Monarch Glen ROL4

ROL4 EDQ Guidelines Compliance Assessment

Ethos Urban

Colliers

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Response To PDA Guideline 01 – Residential 30

PDA Guideline 1 – Residential 30 guides the planning and design of residential development within PDAs. As noted in the Town Planning Report, the provisions of PDA Guideline 5 – Neighbourhood Planning and Design take precedence over the provisions of PDA Guideline 1 – Residential 30, where inconsistencies exist.
The guideline focuses of the following 5 themes:

- Neighbourhood design;
- Lot design;
- Block design;
- Street design; and
- Park design.

Guideline 1 also provides a checklist of examples of how to comply with the intent that the guideline outlines for the above 5 themes. An assessment of the proposed development against the relevant part of this checklist is provided in Table 1 below.

Table 1: Response to PDA guidelines 1 checklists

Neighbourhood Design

Checklist Examples	**Response**
Does the neighbourhood layout and design respect and respond appropriately to local conditions, including: 1) the local market and need for housing and business 2) physical features such as topography, natural drainage systems and vegetation 3) places of cultural heritage significance 4) opportunities for views and vistas and other elements that will clearly identify and, from a commercial perspective, 'brand' the neighbourhood 5) providing connections to existing facilities, services and movement networks in the surrounding area.	**Complies** ROL4 has been designed to respond to the local conditions such as topography and climate, and integrate into the surrounding development areas. ROL4 is responding to the local market and needs for housing through the provision of additional housing and diversity of choice. There are a total of 575 residential lots proposed, delivering 21 different lot typologies ranging in size from 210m² to 966m²). Lot typologies include terrace housing near public open space, smaller lot types throughout the ROL area, priced affordably, and larger lots that take advantage of view and natural topographical features. Physical features of the site have informed the layout of ROL4 and the neighborhood configuration. The earthworks review and understanding of local topography has enabled the design to include natural drainage systems. Consideration of topographical features has also informed lot typologies and locations to enable neighborhoods to capitalise on opportunities for views and vistas. The topographical setting of these precincts informs the vision and brand for the development. ROL4 is within proximity to existing facilities and services within the adjacent Flagstone development areas to the north-east. Additional facilities and services will be provided throughout the MGMP area as it develops over time.
Does the neighbourhood have: 1) defined entries and legible neighbourhood boundaries to foster a sense of identity 2) a highly permeable, legible street pattern 3) a variety of multi-use parks 4) a safe, attractive and efficient pedestrian and cycle network 5) distribution of land uses, layout of streets and building densities that support public transport use 6) a mix of lot sizes providing wide choice in affordable and accessible housing 7) lots of a size to allow small-scale, compatible land uses such as childcare, aged care, retirement living, local shops and home-based	**Complies** ROL 4 has been designed to: 1) Have a defined entry point, with the inclusion of the Monarch Glen entry statement artwork adjacent to the entry road (Homestead Drive), signifying the boundary of the new community. 2) Provide a well-planned, permeable and legible street pattern. 3) Provide a range of open space and opportunities for outdoor recreation through seven (7) linear parks and two (2) Neighborhood Recreation Parks. 4) Provide a high-quality active transport network. 5) Provide a diversity of housing throughout the neighborhood that are serviced by the proposed bus network. 6) Provide a mix of lot typologies and diversity of housing options ranging in size from 210m² to 966m²). 7) Provide allotments designed to their specific use.

Table 1: Response to PDA guidelines 1 checklists	
business	
Lot Design	
Checklist Examples	**Response**
Are the lots of a regular shape and standard dimensions: 1) to contribute to delivery of street pattens that are rectilinear 2) to contribute to cost savings in engineering and building construction 3) to suit proven dwelling designs 4) consistent in lot depth(s) and widths of a standard depth of 25.0 metres and 32.0 metres and widths generally in multiples of 2.5 metres and 5.0 metres	**Complies** ROL 4 Lots have been designed to; 1) Provide a logical and rectilinear street pattern. 2) Provide lots that are benched, retained and mostly flat to minimise the requirement for earthworks and reduce construction costs. 3) Facilitate the development of dwellings as outlined in the Plan of Development. 4) Provide lots designed in keeping with the consistent lot depth(s) and widths, as per the example and as illustrated in the POD.
Slope	
Checklist Examples	**Response**
Unless the dwellings are to be constructed in an integrated or attached development, is the slope on a lot less than 450 sqm in area no more than: 1) 10 per cent side slope 2) 5 per cent lengthwise slope 3) Less, if both these figures approach the maximum together	**Complies** Development of lots less than 450m^2 will be in keeping with the requirements. Proposed lots will be benched and well within the prescribed slope parameters.
Block Design	
Checklist Examples	**Response**
<u>Block shape and dimensions:</u> Are the blocks of a size and dimension that, when arranged, facilitate: 1) an efficient neighbourhood pattern, scale and area 2) high levels of pedestrian connectivity throughout the neighbourhood 3) safe and direct pedestrian, cycle and vehicle access to destinations such as local shops, neighbourhood centre, public transport stop or station, neighbourhood park and nearby district and regional sport facilities 4) choice in the type of housing 5) rear lanes that maintain standard lot types and dimensions	**Complies** ROL 4 is designed to provide urban blocks which; 1) Create an efficient neighbourhood pattern that is easy to navigate and cohesive. The lot sizes and typologies have be developed generally in accordance with the typical lot shapes and dimensions outlined in the guidance document. The diversity of lot typologies is arranged to provide an appropriate sense of scale throughout the development area. 2) Encourage pedestrian activity throughout the neighborhood. The provision of linear parks and open spaces enhances the pedestrian accessibility through the creation of an open space pedestrian network. 3) Facilitates the establishment of a well connected active and public transport network within ROL. Pedestrian access and active transport will be provided throughout the site both within the road reserve and outside of it, through park linkages and open space. An Active transport strategy has been development and is included in the Traffic Impact Assessment (**Attachment H**) which identifies how the ROL active transport provisions will integrate into future development stages. 4) Provides a variety of lot sizes, including terrace housing and a range of single dwellings options, ultimately contributing to housing diversity. 5) No rear lanes are proposed.
<u>Laneway lots:</u> If more than one dwelling is proposed, the laneway lots are:	**Not Applicable** There are no laneways lots proposed in ROL4.

Table 1: Response to PDA guidelines 1 checklists	
1) at least 7.5 metres wide 2) at least 30.0 metres deep on at least one side of the laneway To enable ease of visitor access to houses which front the laneway: 3) the block length has been shortened 4) a mid block lane and/or pedestrian link has been provided	
Orientation for climate: Where the design for the prevailing summer breeze is paramount, is the road leg length: 1) oriented perpendicular to the prevailing breeze Where the design for access to winter sun is paramount, is the long road length: 2) oriented in an east-west fashion To avoid the western summer sun are: 3) wide lots minimised on the north- south streets 4) built-to-boundary walls, unless constrained by topography, located on the west to southern walls	**Complies** The layout for ROL4 has largely been informed by existing topography, however due consideration has been given to the local climate. The development parameters outlined in the POD seek to ensure that dwellings are orientated appropriately to facilitate access to the sun and setbacks are prescribed to reduce overshadowing where required. Many roads within ROL4 are oriented in a north-south direction to allow the shortest possible building length to face the western sun. Where the longer side of the dwelling is facing the west, the POD nominates built to boundary walls on the western side.
Lot arrangement: Are lots within the block arranged so that: 1) the highest densities are located around open space, amenity features or other focal points 2) there are between four and six adjoining terrace or row housing lots in a group (to enable group housing construction and integrated streetscape solution) 3) there are no more than eight narrow frontage lots in a row 4) there are no more than four lots with a width of 7.5 metres or less in a row unless serviced by a rear lane 5) there are no minor mismatches (e.g. less than 1.0 metre) in the rear corner lot boundaries of adjoining lots (to minimise the risk of set out error) 6) multi-family housing lots are preferred on highly accessible: o block ends o corner lots o lots with dual road frontage Are small lots minimised: 7) at the end of a t-intersection 8) at the entrance to a precinct if not a rear lane	**Complies** The layout proposed for ROL4; 1) Ensures opportunities for higher density housing is located near amenities and focal points within the community. For example, the smallest lots (i.e. 11518 – 11524) are located adjacent to a linear park with views of the conservation area. 2) Terrace lots are configured as groups of a maximum of seven. Notwithstanding, the proposed design enables group housing construction and ensures a logical streetscape solution. Additionally, the lots on either end of these terrace lot groupings exceed 7.5m in width. 3) Ensures there are no more than eight narrow frontage lots in a row 4) Ensures there are no more than four lots with a width of 7.5m or less in a row (unless identified terrace housing lots). 5) Avoids minor mismatches of lot boundaries. 6) Ensures larger multi-family style housing can be accommodated by providing larger lots on corners. Corner lots can be as large as 966m^2. 7) Small lots are not located on t-intersections and corners.

Table 1: Response to PDA guidelines 1 checklists

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Street Design

The design of streets within ROL4 are largely in keeping with the street typologies outlined within the PDA Guidelines, as detailed further in the Traffic Impact Assessment (**Attachment H**) which are also aligned with the revised Movement Network Infrastructure Master Plan OSS.

As such, this part of the guideline is not relevant to the proposed development.

Park Design

The provisions of Guideline 12 – Park Planning and Design are considered more relevant than this section of Guideline 1, and have been assessed above.

Building Design

As described in the Town Planning Report, the building design within the ROL4 is informed and controlled by the POD. The POD can only control certain elements of building design. The measures outlined within the Guideline that can be controlled by the POD have been included below for assessment. Further detail is provided in the POD. In the instance of any minor non-compliances with the guidelines, these remain in line with QDC requirements and are therefore considered appropriate.

Control	Guideline	Compliance
Setbacks (Traditional, courtyard, villa and multi-family housing lots)		
Front	Minimum 2.4m 4.5m to garage or carport doors	**Complies** Setbacks range from 3.0m to 4.5m depending on the lot type. 5m to garage door for all lot types.
Side (build to boundary)	Ground floor; 0.0m First floor; 1.0m	**Minor non-compliance** Ground floor; 0-0.3m First floor; 0.9m
Side (not build to boundary)	Ground floor; 0.9m – 1.2m First floor; 0.9m-2m	**Complies** Ground floor; 0.9m First floor; 0.9m
Rear	Between 0.9-2.0	**Complies** Ground floor: 1.0 – 1.5m First Floor: 1.0 – 2.0m
For any boundary setback where wall height is >2m above building pad.	N/A	**Complies** Ground floor; 2.5m First floor; 2.5m
Secondary Frontage	1.5m	**Complies** 1.5m
Setbacks (Terrace, row and loft housing)		
Front	2.4m	**Complies** 2.5m
Side and Rear	Build to boundary line: 0.0m Not build-to-boundary line: 0.9m	**Complies** Built to boundary: Ground floor; 0-0.3m First floor; 0.9m Not built to boundary: Ground floor; 0.9m First floor; 0.9m
Car Parking		
Space for 1 covered on-site parking space	Minimum 2.7 metres by 5.5 metres, per dwelling	**Complies** The PoD stipulates that a minimum of two on-site car parking spaces must be provided for each dwelling, one of which must be within a garage. While no minimum dimensions are prescribed, the following maximums are provided. The maximum width of a driveway at the lot boundary shall be:

Table 1: Response to PDA guidelines 1 checklists		
		a. 4.8m for a dwelling with a double garage with a lot frontage of 12.5m or greater; b. 3.5m for a dwelling with a double garage with a lot frontage equal to or greater than 10m and less than 12.5m; or c. 3.0m for a dwelling with single or tandem garage on any lot frontage. Further this, a car parking analysis plan has been provided as **Attachment P.**
Tandem parking spaces	Provided to allow for one on-site visitor parking on traditional, courtyard, villa and multi-family lots not serviced by a laneway	**Complies** All dwellings are required to provide space for two vehicles on each lot.
Visitor parking for loft homes	Provided for other than in laneways	**Not Applicable** There are no Loft homes proposed in ROL4
Site Cover		
Single dwellings	60% of lot area	**Complies** Site cover for single dwelling is as follows; courtyard, premium courtyard, traditional and premium traditional; 60% The only single dwelling type with a site cover over 60% is the villa and premium villa typology at 65%.
Row / terrace / multi family dwellings	75% of lot area	**Complies** Site cover for Terrace housing is specified at 75% in the POD.
Buildings facing a park or more than one street	Buildings address each street frontage or park frontage through verandahs, porches, awning and shade structures, variation to roof and building lines, inclusion of window openings, use of varying building materials	**Complies** All dwellings must be designed in accordance with the following requirement as set out in the POD; *The primary street frontage elevation is to be articulated to reduce the mass of the building by one or more of the following:* *a. Windows recessed into the façade* *b. Balconies, porches or verandahs* *c. Shadow lines created on the building through minor changes in the façade (100mm minimum).* Additionally, primary and secondary frontage setback requirements for front walls and garages ensure further articulation in built form.
Building articulation	Buildings incorporate two or more, of the following design elements to provide diversity in building form as well as respond to the climate: verandahs roof overhangs window hoods/screens awnings and shade structures	**Complies** All dwellings must be designed in accordance with the following requirement as set out in the POD; *The primary street frontage elevation is to be articulated to reduce the mass of the building by one or more of the following:* *a. Windows recessed into the façade* *b. Balconies, porches or verandahs* *c. Shadow lines created on the building through minor changes in the façade (100mm minimum).* Additionally, primary and secondary frontage setback requirements for front walls and garages ensures further articulation in built form.

Table 1: Response to PDA guidelines 1 checklists

Fencing		
Front fences and walls	Solid front fences and walls no more than 1.2 metres high. If containing openings that make it more than 50 per cent transparent, a maximum fence height of 1.8 metres, and solid to a maximum height of 1.2 metres if the dwelling has a frontage to a street with traffic volumes in excess of, or projected to exceed, 10,000 vehicles per day, or where the main private open space is in front of the dwelling, the maximum height for solid front fences and walls 1.8 metres.	**Complies** The POD provides requirements for fencing that are aligned with the guidelines, including; Primary frontage requirements: a. The maximum fence height is 1.8m; b. Fences are not permitted along road frontages forward of the building; and c. Side boundary fences are to be recessed at least 1m behind the wall addressing the primary road frontage (as per diagram).
Fencing interfacing with a park	no more than 1.5 metres high predominantly open in nature.	**Not Applicable** The few lots that have some interface with the linear parks are not required to have fencing that is open in nature, as these linear parks present large street frontages, ensuring good CPTED outcomes.
Fences on laneways	1800 millimetres high and completely screen private open space, car parking and service areas	**Complies** The POD stipulates that; Within laneways, 1.8m high fences are permitted to screen private open space, car parking and servicing area. Any fencing area above 1.5m in height to be at least 50% transparent.
Fences on corner lots	designed as front fences addressing both streets (rather than a front and a side fence)	**Complies** The POD stipulates that; a. Fences to Secondary Frontages (Side) of Corner Lots may extend beyond the face of the secondary facade only on the basis the fencing visible from the public area is: · A maximum fence height of 1.8m; · Solid up to a height of 1.5m with any fencing above 1.5m in height being at least 50% transparent or the fence can be at least 25% transparent overall where the transparency is consistent across the full area of the fence (ie. transparent sections cannot be located solely at ground level); and · Does not extend for lengths greater than 10m without a landscaped recess 2m in length and 0.75m deep (as per diagram).
Private Open Space		
Dwellings with their main living areas located at ground level	A minimum of 12 sqm in area per dwelling unit a minimum dimension of 2.4 metres and/or have adequate space to accommodate a table, chair, planting, barbeque and shade	**Complies** The POD stipulates that; Each house / dwelling unit has a clearly defined outdoor living space which: a. Has an area of at least: · 12m² with a minimum dimension of 2.4m for a 3 or more bedroom house / dwelling unit; · 9m² with a minimum dimension of 2.4m for a 2 bedroom house / dwelling unit; or · 5m² with a minimum dimension of 1.2m for a 1 room or 1 bedroom house / dwelling unit. b. Is accessible from a living area; and

Table 1: Response to PDA guidelines 1 checklists		
		c. Has a ground slope of not more than 1 in 10;

Response To PDA Guideline 5 – Neighbourhood Planning And Design

The proposed development of the ROL 4 has been designed with the guiding principles and policies in mind to ensure that best practice neighbourhood design principles are incorporated.

Table 2 below provides a more detailed response to the design standards for ROL4 within Guideline 5.

Table 2: Response to PDA Guideline 5 Design Standards

Access	
Design Standard	**Response**
▪ Maximum 400 metres walk to neighbourhood recreation park or equivalent (see PDA Guideline No. 12 Park planning and design). ▪ Clear, direct walk or cycle access to neighbourhood centre. ▪ Ninety percent of all dwellings are within 400 metres of an existing or planned public transport stop.	**Complies** ROL4 has been designed to ensure residential lots are within 400m of an open space area. Furthermore, the majority of lots will be within 400m walking distance of a Neighbourhood Park, as outlined in the revised Context Plan. See assessment against PDA Guideline no.12 Park Planning and Design above. Bus routes are proposed throughout the subject site. Specific bus routes through the development are subject to consultation with TMR / TransLink, however bus stops have been proposed within the development to maximise public transport accessibility and coverage. As shown in the Traffic Impact Assessment (**Attachment H**) the majority of the proposed development area is located within reasonable walking distance of a future public transport route / stop, with only a small portion (~21 lots) outside of the 400m walking radius. 96.4% of residential dwellings are located either within the catchment of the proposed bus stop or within 400m of future services on New Beith Road.
Dwelling Density	
Design Standard	**Response**
▪ Suburban neighbourhood - average net residential density of at least 15 dwellings per hectare (unless prevented by topography or other constraints). ▪ Urban neighbourhood - average net residential density of at least 30 dwellings per hectare. ▪ Higher density residential development is located in and around neighbourhood centres, along connector streets and within 400 metres of transit nodes	**Complies** ROL4 provides an average net residential density of 15.3 dw/ha.
Land Use	
Design Standard	**Response**
▪ Neighbourhood centres serve a catchment of several neighbourhoods and should be located on major connector or arterial roads for exposure and access. ▪ Land intensive uses such as district and major parks should be located at the periphery of neighbourhoods	**Not applicable** There are no Neighbourhood centres proposed within ROL4, nor are there any land intensive uses proposed.
Street Network	
Design Standard	**Response**
▪ Grid pattern or modified grid responsive to site characteristics. ▪ Where slope allows, orientation within 15 degrees of	**Complies** ROL4 has been designed to; • Establish a grid pattern where possible, with

Table 2: Response to PDA Guideline 5 Design Standards	
north-south or east-west. ▪ Connector and main streets of centres orientated to landmarks. ▪ To minimise cut & fill, streets follow ridges, gullies, and/or are perpendicular to slope.	variations required to accommodate site topography. ● Provide appropriate lot orientation which allows the majority of lots within an east-west orientation, with the remaining lots within a north-south orientation ● Provide a well planned road network that includes neighbourhood connector roads neighbourhood access roads to all proposed parks, as detailed further in the Traffic Impact Assessment (**Attachment H**). ● Minimise the amount of earthworks required where possible.
Streets	
Design Standard	**Response**
Street network includes: ▪ neighbourhood streets within neighbourhoods ▪ neighbourhood connector streets (approx. 800 metre grid) linking neighbourhoods ▪ major connector streets linking groups of neighbourhoods ▪ neighbourhood main streets in centres rear lanes	**Complies** The street network of ROL4 has been designed to provide a variety of street typologies that are generally consistent with the requirements of the PDA guideline 6 Street and movement network. These include; • Urban Arterial • Trunk Connector • Trunk Connector with median • Trunk Connector without median • Trunk Connector at bridge • Neighbourhood Connector Type 2 • Neighbourhood Access (15.5m) • Neighbourhood Access (14 m) • Neighbourhood Access (Conservation 20m) Any variations from these requirements are outlined within the Traffic Impact Assessment (**Attachment H**).
Block Sizes	
Design Standard	**Response**
▪ Length 100-200 metres ▪ Mid-block break providing a pedestrian link when blocks are over 130 metres ▪ Depth 40-80 metres	**Complies** Neighbourhood blocks have been designed in accordance with the design standards. Blocks without pedestrian breaks tend to range from 100m to 130m, with some exceptions along the precinct boundaries. Longer blocks without pedestrian links occur in some limited areas, such as along the trunk collector road, where there is no reasonable desire line for pedestrian thoroughfares Mid block breaks are provided by way of pedestrian linkages in other areas of ROL4, such as precincts 102.02 and 102.01 providing linkages throughout the development between the conservation areas and the parks.
Suburban Neighbourhood Lot Layout	
Design Standard	**Response**
▪ No more than eight narrow (less than 10.0 metres) frontage lots in a row. ▪ No more than six lots with a width of 7.5 metres to 5.0 metres in a row unless serviced by a rear lane. ▪ No more than twelve lots with a width of less than 5.0 metres in a row. ▪ Multiple residential lots located on highly accessible block ends, corner lots and lots with dual road	**Complies** ● There are no instances where there are more than eight (8) narrow lots in a row ● No more than six lots with a width of 7.5 metres to 5.0 metres in a row. The terrace housing product provides five lots in a row of 7.5m frontages, with the lots on either end of the row providing frontages greater than 10m.

Table 2: Response to PDA Guideline 5 Design Standards	
frontage. ▪ Lot corners match or are within 1.0 metre of corners of adjoining lots.	• There are no more than 12 lots with a width of less than 5.0 meters. • There are no multiple residential lots provided in this ROL • Lot boundaries for corner lots are appropriately set.
Natural Hazards	
Design Standard	**Response**
State Planning Policy 1/03 Mitigating the adverse impacts of flood, bushfire and landslide.	**Complies** Subject to clearing in accordance with the EPBC approval, no lots within the ROL are identified as being subject to unreasonable natural hazard risk. Potential impacts from flooding are considered within the Stormwater Management Plan provided as **Attachment J,** and demonstrate that the proposal will comply, pending the implementation of the plan. A Bushfire Management Plan is also provided as **Attachment M.** The BMP ensures the proposal will comply, provided that the bushfire mitigation measures and the provisions in the assessment against the Bushfire Overlay Code Assessment Table
On Street Parking	
Design Standard	**Response**
Where for a – ▪ One room or one-bedroom house/dwelling unit: o 0.5 on-street parking space per house/dwelling unit is provided within reasonable proximity of the house/dwelling unit; or ▪ Two or more-bedroom house/dwelling unit: o 0.75 on-street parking space per house/dwelling unit is provided within reasonable proximity of the house/dwelling unit.	The proposed POD prescribes maximum widths of driveways along site frontages (i.e. max. 4.8m for a lot wider than 12.5m, max. 3.5m for a lot between 10m – 12.5m, 3.0m otherwise). The maximum lot width allows each lot to provide on street parking at the frontage. Furthermore, the POD requires that a minimum of two on-site car parking spaces must be provided for each dwelling, one of which must be within a garage, including the narrower lot designs. This further reduces the potential impact of on street parking. ROL4 will provide sufficient parking for residents.
Parking Analysis Plan	
Design Standard	**Response**
A parking analysis plan is required to demonstrate compliance with the above standards if the development proposal includes lots less than 12.5m wide, and/or a Multiple residential development including up to 6 dwelling units.	See above.
Relaxation	
Design Standard	**Response**
A relaxation to the above standards may be approved where: ▪ The development is in proximity to high frequency public transport (e.g. within 800metres of a railway station) and/or ▪ The development secures a higher proportion of on-site parking	No relaxation is sought in this application.

Commented [BM1]: MC comment: that we should include a plan showing the on street parking provision can be accommodated

Assessment Against PDA Guideline 12 Park Planning and Design

Parks planning and design principles	
Preamble The following principles should be used to guide the parks planning and design process. Other sections of this guideline set out specific standards that are intended to achieve these principles. Development proposals involving parks that do not comply with these standards will be required to submit a parks planning report that demonstrates that the proposed park (or parks network) achieves the relevant PDA-wide criteria and the parks planning and design principles stated here.	N/A
Requirement	**Compliance/Comments**
Principle 1: Diverse • The parks network should provide a diverse range of settings and opportunities that cater for the varied recreational needs of residents and visitors of all ages and abilities. • Diversity should be addressed at all levels of planning and design. At the broad network level, park settings should range across the spectrum from natural and semi-natural places to highly modified areas for organised sports. Parks should be located and designed to highlight significant local features such as waterways, hills and ridgelines. • Parks should provide a variety of settings and opportunities for formal sports and active and passive recreational opportunities. Parks that are primarily for sports activities should also include informal recreation opportunities to cater for diverse user groups.	**Complies** • The parks proposed within ROL4 will be integrated with the future parks and open space network planned for the MGMP area, as demonstrated in the updated Context Plan. This network will provide a diverse range of open spaces, including but not limited to linear parks, recreational open space and sports parks. • The parks network will deliver a variety of settings, with some spaces providing a green spine and access to the protected nature reserves, while others will be landscaped and dedicated to organized sport.
Principle 2: Accessible and connected • Parks should be distributed and located to provide high levels of accessibility, and form part of an integrated parks network. • Parks are publicly accessible and free to use. All dwellings should be within a comfortable walking distance of a neighbourhood recreation park or other park that provides active and passive recreation opportunities. • District and major parks should be highly visible and accessible to their catchments and located on major connector or arterial roads with good public transport access. Civic parks should be at central, prominent and accessible locations within centres. Where possible, parks should be integrated into the overall greenspace network to facilitate access by active transport. Linear parks should provide walking and cycling paths and use existing natural features such as waterways and ridgelines to connect to other elements of the parks network and key destinations including centres and schools. • Park design should ensure that all members of the community, regardless of age or ability, have access to suitable recreation opportunities.	**Complies** • The two (2) Neighbourhood Recreation Parks provided in ROL4 are distributed to ensure accessibility for the residents with the majority of lots within 400m walking distance • The seven (7) Linear Parks also contribute to the accessibility of recreational spaces by expanding and enhancing the greenspace network and providing linkages to points of interest. • The proposed parks adjoin other areas of open space, such as the landscaped retention basin areas, to create a linked green network throughout ROL4. • Parks are designed to ensure they are accessible for all members of the community.

Parks planning and design principles	
Principle 3: Sense of place • Parks should respond positively to the natural environment and to local community values and needs. • Parks should play a major role in creating the identity or sense of place for a community. Parks should be designed to take advantage of natural features, provide opportunities for social interaction and community events, be lively, attractive and interesting places about which the community feels a sense of pride and ownership. • Parks should be welcoming, and designed to avoid perceptions that some areas are limited access or private spaces.	**Complies** • The network of parks and open space have been designed in response to the natural environment and community need. The vision for the open space draws from the existing environment, with each park having a purpose and vision. • The open space will connect with the broader site, working with the surrounding bushlands to connect users with the topography, open up to elevated views as well as connect with the forest floor. • Open space has been designed to maximise road frontage access to ensure parks are accessible, inviting and clearly open to the public.
Principle 4: Safe and healthy • Parks should be located and designed to provide a safe environment and encourage healthy activities. • Park design should incorporate the principles of Crime Prevention through Environmental Design (CPTED). Parks should have clear sightlines from nearby buildings and roads, should provide a variety of recreational opportunities and facilities (including lighting where appropriate) that attract a range of users to ensure high levels of activity for extended periods, and should include appropriate treatments of potentially unsafe areas such as close to busy roads or waterbodies. • Parks should enhance physical and mental health by encouraging physical and social activities, and providing opportunities for respite from the surrounding built environment.	**Complies** • The parks are located to ensure there is passive surveillance opportunities and in accordance with CPTED principles. • All open space within ROL4 has at least two road frontages to ensure accessibility and visibility. • There will be a range of recreational opportunities provided throughout the parks, appropriately lit, to ensure the parks provide recreational opportunities for all users. • Parks are appropriately located to ensure residents are provided respite from the surrounding built environment and can enjoy open space and recreational opportunities.
Principle 5: Cost effective • Parks should be planned and designed to balance capital costs with ongoing maintenance and operational costs. • The MEDQ encourages multiple use of parkland and shared use of facilities, where the proposed uses are safe and compatible, as a means of reducing initial development costs and the ongoing costs of the parks network to the community. Specific initiatives that are encouraged to achieve this principle include integration of flood and stormwater management elements, utility corridors and active transport links into parkland, co-location of recreation, sporting and community facilities, shared use of recreational facilities such as school ovals, and use of natural and semi-natural areas for compatible recreation purposes. The inclusion of multiple use elements such as utility corridors, flood and stormwater elements should not diminish the functionality of the park or its recreational use values. • Embellishments should be long lasting, require limited maintenance and incorporate sustainability principles. Within individual parks, facilities that require high maintenance should be grouped in accessible locations to reduce the maintenance effort. • Parks can be used to buffer incompatible uses provided this does not occur at the expense of the other principles.	**Complies** • All parks have been designed to balance capital costs with ongoing maintenance and operational costs. Any embellishments to the park are relevant to the role and function of each park. • Embellishments will be further addressed during the detailed design phase in close coordination with the end asset owner, being Logan City Council. • Linear Parks provided buffers to conservation areas which mitigates bushfire hazard and provides opportunities for residents to enjoy conservation areas. • Stormwater management has been integrated into the linear park network to improve flood immunity outcomes.

Parks planning and design principles	
Principle 6: Fit for purpose • Parks should be fit for purpose and capable of adaption to cater for changing recreational demands. • Key elements in achieving this include appropriate location, size, shape; physical characteristics and facilities to accommodate the intended range of activities; and compatibility with adjoining land uses. Larger, regularly shaped parks are inherently more flexible and should comprise a significant proportion of the parks network. Varied topography within parks is desirable but land with steep slopes or other significant constraints should comprise only a limited proportion of the parks network. • Parks should be designed to respond to the local climate. Key issues to consider are the provision of shade, locally endemic species, passive cooling and the availability of water in hot climates. • Parks should be comfortable and attractive for the intended activities. For example, areas with high noise levels may be acceptable for short duration sports activities but would not be appropriate for walking trails, picnicking and other quieter activities.	**Complies** • ROL4 includes a range of park types and sizes and have been designed in response to the locality. For example, the linear open space accommodates comfortable active travel and play opportunities along key routes. • The larger neighbourhood parks provide multiple recreational opportunities within each park, such as playgrounds, picnic areas and boardwalks. The Neighbourhood Recreation Parks are large, regular shapes providing flexibility for future use. • All parks provide a varied topography, in keeping with the surrounding area and to provide visual interest. • Play areas are proposed to be shaded, both naturally with existing trees and through the provision of shading structures.

1.0 Park types and roles

Park types and roles	
Requirement	**Compliance/Comments**
Parks should be freely accessible and free to use. Sports and recreation facilities that are not available for use by the general public, for example because they are operated for profit or for the exclusive benefit of members and their guests, do not generally form part of the park network addressed in this guideline. Examples of such facilities include sports stadiums, sports fields that are fenced to prevent public access, private recreation facilities such as country clubs, and indoor sports facilities that require payment of a fee for entry or use. Public sports and recreation facilities that require payment of an entry fee (such as public swimming pools) are acceptable provided they do not occupy a large proportion of the park. Table 1 describes the various park types used in this guideline. In practice, a park may comprise a combination of two or more of the park types shown in Table 1 (for example a park that is primarily a major sports park could also include part of a linear park and provide neighbourhood recreation facilities). In such cases the park should be disaggregated into its component park types to identify the particular standards applying to each.	**Complies** See Table 1 responses below.

Table 1: Park types and role		
Park Type	**Role**	**Compliance/Comments**
Linear park	A long, relatively narrow park often provided as part of a floodplain management or environmental area such as a buffer to a waterway or wetland. Linear parks provide informal recreation opportunities, particularly paths for walking and cycling, and are used as a linking element in the overall parks network either	**Complies** The Landscape Master Plan identifies Seven (7) Linear Parks within ROL 4. They comprise a total of 3.8 Hectares.

Table 1: Park types and role		
	within or between neighbourhoods or between neighbourhoods and destinations such as a school or centre.	These areas form a vital part of the green linages throughout the site and provide pedestrian and cycle pathways for recreational access. In some circumstances, the linear parks serve a dual function of stormwater management.
Local recreation park	A small park that provides visual amenity and passive recreation opportunities in an area with medium to high net residential density (more than 15 dwellings per hectare). A local recreation park allows existing vegetation to be retained, and provides seating, a small grassed area and, in suitable locations, can also include play equipment for young children. Local recreation parks provide a meeting point for nearby residents.	**Not applicable** No local recreation parks are proposed within ROL4.
Neighbourhood recreation park	A moderately sized park that provides a focal point for a neighbourhood. Neighbourhood recreation parks should provide places and facilities for passive and active recreation activities and a range of local community activities and events.	**Complies** There are two (2) Neighborhood Parks proposed within ROL4. Both parks incorporate opportunities for passive and active recreation activities.
District recreation park	A large park that caters for the varied active and passive recreational needs and community activities of a group of neighbourhoods. District recreation parks should provide a variety of settings, spaces and facilities to cater for large numbers of people, including large groups of people at significant community events, and for all age groups and levels of ability in the community.	**Not Applicable** No district recreation parks are proposed within ROL4.
Major recreation park	A very large park with extensive facilities and settings to cater for the varied recreation demands of a large population catchment. Major recreation parks provide a significant range of active and passive recreation opportunities to cater for the whole community, and should be capable of supporting a large community event and multiple activities undertaken simultaneously by large groups of people.	**Not Applicable** No major recreation park are proposed within ROL4.
Civic park	A small park within a neighbourhood, district or major centre. They provide landscape and amenity values and passive recreation opportunities for residents, workers and visitors to the centre. Civic parks provide spaces and facilities for social interaction and community events. A civic park may be more urban in nature, with hard surfaces and treatments in recognition of its setting and high activity levels.	**Not Applicable** No civic parks are proposed within this application.
District sports park	A large park that provides spaces and facilities for practising and playing structured or organised sports. District sports parks normally accommodate several sporting organisations that share the sports facilities, and also provide some informal recreation activities and spaces for the immediate area and visitors to the park.	**Not Applicable** No district sports parks are proposed within this application.
Regional sports park	A very large park that provides spaces and facilities for practising and playing structured or organised sports, including spectator seating and parking for major sports events. Major sports parks cater to a large catchment and normally accommodate several sporting organisations that share the sports facilities. Major sports parks also provide a range of informal recreation activities and spaces for the immediate area and visitors to the park.	**Not Applicable** No regional sports parks are proposed within this application.

2.0 Rates of provision, size and accessibility

Requirement	Compliance/Comments
The rates of provision and accessibility standards are shown in Table 2. The rates of provision for different park types are provided as ranges within overall specified standards of provision. For example, the required rate of provision for Local Parks is 1.3 hectares per thousand population - however there is flexibility as to how this overall allocation is distributed amongst the linear, local recreation and neighbourhood recreation parks that make up the total provision of local parks. This approach is intended to provide flexibility for park network planning to respond to local conditions.	**Complies** As noted below, ROL4 provides above the minimum requirements for recreational parks. There are no sports parks provided in ROL4, in accordance with the Context Plan, as these are being provided at later stages.

Table 2: Rates of provision, minimum area and accessibility requirements

Park Type	**Rates of Provision**		**Minimum Area**	**Accessibility Requirements**	**Compliance/Comments**
	Land (ha/1,000 popn)	No. of parks (popn)			
Local recreation park	0.0 - 0.2	NA	500m²	NA	**Not Applicable**
Neighbourhood recreation park (1)	0.5 - 1.1	1/1,000 - 1/1,500	5,000m²	90 per cent of dwellings within 400m of a neighbourhood recreation park or other park providing equivalent informal recreation opportunities	**Complies** The projected population of ROL4 is calculated at a rate of 2.7 persons per dwelling, equaling 1,552 people. ROL4 provides a total 1.03Ha of Neighborhood recreation park, the two (2) parks are 0.5Ha and 0.53Ha therefore complying with both the rates of provision and minimum area requirements. Over 95% of dwellings are within 400m of a neighbourhood park.
Local linear park (2), (3)	0.0 - 0.8	NA	NA	NA	**Complies** ROL4 provides three (3) local linear parks, totaling 1.8 hectares.
Total local parks (4)	1.3	NA	NA	NA	
District recreation park (5)	0.5 - 1.0	1/10 - 15,000	5 ha	90 per cent of dwellings within 2.5 km, must comply with location criteria in Table 3.	**Not Applicable**
Major recreation park (6)	0.5 - 1.0	1/20,000 +	10 ha	Must comply with location criteria in Table 3.	**Not Applicable**
Major linear park (3)	0.0 - 0.5	NA	NA	NA	**Complies** There are a total of four (4) Major linear parks proposed within ROL4, comprising 1.71Ha in total
Total district/major recreation parks	1.5	NA	NA	NA	
Total recreation	2.8	NA	NA	NA	

Commented [BM2]: Confirmed EDQ stated 2.7 in prelodgement

Table 2: Rates of provision, minimum area and accessibility requirements					
parks					
District sports park	0.75 - 1.2	1/10 - 20,000	7.5 ha	90 per cent of dwellings within 4 km, must comply with location criteria in Table 3.	**Not Applicable** District sports parks will be provided in subsequent stages. See Context Plan (**Attachment E**).
Major sports park	0.5 - 1.0	1/25,000 +	15 ha	Must comply with location criteria in Table 3	**Not Applicable** Major sports parks will be provided in subsequent stages. See Context Plan (**Attachment E**).
Total sports parks	1.80	NA	NA	NA	There are no sports parks proposed within ROL4, however in accordance with the updated context plan, appropriate provision of sports parks will be provided throughout the MGMP area. Further sports parks will be assessable via subsequent applications.
Total parks	4.6	NA	NA	NA	
Community land (7)	0.2	NA	NA	NA	**Not Applicable** Community land will be provided in subsequent stages. See Context Plan (**Attachment E**).
Total parks and community land (8)	4.8	NA	NA	NA	ROL4 complies with recreational park rates of provision. In accordance with the Context Plan, sports park rates of provision will be complied with in subsequent stages.

Notes:

(1) Includes allowance for civic parks in neighbourhood centres.

(2) A local linear park is within or adjoining a predominantly residential neighbourhood.

(3) The actual rate of provision for linear parks may exceed the indicated maximum rate, particularly in areas with extensive waterway or other environmental corridors. The allocation in the table sets the parameters for determining the contribution of linear parks to creditable park area.

(4) This is the base requirement of parks for neighbourhood or local area planning purposes (e.g. context plans) for areas that do not include a designated higher order recreation or sports park. Local parks must be provided within or adjacent to the neighbourhoods they serve and cannot be offset by contributions elsewhere within the PDA.

(5) Includes allowance for civic parks in district centres.

(6) Includes allowance for civic parks in regional/town centres.

(7) Refer to PDA Guideline 11: Community Facilities for more information.

The total rate of provision for parks and community land is consistent with the maximum chargeable rate of provision set out in the Sustainable Planning Act 2009 Statutory Guideline 01/09.

3.0 Shape, frontage and location

Table 3: Area and dimensions				
Park Type	**Shape**	**Road Frontage**	**Location**	**Compliance/ Comments**
Linear park	Preferred minimum width of 15 metres, may be reduced to 10m for short distances to respond to physical constraints.	No specific requirements but paths should be located and designed to maximise passive surveillance opportunities.	Site specific.	**Complies** All Linear Parks are a minimum of 15m wide.
Local recreation park	Parkland should be regularly shaped and of sufficient	Minimum 50 per cent of park perimeter to	Generally provided in areas of medium to high Residential	**Not Applicable**

Table 3: Area and dimensions				
	dimensions to achieve its role in the parks network, accommodate proposed activities and provide flexibility for new activities in the future. Minimum dimension of any part should not be less than 10 metres for maintenance purposes	have road frontage.	density (more than 15 dwellings per hectare).	
Neighbourhood recreation park	Parkland should be regularly shaped and of sufficient dimensions to achieve its role in the parks network, accommodate proposed activities and provide flexibility for new activities in the future. Minimum dimension of any part should not be less than 10 metres for maintenance purposes	Minimum 50 per cent of park perimeter to have road frontage.	Central, accessible location within neighbourhood or adjacent to linear park network.	**Complies** Both Neighbourhood Parks are regularly shaped and provided with good accessibility to the proposed residential lots. They include embellishments such as active transport links and playgrounds, while also providing flexible spaces for casual recreation. The Neighbourhood recreation parks have minimum areas of 0.5ha and 0.53ha and minimum dimensions of approximately 60m.
District recreation park	Parkland should be regularly shaped and of sufficient dimensions to achieve its role in the parks network, accommodate proposed activities and provide flexibility for new activities in the future. Minimum dimension of any part should not be less than 10 metres for maintenance purposes.	Minimum 50 per cent of park perimeter to have road frontage.	Direct access from connector or higher order road, and by local public transport.	**Not Applicable**
Major recreation park	Parkland should be regularly shaped and of sufficient dimensions to achieve its role in the parks network, accommodate proposed activities and provide flexibility for new activities in the future. Minimum dimension of any part should not be less than 10 metres for maintenance purposes	Minimum 50 per cent of park perimeter to have road frontage.	Direct access from trunk connector or higher order road, and by frequent public transport.	**Not Applicable**
Civic Park	Parkland should be regularly shaped and of sufficient dimensions to achieve its role in the parks network, accommodate proposed activities and provide	Designed as an integral part of the centre in accordance with CPTED principles.	Integrated into centre, close to community facilities.	**Not Applicable**

Table 3: Area and dimensions				
	flexibility for new activities in the future. Minimum dimension of any part should not be less than 10 metres for maintenance purposes			
District sports park	Parkland must be regularly shaped and of sufficient dimensions to accommodate proposed sportsfields and facilities, and provide flexibility for new activities in the future. Minimum dimension of any part should not be less than 25 metres for maintenance purposes.	No specific requirements but must have highly visible and well-signed entrances.	Direct access from trunk connector or higher order road, and by local public transport.	**Not Applicable**
Major sports park	Parkland must be regularly shaped and of sufficient dimensions to accommodate proposed sportsfields and facilities, and provide flexibility for new activities in the future. Minimum dimension of any part should not be less than 25 metres for maintenance purposes.	No specific requirements but must have highly visible and well-signed entrances.	Direct access from trunk connector or higher order road, and by frequent public transport.	**Not Applicable**

4.0 Designing parks as places for people

Requirement	Compliance/Comments
All but the smallest parks should be designed to provide a variety of settings ranging from places for group activities and events to active play areas and places for quiet contemplation. This can be achieved by designing parks as a number of zones of different character with high activity uses grouped in convenient locations close to park access points. Parks that also focus on the interaction between different activity areas are more interesting places that can also be more convenient to park users. The interactions between different park users and activities create animation and interest, rather than a series of isolated events. Examples of simple activation synergies include: • Locating park shelters to overlook a playground or other active recreation space • Designing pathways to travel between activity nodes and lookouts to destination • Situating a large grassed area for active recreation next to areas of natural bushland and associated trails. For recreation parks it is important to achieve a balance between active and passive recreation spaces. Table 4 shows the minimum level of active recreation spaces that should be provided for each type of recreation park. Sports parks should also include a variety of informal and passive recreation opportunities to complement the sports areas and facilities.	**Complies** All parks have been designed to accommodate a range of activities, including active travel linkages, play opportunities for children such as playgrounds or immersive nature play and shelter areas. The park designs are commensurate with their intended role and function.

Table 4: Requirements for active recreation spaces		
Park Type	**Active recreation spaces required**	**Compliance/Comments**
Linear park	No specific requirement except must be provided with walking and cycling path.	**Complies**. Linear parks include cycling and walking paths.
Local recreation park	No specific requirement.	**Not Applicable**
Neighbourhood recreation park	At least 3 active recreation spaces including at least one of suitable size for kickabout and other group activities (minimum dimensions 50m x 30m).	**Complies** Both neighborhood park provide at least three different recreational spaces, including larger open spaces. The Neighbourhood recreation parks have a minimum dimension of approximately 60m.
District recreation park	Multiple active recreation spaces including multiple large spaces for active group recreation commensurate with scale and nature of park.	**Not Applicable**
Major recreation park	Multiple active recreation spaces including multiple large spaces for active group recreation commensurate with scale and nature of park.	**Not Applicable**

5.0 Slopes, batters and retaining walls

Item	Requirement	Compliance/Comments
Slopes	All areas intended for active recreation and sports activities (including active recreation spaces, playgrounds, sports fields and courts*), outdoor eating and barbecue areas, and areas intended for support infrastructure such as buildings and carparking areas should have a slope of 3 per cent (1:33) or less. Other park areas can have varied topography provided: • the areas are accessible and functional for the intended recreation purposes • the area of any park with a gradient of 1:10 or more should not exceed 20 per cent of the total park area. *Sports fields and courts should comply with accepted standards for the particular sport which may impose more stringent standards.	**Will Comply** • Preliminary earthworks indicate that slope controls will be achieved within all park lots. This will be further addressed in the detailed design phase
Batters	Wherever possible natural topography should be retained, rather than creating batters or retaining walls that are relatively expensive to build and maintain. Batters within areas that contribute to flood and stormwater management are to comply with the standards for flood and stormwater management set out in this guideline. In all other circumstances, batters are to meet the following requirements: • Maximum gradient of turfed batters to allow mowing: 1:4 (except where designed as an integral part of a play experience) • Maximum gradient of planted batters: 1:3.	**Will Comply** • Some batters are proposed within the linear parks which accommodate the retention basins. These will contribute to flood and stormwater management, and will be designed to comply with the relevant guidance. • Any earthworks to form batters will be further addressed in the detailed design phase.
Retaining walls	Retaining walls should only be used in limited circumstances where other solutions are impractical, and should meet the following requirements: • Maximum 900mm high • Designed by a structural engineer • Low maintenance (e.g. non painted rock or concrete or other inert material) • Make a positive contribution to the overall park design • Designed to ensure public safety.	**Complies** • The need for retaining walls has been mitigated through the design of the parks. • Small retaining walls are required to support the design for the retention basins in parks in Lots 9001, 9002 and 9003. Council, who will be the ultimate asset owner has been consulted on the retaining wall and, as the wall will be no higher than 1m, they can

Item	Requirement	Compliance/Comments
		support the design.

6.0 Flood and Stormwater Management

Requirement	Compliance/Comments
The MEDQ encourages the integration of flood and stormwater management practices into parks. These aspects of park design are required to achieve: • relevant performance criteria in the Framework for the Integration of Flood and Stormwater Management into Open Space, Water by Design, Healthy Waterways Limited. (Note: for design purposes a "minor storm event" is defined as a storm event with an Average Recurrence Interval (ARI) of 2 years), and • the minimum flood immunities shown in Table 5.	**Complies** The water retention basins are integrated into the linear parks. Details of the basin designs are provided within the Stormwater management plan (see **Attachment J**). This approach has been discussed and agreed with LCC as the end asset owner.

Table 5: Minimum flood immunities

Park Type	Minimum flood immunity	Compliance/Comments
Recreation parks	Maximum 30 per cent of any park is below the 5 year ARI (average recurrence interval) flood level. Clubhouses, toilet and amenities blocks and other buildings (and areas designated for these facilities) are above the 100 year ARI.	**Complies** Preliminary designs indicate that the prescribed flood immunity can be achieved.
Sports parks	All formal playing surfaces (fields and courts) are above the 20 year ARI flood level. Clubhouses, toilet and amenities blocks and other buildings (and areas designated for these facilities) are above the 100 year ARI.	**Not Applicable**

7.0 Lakes and other permanent water bodies

Requirement	Compliance/Comments
At its discretion the MEDQ may approve lakes and other permanent water bodies in parks provided they: • Form part of an overall integrated stormwater management system • Are located in district or major recreation parks • Are highly visible • Have safe and active edge treatments • Are designed to maintain the required levels of water quality and minimise ongoing maintenance costs • Are provided with suitable access for maintenance purposes including by small boats • Comply with all relevant local government standards and the applicable standards in PDA Guideline No. 13: Engineering Standards.	**Not Applicable** No lakes or other bodies of water are proposed in the parks.
The maximum area of a permanent water body that can be counted towards the required area of park provision is: • Where the water quality standard supports secondary contact recreation - 50% of the water surface at normal fill level • Where the water quality standard does not support secondary contact recreation - the area between the edge of the water body at normal fill level and a line 5m	**Not Applicable** No lakes or other bodies of water are proposed in the parks.

Requirement	Compliance/Comments
in from the water edge.	

8.0 Shade Cover

Table 6: Provision of shade cover

Park Type	Required shade provision*	Compliance/Comments
Recreation parks	• 50 per cent shading of walking and cycling paths • 50 per cent shading of formal seating	**Will Comply** The Landscape Plans provide indicative areas for shading. Further shading requirements can be addressed further during the detailed design phase.
Sports parks	Shaded spectator viewing areas provided for at least one-third of one boundary of all formal sports fields, preferably in good viewing positions (e.g. near the centreline along the long boundary of football, hockey etc fields.	**Not Applicable** No sports parks proposed

* Shade can be provided by existing or new trees at maturity or shade structures. Percentage of shading should be calculated as at 9am or 3pm on 22 December.

9.0 Embellishments

Requirement	Compliance/Comments
Parks should be provided with appropriate facilities and embellishments to suit their intended roles and functions. Wherever practicable, embellishments should incorporate sustainable design elements such as drought tolerant landscaping, water re-use, renewable energy sources and recycled materials.	**Complies** The parks are appropriately serviced with facilities and embellishments, as detailed in the Landscape Master Plan provided in **Attachment D** and in Table 7 below.
All parks should be provided with the following basic facilities: • Fencing/bollards • Seating • Taps and bubblers • Landscaping (including earthworks, turfing and revegetation as required).	**Complies** The parks provide the appropriate facilities as detailed in the Landscape Master Plan provided in **Attachment D.**
Table 7 provides an indication of the standard embellishments normally associated with each park type. The numbers and locations of embellishments should reflect the size and function of the park. High maintenance embellishments such as shelter sheds, barbecues and play areas should be grouped to facilitate access and maintenance and to create nodes of high activity within the park.	**Complies** Refer to table 7
In addition to the standard embellishments, embellishments should be provided to respond to specific opportunities. Examples of such embellishments include viewing platforms, jetties and boat/canoe ramps.	**Complies** ROL4 includes 1.5m wide informal access tracks to connect with existing bush trails,
Irrigation has not been included as a standard embellishment but should be provided, particularly for sports parks, wherever it is practicable to use non-potable water for irrigation purposes.	**Not applicable** Permanent irrigation has not been proposed.

Table 7: Standard Embellishments

Embellishment	Recreation Parks						Sports Parks		Compliance/Comments
	Linear	Local	Neighbour-hood	District	Major	Civic	District	Major	

Table 7: Standard Embellishments									
Internal access road(s) (1)									**Complies** For further details, refer to Landscape Drawings
Parking (cars)									
Parking (bicycles)									
Lighting	X		X						
Toilets									
Paths (pedestrian / cycle)	X		X						
Shade structures			X						
Table and seating– uncovered	X		X						
Table and seating– covered			X						
Barbecues									
Play areas/ facilities			X						
Informal active recreation spaces	X		X						
Half-court, rebound wall or similar									
Sports fields (3)									
Spectator seating (2)									
Community events space									

Notes:

(1) Where required for internal access only.
(2) Spectator seating may be provided by grass mound where appropriate.
(3) Sports fields and courts should comply with accepted standards for the particular sport.

10.0 Engineering design and construction

Requirement	Compliance/Comments
Park infrastructure and facilities, such as internal roads, parking areas and walking and cycling paths, are required to comply with all relevant standards in PDA Guideline No. 13: Engineering Standards. Where a park is to be located adjacent to an existing watercourse a study of the watercourse geomorphology maybe required for the area immediately adjoining the proposed park and an area upstream and downstream of the site sufficient to determine the stability of the watercourse and its surrounds. The study shall also propose what site works are required to ensure the stability of the watercourse and therefore safeguard park embellishments. The study shall be undertaken by a suitable qualified geomorphologist.	**Complies** Park infrastructure is capable of complying with the PDA Guideline No. 13: Engineering Standards. This will be further assessed by EDQ as part of subsequent compliance assessment applications.