

8. Urban and Rural Spatial Development

This chapter outlines and analyses the pre-requisites for spatial development in the planning area. The presentation is mainly based on a series of thematic maps in order to facilitate the understanding of the spatial context. The maps are found in Annexure B. A summary statement of the main findings is presented at the end of the Chapter.

For background information reference is made to the special studies carried out in various subject areas as well as to the *KWT LDO/IDP –Situation Analysis, Setplan/Africon 1999*.

8.1. Design and Aesthetics

Human beings love beautiful things. Aesthetic values are essential to people and are obvious and common parts of their lives. Not always noticed as conscious thoughts, they play a vital part in every day activities, accepting that the basic human needs of food, shelter and safety are fulfilled. Through evolution, the human mind is programmed for these kinds of sensuous rather than materialistic values.

The human sense of orientation in an environment is also something that has evolved over time. In our “distant past” we needed a “sense” of orientation in order to keep track of where we are relative to sources of food and our home. This need is still obvious though we are now orientating ourselves between home and work or shops etc. while living in towns or massive cities where of course the latter will cause the most problem with orientation. Even if one is not totally disorientated or “lost” in a small town, the sense or fear of being lost could impact on the way one perceives the environment as a whole, especially if the environment is considered to be unsafe.

Therefore the design of new settlements, infill of existing ones or the changes of the exterior of buildings are important issues to everyone permanently living there, or those visiting it as guests or tourists. Settlement design needs to consider what elements form the structure that will make people at ease while visiting the settlement, in order not to feel “lost” or unsafe but to find it attractive and beautiful. We have to “create homes” and neighbourhoods, landmarks and nodes etc. And we have to create meeting places for people or at least facilitate for meeting places to occur “spontaneously”. We have to acknowledge the beauty of a landscape, a river course or an outlook from a street toward landscape scenery and incorporate these elements into the settlement design.

8.2 Built Environment

The following section is a short analysis of the built environment and the cultural heritage related to places and areas of interest, buildings and other physical features. For further details reference is made to the report on *Conservation of the Cultural Heritage* and to the thematic map *Natural and Cultural Assets* (Annexure).

8.2.1 Conservation of Cultural Heritage

King William's Town and the surrounding area has an exciting history and a rich cultural heritage of buildings, streets, and important places. From the early Xhosa time, the history of the King William's Town area reflects the history of South Africa.

There are no known visible traces of the indigenous tribes, the Khoikhoi and San tribes, but the oral tradition tells us about the importance of the natural sceneries of the area. Two peaks of the Amathole Mountains are named after the Khoi chief Ndoda and his wife Hoho, and the peak, Ntaba Ka Ndoda, was an important site for the rainmaking ceremonies of the Khoi people.

The early Xhosa history is connected to the area around Buffalo River and Amathole Mountains, where Xhosa tribes were settled during the eighteenth century. Examples of sites attached to the Xhosa are the Great Place of Ngqika and the battlefield of Amalinde where Ngqika and Ndlambe met in 1818.

The historical places of later date, graves, battlefields, missions, forts etc are connected to the colonial era of South Africa. The Xhosa culture is still strongly practised in the King William's Town area. The Great Place of King Sandile is situated within the area and the royal family maintains the kingdom.

King William's Town was established as a British Mission, later a Military Centre. The position on the route between Grahamstown and the Transkei was militarily strategic and also strategic in terms of trading. In the middle of the nineteenth century roads to Fort Beaufort, Stutterheim, Cathcart and East London were built. The central parts of King William's Town were planned by the military in the middle of the nineteenth century and the structure of a grid street pattern has remained unaltered since then.

From the 1860s and onwards, a rich asset of old buildings was developed, representing the Victorian and Edwardian style where the British influence of the architecture is carried out in a South African version. The low scale of the buildings, small erven and mostly two or three story buildings is important to the character of the central area. The old structure and the street pattern are important aspects to consider as a cultural asset in future planning.

Many important persons active in the liberation struggle came from the King William's Town area. Steve Biko is a well-known example, and his house in Ginsberg and his grave is part of that cultural heritage, as well as the Memorial of the Bisho Massacre by the main road between Bisho and King William's Town.

- **Buildings**

There are a number of buildings in the King William's Town area declared as National Monuments, now referred to as National Heritage Sites. Alteration or demolition of such a building or site needs a permit from the South African Heritage Resources Agency.

On the basis of a King William's Town Conservation Impact Study, the National Monuments Council has compiled a list of conservation worthy buildings. The list is recognised and used by The South African Heritage Resources Agency as a register of conservation worthy property and is used as a planning tool at the City Engineer's Office (KWT TLC).

For the old town of King William's Town an extended conservation area is proposed.

- **Areas of interest for the Cultural Heritage**

The early Xhosa history and its core areas of interests need to be documented and evaluated. Tentatively an area in the vicinity of Dimbasa has been identified to be of such interest.

Historical sites and structures older than sixty years are protected by law and there is a need for an investigation of the historical assets especially in the townships Ginsberg, Zwelitsha and Breidbach.

Illustration 13: Settlement Pattern and Areas of interest for the Cultural Heritage

8.2.2 Urban and Rural Settlement Pattern

The settlement pattern of the King William's Town area is characterised by the urbanised areas between KWT and Berlin lying as pearls on a string in a curved ribbon structure. It consists of the urbanised areas of Zwelitsha, Phakamisa and Ilitha complemented by Ndevana regarded as a rural structure but showing a tendency to become more urbanised. Extending the curved ribbon to north-east we find Bisho, the capital of the province, with the partly peri-urban settlements of Tyutyu, Balasi and Skobeni. Seen in a planning context this ribbon structure is very suitable for maintaining a fast and effective transportation system and it has also other advantages. Slightly out of line in this overall structure is Breidbach, the remaining urban area close to KWT. On the other hand Breidbach is situated close to the intersection between the highway to East London and a shortcut (in the ribbon structure) between Zwelitsha and Bisho.

The remaining urbanised area in the KWT area is Dimbasa, 20 km west of KWT, which is functioning as a local node.

This overall structure is strengthened by the on-going densification of rural areas in between and adjacent the urbanised areas such as Kwa Klifu and Kwa Tshatshu (located respectively east and west of Phakamisa), Kwa Bhonke (also known as Sheshegu – located south of Ginsberg) and villages surrounding Dimbaza (Kwa Dikidikana, Kwa Mamata etc.).

This beads on a string structure could be seen on a more overall level including Dimbasa to the west and Berlin, Mdantsane and East London to the east, thus forming a strong development corridor with very good possibilities for good commuter transportation facilities.

The rural areas to the north-east are mostly of the extensive commercial farming type. The rural areas to the north, west and south-west of KWT are scattered with small villages and rural settlements with a wide range of populations. They all consider KWT as the primary node for urban work opportunities and as the basic service provider. A hampering factor in the development of the rural areas is the poor road conditions and transportation facilities.

The urban and rural areas are interdependent of each other in many respects socially and economically but also ecologically. With an integrated approach to planning the present urban-rural divide has to be addressed especially since the new amalgamated municipality will have both types within its own boundaries.

• Spatial Implications

The existing settlement structure is obviously a basis for a comprehensive planning exercise. To plan in an integrated sustainable way one has to focus on consolidating, complementing and strengthening the existing settlement structure and existing infrastructure, thereby benefitting from investments already made.

In the King William's Town area there is an existing urban settlement structure, a beads on a string structure, that has good potential for urban development with

reasonable short distances for commuting and interaction within and between the different urban settlements. But the structure implies that the modes of transportation, its reliability, capacity and rapidness will be of huge importance if one is travelling for longer distances. One has also to tackle the so called peri-urban settlements and find measures to include them in the settlement structure.

The rural areas have to be considered in a different way depending on how close a settlement is to the urbanised areas and the importance of the settlement regarding residential and service provision. The crucial factor will be how adequate public transportation systems there are in place to link up the different urban centres with their rural communities. In the context of rural-urban inter-action, an adequate road system of reasonable standard is of fundamental importance. In the planning context there should be an effort made to identify and prioritize a system of rural access roads that are of significant interest to upgrade and maintain.

8.2.3 Green Structure

The green environmental structure in the CUP core area is characterised by the Buffalo River basin and the Yellowwoods River basin where great environmental values are existing. The small portions of forests existing near Breidbach and Yellowwoods are also of significant interest as well as other grown up solitude trees that can be found e.g. on the Golf Course, in Zwelitsha, along Maitland Road, on cemeteries and in "KWT garden town". A real asset in this respect is the Botanical Garden, which should regain its former status. Being nicely situated close to Buffalo River and the Town Centre (CBD) the Botanical Garden could enhance the townscape and the attractiveness of the town as a recreational and tourist attraction.

The only conservation area existing in the area is the bird sanctuary between Kafferarian Heights and Bisho Stadium, consisting of a bush veld as habitat for birds and insects. Health Department has also identified an area on the hilltop north of Sweetwaters worthy a conservation status.

The green structure presented is not based on a thorough investigation but merely from experience and intuition.

The information on agriculture land is comprehensive and should mostly be seen as indicating the need and importance of acknowledging agricultural activities close to the urban areas as assets from an environmental point of view. Food production close to where it is consumed reduces the transports and thus the impact on environment from traffic but it also improves the quality of the products. The exchange in the other direction is also possible when there are means and measures in place to use for instance compost and sludge from urban areas in agriculture.

Areas for urban agriculture allotments are identified in certain settlements. They could contribute to the household's food quality and maybe also to the household economy if sold on the market or in the neighbourhood. It could also function as a vital part of environment awareness raising in the area through use of compost material from household waste, which cause for separation of waste at

the source and the turn of mindset can start. One example of green production is the composting of organic waste that is to take place in connection with the physical up-grading project on a community garden in Dimbaza. The compost will be used as fertiliser in the garden.

The following recommendation are proposed for “Green structures and Open Space Systems” :

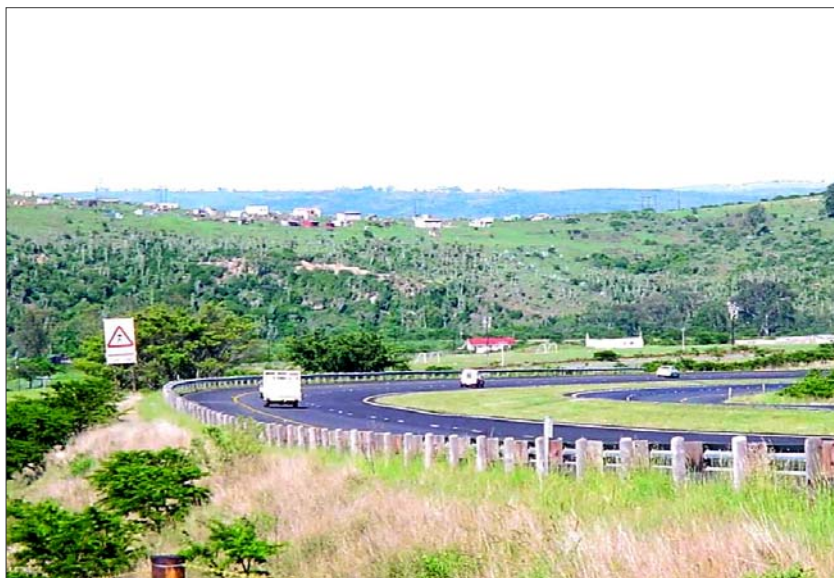
- Reduction of erosion of topsoil and green areas
- Reduction of the removal of indigenous plant material as wood for fuel
- Promote preservation and improvement of open space systems within urban areas

8.2.4 Landscape and Townscape

The natural and cultural assets seen through the eyes of people are often expressed in terms of beautiful (or ugly, or uninteresting) landscape or townscape. It is often witnessed how important the first impression of a town or a landscape is to a person and how difficult it is to change this impression later on. It is therefore vital especially from a tourism point of view to be aware of how we treat the crucial parts of the landscape and the townscape in this respect. Some of them are indicated on the thematic map e.g. road entrances to the urban areas/the town, significant and attractive landscape features etc. Also attractive outlooks from settlements or roads are indicated. The Amatola Mountain ridge is a very significant and beautiful landmark, which is visible from many settlements and in many angles.

Especially the entrance to the urban areas via N2 before and after Breidbach is of specific interest both because it could be regarded as the main entrance and because of its natural scenery.

Illustration 14 : N2 entering King William's Town at Breidbach



8.3 Economic Activity Nodes and Transportation System

The following section outlines the spatial structure of economic activities and the transportation system. It should be read in combination with the thematic map "*Transportation and Economic Activity Nodes*".

8.3.1 Economic Activity Nodes

Economic activity nodes or, as it sometimes is expressed, development activity nodes are constituted by the suburban business areas and the Central Business District in KWT proper. This is where most business operations and interactions are taking place and where the economic creativity can result in new business ideas and enterprises. This also applies to the industrial and light industrial areas in the vicinity e.g. Buffalo Road light industrial area, Sweetwaters industrial area and Dimbaza Industrial area.

8.3.2 Transportation System

The economic activity nodes are also the main focal points for the transportation system, which also serves the accessibility of public services e.g. schools and health clinics. Specific information on the transportation system, volumes, flows and modes of transport together with origin and destination of commuters can be found in the CUP report "*Transportation*".

- **Pedestrian and Bicycle Routes**

On the thematic map is identified a proposed major pedestrian and bicycle route network in the core area, which is connecting the focal points of transportation with residential areas. Separation of pedestrians and bicyclists from the car traffic is often needed to improve the traffic safety for them especially where the traffic is intensive. Roads and streets with a lot of pedestrians can be found between Ginsberg and CBD, between Zwelitsha and CBD and between Bisho and CBD. The latter, Maitland Rd, has pavements which increase the traffic safety considerably.

- **Public Transportation Facilities**

The thematic map shows existing formal taxi ranks. The informal ranks or taxi stops are many but have not in a systematic way been investigated. The public transportation routes, the accessibility and comfort of public transportation are vital ingredients in a public transportation system in the region, which from an environmental point of view is preferred to a future extended use of private cars. For many people the existing public transportation system still is too expensive.

In the transportation study a rapid bus system on the N2 has been suggested and a feeder bus system connecting to the rapid bus system (or a light rail commuter train) in King William's Town CBD and Berlin via Zwelitsha, Phakamisa, Ndevana and Ilitha. Also Dimbaza, Bisho and adjacent areas will be included in the system.

The connection nodes between the rural system of taxis, the urban system of taxis on one hand and the regional bus system and the eventual commuter train on the other hand has to be looked into so that the overall structure of the public transportation system fits together.

- **Road network**

The map contains the major road network in the core area and also proposes some changes to it. The details can be found in the CUP report "*Transportation*".

The proposed changes to the road network are based on the assumption that private car ownership will double in ten years time and also that the population will increase in the area. To be fully understood the thematic map should be compared with the plan map for the core area.

A national road (N2) by-pass of the central parts of KWT proper (CBD) is proposed together with opening of a new and changes of an existing intersection in the Breidbach area. Traffic is proposed to be re-routed from the Maitland Road (R 63) to the Bisho-Zwelitsha road to direct the through traffic from Kei Road to the higher order national and regional road network. Other road sections and intersections that need upgrading are also identified. In ten to twenty years there may be a need for complementary roads to alleviate the pressure on the central area of the town. A kind of "outer ring" is proposed and is closely linked to the development of new residential areas in Ginsberg and north of KWT proper.

- **Railway**

The transportation study has investigated the possibility of a future utilisation of light rail commuter trains as part of a public transportation system. Two different new railway alignments are proposed. Both are aiming at improvement of the public transportation system between King William's Town CBD and East London including the urban areas in between. The one in the south connecting KWT and Berlin via Zwelitsha, Phakamisa, Ndevana and Ilitha seems to be difficult to implement due to high construction costs for the alignment through an undulating terrain.

The alignment connecting KWT and Berlin via Bisho is considered easier to implement and to reasonable costs. It could also have a substantial effect to the development of Bisho as the provincial capital. The light rail concept means that additional train stops could be developed between Bisho and KWT CBD e.g. at Bisho Stadium and east of Club View.

8.4 Land Use and Technical Infrastructure

Land use and infrastructural systems have been described earlier in the various thematic chapters. A summary of *Land use* and *Technical Infrastructure* in mapped format is presented for the core CUP planning area on the appended thematic maps

8.5 Summary Statement

In the three earlier chapters the comprehensive planning process has been described and analysed in terms of environmental, socio-cultural and economic development. All of these take place within the spatial context of our society and therefore a fourth, spatial dimension has to be added, for the full description and understanding of the components and their interrelation in comprehensive development planning.

The location of and interaction between various functions in the society does have a crucial bearing on the sustainable use of resources, on efficient economic and industrial activities and on the well-being of the social and cultural systems. With the now ongoing administrative integration of urban and rural areas, a new challenge has been brought about on how to economically and socially integrate the new municipality. The identification of economic activity nodes and the development of a well functioning transportation system linking the various parts together comes out of the analysis as means to achieve integration.

The design and aesthetics of the built environment significantly affects people's minds and the natural environment can provide stimulation and recreation. In the King William's Town area the assets in terms of cultural heritage are many and valuable. However, some are at risk of being downgraded and others are not fully realised.

Much of the information which has a physical/spatial dimension is presented in the form of thematic maps. Most of the information is, however, still very undeveloped and needs to be elaborated. It is also scattered in different departments and offices and often forgotten.

Future integrated comprehensive planning will to an increasing degree be dependent on reliable and extensive databases to be able to handle the integrated development planning that is required. Therefore, the creation of structured digital databases using the concept of geographical information system (GIS) to combine mapped information with text information etc. is considered to be vital. An excellent opportunity to embark on the development of such a systematic data and information base, is provided through the forthcoming restructuring of the planning functions of Buffalo City.

In conclusion, the assessed strengths, weaknesses and opportunities in relation to urban and rural spatial development in the King William's Town area are outlined below:

Strengths

- Scenic and unspoilt natural assets are abundant and contributing to a healthy living environment
- The railway infrastructure has a potential for upgrading and better utilisation
- Agricultural potential close to urban areas.
- King William's Town and some rural settlements have a rich cultural heritage.

Weaknesses

- The fragmented settlement pattern in rural areas does not easily allow for public transport systems to be established
- Proper routes and lanes for cyclists and pedestrians are not provided resulting in bad traffic safety and reluctance to use these modes of transport.
- Public transport facilities are underdeveloped, expensive, unreliable and unsafe especially in rural areas. .
- Extensive use of private cars in the absence of a functioning public transport system
- The rural roads network is not up to standard and needs upgrading
- Fragmented and at times non-existent information/database.

Opportunities

- The present settlement pattern of the major urban areas forms a structure that can be utilised for the development of an efficient public transportation system
- The natural environment can form a valuable base for tourism development
- The built environment and the cultural heritage, especially represented by the Xhosa culture, can be an equally valuable base for tourism development
- Complementing the existing economic activity nodes, specifically the King CBD, will lead to synergy effects for general economic development.
- Development of a rapid public transport system with connecting feeder bus links.
- Light rail trains as part of public transport system.
- Urban agriculture development to supplement food production.
- Development of a common database – GIS system – for the entire Buffalo City.