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*promoting the value of play*

# **PLAY AREA DEVELOPMENT POLICY FOR LOCAL GOVERNMENT**

	Page
<b>SECTION I</b>	
<b>INTRODUCTION</b>	4
Some introductory principles	5
<b>SECTION 2</b>	
<b>THE ROLE OF PLAYGROUNDS</b>	7
Cognitive play	7
Creative play	7
Social / Dramatic play	8
Social play for older children	8
Physically active play	9
Ball games	10
Play Equipment	10
Significant elements in children's environments	10
<b>SECTION 3</b>	
<b>PLANNING, SITING &amp; DESIGNING PARKS FOR PLAY &amp; RECREATION</b>	11
Planning a diverse system of parks and playgrounds	11
Mapping the open space system	11
Preparing an open space strategy	12
<b><i>Local parks - Planning, siting and design issues</i></b>	13
Functions of local parks	13
Shared spaces	14
Multipurpose design	14
Priority users	14
Complementary settings	14
Site selection for local parks	15
<b><i>Neighbourhood parks - Planning, siting &amp; design issues</i></b>	16
Definition	16
Design, function & purpose	16
Relationships between local and neighbourhood parks	16
Selection of suitable sites for neighbourhood parks	17
<b><i>Regional parks - Planning, siting &amp; design issues</i></b>	17
Function & purpose of regional parks	17
Design issues	18
Site selection	18

	<b><i>Design Elements for parks of all types</i></b>	18
	Shade	18
	Paths	18
	Accessibility	19
	Seating	20
	Tables	20
	Barbecues	21
	Vandalism	21
	Privacy for residents	21
	Community education	22
	<b><i>Playgrounds-specific design issues</i></b>	22
	Play equipment	22
	Design for supervision	23
	Playground safety	23
	Maintenance	23
	Design for different age groups	23
	Toddlers	24
	Junior children	24
	Teenagers	26
	Adults	27
	Community involvement in planning and design	27
	Some benefits of involving the community	27
	Methods of community involvement	28
<b>SECTION 4</b>	<b>CONCLUSION</b>	29
	Acknowledgements	29
<b>SECTION 5</b>	<b>APPENDIX</b>	30

# SECTION 1 INTRODUCTION

The purpose of this paper is to provide some advice to Local Government to assist in the development of children's play opportunities in local government public spaces. This paper aims to assist Council staff, Councillors and community members in the decision-making and planning processes involved in the provision of municipal open space systems for play and recreation; provide a rationale to assist in the reduction of ad-hoc decision-making, and create a systematic and more equitable approach to open space and facility provision.

This paper takes the approach that open space planning, especially for children's use, should be aimed at providing for:

*the wide range of every-day play needs of local children, (as well as the wider population) and at complementing the play opportunities available to them in their everyday lives.*

Councils are encouraged to take a broad view of provision for play and recreation in public spaces. Play equipment areas and mown grass, cannot alone provide all that children need, and it is unreasonable to expect this to be possible.

This paper attempts to provide an approach to the basic question of how to provide for the wide range of children's play and recreation needs, in the context of the open space system and the needs of other groups in the community. After some introductory principles it aims to answer the following questions:

1. What is the nature of children's play needs?
2. How should open space for play and recreation be distributed?
3. How might open space be developed to cater for these needs?

## **Children as a significant population**

Municipal provision for children is significant because childhood experiences appear to have an important impact upon children's future development into adults.

## **Implications for planning**

The population of children living in municipalities will have important implications for both present and future provision of play and recreation opportunities. Provision for children younger than ten years is important immediately, but there is also a strong requirement to provide now for young teenagers and this will remain important as the younger groups grow up. Teenagers are already the subject of community complaints about them 'loitering' in parks and around shops, and the needs of this group need to be carefully discussed with the teenagers themselves.

## **SOME INTRODUCTORY PRINCIPLES**

### **Importance of play**

Children's play and recreation is of great importance in their physical, social, cognitive, creative and emotional development. Children represent the future of our society and planning for quality play environments is therefore seen as an investment in the future.

### **Open space users**

Children are major users of open space but their voices are rarely invited to be heard in debates over land use and space allocation.

### **Quality space-quality play**

Children are the group to whom the provision of quality open space is possibly the most significant. They are heavily dependent upon local opportunities, as they cannot travel far from home. The quality of the physical environment in which play takes place has a great impact upon the quality of the activities and their significance for the child.

### **The dependence of some activities upon the qualities of their settings**

Some activities are dependent upon certain settings (or qualities in open space), while others are more adaptable. Many children's activities are extremely sensitive to the qualities of their surroundings, and are therefore vulnerable to changes in the physical environment.

For example, many creative activities valued by children (e.g. nature exploration and cubby building) require unmanicured spaces with a supply of loose materials (branches, timber, leaves, sand etc) and which can tolerate a high degree of manipulation by child users. A degree of tolerance by adults is also required.

Other activities, such as some socio-dramatic play and small group games, require small intimate spaces, with particular features which might be used as appropriate settings for these types of setting-dependent activities.

Activities such as bird watching and nature observation are likewise dependent upon a high degree of 'naturalness', and are vulnerable to intrusion by too many people and obtrusive management practices.

People walking dogs, or playing small-group ball games, on the other hand, may enjoy a certain degree of 'naturalness', but are likely to be more tolerant of a range of other physical attributes, of other people, and of a range of managerial practices.

### **Access and Diversity**

The balance between access and diversity/quality is of great importance:

'Access and diversity emerge as the most important themes in childhood - environment policy. Collectively children require an environment with sufficient diversity that their many individual needs are met simultaneously.

Access and diversity go hand in hand. It makes no sense to improve diversity unless access is equally considered.'

### **Children's territories**

*It is important that as they develop, children have access to an increasingly expanding territory, thereby 'learning' their physical and social environments, and developing independence, mastery and competence. This expansion of territory is often severely curtailed by several factors in today's suburban environment. Physical barriers, especially roads (but also parental fears) work to contain children to relatively small areas.*

*Moore, Robin Childhood's Domain - Play and Place in Child Development Croom Heim 1986*

### **Town planning with children in mind**

The initial layout of a subdivision, and in particular the relationship between housing areas, roads of various categories, and the network of open space, can have a major impact upon the likelihood of children being able to satisfactorily expand their territories as they grow up.

These factors have important implications for planning and design. A wider range of opportunities may need to be provided within each neighbourhood to make up for a lack of access outside this immediate area.

### **Children vs. adults**

The quality of a play environment is likely to be measured in a different way by adults and children, and qualities often valued by adults (aesthetic appeal, neatness, amount spent on prominent play equipment, etc) may directly threaten values placed upon play environments by children. Qualities such as complexity, manipulability, potential for challenge and for change are likely to be valued highly by children. Children are reported to have an appreciation of the fine details of their surroundings and often the details which they enjoy are not even noticed by adults. These detailed qualities may therefore be at risk of destruction through thoughtless management practices or redevelopment plans which have not explored such sensitive issues.

### **Equal opportunity**

Open space is a finite resource and there is a potential for conflict between users. Generally this tends to be resolved in favour of adults, which raises serious issues of inequity in resource allocation. Genuine attempts to uncover the values placed upon open space by children, and to cater for these, are thus very important.

### **A system of open space**

Open space should be viewed as a system, and reserves should not be treated simply as isolated problems. Each reserve is a resource for the whole community and each should be developed to complement the others within its network.

## SECTION 2 THE ROLE OF PLAYGROUNDS

It has already been stated that the role of the public playground should be to make up for experiences not otherwise available to children in their everyday situation. It is therefore important for planners and designers to not only gain an understanding of the availability of local play resources (both public and private), but to become familiar with some of the more universal aspects of children's play behaviour and the ways children of different ages will make use of different spaces and facilities.

Play theory identifies four broad categories of play behaviour. These apply across all ages, but the way they are interpreted by each age group varies. Some types of play assume greater importance at particular stages of child development.

These categories, along with some simple examples for public play area design, are considered briefly below. They are proposed here simply as a rough checklist to help designers to broaden the range of provision for children. A more detailed discussion of design issues for different age groups is considered later in this paper.

Many of the categories listed below will overlap with one another. For example, many creative activities have an intellectual or cognitive component, and many outdoors physical activities have strong social aspects.

**Cognitive play** includes:

- ◆ activities which challenge the intellect -games of strategy –exploration and observation
- ◆ games which use and develop language

There are many ways that a municipality might ensure that such activities are possible in public parks. Provision of the following could be important:

- ◆ natural areas for exploration and observation of living things; spaces and materials for outdoor games such as chess, other board games and structures such as for 'tic tac toe', spaces suitable for games such as marbles, materials and tools for use in sand and water settings; spaces for quiet activities such as reading, contemplation and nature observation of complex spaces or structures which challenge the user's perceptual skills.

**Creative play** includes:

- ◆ sand play;
- ◆ water play;
- ◆ play in dirt;
- ◆ play with loose and found objects;
- ◆ play with art materials;
- ◆ music making, and
- ◆ cubby building and construction activities

These are not always easy activities to provide in the public domain, but sand, water, plants and trees of every type, lawn clippings, leaves and flowers, sound sculptures, etc could all be made available for play if Councils and the public recognised their value to children. More challenging is the provision of construction materials, and areas for digging and building, and the use of fences and other barriers will help to contain loose materials.

It is important that plants for play areas are chosen for the qualities they offer for children's play, as well as for any characteristics which will help them to survive the demands of a play environment. They need to be tough, and to sucker or regenerate in some other way if damaged.

**Social / Dramatic play** includes:

- ◆ role play ( e.g. dress ups, play in cubbies, shops, etc);
- ◆ imaginative play (language,'pretend' fire engines etc);
- ◆ small and large group activities, and
- ◆ hanging around', talking etc.
- ◆ traditional games

The nature of these activities varies depending upon the age of the child.

### **Social play for older children**

For young children structures such as cubbies, low decks, shop' counters, seats, small spaces, stages, hiding places etc. will foster this type of play.

Spaces defined by natural elements such as planting, with focal elements such as rocks, small seats etc. will also be of great value.

Ambiguous shapes, suggestive of any theme proposed by the child, (rather than predetermined cars, ship, boats etc.), allow for flexibility in play and between age groups.

The juxtaposition of elements in a play area is important in the fostering of this type of play, especially for young children.

Small intimate spaces may be critically important for some activities of this type. This play is enhanced by the provision of loose materials and props such as dress ups, toys etc. which are sometimes difficult to provide in a public setting. For this reason, designs incorporating sand, plants which drop interesting flowers or leaves, and other sources of ever changing loose materials, are very important. Of equal importance is the creation of an intimate atmosphere in which members of the community feel comfortable to bring their own props and play materials.



Older children will use space differently for social activities. Informal seating or perching spaces, steps and changes of level, will be adopted for various uses, including traditional games or for simply 'hanging around'.

Play structures can provide well for social activities if the designer is sensitive to the needs of users. A double swing, for example, provides for two children to swing and talk side by side, (an opportunity not available on a single swing).

Some small-group activities such as hopscotch or elastics; some ball games, and some of the traditional rhyming and running games require small spaces, changes in level, possibly firm surfaces, semi-enclosure, objects as targets and focal points, and durable planting or other elements which may be used in the course of a game.

**Physically Active play** (often referred to as gross motor activity) includes:

- ◆ running
- ◆ hanging
- ◆ climbing
- ◆ experiencing height
- ◆ agility/gymnastic activities
- ◆ sliding
- ◆ jumping
- ◆ balancing
- ◆ swinging
- ◆ crawling
- ◆ bouncing
- ◆ spinning
- ◆ rocking
- ◆ ball games
- ◆ skipping
- ◆ perceptual/motor activity -experiencing over and under, inside and outside.

These activities are generally more boisterous as a group than the others and adequate space is required in a suitable environment where other users will not be disturbed.

Some of these activities are well provided for by traditional play equipment, although others are more dependent upon the size and particular qualities of spaces or other elements (such as the suitability of trees for climbing, for example, or the amount of space suitable for a particular ball game).

## **Ball games**

Ball games have their own special requirements:

- ◆ varying sizes of space (depending upon the ages of children and the type of games) uncluttered by equipment, mounds or planting, suitable distance from neighbouring houses or windows to hit or kick a ball, a suitable surface for running, and possibly a firm surface, wall or accessory such as a ring, backboard or net.

## **Play equipment**

Play equipment can be valuable in children's skill development, and great fun for children. Fixed equipment needs to provide activities of sufficient interest, and at graduated levels of challenge. It is recommended that play equipment be carefully considered before purchase to ensure that it:

- ◆ provides the kinds of activities which children enjoy;
- ◆ provides a good range and choice of activities for the desired age groups;
- ◆ provides for progressive skill development and mastery of new challenges;
- ◆ complements other activities already available in the neighbourhood, and
- ◆ complies with all relevant safety standards.

## **Significant elements in children's environments**

Children appear to have a sense of detail which is not generally shared by adults. It is not always easy to appreciate what it is about a place which gives meaning to children.

Some physical features which have been reported by children to be of great significance, and which may need to be consciously either provided, protected or encouraged by Councils, include:

- ◆ landscape elements such as trees and rocks, small 'secret' spaces enclosed by branches or planting on narrow pathways;
- ◆ creeks and watery environments -live creatures (yabbies, tadpoles, birds)
- ◆ seasonal features such as flowers and fallen leaves;
- ◆ movable objects which can be adopted for play;
- ◆ cubbies built by children themselves;
- ◆ found objects or 'treasures';
- ◆ sand and earth (especially where there are opportunities for digging, and the creation of fantasy environments for use with toys) -special and ephemeral features which will be used opportunistically such as stockpiles of sand or mulch, long grass, fallen branches, partly constructed buildings etc.

A policy which attempts to address the wide range of children's needs will need to ensure the availability of a balanced set of these elements for children's use.

## **SECTION 3 PLANNING, SITING & DESIGNING PARKS FOR PLAY & RECREATION**

### **Planning a diverse system of parks and playgrounds**

It is an important principle that each reserve, park or playground must be considered as part of a *system*, and not as an isolated design problem. The 'system' has three main elements -

- ◆ the patterns of residential areas, divided into neighbourhoods by the road networks, and punctuated by parks and reserves.

This principle requires planners and designers to become familiar with all the parks and playgrounds in the municipality to facilitate the development of a system of parks, each of which offers a different and complementary set of play and recreation opportunities, especially to children within each neighbourhood. It will require careful consideration of the design details in each park, and an analysis of the contribution of each to play and recreation opportunities.

Naturally the location of each reserve and its relationship with residential areas, other community facilities and with concentrations of populations of children and other special groups will also require attention.

There are a number of ways of going about the task of reviewing existing conditions and planning a successful system of parks and playgrounds. A number of different people will need to be involved in some tasks and a comment on the involvement of the community in planning is provided later in this paper.

### **Mapping the open space system**

To help provide an overview of the distribution of parks and playgrounds a good series of maps of the residential areas will be vital to provide the essential overall context into which individual reserves fit.

It is strongly recommended that maps of the municipality should be prepared and analyzed, as a basic planning tool for use in all future work. Use the maps for the following purposes:

#### **1. Define residential neighbourhoods.**

It is useful to consider the 'neighbourhood' as the basic unit of the residential system, for the purposes of planning and analyzing the distribution of parks.

A neighbourhood is defined here as a residential area whose boundaries are formed by any barrier (such as busy roads, railway lines etc) which children cannot be expected to cross independently. Such barriers therefore prevent easy independent access to parks and reserves outside the neighbourhood, and tend to restrain children's movements. Each neighbourhood thus needs to provide a package of diverse play and recreation opportunities to its children, in particular, who may be quite dependent upon these neighbourhood opportunities (having few options to move farther afield).

## **2. Classify existing reserves as Local, Neighbourhood or Regional parks**

The establishment of a hierarchy of parks takes into account that different kinds of parks will be used in different ways, and require different planning and design approaches, depending upon:

- ◆ how far people have to travel to use them (i.e. the size of the 'catchment');
- ◆ how they travel (e.g. foot, bike or car);
- ◆ the size of the space;
- ◆ the kind of setting and experiences they offer.

This can be a useful approach as it guides planners in the location, and the type and amount of development which will be appropriate, for each reserve.

The criteria for classifying parks into Local, Neighbourhood or Regional parks, and the siting and design issues relevant to each, are discussed later in this paper.

## **3. Identify residential areas currently lacking in access to open space (i.e. housing more than 300m away from an accessible reserve).**

A strategy will need to be prepared to address such shortages, particularly in areas which are indicated as a priority after demographic analysis (see below) Remember, however, that the success of open space will not only be determined by its *accessibility* but also by the *quality* of opportunities there. These qualitative issues are addressed elsewhere in this paper

## **4. Compare with maps of demographic information**

Maps of residential areas and parks can also be overlaid with maps of demographic information from census data or other sources- in particular with maps showing-

- ◆ percentage of populations of children, (and potentially high concentrations of open space users);
- ◆ areas of low income (where people tend to be more dependent upon their local facilities and resources);and areas with concentrations of medium or higher density housing (and therefore a lack of private play space).

Neighbourhoods which combine concentrations of these factors with a lack of accessible open space can be identified as priority areas for resource allocation. The process of mapping will help to clearly identify such neighbourhoods.

## **Preparing an Open Space Strategy**

Once the overall picture has been analyzed, a strategy is then required to:

- ◆ identify shortfalls in the provision of open space (i.e. parks and playgrounds);
- ◆ consider ways of making up for a lack of access to parks (such as the acquisition of new land for reserves, and /or providing centre-based recreation and play programs as a substitute;
- ◆ apply the criteria in this document to establish how each reserve might best provide for local needs, with particular emphasis on priority areas and on providing the *qualities* needed to meet the play needs of children to ensure that there is balance in the type of provision for play and recreation, both within each neighbourhood, and across the whole municipality.

## **Local parks-planning, siting and design issues**

### **Local parks**

The basic open space unit (the local park) needs to be within walking distance of most homes. This level of park is intended to provide for the every day play and recreation needs of children, as a matter of priority, but the design should not exclude other park users.

Young children and their care givers, (as well as low income groups and the elderly), are to some extent captive' in their immediate residential area and only limited distances tend to be travelled on foot. Children cannot be assumed to be able to cross busy roads to reach play areas.

The local park is actually a very important space, and careful design is needed to maximize its potential, especially as many such parks are extremely small.

Ideally each neighbourhood will have a number of local parks, each of which:

- ◆ has only a small catchment (i.e. the size of area from which it draws people) will be not much more than 200-300 meters of each home (i.e. walking/bike distance);
- ◆ will complement the others, providing interest and variety around the neighbourhood. This means that a different approach to design and provision of play and recreation should be taken in each park- i.e. provide for different kinds of play, different types of equipment, a different setting;
- ◆ although smaller than neighbourhood parks, local parks should not be so small as to limit usefulness, nor to preclude interesting design, and
- ◆ should preferably link to other reserves. This will extend the usefulness of each.

### **Functions of local parks**

Local parks have a number of purposes and functions. They need to be developed as a network which provides varying settings for:

- ◆ the everyday play needs of young children and their care givers;
- ◆ close-to-home outdoor recreation needs of the elderly and other community members, and
- ◆ the need for visual relief and 'breathing space' in a built neighbourhood, by people of all ages.

In addition, local parks often must contribute to:

- ◆ the close-to-home play requirements of older children, to some extent;
- ◆ for spontaneous group activities such as ball games;
- ◆ if well designed they may provide physical links to other open space systems, and
- ◆ they often provide some form of wildlife habitat.

### **Shared spaces**

It is clear that Local parks are to a great degree shared spaces and will tend to be used by different groups at different times of the day. Very small reserves are more difficult to design for more than one type of use and this is an argument for the allocation of reasonable amounts of space, even for the local park, which tend to be the smallest park in the hierarchy.

### **Multipurpose design**

It is quite often possible to design for a 'priority group' (as described below) while at the same time ensuring options for multipurpose or flexible use by others. The siting and design of individual components of the park will largely determine the success of such multipurpose design.

**The way a park is designed can either create or limit options for multiple use.**

### **Priority users**

The detailed design of local reserves is very important, as subtle details can either exclude various users, or make them feel welcome. Priority must be given (where necessary) to those most dependent upon a particular space (ie those with the fewest options to go elsewhere). Young children, the elderly, and people with disabilities are thus considered to be priority users because of their limited mobility and restricted options.

### **Complementary settings**

Each Local park needs to be developed to complement the others in its neighbourhood -ie each should offer its own setting, offering a different set of opportunities from the parks nearby.

For example:

- ◆ one park may be designed with a small paved section for ball games, set amongst a path system, trees and seats;
- ◆ another may combine a set of modern steel play structures with a well maintained grass ball kickabout area surrounded by a row of deciduous shade trees;
- ◆ a third may have part of the site planted thickly with indigenous planting, with a bumpy dirt path weaving in and out of the 'forest' linking some visually unobtrusive low timber structures as focal points for play activities.

Variation of the park layout and the style of development thus maximizes the overall range of opportunities available locally.

### Site selection for local parks

The following criteria (not necessarily in priority order) should be considered when comparing sites for future development into local parks:

- ◆ physical qualities of the site;
- ◆ sites with natural qualities which may enhance play and recreation (trees, creeks, rocks, undulating landforms, views etc.) should be favoured if they are available;
- ◆ accessibility to a reasonable number of residents, especially children is of fundamental importance for local reserves. Apart from the need to be within 250-300m of residences, the presence of footpaths, and accessibility to people with disabilities or with prams or pushers etc is important;
- ◆ off-road links of one park site with other reserves, means that children and others can move further afield if they choose to, and can walk or cycle along parkland away from the road system. Local parks, which are often small, tend to benefit by such links, which effectively expands the park size;
- ◆ the prominence of local parks is important;

*People need to see a park to use it. Siting of a park on a poor block, effectively hidden by houses, is generally undesirable. The informal surveillance by residents around a more prominent park also helps to deter vandalism.*

*Siting in relationship to houses has a major impact upon the nature of use. It is preferable to site parks so that they are faced by the fronts of houses, rather than rear fence lines. There are a number of reasons for this (including the points above), but children in particular tend to like to play where they perceive the action is. The action tends to be where people congregate, where they can be seen from houses and where parents can keep an eye on children (if they are young). This is one reason why the street outside the home has always been a popular play place.*

- ◆ proximity to other community facilities - i.e. schools, kindergartens, elderly citizens centres, will be likely to affect use of a park and the park can provide a valuable complement to the facility;
- ◆ size of local parks will have an impact upon their recreation potential. A size of less than 1 hectare appears to be marginal for a local park, making both design and maintenance more difficult, and wear and tear greater. Very small reserves increase the likelihood of the risk of overlooking neighbours and damaging their property (from balls, for example). In some cases however, even a very small park may be all that is available, and it is considered preferable to provide some open space for both visual and recreation play reasons, than none at all. Sometimes a reserve may have an interesting shape, natural feature or landform which might be some compensation for being very small;
- ◆ sites with severe design and maintenance constraints such as poor drainage and very steep slopes should be avoided for local parks unless these can be utilized in the design;

- ◆ sites near very busy roads where traffic will pose a hazard to users and noise will intrude, or where some other hazard exists, should preferably be avoided for local parks, as it is more difficult to overcome these problems in a small reserve.

### **Neighbourhood parks-planning, siting and design issues**

#### **Definition**

Neighbourhood Parks comprise the next level above the local park in the proposed park hierarchy. These tend to be larger than local parks and to offer a different level of provision of facilities or other settings for play and recreation. However they do not generally offer the range of provision of facilities that a Regional Park may offer.

It is assumed that:

- ◆ people will travel further to use Neighbourhood parks than for local parks; and that their modes of travel may differ (possibly more trips by car). Designers will thus need to take into account the possible need for parking;
- ◆ it is still the intention that residences would have access to one Neighbourhood park not more than approximately half a kilometre away.

#### **Design, function and purpose of Neighbourhood parks**

Neighbourhood parks tend to be designed to cater for the needs of more than one group of user, and for more than one type of activity. For example:

- ◆ they may offer toddler, junior and senior play areas, sited around a picnic shelter and tables. These facilities may be adjacent to a sports field which also fits into the Neighbourhood category, catering for a moderate level of competition but possibly not offering the range or sophistication of sports facility offered by a major regional sports complex;
- ◆ alternatively, a Neighbourhood park might be set along an urban waterway or reservoir offering a natural setting for walks, wildlife habitat and nature observation, and possibly low key, water-based activities (paddling and wading rather than swimming).

#### **Relationships between Local and Neighbourhood parks**

Neighbourhood parks need to be designed to complement their Local park network and must also take into account other Neighbourhood parks in the system. This means that designed elements found in any of the Local parks in one Neighbourhood should, as a matter of principle, not be repeated either in any of the local parks in the same Neighbourhood, and nor should they be repeated in any of the Neighbourhood parks within the same system. In this way the residents of any one Neighbourhood will have maximum choice available to them.



### **Selection of suitable sites for Neighbourhood parks**

The following criteria (not necessarily in priority order) should be considered when comparing possible sites for Neighbourhood parks. Many of these criteria apply to any reserve, whereas others are particularly relevant for Neighbourhood parks:

- ◆ availability of land of sufficient size. Neighbourhood parks need to be larger than local parks so that they can physically offer a more complex variety of opportunities than Local parks. It is impossible to suggest an absolute size, but the reserve must be large enough to be suitable for the proposed activity. As it is likely that there will be greater numbers of users, Neighbourhood parks could have a greater impact upon the immediate residents (depending upon the nature of use,) so sufficient size must be allowed for the possible need to provide car parking, to buffer noise and active sports from fence lines, and to contain the activities well within the site;
- ◆ the practicality of providing additional services or amenities such as toilets, shelter, lighting, barbecues, pavilions, fences etc will need to be assessed;
- ◆ accessibility to a reasonable number of residents, by foot, bicycle and car is important;
- ◆ links with Local parks or other Neighbourhood parks will maximize opportunities for people to movement through the Neighbourhood;
- ◆ like Local parks, some informal surveillance of a reserve by neighbouring residents is desirable. However issues such as noise, overlooking and night lighting may also provide some nuisance value to residents, and careful design will be required to minimize these problems;
- ◆ proximity of Neighbourhood parks to other community facilities -such as schools, sports clubs etc often facilitates shared use of the park and may be an economical use of limited resources, and
- ◆ hazards within Neighbourhood parks should either be avoided, overcome, or managed carefully to minimize the risk of injury to users. Hazards might include elements which already existed on the site (such as unstable rock faces, dangerous deep water bodies,) may be a result of poor design (such as conflicts between children and cars) or may be in the form of a stand of indigenous trees which drop limbs but are nonetheless of ecological significance.

### **Regional parks - planning, siting and design issues**

The third and 'highest' level in the proposed hierarchy is the Regional park. These tend to be the largest parks of the three considered here, and serve a wider catchment population than Local and Neighbourhood parks.

#### **Function and purpose of Regional parks**

Regional parks tend to be sited where a special feature, whether natural, or manmade, (such as a National Park, a water body such as a large river or dam, a cluster of important sporting facilities, or an historic site) attracts people from a wide area, (including from outside the municipality).

It is assumed that visitor stays are longer, and that they are attracted for experiences not otherwise available in the Local and Neighbourhood park system.

### **Design issues**

A range of amenities such as toilets, picnic tables, barbecues, parking etc. could be required, but the appropriateness and the nature of such facilities will depend upon the character of the site and the aims of the management plan. For example, an outstanding nature reserve may offer unique opportunities to observe wildlife, or to experience a 'semi-wild' setting, and a management plan may deliberately set out to limit the provision of built amenities. Alternatively, the objective may be to make up for a lack of 'built recreation facilities in the region and a full range of built amenities may be required.

It may be that the municipality does not currently have any Regional parks. It is worth considering whether there is a lack of larger, more specialized opportunities for recreation in the region (including in nearby municipalities), and whether there are suitable sites worthy of development for such a purpose.

### **Site selection**

The following issues should be considered when considering a site for development into a Regional park:

- ◆ presence of natural qualities which have special or unique features unlikely to be found elsewhere in the region; or the potential to develop the site in a special or unique way which is appropriate to the character and needs of the region.
- ◆ relationship to residential areas, and the potential of the proposal to be either a nuisance or a benefit to local residents, needs to be assessed.
- ◆ availability of sufficient land for the proposed use is of fundamental importance.
- ◆ The practicality of providing the full range of services or amenities suited to the nature of the proposal needs to be taken into account.

## **Design elements for parks of all types**

### **Shade**

Summer shade is vital to users of open space, particularly around play areas and seating, and especially around sand pits. Shade trees are highly desirable but because of the time taken before they will make an impact, built shade in the form of pergolas or shelters may also be appropriate in some reserves. Shade from the western sun is most important.

### **Paths**

Paths should be sited carefully to minimize their impact upon the other uses of a park. For example, two paths criss-crossing a reserve will break it into four small spaces which may each be too small to be useful.

Busy paths, especially cycle paths, may intrude upon quiet spaces and disturb users (e.g. sand play, bird watching). Paths open up otherwise inaccessible places, and the desirability of a path cutting through an area must first be carefully assessed.

All path surfaces should be selected to blend visually into the surrounds.

Path systems need to be considered for at least two purposes:

### **'Functional' paths**

These have as their main purpose the efficient circulation of people between two or more points. Smooth sealed surfaces, without barriers to wheelchair users or to prams or pushers, and without muddy patches are important.

Such paths may have 'functional' convenience as their primary purpose, but the pleasure of users, and the visual and functional impact of such paths on the landscape are still important. They need to be well-sited so that users are not forced to go far out of their way (as this will encourage them to make their own short cuts) but they need not be 'dead' straight, or unattractive. Sometimes it is valuable to wait until patterns of use ('desire lines') develop across a reserve before constructing a 'formal' pathway, as the resulting wear patterns will indicate exactly where people cross the reserve.

### **Recreational paths**

These are not necessarily the quickest way between points, but may be sited to pass through attractive or interesting areas, simply for the pleasure of the journey. They may be intended for walking or cycling and the surfaces should be considered for their contribution to the recreation experiences of users. For example, rough or bumpy dirt paths are increasingly rare in the suburban landscape. Children derive great pleasure from walking or riding along such paths, especially if they pass through varied terrain, over puddles, bridges and other features, and at times pass through overhanging vegetation or long grass. These opportunities are important as part of the recreation spectrum, but should not be confused with the need to provide convenient access ways through the neighbourhood. Both are needed.

### **Accessibility**

An accessible landscape is one without barriers to particular groups within the community. Children, the elderly, pregnant women and people with a range of disabilities, as well as adults with prams and shopping trolleys, may all be disadvantaged through poor suburban layout and open space design. Design for accessibility thus benefits the whole community. Designers of parks and playgrounds need to be aware of the needs of disabled children as well as disabled parents or caregivers.

There are at least three levels of accessibility which are relevant to park and playground design:

- ◆ access to the reserve;  
Barrier-free routes to the reserve from residential areas require footpaths and kerb crossings: safe pedestrian crossings if required.
- ◆ access into the reserve;  
Common barriers include level changes at park entry; narrow gates, pipe barriers or other inaccessible fence designs; and rough loose paths or soft muddy or grass surfaces. Childproof gates can also prevent access to wheel chair users.
- ◆ access to the amenities of the reserve.  
Common problems include inaccessible seating (i.e. on a raised level); inaccessible play equipment and mulched play areas, and inaccessible toilets, barbecues, tables or shelters.

It is recommended that all new developments should be designed for accessibility at all three levels. This is not to say that every item of play equipment needs to be designed for wheelchair users, but it is desirable that at least some of the items should be accessible. Handgrips and support rails on many items of play equipment will benefit able-bodied as well as disabled users of playgrounds.

### **Seating**

Seating is an important way of encouraging adults to accompany their children to play, as well as providing for the elderly and others. Seating should be available in winter sun and under summer shade. More than one configuration of seating is valuable, to cater for more than one group at a time, and to facilitate either solitude or interaction, depending upon the users wishes.

A variety of styles of seating is important:

- ◆ formal seats with back and arm rests are valued by many older people;
- ◆ care-givers need to be able to sit close to playing children. and
- ◆ edges to 'perch' on and to adapt to more than one purpose (such as walking and balancing on, as a table for sand play, as a marker or boundary in games etc) will be valued by both children and teenagers.

A diverse range of seating is thus more likely to satisfy the needs of a diverse range of users.

### **Tables**

Picnic tables are not always necessary in a reserve. They may however be useful if sited so that adults can supervise children while seated. The shape of tables needs to be considered, and their orientation, both for the comfort of users and for ease of supervision. Hexagonal or octagonal shaped tables allow parents to change their position and to keep an eye on children in any direction.

## **Barbecues**

Generally, barbecues are not considered to be appropriate for Local reserves, but they may be considered for Neighbourhood or Regional parks if the conditions are suitable. The installation of barbecues often requires an associated level of facility provision (tables, toilets, water, shelter, lighting, electricity supply, car parking etc.) and a commitment to maintenance. In Neighbourhood parks these issues still need to be carefully weighed up, to ensure that these facilities are appropriate on any given site.

Once decided upon, barbecues and associated facilities should be sited and designed so that they relate well to one another, and to areas such as **play** areas for young children. They must not intrude into areas of the site where they or their users are likely to have a negative impact.

Other issues which affect park design:

## **Vandalism**

Vandalism is a complex issue, however there are some simple strategies which may help to reduce its impact. A prime deterrent against vandalism is to make parks attractive to large numbers of 'legitimate users', whose presence will deter those with less legitimate intentions. Siting of parks and structures so that they can be kept under informal surveillance from streets and houses may also help. Constant, quick repairs after damage will reduce the impression that the municipality does not care about its reserves and reduce opportunities for further damage.

As older children and teenagers are commonly considered to be the main offenders, it is strongly recommended that the municipality addresses youth issues from the point of view of the teenagers themselves (i.e. not necessarily from a 'policing' point of view). It often appears to be a sense of purposelessness, and lack of control over one's surroundings, which leads people to vandalism. In some cases the provision of opportunities for children and young people especially to have a meaningful contribution into the planning and design of their neighbourhood may prove beneficial from many points of view.

## **Privacy for residents**

The design of a park or playground can have both a negative and a positive effect upon neighbouring residents. While residents must not be allowed to treat local open space as exclusively for their own use, they do have a right to acceptable standards of privacy and amenity.

Play structures, in particular, need to be sited carefully to prevent users overlooking private yards, and noisy items should preferably be avoided.

It is not possible to recommend exact clearances from fence lines, as each situation will vary with the slope of the land and the height of proposed structures, but careful analysis should be carried out to ensure that in each case the privacy of neighbours is protected.

Conflicts with residents are most likely to occur where there is a shortage of space, in which case careful design will be extremely important. To minimize inevitable problems, precautions such as very high mesh fences to restrain balls may also be necessary. These are considered more conducive to play and recreation than signs prohibiting the use of balls in parks.

### **Community Education**

At times conflicts over the use of parkland are likely to arise. It is important in these circumstances that Councils retain a strong planning framework for its actions, explains it fully and carefully, and does not allow a vocal minority to exert undue pressure for ad hoc change. As a matter of long term policy, time and effort spent in participatory processes, and educating the community about the reasons for certain Council decisions will be well spent.

### **Playgrounds-some specific design issues**

The specific design chosen for a site should reflect the best way that the needs of users (as described in a previous section of this paper, as observed, and expressed in discussions with users themselves) can be matched with the opportunities offered by the site, taking into account other recreation opportunities in the neighbourhood and region.

It is at the design stage that the issues which have been discussed earlier in Section 11 must be realized. Factors such as children's heightened perception of detail, and measures of quality in open space such as:

- ◆ complexity;
- ◆ flexibility /mufti purpose potential, and
- ◆ manipulability of objects and materials on the site need to be kept in mind.

These apply to every design detail of:

- ◆ the qualities of the site itself;
- ◆ the choice and layout of structures;
- ◆ planting design;
- ◆ the inclusion of water, sculpture or other 'special' features, and to
- ◆ the siting and design of features such as shelters, paths, retaining walls and seats.

In every case it is advantageous to design into a site features which can be used in more than one way and by more than one age group.

### **Play Equipment**

A playground can be designed in many ways - it is generally defined as an area set aside for children's play. Play equipment can be part of a design and should be incorporated into the overall plan. When play equipment is to be included in the overall plan, it needs to be carefully designed or chosen to ensure that the experiences it offers children are diverse, and complement what is already available, both in other local reserves and also within any one reserve.

Achieve diversity by ensuring that:

- ◆ there is a good balance between types of play activities offered for each age group (i.e. climbing, swinging, sliding, balancing, sand play, hanging, hiding, agility activities, cubbies, spinning, role play etc). Do not repeat any one type of play at the expense of others;
- ◆ there is a balance between moving and static equipment;
- ◆ if there is more than one of any item, e.g. slides, ensure that different styles are used (e.g. straight slide, tunnel slide, spiral slide, roller slide, wave slide etc). On the same principle, make sure there are also different types of swing seats available to suit different users;
- ◆ different brands are chosen from park to park;
- ◆ different materials are used, and
- ◆ the nature of site works and use of landscape elements varies.

### **Design for supervision**

Young children, especially those under six years, are generally dependent upon adults or older children to take them to parks and play areas. Parks and playgrounds for young children therefore need to be designed to attract adults too. Supervision has been found to be a significant factor in playground injury prevention, it is desirable to encourage adults to supervise their children.

Seating in comfortable, sheltered and attractive settings close to children's play areas is one way of achieving this, but siting play equipment areas close to picnic areas, shelters, barbecues and other areas where adults are likely to congregate will also be important.

### **Playground Safety**

It is not the intention of this paper to address in any detail the issue of playground safety. However, playground injuries are a significant cause of childhood trauma and care should be taken to prevent design-related injury, to encourage supervision of young children by adults, and to regularly inspect and maintain playgrounds.

Australian Standards are the current point of reference and all play areas and play equipment must be designed in accordance with these documents. PRAV represents the industry on the Playgrounds Safety Committee and councils through membership of PRAV have access to all advice and information.

### **Maintenance**

Playground maintenance is most important in the prevention of injury. No new playgrounds should be developed without a serious commitment to maintenance. The design and materials of playgrounds, and the frequency and nature of use, will determine the maintenance requirements for each site.

### **Design for different age groups**

Section 11 discussed four broad categories into which play behaviour can be summarized (i.e. cognitive, creative, social and physical play.). The most common weakness in most playgrounds is their focus upon a narrow band of physical activity, at the expense of other kinds of play. It is recommended that

playgrounds be designed to facilitate activities from each of the four categories. These will need to be provided in different forms for different age groups, as children's play activities, their interests and their abilities change dramatically as they develop. Play areas need to cater for this range of interests and to facilitate the gradual development of skills.

Young children are generally unable to cope with the some challenges as older children, due to their smaller physical stature, lower level of skill development, and because their conceptual ability does not enable them to anticipate danger. They are common victims to injury on playground equipment which is designed for older children. Play activities for junior children (between three and seven years) and play activities for senior children (between seven and fifteen years) should be designed within the one playspace to ensure appropriate supervision and participation of children of all ages and abilities. .

### **Toddlers**

Public play areas can provide for this age group, with very simple settings for:

- ◆ crawling and walking on well maintained grass;
- ◆ running up and rolling down gentle slopes;
- ◆ swinging in very low 'baby' swings with age appropriate seats such as rubber cradle seats with front closure, or tyre baskets;
- ◆ climbing up and down very low level changes (150mm max) -sliding down very gentle slides;
- ◆ rocking with an adult on a gentle rocker;
- ◆ play in a small sand pit, and
- ◆ hiding between very low shrubs (in clear view of an adult).

The kinds of environments which these age groups will enjoy will be small scaled and detailed environments with friendly surfaces and a familiar adult close by. These age groups cannot perceive danger and must be protected from hazards. Play areas for young children must be sited away from traffic.

### **Junior children**

The ages from three to six years, cover a wide range of development in children. Co-ordination and physical skill development is relatively proficient by the age of 5 years and children of this age need to practice and hone skills such as:

- ◆ climbing;
- ◆ running;
- ◆ agility skills;
- ◆ skipping, and
- ◆ ball play

Equipment and spaces for these activities need to be designed to take into account that the skills of these age groups are still not fully developed, and realistic limits to challenge and hazards must be set.



These years are also the peak of dramatic play and settings and props are required where children can:

- ◆ play in small groups with sand and water, and
- ◆ build cubbies.

Although playgrounds may not be the main focus of activity for some older children, they are still likely to be used for certain activities such as for:

- ◆ fine-tuning gymnastic skills such as on agility items, turnover bars and chin up bars;
- ◆ swinging in pairs. Swings with more than one seat are likely to be more popular than single swings, as swinging and talking together is popular with these age groups, especially girls;
- ◆ extending physical challenge. This will involve children taking advantage of any challenge provided by the playground itself-and also creating demanding challenges for themselves, such as hanging from one hand only, jumping further, and from higher levels, somersaulting from platforms, and climbing onto roofs and other high points (which were not necessarily designed to be accessible), and riding bikes down accessible slides. Such behaviour can be very demanding of structures and components as children will extend equipment such as swings, for example, to their physical limit; and will load equipment with large numbers of children. Such behaviour is however foreseeable and needs to be anticipated by the designer.

Older children may use also play equipment as:

- ◆ incidental props in their group games. For example play structures may be used as part of obstacle courses, part of chasing and hiding games, as a lookout or a refuge;
- ◆ as a meeting and socializing place for after school activities, as a 'base' for group activities. Individual structures may be adopted by a particular 'gang' and used in their games as a fort or hideout or other form of territorial expression.

Spaces for other activities may be just as important as play equipment:

- ◆ open grassed areas for ball games;
- ◆ ball play areas with hard surfaces, backboards, informal courts;
- ◆ places to ride bicycles and skateboards;
- ◆ hiding and running games
- ◆ areas where traditional small-group games will occur (such as ballplay/counting and rhyming games, elastics, hopscotch, marbles etc)
- ◆ some hard surfaces and changes of level, as well as small scale spaces (i.e. areas within a park which are partly enclosed, for example, with possibly a backdrop of planting, seats or a low wall which children will use for various activities) and features of interest such as an interesting rock outcrop or low branching tree which will be able to be adapted for a number of play purposes.

## **Teenagers**

Areas specifically designed to meet the needs of teenagers are rare in open space systems. They are one of the 'forgotten' groups who are often seen as a threat by adults and are rarely consulted about their needs and interests.

Teenagers need to be consulted about the ways that they would like to use open space. Any opportunities for their involvement in the design and construction of their own spaces are worth exploring, as a means for positive contribution into their environment and for social and skill development. The assistance of Council or other local youth workers should be sought regarding such consultation processes with the young people.

The opinions of teenagers who actually use parks should be sought (preferably on site) and the kinds of information which need to be discussed includes:

- ◆ what they do there;
- ◆ what they would like to do;
- ◆ what they dislike about open space at present, and
- ◆ how the park design could be improved to meet their needs.

A trusting atmosphere in which it is clear that the Council is genuinely interested in the opinions of users needs to be clearly established. Similar sorts of information and opinions from non-users should also be sought from teenagers who gather in other places - either at school or in other local 'hangouts' such as around local milk bars etc.

Accessibility for teenagers without cars is an important issue. The need for meeting points is very strong. Designers need to consider:

- ◆ changing about meeting places with lighting. Pergolas, picnic areas and shelters may be used for this purpose.
- ◆ structures which can be used in different ways by a group- i.e. just sitting and talking, climbing and perching; drama type activities etc.
- ◆ hardened ball play areas - hard surfaces, backboards, courts;
- ◆ skateboards/roller-skating areas, grassed areas large enough for kicking balls, and
- ◆ areas where horse riding is permitted

Opportunities for teenagers and older children to be involved in construction and planting activities should also be investigated - some groups will find great interest in the construction processes.

The supervised adventure playground with its emphasis on children and teenagers constructing their own 'huts', cubbies and other structures such as pigeon houses, animal hutches etc, and the resulting skill development and social networks (if competent leaders are engaged) may again be worth exploring. Many of the inner city programs also take participants away on camps and the 'playground' concept thus extends to meet the particular needs of the groups involved.

## **Adults**

Adult use of parks and playgrounds has already been referred to in this paper, but mainly in the role as supervisors of children. It should also be noted that there is no good reason why adults should be excluded from using playgrounds and suitable play equipment in their own right. This topic will not be addressed in any detail here, but suffice to say that it is a good idea to ensure that some items of equipment in a play area are suitable for adult use.

The provision of swing seats which can accommodate adults, for example, is a pleasant way of encouraging adults to use park facilities either on their own or with their children.

Naturally, provision for adults at the exclusion of child appropriate seats is not the intention, but planners are simply encouraged to consider adults as one group of potential users. Design loadings and structural requirements of the safety Standards require that most equipment should be able to withstand use by an adult in any case.

## **Community involvement in planning and design**

The terms 'participation in planning', 'community involvement' and 'community consultation' are different terms commonly used to describe the processes of involving a community in decision making about issues which affect their lives.

There are many different situations under which such 'participation' occurs. Sometimes it is a token gesture from an authority, seeking community approval for decisions which in reality have already been made. In other cases the community may be given a choice of perhaps two or three options which have also already been devised.

More 'genuine' participation in planning opens up the real decision-making processes to members of the community. Such processes can be challenging, will take time and may be costly. However there are many good reasons for including members of a community in planning, and for seeking detailed information from them about their play and recreation behaviour and preferences.

## **Some benefits of involving the community**

The processes of discussion, research and decision-making tend to empower people and result in 'community building' benefits which can have a positive effect on many aspects of participants lives. The benefits of these processes often seem to outweigh the benefits of the final 'product'.

The sharing of local people's personal observations and local information with designers is also a useful and important part of the design process. As an outsider a designer is rarely aware of all the details which affect a site. Careful observations of how and why people use parts of a site, and discussions with users reveal information which would otherwise be unavailable.

Participatory planning processes do also make good economic sense, in spite of the time needed to be spent on them. Through such processes. there is likely to

be a better match between community needs and recreation or play provision, and the community's investment of limited resources is less likely to be wasted.

### **Methods of community involvement**

Participatory planning processes require genuine communication to take place between a broad cross section of community members, and those who make final decisions. For this to occur it is recommended that more than one type of process is used, to ensure that certain groups are not excluded, either deliberately or **by** accident.

For example: Public meetings tend to be biased towards the opinions of those who can attend, and those who are vocal and articulate. Public meetings are also not an ideal setting to elicit personal, detailed information from people who make use of a site (especially children). Public meetings will nonetheless be a useful tool as part of a 'package' of techniques, but may be best kept until after more detailed personal observations have been gathered from other sources. \*Written questionnaires are biased towards those who can read, and answers are confined by the ways questions are formulated.

Both methods are commonly relied upon and both tend to exclude children. As children appear to be the main users of open space, these flaws naturally have serious implications for planning.

It is of great benefit if small groups or individuals can feel comfortable enough to convey in some detail information their thoughts about:

- ◆ how they presently use the site;
- ◆ details which are significant to them;
- ◆ why they do not use the site, and
- ◆ the kinds of play and recreation opportunities they seek.

This kind of behavioural information is very important and leads to more constructive and sensitive design results. Questionnaires asking participants to tick a shopping list of play equipment are limited because the list may not be relevant to their situation. The most useful information on such questionnaires is usually to be found in the section provided for other comments.

*It is recommended that:*

- ◆ *information should be sought from observations and discussions with users on site at various times of the day and week; (i.e. during weekdays, after school hours, on summer evenings, on weekends etc), In this way a broader range of users is likely to be involved;*
- ◆ *key groups such as school children, parents, teenagers and neighbours should be sought out where they already congregate (e.g. at school, playgroups, kindergarten parent meetings, at shopping centres etc). Discussions held where people gather are more likely to be fruitful than expecting people to come to a special meeting at a less convenient time and venue. Some groups may then wish to show planners details of interest on site, and*

- ◆ *public meetings and carefully worded open-ended questionnaires may then be used to complement these other sources of information.*

## SECTION 4 CONCLUSION

This paper has been prepared to assist councils within Victoria plan and design better play and recreation spaces which are accessible, equitable and provide a diversity of experiences for children and young people.

Whilst playgrounds as we know them are only a small part of a child's play experiences we know that quality is as important as quantity in the selection of sites for open space, and that accessibility is critical in determining usage, especially by children. No park or reserve should be considered in isolation, and open space should be treated as an interrelated system; and genuine participatory planning processes will result in a better matching of open space with community needs.

The role of planners in establishing the framework and layout of new residential subdivisions has not been discussed in this report, but the serious implications of this role must also finally be acknowledged. The pattern of the original subdivision will determine to a large extent the degree to which children, in particular, will be able to move independently around their neighbourhood.

The issues of traffic speeds and frequency in residential streets are strongly influenced by the original street layout and affect the safety and accessibility of a suburb. The quality of the sites set aside for reserves in the original layout, and the potential for linking these with each other to create an off road network of parks will impact forever on the quality of life for children and young people in a particular subdivision.

Councils are urged to carefully consider these issues and to ensure that the implications of all planning and design decisions, and especially their potential impact upon children and young people are understood. Provision of quality play and recreation opportunities will demonstrate a commitment to investing in children as our future.

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## SECTION 5 APPENDIX

**The Recreation Opportunity Spectrum (ROS)** is a *recreation planning tool* which was developed in the United States for use in broad scale forest recreation planning. Some of the important principles used in ROS are also extremely valuable in the Australian municipal context, and these are outlined briefly below. Fundamental to ROS is the principle of **diversity** - that:

*The more diverse the range of opportunities available, the greater the likelihood that the diverse range of individual recreation needs and wants across the community will be met.*

**Settings are the physical, managerial and social attributes which give value to a place.**

The combination of these attributes determines the types of play and recreation opportunities which are possible or likely to take place in that setting.

### **Planning a range of settings**

The range of open space settings in any municipality will by necessity reflect the physical and managerial opportunities and constraints which are available, both overall and on each site, but, consistent with the above statements on diversity, open space should be planned to attempt to reflect the range of needs which are expressed within the municipality, as far as is technically feasible.

Clearly not all municipalities will be able to offer its residents a true wilderness setting, for example. It is possible, however, to consider how small areas of 'nature' might be protected and used for recreation - such as to better provide for the needs of those whose activity preferences are dependent upon certain natural qualities in open space.

A **spectrum** of opportunities is proposed by ROS as the best way of meeting the diverse set of community needs, (and of protecting the resource base). In its original context the spectrum was proposed on a continuum from 'natural' (i.e. remote wilderness) to 'highly modified' (i.e. man-made settings), but the availability of certain recreation experiences is of course limited to what is technically feasible within any one context.

When applied to settings for children's play, such a spectrum needs to span from activities in semi 'wild' settings dominated by planting and landscape elements, to those in more man-made settings (e.g. play structures).

### **Complementary experiences & settings**

An important consideration in the light of the need for diversity when developing open space for play and recreation is that parks and reserves should be developed to complement one another.