

Appendix P – Caloundra South PDA infrastructure agreement (local government infrastructure) - Park Profile and Rate of Provision assessment

PART C – INFRASTRUCTURE STANDARDS – OPEN SPACE INFRASTRUCTURE

Table 1 – Park Profiles – Recreation Parks

Park Profile 1 – Local Linear Park

Description	
A long, relatively narrow park providing informal recreational opportunities and utilised as a linking element in the overall parks and open space network.	
Location	
Total Area	Min 0ha – Max 36.8 ha (over the whole of the Development).
Quantity	Determined at ROL application within each precinct (except Precinct 6) in accordance with the Rate of Provision.
Precincts	All except Precinct 6

Performance Outcomes	Design Approach	Comment:
Size: Capacity to accommodate access to the open space network in safe, pleasant and attractive surroundings.	Size: Size (length) not limited so long as routine access points are provided with high visibility from adjacent uses.	Complies. The park runs along a road frontage.
Width: Capacity to provide space for assets, trees for shade and broad visual amenity and infrastructure to support safe open space and maintenance access.	Width: Preferred minimum width of 15m - may be reduced to 10m for short distances no more than 80m.	The linear park is at the interface between the development and the open space conservation land. The combined linear park and conservation open space has very substantial width.
Shape: Typically long and narrow shape allows flexibility in design, and safe open space and maintenance access.	Shape: Provide appropriately sized and located entry and exit points to avoid entrapment issues.	Complies.
Topography: Facilitates access for the general community and creates interest with varied landform.	Topography: Encourage variation in landform and allow for access to nodal points that comply with DDA requirements for access by all residents.	The linear park adjoins esplanade road, which will be provided with pedestrian footpath access as part of the road cross section.

	• Turf mounding to be used to create interest with height and elevation in non-active areas where appropriate. Max grade 1:4, 1:6 preferred for maintenance requirements.	
Flood Immunity: • Major Infrastructure elements should be in flood free areas. • Active and passive areas should drain quickly and freely to minimise restrictions on park use and minimise impacts on maintenance programs.	Flood Immunity: • Maximum 30% of the park below Q5. • Garden beds and footpaths above Q10. • Recreation spaces and footpaths be well drained.	Complies with PO. There is no major infrastructure in the linear park and the park slopes down to the conservation area for drainage.
Settings: Settings to support a range of activities appropriate to the linear nature of the open space.	Settings: Take advantage of natural features, views and provide open grassed areas provide for passive recreation.	Complies. The linear park directly adjoins the conservation area along its full width and hence, takes advantage of this natural features whilst providing a grassed area which can provide for a limited amount of passive recreation.
Stormwater Management: Integrated water treatment facilities for internal stormwater and adjoining road frontages.	Stormwater Management: • Land provided for stormwater treatment facilities for the park are to have a minimal impact on the park's functionality. • Additional land provision for integrated stormwater treatment facilities for adjoining road areas can be co-located with park treatment facilities also to have no impact on park function as identified in the description for this profile. • Max. 5% of total park area in one location. • Where possible, stormwater treatment facilities are to be integrated with planting areas and form part of the overall vegetated area.	Complies with PO. The location of the stormwater basins are at the very eastern and western ends of the linear park and ensure that the full road frontage is occupied by the linear park rather than by stormwater mitigation. The linear park and conservation open space land, combined, are very substantially larger in area than the stormwater management basins.
Shading: Shade trees frame and delineate recreational spaces, provide shade to pedestrian / cycle paths and provide appropriate and safe day-time shading reducing the harmful effects of UV radiation and reduction of heat.	Shading: 10-40% shading of walking paths / cycle paths, with ultimate shading of 40% at mature size.	Complies with PO. Shading will be provided by sporadic trees within the park and via the vegetation in the conservation area.
Lighting: To support safe access for users to access the network.	Lighting: Lighting to key entries, key pathways and nodes to conform with AS/NZS 1158.	Complies with PO. Details regarding street lighting to be provided post approval..
Activities: Open space area providing passive recreation opportunities with connections to the wider open space network.	Activities: Provide passive recreational spaces of varying scale. Seek to provide spaces based on allowances below. • Open space (turf) – min 50% • Vegetated areas (incl garden Beds) – min 20%	Complies with PO. The linear park, combined with the conservation open space, will provide substantial passive open space.

Connectivity: Network of pedestrian and cycle routes to provide access along and across residential settings which are connected to the broader open space, social and transport active network.	Connectivity: • Provide as a linking element in the overall parks and open space network. • Connect to higher order roads and public transport network. Link to key destinations such as community facilities, schools and centres. • Provide access points for maintenance. • Appropriate all weather shared pedestrian, cycle, maintenance and emergency accesses across drainage reserves with removable bollards/maintenance access gates where appropriate. Drainage reserve crossings could be causeways or bridge structures. Any bridge structures to be structurally designed and certified compliant with AS5100-2010 (Construction Standards in relation to pedestrian, cycle and maintenance of access bridges).	Complies. Connectivity is provided along the road frontage with no further access or pathways necessary.
Frontages: □ High level of shared frontage with roads to encourage accessibility and high visual connection with adjacent communities. □ Maximise surveillance of spaces with high level of visual surveillance from adjacent communities.	Frontages: • Paths should be located and designed to maximise passive surveillance opportunities. • Highly visible entrances and exits.	Complies. The path will run along the street front as part of the road cross section.
Fencing and Barriers: • The site is to be protected against potential vehicle access, providing protection from potential hazards, and damage to turf areas. • Separation of non-compatible uses to be addressed by barriers, however surveillance to be maintained.	Fencing and Barriers: • Boundary treatments are to be appropriate to adjoining residential areas, streets / roads, and natural areas. • Security to adjoining residential to be maintained. • Bollards provided to restrict vehicular entry with maintenance access points	Further detail to be provided at post approval. Bollards can be provided if required.
Buffers: • Appropriate space is given between remnant vegetation and residential boundaries to minimise conflicts. • Local linear network contributes to the natural biodiversity of the area. • Designed to positively contribute to the amenity of surrounding areas	Buffers: • Remnant vegetation and new plantings to protect and enhance each parks natural (biodiversity) values and features. • Wider sections to allow for taller growing trees or the retention of existing trees without posing ongoing safety threats (eg large overhanging branches) and maintenance issues for adjoining residents.	Complies. The park adjoins a conservation area and the linear park will provide a buffer. Planting around the stormwater basins and along the swales will contribute to biodiversity.
Local features: Park design enhances the visual amenity of its catchment and	Local features: Design highlights natural view lines to and from the park within immediate catchment.	Complies.

contributes positively to the amenity of surrounding areas.		That park can be wholly viewed from the street it adjoins and from the several connect streets.
Design: Parks are designed consistent with CPTED guidelines to provide a safe environment that encourages high level activity for both daytime and night time use for extended periods.	Design: • Passive spaces and trails are located to be highly visible from external areas. • Passive surveillance addressed with clear sight lines and suitable fencing to the perimeter adjacent non compatible uses. • Provide appropriately sized and routinely located entry and exit points to avoid entrapment issues.	Complies. The park follows the road boundary and is highly visible along its full extent. No paths are provided except for the footpath along the road boundary.
Signage: Ability to locate and access facilities with relative ease, to reinforce the neighbourhood character and help build community and a sense of place for residents.	Signage: Directional and park signage to key entries, pathways and nodes.	Details of any signage will be determined at detail design phase.
Waste Management: Appropriate placement of litter bins to facilitate ease of collection, reducing ongoing maintenance requirements.	Waste Management: Litter bins to be generally located in other open space park types that link with local linear parks	Details of any waste management provision will be determined at detail design phase.
Maintenance: • Location, design and infrastructure selection minimises maintenance and infrastructure renewal costs. • Provide suitable park access points and internal circulation to avoid ongoing maintenance issues.	Maintenance: • Infrastructure design and selection minimises whole of life costs and provide appropriate access for maintenance into and within all parts of the network. • Limit non-machine accessible areas that would require intensive labour.	Complies. The park is small and flat, and has a clear and obvious linear layout.
Energy conservation: Facility has a low carbon impact.	Energy conservation: Include energy saving features (eg low energy low CO2 light fittings).	Complies. The park requires no lighting.

Embellishments		
Item	Quantity (minimum requirements)	Comment:
Pathways - recreation	1.5m minimum width	Complies. A 3m footpath will serve the park.
Lighting	- Provided where pathways form part of the commuter network and active transport network, and are not adequately covered by street lighting. - To conform with AS/NZS 1158	Street lighting will be sufficient to illuminate the park.

Bollards	Along non-fenced perimeter boundaries at min. 1.5m centres where drainage or stormwater treatment devices, natural features (including waterways or conservation and rehabilitation areas) or landscaping treatments have not been provided to restrict vehicle access.	Bollards can be provided if required.
Fencing	Along adjoining residential boundaries.	N/A
Signage	Directional and park naming.	Details of any signage can be determined at detail design phase.
Maintenance access	1 post and top rail fence or similar (where required).	N/A. Not required.

Table 6 – Rate of provision

Open Space Category	Provision ^[1]	
Local parks Open Space Infrastructure	Provision Ha (Pop per 1,000) ^{[2],[3]} (Provision determined at ROL application within each precinct in accordance with land provisions and standards of this Infrastructure Agreement)	Total Provision (ha)
Local Linear Park	0.0 - 0.8 (See item 1.1.9 of the Infrastructure Contribution Schedule)	Minimum 0; Maximum 36.8

Comment:

The Linear Park is approximately 0.5515ha and **will comply**.

No other aspects of table 6 are considered applicable.