



P r i n c i p l e s a n d g u i d e l i n e s

Best Practice

Open Space

in Higher Density

Developments

Project

01

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Background

The City of Charles Sturt has instigated and guided the Best Practice Open Space in Higher Density Developments Project with the aim to encourage appropriate planning for open space in higher density development areas by Local Government, including the City of Charles Sturt. The Project is a proactive response to the 30 Plan for Greater Adelaide and aims to provide a practical resource for Local and State Government based on sound research and consideration of best practice.

One of the main objectives of the City of Charles Sturt Best Practice Open Space in Higher Density Developments Project is to develop broad Principles and Guidelines for open space in higher density urban developments that can be used by Local and State Government and other stakeholders when planning for Transit Oriented Development's and other higher density development, as identified in the 30 Plan for Greater Adelaide.

Principles and Guidelines have been developed for three key aspects of open space planning, including:

- **Open Space Provision**
- **Open Space Design**
- **Open Space Management**

These 'aspects of planning' aim to collectively address all potential requirements and considerations relating to open space in higher density urban developments.

The Principles and Guidelines is part of a suite of reports developed through the Best Practice Open Space in Higher Density Developments Project and based on the research as outlined on the following page.

The Principles and Guidelines report will be relevant to urban developments that are medium and high density using the 30 Year Plan for Greater Adelaide definitions as a guide (35 dwelling units per hectare or 4 storeys or more).



Five reports and a Summary and Recommendations Report have been produced as outlined below.



The Summary and Recommendations Report explains why open space is critically important in higher density urban development and provides a rationale for challenging the 'status quo' and adopting the Principles and Guidelines report. The Summary and Recommendations Report also includes definitions for key terms used in the reports.

The Principles and Guidelines report summarises the research findings and provides a framework for open space provision, design and management that aims to influence the future delivery of open space in higher density urban developments.

The Principles and Guidelines report has been influenced by the research and case studies. As such, a summary of the key research findings is included in the Principles and Guidelines report as background information.

Open Space Provision



The provision of open space within any city is essential to the physical and social health of its population. The amount of open space provided and the quality, location design and diversity of this critical community asset, directly impact on the vitality of the city's urban fabric. The 'Open Space Provision' principles and guidelines consider the appropriate amount and quality of open space required to support communities in and around future higher density urban developments.

Key findings and information that have influenced the principles and guidelines are outlined below to provide a context for the recommended principles and guidelines.

Key Research Findings

- Most research recommends a good provision of open space in higher density areas due to less private open space, the social and health benefits of open space and to increase the liveability and quality of the developments. Case studies show that successful higher density developments have around 25-50% of open space, including public, private and communal open space, and this is often used as a marketing tool by developers.
- Benchmark planning for the provision of public open space in new development areas used by some States in Australia ranges between 2.83ha per 1,000 people and 5ha per 1,000 people. The 2.83ha figure is primarily used in NSW and generally does not include drainage areas (stormwater provision) or natural areas. The use of a 'hectare per 1,000 people' benchmark is difficult to achieve in higher density areas as this could require a large proportion of the development site. Such benchmarks are more suitable for lower density areas.



- The South Australian legislative requirement of '12.5% of land for open space' relates to around 4 ha per 1,000 people in a lower density development area of 35 hectares (based on 15 dwellings per hectare and 1.9 persons per household). This figure is consistent with benchmarks used in the ACT (4ha) and Queensland (4-5ha) but greater than the NSW benchmark.
- The adequacy of 'up to 12.5% of land for open space' in higher density developments has been questioned in a number of previous studies and there is a sense that additional land is justified. Some studies suggest that an increase in open space is required to compensate the increase in density with people having less private open space.
- The need for a balanced provision of public, communal and private spaces in higher density development areas is reflected in some studies, including the importance of plaza's and activated spaces to create a sense of integrated communities.
- There is recognition that the quality, robustness and functionality of open space in higher density areas are of greater importance than quantity, although this is balanced by the need for adequate open space for activity and aesthetics.



“What I have learned convinces me that there is one overriding consideration for any open space program. It is, simply, that open space must be sought as a positive benefit. Open space is not the absence of something harmful; it is a public benefit in its own right, and should be primarily justified on this basis”

William Whyte, Securing Open Space for Urban America, 1959

Key Research Finding



- There are many benefits associated with a good provision of open space including:
 - *Opportunities for physical activity, social interaction, community well being and health (including through spaces for activity, community gardens and interaction with nature)*
 - *Potential environmental benefits including habitat provision, reduced noise, dust pollution, micro-climate amelioration, and mitigation of urban heat islands to affect potential carbon sequestration*
 - *Higher quality neighbourhoods and economic benefits for developers and home owners*
 - *The attraction of wider communities to contribute to the viability of commercial components, including tourism potential*
- The view that no two development areas are the same and 'one size fits all' will not work is consistently raised in the research. The research highlights the need to consider the existing and future population character and related community needs, societal trends, the character of the area and links to other open space and facility opportunities.
- A needs based approach to planning for open space in higher density areas is consistently recommended in the research, where the potential character of the population and community needs should be taken into consideration to determine the appropriate types of open space and related facilities. However, there is little consideration given to planning for sporting needs and this is potentially a major gap in the future as urban populations increase and demand for sport becomes greater.
- A good distribution of quality and flexible open space is required. This includes ensuring open space is not inundated or unstable due to topography, drainage or stormwater management. Open space should not be 'left over' land or undevelopable land.
- It is recommended that people in higher density areas should be within a 3-5 minute walk or 250m – 300m from a park. There is need for a spread of parks and activity nodes that provide opportunities for frequent use (the idea of providing people with the opportunity for a 'quick stroll in the garden').

- Different types of open space with different hierarchy levels and diverse qualities are required to meet community needs, including:
 - *Linear connections (that support walking and bike riding) and Parks (various sizes)*
 - *Plazas, laneways and boulevards*
 - *Stormwater management areas (detention, retention and wetlands)*
 - *Nature based spaces (trees, landscapes, habitats)*
 - *Productive landscapes and community gardens (opportunities for people to interact and manage their own environment)*
 - *Playscapes (opportunities for play through formal and informal playspace design and play interventions through out the public realm)*



Key Research Finding



- A balance between hardscapes, civic spaces and ecological spaces is recommended.
- A strategic approach is required to meet a range of community needs. This includes planning for and with people, places and the environment.
- Local parks are important to provide small intimate and connected spaces. Some larger spaces are also suggested to support activities but they do not need to be huge in size. Larger parks are required for physical activity and connections.
- Active living areas are required and open space should have the capacity to support activity. This includes creating 'playable' spaces and providing other diverse active and passive recreation opportunities.
- The provision of 'green' settings that support nature and ecology is important for people's well being and to strengthen nature based ecology.
- The provision of commercial components such as cafes and shops can add vitality, diversity and destinations (as well as using playspace to activate commercial spaces.
- It is suggested that the best public spaces have nodes of activity complemented by quiet zones and people watching opportunities (developing locations of prospect and refuge). This includes the creation of destinations that people are attracted to.
- It is important to engage the community in the detailed provision and design of open space, e.g. whether a community garden is desired or appropriate or the location of play facilities.
- Open space should provide links to community facilities and surrounding open space and neighbourhoods.
- Open space should be highly accessible for members of the community regardless of age or ability.
- There should be good public transport links with easy access to work places, schools, shops and health, leisure facilities and other destinations.
- Providing a good amount of private open space such as balconies and courtyards is important. A mix of private and community open space is good when each is seen as 'a complementary part of a complete whole'. Providing a sense of transition and ownership is important.
- The emphasis should be on 'making living pleasurable versus tolerable' and ensuring open space is interwoven into the urban fabric.
- The research highlights the need to plan for and secure the future provision of open space.
- Open space provision is fundamental to achieving shared priorities across governments, e.g. increased physical activity, reduced crime and social issues as level documents.

Other Findings and Information

The current legislative requirement relating to the provision of open space in South Australia, as outlined in Section 50 of the Development Act 1993, is summarised as follows:

- Where there are more than 20 allotments developed there may be a requirement for up to 12.5% of the area to be vested in the Council or the Crown to be held as open space.
- Where there is 20 allotments or less and one or more allotments is less than 1ha in size, a contribution in accordance with the Act's Regulations may be required or land could be vested in the Council or the Crown to be held as open space.
- The Act suggests that the amount of land to be held as open space should not exceed 12.5%.
- The provision of up to 12.5% of land for open space is unlikely to be sufficient to meet the recreation, sport, social and environmental needs of people in higher density areas due to the smaller area of land being developed, i.e. the population size and demands are likely to be high but the provision of open space can only be 12.5% of the land which could be a low provision. New development areas require land for recreation, stormwater management, nature and connections, plus there should be access to sporting open space. Generally 12.5% will not be sufficient to cater for the required provision in a 'high density scenario' as highlighted by the Open Space

Comparison on the following page.

- Whilst high density urban developments could require more than 12.5% of land for open space, a balanced approach is required as too much open space could have negative impacts, including the need for taller buildings or higher housing costs to achieve viability.
- Developments with less than 20 dwellings are likely to occur and this could result in contributions of funds rather than the allocation of open space. As a result, neighbourhoods could be left with a lack of or poorly planned open space.
- Planning for sport as part of urban development is essential, otherwise there will be a lack of facilities and spaces to support active communities in the future. A number of local councils across metropolitan Adelaide already have a lack of sporting open space and this will intensify the issue. Increasing demand for sport without adequate provision could result in a major gap in provision and the potential over use of existing facilities.
- A large proportion of people in higher density areas appear to be younger and middle aged adults (20-45 years). This suggests higher density communities could potentially be very active communities and will require opportunities for physical activity and social interaction. This age group could also have young



Open Space Provision Principles and Guidelines

With regards to the Open Space Provision Principle and Guidelines on the previous page, it should be noted that:

- 12.5% of land in a high density development of 45-100 dwellings per hectare is the gross equivalent of around one hectare per 1,000 people and this on its own is unlikely to meet the recreation, social and environmental expectations of the development's community. 12.5% in a lower density development area (15 dwellings per hectare) is equivalent to around 4 hectares per 1,000 people of which approximately 2 hectares is often allocated for informal recreation open space. Best practice case studies for higher density development areas allocate between 25% and 50% of land for open space. The recommendation to obtain additional open space to the 12.5% 'base open space' is consistent with these findings and justified.
 - The total provision of open space within a higher density urban development would ideally be around 2 hectares per 1,000 people or 25% of the development land (around 1 hectare per 1,000 people for Primary Open Space and around 1 hectare or more per 1,000 people for Contributory Open Space) based on best practice and case studies.
 - The provision of the 'Contributory Open Space' should be guided by Performance Based Standards. The Performance Based Standards will require careful consideration and stakeholder engagement, and as such these have not been developed as part of the City of Charles Sturt Best Practice Open Space in Higher Density Developments Project.
 - The recommended provision and the inclusion of Performance Based Standards would ideally be formalised within State and Local Government policy, Deeds of Agreement with developers or legislation. The opportunities for this to occur will require further assessment and stakeholder engagement as a 'next step' to the City of Charles Sturt Best Practice Open Space in Higher Density Developments Project.
- The Guideline relating to open space provision is presented through a diagram on the following page and are followed by principles and guidelines that reinforce Best practice open space provision in higher density infill development projects.

1. 12.5% is currently the amount prescribed by legislation to be allocated as public open space in a development of over 20 allotments.
2. Contributory Open Space could be private communal spaces, secondary connections, streetscapes etc.
3. Open Space for Sport (District level) should be located within 5 km of the development site.

Open Space Provision Types

1.



Primary Open Space

- Open space delivered as part Developer provision
- Primary Open Space should have a strong focus on supporting lifestyle and include key parks and main connections.
- Primary Open Space could include communal open space if other public open space is located nearby and the council does not require all land to be publically accessible or wish to have management responsibility.
- Primary Open Space will generally represent around one hectare per 1,000 people in a high density development which is consistent with the 'up to 12.5%' of land currently required by legislation (Development Plan 1993).

2.



Contributory Open Space

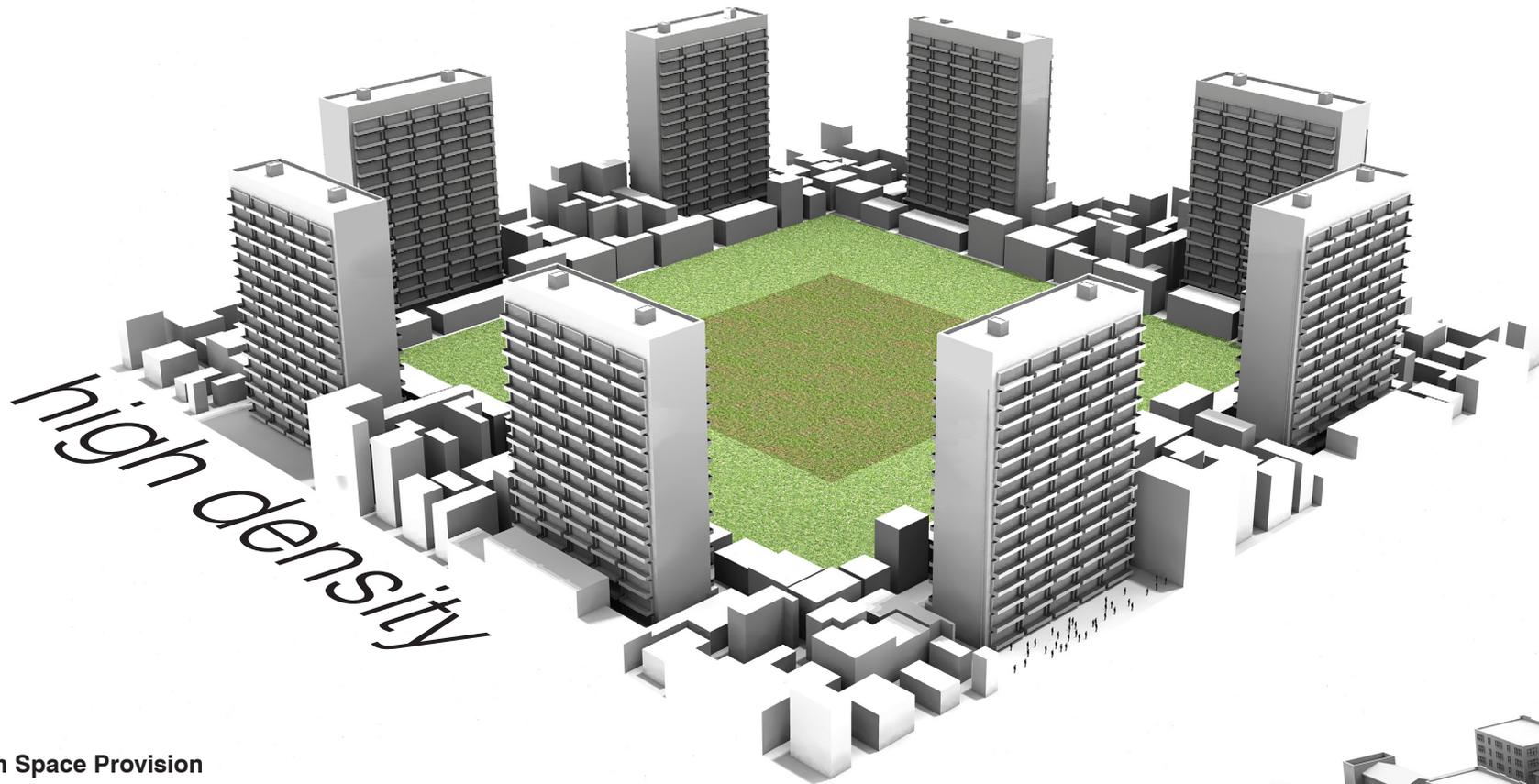
- Contributory Open Space will generally be required to contribute to the quality, function, natural value and viability of a development area.
- The amount of Contributory Open Space will depend on a range of factors including the population size, the development character, the need to strengthen biodiversity and habitat value, the potential for public realm, stormwater management requirements, council planning and policies, and the existing open space provision in the development area and surrounding area.
- An additional one hectare per 1,000 people or more of Contributory Open Space could be required.
- Communal and private open space could be considered as part of the provision.
- In some instances, existing open space that adjoins and directly links to a higher density development could be included.

3.



State and Local Sports Provision

- Open Space for Sport (District level) should be located within 5 km of the development site
- An additional one hectare per 1,000 people or more of State and Local Sports Provision could be required.

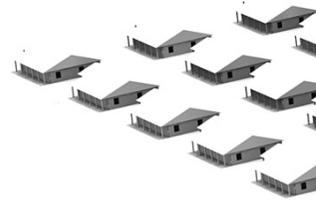
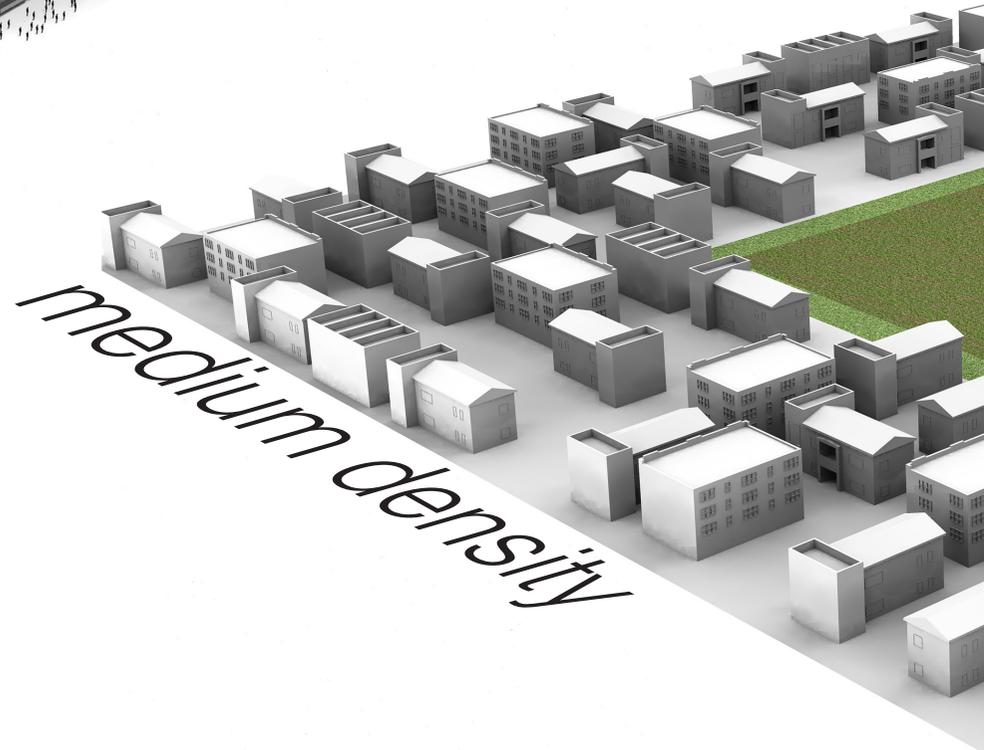


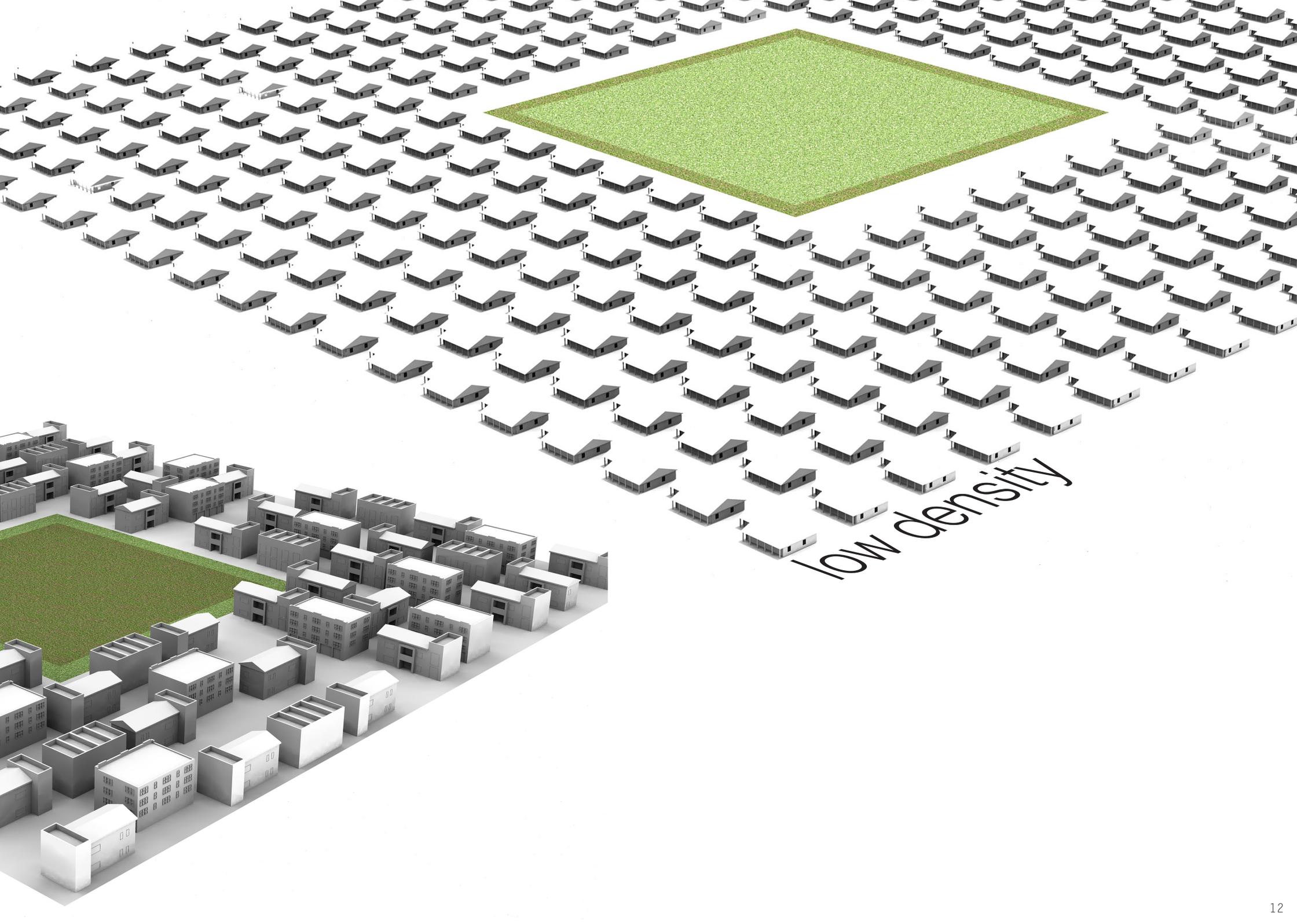
Open Space Provision

The following pages demonstrate the issues surrounding the provision of open space with higher density developments. The current legislative requirement relating to the provision of open space in South Australia, as outlined in Section 50 of the Development Act 1993, is summarised as states:

Where there are more than 20 allotments developed there may be a requirement for up to 12.5% of the area to be vested in the Council or the Crown to be held as open space.

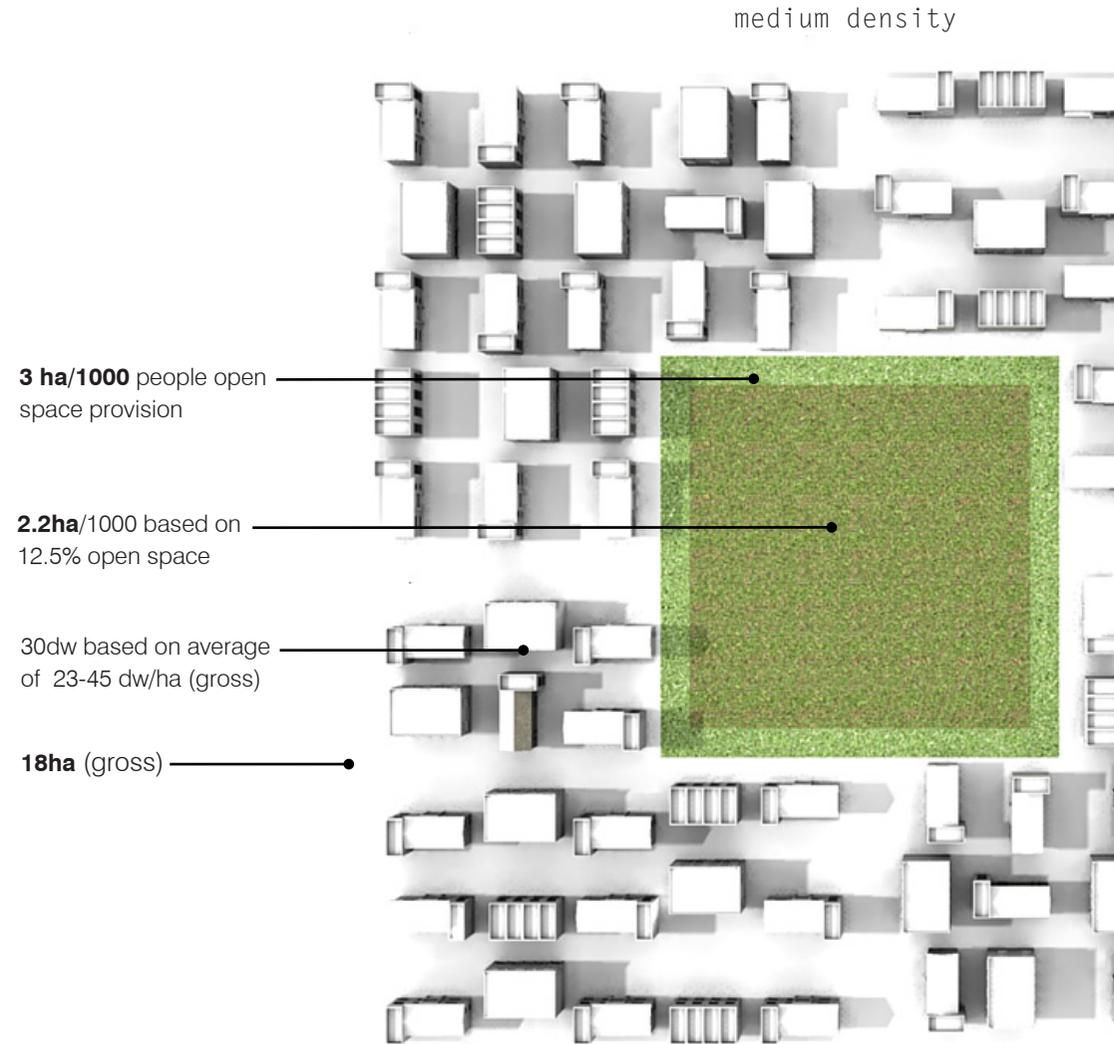
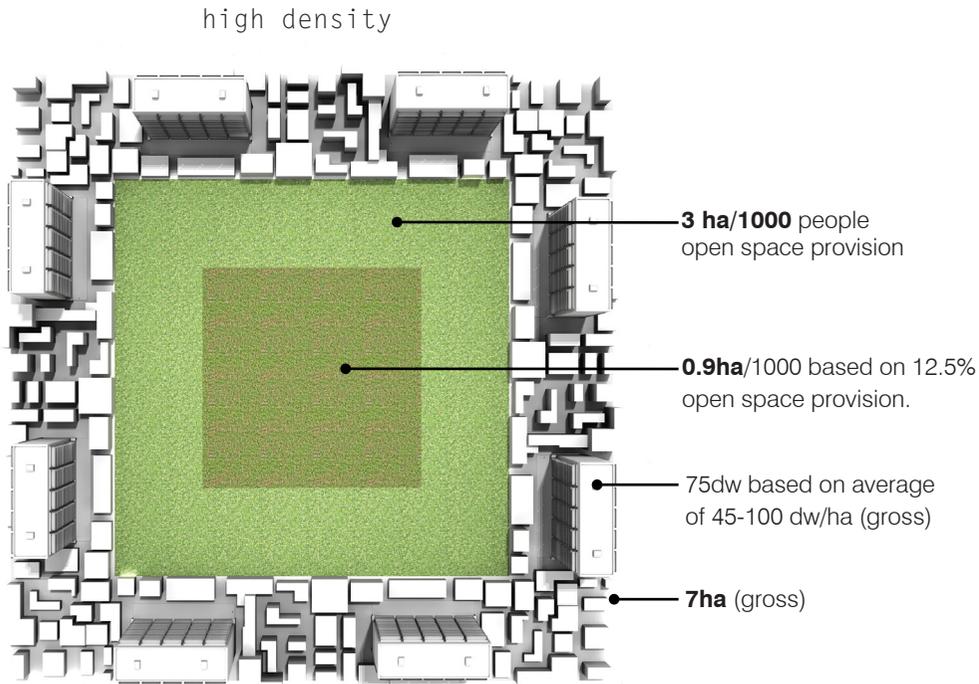
This requirement delivers a specific amount of open space within development areas. Research into the inter-relationship of development area, open space as a percentage of site area, density and best practice provision has highlighted limitations in provision of open space in higher density developments. The following pages illustrate the variation in open space provision that occurs in low, medium and high density development.



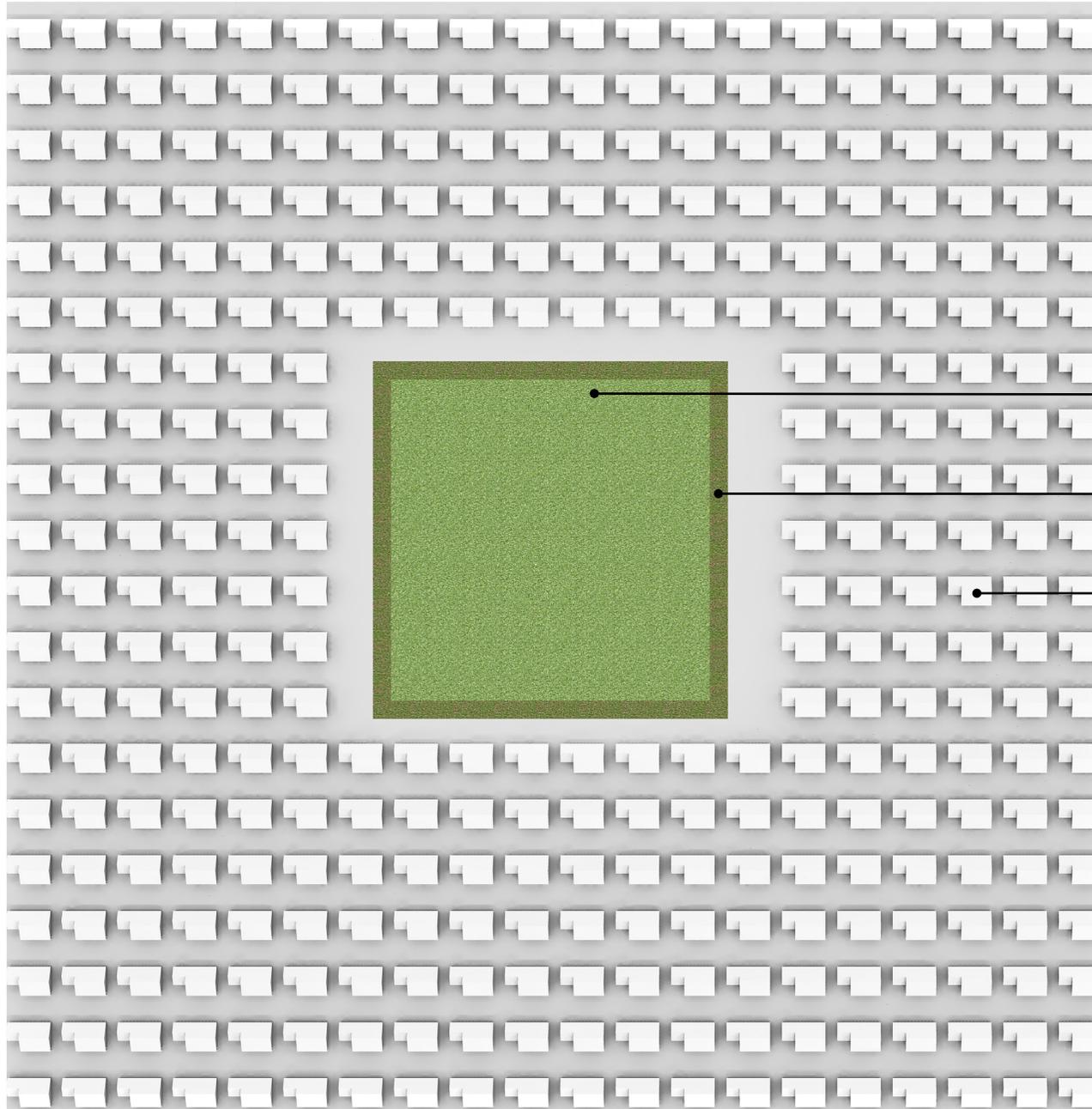


low density

Open Space Provision



low density



3 ha/1000 people open space provision

4.4ha/1000 based on 12.5% open space provision

15dw based on average of 11-22 dw/ha (gross)

35ha (gross)

Open Space Provision

Topic	Principles	Guidelines
Open Space Provision	<p>There should be a good provision of open space within higher density areas to:</p> <ul style="list-style-type: none">• Compensate for reduced private open space• Enhance the quality and function of the open space• Support increased use of open space by the local community (linked to increased urban density)	<ul style="list-style-type: none">• 12.5% of the development area should be provided as the base open space. This open space is referred to as 'Primary Open Space' and should have a strong focus on supporting lifestyle and include key parks and main connections. The base open space provision is consistent with the current legislative requirement and would generally be public open space. However, it could include communal open space if other public open space is located nearby and the Local Council does not require all land to be publically accessible or wish to have management responsibility. In some instances, existing open space that adjoins and directly links to a higher density urban development could be included in the 12.5% if agreed to by the Local Council.• Additional open space (beyond the base 12.5%) will generally be required to contribute to the quality, function, natural value and viability of the development area. This open space is referred to as 'Contributory Open Space'. The amount of contributory open space will depend on a range of factors including the population size, the development character, the need to strengthen biodiversity and habitat value, the potential for public realm, stormwater requirements, Local Council planning and policies, and the existing open space provision in the development area and surrounding area. An additional 1 hectare per 1,000 people or more of contributory open space could be required although communal and private open space could be considered as part of this provision.• Where there is existing open space in a future development area that can be integrated within the urban fabric, this can be considered as part of the open space provision.• A wide boulevard that provides a main pedestrian or cycle connection and has verge widths of at least 8 metres could be part of the contributory open space provision. Other streetscapes will generally not be consider as open space.

Open Space Provision

Topic	Principles	Guidelines
Sporting Open Space Provision	Communities in higher density urban development should have good access to quality sporting facilities.	<ul style="list-style-type: none">• Plan for a spread of regional and district community and sport hubs across metropolitan Adelaide to cater for the organised sporting needs of future populations in higher density areas as well as existing communities and users.• Allocate a minimum of 1 hectare per 1,000 people for sporting open space to cater for residents in the higher density areas. The requirement could be up to 1.5 hectares per 1,000 people if there are large proportions of families with children or young people.• Consider the following options for sporting open space provision:• Maintain existing or proposed sporting open space that is within or adjoins the higher density urban development where feasible.• Enhance existing sporting open space located near the higher density urban development if there is capacity to cater for additional demand (rather than duplicate with another facility).• Consider opportunities for acquiring land and expanding existing sporting open space located near higher density developments if the existing sportsground does not have capacity for additional demand.• Establish new community and sport hubs that are strategically located to cater for a number of higher density developments. This includes considering the potential for utilising surplus education land or other large undeveloped sites.• Plan for all higher density urban developments to be within 3 kilometres of a sportsground, ideally with public transport links and/or on transit corridors.• The specific requirements and opportunities for sporting open space will require a region wide approach to planning, taking population projections linked to Transit Oriented Developments and transit corridors into consideration.• Community and sport hubs would generally be provided by Local and State Governments and not be a developer responsibility. <p>NOTE:</p> <ul style="list-style-type: none">▪ Generally it will not be feasible to include sporting open space within a higher density development as the land take would be too great and could result in high rise buildings.▪ The reason for not recommending developers contribute land or equivalent funds towards sporting open space is to maintain housing affordability in higher density developments.

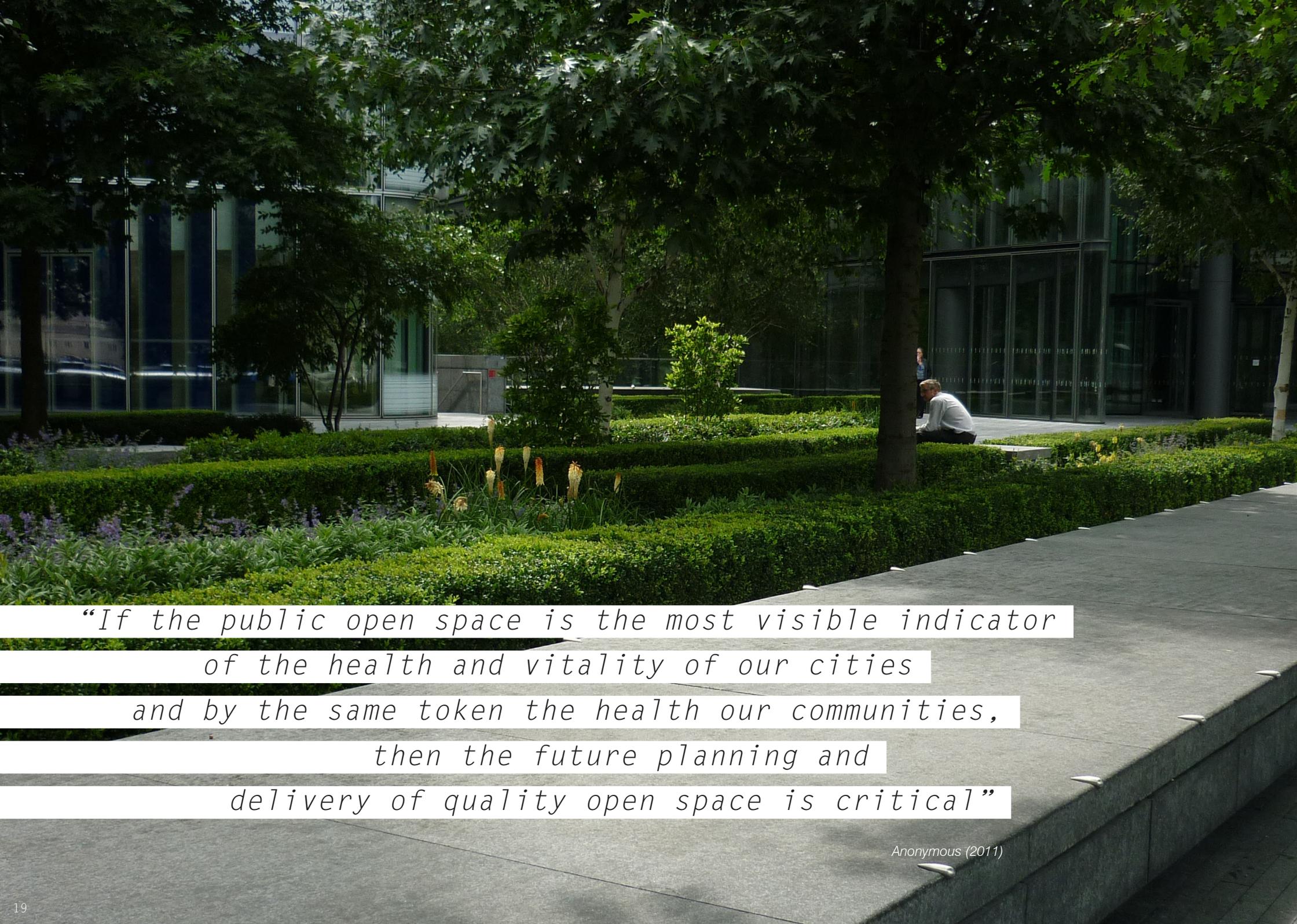
Open Space Provision

Topic	Principles	Guidelines
Advanced Planning	Higher density developments including TOD's and transit routes should be planned for in advance. This includes an early strategic assessment of the principles and approach to future open space provision.	<ul style="list-style-type: none"> Undertake a strategic assessment of the opportunities and general approach to open space provision for all TOD's and transit routes as the first step to planning for open space within higher density urban development. This includes planning for areas where there are multiple land owners that could each have 20 allotments or less. The planning will result in an Open Space Provision Framework that will indicate future open space requirements and fundamental principles for the development area (amount, types, connections, indicative location etc). The Framework will guide future detailed planning and may identify specific parcels of land for acquisition or rezoning if key nodes and destinations are known at the time of planning. <p>NOTE:</p> <ul style="list-style-type: none"> The Open Space Provision Framework could be undertaken as part of Structure Planning being facilitated by the State Government in accordance with the 30 Year Plan for Greater Adelaide. The recommendation for Primary and Contributory Open Space also relates to higher density developments where there are multiple land owners that could each have 20 allotments or less. The planning would need to group together individual land parcels and determine the collective requirements for open space.
Detailed Planning	Prior to development, detailed planning should be undertaken to clearly define the required provision and preferred location of open space.	<ul style="list-style-type: none"> Undertake detailed planning for the development area closer to the time of development. The detailed planning will identify specific parcels of land that should be retained for open space. This may require two planning steps, particularly where there are multiple land owners: A Precinct Plan once key nodes, destinations and road systems are known to identify key parcels of land that should be allocated as open space, ensuring larger parks and primary connections are defined and not developed for housing. A detailed Master Plan prior to development to consider all other parcels of land required for open space, e.g. smaller parks, secondary connections, land for stormwater management. A detailed social needs assessment should be undertaken for each higher density urban development to consider the needs of future communities and requirements for open space. <p>NOTE:</p> <ul style="list-style-type: none"> This planning could become part of the Precinct Planning that is being facilitated by the State Government in accordance with the 30 Year Plan for Greater Adelaide as well as broader Master Plans for urban developments.

NOTE: A Planning Guide has been developed as part of the Best Practice Open Space in Higher Density Developments Project to assist with the implementation of the suggested planning stages.

Open Space Provision

Topic	Principles	Guidelines
Planning Context	Open space provision in higher density areas must be consistent with broader strategic planning.	<ul style="list-style-type: none"> • Consider the implications of State and Local Council broader strategic planning as part of the planning process. • Review and reflect the Local Council's Development Plan objectives and principles when determining the provision of open space in higher density urban developments.
Equitable Distribution	An equitable distribution of accessible open space should be strategically located across a higher density area.	<ul style="list-style-type: none"> • All residents in a higher density urban development should be within 250 metres of a park or recreation space that is at least 0.25ha in size. • Residents in a higher density urban development should be within 500 metres of higher quality neighbourhood, district or regional open space. • Residents should be within a 2-3 minute walk of a park, plaza or other activity area or destination that facilitates activities such as informal play opportunities.
Open Space Type	Diverse open space types should be provided in a higher density urban development although sport will generally be catered for at the district level outside of the development area.	<ul style="list-style-type: none"> • A hierarchy of open space should be planned for including district, neighbourhood and local open space, linked to public, communal and private open space. • A mix of parks (small and larger) and spaces to cater for a range of community needs that support activity and lifestyle, including active living opportunities, quiet zones and nature based areas should be considered. • Open space should generally be at 20 metres in width to be recognised as a park. Narrower open space will generally be a greenway or boulevard. • Open space that has a biodiversity focus should be included to provide a connection to nature and provide habitat for birds and other wildlife.
Quality and Function	Open space in higher density urban development should be good quality, diverse and functional to support intensive use and provide destinations for communities.	<ul style="list-style-type: none"> • Facilities and infrastructure linked to open space in higher density urban development should be well designed, robust and good quality. • The design of parks and reserves should aim to cater for a range of recreation, social and nature based needs and minimise conflicts.



“If the public open space is the most visible indicator of the health and vitality of our cities and by the same token the health our communities, then the future planning and delivery of quality open space is critical”

Anonymous (2011)

Open Space Provision

Topic	Principles	Guidelines
Balanced Access	Higher density urban development should include a balance of public, private and communal open space and facilities to support resident activity and achieve an integrated community.	<ul style="list-style-type: none"> • Generally at least 50% of the open space should be accessible to the public and the public open space should aim to encourage connections between new development communities and the broader public. • Community and commercial components should be accessible to the general public as well as higher density development residents to achieve viable centres and strengthen connections between communities. • Gated or restricted access to open space should be minimised or managed to provide as much access to the open space as possible.
Defined Purpose	Each parcel of open space in a higher density urban development should have a clearly defined purpose.	<ul style="list-style-type: none"> • As part of detailed planning for open space in higher density urban development, determine the potential social, economic or environmental role of each parcel of open space based on community needs and design the open space to meet specific needs.
Activated Recreation	Higher density urban development should include some activated parks and spaces that support physical activity and play.	<ul style="list-style-type: none"> • At least one main park that is at least 0.5ha in size should be established in a higher density urban development to provide a focus for recreation activity, integrated play and larger group use.
Stormwater Integration	Stormwater management should be sensitively integrated within open space design and not impact on the open space value.	<ul style="list-style-type: none"> • The quality and function of the 'base open space' (12.5% that is planned for in advance) should not be affected by drainage or stormwater management. • Open space with a stormwater role should not represent more than 20% of the total open space. Any additional stormwater land should be provided as additional to the open space requirements. • Stormwater management should generally be planned for as part of the additional 'Contributory Open Space' rather than the 'base' Primary Open Space.
Land Quality	Land allocated for open space should be good quality and usable.	<ul style="list-style-type: none"> • The land allocated for open space should not have issues associated with the following items that cannot be appropriately addressed: <ul style="list-style-type: none"> • Site contamination • Chemicals and hazardous materials • Salinity • Flooding • Noise impacts • Dust

“While spaces are inequitably distributed and used differently, people seem to value similar qualities in outdoor space...they value clean air, trees, natural landscapes, places that make them feel better, safe places for their children to play, and places to walk and sit outside”

*Clare Cooper Marcus and Carolyn Francis, People Places, 2nd ed., 1998, 89
citing a study of Seattle's open spaces by Tuttle, 1996*



Open Space Provision

Topic	Principles	Guidelines
Preservation	Land and buildings that have a conservation or heritage value should be preserved through open space or the development design.	<ul style="list-style-type: none"> Natural conservation areas and heritage items should be defined in the early planning step (Open Space Provision Framework) and incorporated within the open space provision or the development design (e.g. heritage buildings integrated within the building design).
Amenity Provision	The provision of amenities such as toilets and car parking should be linked to hierarchy and consider connections to the wider community.	<ul style="list-style-type: none"> Car parking should be provided where a park or reserve has a regional or district role, such as where the park includes a community centre or playspace that caters for the wide district. Car parking linked to local and neighbourhood open space should be limited on the basis that residents can generally walk to the open space. Toilets should only be considered where the open space or facility is regional or district level, and where the toilet can be located to minimise impacts on residents and minimise security risks. Ideally accessible toilets will be linked to commercial or community facilities, e.g. as part of a cafe or linked to a library or community centre and accessible to the general public. In instances where a park is highly activated and has regional or district value, there could be justification to sensitively locate a toilet.
Walkability	A strong emphasis should be placed on walkability when locating, designing and connecting open space in higher density urban developments in accordance with Heart Foundation principles and guidelines.	<ul style="list-style-type: none"> As part of the detailed design of open space and higher density urban developments, ensure that: Parks and spaces are connected and accessible with linear open space, 'greenways' and boulevards with good path and cycle networks. There are good linear connections by way of path's, cycle ways and trails to public transport, surrounding open space, nearby sporting facilities, adjoining neighbourhoods and local centres.
Community 'Heart'	Community facilities, plaza's, shops and other commercial and civic components should be considered within or near higher density areas to provide a 'heart' for communities in higher density areas.	<ul style="list-style-type: none"> All higher density urban developments should be located within 200 metres or have the potential to include civic, community and commercial hubs. Opportunities for integrating community and commercial components within the built form should be considered. Key open space should be designed as a destination with footpath and cycleway links.
Transport Links	There should be good public transport and trail links to workplaces, schools, sporting, community and commercial facilities that are not located in the high density urban developments.	<ul style="list-style-type: none"> Develop public transport to achieve a highly connected environment, both internally within the development and externally within the wider region. Develop trail plans as part of planning for the higher density urban developments.



*“It may not be crowding per se that degrades us,
but a lack of relief from crowding,
a lack of open space, a lack of green,
of nature going its own way”*

CHARLES LITTLE and JOHN MITCHELL, *Space for Survival*, 1971

Open Space Provision

Facilities to Consider	Facilities that Could be Considered But Require Careful Location and Management	Facilities that Should Not be Provided
<p><i>Broad Principles:</i></p> <p>Facilities and infrastructure that activate and enhance the use, amenity and value of open spaces should be provided. The facilities and infrastructure should be located to be accessible to residents and broader communities whilst minimising impacts on local residents. The level and quality of provision should reflect the hierarchy of the open space or facility.</p>	<p><i>Broad Principles:</i></p> <p>Facilities and infrastructure that could impact on residents or the function of open space but are valuable in supporting an activated and connected community can be considered, providing they are appropriately located and designed to minimise the potential impacts on local residents.</p>	<p><i>Broad Principles:</i></p> <p>High noise facilities or facilities that could create social problems should not be provided in high density urban developments due to the potential high impact on local residents.</p>
<p><i>Potential Specific Facilities:</i></p> <ul style="list-style-type: none"> • Trees and landscapes • Pathways and trails • Grassed areas • Picnic settings (seating, tables, shelters, shade) • Outdoor courts for casual use • Innovative play (activity and nature based) • Community gardens and productive landscapes • Fitness equipment and spaces (indoor and outdoor) • Cafes and restaurants • Retail outlets • Community centres and services, e.g. library (as part of residential and other buildings) • Lighting (security, twilight use) • Car parking (including disability) • Water Sensitive Urban Design components • Public art 	<p><i>Potential Specific Facilities:</i></p> <ul style="list-style-type: none"> • Skateable spaces (urbanised spaces for skateboards, rollerblades, scooters) • Moderate BMX (beginners and intermediate) • Basketball and netball rings and backboards • Soccer and other sport goals and spaces • Swimming pool • Barbeques • Sportsgrounds (subject to land availability or where a sportsground already exists) • Club and competition based outdoor courts • Event spaces • Marina's, boat ramps and jetties (for coastal developments) • Community markets • Toilets (including disability) • Wetlands • Stormwater management systems and MAR • Enclosed dog exercise areas or other defined areas for domestic animals (e.g. horse agistment) 	<p><i>Potential Specific Facilities:</i></p> <ul style="list-style-type: none"> • Skate park • Hitting wall • Major BMX (competition, club use) • Major sportsgrounds and sports facilities that involve night games and large crowds • Amusement parks, major stadiums and indoor centres, unless housing is designed to have minimal impacts • Motor racing or motor bike racing • Other high noise activities

Open Space Provision

The design of open space needs to balance a multitude of demands in order to create valued public spaces that are used by the community. For this reason, careful consideration should be given to the principles and guidelines for the design of open space within higher density development. The following outlines the research findings specifically associated with the design of open space.

- 'One size fits all' is not appropriate and instead a variety of sizes, designs, physical features and types of spaces are required. The design of open space can be used to differentiate activity opportunities, define the purpose and character of each open space and define the character of the development area.
- The principle of interweaving open spaces within the urban fabric to create opportunities for relaxing, exercising and escaping a busy life is strong across previous research. This includes clearly defining public open space through its location and design.
- It is important to be clear about the main purpose of each parcel of open space from the beginning and design the open space accordingly.
- Versatility and flexibility are essential to provide for a diversity of activities, user groups and functions. This includes establishing a hierarchy of open space and open space with different roles such as plaza's and public squares, parks and trails and greenways.
- Open space in higher density urban developments should be designed to support active living and cater for a range of community needs and different age groups.

- Open space in higher density urban developments should be high quality to encourage active use and exercise, and support intensive use. The quality of open space has been found to have a profound impact on people's health and well being.
- People are twice as likely to engage in physical activity if they have good access to large and attractive parks and links to destinations. This suggests there should be some good sized parks linked to higher density urban developments (even if this is nearby and accessible rather than within the development area).
- Innovative open space and facilities such as community gardens with an interaction focus, innovative play and activated edges, have high social benefits.
- Landscape is a very important aspect of design and there should be a strong focus on 'green' open space and good vegetation cover, creating opportunities for large trees to establish, retaining existing mature trees and vegetation, distinctive landscape design and good amenity such as shade and shelter.
- Open space should be located and designed to have balanced access to sun and shade. This includes considering appropriate amenity, aspect, prospect, surrounding building height, street setback and management of overlooking and overshadowing.
- Designing open space to make the most of views and vistas is important. Good design should respond and contribute to the natural and built context.
- An integrated approach to designing and connecting public, communal and private open space is important.



- Connectivity is essential to support physical activity and to connect people to open space, including good street connectivity, connections between green spaces, and connections beyond the development area. This includes creating walkable areas and integrating pedestrian routes within the wider circulation network.
- Open space in higher density areas must be accessible, inclusive and connected to encourage use and to activate spaces. This includes interconnected spaces linked to a range of amenities.
- The barriers to accessing open space and facilities should be minimal, including distance to open space, poor footpaths, fencing, dangerous intersections and concerns about safety and surveillance.
- Playspaces are vital for creating opportunities for children to be creative, have activity opportunities and interact with other children. Playspaces need to be sensitively located, including away from traffic and not disturbing residents, but close enough to allow good safe surveillance and opportunities for independent access by unaccompanied children
- Connection and cohabitation with nature is seen as a key design element.
- There should be a balance between hardscape civic spaces and ecological spaces.
- Opportunities for shared-use should be considered.

- Safety and security are key aspects of design. A key principle is to 'design for community safety' taking Crime Prevention Through Environmental Design (CPTED) principles into consideration.
- Open spaces and plazas should be located and designed to connect to public transport.
- Best practice 'active sustainable' cities include few cars, many cycles, connected plaza's, parks, trails and boulevards, and tree canopies (e.g. Amsterdam).
- Sustainability is a key aspect of design, including the integration of stormwater capture and reuse, energy efficient buildings and the use of other natural resources.
- Consideration should be given to visual and acoustic privacy balanced with safe and open spaces.
- The character of the built environment will influence how open space is used.



Open Space Guidelines

The following principles and guidelines are provided at a 'high level'. Potential additional detailed design guidelines are provided in Appendix 1.

Topic	Principle	Guidelines
Planning Context	<p>Open space design must be consistent with the relevant Local Council's Development Plan objectives and principles relating to open space, recreation, biodiversity and other priorities.</p>	<p>1.1 Review and reflect the Local Council's Development Plan objectives and principles in the design of open space in higher density urban developments.</p>
Human Experience and Provision of Amenity	<p>Open space must respond to the needs of people in relation to comfort, amenity, beauty, pleasure and a sense of well being and safety.</p> <p>The principle recognises that the more comfortable and significant the experience for people and the greater the provision of amenity, the more likely open space will meet the community's needs and demands and be used, respected and cherished.</p>	<p>2.1 Aim to achieve green environments with trees and landscapes that contribute to mental well being. At least 75% of open space should be green space as opposed to paved plaza's and pathways.</p> <p>2.2 Open space must be perceived as safe to encourage activation, particularly for older aged people, women and children (unaccompanied).</p> <p>2.3 Consider opportunities to express 'Prospect and Refuge' within the design and development of open space (with reference to J. Appleton).</p> <p>2.4 Allow people to be seen while providing spaces that create a sense of seclusion (balancing personal space and safety).</p> <p>2.5 Seek to create high quality open space and landscapes that deliver a high degree of amenity including shade and shelter, as well as, beauty and aesthetic character.</p> <p>2.6 Ensure that the relationship of open space and built form creates a legible urban environment without enclosed or hidden spaces or open space dominated by built from (over shadowing).</p> <p>2.7 Ensure that open space provides an inclusive social environment that foster community activation and general sense of wellbeing within the public realm and minimise segregation.</p>





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Open Space Guidelines

Topic	Principle	Guidelines
Community Activation and Cultural Animation 	Create quality design outcomes that encourage responsive social interaction and behaviour, and foster a sense of community.	<ul style="list-style-type: none">3.1 Provide opportunities for human interaction including play, congregation and social participation in all open space.3.2 Provide opportunities and programmes that encourage social and cultural engagement and deliver new community events and memories within open space.3.3 Consider opportunities for public art and explore how art can be used as a mechanism for activation, reclamation or regeneration within open space, streetscapes and the wider development.3.4 Ensure that open space design delivers a time based hierarchy of use that facilitates incidental, occasional and planned visits and events.3.5 Where appropriate integrate community facilities into the building fabric of the development rather than impacting on the provision of open space.3.6 Explore opportunities to deliver civic, commercial and retail activity to the edge of buildings or occasionally within open space that enhance community engagement and activation.3.7 Create at least one destination point within every open space (seating, play, shops, art, landscape).3.8 Seek to create moments of changing engagement and entertainment within open spaces.3.9 Ensure that edge activation is designed to respond to human scale and pedestrian speeds.3.10 Foster a sense of ownership in the community for the open space and landscapes (allowing people to make it their own through gardening, maintenance or general cultivation).3.11 Develop soft edges between public, semi private (shared use) and private areas to allow interaction and communication between the areas.

Open Space Guidelines

Topic	Principle	Guidelines
Integration and Compatibility 	<p>Provide a balanced approach to the delivery and interrelationship of infrastructure, services, and open space function and purpose.</p> <p>Integration and compatibility represents a conscious move away from the idea of 'multi-function' open space which often delivers an unbalanced approach with one particular function dominating other (equally important) functions.</p> <p>Ensure that open space demands are met and where possible exceeded, without one single function dominating the design.</p>	<ul style="list-style-type: none">4.1 Encourage the integration of ideas and a range of different functions equally within open space.4.2 Consider the development of buildings and infrastructure that promote and enhance the demands and needs of open space.4.3 Develop a dialogue between the competing demands and uses for open space to achieve the most appropriate and balanced result.4.4 Design roads, car parks and vehicular accessways that focus on shared use principles, in order to maximise the potential for usable open space within development areas (consider roads as social infrastructure not vehicular transport assets).4.5 Deliver water sensitive urban design (WSUD) principles that enhance the function and amenity of open space within high density developments.4.6 Seek to maximise design responses and minimise the visual impact associated with dominant infrastructure such as electrical cabinets, pumping mains and fire hydrants (reduce the utilitarian aspect of facilities within open space).4.7 Seek to maximise biodiversity opportunities and encourage habitat creation within all aspects of open space development.

Open Space Guidelines

Topic	Principle	Guidelines
Adaptability and Transformation 	Ensure that open spaces and reserves are adaptable and able to accommodate changes and transformation in the short, medium and longer term, whether social, physical or environmental.	<ul style="list-style-type: none">5.1 Explore how open space can grow and transform in order to remain relevant for the community that live and use the reserves, landscapes and public domains.5.2 Provide design opportunities that allow for changes in social demographics in relation to age profile, community size and social values (consider opportunities in relation to access, play, and recreation).5.3 Consider trees, plants and landscape treatments that can adapt to future changes in climate.5.4 Provide opportunities for open space programming that allow for adaptive use and reuse, as well as allowing temporary transformation.5.5 Develop flexibility in the design of facilities within open space, particularly in relation to street furniture (flexible seating, mobile lighting, planters and interactive public art and play).5.6 Respond to the increased demands and usage of open space posed by high density developments.5.7 Consider providing spaces that remain undefined in terms of function and use to allow for adaption and transformation by the community (ownership) in the future.



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Open Space Guidelines

Topic	Principle	Guidelines
Design Diversity 	Design open space to be diverse in character and innovative.	<ul style="list-style-type: none">6.1 Use a diversity of landscape, connections, boundary treatments and building form to define spatial use and hierarchy6.2 Adopt innovative and creative approaches to the design of open space and connected infrastructure.6.3 Explore the potential to increase the civic and public function of open space in relation to commercial and retail precincts, particularly with paving surfaces.6.4 Seek opportunities to deliver and connect with district and regional open spaces outside the development area.6.5 Establish a legible hierarchy of open space in relation to district, neighbourhood and local as well as public shared, and private, and use landscape, connections, boundary treatments and building form to define spatial and use hierarchy.6.6 Consider all open space as important irrespective of assumed hierarchy.

Open Space Guidelines

Topic	Principle	Guidelines
Accessibility and Connectivity of Open Space 	<p>Deliver highly accessible and connected open space environments that are accessible both internally (within the development and building forms) and externally (opportunities for open space provision in locations locally and regionally).</p> <p>Create an open space structure that enables people to easily access open space. This will include encouraging frequent use through access, environmental comfort and facilities.</p>	<ul style="list-style-type: none">7.1 Ensure open space is available to all and ownership and community access is unambiguous, inclusive and highly legible.7.2 Ensure connections to and from dwellings do not discourage access to open space (provide easy access with high levels of amenity).7.3 Ensure open space is clearly visible from buildings and accessible to intended users.7.4 Encourage design responses that define open space use and implied ownership (recognising the importance of share community open space and creating the community backyard).7.5 Ensure strong links or public transport routes enable connections with other district and regional open space and destinations.7.6 Develop safe, easily access connections to play spaces.7.7 Ensure that local open space design and play spaces facilitates use by children without direct supervision of adults.7.8 Develop a strong connection with transport that allows access via public transport to sports facilities and other community activity opportunities.



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Open Space Guidelines

Topic	Principle	Guidelines
Urban Context and Built Form 	Encourage responsive building designs and explore how open space can interact, respond and integrate with its surroundings and building containment.	<ul style="list-style-type: none">8.1 Look to maximise open space provision through the integration of landscapes, playspaces, gardens and landscape areas on buildings.8.2 Ensure access to sunlight and avoid over shadowing by built form (consider open space proportion that responds to orientation, aspect and built form).8.3 Ensure significant activation of building facades with windows and balconies to allow passive surveillance of open space, particularly for play spaces.8.4 Design entries to be clearly identifiable elements within building facades.8.5 Avoid concealed alcoves, dark areas, and hidden entrances which limit passive surveillance and impact on the perceived sense of safety.8.6 Avoid the use of multiple fencing styles and materials in order to reinforce the consistency and legibility of the public realm.8.7 Ensure that building edges are responsive to human scale (consider 3-4m and 7-8m façade units).8.8 Look to provide opportunities for interactive public art within the urban context and build for that surrounds open space.

Open Space Guidelines

Topic	Principle	Guidelines
Nature and Landscape 	<p>Create landscapes that express a strong sense of nature in order to provide people with the opportunity to reconnect with the natural environment as well as providing a contrast to the urbane condition of high density living.</p> <p>Seek to encourage a diversity of landscape types and uses, from those that provide visual amenity and beauty to those that are productive and functional (e.g. WSUD and community gardens).</p>	<ul style="list-style-type: none">9.1 Consider opportunities for increasing biodiversity and habitat within the development area. Includes providing adequate habitat for local native fauna such as small birds, butterflies, bats, lizards and frogs.9.2 Plan for and implement large trees and shrub planting to provide an immediate sense of maturity within open spaces (ensure that building designs allow for mature trees adjacent to buildings).9.3 Provide diversity within the design of open space landscapes to create different characters, aesthetics and levels of amenity.9.4 Explore opportunities for people to engage with the landscape and open space (gardening, weeding). This includes providing opportunities for production gardens and productive landscape within open space.9.5 Use landscape treatments and trees to establish a vertical sense of scale that offsets the built form.9.6 Choice of plant species should be carefully considered for drought tolerance, provision of shade, amenity value and seasonal variation.9.7 Tree planting should be supplemented with lawns, garden beds and hedges to provide spatial definition within open spaces and reserves and increase microclimate modification.

Open Space Guidelines

Topic	Principle	Guidelines
Quality Design and Durability 	Respond to the demand for open space within high density development areas, and the frequency of use through quality design and the selection of quality materials.	<ul style="list-style-type: none">10.1 Establish a design continuity to ensure that quality is evident at all levels of open space provision (not just regional).10.2 Consider potential for increased requirements for the management, maintenance and asset renewal of facilities, landscapes and materials.10.3 Maintain a consistency in the development and delivery of open space.10.4 Deliver robust design resolutions that meet the usage expectation of the community.10.5 Consider the usage impact on playspaces and design responsively in relation to equipment and material selections.10.6 Select materials, paving and furniture that are robust and durable; and which respond to the increased usage that is experienced in high density areas.

Open Space Guidelines

Topic	Principle	Guidelines
Universal Design Principles and Guidelines 	Adopt and utilise universal design principles and guidelines such as sustainability, innovation and crime prevention through environmental design, spatial justice and the right to play.	<ul style="list-style-type: none">11.1 Ensure all design, implementation and management responses are socially and environmentally sustainable.11.2 Ensure design and management responses attempt to meet and resolve issues and opportunities using innovative and best practice approaches.11.3 Apply Crime Prevention Through Environmental Design (CPTED) principles to all aspects open space design and implementation.11.4 Ensure key open space, pathways, shared use areas and playspaces are DDA (Disability Discrimination Act) compliant (accessible for all).11.5 Establish an optimum level of water to maintain the establishment of landscapes.11.6 Ensure that the distribution of open space resources and facilities are equitable and unbiased.11.7 Ensure that the rights of children and youth to play are considered and maintained within all open space.

Open Space Management



Maintaining open space in higher density urban development areas to a good quality and managing the impacts of activities on residents and open space users is crucial to achieving liveable and appealing developments. The key findings associated with open space management are summarised below.

Key Research Findings

- A commitment to maintaining good quality open space is essential to increase the potential appeal and use of spaces, maintain enduring landscapes and enhance the quality of higher density developments. This includes quality landscapes and ensuring that open space is equipped and designed to cater for intensive use.
- Safe places with good surveillance and adequate lighting are recommended. This includes parks, streets and open spaces being overlooked for security and the avoidance of SLOAP (space left over after planning).
- There is potential for conflict between open space users and higher density residents, e.g. children or youth making a noise. The risk of conflict is potentially greater when providing open space that is fully open to the public.
- Children need to be in safe open settings away from roads but where they will not disturb the residents.



- Facilities that create loud or irritating noise and potential social issues are not appropriate in higher density urban developments.
- Public spaces should be clearly defined with maximum visibility and not isolated.
- The establishment and preservation of mature trees is important to strengthen the natural environment and enhance the character of the area. Adequate space for these trees to grow is required.
- A unified approach to management and maintenance is a key ingredient to successful open space in higher density urban developments.
- It is important to understand and be able to manage the relationship with the surrounding areas, e.g. crime patterns and how potential issues can be managed.
- Stormwater management and Water Sensitive Urban Design are essential to avoid inundated and unusable areas.
- It is important to prepare for and manage climate change (adaptation for social and environmental benefits).

- Ways to increase the sustainable patterns of movement and reduce the reliance on motor vehicles should be considered.
- Planning should ensure that open space does not encroach on private spaces, including locating open space in front of houses rather than at the back which is less secure and more private.
- Local councils often manage open space within a hierarchy framework and aim for quality regional and district open space at key locations.
- Roads are an important community asset in catering for pedestrians, cycling and appropriate vehicle movement.
- A review of the requirements for hierarchy and management is required for higher density urban developments. With potential high use of open space in higher density developments it may be necessary to allocate additional resources and maintain all open space to a higher level.

Open Space Provision

A commitment to the ongoing management and maintenance of open space is essential to retain the quality and value of open space and to benefit users of the open space and surrounding communities. The following principles and guidelines aim to reinforce the importance of management.

Topic	Principles	Guidelines
Quality Infrastructure and Maintenance	Place a strong focus on quality infrastructure and quality maintenance in higher density open spaces, including parks, plaza's and linear connections.	<ul style="list-style-type: none"> - Establish clearly defined development and maintenance guidelines and management plans prior to development (including agreements with developers). - Develop and maintain most open space in higher density urban developments to a regional or district level in accordance with the local council's hierarchy framework. - Undertake regular maintenance and address vandalism and graffiti in accordance with the hierarchy allocated. - Understand the lifecycle and replacement requirements of open space and facilities as part of ongoing asset management. - Consider sponsorship opportunities that enable the provision of quality infrastructure and ongoing maintenance contributions to maintain a high level of quality.
Resident Impact Management	Facilities and spaces that create high levels of noise or potential social issues (e.g. vandalism, graffiti) should be avoided or managed in higher density areas.	<ul style="list-style-type: none"> - Manage the provision and location of activity spaces (and particularly play and youth spaces) to minimise impacts on residents whilst ensuring good passive surveillance. - Locate and design event and commercial areas to manage noise, car parking and other impacts.
Management of Spaces	Manage landscapes and infrastructure to contribute to safe and appealing open spaces and maintain good visibility and high amenity.	<ul style="list-style-type: none"> - Undertake tree management and garden maintenance on a regular basis. - Maintain mature trees and natural features to a high standard. - Develop an asset renewal program that is consistent with the allocated hierarchy and level of use.
Stormwater Management	Manage stormwater to achieve well drained and usable open spaces (avoiding inundation of activity areas) and to provide an affordable water resource.	<ul style="list-style-type: none"> - Collect stormwater from buildings and hard surfaces through rainwater tanks and wetlands for re-use on the landscape. - Integrate Water Sensitive Urban Design (WSUD) principles without impacting on open space provision and quality.

Topic	Principles	Guidelines
Crime Prevention	Manage crime and social issues through good design in accordance with CPTED (Crime Prevention Through Environmental Design).	<ul style="list-style-type: none"> - Create activated edges and good sight lines in parks and other open spaces. - Ensure good passive surveillance over open space and high levels of activation. - Design open spaces to be safe and appealing with good lighting and no hidden areas.
Transport Management	Manage vehicle movements and encourage alternative modes of transport (walking, bikes, public transport) through good connections, including connections to public transport.	<ul style="list-style-type: none"> - Connect higher density areas with public transport and convenient services. - Establish trail and pathway links to public transport, facilities and surrounding areas.

Detailed Guidelines

The following detailed guidelines have been developed as part of the Open Space Provision Principles and Guidelines. The detailed guidelines are designed to further assist the planning and delivery of open space within higher density developments. The detailed guidelines include:

- **Human Experience and Provision of Amenity**
- **Community Activation**
- **Integration and Compatibility**
- **Adaptability and Transformation**
- **Diversity of Open Space**
- **Accessibility and Connectivity of Open Space**
- **Quality and Durability**
- **Urban Context and Built Form**
- **Nature and Landscape**
- **Universal Principles and Guidelines**





Detailed Guidelines

Topic	Guidelines
Human Experience and Provision of Amenity	<ul style="list-style-type: none">- Provide shade to meet seasonal demands of the South Australian climate (consider a balance of natural and constructed shade and the provision of amenity).- Avoid visually dominant constructed shade and ensure that a suitable balance is reached in relation to visual enclosure (refuge) and the ability for passive surveillance (prospect).- Develop shelter that extends open space use and activation (respond to the limited provision of private open space and increased demand for open space all year round and in all weathers).- Avoid locating facilities, seating or playspace in areas of prolonged shadowing (consider extent of over shadowing from built form).- Provide adequate climate control and micro-climate mitigation through shading, and shelter screens (both natural and constructed) to increase the comfort and usage of open space (consider in response to built form guidelines).- Seek to use vegetation and tree plantings that permit a degree of visual permeability within open space (consider deciduous and open canopy trees).- Ensure that passive surveillance opportunities are provided at ground level as well as from elevated positions and balconies (consider as part of built form guidelines).- Provide quality landscaping or screens where there are undesired views, particularly along laneways or where open space terminates at car parking area, service infrastructure and other undesirable elements.- Provide consistent lighting levels within open spaces with a hierarchy of light levels that responds to:<ul style="list-style-type: none">- <i>Access, public spaces and pedestrian lighting</i>- <i>Landscape and tree lighting</i>- <i>Decorative and feature lighting</i>- <i>Compliance with the new Australian Standard AS/NZS 1158 3.1:1999 Pedestrian Area (Category P) Lighting</i>- Minimise light pollution where possible, whilst providing a degree of lighting to encourage evening activation and a general sense of security.- Consider developing a hierarchy and network of playspace located at intervals of at least 500 metres.

Detailed Guidelines

Topic	Guidelines
Community Activation	<ul style="list-style-type: none">- Avoid over dependence on structured play equipment in favour of natural or interactive play opportunities (consider role of landscape features in providing opportunities for climbing, shading, hiding and exploration).- Explore opportunities to represent and recognise the history and cultural values of the community and the area (consider the past, present and future in relation to commemoration, celebration and aspiration).- Use public art to create activation, animation and destinations within open space.- Avoid commemorative or 'plonk' art responses unless appropriate to the context of the open space.- Provide storage of maintenance equipment within open spaces to allow for community engagement.- Develop opportunities to programme open space to increase usage, function and community engagement.- Locate street furniture and equipment that encourages congregation and provides meeting points that respond to and provides for social interaction based on the context of the open space.- Furniture and facilities should be placed with care and in response to the design context of the open space and public realm, in order to enhance the character of the area and avoid excessive physical and visual clutter and potential conflicts with users.- Provide seating at regular intervals along trails, walking tracks and dual-use paths, as rest stations for recuperation or contemplation and to capitalise on views and areas of community activation. Integrate wheelchair stopping points as part of seating areas to ensure all accessible points of congregation.- Avoid fencing of playspaces to minimise the perception of enclosure within high density areas, except where playspaces are in close proximity to hazards or there is an increased degree of risk.- Locate litter bins in areas where they are easily accessible such as next to trails and paths or near picnic areas. The location should also be readily accessible by the maintenance staff.- Provide opportunities for people to adopt, interact and generally develop a sense of ownership for open space through gardening and maintain the landscape. (ensure suitable provision of equipment and services such as shed, tools and waste)- Consider using lighting to increase evening activation whilst increase comfort and safety within open space.

Detailed Guidelines

Topic	Guidelines
Integration and Compatibility	<ul style="list-style-type: none">- Consider the development of integrated design approaches to street furniture and other facilities in order to maximise function, amenity and beauty (bin stores, bike racks, seating).- Ensure that the selection of trees and shrubs avoids impact on infrastructure and does not lead to potential public liability issues. Reference should be made to State Government requirements, detailing recommendations and other requirements specified by service providers such as AGL, Origin, Telstra and SA Water.- Ensure planting areas and tree pits will accommodate mature trees and shrubs (make provision for trees to reach maturity and provide soil volumes in excess of 7-10 m³).
Adaptability and Transformation	<ul style="list-style-type: none">- Consider areas that allow gardening and direct interaction rather than passive engagement by the community and consider in relation to Social and Community Activation guidelines.
Diversity of Open Space	<ul style="list-style-type: none">- Avoid overly urban and paved open space adjacent to residential areas. Consider a 50/30 balance of hard and soft landscape areas within residential areas.

Detailed Guidelines

Topic	Guidelines
Accessibility and Connectivity of Open Space	<ul style="list-style-type: none">- Develop building accessways that overlook open space to allow continuous visual connections and passive surveillance opportunities.- Avoid gated and obstructive segregation of public open space and shared community areas to ensure that open space provision and amenity is maximised for all members of the community.- Develop footpath and cycle connections of at least 3 metres and ensure a generous provision of access routes within open space and to other adjacent open space.- Ensure vista and visual corridors are provided across the widest dimension of the open space and between adjoining open space.- Provide links and connections between buildings to ensure physical interconnection to the surrounding open space (encourage direct line of sight).- Provide "access for all" ramps as part of new building and access points within open space.- Provide consistent lighting and clear sightlines along laneways and streets and across parking areas, and ensure that safe pedestrian routes are provided.- Ensure that footpaths are a minimum of 1.5 metres wide and provide all-weather access.- Provide adequate bicycle parking on share use paths and at identified destinations.- Develop signage strategies that provide a hierarchy of information that is consistent, legible, with pictograms, images and devices to assist the visually impaired, ensuring a clearly articulated intent and the correct delivery of information.- Create highly visible play and recreation opportunities with good passive surveillance.
Quality and Durability	<ul style="list-style-type: none">- Consider the impact of increased usage upon playspaces within higher density developments and design responsively in relation to equipment and material selections.- Consider asset renewal and replacement rates equal to the frequency of use experienced by the open space, playspace or facility in high density developments.- Select durable materials which will deliver structures, equipment, street furniture and paving with a 20-30 year asset lifespan.

Open Space Provision

Topic	Guidelines
Urban Context and Built Form	<ul style="list-style-type: none">- Consider green roofs and decks as part of an integrated design approach to deliver open space development (contributory open space with higher density development).- Ensure that building edges, façade articulation (balconies) and podium setbacks do not create a dominant sense of containment (response to a human scale).- Avoid narrow (less than 10 metres wide) open space provision when orientated east-west and when building containment exceeding 3 storeys (consider podium setback in order to minimise over shadowing).- Avoid boundary fencing and blank boundary enclosures that reduce the activation or surveillance of open space.- Provide separation of not less than 7 metres width between buildings to ensure suitable visual and physical interconnection to the surrounding open spaces, streets and public realm.- Encourage building edge frontages to be typically 3-4 metres and not exceeding 7-8 metres in order to respond to human scales.- Reduce the impact of noise from open space through double glazing and acoustic buffers, both within the built form (double glazing) and open space (earth mounding).- Buildings with northern or western orientations will provide a high degree of overshadowing when open space is orientated to the southern or eastern side. A ratio of 1:1.6 (built form to open space) should be applied as 'best practice approach' to minimise the impact of overshadowing on open space.- Where built form is developed to the west and north then the relationship between the built form and open space must be considered to mitigate overshadowing either by increasing open space provision to the south or east or by moderating building heights to the north and west.- Aim to provide active zones within open spaces that provide significant periods of sunlight access (9am-4pm) in relation to overshadowing. Consider the location and design of facilities, features and activities that respond to the activity zones and overshadowing.

Open Space Provision

Topic	Guidelines
Nature and Landscape	<ul style="list-style-type: none">- New trees within open space should be selected for their longevity (50-60 years) and habitat value, to ensure the connection to nature is maintained.- Locate productive gardens within large open space areas, where they are visual and accessible (avoid remote or isolated locations, unless by agreement).- Trees within open space should not impinge on visibility and should be clear stemmed to a minimum of 2.5m above ground level where surveillance is required.- Incorporate porous surfaces to allow water to permeate and increase stormwater inundation (based on 60/30 hard and soft landscape ratio).- Amenity landscapes within reserve and open spaces should be low to medium height and not create visual barriers.
Universal Principles and Guidelines	<ul style="list-style-type: none">- Give consideration to the sustainability and embodied energy demands of materials.- Comfortable and safe spaces for old aged, women and unaccompanied children should be the minimum benchmark.- Consider on-site weather stations and soil moisture sensors which will enable a more responsive irrigation schedule to be applied (particularly in relation to potential building rain shadows and micro climatic variations).

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