

2.8 Physical Infrastructure

(1) Desired Environmental Outcome No. 7

Orderly and sequenced development which allows for the efficient, affordable and environmentally acceptable provision (and ongoing maintenance) of engineering infrastructure by service providers in a way which ensures the sustainable use of the Shire's water and other resources, and adequately serves community needs for;

- *Water supply, sewerage treatment and disposal, wastewater management, power, solid waste management, communications and other related services.*

(2) Strategic Implementation Measures

In order to achieve Desired Environmental Outcome No. 7, the following Strategic Implementation Measures are to be employed:

- (a) development contributes a fair and equitable share to the costs of providing development infrastructure;
- (b) ensure that development inconsistent with the assumptions, or outside the Priority Infrastructure Area, of the priority Infrastructure Plan is assessed for its impacts on the provision of trunk infrastructure;
- (c) promote strategies for recycling and reuse of treated wastewater particularly for industrial activities, for water management and waste minimisation, including cleaner production activities;
- (d) ensure rural residential and non-urban activities have a reliable potable water supply and ecologically sustainable on-site effluent treatment and disposal facilities;
- (e) promote an orderly development pattern which optimises the efficient and timely provision of physical and human services and facilities; and
- (f) maintenance of a Retail and Commercial Centres Hierarchy to ensure that new nodes of activity are not created that would duplicate existing established or planned services and infrastructure in centres that meet the reasonable needs of the community.

3. URBAN DEVELOPMENT

3.1 Explanation

"Urban Development" embraces development in those areas where residential uses of an urban density dominate and includes those other uses (principally commercial and retail, social and educational facilities and industry) which are required to service the residential areas and are normally integral components of such areas.

3.2 Key Issues

The key issues dictating the planning strategy in the Shire's urban areas and Permissible Areas for Rural Residential include:

- the expectation that the current high rates of population and tourism growth will continue for the life of the Strategic Plan;
- the serious impacts that such growth, if not properly managed, can have on the important natural and aesthetic resources, the protection of good quality agricultural land, the loss of character and livability and the costs of physical and social infrastructure;
- the advantages in facilitating higher densities and encouraging infill and redevelopment without compromising living standards for potential or existing residents and visitors;
- the need to limit high rise development to agreed locations;
- contemporary design of housing estates and other urban areas which have tended to lack community identity, character and focus;
- the continued availability of the current diversity of housing options, from high-rise units to rural retreats, recognising the limited suitability of some forms of development in the light of other sound objectives, such as the containment of urban areas, the preservation of important habitats and good quality agricultural land, the image and character of the Shire and the impact of high densities and substantial buildings on residential amenity;
- changes in household structure with significant single person and single parent households with a subsequent change in the housing form that meets their needs;
- the need to address effects of the State controlled road network, including the visual impacts and impacts of traffic noise, dust and vehicle emissions;
- the need to service urban areas with Local centre and General store development, at a limited range of sites, and providing clear expectations for local communities.

3.3 Urban Strategy

The following outlines the elements of the planning strategy to be employed in those areas shown as Urban and Permissible Area for Rural Residential on the Strategic Plan Map:

3.3.1 The principal element of the strategy is the allocation of Urban areas and Permissible Areas for Rural Residential which recognise the broadly different residential categories containing urban communities and

providing separation between communities with characteristic rural and natural landscapes and protecting good quality agricultural land and significant natural and scenic resources from urban expansion.

3.3.2 The Urban allocation indicates areas existing and preferred for predominantly residential use. A range of ancillary uses such as commercial and retail, social and education facilities and industry may also establish within Urban areas.

3.3.3 Areas within the urban designation possess significant natural attributes important to the character or environment of a locality or are needed to meet open space requirements of the community. Development proposals in these areas should seek to preserve significant habitat and provide for a integrated open space network.

3.3.4 Specific areas have been included within the Permissible Area for Rural Residential on the basis that they are considered to contain land suitable to this form of closer settlement within the time span of this Plan. This includes:

- areas relatively close to substantial urban settlements;
- areas of infill in locations where rural residential is the dominant land use;
- land which is topographically constrained for other more intensive land uses;
- those catchments where opportunities for higher forms of development are restricted due to the downstream hydrological characteristics.

3.3.5 Strategies and policies relating to matters such as lot configuration design, building siting, the location of commercial, transport and community facilities and the relationship between transport modes will be employed. These controls are aimed at improving social interaction and accessibility, primarily in new urban areas and commercial centres.

3.3.6 The spread of urban areas is contained in the interests of preserving the identity of individual communities, maximising the efficiency of urban infrastructure and minimising the loss of good quality agricultural and rural land and land possessing high habitat or scenic values. Containment strategies, such as urban renewal and infill techniques, are facilitated.

3.3.7 High-rise development will be limited to the existing coastal tourist node of Mooloolaba, Alexandra Headland, the Maroochydore Principal Activity Centre and a small strip of land at Marcoola.

3.4 Preferred Dominant Land Uses

3.4.1 Urban

The Urban allocation identifies areas suitable for residential premises of varying densities, but allows for retail, commercial, community services and general industrial activities required to serve the day-to-day needs of local communities and which are of a scale appropriate to these needs.

The Urban areas may include land which is considered to have significant ecological value and sensitive development options would be appropriate to adequately incorporate this land into the urban fabric with minimal impact.

3.5 Objectives and Implementation Measures

3.5.1 To Develop Upon and Consolidate Existing Residential Areas

Considerable emphasis has been given to consolidation and containment of the existing urban form and structure as shown on the Strategic Plan Map. Particular weight has been placed upon the containment of the creation of rural residential lots. This emphasis allows greater efficiencies in the delivery of social and physical infrastructure and provides greater protection for good quality agricultural and rural land and the considerable natural resources of the Shire.

It may not be possible to accurately quantify the total cost to the community of premature urban expansion. However, there are considerable physical costs attributable to inefficient development in providing services and maintaining infrastructure, even where infrastructure is provided by an applicant, and there are social costs associated with matters such as isolation and limited community involvement. For these reasons, the Council will only facilitate proposals which logically expand on existing urban development.

An indication of a logical development sequence, is given in the Priority Infrastructure Plan.

Implementation

1. Council will generally only support applications for urban development in which the connection to all existing development infrastructure and the provision of social infrastructure can be achieved in an orderly and progressive manner.
2. Council is prepared to negotiate development parameters on innovative forms of urban development which may contribute towards this objective, even where such development may not satisfy all Planning Scheme requirements.
3. The Priority Infrastructure Plan will be used by Council to guide urban development and rural residential development in an orderly, cost efficient and socially effective manner.
4. Council will not support any further urban uses west of the mouth of Eudlo Creek other than the land shown Urban on the Strategic Plan Map.

3.5.2 To provide for a Diverse Range of Housing and Residential Lots

While it is anticipated that the single detached dwelling will remain the dominant form of housing within the Shire, consideration needs to be given to the particular and changing demographic and economic characteristics of the Shire. This will be achieved by adopting residential standards which encourage a diversity of housing types and housing mix which meet community expectations.

Implementation

1. Residential development will generally be in accordance with the desired character of the Planning Area and Precinct in which the premises are proposed to be situated.
2. The Planning Scheme's development provisions facilitate a range of lot sizes, housing types and higher density accommodation.
3. To allow for low cost housing and market demand for smaller housing, development in the urban residential Precincts, in accordance with local character. In the interests of ensuring that such development provides suitable home environments and integrates with existing neighbourhoods, impact assessable applications will be assessed against the provisions of relevant codes and the Statements of Desired Precinct Character contained in Volume 3. In addition, regard may be given to the Queensland Residential Design Guidelines (QRDG).
4. The development of high-rise apartment buildings is allowed for in the tourist nodes of Mooloolaba, Alexandra Headland and a small area at Marcoola, as well as in the Maroochydore Principal Activity Centre. It is not envisaged that such development will be supported outside those nodes.

3.5.3 To Encourage A Comprehensive and Integrated Set of Performance and Prescriptive Standards To Cover Low and Medium Density Residential Development

The successful adoption of the Performance and Criteria and Acceptable Measures will provide a comprehensive and integrated set of performance and prescriptive standards which will be applied to low and medium density residential development within the Urban areas.

Implementation

1. Council will assess applications for residential development in accordance with the Planning Scheme codes.
2. In some parts of the Shire, additional criteria will be applied as dictated by local conditions, which may relate to matters such as the protection of significant vegetation, natural resources, flood prone land and steeply sloping land. These are identified by the Special Management Areas and Planning Areas and Precincts.

3.5.4 To Ensure That The Physical Environment Can Sustain Urban and Rural Residential Development

Because the Shire's urban areas comprise significant areas of steep or slip-prone land, potential exists for inadequate drainage, slope retention and site planning to compromise the conditions of development below and to scar visually prominent features of the landscape. Substantial amounts of land are also flood-prone. Implementation criteria are intended to ensure sound planning prevents or minimises potential problems.

It is recognised that the protection of certain natural areas is necessary for the future image of the Shire and

the maintenance of its natural environmental integrity. Subsequently, development within the Urban areas and Permissible Areas for Rural Residential should have regard to areas of natural habitat.

In order to determine the potential effect of any proposal on areas determined to have environmental significance, Council may seek the submission of an environmental impact statement and/or management plan. The identification of areas is important in implementing the Planning Scheme's strategic measures.

Urban designated areas which contain significant stands of vegetation or fauna habitats may have their significance protected in a variety of ways, depending on the nature of the stand or habitat, ranging from habitat preservation measures to dedication of land. The appropriate development of a particular area can only be determined after an assessment has been made of its environmental and/or visual significance.

Information available from Council should be sufficient to enable a basic understanding of the significant features of the area involved. Developers are encouraged to hold pre-application or pre property-purchase meetings with Council officers.

Implementation

1. Applications for development in Urban areas which contain Vegetation Management Units (refer Figure 4-2.1.1(a) or on land adjoining areas shown as Conservation on the Strategic Plan Map, are likely to be subject to a request for an environmental assessment addressing any likely impact of the proposal on the important habitat elements of the identified area.

2. Development of land which is recognised as having conservation value is to provide for the adequate protection of the relevant significant habitat and other areas which are determined to have habitat areas of significance. In such cases, the Council may seek the dedication of land for that purpose. Developers are encouraged to negotiate the parameters of development and land dedication prior to lodging an application. Negotiation may include alternative means of preserving the significant areas.

3. Applications for development on land, displaying other sensitive environmental characteristics, and generally included in a Special Management Area under the development management provisions (in Volume 1) of the Planning Scheme, are likely to be subject to a request for a formal environmental assessment report outlining the manner in which the development is to be carried out to minimise environmental degradation, having regard to the guidelines for such assessment set out in relevant Planning Scheme codes and policies. The Council may request the submission of an environmental impact statement in some cases.

4. All applications are to address the possibility of impacts relating to steep or slip-prone land in accordance with the provisions of Section 18.0 of the Strategic Plan and relevant Planning Scheme codes.

5. All applications relating to land in flood-prone areas are to describe the known flood-plains and the characteristics of natural drainage and detail the drainage, landfilling, open space allocation and site planning to be adopted in addressing flood issues.

6. If, after assessing any environmental impact statements or environmental assessments, Council is not satisfied that a sensitive environment or habitat can adequately sustain a proposed development, it may not support the application.

7. Applications for development which adjoin or are within the near vicinity of land used or likely to be used for agriculture shall have regard to the State Government's 'Planning Guidelines – Separating Agricultural and Urban Land Uses' and State Planning Policy 1/92 as both require the provision of suitable buffering to good quality agricultural land. Similar considerations will apply to lands intended for commercial pastoral use.

8. All applications will be required to demonstrate that adequate stormwater systems can be provided for water quality and quantity management.

3.5.5 To Enhance the Amenity of Existing and Proposed Residential Areas and Permissible Areas for Rural Residential

Appropriate lot reconfiguration design and land use planning contribute towards the well-being of residents and the broader community. This can be achieved by ensuring reasonable accessibility to services, improving safety for motorists, pedestrians, cyclists and the community generally, maximising the potential of the landform and providing useable recreation space linked where possible to regional open space systems.

Implementation

1. Council will have regard to the following criteria for applicable applications in the Urban areas and Permissible Areas for Rural Residential shown on the Strategic Plan Map:

- the desired character of the Planning Area and Precinct in which the site is located;
- open space needs and the relationship of the area to the provision strategy set out in the Priority Infrastructure Plan;
- accessibility to the retail, commercial and community services required by occupants of the proposal;
- the impacts of any Local centre development on the amenity (including visual, character, traffic, noise, odours, vibrations, etc) of existing properties and streets;
- the adequacy of existing and proposed roads to cope with the level of traffic and on- street parking likely to be generated;
- the provision of appropriate buffering to address the impacts of traffic noise, dust and vehicle emissions and for visual amenity on land adjoining State controlled roads;
- the aesthetics of the proposal relative to the site's role in the locality and its visibility from major roads, public areas, coastline, environmentally or visually significant areas and tourist nodes;

- the noise impacts of developing land adjoining State controlled roads;
- the design and operational characteristics of the proposal which ensure its compatibility with the primarily residential nature of development in these designations; matters to be taken into account include noise, dust and smell nuisance, the impact of lighting devices, screening of service and parking areas, building height and bulk and traffic generation;
- the design and locational elements which contribute to the privacy of occupants of the proposed and neighbouring premises;
- the landscaped presentation and buffering of the proposal with regard to vegetation preservation, revegetation, the retention of natural features on the site and the use of native species;
- designs which have regard to the retention of significant vegetation, the revegetation of denuded areas, the establishment of landscaping to achieve a particular streetscape theme and the retention of valued habitat or corridors connecting valued habitat; and
- the adequacy of any existing or proposed buffer to any non-residential use which may exist or may establish on an adjoining property. In respect to buffering needed for agricultural and other productive rural uses, regard shall be given to guidelines issued by the State Government.

2. Council will have specific regard to the following criteria for applicable lot reconfiguration applications and other applications which involve the layout of urban communities:

- the design and layout of accessways, demonstrating that the location of lots, retail and community facilities, schools, recreation or open space, roads and pedestrian and cycle paths facilitate and provide easy access between homes and the places where the community shops, gathers and recreates, with priority being given to non-vehicular modes of transport;
- the location of retail and community facilities to reflect their role as the focal point for the community in which they are located;
- the treatment of visually prominent parts of a site, such as crests; and
- the preservation of the semi-rural character of Permissible Areas For Rural Residential.

3. Further detail on lot reconfiguration is provided in the Code for Reconfiguring Lots.

4. Council will require the construction of concrete footpaths as part of residential developments.

3.5.6 To Provide for Retail Commercial and Service Industrial Activities Appropriate to Service the Residential Communities without Compromising Residential Amenity

Local retail, commercial and service uses should be part of the urban fabric, as they can desirably form a part of the community to which they provide a service. However, they may cause detrimental impacts on residential amenity because of their potential to generate traffic and people movements, to produce noise and smell and to shed light. The concentration of such activities maximises community focus objectives and localises any potential amenity problems.

Implementation

Council will take into account the following criteria when assessing applications for non-residential uses in Urban areas and Permissible Areas for Rural Residential:

1. Approval is only likely to be granted to development of retail, commercial and service uses which are to be located on a specific site (in a Centre Precinct or site specifically identified) and which offer a service only to local communities (other than in the Maroochyore Principal Activity Centre) and are consistent with the intent for, and desired character of the Planning Area and Precinct in which it is to be situated. Consideration will be given to the characteristics of the proposed use, including its location and scale, which determine its accessibility to its locality and its ability to service areas beyond an immediate locality and consequently diminish the vital role played by such facilities in providing a community focus and identity.

2. It is envisaged that local retail, commercial and service uses will be concentrated into nodes in urban communities. In new communities, these nodes will generally have been established at the conceptual and detailed site planning stages. In older ones, they will be on specifically designated or referenced sites characterised by the existence of shopping groups or centres which are adequately accessible to a locality. In all Planning Areas the preferred site for the Local centre will be clearly referenced. Applications for retail, commercial and service uses outside these sites will not be supported.

3. Consideration will be given to the impacts of noise, dust, smell, light and traffic on neighbouring properties by assessing the nature of the proposed activities, the proposed buildings and site layout, the roads from which access is obtained and the location and design of activity areas, parking areas, access points and sources of noise, smell or light relative to residential neighbours.

11. OPEN SPACE AND RECREATION

11.1 Explanation

“Open Space and Recreation” refers to the system of public and private land and facilities as well as coastal areas and waterways. These areas can have nature conservation, environmental, scientific, social, recreational, cultural, spiritual, scenic, health and economic benefit for the community, both now and in the future. It excludes entertainment areas such as cinemas and video game parlours. Outdoor Recreation includes sustainable nature based recreation and will be ecologically sustainable and accessible for enjoyment of local, district, regional, national and international visitors. It will involve land which is or ultimately may be in public ownership as part of the recreation and conservation resources of the Shire, or which may be in private ownership, but because of its recognised contribution to recreation, conservation, biodiversity or landscape and amenity should be managed and protected using various statutory or voluntary mechanisms.

Unless agricultural land is within these categories it is not included in this definition.

11.2 Key Issues

The key issues to which the planning strategy for open space and recreation within the Shire responds include:

- the need to provide equitable access to a diverse range of open space experiences for the community;
- the value of open space includes its contribution to available recreation opportunities, to conservation, environmental management and water cycle management, and to the economic resources of the community;
- the need to co-ordinate the planning, provision and management of open space;
- the number of regionally significant natural resources in Maroochy Shire offers a comprehensive range of recreational activities and facilities;
- the opportunity for multiple use of the Shire’s many recreational reserves, by land used for drainage purposes and by formed and unformed road reserves and esplanades;
- the importance of connectivity or creating linkages in the open space network;
- the need to provide land and facilities of an appropriate standard to minimise life cycle/maintenance costs while meeting community needs;
- the need to establish a sound basis for the funding of open space provision;
- the pace of growth in the Shire and the need to identify and protect opportunities to establish a functional open space network;

- the diverse physical settings, development patterns and community characteristics in the Shire; and
- the adequacy of the type and distribution of open space and recreational facilities in meeting community requirements.

11.3 Open Space and Recreation Strategy

The following outlines the elements of the planning strategy to be employed to address the above issues:

11.3.1 Distinguishing the two layers of the open space system in the Shire.

- The first layer embodies the conservation and visual amenity elements that provide the Shire with its landscape character and ‘macro’ level open space structure. Sections 7.0 and 10.0 of the Strategic Plan, in particular, address the identification and preservation of these conservation and visual amenity elements; and
- The second layer identifies different types of open space at a settlement specific or ‘micro’ level. This recognises that the settlement areas framed by the ‘macro’ open space structure have different lifestyle preferences, different built forms, different levels of accessibility to recreation and leisure opportunities and different needs for open space and leisure.

11.3.2 Identifying a coherent and inter connected physical system of open space which serves the following broad functions:

- conservation and environmental management, where land contains significant biological diversity values such as vegetation or habitat for fauna, or can support these (as corridors or buffers), or is necessary for the sustainable management and protection of all water resources;
- recreation, including organised sporting pursuits, for informal play, for walking or for simply ‘passing the time of day’ in pleasant relaxed surroundings;
- definition of a visual and landscape ‘character’ that adds to the amenity and visual appeal at both a Shire wide and local level; and
- links between areas providing the above functions.

11.3.3 The classification of open space areas as regional, shirewide, district or local, where these ‘levels of significance’ are generally distinguished:

- for active or informal recreation reserves, and open space links, by the distance between them, or the number of people they serve (that is, there will be more local than district facilities and more district than shirewide facilities, and more shirewide facilities than regional); and for open space areas with conservation, environmental management or landscape and amenity values, by how important the values being protected are (for example, an area containing a plant species that is very rare and threatened in national terms would be of ‘regional’ significance, while a landscape backdrop to a small local park, providing amenity value to a neighbourhood, might be of only ‘local’ significance).

11.3.4 Notwithstanding the general distinction between the levels of significance of the different types of open space, adoption of the following criteria for allocating local, district, shirewide and regional open space classifications.

- **Local open space** serves the population *living in* a neighbourhood, locality, planning area or township within the Shire.
- **District open space** serves the population *living in* a township, as well as a substantial section of the Shire or visitors from the remainder of the Shire or immediately adjoining local government areas, for a particular array of opportunities. District open spaces should vary in what they offer across a local government area, rather than duplicate each other. All residents should have good access (with safe provision of access routes) to one or more district open spaces within the Shire (in accessible locations) and a choice of uses across the array of sites provided.
- **Shirewide open space** serves the population of the planning scheme area. The spaces are envisaged to provide “headquarter facilities” for the major sports and other shirewide public recreation functions. They are preferably located within or adjacent to major urban areas. Shirewide open space also includes the recreation trails network.
- **Regional open space** serves or is significant to residents of the whole Shire, those from neighbouring local government areas, and potentially, those from South East Queensland, the rest of the State, other states and overseas. A regional open space may support *one* activity or a particular *range* of activities although multi-use is desirable.

11.3.5 Applying three key principles relating to equity of opportunity, access and diversity to guide the distribution, level of provision and quality of open space to meet community needs and expectations at a settlement or micro level.

(i) Ensuring equity of opportunity for all residents regardless of age, ability, interests, and economic circumstances

This principle directs that no resident will suffer disadvantage in terms of open space opportunities because of personal circumstances or because of technical or administrative barriers

(ii) Ensuring access

No resident will suffer disadvantage in terms of open space opportunities because of the location, character, design or cost of using open spaces

(iii) Ensuring Diversity

A range of open spaces will be provided such that an array of settings can be used and a range of experiences and benefits can be gained from them by the community

11.3.6 The implementation of an equitable and effective system for funding, designing, developing and managing open space, having regard to a range of guiding principles as follows.

- *Giving priority consideration to the protection of the intrinsic and natural attributes of the environment; honouring national and international commitments; ensuring environmental sustainability and monitoring and responding to use impacts*

Environmental sustainability and the protection of the intrinsic and natural attributes of the environment will be given precedence of consideration over other forms of open space use.

- *Protecting the community’s cultural heritage*

Action to develop open space will only be taken if the community’s cultural heritage is protected or not degraded.

- *Being relevant to community needs and reflective of culture and cultural change*

Actions will only be taken after an appropriate assessment of the needs of the community and an assessment of cultural change and the projected needs of future generations.

- *Devising an appropriate plan for funding open space*

Open space will be funded according to the applicable infrastructure charging instrument, covering the levying of infrastructure charges or contributions on development.

- *Optimising the benefits offered by existing resources*

The use and capacity of existing resources will be fully developed before additional resources are provided.

- *Maintaining and enhancing the built environment*

Open space acquisition, development and management will contribute to the quality of the built environment.

- *Seeking operational viability and net community benefits*

Open spaces will only be acquired and developed if they have the capacity to achieve operational objectives and provide net community benefits given the financial investment.

- *Protecting existing provision*
A net reduction in open space provision levels should not be permitted without compensatory enhancement of another site or sites to a standard and at a location which are acceptable to the community.
- *Pursuing integration and consolidation of provision*
Open space provision will be enhanced through actions designed to integrate and consolidate existing and additional future provision.
- *Treating property and owners with equity and respect; providing appropriate compensation; ensuring investment certainty*
All property will be treated with respect; property owners will be treated equitably regarding the acquisition, management and funding of open space; compensation will be paid for demonstrable loss by property owners in accordance with relevant legislative requirements; action will be taken to maintain investment certainty with respect to open space.
- *Seeking roles for private providers*
The roles and opportunities offered through private providers of open space will be recognised and incorporated into open space planning, acquisition, development and management.
- *Integrated planning*
Open space acquisition, development and management will be treated as an integral part of local, district, shirewide and regional planning and infrastructure provision

11.4 Preferred Dominant Land Use

11.4.1 Recreation

The preferred dominant land use of 'Recreation' has been attributed to existing and proposed major recreational facilities recognising their potential for establishment and/or expansion, and the need to protect the resource from the encroachment of incompatible land uses. It is intended that the extension of the existing recreational use or the establishment of an appropriate new recreational use as well as a range of ancillary uses are likely to be permitted, having regard to its impact on existing land uses in the surrounding area.

The recreation preferred dominant land use does not include many other important elements of the open space network, particularly those of a shirewide, district or local level significance or whose predominant function is other than recreation. While these exist within other designations on the Strategic Plan Map, the objectives and implementation strategies set out in this section will apply equally to them.

11.5 Objectives and Implementation Measures

11.5.1 To Develop an Open Space Network which Performs a Range of Functions, Meets Community Needs and is in Keeping with its Setting

Open space can fulfil a number of functions including conservation and environmental management, definition of a landscape and visual character and structure and provision for passive and active recreation. Its utility is maximised when it is provided as a coherent and interconnected network.

Areas of open space serve different catchments. They may perform any of the above functions, at a regional, shirewide, district or local level of significance.

At the local level, it is generally intended to promote the provision of larger spaces to offer flexibility in function as community needs change over time and to minimise maintenance costs. In addition, linkages between open space areas of all types are seen as a critical part of the system. Roads and other linear reserves can be utilised to fulfil this function.

Maroochy Shire has a range of settlement types, including rural and rural residential areas, small towns in the 'rail' corridor, on the Blackall Range and elsewhere in the hinterland, and larger urban settlements at Buderim, Nambour and on the coastal plains. Open space provision in these different settlement areas may reflect different needs and preferences, and different landscape and amenity values.

Consultation with the communities in these different settlement areas, combined with the application of normative standards of provision, have been utilised to identify an open space system consisting of a range of open space projects.

Implementation

- (1) The Priority Infrastructure Plan sets out in detail the intended classification, distribution and level of provision for different elements of the open space system. The applicable infrastructure charging instrument sets out the intended means of funding these elements.
- (2) Provisions have also been incorporated into the Code for Reconfiguring Lots to provide guidance for the contribution of land in lieu of paying all or part of the applicable infrastructure charge.
- (3) Council's Open Space Strategy contains additional elements, covering open space design and management, which also provide guidance for the development of the open space network and for establishing the appropriate role and setting of particular open space projects.

11.5.2 To Protect Natural Features and Resources which Establish the Visual and Landscape Structure and Provide Important Recreational Resources

Elements of the open space system which define the visual and landscape structure of the Shire include its topographic features, vegetation and habitat areas, and linkages between these and the foreshores and river corridors.

While this array of significant natural resources have undisputed ecological values, they also have considerable aesthetic values, provide recreational opportunities, impact on quality of life and providing an indispensable asset for the economy of the Sunshine Coast. As such, these resources must be protected. Some protection is already afforded through public ownership and management plans that provide for recreational needs and protect the environmental qualities of these areas. However, a number of these resources are also being encroached on by urban development or other activity which has the potential to undermine the aesthetic qualities and range of recreational experiences which may otherwise be offered by these resources.

Beach, foreshore and river areas are important natural recreational resources of the Shire and unless required to be protected to secure their integrity or are required to be protected under coastal management plans, the public areas should be made accessible to people.

Implementation

- (1) Development on land on the periphery of natural resources which provide landscape values and/ or recreational opportunities will be subject to management regimes which seek to prevent the natural resource from being compromised.
- (2) Development on land adjacent to natural resources will be assessed having regard to the recreational potential the resources embody to ensure that future conflicts are minimised and the recreation potential is not undermined.
- (3) Wherever practical natural recreation resources will be secured in public ownership.
- (4) Beach, foreshore and river areas in public ownership shall be made accessible to the people where their environmental values are not compromised or endangered.

11.5.3 To Protect Existing Open Space and Recreational Facilities

Existing open space areas are important community resources and form the basis of the intended future system at local, district and regional levels. Large sporting fields and other recreational facilities are shown on the strategic plan map. These large facilities may create impacts on surrounding areas as a result of noise, lighting and traffic, albeit for generally limited periods of time.

It is important to recognise existing facilities, to plan for their continued development and to protect them from potential conflict with incompatible uses.

Implementation

- (1) Development on land near existing open space areas and recreational facilities may be subject to conditions relating to such matters as buffering and setbacks of certain activities, particularly where the land is being developed for predominantly residential purposes.
- (2) Development on land near existing open space areas and recreational facilities will be assessed having regard to activities or proposed activities in or at these areas and facilities, to ensure that any future conflicts are minimised.

11.5.4 To Secure Centrally Located Civic Spaces Providing a Community Focus and Serving Community Needs

Considerable emphasis is given to the desire for greater community focus in urban development, to be achieved in part through the provision of central focus points from regional to neighbourhood levels of planning. Central to this provision will be the provision of highly visible and accessible civic spaces located in conjunction with retail and commercial development and other public buildings, serving a range of civic and recreational functions. These spaces may only be small in size, but may be intensively utilised and serve a number of community functions appropriate to the size of the community it serves.

Implementation

- (1) In development proposals including proposals for retail and commercial development and other centrally located facilities, regard may be given to the community need for civic spaces. The size, shape and character of the civic space, is to have regard to the role, intended character and Statements of Desired Precinct Key Character Elements (in Volume 3) of the centre, including Local centres, that the space is intended to enhance.
- (2) Civic spaces should be made accessible to surrounding public facilities and amenities, including recreation facilities and open space, schools, public transport and shops, with appropriate pedestrian, bicycle and other linkages and connections.

- (3) Civic spaces should be designed so as to be highly visible, accessible, safe and provide adequate seating, shade structures and recreational equipment to serve the needs of the community.

12. COMMUNITY FACILITIES

12.1 Explanation

“Community Facilities” cover health, education, personal, community and family support measures provided by various governmental, private and voluntary agencies. It also includes planning strategies which affect the community’s access to facilities or which influence the well being of communities and consequently their need for greater support.

12.2 Key Issues

Community facilities are in most cases not provided by Council. In its traditional role as a land use planning mechanism, the Planning Scheme has little control over their siting and establishment. However, planning strategies can assist in foreseeing the need for various facilities and, given good planning practices, alleviating some of the causes of demand for some facilities. The Priority Infrastructure Plan assists in the better provision of facilities. The key issues forming the basis for a Community Facilities strategy include:

- the existence of few centres which provide an appropriate range of accessible community facilities including meeting places for community groups or individuals;
- a characteristically high unemployment rate (relative to the Queensland average), indicating a need to facilitate employment opportunities and to increase accessibility to employment nodes;
- health services which have not kept pace with the rapid population growth;
- the demographic profile of the Shire which requires that particular attention be paid to social services for the young and the elderly;
- the lack of an adequate public transport service; and
- the Shire’s attractions influencing demand for community facilities by introducing substantial tourist populations and a non-typical socio-economic profile (including a high incidence of aged and unemployed people, etc).

12.3 Community Facilities Strategy

The following outlines the planning strategy developed to address the issues raised above:

- (1) Underlying the Community Facilities strategy is the belief that urban form can influence the need for community facilities by planning for dispersed or concentrated facilities and affecting accessibility and community interaction. To this end:
 - residential premises of a higher density, concentrated around retail and commercial nodes, thus increasing accessibility is encouraged;
 - a greater mix of uses in the retail and commercial nodes is supported (within the physical limits of the designated or referenced centres) to encourage greater industry and business opportunities and consequently greater employment opportunities; and

- there is an increasing emphasis on providing for public transport, pedestrian and cyclists as well as increased accessibility for motor vehicles, in turn increasing accessibility for residents to facilities.
- (2) The Strategy aims to address unemployment through the designation of adequate supplies of land for industrial, commercial and retail activities and through the development of a strong tourism strategy.
 - (3) Access to employment nodes by a variety of means, will be pursued through the transport strategy (see Section 13). The role of transport infrastructure, particularly public transport, is recognised as being intrinsic to the successful implementation of a community facilities strategy. Appropriate steps are to be taken under the urban and transport strategies.
 - (4) There is a view that an adequate delivery of appropriately located and timed social and community infrastructure can not be effectively achieved without the planning of such facilities being an integral component of the land development process. Therefore, the emphasis of the Strategy is on addressing this issue through the development process and in conjunction with the development or redevelopment of sites located within Regional, Sub-regional, District, Village and Local Centres and larger sites being developed for predominantly residential purposes. The Priority Infrastructure Plan is also a part of the strategy to provide for improved availability of community facilities to newly developing areas.
 - (5) Such a strategy, however, relies on the preparation of a social infrastructure plan or other assessment to determine an appropriate range of social and community facilities, their optimal locations and delivery dates or population thresholds.
 - (6) The designation of land for community purposes under the relevant provisions of the Act is also part of the strategy.

12.4 Preferred Dominant Land Use

12.4.1 Special Purpose (University)

The proposed site of the Sunshine Coast University College at Sippy Downs has been identified by the preferred dominant land use of 'Special Purpose' with a symbol to identify the particular purpose. The development of the land for this purpose will extend to activities on the land which are considered to be related to a university and will also have a significant influence on the planning of the surrounding area.

12.5 Objectives and Implementation Measures

12.5.1 To Produce Needs Assessment Criteria for Community Facilities

To plan for a satisfactory community facilities network, the Council must have an understanding of the inter-relationship between community types and sizes and their needs. It is expected that criteria should reasonably pre-determine the level of local services required by planned communities, the contribution towards demand made by smaller subdivisions and the need for and location of district or regional level facilities on the basis of population growth in a vicinity.

Implementation

(1) Council is committed to consulting with community facilities providers to determine needs for facilities on a basis which will assist in their translation to requirements or guidelines for the supply of facilities on local, district and regional levels.

12.5.2 To Incorporate the Provision of Community Facilities into the Development Process

By nominating the location and size of facilities, it is possible to optimise accessibility and minimise the need for service providers to undertake the complex and costly procedure of acquiring available land, which may not be eminently suited to the proposed purpose or the good of the community. The Act provides a formal "designation" process to assist in this regard.

Implementation

- (1) In assessing relevant development applications which relate to the establishment of residential communities, the Council will have regard to the implementation criteria relating to Objectives 3.5, 3.6 and 11.0 of this Strategic Plan and to the following criteria:
- with respect to applications relating to communities of a size which, according to the needs assessment criteria, should desirably be provided with certain facilities, whether adequate provision has been made for such facilities;

- with respect to other applications, whether the proposed community contributes towards a demand for facilities on the basis of it being part of a larger community; the Council may require that provision be made for certain facilities or that an infrastructure charge be made towards their provision as set out in the applicable infrastructure charging instrument;
- whether all proposed community facilities, including shops, schools, churches, child care centres, community meeting places, social welfare agencies and emergency services, are provided in a single, adequately accessible location which acts as a local community focus. Consideration will be given to whether such an arrangement is appropriate to the subject proposal; and
- whether the proposal facilitates appropriate standards of accessibility to community facilities for motorists, pedestrians and cyclists;

- (2) Due to the small size and intended role of Local centres, Council accepts that the ability to encourage a full mix of community facilities and other non-commercial or retail uses may not always be achievable.
- (3) Council may seek a report assessing the social impact of the proposal and its capacity to generate demand for social and community facilities.
- (4) Any social impact report must be prepared by an appropriately qualified and experienced professional.
- (5) If after assessing any social impact report, Council is not satisfied that the proposal can be adequately supported by the existing and proposed community facilities, it may not support the application.

12.5.3 To Facilitate Community Interaction

It is recognised that the need for some community facilities arises out of social dislocation and generally inadequate community structures. Social conditions can be improved by ensuring that communities have good access to facilities and are encouraged to interact at accessible and thoughtfully planned community nodes, which may centre on local shopping centres.

Implementation

- (1) In assessing relevant applications for development in established or proposed community activity nodes, the Council will have regard to the implementation criteria in Objective 12.5.2 above and to the proposed design. The design should ensure that the community is afforded efficient, safe and user-friendly pedestrian access between facilities in the node and that development in the node is conducive to community interaction.

- (2) In assessing applications for community facilities and local retail facilities which are not in community activity nodes or defined Local or Village centres or which erode the function of a satisfactory existing node, Council's position is that the community would be better served by the proposal's establishment in such a node or centre, having regard to the principles espoused in the need assessment criteria.
- (3) In considering applications for the establishment of residential communities, the Council will have regard to the criteria relating to Objective 3.5 of this Strategic Plan. Favourable consideration will be given to applications for comprehensively planned residential communities which incorporate measures for improving social interaction. Measures may include innovative street layouts and treatments, appropriate house to street interfaces, innovative approaches to improving pedestrian and cyclist accessibility and the creation of relatively high density communities centred on community activity nodes. Council may vary its standard development requirements to facilitate such proposals.
- (2) Council in assessing applications will have regard to the visual character of a development to ensure that the character of the particular Planning Area, the immediate amenity and the historical and cultural character of the area in which it is located, has been considered. The visual character of a development will also integrate any associated infrastructure which must be designed as part of the total visual presentation.

12.5.4 To Encourage the Design of Buildings and Landscapes which Relate to their Physical Context and are User Friendly

Building design can produce a more livable building if the design has regard to local climate, effective use of passive (low energy) design principles, the appropriate use of native landscapes and the physical relationship to adjoining buildings or potential buildings. The visual character of the building is important if it is to be reflective of the Sunshine Coast and respect the immediate amenity in which it is to be located. The building design must not lose sight of its purpose and its accessibility to its users.

Implementation

- (1) Development is designed to be in accordance with Council's Planning Scheme codes to ensure that:
- Site layouts, including building and landscape designs address local climate, and topography including such issues as the use of space, effective use of passive (low energy) design principles and site excavation;
 - Landscape works appropriately incorporate the use of endemic and non-native species, and shade planting;
 - Pedestrian, disabled and vehicular access, vehicle parking and service areas are adequate, functional and do not unduly compromise other aspects of the development; and
 - the intended character, Statements of Desired Precinct Key Character Elements (in Volume 3) and the role of Local centres is not compromised.

13.5.4 To Encourage the Upgrading of the Sunshine Coast Airport and Surrounds to that Appropriate to a Tourist Region

As the gateway to the Sunshine Coast to many tourists, the airport, its surrounds and the roads providing access to it serve an important role in projecting the Shire's image as a tourist destination. The appropriate treatment of the airport and roads and the appropriate development of the surrounding land is vital to the Shire's long-term status as a tourist destination.

Implementation

- (1) Council will encourage the appropriate authorities to make aesthetics a high priority in developing the airport and major roads.
- (2) Development in the vicinity of the airport and of the David Low Way and the other roads which distribute traffic from the airport currently and in the future is to acknowledge the gateway quality of the airport through the adoption of appropriate development, landscape and access standards.
- (3) The implementation criteria of Section 7.0 of this Strategic Plan will be utilised.
- (4) In assessing applications to which these provisions apply, Council will have regard to the following criteria:
 - landscaping, particularly along road frontages and site boundaries readily visible from arterial roads and the airport;
 - the provision of buffers between the arterial roads and the airport and the proposed development;
 - the scale and presentation of buildings; and access to arterial roads.
- (5) In assessing applications for development on sites proximate to the airport, Council may require that appropriate acoustic attenuation measures are incorporated.
- (6) Council may prepare guidelines regarding noise attenuation in building design.

13.5.5 To Facilitate the Provision of a Public Transport System Capable of Meeting the Needs of Shire Residents

A useful public transport system as well as catering for the general transportation needs of the community will provide mobility for people such as aged persons, disadvantaged persons, children and tourists who may otherwise have difficulty in moving from one place to another. The public transportation system may also relieve congestion in major activity areas during peak periods.

Implementation

- (1) Council encourages the establishment of new and upgrading of existing public transport facilities with regard given to positive or negative impacts on established land uses.
- (2) The development of the Caboolture – Maroochydore land use transit corridor strategy will play a fundamental role in improving the public transport system within and external to the Shire. Council will actively promote the development of this transport link.
- (3) In assessing relevant development applications, Council will ensure, where reasonable, that appropriate allowance is made for existing or potential public transport systems, having regard to the following criteria:
 - the design and route of arterial, distributor and collector roads, such that road grades and curves are reasonably negotiable by buses, the route a bus would need to follow is not overly tortuous and the majority of residents are within easy walking distance of such a road;
 - the provision of pedestrian walkways which improve access to potential public transport routes; and
 - provision be made for bus stops at substantial public venues, such as shopping centres and other community foci.
- (4) Council encourages and will favourably consider proposals for substantial residential communities which may facilitate a viable and efficient public transport system by providing for the concentration of commercial and community facilities and accommodation in locations such as Centre Precincts or specifically referenced centres (including Local centres) which are readily accessible to their respective communities and to the Shire's arterial road system.
- (5) To encourage adequate bus patronage the residents in new estates should be captured as early as practical and Council will assist by requiring user friendly bus stops where appropriate.

13.5.6 To Maintain the Integrity of Natural Resources and the Amenity of Transport Corridors in the Development of Transport Facilities and Routes

The development of transport infrastructure (in whatever form) should aim to maintain the values attached to natural resources in the interests of protecting significant vegetation and wildlife habitats and to project an appropriate image from transport corridors.

Implementation

- (1) In siting and designing major roads, or in deliberations with State or Federal authorities relating to the siting and design of major roads or other transport modes, Council will endeavour to influence the location and design to respect existing vegetation communities and wildlife habitats. In particular, such works should accommodate and sustain wildlife by conserving significant vegetation, minimising changes to the hydrology of vegetation communities and by providing fauna protection mechanisms where appropriate. Works should also consider sediment and erosion control, stormwater management and protection of natural drainage systems and other potential impacts.
- (2) In considering relevant applications for development on land in the immediate vicinity of major transport corridors, Council may require vegetation retention, rehabilitation, or landscaping to provide effective visual screening. This may influence the design of structures, building setbacks and sites adjoining transport corridors.

maintain and enhance these areas in a manner which does not significantly impact on the natural and cultural resources of these areas.

- (6) Local centres are to be so designed to ensure they function as a focus for local public transport, cycling and walking.

13.5.7 To Develop a Network of Bikeways and Pedestrian Paths including Boardwalks for Safe and Convenient Access Between Residential Areas and Desired Destinations and for Recreational Use

The growth in motor vehicle traffic within the Shire and the dispersal of destinations creates the need for safe and convenient access for cyclists and pedestrians. Also many residents and tourists are drawn to the recreational and health benefits of cycling and walking.

Implementation

- (1) Continue the preparation of a functional network of bikeways and pedestrian paths to provide effective links between places of residence and destinations such as employment, retail and recreational uses.
- (2) Undertake the construction of further elements of the network as demand and finance dictate, and if appropriate, seek infrastructure charges under the applicable infrastructure charging instrument to facilitate the development of a comprehensive network.
- (3) Development proposals shall incorporate those sections of the network that are relevant to the development or traverse the development.
- (4) The consideration of new developments should include whether upgradings or modifications are required to the network to provide for the development proposal.
- (5) Consider that development proposals promoting public access to coastal areas, waterways and wetlands do not affect the enjoyment of these areas and that access ways are designed to

14. PHYSICAL INFRASTRUCTURE

14.1 Explanation

“Physical Infrastructure” embraces all services necessary for any development including water, sewerage, electricity, street lighting and telephone. For the purposes of this Section, the provision of a road network is addressed elsewhere.

14.2 Key Issues

The key issues determining the provision of physical infrastructure include:

- the significant impacts on the viability and therefore level of growth in any location by providing or alternatively retarding physical infrastructure;
- the need for land use planning and infrastructure planning to work together, to minimise inappropriate development (resulting in infrastructure which is costly to provide and inefficient to operate) and inappropriate infrastructure planning (undermine land use planning strategies);
- the whole range of extraneous costs (outside the normal fee structures and charges) associated with development which is fragmented or inappropriately staged;
- the need for an appropriate standard of development to ensure that adverse environmental impacts are minimal and to secure development that is aesthetically acceptable.
- the need to identify solid waste disposal sites at an early date to meet the future requirements of the Shire and to safeguard them from conflicting land uses.

14.3 Physical Infrastructure Strategy

The following comprises the elements of the physical infrastructure strategy.

14.3.1 The underlying goal in the development of the physical infrastructure strategy is the establishment of an appropriate array of standards which address the environmental and aesthetic impacts of development on the wider community and environment and the encouragement of development which is appropriate in character and location to ensure an efficient delivery of services which will serve the community well in the future as well as the present.

14.3.2 In terms of the provision of a reticulated water supply this means that, while most development within Urban areas and some select Permissible Areas For Rural Residential (that is within water benefited areas) must be reticulated, there will also be other Urban areas and Permissible Areas For Rural Residential as well as other forms of development for which there may never be an available reticulated supply of potable water. For these areas suitable alternative sources of water will be required.

14.3.3 As indicated in Section 15.0 of the Strategic Plan there is also a need to protect the quality and quantity of water supply through the protection of the integrity of their catchments and the identification and protection of groundwater reserves and associated aquifers.

14.3.4 Reticulated sewerage disposal systems are considered the most appropriate means of sewage disposal for closer settlement. Generally, the provision of a reticulated system is mandatory for all development located within Urban areas.

14.3.5 Where development infrastructure is to be provided, this provision will be in accordance with the Priority Infrastructure Plan.

14.3.6. Most other parts of the Shire will not require connection to a reticulated sewage disposal system. An alternative means of sewage disposal in accordance with appropriate health and environmental standards will be required.

14.3.7 A number of established or proposed Water Pollution Control Works are shown on the Strategic Plan Map. Water Pollution Control Works will be protected ensuring sufficient separation distances by allocating adjoining areas to the Preferred Dominant Land Uses of Industry, Agricultural Protection and Rural or Valued Habitat.

14.3.8 Solid waste disposal sites available within the Shire to meet ongoing needs are limited having regard to appropriate issues. Desired sites are to be identified as early as practical to enable these to be accommodated in planning considerations.

14.4 Objectives and Implementation Measures

14.4.1 To Ensure that all New Development Occurs in Locations Capable of Being Adequately Serviced with Physical Infrastructure Utilities, having regard to the Orderly Extension of such Services

With a number of exceptions (listed below), the areas shown Urban and Industry and some parts of the Permissible Area For Rural Residential have been identified as areas which can be economically provided with public utilities assuming development takes place on a progressive basis. This assumption is an important consideration in assessing development applications. It is probable that a number of proposals will be found to be premature during the life of the Planning Scheme. In some Urban areas within the Shire (such as at Eudlo and the Blackall Range) and some Permissible Areas For Rural Residential (such

as Rosemount, Keil Mountain and west Buderim) and other areas (and in the case of reticulated sewage disposal and all Permissible Areas For Rural Residential), it is not intended to provide a reticulated water supply or sewage disposal system. In such instances, due consideration shall be given to the means proposed to trap and store potable water and to dispose of sewage effluent.

Implementation

1. In assessing relevant development applications, Council will have regard to:

- whether it is proposed to provide the site with reticulated water supply and sewerage infrastructure and other physical infrastructure;
- the physical impositions to be overcome in providing the proposed infrastructure if any; and
- any approvals, planned stages or financial commitments by Council or other lead agencies in the provision of infrastructure.

2. Where it is not intended to provide reticulated water supply or sewerage and where an alternative to conventional infrastructure is proposed, Council will have regard to the suitability of that alternative, from an environmental, health and aesthetic point of view.

3. Council will generally only support applications for development in which the connection to all appropriate infrastructure can be achieved in an orderly and progressive manner.

14.4.2 To Provide an Adequate Water Supply

Some form of water supply is required for all development. In most instances it must be potable, whether reticulated or stored on site. However, there are other uses for water, whether potable or reclaimed, including industrial applications, lawns, gardens and fire fighting purposes.

Ensuring there is an adequate and appropriate supply of water is necessary in providing for the health, safety and amenity of residents, workforce and visitors to the Shire.

Implementation

1. In all Urban areas (and as required, in other areas) where reticulated supply is to be provided, no development will be supported without there being adequate provision made for the reticulated supply.

2. Where potable water is required outside the area to be reticulated, Council shall have regard to: whether an adequate supply can be assured with respect to the proposed use of the land, the rainfall characteristics, catchment area and storage volume;

- whether an adequate quality can be assured with respect to the use of particular materials for catchment and storage; and
- the use of devices such as first flush by-pass and water purification (such as chlorination) may be required;

3. Council may require adequate provision for water (whether potable or reclaimed) for such purposes as:

- commercial and industrial development as well as low density residential development where there is a risk of commercial, industrial or wild fire; and
- commercial and tourist development where a high standard of visual amenity is required and extensive lawns and gardens are proposed.

14.4.3 To Provide an Adequate Sewerage Collection and Disposal System

Some form of disposal of sewage and sillage is required for all development. A high standard of effluent disposal is essential in maintaining a high environmental standard, in minimising health risks and in achieving an acceptable community standard.

Implementation

1. In all Urban areas where a reticulated supply is to be provided, no development will be supported without there being adequate provision made for reticulated disposal of sewage and sillage.

2. Where no reticulated disposal system is provided, Council shall have regard to:

- the capacity of each lot to provide adequate on-site disposal in terms of soil permeability, proximity of the water table, the underlying geology, topography and wet weather conditions;
- whether the land is contained within a potable water supply catchment or upstream of an environmentally significant habitat;
- whether there is minimal and acceptable risk of contamination of groundwater or overland flow;
- the presence and location of residential or other land use;
- The presence and functioning of other on-site disposal systems; and
- The cumulative impact from the number of on site sewerage disposal systems in the area.