

A.1 Caloundra South PDA Development scheme Assessment (The Caloundra South Urban Development Area Development Scheme (approved October 2011))

Vision Statement

A vibrant community	A vibrant community » Caloundra South is serviced by a network of centres, the major centre being the Caloundra South Major Regional Activity Centre (MRAC). The network of centres within Caloundra South complements the hierarchy of centres that supports Maroochydore as the Principal Regional Activity Centre and nearby Caloundra as a MRAC. » The Caloundra South MRAC serves a sub-regional catchment and develops as a high quality town centre providing a diverse range of retail, business and commercial, civic, health, community, educational, recreational and entertainment facilities in conjunction with more intensive residential development. This is supported by district and neighbourhood centres that provide a focus for the community. » Residents live in neighbourhoods which have a discernable identity and sense of place, and are designed around a community focal point which may be a local park, school, community facility or neighbourhood centre. » Centres and open space facilities provide a wide range of opportunities for recreation, including community events that bring people together.	Comment: The proposal generally aligns with the underlying zoning and will supply industrial and commercial land to the area in general accordance with the approved Master Plan (which has refined the vision for this area).
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An inclusive community

An inclusive community

- » Caloundra South provides a diversity of housing, including affordable and accessible housing, to cater for a variety of households and changing requirements as the community matures.
- » Caloundra South meets the social, community, recreational and entertainment needs of residents through the provision of new services in accessible locations, including multi-purpose community facilities located in centres throughout the UDA.
- » Caloundra South will have early provision of a range of services and community facilities preferably co-located near schools or district and neighbourhood centres.
- » People have a multitude of opportunities for social interaction in the centres and parks that provide the focus for communities throughout Caloundra South.

Comment:

The proposal will provide for establishment of commercial and industrial business activities. This will provide for local employment opportunities and enable the service needs to residents of Aura to be catered to.

Housing, social, community and recreational needs of residents are provided for outside of Precinct 13 through other precincts across Aura.

An accessible community

An accessible community

- » Caloundra South is a compact, well planned community with higher density residential development within and adjacent to centres and major transport nodes to enhance accessibility to services and facilities, and reduce demand for travel by private vehicles.

Comment:

The proposed development aligns with the underlying zoning. The proposal does not compromise the designated layout of the transport network and provides for active transport generally in accordance with the requirements approved through the Master Plan. Internal to the site the road network is logical and of appropriate formation widths to be able to provide for the movement of vehicles in accordance with the underlying zoning.

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	» Caloundra South is serviced by an integrated public transport system that connects neighbourhoods and centres, linking with the future bus rapid transit and rail service to provide good access to work, education and other opportunities elsewhere in the region. » Caloundra South is designed for walking and cycling. It has a network of pathways built around several major off-road spines along the greenspace corridors including Bells and Lamerough Creeks, and along major roads. These spines are supplemented by a comprehensive network of smaller links and safe, legible street layouts that link to and between centres, parkland and other community facilities. » Residential uses, work from home opportunities and non-residential uses to serve the community needs will be provided within well designed, walkable neighbourhoods.	
A connected community	A connected community » Caloundra South is serviced by an integrated transport infrastructure network which supports transit oriented development, promotes pedestrian, bicycle and public transport modes over private vehicle use, provides for the integration between public transport modes and connects Caloundra South to the sub-regional transport network.	Comment: As noted above, the proposal does not compromise the designated layout of the transport network under the Development Scheme and provides for alternative modes of transport in accordance with the layouts approved through the Master Plan. Internal to the site the road network is logical and of appropriate formation widths to be able to provide for the movement of vehicles in accordance with the underlying zoning.

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	» High quality and frequent public transport services are provided that connect Caloundra South to other parts of the Sunshine Coast and the rail line that connects to Brisbane and other destinations within South East Queensland. » The road network provides for convenient movement for residents between their homes, employment, recreation, leisure, retail and community facilities and takes account of the topography, natural vegetation and where possible views and vistas to the Glass House Mountains. » The road network provides an efficient system where the function of streets is clearly identified, allowing for a permeable street network. » A community greenspace network will follow the Bells and Lamerough Creek systems. The network includes an integrated pedestrian and cycle network linking neighbourhoods, community facilities, public transport nodes and places of employment to the greenspace network.	
A prosperous community	A prosperous community » Caloundra South is a significant community within the Sunshine Coast and the South East Queensland region. It achieves the potential identified in the Regional Plan, providing a wide range of housing choices and employment opportunities, supported by community services and a variety of transport modes.	Comment: The establishment of this proposal will provide employment opportunities to the area in accordance with the underlying zoning.

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	» A mix of land uses facilitates the delivery of jobs that contribute to a high level of self containment within the Sunshine Coast region. This is promoted through the provision of local employment opportunities through a network of centres and the development of industrial areas which contributes to a resilient economy. » Caloundra South provides opportunities for a wide range of employment activities to establish in the community, including work-from-home opportunities and start-up opportunities for local entrepreneurs. » Caloundra South fosters life long learning opportunities through a network for public and private schools and strong links to universities. » Caloundra South's wide range of education and training opportunities means that the community is well equipped to compete in the global economy.	
A sustainable community	A sustainable community » Development protects and supports the regional and national biodiversity values external to the UDA in the Pumicestone Passage. » Development within Caloundra South provides for the enhancement of natural ecosystems and biodiversity values through the protection of ecologically important areas and the establishment of buffers to these areas.	Comment: The proposal designates large areas of the site for conservation, a vegetated highway buffer, stormwater treatment and fish passage. Furthermore, the proposal incorporates a highway buffer, and built form provisions in the proposed PoD, that will ensure that amenity is protected as the area develops.

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- » Integrated water cycle management and water sensitive urban design contributes to the water quality values of the Pumicestone Passage and the Bells and Lamerough Creek riparian corridors.
 - » Buildings and other development respond positively to the key environmental issues of climate change, energy efficiency and waste management.
 - » A comprehensive greenspace network ensures important ecological and scenic values are protected and enhanced, and adequate parks and recreation opportunities are provided.
 - » Residents take advantage of opportunities to move around using active and public transport, thus reducing private motorised travel and its impacts on the environment.
 - » Cultural and community services, open space, sport and recreational facilities meet the needs of the community and encourage active, healthy lifestyles.
 - » Development provides a visual and acoustic buffer adjacent to the Bruce Highway ensuring the character and visual values of this gateway to the Sunshine Coast are sustained.
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UDA-Wide Criteria

Neighbourhoods		Comment:
	Development delivers neighbourhoods that: » are compact and walkable, comprising the area within a 5 minute walk (400 metre radius) of a community focal point. A cluster of neighbourhoods supports a neighbourhood centre » have a highly permeable, legible street pattern designed to promote walking and cycling as the primary modes for local movement » contain a variety of dwelling types including affordable and accessible housing » are designed to respond to local site characteristics, settings, landmarks, scenic amenity and views, and use natural features such as waterways, or man made features such as the built form and public parks, to provide local identity and character » have a centrally located focal point which must comprise of at least a local recreation park but which can also include a public transport stop, community facility, local shop or similar » are interconnected and provide good access to public transport, parks, schools and other community facilities and neighbourhood centres » provide a safe environment through the application of Crime Prevention Through Environmental Design (CPTED) principles such as passive surveillance of public	The proposal has incorporated a logical internal road layout, and walking and cycling throughout the development. The proposal also aligns with the underlying zoning and provides buffers to more sensitive land uses. CPTED principles have been considered in the design and proposed PoD provisions.

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| <p>spaces, and a legible street network that minimises traffic impacts on residential areas</p> <ul style="list-style-type: none">» locate higher density residential close to centres, transit nodes, recreation and corridor parks, or along busier streets that lead directly to centres» are designed to promote optimum solar access and use of prevailing breezes» locate urban neighbourhoods around transport nodes and higher order centres to maximise accessibility» appropriately interface with existing residential development adjoining the UDA boundary by considering:<ul style="list-style-type: none">» densities through minimum lot sizes and the location of property boundaries» access arrangements» uses» height» do not prejudice future core industry and enterprise precincts adjoining the northern boundary outside the UDA³. <p>Neighbourhoods are designed to achieve:</p> <ul style="list-style-type: none">» the standards set out in the applicable ULDA guideline» the minimum net residential densities and specific requirements in Table 1. | |
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Centres

Development delivers centres that:

- » provide for knowledge, community and commerce, accommodating a range of employment, education, cultural and community, retail, community greenspace, entertainment, sport and recreational opportunities which meet the needs of the community, encourage community interaction and active, healthy lifestyles
- » are commensurate with their role in the Regional Plan and the UDA centres network comprising major, district and neighbourhood centres and are focal points for their catchments providing a wide range of services and facilities
- » respond to local site characteristics, settings, landmarks and views, and use natural features to provide specific identity and character
- » are active places characterised by a high quality public realm and safe, attractive pedestrian areas
- » have a local recreation or civic park as a central focal point for community activities
- » are located to maximise accessibility and act as hubs for feeder public transport and walking and cycling networks
- » ensure higher order centres are designed around planned public transport services. Public and active transport is given priority within centres

Comment:

The proposal is in general accordance with the underlying zoning and has been designed such that it would not detract from, or undermine, the adjoining centre to the southeast. With a limited area of land designated for commercial/retail, (consistent with GFA parameters under the *Development Scheme* and under the approved master plan) the proposal will not threaten the hierarchy of centres within Aura.

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- » have a permeable road network that provides vehicle access into centres through a network of low-speed urban streets
- » contain a core and frame in the major centre, where the core accommodates the highest order mixed use activities. The frame accommodates lower intensity and car dependent uses (i.e. showrooms) on the periphery of the centre to support the core
- » locate higher density development, including residential, and key community facilities in the core of the centre. The core is the area within the 400 metre primary walking catchment of the major transit node or central focal point
- » the frame and district centres can also include urban neighbourhoods with higher density residential development
- » contain commercial, retail and other uses which require high levels of accessibility.

The major centre is the focal point of the community. It will provide a wide range of facilities and services, including most higher-order services. It has the greatest mix of uses and the highest development densities within the UDA.

The highest density of activities and key community facilities are in the core of the major centre close to the major transit node.

District centres are the intermediate tier in the centres hierarchy and provide a wide range of goods and services with relatively high densities.

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Neighbourhood centres provide a range of services and activities to meet day-to-day needs. Neighbourhood centres are located on collector or higher order roads with good access by public and active transport.

Small scale shop or office activities with an aggregate gross floor area of 250m² or less are acceptable outside a centre where the development will not constitute an incremental expansion to a designated centre, and will not have a detrimental impact on residential amenity and the centres hierarchy.

The delivery of the major centre must not prejudice the network of centres on the Sunshine Coast. Maroochydore as the Principal Regional Activity Centre is to be the most significant location for economic and employment growth on the Sunshine Coast.

A development application within the major centre that seeks to exceed the requirements in Table 1 must be accompanied by an Economic Impact Assessment. This must demonstrate how the proposed centre development will complement and not compromise the network of centres on the Sunshine Coast. Furthermore, any analysis must demonstrate:

- » transport infrastructure can service the future development and not jeopardise the road hierarchy and movement network
- » growth contributes to self containment within the Sunshine Coast sub-region providing opportunities for economic

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	growth and increased employment opportunities. Map 3 - Centres and transport network indicates the general distribution of centres within the UDA. Centres are designed to achieve: » the principles and design standards set out in the applicable ULDA guideline » the specific requirements in Table 1.	
Housing diversity and affordability	Development delivers: » housing choice and diversity to meet the needs of the community, through a mix of densities, types, designs, tenures and levels of affordability, to cater for a range of lifestyles, incomes and life cycle needs » residential development that complements or enhances the character of the neighbourhood and streetscape, and contributes to the creation of an attractive and safe environment » dwellings that provide appropriate levels of amenity and privacy, and adequate outdoor areas and car parking to meet varying household needs » energy efficient, climatically responsive design including appropriate solar orientation, shading, cross ventilation, natural lighting and passive cooling techniques. The ULDA's applicable guidelines provide additional information on how to achieve these criteria.	The proposal will not prejudice the ability of the PDA to provide diverse and affordable housing.

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Employment opportunities

Development delivers:

- » a diverse range of employment and training opportunities that complement and reinforce the Sunshine Coast Industrial Park to the north of the UDA and contributes towards self containment in the Sunshine Coast Region
- » low and medium impact industry including research and technology facilities, service industry and warehouses
- » an appealing industrial and business environment providing a high level of amenity
- » non-industrial uses which are limited in scale and type to those uses that are compatible and able to demonstrate a nexus with industrial uses. Non-industrial uses are not to duplicate commercial or retail uses intended for the centres network
- » industrial uses that do not prejudice adjoining land uses outside the UDA
- » appropriate transitioning of land uses at the interface with residential neighbourhoods
- » an appropriate height of buildings, structures and advertising devices that

The proposed development will establish Precinct 13 in general accordance with the underlying zoning and the approved Master Plan. It will make employment land available to contribute to the supply for the area, and the proposed PoD will ensure that appropriate land uses are established once the sites are created.

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	does not impact upon the amenity of the area, in particular the visual amenity of the Bruce Highway as an important gateway to the Sunshine Coast » industry and business areas with access from a connector or higher order road that does not require heavy vehicles to pass through residential areas, and in which lots generally have access from the internal street network only. The applicable ULDA guideline provides additional information on how to achieve these criteria.	
Movement network	Development contributes to: » an effective, efficient and integrated movement network that provides a high level of safety and accessibility, maintains residential amenity and promotes the use of public and active transport particularly for local trips » a major road network that provides effective links between centres and the neighbourhoods they serve, and to the external road network » a road network that accommodates a range of users including cars, service vehicles, pedestrians, cyclists and public transport » a road network that has a functional hierarchy, facilitates longer travel movements, provides multiple access	As noted already, the proposal will implement a movement network that will generally align with the approved Master Plan and provide for multimodal transport throughout the site.

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| | <p>routes to and through neighbourhoods and minimises traffic impacts on residential areas</p> <ul style="list-style-type: none">» the provision of a public transport network that is readily accessible to the community (90% of all dwellings should be within 400 metres of a potential public transport service), and provides effective links to centres, the rail station, public transport interchange and key external destinations» the delivery of a future rail line which follows the protected corridor and is integrated into the urban fabric. Opportunity to slightly move the corridor will only be considered where it does not compromise the geometry and operation of heavy rail» a transit station interchange integrated into the major centre, greenspace network and pedestrian cycle network, creating an important focal point for residents, workers and visitors to Caloundra South» a comprehensive active transport (walking and cycling) network based around major active transport spines, supplemented with local links and a safe and permeable street network within neighbourhoods⁴. The active transport network provides safe and direct links to key destinations including centres, public transport stops, parks and schools |
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	An eastern road link from Caloundra South to the east is desirable to deliver a connected and permeable movement network. Investigations into the preferred route are ongoing. The current focus of investigations of the preferred route for the Eastern Road Link is on securing an adequate road network to service the Caloundra South development and east-west road trips in the general locality. Particular attention is being given to identifying an alignment that minimises its impacts on the Pelican Waters community and on the environmental values of the area as well as effectively integrates with the existing and future road access in and around Caloundra City. Map 3 - Centres and transport network identifies the preliminary road, public transport and active transport network for the UDA. The applicable ULDA guideline provides additional information to assist in achieving these criteria.	
Community greenspace network	Development contributes to the provision of an integrated, high quality, regional community greenspace network that caters for a range of environmental needs by: » retaining where possible locally significant wetlands, remnant vegetation and habitat for fauna » protecting important landscape and visual quality values including scenic amenity areas	The greenspace network proposed has been informed by ecological reporting and approvals to ensure appropriateness. Almost 50% of the site will be conservation areas with additional area dedicated to park, highway buffer and for stormwater management. The proposal generally aligns with the Master Plan.

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- » enhancing wetland communities as part of the rehabilitation of ecological corridors
- » providing ecological corridors and linkages, including to areas outside the neighbourhood or community
- » providing new planting that comprises predominantly endemic species.

The riparian corridors are a sufficient width to protect and improve the ecological function of these corridors and include:

- » approximately 100m across Bells Creek South
- » approximately 200m across Lamerough Creek
- » approximately 200m across Bells Creek North recognising that part of the corridor is located outside the UDA boundary.

The immediate waterway corridor adjacent to the creek top of bank is to be retained for environmental protection and rehabilitation purposes. The outer edges of these corridors away from the creek top of bank may include:

- » stormwater management devices
- » fauna refuge areas
- » pedestrian / cyclist paths
- » passive open space.

The riparian corridors of Lamerough Creek, Bells Creek North and Bells Creek South will be subject to extensive rehabilitation works to enhance flora and fauna habitat values. Vegetated buffers planted with endemic species will extend from the creek top of

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bank. The corridors will contain a diversity of habitat types to provide wildlife connectivity and linear habitat. Fauna refuge areas are to be located adjacent to Bells Creek North and Bells Creek South to provide a safe haven for fauna during heavy rainfall.

Development adjacent to the greenspace network which contains or is within close proximity to valuable ecological features, such as the Blackbutt Forest in the north east of the site, must address potential edge effects. This will vary dependent upon the nature of the ecological feature but may include a variety of treatments such as additional planting with endemic species, linear open space, boulevard streets and larger lots. The appropriate response will be determined at the development application stage.

Development delivers parks that:

- » contribute to the achievement of an integrated, high quality greenspace network that caters for a variety of recreation functions and experiences to meet the needs of residents and visitors
- » are accessible for users
- » provide for multiple purposes and uses including recreational, sporting, ecological and stormwater management functions
- » incorporate existing natural features where possible and are landscaped to assist in creating neighbourhood identity and wayfinding

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	» retain existing significant vegetation to the greatest extent practicable » contains landscaping and planting with endemic species » are shaped and embellished to suit their anticipated use » support the community's recreational needs and provide opportunities for community and special events. The initial development application lodged over Caloundra South must be accompanied with an open space strategy for the entire UDA. This will address the recreational and sporting open space requirements for this community as set out in the applicable ULDA guideline. The community greenspace network is distributed generally in accordance with Map 4- Community greenspace network. The community greenspace and open space network is located and designed to achieve the principles and design standards set out in the applicable ULDA guideline.	
Community facilities	Development facilitates the delivery of: » sustainable communities with a strong community identity and access to services and community facilities that meet diverse needs, maximise potential for community development and enhance community wellbeing » a range of services and community uses such as schools, child care centres and medical facilities that are accessible and appropriate to the needs of the community and reduce physical and social isolation	PC13 is not designated to accommodate community facilities. The proposal aligns with the land use arrangement from the approved Master Plan and as such, it is considered that the proposal would not detract from the ability of Aura to develop with community facilities.

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	» community services and uses where accessibility to the facility's target market is maximised through good access to public transport, pedestrian and cycle paths » a hierarchy of services and community uses in neighbourhood, district and major centres. Neighbourhood level community facilities and services are located within walking distance for most residents, meet everyday needs and are provided early in development. District level community facilities and services serve a broader population catchment, reflect the diverse needs of the population and are provided in response to population growth thresholds. Major level of services and community uses are of a higher order and accessed by a sub-regional population. Map 5 - Community facilities indicates the general distribution of community facilities within the UDA. Community facilities are designed to achieve the principles and standards set out in the applicable ULDA guideline.	
Natural values	Caloundra South UDA is located within the catchment that connects to the Pumicestone Passage and the Fish Habitat Area and the internationally recognised Ramsar wetlands. Pumicestone Passage is a significant environmental feature within the region and forms part of the Moreton Bay State Marine Park. Development responds to the natural features of the land and delivers: » protection of significant environmental and ecological values	The proposal has been designed in general accordance with the Development Scheme, Master Plan and the underlying approvals. a significant portion of the site (approx. 50%) will be designated for conservation area, while the portions will be designated for fish passage and stormwater treatment. The design has been informed by site specific reporting and is considered to adequately address the ecological and biodiversity values for the site.

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	» minimal emissions to land, water and atmosphere » efficient use of land and resources. The design, siting and layout of development: » avoids and/or minimises impacts on areas of biodiversity value » maintains and improves ecological connectivity in the local urban context » incorporates landscaping with endemic species that contribute to the bushland character and flora and fauna habitat, and fauna movement » minimises adverse impacts on natural landforms and the visual amenity of the site » maintains the ecological health and environmental values of surface and groundwater, including wetlands and waterways in and adjacent to the UDA » maintains the functioning and characteristics of the hydrological network, including surface and groundwater » incorporates total water cycle management and water sensitive urban design principles to appropriately manage floodwater and stormwater » manages air quality, noise and hazardous materials according to current standards » occurs in accordance with best practice techniques for the management of acid sulphate soils	
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- » promotes innovative and efficient use of energy and water
- » maximises recycling opportunities and reduces waste generation
- » incorporates native vegetation and natural elements through the built environment.

Land in the greenspace and Environmental protection zone provides opportunities for habitat improvement and is to be protected through a staged Rehabilitation Plan. The Rehabilitation Plan is to be developed from the outset (except for the provision of community infrastructure located south of Bellvista). Revegetation is to be primarily comprised of endemic species. This is to be linked to development stages with the majority of land in the Environmental protection zone rehabilitated before filling and earthworks occurs in association with the major centre.

In the northern part of the UDA in the vicinity of Lamerough Creek, a Flora and Fauna Management Plan is required to address the Acid Frog habitat and management of flora values.

Protection of Water Quality in Pumicestone Passage, Bells Creek and Lamerough Creek

Development protects the water quality of surface and groundwater and the ecological condition of the Pumicestone Passage, Bells Creek North, Bells Creek South and Lamerough Creek.

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In order to protect the ecological condition of the Pumicestone Passage, Bells Creek and Lamerough Creek, development is to incorporate best practice stormwater management, water management solutions and sediment and erosion control techniques⁵. This is to achieve no net worsening of water quality levels at the site's boundaries. Where planting occurs in water

sensitive urban design features such as bioretention areas and wetlands, the species used are endemic to the area.

A 'multi barrier' water sensitive urban design (WSUD) treatment train approach to stormwater quantity and quality management is to be used that achieves a no net long term worsening of down stream water quality.

This treatment train is expected to include:

1. rainwater tanks
2. roadside bioretention and swale systems
3. lateral bioretention systems that will be heavily vegetated delivering treated site runoff to regional wetland style waterbodies.

An 'adaptive management approach' is to be adopted and may result in changes to the nature and design of treatment measures implemented.

A water quality monitoring program must be developed at the outset of development, except for the provision of community infrastructure located south of Bellvista. This is to be endorsed by the ULDA and set out requirements and processes for water quality monitoring.

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The process is to comply with the water quality monitoring and compliance regime described in Section 5.4 within the Implementation Strategy.

The adoption of the formal Water Quality Objectives for Pumicestone Passage

necessitates the adoption of water treatment measures that are more stringent than those required elsewhere in South East Queensland for other catchments and developments.

Protection of Groundwater Resources

Development incorporates best practice groundwater management which:

- » substantially maintains the regional (large scale) flow paths and water quality of groundwater;
- » protects downstream groundwater dependent ecosystems; and
- » provides for artificial groundwater recharge infiltration systems that involve passive engineering solutions, such as seasonal wetlands where necessary, to avoid any adverse impacts of development.

Development complies with a Groundwater Management Plan, established at the outset, documenting measures to comply with the groundwater management criteria stated above.

Map 6 - Natural values shows the key natural and cultural values in the UDA. Development is sited, designed and constructed to avoid or minimise impacts on natural and cultural values.

Reference should be made to the applicable ULDA guidelines for further detail.

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Community safety and development constraints

Development ensures that people and property are safe from potential hazards and disturbances including landslip, bushfire, noise, flooding⁶ and the predicted effects of climate change.

Future residents are to be provided with a level of amenity that addresses noise sources. Sensitive uses to nearby noise sources such as the Caloundra Aerodrome and the Bruce Highway are to be protected. The preferred means to control noise impacts will be determined at the development application stage.

Development adjoining the Bruce Highway

A buffer is to be provided between the limit of development, the Bruce Highway corridor and the south west boundary of the site fulfilling the following:

- » provision of a predominantly landscaped treatment that achieves a natural and

The proposal is supported by appropriate reporting to ensure that people and property are not exposed to unreasonable risk. Bulk earthworks and stormwater drainage will ensure flood immunity for the proposed lots, and no adverse external flood impacts are anticipated.

A highway buffer is also provided in accordance with the underlying Master Plan and the relevant infrastructure agreements.

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- rural edge as viewed from the Bruce Highway
- » provision of visual separation between development and the highway. Acoustic walls are not visually prominent and do not result in a continuous, monotonous stretch of acoustic wall along the length of the site's frontage to the Bruce Highway
 - » inclusion of a variety of techniques at different locations including separation distances, mounding, landscaping, noise attenuation measures and recreational opportunities
 - » compliance with the applicable noise standards and requirements⁷.

The visual buffer is designed to achieve the principles and standards set out in the applicable ULDA guideline.

Development located near the Caloundra Aerodrome

Development located near the Caloundra Aerodrome must not prejudice the ongoing operations of the Aerodrome. Nearby noise sensitive development that has the potential to receive intrusive noise is required to address the following:

- » Justify that the proposed land use is suitable on amenity grounds based on the extent of aircraft noise at the subject

site and information about future noise projections from the aerodrome operator comprising both fixed wing aircraft and helicopter movements. This will include information about:

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- » Areas forecast to be exposed to above 20 noise events a day exceeding 70dB(A)
- » The Transparent Noise Information Package (TNIP) N70 contour forecast for the year 2030
- » Inclusion of a variety of appropriate noise attenuation measures
- » Provision of suitable levels of indoor residential amenity (by appropriate building siting and construction) to comply with the indoor design sound levels from the applicable Australian Standard⁸.

Flooding and Flood Management

To ensure protection from flooding:

- » development achieves an appropriate level of flood immunity⁹
- » development ensures that stormwater run off at the site's boundaries does not exceed that which presently exists, and there is 'no net worsening' of flood conditions at the site's boundaries.

Any seasonal wetlands installed for stormwater management purposes are to be subject to a maintenance arrangement between ULDA and the land owner confirming the maintenance obligations.

Map 7 - Development constraints shows the key community safety and development constraints affecting the UDA. Development is sited, designed and constructed to avoid, minimise or withstand the incidences of a development constraint.

Buffers are designed to achieve the principles and standards set out in the applicable ULDA guideline.

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The Service infrastructure

The UDA delivers efficient and effective use of infrastructure and services.

Development ensures infrastructure and services are:

- » provided in a timely, orderly, integrated and coordinated manner to support urban uses and works
- » available or capable of being made available (including key infrastructure such as roads, public and active transport, water supply, sewerage, drainage, park network, community facilities, medical facilities and GP services, electricity and telecommunications)
- » designed to allow for future developments in information technology and providing access to technology in neighbourhood facilities
- » located and designed to maximise safety efficiency and ease of maintenance¹⁰
- » located and designed to consider total life-cycle costs.

Infrastructure is designed to achieve the principles and standards set out in the applicable ULDA guideline.

Comment:

The establishment of the proposal will be coordinated with infrastructure in accordance with the engineering reporting of **Appendix G**. Staging will be utilised where necessary in order to facilitate coordination.

General requirements

Site area and landscaping:

Sites have sufficient dimensions to accommodate:

- » buildings,
- » parking,
- » access and circulation areas
- » water treatment and retention areas if required and
- » landscaping.

Landscaping is provided to enhance the visual amenity of the locality.

Sub-tropical design measures

Development provides built forms that respond to the subtropical environment, including eaves, roof overhangs and sun shading devices.

Parking and end of trip facilities:

Parking is provided in accordance with the rates and standards set out in the planning scheme¹¹. The ULDA will consider proposals for a reduced number of car parking spaces where it can be justified due to factors including:

- » availability of on-street car parking
- » public transport accessibility
- » overall accessibility, including, for residential development, location within or adjoining a centre

Comment:

The PoD within **Appendix D** will ensure that the landscaping, site area, parking and advertising outcomes are appropriate for the intended use and to ensure the area contributes successfully to the wider area.

- » potential for sharing car parking spaces by different uses and activities

- » target markets for residential development.

End of trip facilities for pedestrians⁵² and cyclists, including secure undercover bicycle storage facilities, showers and lockers are to be provided as part of development.

Advertising devices⁵³:

- » cater for the needs of display homes and businesses to clearly identify the location and the goods or services which are supplied to the public

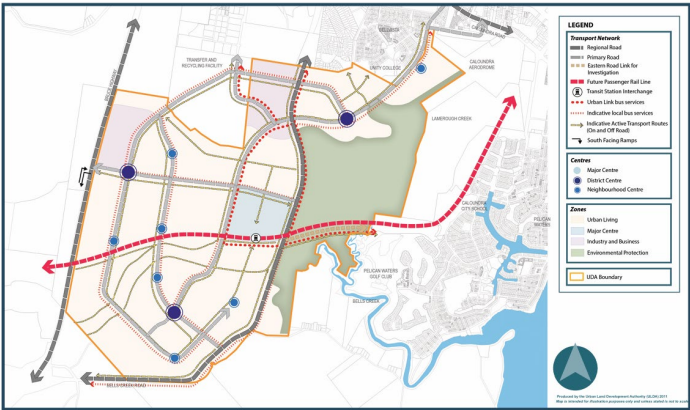
- » are consistent with the scale and design of existing buildings and other works on the site and in the locality, and complement the local streetscape

- » where appropriate, reflect the character of the area

- » are sited and provided on premises having regard to safety and amenity.

Maps

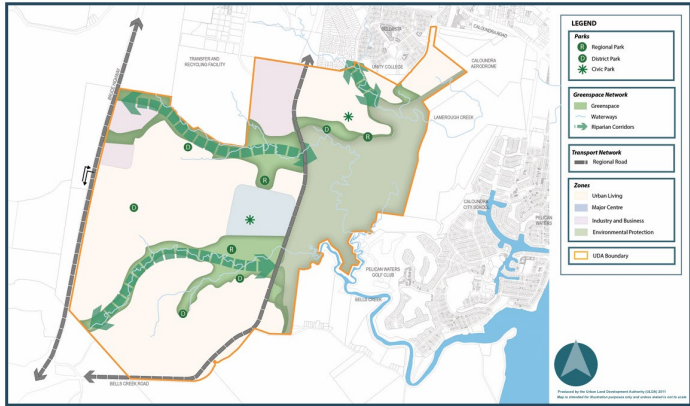
Map 3 - Centres and transport network



Comment:

Map 3 has been effectively superseded by the Master Plan approval and its design guidelines. Notwithstanding this, the proposed layout generally aligns with the displayed transport network.

Map 4 - Community greenspace network



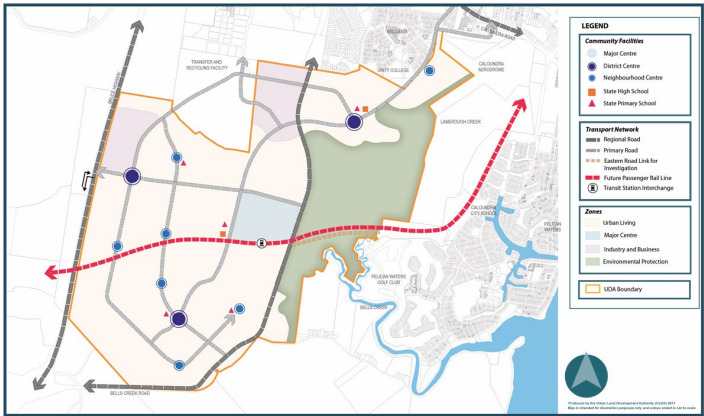
Comment:

Map 4 has been effectively superseded by the Master Plan approval and its design guidelines. The proposal aligns with the Master Plan.

Notwithstanding this, a significant portion of greenspace is being provided through the proposal in accordance with environmental reporting and approvals that have dictated and informed the design. Further detail on the underlying approvals is provided within **Appendix L**.

Regarding: Appendix N

Map 5 - Community facilities

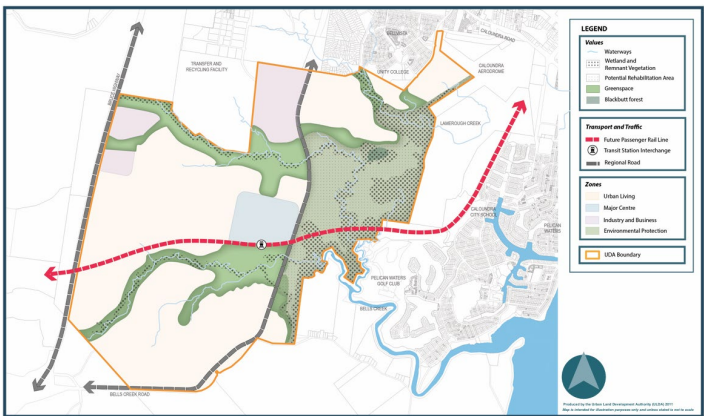


Comment:

Map 5 has been effectively superseded by the Master Plan approval, and the proposal is consistent with the Master Plan mapping.

Notwithstanding this, the centres and community facilities displayed here will not be adversely impacted or undermined by this proposal.

Map 6 - Natural Values

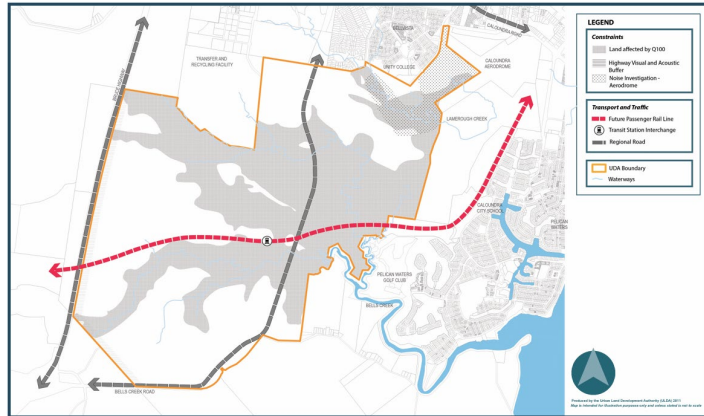


Comment:

Map 6 has been effectively superseded by the Master Plan approval which refined the location of the natural areas shown. The proposal will align with the approved Master Plan and the other relevant underlying environmental approvals. The site also has site specific reporting prepared to ensure the proposal responds appropriately to natural values.

Regarding: Appendix N

Map 7 - Development constraints

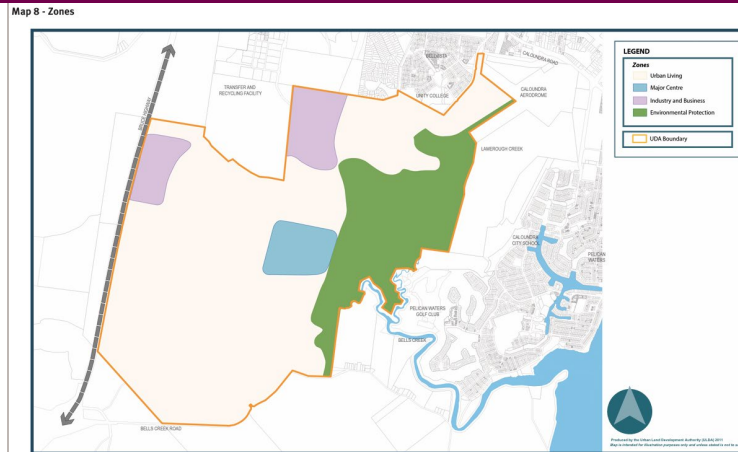


Comment:

As noted above, the mapping for this site has been refined by the Master Plan and the proposal will be constructed in accordance with the refined mapping.

Zone provisions

Zone map



Map 8 shows the location and boundaries of zones in the UDA. The UDA contains four zones:

- » Urban living
- » Major centre
- » Industry and business
- » Environmental protection

Inclusion of land within these zones, excluding the Environmental protection zone does not imply that all such lands can be developed for urban purposes. Some land may not be available or appropriate to be developed due to local site conditions or other constraints.

Comment:

The zoning for the subject site has been refined by further investigations and the Master Plan approval; however, the allocation of light industry and business use across the subject site generally aligns with the spatial extent of the Industry and Business zoning shown here.

Regarding: Appendix N

Zone intents

Industry and business zone

The industry and business zone accommodates industrial uses which do not generate dust, noise and odour emissions beyond the zone. The zone provides for a wide range of compatible industrial uses including low and medium impact industry, research and technology facilities, and service industry activities.

A limited range of other uses may also be acceptable in the industry and business zone where it can be demonstrated that the use:

- » supports or otherwise has a clear nexus with the primary uses within the zone and is not the predominant use
- » does not compete / undermine the vitality and performance of the centres network
- » provides a service to the workforce within the zone
- » will not prejudice the establishment or operation of the primary uses within the zone.

The industry and business zone, located adjacent to the Bruce Highway, has an emphasis on low impact industry and research and technology facilities with a limited range of business and commercial uses. Uses are not to rely on highway frontage for exposure and visibility.

Comment:

The proposed layout of the site and the PoD that is intended to guide development at the site, will align with the intents from the Development Scheme by supplying predominantly light industrial and commercial land with a series of other uses at appropriate scales such that they do not detract from the intended character of the area.

Amenity has been a key consideration, and the provisions of the PoD will ensure the outcomes align with the zoning.

Regarding: Appendix N

Non-industrial uses, such as commercial and trade retail activities, may locate in the zone where such uses do not compromise the intended industrial/business character of the local area. Uses that promote knowledge creation and entrepreneurial activity in industry, science and technology and research and development are encouraged.

The location, design, operation and management of uses and works contribute to the amenity, built form, landscaping and streetscape which enhances the industrial character of the area.

Development has linkages to existing and proposed transport infrastructure, public transport services, bicycle and pedestrian networks and community facilities and maximises the sustainable and efficient use of essential services, including water, sewer, energy, and telecommunications infrastructure.

The zone may accommodate unanticipated

interim land uses that do not compromise the long term use of the land for its intended purpose and may include:

- » Agriculture
- » Agricultural supply store
- » Animal keeping and husbandry
- » Intensive horticulture