

## **DRAFT: Discussion document in support of the Structure Plan: Density Draft Policy Guideline**

### **INTRODUCTION:**

*What is densification and why is it needed*

- **Densification not only refers to the increase in intensification of residential activities, but also refers to the intensification of activities within certain identified areas**
- ***Higher density does not mean low income***
- ***Densification does not mean blanket densification of the entire town – it provides for densification in selected areas, to provide different density categories in a town which ultimately gives investors different choices. Do not want homogenous typologies.***

Large properties have been the norm in Namibia for many years. Unfortunately, large properties also means

- higher rates and taxes for the owners, making it unaffordable for large sections of the population
- higher maintenance costs
- higher water costs (if property has large gardens, it means large areas need to be watered and with Namibia being a dry country, this is simply no longer an option)
- Less security – bigger properties tend to mean higher security costs
- cost of engineering services – larger properties lead to urban sprawl and this leads to higher cost to service such neighbourhoods
- Unsustainable – all over the world the norm of having large properties are changing. Urban sprawl also leads to higher personal vehicle usage, which means that the low income person that does not have personal transport must make use of public transport, which are non-existent in Namibian towns. They then have to rely on taxi services which are expensive, not always safe and unreliable
- Longer travel distances between development nodes (places of employment) because of urban sprawl, with fragmented and dispersed urban activity patterns. Such a dispersed pattern makes it difficult for a viable public transport system
- Leads to lower social cohesion.

Urban sprawl is a term that describes the continuous low density development without a clearly defined centre, usually encouraging car dependency and the segregation of land-uses. Urban sprawl is seen not as environmentally sustainable as it increases distances between land-use activities, increase the dependency on cars, it increases the expense of providing a future public transport system and it increases the cost of service delivery to developments further away.

Low density developments are popular with many consumers and these can still be catered for within an urban development.

**Densification definitions:**

*“The increased use of space both horizontally and vertically within existing areas/properties and new development accompanied by an increased number of units and/or population thresholds.*

*Incremental densification refers to small-scale densification which is almost invisible, e.g. the subdivision of a residential property or the construction of a second dwelling.*

*Densification is not an end in itself, but a means of improving the sustainability of public transport and improving the vitality of urban precincts” (City of Cape Town, 2012)*

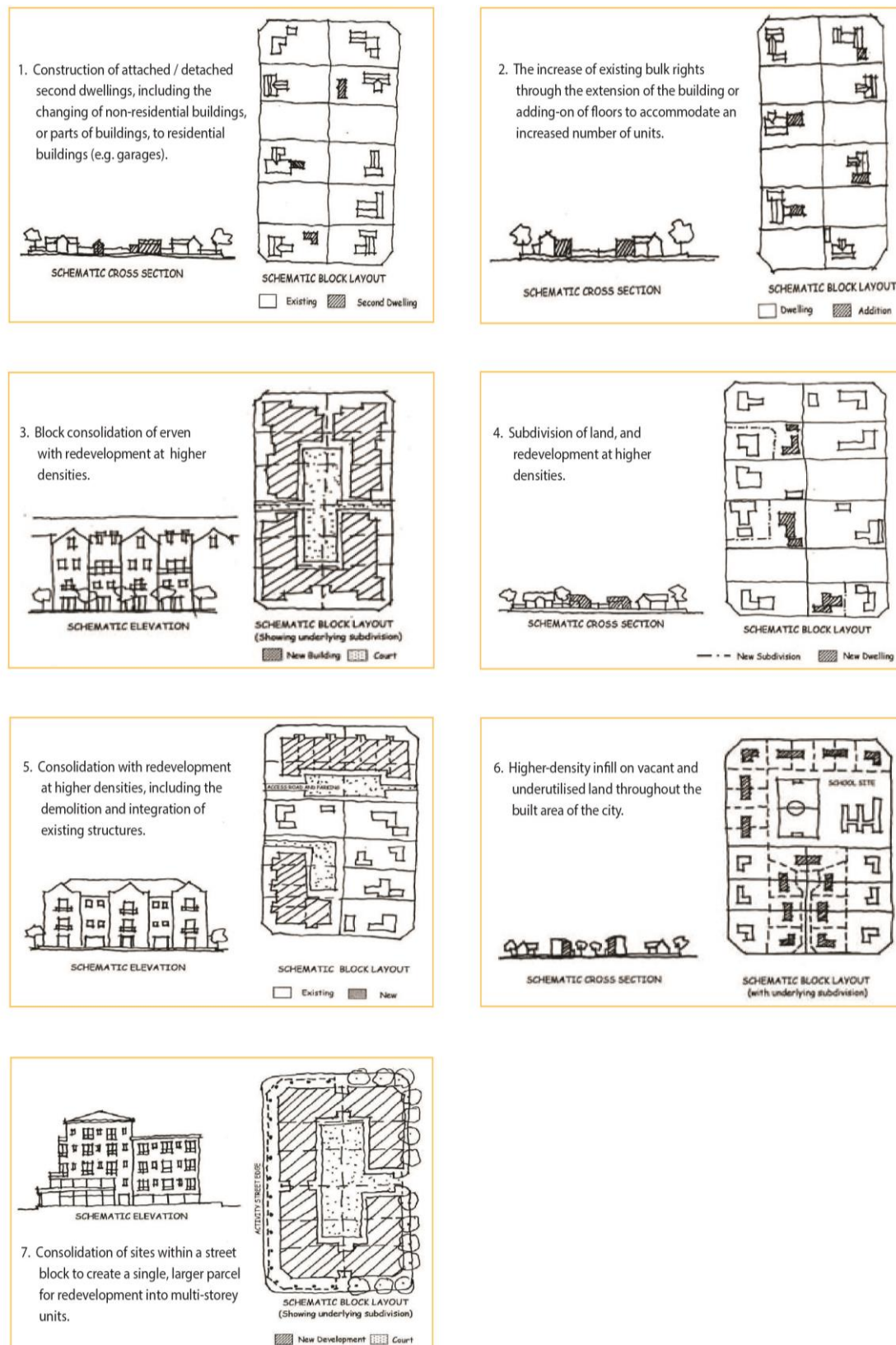
Densification in the Namibian context can refer to many different housing typologies and methods. It can mean:

- Intensification of larger residential properties by permitting a second dwelling on the property
- Intensification of larger residential properties by subdividing into an additional erf (creating attached row/ duplex housing
- Consolidation of properties for higher density developments
- Changing the density of residential properties for townhouse/ flat development

A function of increased density, buildings will need to be allowed to get taller, and to cover a greater bulk and allowed to offer a mixture of uses such as retail, office, institutional and residential uses. “In addition to increasing density, taller buildings have other passive advantages, such as the creation of shade and enclosure that can moderate the environmental conditions at street level, by cooling through shading and by providing a wind barrier” (SPC, 2015 Khorixas Structure Plan).

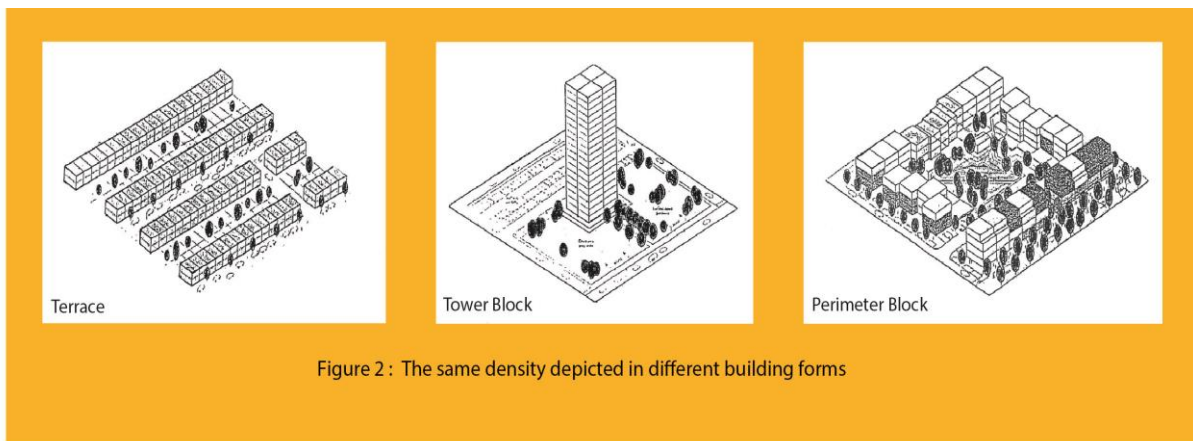
Figure 1 shows the different forms of densification that can be taken up in an urban area

**Figure 1 Examples of different forms of densification**



Source: (City of Cape Town, 2012)

**Caution:** Densification in the Namibian setup does not refer New York, Dubai or Hong Kong. Each country has to assess their own realities and situations and come up with a strategy that works for the particular situation. Densification in the Namibian context will take on different forms and typologies and will most likely refer to 2 to 4 storey developments and not necessarily to a 10 to 50 storey development. Figure 2 below shows how the same density can be applied, but with different housing typologies. This shows that a building does not necessarily have to be 10 storeys high to allow for higher density. Buildings can also be 2 to 3 storeys in height but spaced differently.



Source: (City of Cape Town, 2012)

Densification is **feared by many** because of the perceived negative impact of density. Many see the unattractive, monotonous buildings being constructed under the auspice of densification. **Densification does not have to be unattractive** and should not be feared. One of the principles of densification is to ensure proper building form, ensuring that such developments makes provision for open spaces; ensure that the architecture and typology of the building is attractive. This is also where a Town Council have the responsibility when approving the building plans.

Densification can be done either through **a) infill** or **b) compaction**. Infill is when open, vacant areas are developed. Compaction refers to the redevelopment of the existing properties to higher densities (densification) and may include subdivision and development of large properties within urban areas.

Densification does not mean blanket densification of the entire town. Densification is to allow for choice, is to allow for the investor the choice of choosing high or low density properties. It is important to allow for variety and choice within an urban context and to take into account aspects of recreation, agriculture, ecological, sensitive areas, conservation and low density and identify areas accordingly.

## Densification and intensification Policy for Otavi:

Densification should typically take place in target areas such as

- Town centres; development nodes; activity spines, proximity to major transport roads, areas where higher residential density development should be promoted. Typically higher densities will be placed in proximity to shops, offices and public transport routes
- In areas where density should be managed such as in residential suburbs

Densification and intensification should be discouraged in high priority agriculture areas, identified rural areas, conservation and sensitive areas and areas earmarked for low density development.

Density in Namibia is controlled by town planning schemes through the allocation of densities to residential land. Densities can vary from high density 1:100m<sup>2</sup> to lower densities of 1:900m<sup>2</sup> or 1 per Erf. Business and office activities are regulated by prescribing a bulk factor/ floor area ration for each of the properties. This bulk can vary from as low as 0.4 to as high as 3.0. For single residential zoned properties the densities are not allowed to go lower than 1:300m<sup>2</sup> due to the restrictive government measures put in place that prohibits single residential erven being smaller than 300m<sup>2</sup>. Currently the only way to allow for residential properties to be smaller than 300m<sup>2</sup> is through rezoning to General Residential and creation of sectional title ownership.

### **Objectives of densification**

Broadly the densification guidelines are to ensure

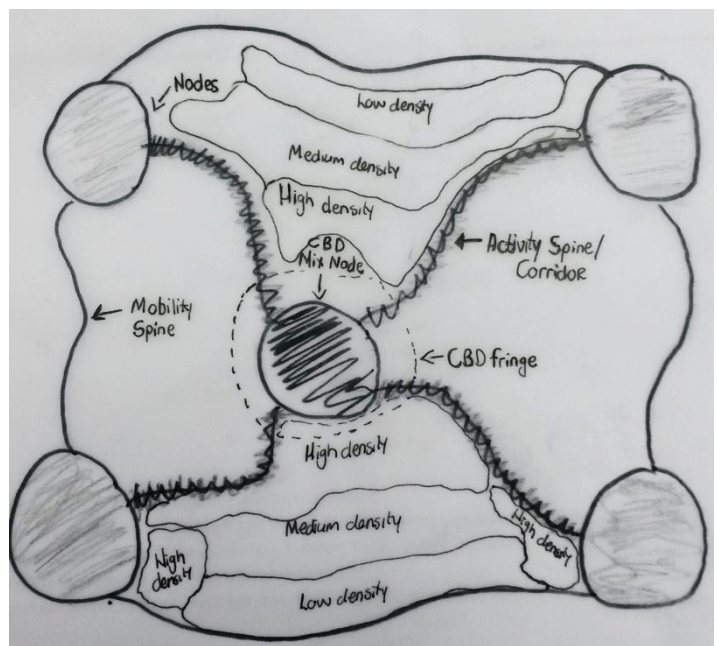
- Higher levels of densification and intensification of different land uses in highly accessible localities, central business areas; commercial nodes
- Higher levels of densification and intensification along activity streets and corridors
- Densification in civic and institutional nodes
- Mobility access roads is to remain for mobility purposes
- Incremental small densification in areas away from these nodes

**For clarity purposes the following concepts are defined**

**CBD** – Central business area where the highest intensity of retail activities to be permitted.

**Mobility spine** (Arterial road) is a road linkage between activity spines and the main function is to ensure mobility. On such a spine office and business activities are to be restricted as this will impact mobility.

**Mixed Use Nodes** are areas with a unique mixture of land uses having higher intensity



of activities and high density. These nodes are usually situated on major crossings which is well served by pedestrian and vehicle traffic. Nodes will be linked with each other by means of activity streets. Intensity and density should be higher than those of the activity street/corridor.

**Speciality nodes** are areas with specific functions such as industrial node; institutional node etc

**Activity street/ corridor** is a mixed use area along a major street. Typically this street should be pedestrian oriented with slow moving traffic. The activities are to incorporate a mixture of retail, offices, and residential uses with higher density than the surrounding area, but lower density and intensity than that of the mixed use nodes. Corridors are to link development nodes/ activity nodes and other areas of activity. Typically an urban area will have higher intensity corridors and lower intensity corridors.

**Shop-house:** term that refers to a building where the front or lower level is used for a shop and the back area or first floor used for residential purposes. A shop-house ensures that there is a link with the pedestrian world outside and brings vibrancy to a traditional business area that closes down after 5'o'clock.

The purpose of **Corridors** is not only for densification and intensification , is also to form part of the heart of a town and expanding this heart to become more accessible. These corridors must be beautified through creating streetscapes that are attractive, safe, accessible (pedestrians, vehicles and cycling), providing shelter and shade in harsh climates. It is the responsibility of the Town Council to ensure that developments also make provision for amenities such as open spaces, and beautification of streets when applying for approval of building plans on these corridors. Land uses on the ground floor along corridors should be promoting activity and vitality of the area.

## Recommendations for Otavi:

### Objective:

The objective of the Otavi policy is to bring back life to the central business district of the town; to expand the business area; to allow for more mixed used activities and opportunities.

**Table 1 Categories of intensification and densification guidelines**

<b>Area and number on map</b>	<b>Description of the area</b>	<b>Aim</b>	<b>Density and Intensity Guidelines</b>
<b>CBD/ downtown B12</b>	Retail, commercial heart of the town	Intensify and strengthen existing business district – be careful of creating secondary business districts within small towns	Higher bulk of 3.0; Mixture of retail, commercial, office and housing (density of housing 1:100) Developments to include open space provision and landscaping. Historical buildings and older building character to be retained.
<b>Historic CBD (still needs to be</b>	Historical buildings within the CBD needing	Preserving the character of the	Lower bulk (1.0) and residential densities of 1:250. Historical



<b>Area and number on map</b>	<b>Description of the area</b>	<b>Aim</b>	<b>Density and Intensity Guidelines</b>
<b>defined)</b>	conservation	historical commercial area	buildings are to be retained. New buildings to conform to regulations pertaining to historical usage
<b>CBD fringe B11</b>	Surrounding the CBD area a transition area with mixed uses – lower densities and bulk than in CBD	Act as a transition area between residential and business district and allow for expansion of business district	Bulk 1.0 and density 1:250. Mixture of uses from business, office, residential entertainment etc.
<b>Activity nodes (B4, B6, B7, B8, B9, B10)</b>	Mixed use nodes where a mixture of activities can be permitted	On activity streets or nodes	Business and offices with bulks of 1 to 2.0 (allow for residential component above ground level)
<b>Sub-urban nodes B1, B2, B3, B5, B13, B14, B15)</b>	Mixed use nodes where a mixture of activities is to take place	Allow for smaller neighbourhood nodes to develop – care to be taken when allowing large commercial activities so as to ensure that the town CBD remains vibrant and alive	Residential Density 1:250 and Office Bulk 1.0 . Only local businesses in this node with Shop-houses along major streets. The larger commercial and retail to be established in CBD
<b>Mobility spines (B1-Trunk road)</b>	Major road through town	To create mobility route through town	Preferable no office or business activities alongside this spine (except in selected nodes).
<b>Major Activity Street</b>	Along major streets (north south corridors and east west corridor)	Creating vibrant streets	Office and residential mixture (only local business – no large retail and commercial) Density 1:250 and Bulk 0.75
<b>Secondary Activity Street</b>	Along secondary streets	Creating vibrant office, shops and residential areas	Offices and residential mixture with bulk of 0.5 for office and 1:250 for residential. Shop-house typology supported.
<b>Shop-House</b>	Corridors, CBD, Activity Streets	To create a vibrant area whether day or night	Along corridors and within business areas
<b>Residential neighbourhoods R1</b>	Khoaeb Extension 3, 4 and 5. Higher density areas		Densities of 1:300 with supplementary dwelling unit for rental (if want to alienate supplementary dwelling –must

<b>Area and number on map</b>	<b>Description of the area</b>	<b>Aim</b>	<b>Density and Intensity Guidelines</b>
			rezone)
<b>R2</b>	Khoaeb Proper and Extension 1	Higher density area	Densities of 1:300 with supplementary dwelling unit for rental (if want to alienate supplementary dwelling –must rezone)
<b>R3</b>	Khoaeb Informal area	Highest density area	Needs to be formalised – densities of 1:250
<b>R4</b>	Otavi Extension 3 – currently low density with large properties. Owners starting to subdivide	Incrementally densify the area	Densities of 1:600
<b>R5</b>	Otavi Extension 4 and southern part	Incrementally densify the area	Densities of 1:450
<b>R6</b>	Higher density node next to business node	Higher densities for flats, townhouse, duplex flat development	Densities of 1:100
<b>R7</b>	Low density development	Further away from business and work opportunities	Densities between 600 to 900
<b>R8</b>	Medium density	Incrementally densify the area	Densities between 300 to 450
<b>R9</b>	Medium density along activity street	Incrementally densify the area	Densities of 450
<b>R10</b>	Higher density along railway and activity street	To increase density along the activity street	Densities of 1:100
<b>R11</b>	Higher density node	Increased densities in the suburban node of Extension 11	Densities of 1:250
<b>R12</b>	Low density node	Retain low density for a low density neighbourhood	Densities 1:900

### ***CBD Precinct (B12)***

Intensified business activities with activity streets tarred and landscaped pavements. This is the entrance into town and the first impression visitors will have to the town. This area needs to be clean and welcoming to visitors.



Strengthen the existing business area and provide for growth by identifying an extended business area where the maximum bulk of a business use in this area can be 3.0. Lower bulks can be permitted. The bulk of 3.0 are to answer the request from Council to allow for higher buildings in the town centre itself. The land uses in this section will be mixed use of nature, with predominantly business activities. Residential use in the section is to be encouraged to higher densities of 1:100. Lower densities will also be permitted. It is advised that the two activity street in the main business area is to be beautified by tree planting and defined pedestrian and cycle lanes. Higher residential development has to provide open space amenities within the developments as well as undertaking the paving of the pavement on the street front, with tree planting. The area must be clean, well light at night and no donkeys, cattle or goats are to roam this area.

#### ***CBD Fringe Precinct (B11)***

South of the business district will be the business fringe where slightly lower intensity activities can be permitted. The objective of this area is to act as an expansion of the business district by allowing for business and office activities with a bulk of 2.0 to take place. Predominantly the area is to be more office and higher residential oriented, with business uses oriented on the activity street. Consideration will be given for properly motivated business applications.

#### ***Otavi Activity Street Precinct (R10, R9)***

- Properties along the Activity Street are to be densified with densities of 1:100 being permissible.
- The Shop-house concept is to be allowed.

#### ***Extension 4 Precinct***

- The Activity Street passes through Extension 4. Erven adjacent to the activity street (B8, B9, B10) is to have higher intensity uses, with higher office and business bulks. Bulks of 2 for business activities within the small business node and bulk of 0.75 for offices to the north of the activity street. Light Industries with a bulk of 1.
- Residential component in Extension 4 can be incrementally densified by allowing subdivisions and densities of 1:450. Please note that the rezoning process still needs to be followed if the current density does not allow for subdivision.

#### ***Extension 3 Precinct***

- Extension 3 currently has densities of 1:900. The objective is to incrementally densify the area by allowing densities of 1:600 in this area. Already a number of properties have been subdivided as the erven are quite big.
- Three activity streets (west, south and east of Extension 3) have been identified. Along these corridors higher intensity uses with bulks of 0.5; 0.75 can be permitted and higher densities of 1:450.

### ***Khoaeb Extensions***

Khoaeb is predominantly higher density with densities of 1:300. As Khoaeb is already relatively dense compared to the rest of the town it is not advisable to further densify the Khoaeb extensions with the exception of the General Residential properties in the area. One larger business node has been identified within Khoaeb Proper where higher intensity business and office activities can be permitted. The Old Single Quarters will be changed into a SME market, which is close to the business node. Erf 139 Khoaeb Extension 1 will be subdivided for a church node. Khoaeb Extension 3 and Extension 5 will have small business nodes that are to serve the neighbourhoods. Bulks of 0.75 can be permitted within this node. Densities of 1:150 for the General Residential erven in Khoaeb can be permitted.

### ***Institutional***

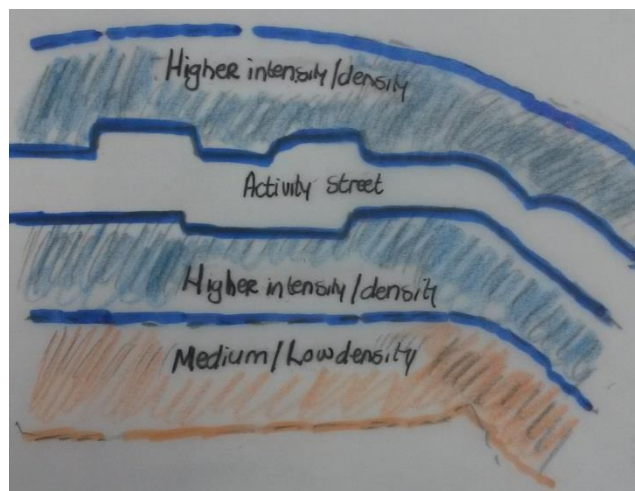
Four Institutional nodes have been identified. I1 (Erf 139) is currently being subdivided for the purpose of creating erven for churches. I2 consists of the community hall and the doctors consulting rooms. I3 and I4 are proposed institutional nodes on the area bought by Council. This will compliment to the proposed hospitality and conference centre in the same area)

### ***Logistics Area (L1 and L2)***

The two areas on the eastern gateway have been identified for a logistics area. This can include anything from a techno park, hospitality, service industries, warehousing and so forth. This is to compliment trade to Angola and other SADC neighbours.

### ***Major Activity Street***

The main activity street has the objective to intensify uses. These activity streets are the entrances into town and should be paved and beautified with natural gardens and landscaped streets. Activities along these major activity streets will have higher intensity uses such as offices with a bulk of 1; higher densities with a density of 1:100.



***Figure 2: Simplified activity street (right)***

### ***Secondary Activity streets***

The secondary activity streets will have lower intensity uses than the main activity street. Along these streets activities such as shop-houses, offices and higher residential activities are to take place.

### ***Activity Corridor (Trunk Road – B1)***

The objective is for the Council to enter into an agreement with Roads Authority, where the trunk road between the three gateways is reduced in status. The road will remain the jurisdiction of Roads Authority but with fewer restrictions on the road, with four way stops and traffic circles to regulate and slow down traffic. With developments taking place on both the eastern and western side of the trunk road there is a need to integrate these developments and the only way to do that is to incorporate the trunk road into the street network of town. Thirdly – there should NOT be a bypass

for the town. The aim is to keep the traffic from being diverted – to create opportunities for the traffic to stop and invest in the town. Access onto the trunk road will still be restricted with only certain points allowed and no direct access.

## General Conditions

- The town planning scheme remains the statutory document. This means that whether an erf falls within a policy area or not – the applicant/ developer must still undertake the statutory rezoning process. This policy is merely to assist the Council with decision making matters. When applying for a rezoning within the policy area, the Council can give consent for the developer to start construction while the rezoning is in process. As the rezoning process can take up to 2 years, this conditions is included to fast track development. However – no consent is to be given if there are any objections from the neighbours or public. In a case where objections have been received the full statutory process must first be completed before the developer can start with the construction. This is to prevent Council from being held legally responsibly by the public and the developer.
- Higher residential development has to provide open space amenities within the developments as well as undertaking the paving of the pavement on the street front and landscaping of the pavement adjacent to the development.



