (some paving may need to withstand the passage of vehicles).

Formal paved maintenance tracks are not typically provided, a minimum 3m wide grassed access space is preferred. The mature spread of trees and shrubs shall be considered in the design of the space and should not inhibit future access.

For mowing of grassed areas play spaces shall allow a minimum 2.4 metre clearance between the play space edge and trees, trunks or other obstructions to enable mower access. For further details refer *MIS 24 Soft landscape design.*

Seats should be installed on a hard surface to reduce maintenance.

Play equipment shall:

- Be robust;
- Ensure any wearing or moving parts shall be readily available and easily replaceable;
- Include inspection plate containing compliance and product supplier and code; and
- Not be timber (excluding hard wearing natural play elements such as logs and steppers).

Sand as a play element shall:

- Be certified playground sand (*AS NZS 4422*);
- Be contained and not spill onto paths and slopes; and
- Only be considered in cat containment areas.

Consider: Where possible, access paths should be incorporated into the play space design to prevent excessive wear of surrounding grass areas. Isolated and narrow strips of grass less than 3 metres wide should not be located adjacent to the play equipment or heavy-use areas.

1.5.8 Orientation of play elements / play space design

General: The orientation of play elements and play spaces is to be informed by the following:

- Safe legible access;
- Placement of key activity areas that avoids conflict between users or activities. Consider the play traffic generated by the design and where onlookers and passers-by might sit;
- Provide a 'social heart' to the play space that is accessible and is well situated to users to sit/meet/play and supervise children. If required, A space for very young children, might be ideally located close to this social space;
- Where feasible, provide an open grassed area to allow for ball games that is located out of the main path of foot traffic;
- Slides exposed to direct sunlight can become hot, even when south facing long slide runouts can become excessively hot. Metal slides and dark plastics should generally be avoided and shading should be considered;
- Positioning of hard surfaces (if required) will need to consider the impact of noise on residents (associated with bouncing the ball on the ground, surface, backboards or on walls). Ensure that balls can be contained within the space, and not roll under fences or gates or down slopes onto roads. Half court areas need to be approx.15 x 15 metres wide to allow a reasonable amount of activity without excessive erosion around the edges when the ball rebounds;
- The orientation of sports facilities such as basketball hoops should consider glare issues;
- Plan for the social aspects of older children's games including spectator seating;
- Swings, spectator activities and moving equipment should be kept away from main pedestrian routes; and
- Design and locate built structures to obtain the best play value, i.e. by using the underneath space for an accessible cubby. Aim for a level of complexity which might invite use by a range of age groups and provide areas that promote social interaction.

Provide different settings for different sites and user groups.

1.5.9 Fences and barriers

General: Fences and barriers can be meaningful additions to recreational facilities, adding to the user experience and function of the space. The use of fences and barriers shall consider the location of carer seating in relation to play spaces and openings in the fence or barrier.

Requirement: The following items must be met when designing fences or barriers:

- Fences or barriers are not to be considered a substitute for proper direct clearances listed in **Play equipment siting setback requirements** and **Skate park setback requirements** and,
- Fences or barriers are not to be used as passive management to contain unsupervised children.

The assessment of the need to install a physical fence or barrier to a play space or recreation facility should follow an approach similar to the *US Federal Highway Administration's web-based guidance tool "Bicycle Path Entry Control"*. This guidance tool uses an escalating three-step approach to access management – if the first step does not work, then escalate to the next:

Re-design landscape area to position play space or recreational facility to comply with offset requirements.

Re-design play space or recreational space to discourage access, (slopes, planting, integrated retaining walls).

Use Fence or barriers as a last resort, where the risk of injury or wayward children is real and offsets cannot be met.

Fences or barriers should not be designed as full enclosures, they should be integrated with the landscape design and where possible offer play or recreation value (ball wall, fixed play elements, talking tubes, murals/artistic installation) the position of carer seating should support appropriate supervision and carer responsibility (seating at the end of or an opening in the barrier).

1.5.10 Surfaces

General: Use suitable ground surfaces and materials to provide access, to cushion falls, for aesthetic and visual interest, as a unifying element, and wayfinding. Plan the relationship between different materials on the ground. Consider the costs and benefits of different surfaces, and avoid placing two incompatible materials close together.

Requirement: Play space surfaces shall comply with the following:

- All fall zone areas shall comply with *AS NZS 4422* and *AS 4685;*
- Synthetic impact absorbing materials shall:
    - Only be used in consultation with TCCS;
    - Only be used where it provides an accessible path of travel to play equipment suited for accessible requirements (for example nest swings and social play areas);
    - Not be located near sand as it clogs the pores, and reduces impact absorption; and
    - Complex rubber softfall patterns should be considered against lifecycle costs, colour and UV impact and durability. Refer to the technical specifications and standard details for minimum installation and construction requirements.

> Tan Bark softfall shall:

- Be certified for playground use; and
- Have a grade between 0% to 2%.

> Paving shall:

- Be accessible;
- Provide definition to spaces; and
- Direct users to and between spaces with thought to desire lines and movement patterns.

> Loose gravel shall:

- Not be used on slopes where they can erode and become slip hazards on other paving. Slopes greater than 2% are not acceptable, concentrated flows and potential wash/scouring must also be considered; and
- Be contained and consider overland flow and be designed to mitigate washout.

> All softfall surfaces shall have subsoil drainage.
> Concrete and asphalt surfaces can be useful materials for robust pavements with low maintenance requirements and long life expectancy. The pavement types shall:

- Consider surface flow (direct away from softfall surfaces); and
- Provide appropriate “flares” or widening where children or other users may “shortcut” at corners.

Consider: Play space surfaces shall consider the following:

> Colour and pattern design for user groups and needs;
> Reduction or careful use of glary light coloured surfaces in spaces without shade; and
> Dark coloured surface can become excessively hot. Consider the location and material to avoid heat issues.

Consider: Alternate pavement materials may be proposed in consultation with the asset owner and the authority responsible for maintenance of the asset. The designer should provide all available product data for alternative materials including supplier, cost (whole of life including replacement), maintenance requirements, and life expectancy.

1.5.11 Planting

Requirement: Planting species and design in recreational spaces shall:

> Where located in or near play spaces:

- Plants shall not be toxic to people (poisonous berries, irritant leaves etc), refer to *Kidsafe* and *Australian Nation Herbarium*;
- Be robust, children trample low shrubs and plants around play spaces; and
- Plant species with thorns or spikes that may cause injury or irritation should not be used.

> Consider shade provision, refer to **Sun/shade protection, other climatic factors and trees**; and
> Comply with *MIS 24 Soft landscape design* and *MIS 25 Plant species for urban landscape projects*.

1.5.12 Landscape objects

General: Landscape objects in play spaces (and other recreational spaces) include malleable objects and non-movable objects. Malleable object include sand, twigs, moving play elements etc and are generally designed to move or safe for children to move. Non-moveable objects may be unsafe to move or have the potential to create unsafe environments.

Requirement: Objects in or near play spaces greater than 600mm in height shall be non-moveable. Non-movable objects such as boulders and logs must be properly secured in place.

Requirement: Non-movable objects in play spaces shall be either:

- Heavy enough not to be moved by two strong adults (generally 150kg or more) and soundly bedded in situ (no rocking or other movement); or
- Fixed securely in place. Such as mechanical fixings to footings or partially buried.

General: Timber objects and logs may be used in play spaces as natural elements and features for interest and character.

Requirement: Timber objects should be appropriately seasoned or treated to avoid rot and decay.

1.5.13 Fitness equipment

General: Fitness equipment is to be inclusive and encourage use by a wide range of the community from youth through to the elderly. Fitness infrastructure should offer a range of challenges that responds to user's abilities, including stretching, cardiovascular and strengthening. Fitness infrastructure should not be limited to equipment and should consider options such as sprint or timing markers (set distances marked on pavement surfaces) and stairs or graded tracks.

Fitness equipment is provided in two formats:

- Fitness trails:
    - 1-2 pieces of fitness equipment shall be provided at each location along the trail;
    - May include seating nearby; and
    - Provide a range of workout and distance options.
- Fitness stations:
    - Associated with Central Community parks and District parks; and
    - Provide a range of exercises options for multiple users at any time.

Requirement: Fitness equipment shall meet the following criteria:

- Designed by professional exercise equipment designers;
- Be ergonomically correct and include clear, easy to understand instructions;
- Contain replaceable components;
- Be durable with long life span (10-15 years);
- Be robust (fire retardant/no timber and consider vandalism);
- Designed for easy removal/replacement (accessible but tamperproof fixings);
- Be low maintenance (consider whole life cost);
- Be fitted with signage outlining proper use and where available qr code sign;
- Where fitness equipment may be perceived as play equipment, surfacing shall be in line with Australian standards for play spaces (tan bark softfall or rubber softfall);

- Where fitness equipment is not reasonably perceived as play elements surfacing is not required to comply with Australian standards for play spaces. It is the designers' responsibility to demonstrate that the fitness equipment cannot reasonably be perceived as play equipment, which will be approved at the discretion of TCCS. Considerations include physical separation (distance, barriers, landscape features) from play spaces, colours and style of fitness equipment (which can sometimes look alike to play equipment) and visibility from play equipment (in the same park or visible from play spaces);
- Respond to climatic conditions:
  - provide shade (typically shade trees considering root growth and maintenance); and
  - shelter from prevailing winds.
- CPTED principles;
- Meet play equipment set back requirements (see **Play equipment siting setback requirements**); and
- Comply with the relevant legislation and standards

Static fitness equipment nestled into the landscape while remaining visually connected

1.5.14 Sun/shade protection, other climatic factors and trees

General: Quality shade provides protection from UV radiation where it is needed, at the right time of day and at the right time of year.

Well-designed shade ensures that:

- The outdoor space is comfortable to use in all seasons;
- A barrier protects users from direct and indirect sources of UV radiation;
- The shade is attractive, practical and environmentally friendly; and
- Shade structures need to be comfortable and attractive so that people will want to use it.

Shade cover should be provided for play space users (wherever possible).

Shade cover can be provided in two categories:

- Trees:

  - This is the most common shade type provided in play spaces;
  - Trees near play spaces shall be used to provide summer shade and buffer NW prevailing winds whilst also considering winter sun access and summer cooling easterly breezes;
  - Extreme care shall be exercised to avoid locating play equipment areas under trees with potentially hazardous limbs [brittle gums are avoided as so many limbs are lost on still hot summer nights]. Initial and regular hazard reduction pruning to *AS4373* by a suitably experienced arborist will be required to remove dead and potentially hazardous branches overhanging the play space. Any work occurring within the tree canopy shall be assessed and approved prior to commencement of work; and
  - If no trees exist in the immediate area, a planting program should be undertaken to provide future shade and wind protection.

- Built shade:

  - Built shade structures have the following advantages over natural shade;

    - the shade they cast is more predictable;
    - they can provide protection from the rain;
    - some types can be erected quickly; and
    - they have a range of alternative uses, for example, to collect rainwater for irrigation or to support a solar power device.

  - Built shade structures can be either:

    - shade sails;
    - solid roof (such as pergolas, shelters or roofs attached to play equipment; and
    - shade sails shall only be considered in Central Community and District Play Spaces.

  - Free standing shade structures shall only be considered in Central Community and District Play Spaces. Where more than one social space with picnic settings are provided at least half of the spaces shall include shade shelters;
  - Roofs attached to play equipment are acceptable in all play spaces;
  - All built shade structures (excluding small roofs attached to play equipment) shall comply with the following:

    - the posts are not to be located within fall zones of play equipment;
    - posts to be over 160mm to deter climbing;

- modeling of shade is to be provided to show shade cast in midsummer (summer solstice) and sun access in midwinter (winter solstice) at 9am, 12pm and 3pm (as a minimum);
- be designed for a minimum 10 year lifespan (warranty) on sails, structure or poles;
- be designed for a minimum 5 year life span (warranty) on paint / powder coating;
- provide high UV protection (80% UVR minimum, 90% or higher UVR desirable for shade sails);
- sail material stitching to be UV stabilized PTFE stitching with a minimum 15 years UV warranty;
- cloth to be fire retardant to *AS1530.2* and Flammability index to be less than 5 in Bushfire Zone;
- tamper proof fixings to be used (no tap on caps, eye bolts, or wire slings);
- stress points on shade sails to be reinforced by double layer of mesh or webbing;
- any part subject to wear is to be readily available for ease of maintenance; and
- character and materials should suit the desired character of the setting.

Consider: Where designing shade sails consider forward planting of trees that will provide the required shade after the lifespan of the shade sail.

Left image - Free standing shade structure over carer area
Centre image – Shade sail over play spaces to maximise shade in summer and light in winter
Right image – Trees can provide excellent shade and reduce heat

1.5.15 Water play elements

General: Water play elements are to be inclusive and encourage use by a wide range of the community. Water play elements should offer a range of challenges that responds to user's abilities, including stretching, cardiovascular and strengthening.

Requirement: Water play shall:

- Only be considered in central community and district play spaces;
- Be designed to only operate in the warmer months;
- Be in accordance with *AS 1547:2012 – On-site domestic wastewater management;*
- Ensure waste water does not discharge into sewerage or civil stormwater connections;
- Include a gate valve nearby but not within the water play area (nearby garden bed or service area, within 5m of the water play space). The gate valve shall be separate to all other water supply (such as irrigation, drink fountains, toilets);
- Be designed to function and look attractive when not in use (colder months);
- Be designed as an integrated part of the whole play space;
- Comply with relevant *Play Ground Australian Standards*; and
- Water play elements shall:

    - include timers on any push buttons etc;
    - be robust to withstand continual use and vandalism; and
    - must have adequate drainage designed by a suitably qualified engineer.

The location and distribution of water play spaces shall be confirmed with TCCS prior to design. Water play spaces are high maintenance facilities and must be designed in consultation with the authorities responsible for design approval, acceptance, and maintenance, and the asset owner.

Where water re-use is proposed all water must be treated prior to reticulation.

1.6 Design criteria

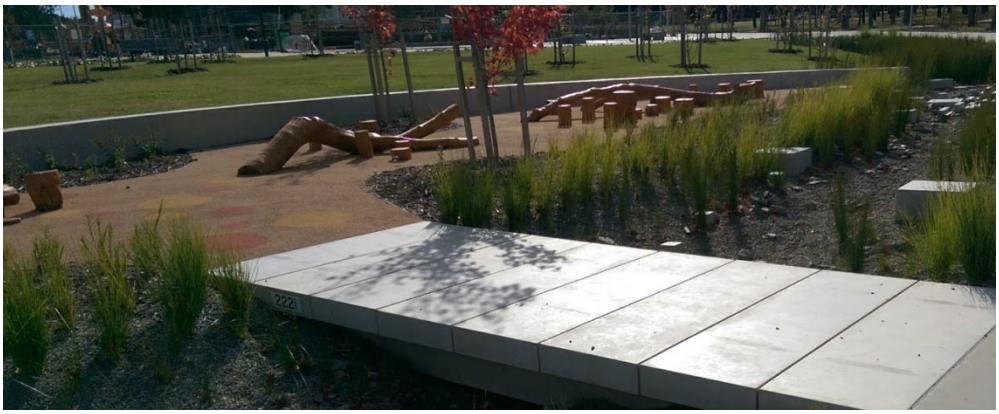
1.6.1 Local neighbourhood play space

General: Local neighbourhood play spaces shall support local resident amenity.

Local Neighbourhood play spaces may be either:

- Structured play equipment;
- Natural play spaces; or
- A mix of structured play equipment and natural play spaces.

Each Local neighbourhood park shall provide a theme, character and style different from or complimenting nearby play spaces.

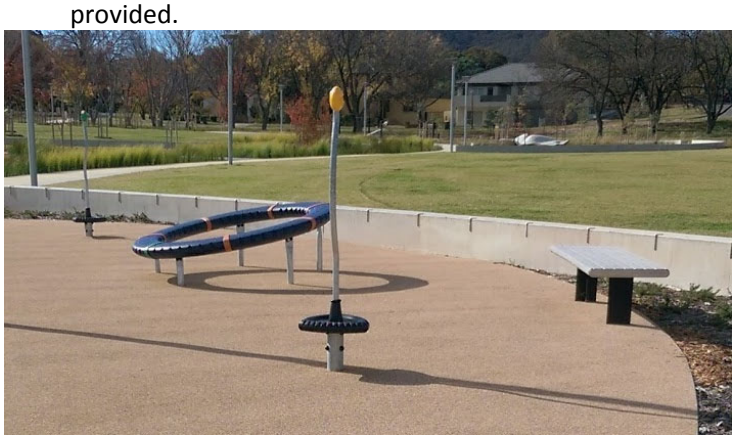


A play space which utilises natural elements alongside a dry creek

Requirement: As a minimum local neighbourhood play spaces shall meet the following criteria:

1. Age groups

- Play spaces shall cater for toddler and junior children (0-9).
- Some pre-teen children (10-13) activities should be provided. 10-13 play space may be only open space for ball games etc.
- 0-9 and 10-13 play spaces should not be separated from each other by large distances but some distinction between the spaces is desirable. They should be physically close enough that carers can supervise more than one age group.
- No specific teenager (14-17) play equipment needs to be provided in all local neighbourhood play spaces (optional to add facilities such as half courts, handball etc).
- Adults main function will be as carers for toddler and junior age groups. Seating and shade shall be provided.



Seating located directly adjacent play equipment allows carer to respond quickly and encourages engagement.

2. Core Design Features

- Open space within the park setting.
- Natural play elements to be incorporated using the features that exist within the park
- In some cases this might be the core component of the play space (i.e. no equipment at all).
- Seating and path access to the play space shall be provided.

Natural play spaces can integrate with the landscape setting and provide engaging environments for play

3. Imaginative / creative play elements

Imaginative play in local neighbourhood play spaces can be either:

- Play equipment; or
- Natural play spaces.

If imaginative play is play equipment it shall be wheelchair accessible. If imaginative play is in the form of Natural play space some level of wheelchair access is desirable.

Left image - Wheel chair accessible 'boat' with steering wheel
Right Image - Dry creek bed with large boulders

4. Activities providing physical / agility / movement

> Agility – climbing structures or surface such as horizontal ladders, turnover bars, parallel bars

- if only one horizontal ladder or similar upper body activity it provided it shall not be higher than 1300mm;
- if two or more are provided, one is to be higher, up to the 2200mm; and
- if provided turnover bars shall offer a choice of heights.

> Swinging - at least one double swing frame fitted with:

- one toddler seat or tyre basket; and
- one strap seat or safety seat.

> Sliding – at least one sliding element for toddlers with stairs or easy access;

> Rotating or rocking – at least one item, that offers rotating or rocking movement that can be used by a range of ages / abilities; and

> Wheeled activity - A loop path suitable for wheeled activities (bike, trike, skates, and wheelchairs).

The following may be considered for Local Neighbourhood play spaces:

> Wheeled activity:

- minor skate elements and a flat paved area for wheeled activity.


Left image shows a large see-saw which provides rocking activity for individuals or groups
Right image shows a swing frame with one strap seat and one safety seat

5. Social / Amenity

- A choice of activities for both individuals and groups, regardless of age or ability.
- An open grassed space suitable for activities such as ball games, running or group play.
- An accessible social space. As a minimum, one seat facing the play space, from which an adult can be close enough to see children, talk to them while playing, and reach them quickly if required.

Open Grassed Area used for ball games and relaxing

6. Fitness Equipment

Consider: Local neighbourhood parks may incorporate fitness equipment that comply with the following:

- Only static items are to be provided (balance, step, sit-up, chin-up and stretching activities);
- Consideration should be given to locate fitness equipment which may encourage carers to be active while supervising children; and
- Fitness equipment may be part of a wider fitness trail through the area.

1.6.2 Central community play space

General: Central Community play spaces shall support larger numbers of visitors, for longer durations on trips from further away from home than those in local neighbourhood play spaces.

Central Community play spaces shall provide either:

- Structured play equipment; or
- A mix of structured play equipment and natural play spaces.

Each Central Community park shall provide a theme, character and style different from all nearby playgrounds.

Requirement: As a minimum Local neighbourhood play spaces shall meet the following criteria:

1. Age groups

- Play spaces shall cater for toddler (0-4) and junior children (5-9), pre-teen (10-13).
- Toddler, junior and pre-teen play spaces should not be separated from each other by large distances but some distinction between the spaces is desirable. They should be physically close enough that carers can supervise more than one age group.
- Some teenager (14-17) play equipment/activities shall be provided.
- Adults main function will be as carers for toddler and junior age groups. Seating, shade and socialising spaces shall be provided.

2. Core Design Features

The following shall be provided in Central Community play spaces:

- Open space within the park setting;
- Natural play elements to be incorporated using the features that exist within the park;
- Seating and path access to the play space shall be provided;
- Multiple spaces for different age groups;
- A seamless path system or loop path for walking, cycling, wheelchairs, wheeled toys, orientation, or other play activities; and
- An accessible, shaded, centrally located seating/social area that can accommodate a few groups will provide a base for seating, eating, resting and for adults to easily supervise children. This shall be designed to encourage people to meet and socialise.

Loop path for wheeled activities

The following are desirable in Central Community play spaces:

- Multi use play equipment that caters for a wide range and high number of users;
- Attractive popular play equipment;
- An iconic “draw card” play item/piece. This item should be multi use as per the item above; and
- Enclosure or barrier around (or partly around) toddler play spaces:

    - The enclosure or barrier shall be integrated into the play experience and landscape setting;
    - A barrier is not to be used to avoid necessary clearance requirements in new playgrounds;
    - Fencing that acts as a barrier to hazards rather than be an inhibiting factor in the landscape; and
    - Fencing can provide opportunities for local storey telling, integration with other landscape elements and play activities, and designed in a way that is visually permeable.

Multi use play equipment incorporating climbing, imaginative play and providing levels of challenge

3. Imaginative / creative play elements

Imaginative play in Central Community play spaces can be either:

- Play equipment; or
- Play equipment and natural play space.

Imaginative play elements shall be wheelchair accessible. If imaginative play is within natural play spaces some level of wheelchair access is desirable.

Imaginative /creative play shall provide the following:

- Options for children to engage with the play space creatively;
- Physical and visual links between activities to stimulate additional games, social activities, exploration:
  - The placement of play equipment close to natural elements will enable children to link both manmade and natural elements in their play.
- Play at elevated levels - Some wheelchair and stair access to elevated areas shall be provided:
  - Take any opportunities to make the underneath areas of elevated structures into cubby spaces, and for these to be wheelchair accessible with adequate headroom/height clearance, space to maneuver around and activities to access; and
  - Special items such as a musical panel or interactive panel are to be mounted so that they can be accessed and used front on by a child in a wheelchair.
- A choice of role play activities which can engage a number of children at once;
- Items such as boats, cars, and trains with accessible accessories such as steering wheels, levers, buttons etc;
- Manipulable elements and materials, located near imaginative play equipment (cubbies, etc);
- Audible elements that facilitate creativity, performance, and social interaction:
  - Musical elements, speaking tubes.
- Semi-natural settings such as large boulders, logs, groups of vegetation, weeping shrubs and particular trees. Materials for play include sand, dirt and digging, plant materials (leaves, twigs, flowers, lawn clippings etc) mini forests, water /stream beds and other found materials.


Left image –grades and rails allow accessible access
Right image – music elements allow children to make their own music

4. Activities providing physical / agility / movement

The following shall be provided in Central Community play spaces:

- Agility – climbing for different age, as a minimum the following shall be provided:
  - Two climbing element for toddlers/juniors, such as small boulders, ladders, varying height steps and platforms;
  - Two climber elements for juniors/pre-teens, such as horizontal ladders, turnover bars, parallel bars. One horizontal ladder or similar upper body activity shall not be higher than 1300mm. Junior climbing elements shall not be higher than 2200mm;
  - If provided turnover bars shall offer a choice of heights; and
  - Where climbing provides access to slides, slides shall be accessible via a stair as well as via any more challenging activities.

- Balancing – balancing elements for different ages with appropriate hand supports, as a minimum the following shall be provided:
  - Balancing elements for toddlers, such as logs, steppers and balance beams;
  - Balancing elements for juniors, such as rocks, logs, balance beams and moving bridges;
  - Balancing elements for pre-teens, such as rocks, logs, platforms, rails and bars; and
  - Balancing elements for teens, such as platforms, rails and bars.

- Swinging - at least two sets of double swing frames:
  - One frame with a junior seat and a toddler seat or seat with back support for children with a disability; and
  - One frame with either two senior strap seats or one strap seat and one rigid ‘safety’ seat.
  - Sliding – sliding elements for different age groups, as a minimum the following shall be provided:
  - One slide for toddlers with stairs or level access;
  - One slide for junior with multiple access options (climbing, stairs etc); and
  - Slide poles of different degrees.

- Rotating – spinning elements for different age groups and abilities, as a minimum the following shall be provided:
  - One spinning element for toddlers and juniors, such as a carousel or spinner.

- Rocking – items that offers rocking movement that can be used by a range of ages / abilities, as a minimum the following shall be provided:
  - Two rocking elements for toddlers, such as springers;
  - One rocking element for juniors/pre-teens, such as a group seesaw; and
  - Rocking- preferably in different ways, such as rockers which can accommodate a group; include one which provides some back support.

- Wheeled activity - A loop path suitable for wheeled activities (bike, trike, skates, and wheelchairs).

Climbing, balance, sliding, imaginative, social play can be integrated into larger play elements to create immersive environments

The following maybe considered for Central Community play spaces:

> Swinging

- A basket or nest swing, skate type swing or rotating multidirectional swing.

> Rotating

- A wheelchair accessible spinning element that can also accommodate a number of children at a time: or
- A spinning element that is easy to hang onto and easy to help others to use.

> Gliding

- A small track glide or cableway.

> Wheeled activity

- Minor skate elements and a flat paved area for wheeled activity.

Left image - Rocks as climbing elements
Right image - Concrete steppers through a dry creek vary in level, size and distance increasing the challenge

5. Social / Amenity

The following shall be provided in Central Community play spaces:

- A choice of activities for both individuals and groups, regardless of age or ability;
- An open grassed space suitable for ball games; and
- Accessible social space. As a minimum:

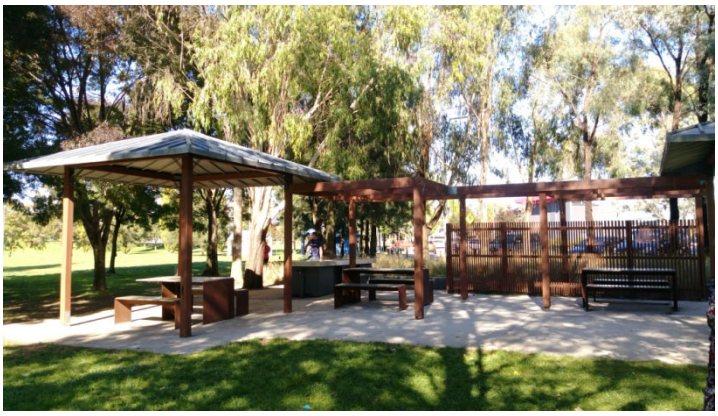
  - Four seats facing the play space, from which an adult can be close enough to see children, talk to them while playing, and reach them quickly if required; and
  - A central gathering space with shelter and as a minimum one accessible picnic setting.

The following shall be considered for Central Community play spaces:

- Hard surface sport area:

  - Ball wall; and
  - Multiuse court or half court(s) with line markings and goals.

- Picnic, barbeque and water bubblers. In accordance with MIS 20 Street and park furniture.



Social gathering space with barbecues and picnic settings with a choice of shaded, partial shade and accessible tables provided

6. Fitness Equipment

Consideration should be given to locate fitness equipment which may encourage carers to be active while supervising children. Static fitness equipment is acceptable within or adjacent play grounds.

Central Community Parks may incorporate fitness equipment in either:

- Small groupings along as part of a wider fitness trail through the area; or
- As a centralised fitness station.

Where small groupings of fitness equipment are provided only static items which require minimal maintenance (balance, step, sit-up, chin-up and stretching activities) shall be used.

1.6.3 District play space

General: District play spaces are the largest category of public play spaces in the ACT. They facilitate large groups of users, providing adequate activity, and choices in scale and challenge.

A District play space is to be part of a Master Plan for the entire park and any design shall be sympathetic to the requirements of any overall strategic plan that applies to the site. They shall be one-off designs and maximizes the importance of accessibility, inclusion and participation by visitors of all ages and abilities.

District play spaces shall provide a mix of structured play equipment and natural play spaces.

Point Heathcote in Perth – a large accessible regional playground for all age groups, designed with a nautical theme reflecting the coastal location and history of the area.

Requirement: As a minimum District play spaces shall meet the following criteria:

1. Age groups

- Play spaces shall cater for toddler (0-4) and junior children (5-9), pre-teen (10-13) and teenager (14-17).
- Toddler, junior and pre-teen play spaces should not be separated from each other by large distances but some distinction between the spaces is desirable. They should be physically close enough that carers can supervise more than one age group.
- At least part of the teenager play spaces should be physically separated from the other age groups, the area should maintain visual connectivity with the other areas.
- Adults, as carers for toddler and junior age groups, social gathering and exercise.

2. Core Design Features

The following shall be provided in District play spaces:

- Open space within the park setting;
- Natural play elements to be incorporated using the existing features (tree, rock outcrops, drainage lines) and manipulated features (water bodies, mounding, tree plantings) within the park;
- Multiple spaces for different age groups;
- Seating associated with each play space;
- Accessible path network to the play spaces. As a minimum:

  - Direct accessible path of travel between car parking the central gathering space;
  - Accessible path of travel between the central gathering space and each play space; and
  - Accessible path of travel between the central gathering space and nearby facilities (toilets, sports fields, shops) and transport (bus stops, car parks).

- A seamless path system or loop path for walking, cycling, wheelchairs, wheeled toys, orientation, or other play activities. As a minimum one full loop shall be accessible, additional paths and cross loops may incorporate non accessible design features such as “speed bumps”;
- Multiple accessible shaded, seating/social areas that can accommodate groups and will provide a base for seating, eating, resting and for adults to easily supervise children. This shall be designed to encourage people to meet and socialise. As a minimum these areas shall include:

    - One large centrally located seating/social area; and
    - One seating/social areas associated with or directly overlooking each play space containing play equipment.

- Ample seating opportunities should be provided adjacent play spaces particularly near equipment that will be used by toddler and junior children; and
- Picnic, barbeque and water bubblers. In accordance with *MIS 20 Street and Park Furniture.*

Shade trees provide picnic/seating space for carers adjacent a toddler and junior play space

The following are desirable in District play spaces:

- Multi use play equipment:

    - Some items of equipment cater for a wide range and high number of users. These designs are preferred over those which only one age group can use.

- An iconic “draw card” play item/piece:

    - This item should be multi use as per the item above.

- Enclosure or barrier around (or partly around) toddler play spaces:

    - The enclosure or barrier shall be integrated into the play experience and landscape setting;
    - A barrier is not to be used to avoid necessary clearance requirements in new playgrounds; and
    - Fencing that acts as a barrier to hazards rather than be an inhibiting factor in the landscape.

Multi-use play space incorporated into natural high point.

3. Imaginative / creative play elements

Imaginative play in District play spaces shall include both play equipment and natural play spaces.

Play equipment imaginative play items shall be wheelchair accessible. Some level of wheelchair access to imaginative natural play spaces shall be provided.

Imaginative /creative play shall provide the following:

- Ensure that there are options for children to engage with the play space creatively;
- Physical and visual linking between activities to stimulate additional games, social activities, exploration;
- Play at elevated levels - Some wheelchair and stair access to elevated areas shall be provided:
    - Take any opportunities to make the underneath areas of elevated structures into cubby spaces, and for these to be wheelchair accessible with adequate headroom/height clearance, space to maneuver around and activities to access.
- A choice of role play activities which can engage a number of children at once;
- Items such as boats, cars, and trains with accessible accessories such as steering wheels, levers, buttons etc;
- Manipulable elements and materials, located near imaginative play equipment (cubbies, etc);
- Musical elements that facilitate creativity, performance, and social interaction;
- Special items such as a musical panel or interactive panel are to be mounted so that they can be accessed and used front on by a child in a wheelchair;
- The placement of play equipment close to natural elements will enable children to link both man made and natural elements in their play; and
- Semi-natural settings such as large boulders, logs, groups of vegetation, weeping shrubs and particular trees. Materials for play include sand, dirt and digging, plant materials (leaves, twigs, flowers, lawn clippings etc) mini forests, water /stream beds and other found materials.

Left image – drums provide tactile and musical experiences
Centre image – natural objects encourage creative play
Right image – an interactive play panel mounted for wheelchair access

4. Activities providing physical / agility / movement

The following shall be provided in District play spaces:

> Agility – climbing for different age, as a minimum the following shall be provided:

- Two climbing element for toddlers/juniors, such as small boulders, ladders, varying height steps and platforms;
- Two climber elements for juniors/pre-teens, such as horizontal ladders, turnover bars, parallel bars. One horizontal ladder or similar upper body activity shall not be higher than 1300mm. Junior climbing elements shall not be higher than 2200mm;
- If provided turnover bars shall offer a choice of heights; and
- Where climbing provides access to slides, slides shall be accessible via a stair as well as via any more challenging activities.

> Balancing – balancing elements for different ages with appropriate hand supports, as a minimum the following shall be provided:

- Balancing elements for toddlers, such as logs, steppers and balance beams;
- Balancing elements for juniors, such as rocks, logs, balance beams and moving bridges;
- Balancing elements for pre-teens, such as rocks, logs and platforms, rails and bars; and
- Balancing elements for teens, such as platforms, rails and bars.

> Swinging - at least three sets of swing frames:

- One frame with a junior seat and a toddler seat or seat with back support for children with a disability;
- One frame with either two senior strap seats or one strap seat and one rigid 'safety' seat; and
- One frame with a basket or nest swing.

> Sliding – sliding elements for different age groups, as a minimum the following shall be provided:

- One slide for toddlers with stairs or level access;
- One slide for junior with multiple access options (climbing, stairs etc); and
- Slide poles of different degrees.

> Rotating – spinning elements for different age groups and abilities, as a minimum the following shall be provided:

- One spinning element for toddlers and juniors, such as a carousel or spinner; and
- One spinning element for junior and pre-teens, such as a carousel.

> Rocking – items that offers rocking movement that can be used by a range of ages / abilities, as a minimum the following shall be provided:

- Two rocking elements for toddlers, such as springers;
- One rocking element for juniors/pre-teens, such as a group seesaw; and
- Rocking- preferably in different ways, such as rockers which can accommodate a group; include one which provides some back support.

> Wheeled activity - A loop path suitable for wheeled activities (bike, trike, skates, and wheelchairs).

Left image – a spinning digger provides opportunity for children to develop gross motor skills
Centre image – slides attached to multi-use equipment integrates varied activities
Right image – climbing structure which can be used in numerous ways to challenge users abilities

The following may be considered for District play spaces:

> Climbing:

- A larger climbing wall or structure which challenges junior and pre-teen age groups; and
- Climbing structures that incorporate or provide access to other activities.

> Swinging:

- A skate type swing or rotating multidirectional swing.

> Gliding:

- Cableway(s) and track glide(s).

> Specialist equipment such as wheelchair accessible swings, diggers, rockers and carousels should be considered; and

> Wheeled activity:

- Minor skate elements and a flat paved area for wheeled activity.

Left image – Balance beams and stepping posts offer natural setting challenges
Centre image – Nest swings encourage all inclusive group play
Right image – slides on mounds or slopes provide choices to access the top (stairs, scramble, climb) and manage site level changes

5. Social / Amenity

The following shall be provided in District play spaces:

- A choice of activities for both individuals and groups, regardless of age or ability. As a minimum:
  - A space for toddlers and juniors;
  - A space for juniors and pre-teens; and
  - A space for teenagers.
- At least one open grassed space suitable for ball games;
- Accessible social space. As a minimum:
  - A central gathering space with shelter and as a minimum one accessible picnic setting;
  - Two other accessible picnic settings; and
  - At least one picnic setting in each space shall be accessible (include wheelchair access/space).
- Hard surface ball games space:
  - Ball wall; and
  - Multiuse court(s) or half court(s) with line markings and goals.

The following shall be considered for District play spaces:

- Additional open grassed space suitable for ball games; and
- Ping pong tables.

Informal sports offer teenagers and adults interactive play and fitness

6. Fitness Equipment

Fitness equipment is to be associated but separate from play equipment. Consideration should be given to locate fitness equipment which may encourage carers to be active while supervising children.

District parks shall incorporate fitness equipment as:

- Small groupings along as part of a wider fitness trail through the park; and/or
- A centralised fitness station.

Where small groupings of fitness equipment are provided only static items which require minimal maintenance (balance, step, sit-up, chin-up and stretching activities) shall be used.

1.6.4 Skate parks

General: Skate Parks are unique spaces that provide important environments for all age groups. They are used for skating, bicycling, scooters, in-line skates and roller skates. Skate parks should respond to their location and shall vary in character between urban and suburban settings.

For minor skate/wheeled activity facilities associated with neighbourhood, central or district play spaces refer to **Local Neighbourhood Play Space**, **Central Community Play Space** and **District Play Space**.

Requirements: The following performance criteria must be met:

- Comply with relevant legislation and standards;
- Be designed in consultation with TCCS, skate groups/community and a suitably qualified engineer;
- Designed to cater for different skills and ability levels;
- Be made from robust materials (vandal and corrosion resistant);
- Durable – life span of 20-30 years;
- Be well drained (particular attention to bowls to ensure no ponding during or after rain events);
- Be connected by a continuous accessible path of travel to an accessible car park space;
- As a minimum provide shade to one seating area associated with the skate park;
- A water refill station within or adjacent the seating area: and
- Lighting:

    - At the time of writing this document there was no Australian Standard for Freestyle Skate Parks, the designer shall confirm this is still the case at design;
    - Average lux shall be 100 with a uniformity minimum average of 0.5;
    - Lighting illumination of surfaces and features shall be even and consistent;
    - Lighting shall adequately identify all corners, obstacles and level transitions (shadows shall not hide edge, objects etc);
    - Not adversely impact adjacent residents (the lighting designer shall provide documentation demonstrating no light spill onto adjacent residential blocks);
    - Lighting shall be on a timer; and
    - Associated seating areas and the route between car parking and the skate park are to be adequately illuminated for public safety and community surveillance in accordance with MIS14 Public lighting.

Consider: The following should be considered in the design of a skate park:

- Inclusion of elements which may be used by wheelchairs in place of skateboards;
- Creating a unique character which reflects local community or landscape setting;
- Preference for pergola structure and trees for shade (rather than shade sail) over seating areas. Selection of tree species and planting location shall consider litter drop and potential impact on skate park users;
- Providing a sequence of activities that allow users to learn and improve skills;
- Providing a range of street, bowl and vertical ramps; and
- Providing flat areas of hard pavement.

Skate parks offer a range facilities for users to challenge themselves.

1.6.5 Learn to ride centres

General: Learn to Ride Centers provide safe spaces for children to learn to ride. It is important that children learn the fundamentals of safe riding in an environment that, as far as possible, mirrors real riding conditions.

Learn to Ride Centres have the look and feel of a real road environment and are a safe space for young cyclists to learn riding skills. They include everything you would expect to see out in our suburbs, such as footpaths, roundabouts, pedestrian crossings, line markings and road signs.

The centres are intended for toddler and junior age groups and provide a non-threatening and fun environment where kids can learn all the basics from how to safely cross the road through to independent and confident riding on their own bicycle. They are also suitable for children with broad ranging skills and needs, including children with additional needs.

The Learn to Ride centres contributes to improving road safety for vulnerable road users by providing a controlled environment to educate and practice how to ride bicycles safely.

Requirements: The following performance criteria must be met:

- Comply with relevant legislation and standards;
- Be designed in consultation with TCCS;
- Designed to reflect real world suburban setting;
- Be connected by a continuous accessible path of travel to an accessible car park space;
- Provide shaded seating/observation areas;
- A water refill station within or adjacent the area; and
- No lighting to be provided

Consider: The following should be considered in the design of a Learn to Ride Centre:

- Trees for shade;
- Proximity to play spaces, barbecue/picnic facilities; and
- Active travel network connectivity.

Learn to ride facilities provide safe environments for children to ride and become familiar with some "real world" infrastructure.

1.6.6 Bike tracks

General: Bike tracks are small scale trails specifically designed for bicycles, typically “off-road” mountain bikes or bmx. Bike tracks may include one or more short trails or loops, and may include or entirely consist of pump track(s). Bike tracks may either be on relatively flat or sloped sites. Bike tracks should offer a variety of challenge and difficulty for users.

Requirements: The following performance criteria must be met:

- Comply with relevant legislation and standards;
- Be designed in consultation with TCCS;
- No lighting to be provided; and
- The level of difficulty of a trail shall be easily assessed from the head of the trail.

Consider: The following should be considered in the design of a Bike track:

- Nearby facilities and other users of the open space;
- Trees for shade;
- Seating and rest nodes off of the track for observing;
- Proximity to play spaces, barbecue/picnic facilities;
- Respond to the landscape setting with materials and track finishes; and
- Active travel network connectivity.

1.6.7 Dog parks

Requirement: The design of a dog park shall provide the following:

- A minimum area of 6,000 square metres (smaller sites may be considered on their merits and community expectations where demonstrated by the designer);
- A minimum of one water fountain with dog bowl attachment per enclosure;
- A minimum of three bench seating for carers. Bench seats shall have backs and arm rests;
- Informal seating opportunities around the enclosure including logs and boulders;
- At least one rubbish bin at each entry. Rubbish bins shall outside the fence, accessible from the inside via a 300mm x 300mm opening in the fence;
- Parking provision close to the site (parking shall be subject to comparative studies of existing dog parks and projected catchment population);
- Shade provision through existing and proposed tree planting;
- Screen planting to the outside of the dog park fence;
- Separate small and large enclosure areas (separated by 1.8m high black pvc coated chainmesh fence);
- Landscape elements along fences to discourage dogs running back and forth along fences;
- 1.8m High Black PVC coated Chainmesh Fencing to the extent of the dog park, including entry corral consisting of two gates and maintenance access gate (see details below); and
- Signage (refer to *MIS 22 Signage for urban parks and open space*).

Consider: The design of dog parks shall consider, in consultation with TCCS, the following:

> Surfacing:

- Consider the existing vegetation and surfaces;
- Materials that will not be harmful to dogs, such as decomposed granite gravel which can cut or damage paws; and
- Discuss materials and finishes with TCCS prior to undertaking design.

> Plant species selection to avoid plants which may be hazardous to dogs including poisonous plants and plants which may cause injury (spikes and thorns).

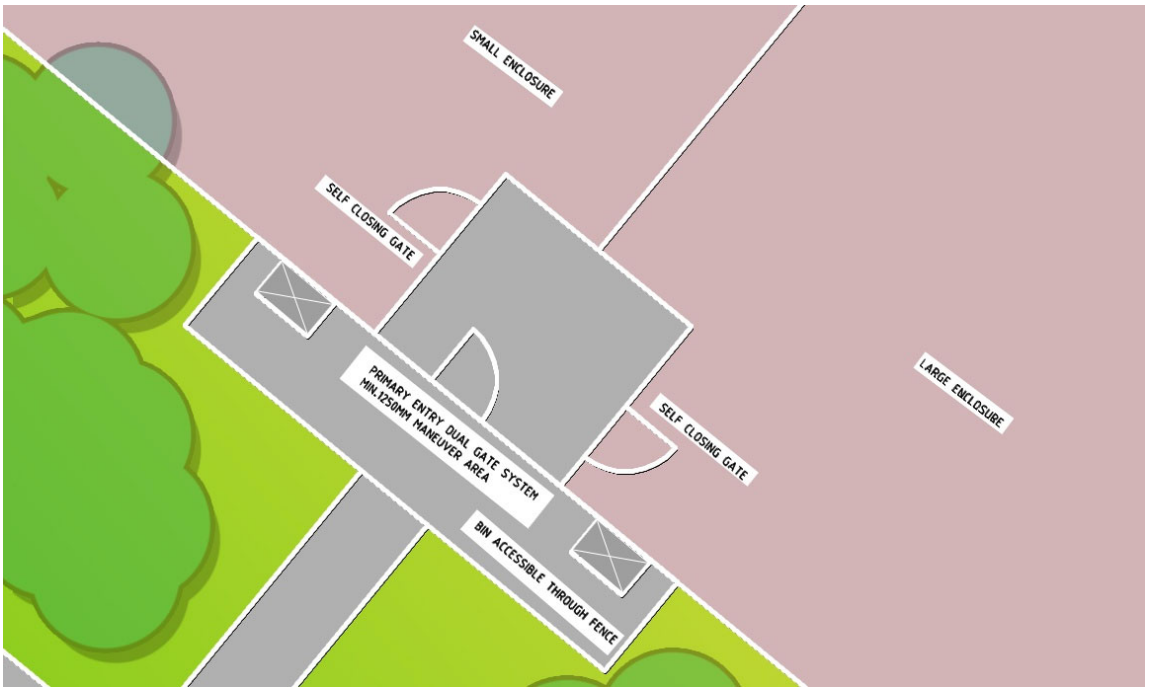


Figure 21-4 Dog Park Entry

1.6.8 Unenclosed dog trails

General: Unenclosed dog trails are spaces within which dogs are permitted off leash outside of dog parks. Most unenclosed dog trails will not have any special treatment or landscape elements and will be simple grassed and treed spaces.

Consider: Consider incorporating elements for dog agility and play into the design of functional elements such as retaining walls of appropriate jumping heights, bench seats which could be used for jumps or posts or boulders appropriately spaced and landscaped to be used as obstacles/weave poles.

1.6.9 Stages and amphitheatres

General: Stages and amphitheatres are high level community assets that provide a focus for outdoor events and gatherings.

Requirement: The design of a stage or amphitheatre shall be undertaken with the asset owner, the authority responsible for asset maintenance and the authority responsible for planning. Where proposing a stage or amphitheatre the designer shall provide evidence of community desire and a list of benefits to the asset owner and the authority responsible for planning, prior to undertaking design.

Consider: Where stages are proposed the following should be considered:

- Size for function (small simple stage at a group centre or large community stage in a town park);
- Lighting (if necessary, light spill to neighbouring residents or light pollution);
- Power;
- Orientation to avoid glare; and
- Noise (potential impacts on surrounding uses).

Consider: Where an amphitheatre is proposed the following should be considered:

- Size of the amphitheatre and projected user capacity (smaller informal spaces with dryland grass or larger paved terraces);
- Providing a more flexible paved area in place of a formal stage structure;
- Integration with landscape topography;
- Orientation to avoid glare; and
- Noise (potential impacts on surrounding uses).

1.6.10 Electrical power connections

General: Electrical power connections may be provided in District parks, Town Parks, CRPs, at stages, in skate parks or other prominent locations where events may be held.

Requirement: Where electrical power connection points are proposed the designer shall consult with TCCS during the design phase. Electrical power connections in recreation facilities shall be:

- Include the following power outlets:
    - At least two single power outlets (15A 1 phase 3 pin 240v);
    - At least one double power outlet (10A 1 phase 3 pin 240v); and
    - At least one 3 phase single power outlet (20A 3 phase 5Pin 400v outlet).
- Provided in lockable heavy duty cabinet;
- Accessible by maintenance vehicles;
- Designed and certified by a qualified electrical engineer;
- Comply with all relevant building codes and Australian standards; and
- In accordance with the electrical authorities requirements.

Consider: The design and location of electric power connections shall consider:

- Safe operation and locations which will not impede active travel when in use (shall not open onto or have cables running across paths or other active travel infrastructure);
- Minimising negative visual impacts (located in walls or within landscaped areas); and
- Potential for vandalism and CPTED.

1.7 Documentation

Requirement: Comply with Requirements for Design Acceptance Submissions (refer *TCCS Reference Document 6 Requirements for Design Acceptance Submissions and TCCS Reference Document 6A Requirements for Design Acceptance submissions for infill developments*).

For each non-proprietary item and custom element/object the design consultant shall supply a maintenance plan for review at Design Acceptance. A revised maintenance plan reflecting any agreed changes or alterations shall be submitted at handover.

ACT Government

Transport Canberra and City Services

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