

## 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.

3. If after assessing a proposed disposal system, Council is not satisfied that an acceptable disposal system can be provided, it may not support an application.

#### 14.4.4 To Provide an Adequate Level of Other Physical Infrastructure

The provision of an appropriate level of physical infrastructure is central to a satisfactory quality of life for residents, workers and visitors to the Shire. This does not require the universal adoption of a single set of standards. In some circumstances the provision of a high standard of infrastructure may be considered detrimental to an individual or community's quality of life.

##### Implementation

1. On determining an appropriate level of services, due regard must be given to:
  - accepted community standards;
  - the amenity and land uses within a particular area;
  - the character and location of future development within the area;
  - opportunities for ecologically sustainable and innovative technical solutions.
2. An adequate supply of electricity or other approved alternative energy source will be provided to all premises.
3. All electricity supply shall be undergrounded in all Urban and select Permissible Areas For Rural Residential as required by Council.
4. Street lighting to an appropriate standard shall be provided in all Urban and select Permissible Areas For Rural Residential as required by Council.
5. Telstra clearance is to be provided for all lot reconfiguration and relevant material change of use applications as required by Council.
6. All physical infrastructure shall be provided in accordance with the requirements, including environmental considerations and conditions, of both Council and the regulatory authority and to an appropriate level of reliability.

#### 14.4.5 To Identify and Protect Waste Disposal Sites which are Needed to Service the Shire

Suitable sites for the disposal of waste are limited due to the constraints that apply to an acceptable disposal location. With the growth of the Shire and expansion of the urban areas and other uses that may conflict with a waste disposal site it is important to identify sites as early as practical so that these may form part of the Shire's planning.

##### Implementation

1. To identify potential waste disposal sites and determine those which are considered to be needed to meet the future requirements of the Shire.
2. To protect any waste disposal sites which are identified under 1 above from potential land uses which may undermine the use of these sites for waste disposal.