

# WESTERN CAPE PROVINCIAL SPATIAL DEVELOPMENT FRAMEWORK

## Settlement Restructuring: An Explanatory Manual

March 2009



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## SETTLEMENT RESTRUCTURING: AN EXPLANATORY MANUAL

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### **Acknowledgements: (reference group)**

1. Marek Kedzieja (convenor)
2. Alexia Julius
3. Ruth Massey
4. Aluwani Makherana
5. Michelle Botha
6. Duma Goso
7. Heinrich Mostert
8. Taryn Elliot
9. Bronwen Hobbs
10. Matthew Cullinan
11. Riaan van Eeden
12. Lize Malan
13. Johan de Jongh
14. Lambert de Klerk
15. Saar van der Merwe
16. leptieshaam Bekko
17. Jeff Manuel
18. Neil Muller
19. Neil Lambrechts
20. André van der Merwe
21. Raudhiyah Sahabodien
22. Lekgolo Mayatula
23. Trevlyn Davies
24. Lehan Fouche
25. Willem Smith
26. Tania de Waal
27. Zaahir Toefy

28. Anthony Barnes
29. Gerhard Gerber
30. Jeremy Benjamin

### **Specialist consultants**

1. MCA Urban and Environmental Planners
2. iKapa Enviroplan

### **Participating authorities**

1. South African Heritage Resource Agency
2. PGWC Department of Housing
3. PGWC Department of Agriculture
4. PGWC Department of Transport
5. PGWC Department of Water Affairs and Forestry
6. PGWC Department of Education
7. PGWC Department of Agriculture
8. PGWC Heritage Western Cape
9. Beaufort West Local Municipality
10. Bergrivier Local Municipality
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12. Breede River Winelands Local Municipality
13. Breede Valley Local Municipality
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20. Eden District Municipality
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33. Stellenbosch Local Municipality
34. Swartland Local Municipality
35. Swellendam Local Municipality
36. Theewaterskloof Local Municipality
37. West Coast District Municipality
38. Witzenberg Local Municipality.



## **Preface: How the manual works**

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The manual is set out so that the user can access sections quickly and easily, without having to go through the entire document. Each section, and subsection, is colour coded for easy reference. The manual is divided into four main sections:

### **Section 1: Introduction**

The introduction establishes the background to and focus of the manual, explores why we need the manual, and highlights WC WCPSPDF policies relating to the management tools and integration strategies explored in this manual.

### **Section 2: Land Use Management Tools**

Three land use management tools are presented in this section, namely:

2.1 [Vacant and underutilised land audit](#), which sets out guidelines on how to:

- Identify vacant land within existing urban areas;
- Identify key development potentials and constraints of identified land parcels;
- Identify potentially developable land as input to the densification and urban restructuring and urban edge study; and
- Provide the basis for other studies and strategies, including the densification strategy and social integration and urban restructuring strategy.

2.2 [Densification analysis](#), which sets out guidelines on:

- How to facilitate more efficient and effective utilisation of land;
- How to facilitate more efficient and effective infrastructure and service provision in the long term;
- How to establish appropriate densities to support the role and function of the towns in the Western Cape, taking into account regional differences;
- Suitable mechanisms for densification within the different contexts within the Western Cape; and
- Identifying areas suitable for densification.

2.3 [Urban edge delineation](#), which aims at establishing:

- A proactive approach to urban management and development that protects valuable natural environmental and economic (agricultural) assets while providing for and encouraging urban development in specific areas;
- Limits for urban development in the medium term, as well as giving clear guidance to areas in which urban development will be encouraged and promoted;
- Guidelines for appropriate development, which would enhance the environment and prospects for economic development;
- Appropriate development along the edge in the proximate rural and transition areas (urban fringe areas); and
- Guidance around the interface between elements of the urban/rural/natural environment.

Each of these 3 management tools is unpacked in terms of:

- The concept - addressing “What is it?” and “Why do we need to pursue this?” questions;
- The application of the concept - “What are the steps?”
- Inputs and linked activities - “What other information or studies do we need to do in order to undertake the activity?”; and
- Common issues and frequently asked questions.

### **Section 3: Integration Strategies**

The integration strategies address physical integration and socio-economic integration in human settlements. This section provides guidance on:

- Identifying strategically located land with the potential to integrate communities;
- Identifying the appropriate use of strategic land parcels; and
- Identifying mechanisms and appropriate land use arrangements which will ensure greater spatial and social integration.

### **Section 4: Technical Module**

This section includes the definitions and terminology and general provisions that are applicable to the whole document.

## Executive Summary

### 1. Vacant and underutilised land audit

#### What is a vacant and underutilised land study?

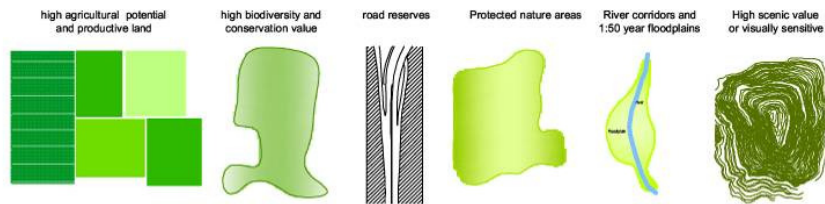
An audit of vacant and underutilised land provides a municipality with an inventory of usable land parcels within the urban edge<sup>1</sup>.

#### Why is a vacant and underutilised land study needed?

A vacant and underutilised land study/audit is a land use management tool key to understanding opportunities for influencing future land use to achieve spatial restructuring and redress past spatial imbalances.

#### Exclusion criteria

Exclusion criteria refer to a 'fatal flaw' with regard to the land parcel which is highly likely to prohibit development. Land parcels which have an exclusion criteria as one of their characteristics should be marked as unviable in the vacant land register.



<sup>1</sup> Note: It would also be possible to undertake a vacant and underutilized land audit of rural land as an input into achieving rural development goals.

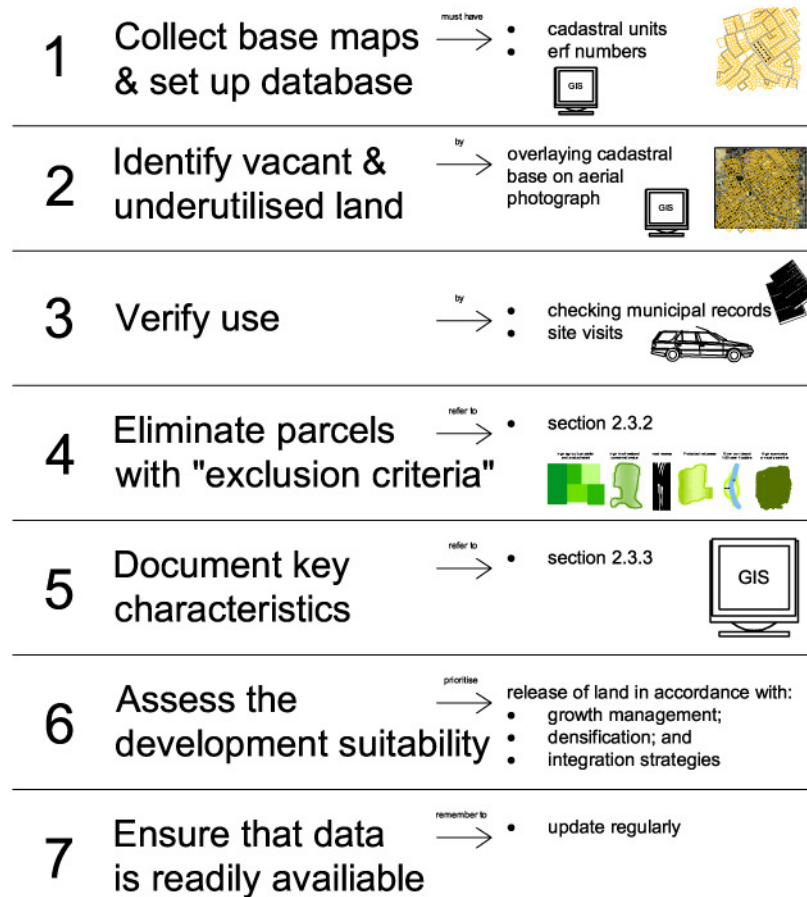
#### Key characteristics of Land Parcels

Ideally all the following aspects should be investigated and documented for each potentially viable land parcel:

- Erf or farm number
- Ownership: public or private (if public provide as much detail as possible – e.g. vested with which state department, provincial department or municipality (district or local))
- Zoning
- Size and developable area (taking into consideration zoning requirements, servitudes, floodplains, etc.)
- Title deed restrictions
- Current land use
- Site type (greenfield / brownfield)
- Site status (not developed, under construction / partly developed, complete)
- Proposed land use / SDF proposal
- Availability of bulk services
- Proximity to public transport service
- Suitability for agricultural development
- Relevant plans (such as SDFs, local area plans, etc)
- Conservation and heritage resources and related constraints
- Likelihood of contamination
- Map indicating locality
- Proximity to the “big five” urban functions (i.e. transport, residential, commercial/business/industrial, institutional, recreation)

- Suitability for urban restructuring purposes (e.g. infill development)

### Steps in preparing a vacant and underutilised land audit



### Inputs and linked activities

- Understanding land requirements
- Up-to-date GIS database

### Common issues and Frequently Asked Questions

- Out of date aerial photography
- Land audit categories/characteristics not useful
- How to access/direct the development of private land
- Should informal settlements be captured as vacant land?

### Toolkits:

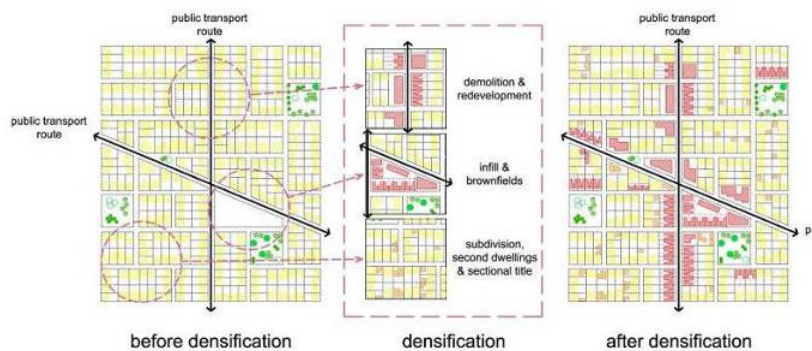
- Toolkit 1: Template for the capturing of data for vacant and underutilised land parcels
- Toolkit 2: Land to value ratio – an approach to identifying underutilised land

## 2. Densification

### What is densification?

Densification is the process whereby densities, i.e. the number of dwelling units per hectare, increase in a planned and sustainable manner without adversely affecting the quality of life of established communities within a defined area<sup>2</sup>.

### Type of densification



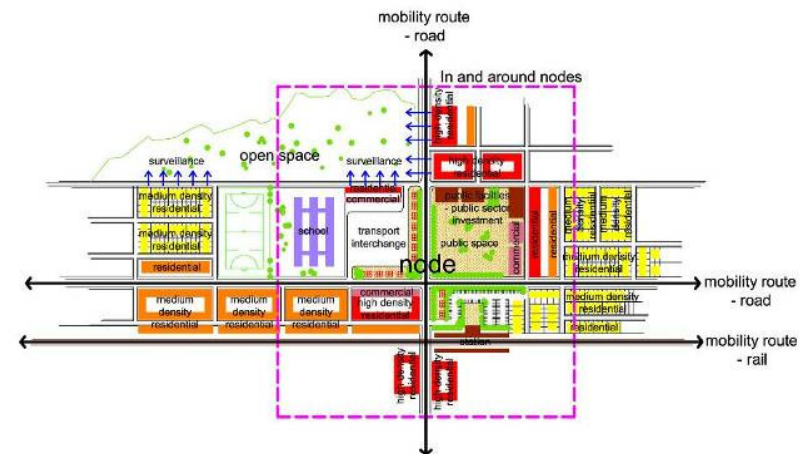
- Demolition and Redevelopment
- Infill and Brownfield development
- Subdivision, Additional / Second Dwelling, Sectional Title Development
- Greenfields development

<sup>2</sup> CMC 2000: MSDF Handbook: Guidelines for the local interpretation and application of the MSDF principles and spatial concepts

### Where should densification occur?

Within towns / settlements, higher densities should be concentrated:

- Along mobility routes in order to support public transport routes,
- In and around nodes,
- On the periphery of open spaces to increase surveillance,
- Within areas of focussed public-sector investments, and
- in selected areas of high private sector investment (e.g. around commercial hubs).



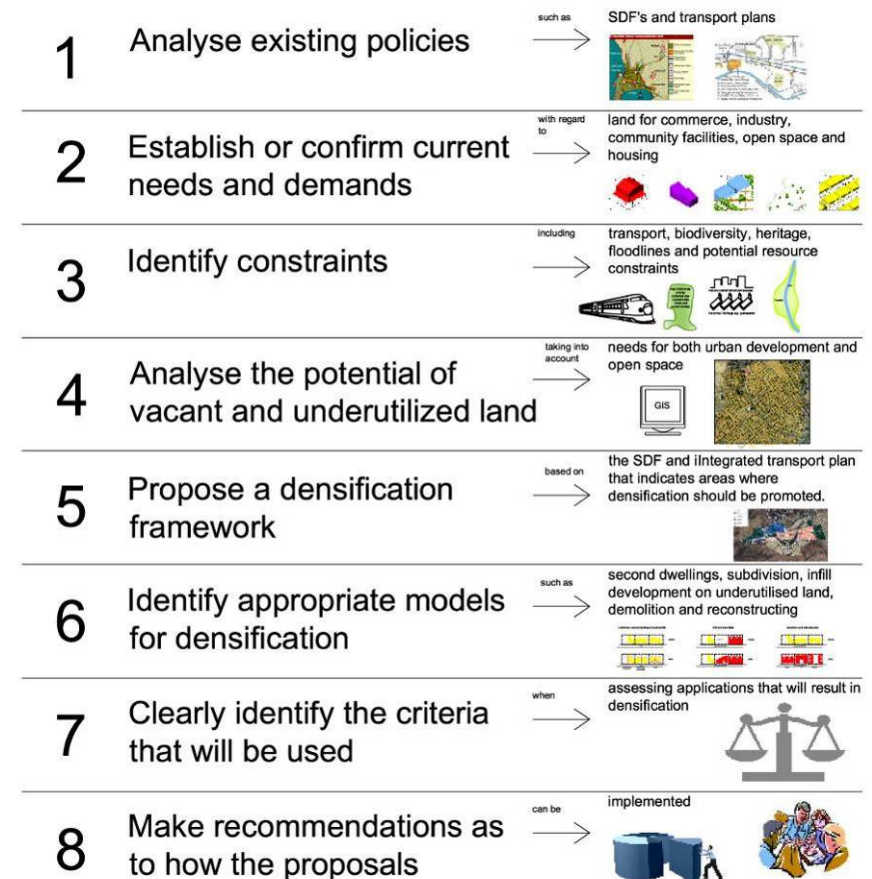
### Why do we need to pursue densification?

Densification is a land use management tool to address sprawl and fragmentation and achieve efficient, integrated, compact and sustainable human settlements.

The benefits associated with higher densities include:

- Increased social proximity and integration
- Viability of and access to social facilities
- Higher thresholds to support business
- Viable public transport
- Savings in land cost per unit
- Economies of infrastructure
- Reduction in the consumption of land through the reduction in demand for developable land
- Increased energy efficiency
- Increased resource use efficiency
- Conservation of the regional landscape and scenic beauty

### Basic Steps



### **Inputs and linked activities**

- Vacant and underutilised land audit
- Open Space Strategy
- Spatial Development Framework
- Zoning Schemes
- Heritage Studies
- Assessment of Infrastructural Capacity

### **Common issues and Frequently Asked Questions**

- Understanding Densities
- Can densification occur in areas of heritage significance?
- Capacity constraints in engineering services
- How to avoid Urban cramming
- Conflict between densification and open space
- Conflict between minimum erf size proposed in zoning scheme vs. minimum erf size proposed in Spatial Development Frameworks and Densification Analyses
- Barriers to infill development

### **Toolkits:**

Toolkit 3: Terms of reference for a densification study<sup>3</sup>:

Toolkit 4: Methodology for Understanding the Demand for land

Toolkit 5: Land use management mechanisms to facilitate densification

Toolkit 6: Guidelines and design considerations for different forms of densification

Toolkit 7: Criteria for assessment of development applications resulting in densification

Toolkit 8: Criteria for assessment of development applications in areas of heritage significance<sup>4</sup>

Toolkit 9: Guidelines for engagement with Heritage Western Cape with regard to development applications

Toolkit 10: Criteria for redevelopment and/or preservation of open space (including public and private open spaces and natural areas)

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<sup>3</sup> Reference: Drakenstein Municipality 2005: "Drakenstein Open Space and Densification: First Draft November 2005"

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<sup>4</sup>City of Cape Town 2005: Bergvliet – Meadowridge – Diep River Local Structure Plan

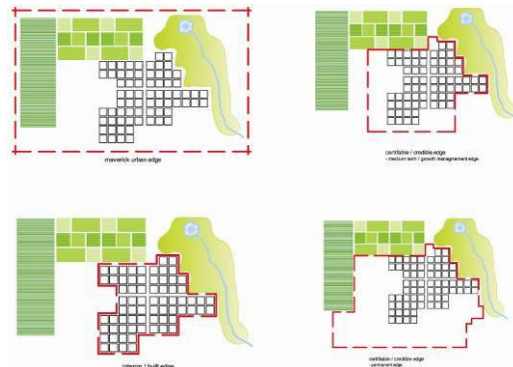


### 3. Urban edge

#### What is an urban edge?

The urban edge is a demarcated line and interrelated policy and guidelines (relating to the management of the urban edge line) that separates urban areas from rural areas.

#### Types of Edge



#### Special Edges



Celebration Edge



Coastal Edge



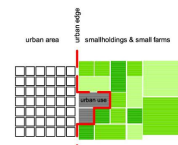
Containment Edge

#### Demarcation criteria

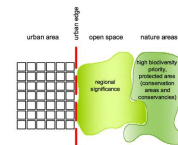
The following information should be mapped for each settlement in the municipal area for which an urban edge will be demarcated:



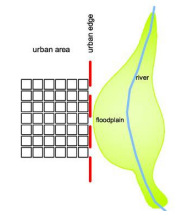
*Agricultural land and agri-processing surrounding urban areas*



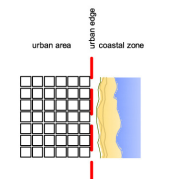
*Rural land, small farms & smallholdings*



*Open space (urban and regional) and natural areas*

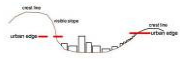


*Rivers and floodplains*

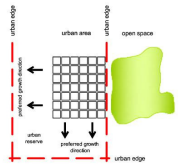


*Coastal zones and sea level rise (5m contour)*

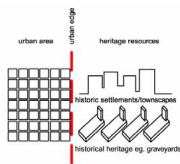




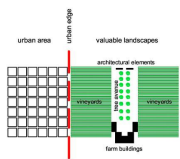
*Topography and slopes*



*Existing planning & growth management*



*Heritage resources*



*Valuable landscapes*

*Zoning, approvals and housing projects*

*Transportation Planning*

*Service networks and infrastructure*

### Why do we need an urban edge?

The draft [PGWC: Provincial Urban Edge Guidelines \(2005\)](#) establishes two distinct functions for an urban edge. Each of these two functions has a number of related objectives.

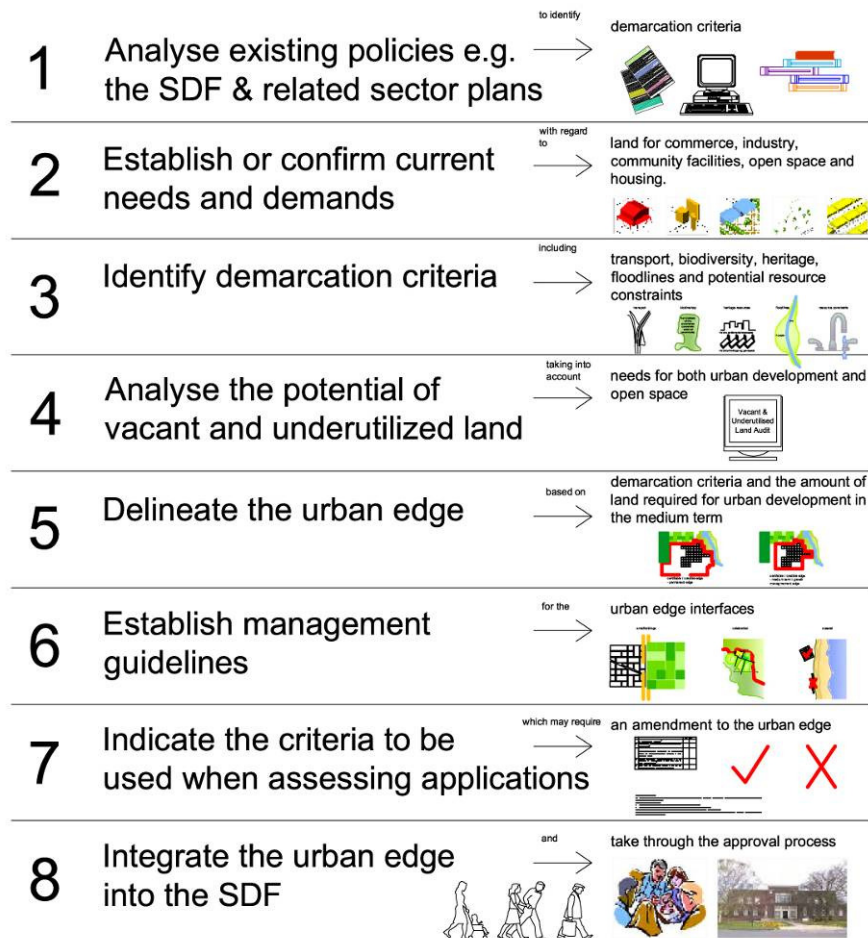
It is a *growth management tool*: As a growth management tool, the urban edge is used to limit sprawl and the outward growth of urban areas, in favour of densification and infill development, to ensure more efficient use of resources and land within urban areas.

It is a *conservation tool*: As a conservation tool, the urban edge is used to exclude certain elements of the environment from the urban area, in order to protect or preserve it, or to discourage its development in the short and medium term, while long term implications are uncertain.

### Inputs and linked activities

- Spatial Development Framework (SDF)
- [Densification Study](#)
- Audit of [Vacant and Underutilised Land](#)
- Heritage register and inventory
- Bioregional Plans
- Land Care/Area Wide Planning
- Strategic Environmental Assessments
- Environmental Management Frameworks
- Service and infrastructure plans
- IDPs and related sector plans

## Generic process plan and steps



## Common issues and Frequently Asked Questions

- Buy-in from Council
- Conflict with developers and speculators
- Cumulative effect of development outside the urban edge
- Communities motivating for development on the basis economic development and job creation
- Does the urban edge always have to coincide with cadastral boundaries?
- How much land should be available inside the urban edge?
- Should smallholdings be located inside or outside the urban edge?
- The municipality has limited/no land holdings. Can the urban edge be drawn wide?
- Can the municipality amend the urban edge on an ad hoc basis to accommodate a specific development?
- What if we can't achieve containment/densification and integration?

## Toolkits:

- Toolkit 11: Terms of Reference for an Urban Edge Study
- Toolkit 12: Urban Edge Management and Interface Guidelines
- Toolkit 13: Generic Interface Guidelines
- Toolkit 14: Checklist for amendment of the urban edge

## 4. Integration

### What is integration?

Integration refers to the interdependence of urban functions and activities resulting from a fine-grained mix of land uses and/or income groups.

### Why do we need to achieve integration?

The two fundamental objectives of integration are to:

- Redress past spatial imbalances, and
- Improve access to social, economic and recreational opportunities, services and facilities.

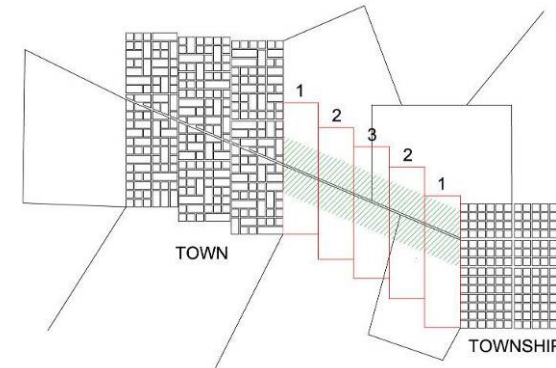
### Steps

The first step in addressing integration is establishing where the most appropriate location for such projects and initiatives would be. To this end, it is advisable to understand and establish a spatial structural logic of the settlement (this can occur in the municipal SDF or in more detailed settlement plans). Integration should be concentrated:

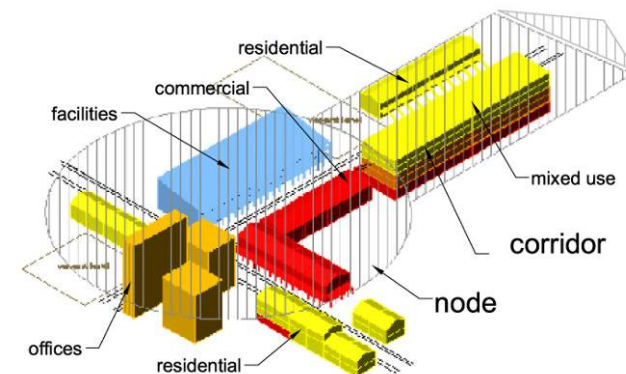
- In defined **integration spaces** in order to create spaces where social integration can occur (e.g. public spaces, institutions and facilities);
- Along **public transport routes** in order to improve access to opportunities, services and facilities; and
- In relation the **major urban functions** (for example concentrations of non-residential urban functions including recreational, employment, commercial land uses) in order to improve access to urban opportunities.

It is proposed that integration can occur in two ways, though:

- Macro urban restructuring in planned locations between fragmented settlements (town and township), and



- Micro urban restructuring in planned locations (integration strategy areas) within settlements, and in public spaces (integration spaces) where people lived their public life, and on a case-by-case basis within settlements



### Where should integration occur?

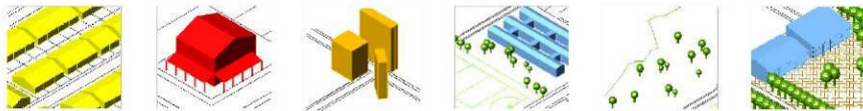
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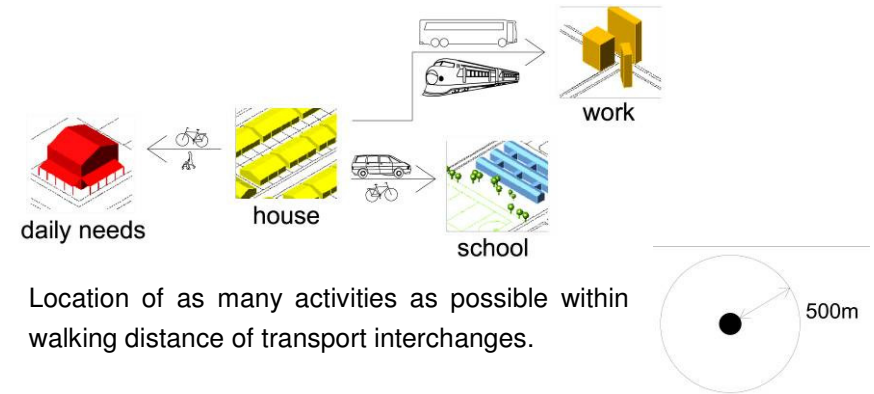
### Guiding Principles

Integration policies should be based on the following general principles:

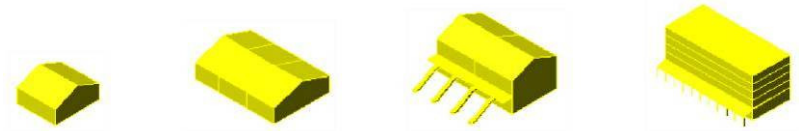
- The provision of complete, integrated urban settlements containing all elements of an urban settlement (residential, shops, offices, schools, parks, social facilities, etc) for all residents.



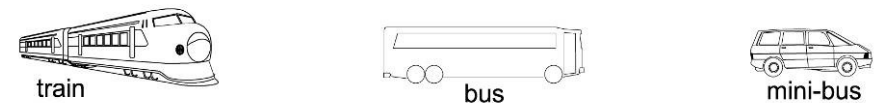
- Access to housing, jobs, and daily needs within easy walking distance.



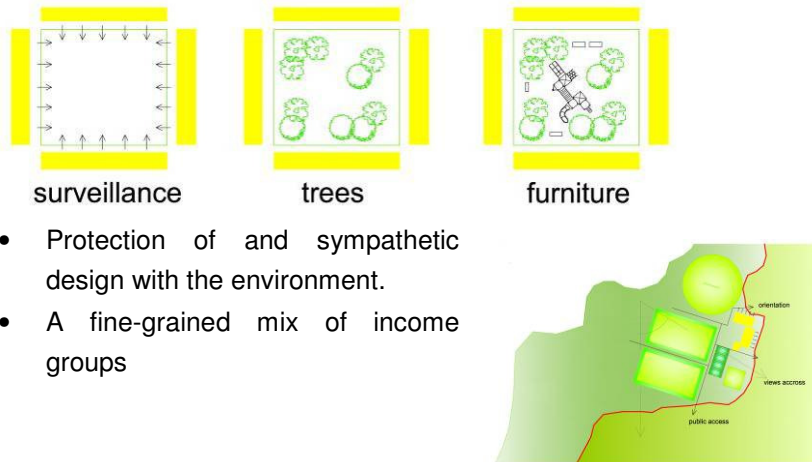
- Location of as many activities as possible within walking distance of transport interchanges.
- A wide variety of housing types to enable people of a wide range of life stages and economic status to live in close proximity.



- A transport network consistent with the location and needs of the community.



- Location and design of public spaces that encourage people to utilise them.



- Protection of and sympathetic design with the environment.
- A fine-grained mix of income groups

#### Inputs and linked activities

- Spatial development framework
- [Vacant and underutilised land audit](#)
- [Densification study](#)
- Zoning scheme

#### Common issues and Frequently Asked Questions

- How can we overcome conflict between the overlay zoning and the existing zoning scheme?
- Development will consist of big erf, small erf, big erf, etc?
- What if subsidy housing and social housing cannot be provided onsite?
- Are there any financial instruments available to encourage integration?
- Does integration mean locating the very poor next door to the very rich?
- Incompatibility and scale of integration
- Overcoming NIMBYism
- Generally, what land use management mechanisms can be used to allow for mixed use development?
- Can lack of consistency and streamlining in policy hamstring integration?

#### Toolkits:

- Toolkit 15: Overlay zones and flexible zoning
- Toolkit 16: Criteria to assess suitability for integration
- Toolkit 17: Design guidelines for integrated development initiatives
- Toolkit 18: Generic infill overlay zone to accommodate mixed use development
- Toolkit 19: The use of Urban Development Zones to promote integration
- Toolkit 20: Designating Restructuring Zones for social housing
- Toolkit 21: Location of social and subsidy housing

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## 1.0 INTRODUCTION

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### 1.1 Background

To guide the Western Cape's social partners (i.e. government, labour, business and civil society) in their endeavours to establish dignified, enabling and sustainable human settlements, the Provincial Government has prepared this Settlement Restructuring Manual. The manual explains how to restructure the province's human settlements in response to the various challenges they face.

The background to the Manual's introduction is outlined below.

#### 1.1.1 Global Imperatives

Human settlements across the world are struggling to deal with the following new challenges:

- Impending climate change, the implications of which are currently being investigated in a study commissioned by the Western Cape Provincial Government. Based on the findings of this study a manual will be produced setting out guidelines for dealing with this challenge.
- The globalization of the economy, which has led to increased competition between cities and a growing awareness of the economic interdependence of human settlements that make-up a city region.

- The energy crisis, specifically the high costs of fossil fuels on which most urban transport systems are dependent (e.g. transportation consumes 54% of energy used in Cape Town).

The Western Cape Settlement Restructuring Manual provides guidance on how to respond to these global paradigms.

#### 1.1.2 National Imperatives

Whilst 1994 saw the advent of democracy in South Africa, the country's urban landscapes still reflects the legacy of apartheid. The country's human settlements remain segregated along racial and income lines, the poor continue to be marginalised from reaping the benefits of urban living, the housing backlog continues to escalate, and urban planning is still based on the assumption that everyone will own a car.

To break from these apartheid spatial forms the government introduced the framework document *Breaking New Ground* (BNG) in 2004 – a comprehensive plan for the development of sustainable human settlements. BNG marked a shift from a previous focus on “projects for the poor” to the “housing system as a whole”, and emphasised the importance of responding appropriately to the context of human settlements.

Significantly, BNG places sustainable human settlements firmly on the national agenda and highlights the constitutional imperative to “secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development”. Current resource and land use patterns in South Africa's human settlements are both highly

## SETTLEMENT RESTRUCTURING: AN EXPLANATORY MANUAL IN TERMS OF THE WESTERN CAPE PROVINCIAL SPATIAL DEVELOPMENT FRAMEWORK

inefficient and inequitable, and BNG highlights the imperative of new approach to human settlements.

BNG also introduced “demand-driven supply negotiated” delivery in South Africa which has paved the way for a range of different housing delivery programs to be pursued in different contexts. This is in contrast to the previous “one size fits all” approach, and has provided opportunity for participatory approaches to housing delivery which leads to the empowerment of local communities.

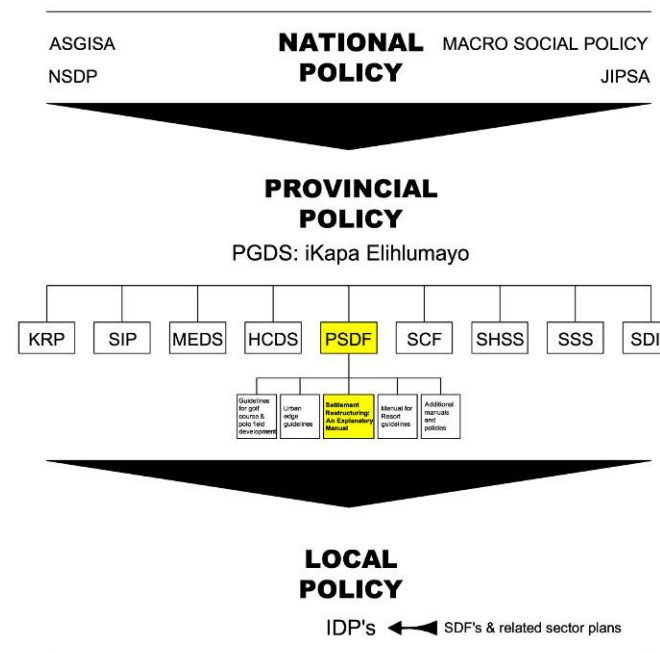
### 1.1.3 Provincial Imperatives

Building on the BNG national framework and informed by the Accelerated Shared Growth Initiative in South Africa, the Western Cape Provincial Government and its social partners entered into a [collective agreement](#) to change the spatial, social, economic and human landscape in pursuit of a new vision: “*a Home for All.*”

To give effect to this vision the Provincial Growth and Development Strategy (PGDS) was gazetted in 2006 as a Green Paper under the name ‘iKapa Elihlumayo’, which means ‘*Growing the Cape*’. The PGDS shifts the development path of the Western Cape towards a future of shared growth and integrated development.

The four interdependent elements underpinning the province’s strategic focus on shared growth and integrated development are equity, growth, empowerment and environmental integrity.

The PGDS argues that the only option for sustained economic growth is to widen the participation rates in the economy and to spread the benefits of growth. Environmental sustainability is critically important for achieving shared growth, given that spatial patterns of development associated with over consumption and social exclusion have driven a pattern of unsustainable development. The PGDS stresses that “embarking on a path of spatially responsive sustainable development is not a platitude, it is an imperative”.



As illustrated above, the PGDS is being implemented through eight lead strategies. Two of these lead strategies provide the background to this Settlement Restructuring Manual, namely the Provincial Spatial Development Framework (WCPSPDF) and the Sustainable Human Settlement Strategy (SHSS).

The WCPSPDF, endorsement by the Provincial Cabinet in 2005, is the policy document of the Department of Environmental Affairs and Development Planning (DEA&DP) that sets out measures to rectify the spatial legacy of apartheid in a sustainable manner. It contains groundbreaking initiatives on sustainable development, integrated communities and urban structure.

As part of the roll-out of the WCPSPDF explanatory manuals have been produced to assist municipalities give expression to the prescripts and intentions of the WCPSPDF. These manuals cover the following topics;

- Climate change,
- Inclusionary housing,
- Rural land use planning and management, and
- Settlement restructuring.

The SHSS, referred to as Isidima, was issued by the Department of Local Government and Housing, and builds on the national BNG policy. It sets out the Western Cape's road map to the establishment of dignified and sustainable communities. Isidima sets-out the DLG&H strategy for achieving the goal of all Western Cape citizens and residents - particularly poor households - living in vibrant, safe, efficient and sustainable human settlements. Isidima identifies priority actions for addressing the following 8 objectives:

- Providing a range of housing services and instruments that respond to different needs and contexts.
- Aligning intergovernmental human settlement policies and investments.
- Building municipal delivery capacity.
- Establishing an enabling and functioning property market.
- Restructuring departmentally to implement.
- Using state land and other resources for spatial restructuring.
- Consolidating a pact between government and civil society.
- Ensuring that new human settlement investment is planned in accordance with ecological design principles, and incentivising its adoption in existing investments.

This Settlement Restructuring Manual thus serves to guide the provincial government's social partners in the roll-out of both the WCPSPDF and the SHSS.

## 1.2 The Brief

From international, national and provincial perspectives, there is an urgent need to respond to the above imperatives for change in the spatial structure and living environments of human settlements in the Western Cape. A new planning paradigm is needed that breaks the inertia from the past.

To restructure existing apartheid urban patterns in order to reduce spatial inequality and inefficiencies in the province, the WC WCPSPDF proposes certain land use management tools for municipalities to use. These encompass: the determination of an urban edge; densification; the infill of vacant land and better utilization of under-utilized land; and social, racial and functional integration of human settlements. These tools will contribute

to a desired urban form in a sustainable manner and make public transport more viable.

It is against this background that the Department of Environmental Affairs and Development Planning (DEA&DP) of the PGWC have developed this Settlement Restructuring Explanatory Manual.

### 1.3 Why do we need to achieve urban restructuring and integration?

Urban restructuring and integration aspire to achieve human settlements which perform well for all their inhabitants, creating a *sustainable* and *liveable* environment.

#### 1.3.1 What do we mean by “liveable”?

A liveable urban environment satisfies more than just basic needs of its citizens, it refers to the degree to which the individual's and communities' needs for social amenity, well-being and health are met. It is closely linked to the concept of quality of life, or the level of satisfaction experienced by inhabitants of a town or settlement.<sup>5</sup>

#### 1.3.2 What do we mean by “sustainable”?

Sustainability refers to an awareness of the context in which a settlement occurs and its relationship with the surrounding environment. A

<sup>5</sup> I. van Kamp et al, 2003: Urban environmental quality and human well-being: Towards a conceptual framework and demarcation of concepts; a literature study (Landscape and Urban Planning 65 (2003) 5-18)

sustainable settlement reduces the impact on the environment through reducing the use of resources and the production of waste while improving the liveability of the settlement.<sup>6</sup>

Characteristics of a sustainable, liveable urban environment include the following:

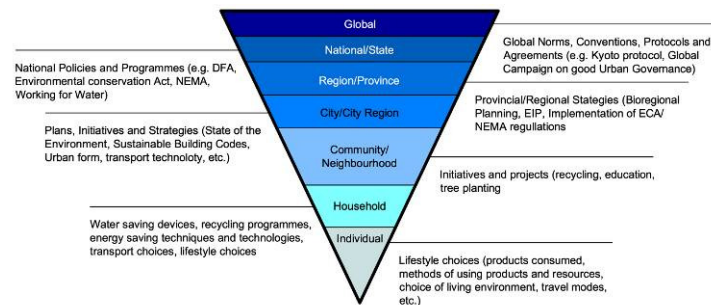
- There is ease of access to employment, education, housing and recreation opportunities.
- Resources are used efficiently.
- There is a choice of services, as well as education, recreation and employment opportunities.
- There is a choice of housing typologies (forms) and densities.
- There is reliable and affordable public transport and walkable local areas, reducing reliance on cars.
- There are quality public spaces.
- All residents have a sense of place or belonging.
- There is a mix of uses within a local area.

#### 1.3.3 Areas of intervention: Relationship between policy and action

Settlements and regions/provinces represent a critical point of intervention. The diagram below illustrates the nesting of factors that contribute to sustainability in terms of resource consumption and utilisation.

<sup>6</sup> I. van Kamp et al, 2003: Urban environmental quality and human well-being: Towards a conceptual framework and demarcation of concepts; a literature study (Landscape and Urban Planning 65 (2003) 5-18)

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In the conceptualisation above the region or provincial level plays the role of creating an enabling policy and regulatory environment to facilitate action. While settlements play a critical role as the point at which policy gets translated into concrete action. Settlements (and by extension local government) are the fulcrum between policy and enabling action. It is the level at which systems of delivery can be influenced and manipulated to ensure self-interest is aligned with societal good to create liveable communities.

### 1.3.4 Aims and Objectives

The variety of contexts experienced in the Western Cape implies that a blanket approach to planning and the application of tools such as an urban edge is not desirable. This manual explores these varied conditions and unpacks nuances to planning and linked decision making within the overarching policy framework of the WCPSDF.

The aim is to produce a “how to” manual to assist municipalities in achieving the aims of urban restructuring and integration that contribute towards sustainable and liveable urban environments.

The first step in creating a sustainable and liveable settlement is **compaction, managing growth and clustering urban functions within the urban footprint**. The tools applicable to achieving compaction are:

- An [audit of vacant and underutilised land](#) to identify opportunities for infill development, and
- The [delineation of an urban edge](#) to guide future urban growth, infrastructure development and conserve resources.

The second step is **focusing on improving the functioning of settlements and achieving design standards within the settlement to attain liveability and sustainability**. The tools applicable to achieving a liveable settlement are:

- a [densification analysis](#) to establish methodology to achieve densification within urban areas, and
- [socio-economic and mixed use integration strategies](#) to ascertain an approach to achieve socio-economic and mixed use integration.

These tools are mutually supportive of achieving sustainability and liveability. In particular, densification and infill (through the efficient utilisation of vacant and underutilised land identified in the land audit) provides opportunities for integration and an urban edge should be utilised to direct urban growth and infrastructure development in support of socio-economic integration and efficient resource utilisation.

However, despite being mutually supportive of one another, the tools are also interdependent. For instance, in order for a credible edge to be delineated it has to be informed by an understanding of opportunities for

infill development and densification within the urban areas in order to accommodate growth within the agreed time frames.

Thus it is preferable that the settlement restructuring tools presented in this manual are used together.

## 1.4 WC WCPSTDF Policies

The WC WCPSTDF policies relevant to the settlement restructuring tools and integration strategies presented in the manual are outlined below.

### 1.4.1 Densification Study

**WCPSTDF UR2:** The average gross residential density in urban settlements experiencing urban growth shall be encouraged to increase to 25du/ha before further extensions to the Urban Edge are considered (M). The term "average" implies that densities may be as low as 3-6 du/ha on the urban periphery but should increase to 40-60 du/ha at or near the centre or other highly accessible nodal points or other identified nodal centres in the urban area, see Figure 8.4.11. The general pattern is that densities should be higher towards the core and lower towards the periphery after heritage, environment and other constraints such as services capacities have been taken into account. Densification should only occur in strategic parts of urban settlements such as along major routes, around open spaces, on well located pieces of land or in underdeveloped areas with good location that warrant increased development. Heritage resources should be taken into account so that they are not destroyed.

**WCPSTDF UR3:** The density target should be achieved using a range of urban development "tools" including (G):

- Demolition and redevelopment;
- Infill of surplus vacant land including 'brownfield' sites;
- Greenfield locations within the Urban Edge as long as they have not been identified as a biodiversity priority, priority open space, productive agricultural or recreational sites; and,
- Subdivision, second dwellings and sectional title development as appropriate.

**WCPSTDF UR4:** Densification of urban settlements should occur with due regard for ecological and heritage concerns as identified in EIAs/HIAs. Ecological concerns include impacts on biodiversity, flora/fauna in general, soil, and water quality and quantity, and heritage concerns include cultural landscapes, historic buildings and precincts, and artefacts of memory. (G)

### 1.4.2 Urban Edge Delineation

**WCPSTDF RC:7** Between Urban Development and Core, Buffer and Intensive Agriculture areas an Interim Urban Edge shall be considered to be in place around all villages, towns and cities in the Province along the edge of actual urban (i.e. not urban fringe) development – to mediate the relationship between these provincial broad spatial planning categories, until a Medium Term Urban Edge has been approved. (M)

The Urban Edge has two functions:

- i. To contain the outward growth of urban settlements so as to promote their restructuring to address apartheid spatial patterns

and urban functional inefficiencies. These inefficiencies relate to insufficient thresholds to support viable businesses and informal (2nd economy) activity, public transport and community facilities, and sub-optimal use of well located land, especially for subsidy and social housing. Thus, the Urban Edge must restrict the outward growth of urban settlements until such time as average gross densities of 25 dwelling units, or 100 people per hectare, are achieved. This may take 5 to 10 years in settlements that are growing rapidly, see Policy UR2. (M)

- ii. To protect land designated Core, Buffer and Intensive Agriculture from urban development where required. (M)

**WCPSDF RC8:** As a general rule development beyond current rights pertaining to agricultural or conservation activities outside the Interim or Medium Term Urban Edge shall not be permitted except for bona-fide holiday/tourism accommodation; bona fide agricultural/forestry development; social agri/forestry-labour central-settlements, and social facilities and infrastructure necessary for rural development – all located and designed environmentally-acceptably and only allowed when and where it can be demonstrated that there will be no harm to biodiversity conservation through successful compliance with the four stage test discussed under the Action Plan. (M)

**WCPSDF RC9** General rural development, i.e. development outside the Urban Edge, shall not exceed densities of 1du/10ha and may be considerably lower in landscapes with low visual carrying capacity. (M)

**WCPSDF RC10:** Resort development outside of the Urban Edge shall include no individually alienable units and shall be subject to norms to be determined by Provincial Policy. (M) Alienation of individual units outside of urban edges may be considered under specific Rural Development policy (see RC 11)..

**WCPSDF RC11:** Specific Rural Development, if approved on general land use and environmental grounds and in terms of strategic context, may be individually alienable under certain circumstances subject to norms as to be determined by Provincial Policy. (M)

**WCPSDF RC12:** Only land within an Interim or Medium Term Urban Edge shall be used for Urban Development purposes. (M)

**WCPSDF RC13:** Urban Development shall be defined as buildings and infrastructure with a residential purpose as well as industry, offices, shops, community facilities and other associated buildings and infrastructure and public open space to provide for proper functioning of urban areas and amenity and recreation. (M)

**WCPSDF RC14:** Settlements shall be restructured so as to break down the apartheid spatial patterns and increase urban functional efficiencies including spatial opportunities for the SMME sector, and to aim to achieve an average gross density of 25 dwelling units (100 people) per hectare inside the Urban Edge. (M)

This does not imply “wall to wall” Urban Development as space must be allowed for a wide range of open space functions and transport, employment, social and recreational facilities. It is likely that most



settlements will only achieve Urban Development of around 50% of their land area with the balance being used for open space, school fields and transport and other similar requirements.

**WCPSDF RC15:** While existing rights cannot be taken away, upgrading of rights for residential estates outside of existing urban settlements shall not be permitted. Any development complying with the norms for rural development shall be integrated, providing opportunities for a full range of income groups, viable with respect to being able to support at least a tertiary range of facilities, for example a clinic, primary school and multi-purpose hall, and shall be sustainable with regard to impact on natural resources. (M)

**WCPSDF RC16:** Further ribbon development along the coast and riverbanks shall be prohibited. (M)

**WCPSDF RC17:** Coastal and river bank development shall be set back behind the ecological setback lines including flood and storm surge lines (1:50 year floodline : property boundaries; 1:100 years floodline : building platform) . (M)

### 1.4.3 Integration Strategies

**WCPSDF UR1:** Urban settlements shall be restructured so as to break down the spatial barriers created by apartheid and make them more convenient and pleasant to live in while creating economic opportunities close (within walking distance) to where people live, see Figure 8.4.10. (M)

**WCPSDF UR5:** The complete range of socio-economic groupings within an urban settlement shall be located within walking distance radius according to the Principle of a Socio-Economic Gradient. (G)

**WCPSDF UR6 a:** All residential developments undertaken by the private sector (irrespective of it being on public or private land) above a certain threshold shall provide 20% or more inclusionary housing opportunities, whether on not on a rental basis, as determined by the WC WCPSDF Explanatory Manual and Policy on Inclusionary Housing. The abovementioned threshold may be revised from time to time. (M & G)

**WCPSDF UR6 b:** All private sector non-residential development, approved in terms of applicable planning legislation, shall include opportunities for inclusionary housing, as determined by the WC WCPSDF Explanatory Manual and Policy on Inclusionary Housing. (M & G)

**WCPSDF UR7:** Large scale urban development projects on public land should provide for mixed use and socio-economically integrated communities in a similar ratio of income distribution to that pertaining in the municipality as a whole. (G)

**WCPSDF UR8:** Investment by government departments in all three spheres, by parastatals and by the private sector should be coordinated to achieve integrated urban nodes. (G)

**WCPSDF UR19:** In each case high density residential accommodation and business opportunities, from informal street trading to formal shops,

offices and factories at the appropriate scale, should be located around clusters of community facilities grouped at the appropriate scale. (G)

**WCPSDF UR10:** Public land shall be made available to assist with achieving urban restructuring. (G)

**WCPSDF UR11:** 50% of the five major urban activities (public transport, access points, residence, recreation, shopping and employment) should be accessible within walking distance (1000m) of residential dwellings, see Figure 8.4.14. (G)

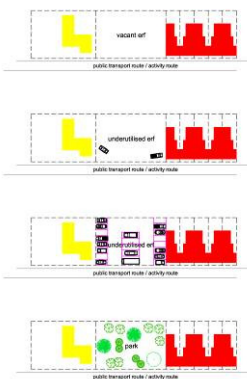
## 2.0 VACANT AND UNDERUTILISED LAND AUDIT

### 2.1 What is an audit of vacant and underutilised land?

An audit of vacant and underutilised land provides a municipality with an inventory of usable land parcels within the urban edge<sup>7</sup>.

Vacant and underutilised land refers to land:

- Where there is no obvious or identifiable land use or is partially or inefficiently utilised (e.g. a paved parking lot may be underutilised but an unpaved lot where trucks are parked is vacant);
- Where there are no building or improvements;
- Where the previous productive use has ceased for a significant period of time; and
- That would benefit from development or improvement. ([click here](#) for more information on how to identify underutilised land)



#### Note:

**Parks and open spaces are treated as developed, unless the SDF or a related investigation has indicated that the land may be developed.**

<sup>7</sup> Note: It would also possible be to undertake a vacant and underutilized land audit of rural land as an input into achieving rural development goals.

### 2.2 Why is an audit of vacant and underutilised land needed?

A vacant and underutilised land audit is a land use management tool that is used to identify opportunities for influencing future land use patterns. The purpose is to identify strategic parcels of developable land in order to achieve the development goals of the municipality, such as:

- Restructuring urban settlements;
- Achieving densification goals and establish the availability of land to accommodate projected growth within urban areas
- Addressing socio-economic integration
- Providing well-located social and subsidy housing, and
- Providing opportunities for integrated settlements on publicly-owned land

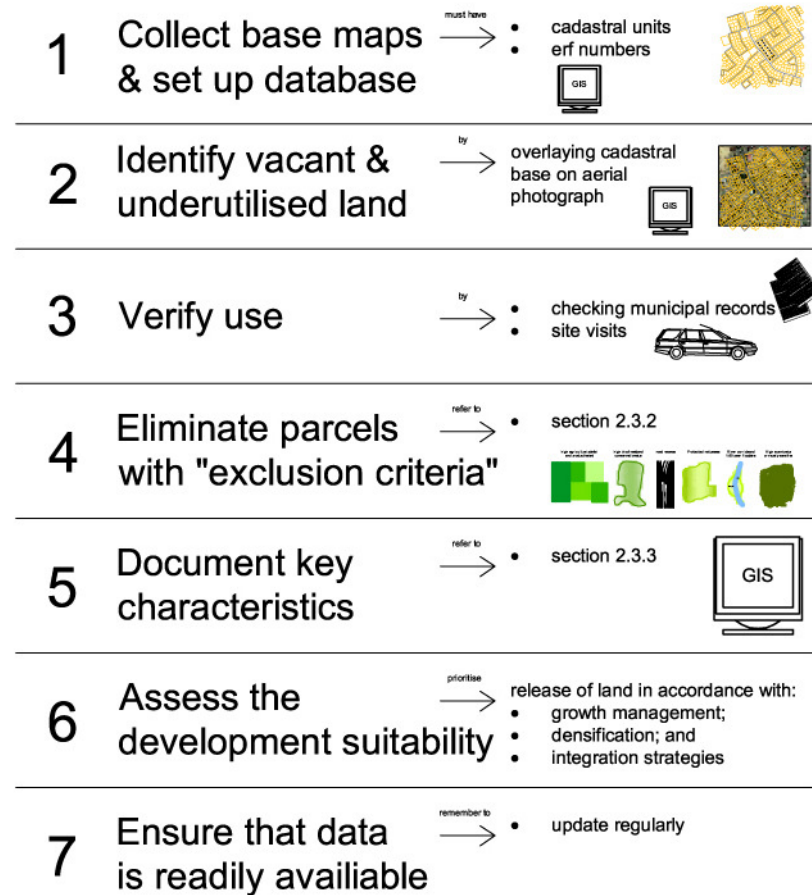
Municipalities need to achieve a balance between the demand for land by various land uses and the supply of appropriate land, i.e. land with the appropriate characteristics to enable its use for a specific land use.



## 2.3 Application of the concept

### 2.3.1 Phase 1: Setting up the land audit

- Step 1: Collect base maps that indicate cadastral units and erf numbers for settlements. Agree on the key characteristics (see below) to be investigated for each land parcel. Set up a database reflecting these characteristics – preferably in GIS ([click here](#) for a template for data capturing).
- Step 2: Identify vacant and underutilised land ([click here](#) for an approach to identifying underutilised land) based on recent aerial photography - preferably by overlaying the cadastral base on aerial photographs using GIS.
- Step 3: Verify the **use** of the identified parcels based on municipal records and site visits.
- Step 4: Eliminate all parcels possessing “exclusion criteria” from the data set (see below).
- Step 5: Investigate and document key characteristics of each land parcel (see below).
- Step 6: Assess the suitability of the land for development, indicate an appropriate use/s (ensure that these are related to the characteristics of the site) and prioritise the release of land parcels in accordance with growth management, densification and integration strategies.
- Step 7: Ensure that the findings are readily available on the municipal database system and updated regularly.



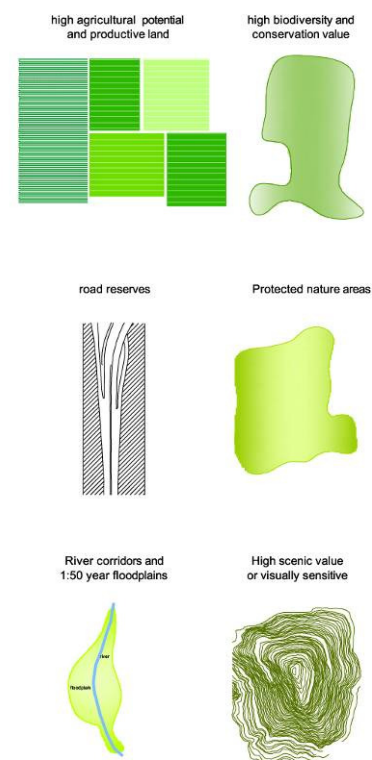
### 2.3.2 Exclusion criteria

Exclusion criteria refer to a 'fatal flaw' with regard to the land parcel which is highly likely to prohibit development. Land parcels which have an exclusion criteria as one of their characteristics should be marked as unviable in the vacant land register.

Exclusion criteria include:

- High agricultural potential and productive agricultural land
- High biodiversity and conservation value
- Road reserves
- Protected nature areas
- River corridors (30m buffer [\(RC2\)](#) and 1:50 year floodplains [\(RC17\)](#))
- High scenic value or visually sensitive
- Buffer areas from hazardous services (e.g. landfill sites, nuclear power plants)

Although there are a number of general exclusion criteria, some characteristics which are fatal flaws for some forms of development, may not represent fatal flaws in another form of development. For example, due to financial constraints a site with a slope greater than 1:6 is unviable for subsidy housing, but may be suitable for higher income housing.



### 2.3.3 Key characteristics of vacant and under-utilized land parcels to be investigated

Ideally all the following aspects should be investigated and documented for each potentially viable land parcel:

- Erf or farm number
- Ownership: public or private (if public provide as much detail as possible – e.g. vested with which state department, provincial department or municipality (district or local))
- Zoning
- Size and developable area (taking into consideration zoning requirements, servitudes, floodplains, etc.)
- Title deed restrictions
- Current land use
- Site type (greenfield / brownfield)
- Site status (not developed, under construction / partly developed, complete)
- Proposed land use / SDF proposal
- Availability of bulk services
- Proximity to public transport service
- Suitability for agricultural development
- Relevant plans (such as SDFs, local area plans, etc)
- Conservation and heritage resources and related constraints
- Likelihood of contamination
- Map indicating locality

- Proximity to the “big five” urban functions (i.e. transport, residential, commercial/business/industrial, institutional, recreation)
- Suitability for urban restructuring purposes (e.g. infill development)

### 2.3.4 Phase 2: Understanding why land is vacant and how to release it

Within an urban context, land is often vacant for a reason. In other words land that is not developed is not necessarily easy to develop.

An audit of vacant and underutilised land in and of itself will not help a local authority to release developable land. Once a land audit is completed, priority areas should be identified for detailed assessment of the land parcels identified in the audit. This second phase should focus on understanding why the land is vacant, (possible reasons include restrictive title deed conditions, environmental constraints) and on proposing how these obstacles can be overcome and the anticipated timeframes for addressing the obstacles.

It is proposed that the second more detailed phase is undertaken for land parcels in strategic action areas identified for densification or integration.

## 2.4 Inputs and linked activities

### 2.4.1 Understanding land requirements

In order to suggest potential land uses for vacant land parcels, it is critical that the need and/or demand for various types of land uses are understood (see [toolkit 4](#) for an approach to understanding demand for land). Do not assume that all developable vacant land should be used for housing. This could include land for:

- Housing, including affordable housing
- Commercial / Industrial
- Education
- Retail
- Community services and facilities
- Public transport
- Open Space

### 2.4.2 Up-to-date GIS database

An up-to-date GIS database would form an extremely useful basis for the study and should as a point of departure include the following:

- Up to date cadastral information – can be sourced from Department of Land Affairs: Surveys and Mapping
- Recent geo-referenced aerial photography (SPOT5 satellite imagery) can be sourced from the Department of Environmental Affairs and Development Planning. The images are in a TIFF format and as it is geo-referenced it can easily be viewed on top of cadastral data. It has

a resolution of approximately 2,5m, which allows for identification of dwellings.

- Zoning and ownership information – should be available as part of the rates collection system

## 2.5 Common issues and frequently asked questions

### 2.5.1 Out of date aerial photography

There are three options available for addressing out of date aerial photography:

- Check with the Provincial Department of Land Affairs what the latest available photography is.
- The Department of Environmental Affairs and Development Planning are the Provincial distributors of SPOT5 Satellite imagery. The current data set is for October 2005 images; however, the latest dataset (June/July 2006) will be available shortly. The dataset is approximately 120GB in size and requires the consultant/municipality to provide the Department with an external hard drive to accommodate the data.
- Use Google earth, specifically the pay version which provides geo-referenced information that can be linked to cadastral units easily. This will require access to a relatively high capacity broad band internet connection. (<http://earth.google.com/>)



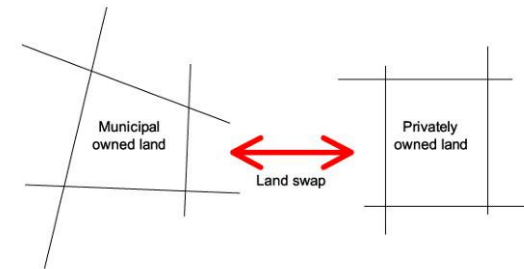
### 2.5.2 Land audit categories/characteristics not useful

In order to ensure a useful product, it is important that all vacant or underutilised parcels are recorded as well as, as much information regarding each parcel as possible. It would also be most useful to ensure that the information is captured in a GIS database with the characteristics listed as attributes. This would allow for a sophisticated query system that could identify land with a range of characteristics, e.g. all land parcels in municipal ownership, larger than 10 ha and zoned for commercial use. Although this may be more costly initially, it will prove invaluable in the long term.

### 2.5.3 How to direct the development of private land

It is often difficult to ensure that vacant or underutilised land in private ownership is optimally developed. In this regard:

- The SDF should give clear guidance on the desired use of the land
- Where the rights attached to the land are regarded as undesirable or the land is highly suited for municipal purposes (such as community facilities or subsidised housing) land swaps or land use rights transfers should be considered. The vacant land audit will provide information on alternative land parcels.



### 2.5.4 Should informal settlements be captured as vacant land?

If (informal) settlement is the appropriate use for the parcel of land in terms of the municipal plans (Housing Plan, SDF), the land should not be indicated as vacant or underutilised. However, if settlement is not the appropriate use of the land (due to hazards, there is a more compatible use) it should be categorised as (a) land to be cleared, if the most appropriate use of the land is as open space or (b) underutilised as this land is not currently vacant, but has future development potential.



### 3.0 DENSIFICATION STUDY

#### 3.1 What is densification?

Densification is the process whereby densities (i.e. the number of dwelling units per hectare) increase in a planned and sustainable manner without adversely affecting the quality of life of established communities within a defined area<sup>8</sup>. The analysis should provide a clear understanding of all aspects (such as urbanisation and growth rate) which inform the municipality's approach to densification. The policy should address how and where densification should take place. In combination a densification analysis and policy should provide a conceptual approach to densification.

These guidelines are guided by the WC WCPSPDF that has set a target of an average gross density of 25 dwelling units per hectare (du/ha) for settlements, so as to achieve thresholds for neighbourhood community facilities, public transport services, and walkable urban environments. At present densities are on average between 9-12du/ha in formal settlements. These are regarded as low. The WC WCPSPDF makes the point that densification does not imply tower block flat developments, but that high densities of 40du/ha can be achieved with two and three-storey walk-up flats. [Click here](#) to gain perspective on what high, medium and low density means.

<sup>8</sup> CMC 2000: MSDF Handbook: Guidelines for the local interpretation and application of the MSDF principles and spatial concepts

#### 3.2 Why do we need to pursue densification?

Densification is a land use management tool to address sprawl and fragmentation and achieve efficient, integrated, compact and sustainable human settlements. The Western Cape Sustainable Human Settlement Strategy, "The Road Map to Dignified Communities", prepared by the [PGWC Department of Local Government and Housing](#) proposes three strategic shifts:

- The shift from housing construction to "sustainable human settlements";
- The shift to sustainable resource use; and
- The shift to real empowerment.

The benefits that result from densification reinforces the first two strategic shifts, namely sustainable human settlement creation and sustainable resource use.

The benefits associated with higher densities, which contribute to the creation of sustainable human settlements, include:

- Increased social proximity and integration
- Viability of and access to social facilities
- Higher thresholds to support business
- Viable public transport

The benefits associated with higher densities, which contribute to sustainable resource use, include:

- Savings in land cost per unit
- Economies of infrastructure

- Viable public transport
- Reduction in the consumption of land through the reduction in demand for developable land
- Increased energy efficiency
- Increased resource use efficiency
- Conservation of the regional landscape and scenic beauty

Click here to view the relevant [WCPSDF Policy relating to densification](#).

### 3.3 Application of the concept

#### 3.3.1 Basic Steps

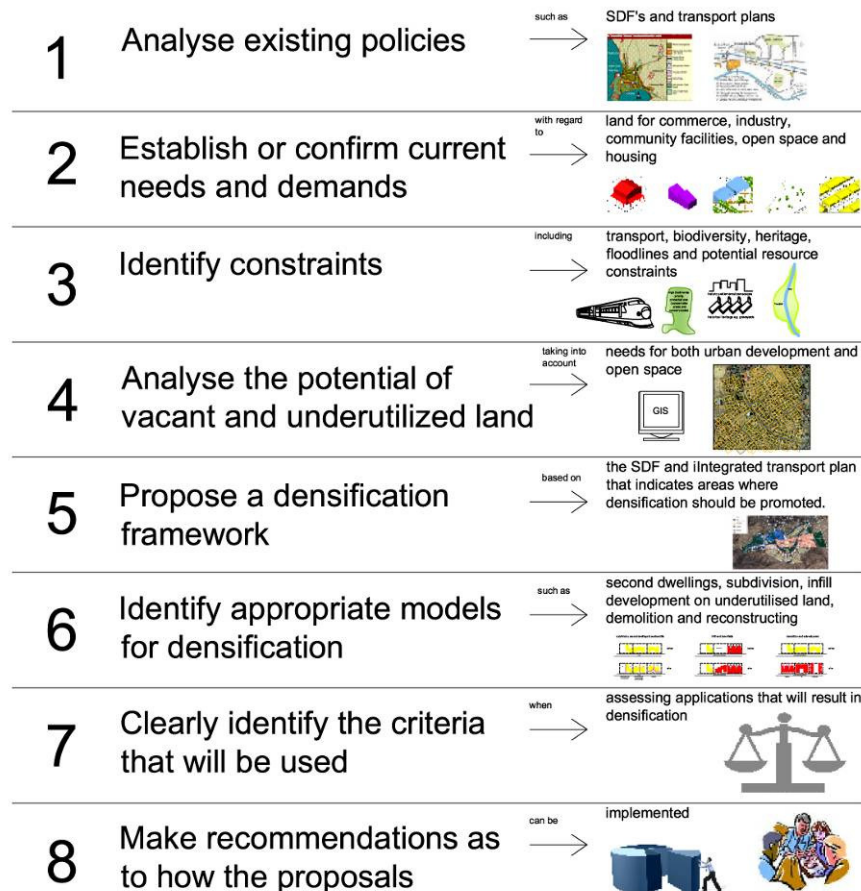
1. Analyse existing policies such as the SDF and transport plans with a view to identify opportunities and constraints to densification at the municipal level.
2. Establish or confirm current needs and demands with respect to land for commerce, industry, community facilities, open space and housing according to existing available information. In particular establish the current growth rate of the town and make projections of the future growth rate, based on existing growth rates as well as other relevant policy documents, if this has not been explicitly indicated in the SDF.
3. Identify constraints, including transport, biodiversity, heritage, floodlines and potential resource constraints such as water availability, infrastructure capacity, sewage and sanitation capacity.
4. Analyse the potential of vacant and underutilized land, taking into account needs for both urban development and open space<sup>9</sup>;

<sup>9</sup> Click here to view [Vacant and Underutilised Land Audit](#) section

5. Propose a densification framework, based on the SDF and integrated transport plan that indicates areas where densification should be promoted.
6. Identify appropriate models for densification, such as second dwellings, subdivision of residential properties, infill development on underutilised land, demolition and reconstructing, and indicate which would be most suited for the areas identified for densification. This could include three or four case studies of how sites might be developed for either urban development or open space purposes.
7. Indicate the criteria that will be used when assessing applications that will result in densification.
8. Make recommendations as to how the proposals can be implemented.

Note: Creating public awareness as well as Council buy-in is a critical aspect for the successful implementation of densification. At the end of the process communities should be aware of the benefits and forms of densification and that densification is likely to take place in their area. In this way the risk of delaying approvals for appropriate densification applications can be decreased. Thus a comprehensive participation programme is needed that may benefit from the use of a facilitator.

[Click here](#) for a generic terms of reference for the appointment of consultants to undertake a densification study.



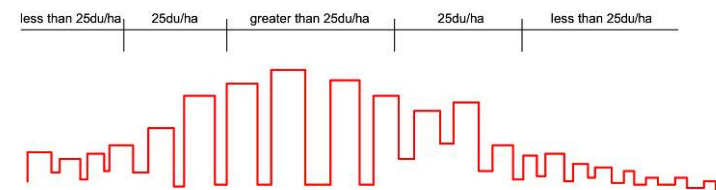
### 3.3.2 Where densification should be encouraged?

It is agreed that densification should not be applied uniformly across the province, or within settlements. It is common misunderstanding that the WC WCPSDF promotes 25 dwelling units per hectare uniformly across settlements. 25 dwelling units per hectare is the target average gross density for settlements, especially for identified growth nodes. Within these nodes, areas where densification would be appropriate, such as nodes, corridors and specific precincts should be identified.

It is also recognised that 25 du/ha may not be appropriate or achievable in smaller and historical settlements, or areas within settlements. Long term constraints to densification include:

1. The protection of heritage resources (such as Moravian Mission Stations, or historic parts of towns),
2. Environmental constraints (such wetlands and floodlines; biodiversity; agricultural areas that prohibit infill development)
3. The need for public open space that prohibit infill development.

The densification strategy should also investigate and motivate where densification to achieve an average of 25 du/ha will not be appropriate. Strategies to achieve the highest possible density in such areas should never the less be put forward.



# Densification Study

### 3.3.3 Suitable environments for different types of densification

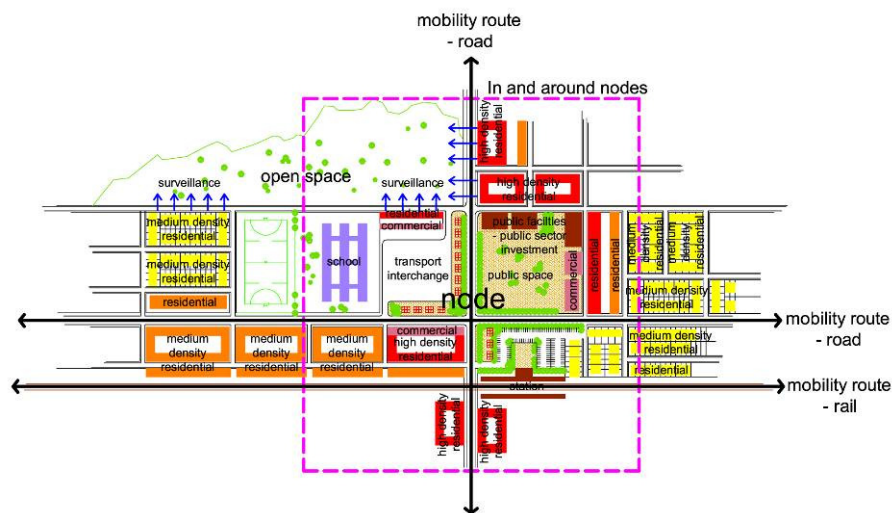
**a At the provincial, district - and local - municipal scale**

When addressing densification at the provincial, district or local municipal scale, the initial focus of achieving higher densities and increased development should be on areas of high economic potential as per the [National Spatial Development Perspective](#) (2004) and the [Growth Potential of Towns Study](#) (2004) undertaken by the PGWC.

**b At the settlement / town scale**

Within towns / settlements, higher densities should be concentrated:

- Along mobility routes in order to support public transport routes,
- In and around nodes,
- On the periphery of open spaces to increase surveillance,
- Within areas of focussed public-sector investments, and
- In selected areas of high private sector investment (e.g. around commercial hubs).

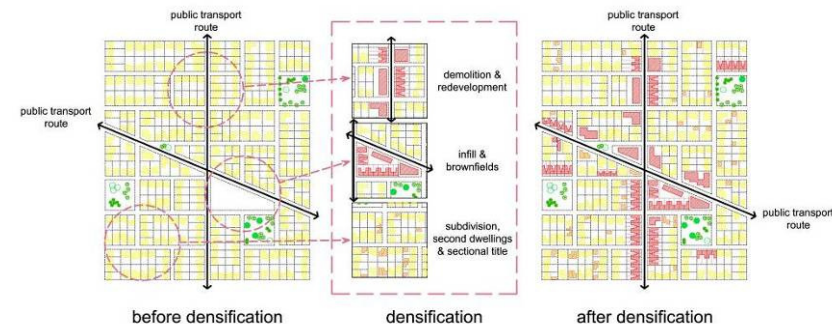


In these areas the availability of services may cause constraints in the short to medium. It is thus critical that a densification strategy informs the municipal plans for infrastructure expansion and upgrading.

Toolkit 5 indicates land use mechanisms for facilitating densification. Click [here](#) for [toolkit 5](#).

### 3.3.4 Densification options

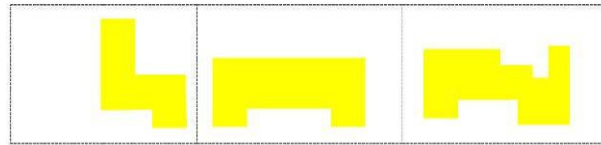
Densification is a negotiated process that occurs overtime. When preparing a densification strategy the following forms of densification could be considered:



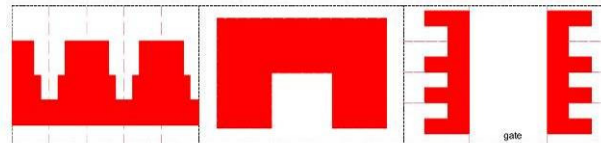
[Toolkit 6](#) provides guidelines and a design consideration for different forms of densification and [Toolkit 7](#) provides criteria for the assessment of applications resulting in densification.

### a Demolition and Redevelopment

This form of development includes town houses, flats and security villages. It would be most appropriate fronting onto existing or future public routes.



before



after

townhouses      flats      security complex

### Case Study: Demolition and Redevelopment Foodworld Development, Claremont, Cape Town

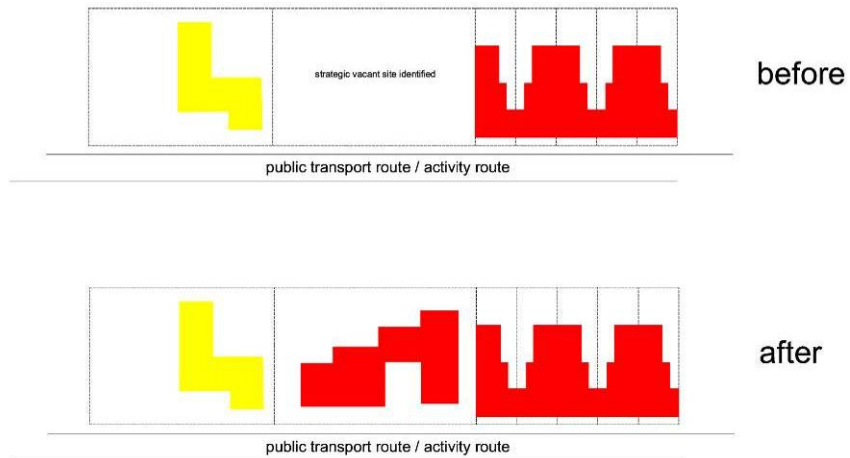
The recently completed Foodworld development, “the Claremont” on Main Road Claremont, presents an excellent example of an appropriate demolition and redevelopment project. The project entailed the demolition of 5 double storey commercial buildings on Main Road that was replaced by a development which introduced more than 300 apartments to a business node, with retail outlets wrapped around the edges at the ground level so as to ensure vibrancy and surveillance along Main Road and some of the side streets.





## b Infill and Brownfield development

Infill and brownfields development should be promoted on strategic sites identified as part of [the audit of vacant and underutilised land](#), and areas promoted for densification in the SDF.



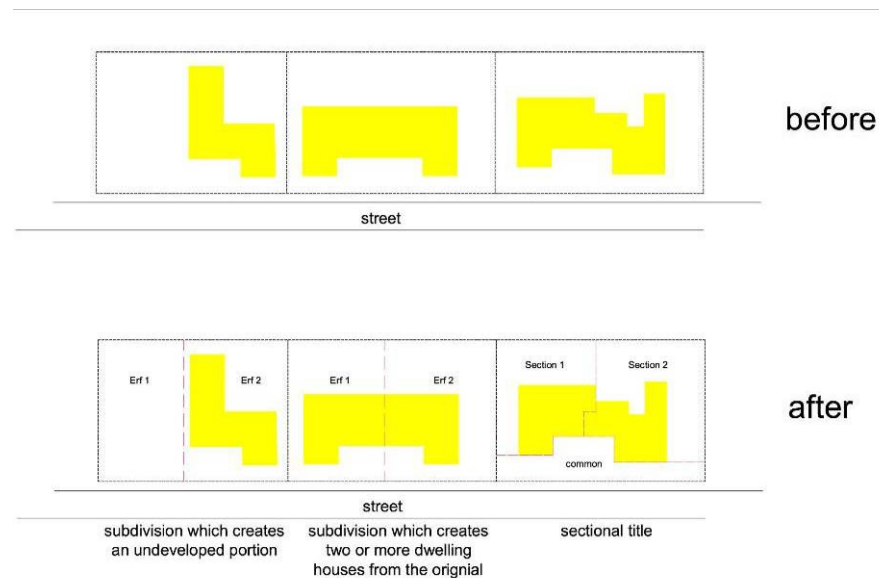
### Case Study: Brownfield Development, Brickfields in Newtown, Johannesburg

The Brickfields site in Newtown, Johannesburg, was used as a shanty town in the late 1800s, mostly accommodating immigrants coming to work on the mines. After the site was cleared in an attempt to “clean-up” the area and acquired by the City, it housed an abattoir, and was later acquired by the Post Office, but never used by this institution. The site has recently been development through a joint venture between the private sector and government to provide 650 one to three bedroom apartments catering for a range of income groups and will also include a retail component to serve residents. This development is an example of infill development on a brownfields site that is not only historically appropriate (by reintroducing a mix of residents to the site) but is also developed at an appropriate intensity in the inner city context.



### c Subdivision, Additional / Second Dwelling, Sectional Title Development

This form of densification is suitable in the 'internal heartland' of suburban areas where erven are large and densification can be achieved by subdividing into two or more smaller plots, permitting a second dwelling on an undivided erf, or creating sectional titles for a large residential building.



#### Anecdote: Subdivision for Profit

The subdivision of residential erven is a lucrative option in a buoyant property market.

### d Greenfields development

Greenfields sites within urban areas identified through the land audit require careful consideration. Where they occur on the edges of settlements high densities may in fact not be appropriate, because of potential impacts on the character of the surrounding area. On the other hand it is also imperative that resources such as land and services are used optimally, thus a careful balance is needed between achieving a relatively high density within the character constraints of the area.

#### 3.3.5 Designing for Densification

When designing for densification, the approach should concentrate on the following:

##### a Making trade-offs

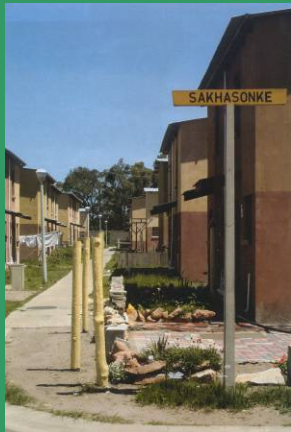
Many designs do not question the appropriateness of prescribed standards, such as:

- Minimum erf size
- Road widths
- Facilities space standards
- Infrastructural requirements

Developing higher density areas may require an innovative approach and a modification or relaxation of some generally accepted standards in order to achieve the benefits associated with higher densities.

**Making Trade-offs Case Study: Sakhasonke Village, Port Elizabeth**

Sakhasonke Village in Port Elizabeth reflects a variety of good development practices, as it is an infill development, on a brownfield site, of good quality, extendable and affordable housing developed at a high density. The trade-offs that were made on the project are particularly interesting. Many of the properties do not front onto streets, but rather walkways. This has resulted in a cost saving on the construction of roads and space saving meant that more development could be accommodated on the site.

**b Prioritising the design of the public over the private**

Public space becomes increasingly important as densities increase, as private open space is reduced and town cramming needs to be avoided. A design should focus on creating functioning green networks that form a structuring element within the town or city.

**c Focusing on the interrelationships between elements that create the layout**

All steps of the design, from the house, to the erf, to the block, to the town should inform each other. Cognisance should be taken of the impact of design decisions at each level on the other related scales.

**3.4 Inputs and linked activities****3.4.1 Vacant and underutilised land audit**

The vacant and underutilised land audit will provide invaluable information to the densification study on land suitable for infill and brown field development.

**3.4.2 Open Space Strategy**

An open space strategy will provide information regarding the need for open space (i.e. which land parcels could be filled in and which not) as well as areas surrounding open spaces that may be suitable for densification.



### 3.4.3 Spatial Development Framework

The SDF should provide clear guidance on nodes and corridors where high densities could be achieved.

### 3.4.4 Zoning Schemes

Zoning schemes are critical to supporting densification. In the revision of zoning schemes provision should be made for achieving a range of densities including very high densities. Particular issues that should be addressed include second dwellings, and minimum erf sizes. In addition the zoning scheme could provide for overlay zones in areas where densification will be promoted – such overlay zones could help with simplifying consultation requirements, relaxing building lines and other constraints to densification, as well as provide clear guidance to the market as to where to focus their attention.

### 3.4.5 Heritage Studies

Heritage register and inventories of heritage resources prepared in terms of the National Heritage Resources Act, 1999 will provide valuable input into a densification strategy. In addition to a list of resources (typically valuable properties) other aspects such as the overall character of an area, will require consideration. An analysis of this nature would inter alia consider patterns of subdivision, massing and placement of buildings on properties, interfaces with public spaces (typically the street), building heights and materials. This will form the basis of guidelines for further development in the area.

Ideally the heritage register and inventories for the settlements within the municipal area should be completed prior to a densification study; however, this may not always be possible. In lieu of a complete heritage assessment, the following guide should be used by the municipality, land owners and developers as a guide to determine the heritage significance of an area or building.

- Does the area have a distinct physical identity (sense of place) that is readily distinguishable from surrounding development?
- Does the area possess architectural and/or environmental cohesiveness?
- Are the buildings within the area of a high standard of architectural or townscape quality? This may include buildings with heritage status, buildings of local architectural or historic interest, important landmarks and good examples of local or vernacular styles and materials.
- Does the landscape, spatial quality or general layout of the area exhibit a special character derived from a natural or topographical feature, historic open space, landscaping or historic street pattern?<sup>10</sup>

Toolkit 8 provides criteria for assessment of development applications in areas of heritage significance ([click here](#)) and Toolkit 9 provides guidelines for the engagement with Heritage Western Cape with regard to development applications ([click here](#)).

### 3.4.6 Assessment of Infrastructural Capacity

As noted in the steps for preparing a densification strategy, understanding the capacity of the engineering services to accommodate densification is

<sup>10</sup> City of Cape Town: South Peninsula Region, August 2005: Bergvliet – Meadowridge - Diep River Draft Local Structure Plan, Draft for Comment

critical. Where limited information and planning is available it may be necessary to appoint consultants to investigate and make proposals for this specific aspect of the strategy.

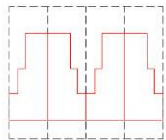
### 3.5 Common issues and frequently asked questions

#### 3.5.1 Understanding Densities

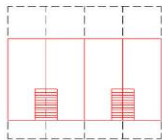
##### What does high density mean?

Generally, high density refers to an area with a gross density of 40 or more dwelling units, or 150 or more people, per hectare.

##### What does high density look like?



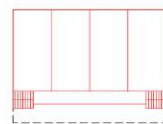
Row housing  
frontage 5-7m  
ground related  
40du/ha +



Walkups  
frontage 6-10m  
2 - 4 storeys  
60du/ha +



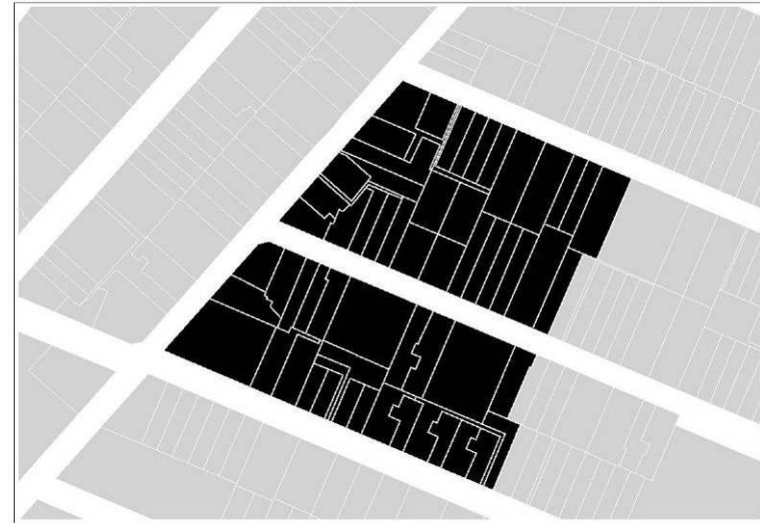
Apartments  
core access  
2 - 5 storeys  
80du/ha +



Apartments  
gallery access  
2 - 5 storeys  
80du/ha +

##### “On the ground” example:

Below is an example of a high density urban area. The area has a gross density of approximately 61 dwelling units per hectare. These densities are achieved through long narrow erven with small street frontages (approximately 5m). The predominant housing typology is single storey row housing.



Cadastral boundaries (scale 1:800 @ A4)

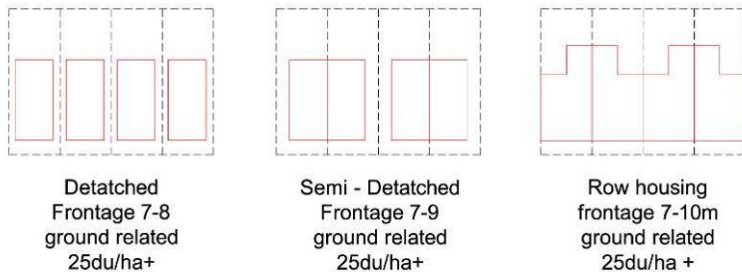


Aerial photograph (scale 1:800 @ A4)

### What does medium density mean?

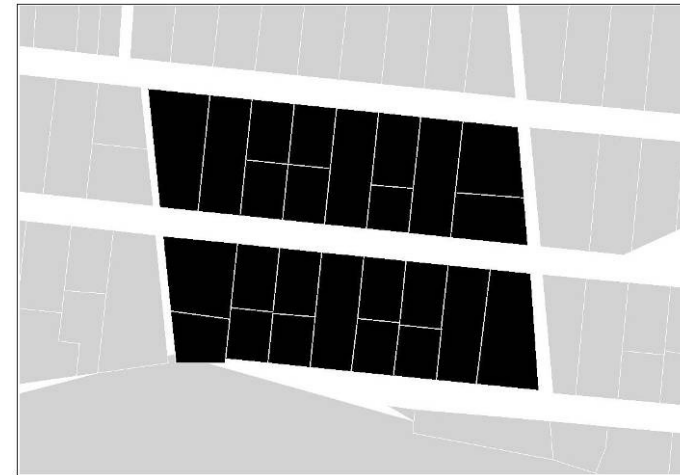
Generally, medium density refers to an area with a gross density of approximately 25 dwelling units, or 100 people, per hectare.

### What does medium density look like?



### “On the ground” example:

Below is an example of a medium density urban area. The area has a gross density of approximately 25 dwelling units per hectare. The erven generally have narrow frontages (approximately 14m), while the depth of the erf varies. The houses are typically double storey free standing units.



Medium density cadastral boundaries (scale 1:800 @ A4)



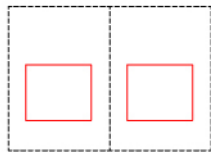
Medium density aerial (scale 1:800 @ A4)



### What does low density mean?

Generally, low density refers to an area with a gross density of less than 15 dwelling units, or 50 people, per hectare.

### What does low density look like?

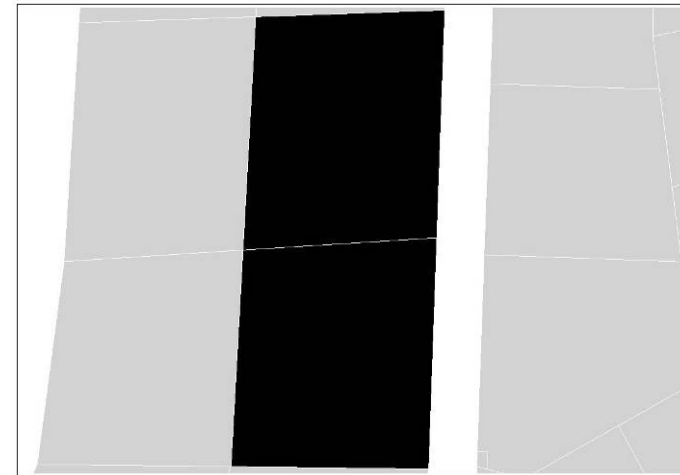


Detached  
frontage 40-80m  
ground related  
< 15du/ha

Low density development is generally characterised by the “one house on plot” typology, where single storey residential units are set back from the street, with a private front and back garden.

#### “On the ground” example:

Below is an example of a low density urban area. The area has a gross density of approximately 2 dwelling units per hectare. The erven are nearly as wide as they are deep (75m frontage and 365m depth), with a double or single storey house located towards the middle or back of the erf.



Low density: cadastral boundaries (scale 1:800 @ A4)



Low density: aerial (scale 1:800 @ A4)

### 3.5.2 Can densification occur in areas of heritage significance?

Densification can, generally, occur in areas of heritage significance as long as it does not significantly impact on the heritage resource. Development in areas of heritage significance should occur with the support of Heritage Western Cape (click here for more detail on criteria for assessment of development applications in areas of heritage significance ([toolkit 8](#)) and guidelines for engagement with Heritage Western Cape with regards to development applications ([toolkit 9](#))). There are three tools that can aid in densification in areas of heritage significance, these include:

- Architectural and design guidelines: architectural and design guidelines may mitigate the impact of densification on the receiving environment.
- Density guidelines: certain densities and forms of densification may be more appropriate in certain areas than in others. These should be identified in the densification study, and
- No-go strategy: there may be areas where densification cannot be accommodated within negatively impacting significantly on the existing heritage resource. In such areas densification should not be encouraged, but should be accessed on a case-by-case basis.

### 3.5.3 Capacity constraints in engineering services

In some cases, engineering services may not have been designed to absorb additional capacity created through increasing densities in a certain area. The municipality will need to make a trade-off between increasing the capacity of the existing services and providing bulk services to service new development on



the periphery. An option is to increase the capacity of services when routine maintenance and up-grading takes place, thereby increasing the carrying capacity of the services.

#### Anecdote from the City of Cape Town

The “wet services” (sewage, storm water, and water reticular) in many of the existing suburbs in the City of Cape Town require upgrading. The officials have indicated that it is more cost effective and efficient for them to upgrade the existing services, **and** increase their capacity at the same time, rather than simply upgrade the services and continue to extend the service into greenfields sites. In order to achieve this, densification within the urban edge is a prerequisite.

### 3.5.4 How to avoid urban cramming

Town cramming could be described as the “over-application” of densification - in other words the over-provision of residential units or unsympathetic development in existing areas, and the under-provision of open spaces. It is associated with negative consequences such as increased traffic congestion and loss of privacy. Densification should not occur in an ad hoc fashion, targeting every piece of open space. To avoid town cramming, densification must occur in accordance with an overall densification framework aimed at maintaining privacy for existing residents,



providing quality spaces, and maintaining existing character.

### 3.5.5 Conflict between densification and open space

An open space study should be part of or an informant to a densification analysis. As densities increase private open space is likely to decrease (a shift away from the suburban model to a more urban model), and open spaces become more valuable and necessary in order to avoid town cramming. Open spaces need to be preserved to create the “green infrastructure” for a community. Open spaces play a number of roles in terms of its environmental and community services, such as:

- Recreational parks
- Visual amenity and relief in an urban environment
- Conservation
- Agriculture
- Buffers along roads
- Ecological corridors

Open spaces, and other public facilities, create the spaces for integration and social cohesion to occur. Open spaces must be functional and appropriate in size and use.

However, there may be open spaces that may be appropriate for redevelopment or intervention, such as:

- SLOP: “Space Left Over By Planning” Many zoning schemes require a percentage of land to be retained for public open space when undertaking a township development. In some cases, the land parcel(s) set aside for open space do not form part of a functional green system, but are pockets of vacant land scattered through the

development. In many cases these spaces are not developed as the green recreational space that they were intended to be.

- Underutilised open space. Due to a standardised set of facilities criteria, public facilities are often provided on fixed or set erf sizes. For example, a high school is provided when there are x number of dwelling units, in addition the size of the high school is pre-determined. In some cases, the facility and associated department (e.g. school and the Department of Education) do not have the funding available to develop the site concurrently with the development of housing, and / or to develop the full set of planned facilities. As a result large portions of open space remain vacant, detracting from the safety and quality of environment of the community.
- Dangerous spaces. Open space has the potential to create dangerous places. Open space, created for worthy reasons (such as the conservation of remnant vegetation, preservation of dune system, or recreation space) can, through lack of surveillance and inappropriate design become dangerous places. Design intervention on or adjacent to these parcels of land may be required in order to improve safety and preserve the integrity of the open space.

Toolkit 10 provides the criteria for decisions regarding the redevelopment and/or preservation of open space. Click here to see [toolkit 10](#).

### 3.5.6 Conflict between minimum erf size proposed in zoning scheme vs. minimum erf size proposed in Spatial Development Frameworks and Densification Analyses

The potential exists for proposals made in the densification studies to conflict with minimum erf sizes permitted in terms of existing zoning schemes. There are two approaches to this issue:

1. Allow for overlay zones in terms of (new) integrated zoning schemes.
2. Adapt a more 'flexible' approach to land use management. Each application is considered on a case-by-case basis. Where it is in keeping with (a) the proposals made by the SDF and (b) the proposals made in a council approved [Densification Study](#), and (c) where it will not negatively impact on the receiving environment, relevant departures (such as relaxation of minimum erf frontage, lateral building lines) should be allowed in order to permit densification.

### 3.5.7 Barriers to infill development<sup>11</sup>

Physical barriers refer to physical site constraints which may influence the feasibility of infill development on a site. These constraints can include:

- Environmental issues (such as wetlands, remnant vegetation)
- Nuisance uses (such as busy roads or railway lines, car repair shops)

Social barriers refer to the receiving community's resistance to change (also known as NIMBYism).

Regulatory barriers refer to barriers created by existing policy and land use regulations such as zoning schemes, parking requirements and approval processes.

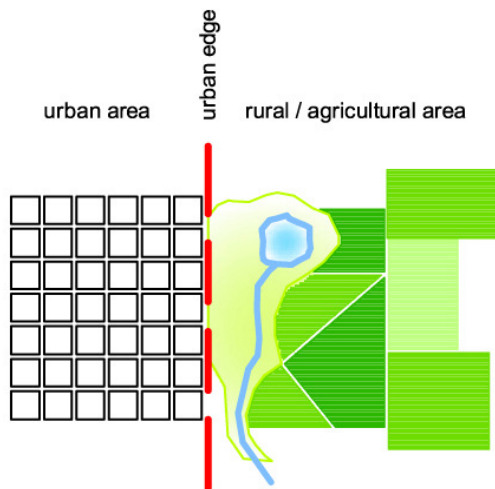
Economic barriers refer to elements that create uncertainty surrounding the outcome and timeframes of expected returns on investments by developers. These include the preconstruction process (land use approval process), construction costs and the cost of materials. For instance economies of scale can only be achieved when developing a certain number of erven/units.

<sup>11</sup> Maryland Department of Planning, October 2001: Managing Maryland's Growth – Model and Guidelines for Infill Development

## 4.0 DELINEATION OF AN URBAN EDGE

### 4.1 What is an urban edge?

The urban edge is a demarcated line and interrelated policy and guidelines (relating to the management of the urban edge line) that separates urban areas from rural areas. The intention of the urban edge is to establish limits beyond which urban development should not be permitted for an agreed period of time.



## 4.2 Why do we need an urban edge?

### 4.2.1 Problem statement

Uncontrolled low density urban development, often referred to as sprawl, is associated with:

- Inefficient development, dependent on private vehicle use (with associated traffic congestion, pollution and resource depletion)
- Inadequate population thresholds to support an integrated public transport system, at high cost to the poor in particular
- High cost of the provision and maintenance of infrastructure and services due to extra lengths
- Lack of population thresholds to support social services and economic development.
- Irretrievable loss of agricultural land and increased pressure on water resources (due to higher requirements of low density development)
- Loss of biodiversity and ecological corridors
- Loss of character of small towns and undesirable visual impacts in rural areas/cultural landscapes
- Inappropriate development in disaster prone areas, such as floodplains or areas with high veld fire risks.

The draft [PGWC: Provincial Urban Edge Guidelines \(2005\)](#) establishes two distinct functions for an urban edge. Each of these two functions has a number of related objectives.

- (i) It is a *growth management tool*: As a growth management tool, the urban edge is used to limit sprawl and the outward growth of urban areas, in favour of densification and infill development, to



ensure more efficient use of resources and land within urban areas. Growth management objectives include:

- Enabling easier access for low and middle income households to well-located urban opportunities
- Changing urban development trends to increase densities and ensure more efficient use of the available land;
- Reduction in infrastructure costs by engaging in urban redevelopment, infill and limiting the establishment of bulk infrastructure to service greenfield developments;
- Reduction in the loss of threatened and endangered species;
- A separation between urban and rural uses, thus increasing the value of urban land and maintaining the value of rural land; and
- Providing a clear definition of the urban area and its community and increasing the integration of uses and social groups in order to achieve urban restructuring.

(ii) It is a *conservation tool*: As a conservation tool, the urban edge is used to exclude certain elements of the environment from the urban area, in order to protect or preserve it, or to discourage its development in the short and medium term, while long term implications are uncertain. Conservation objectives include:

- The preservation of open space (green belts) and farm land surrounding the urban area;
- The conservation of natural or protected areas (such as nature reserves);

- The protection of heritage resources (such as archaeological resources, scenic beauty and cultural landscapes).

Click here for relevant [WCPSDF policy relating to urban edge delineation](#).

## 4.3 Application of the Concept

### 4.3.1 Basic Steps

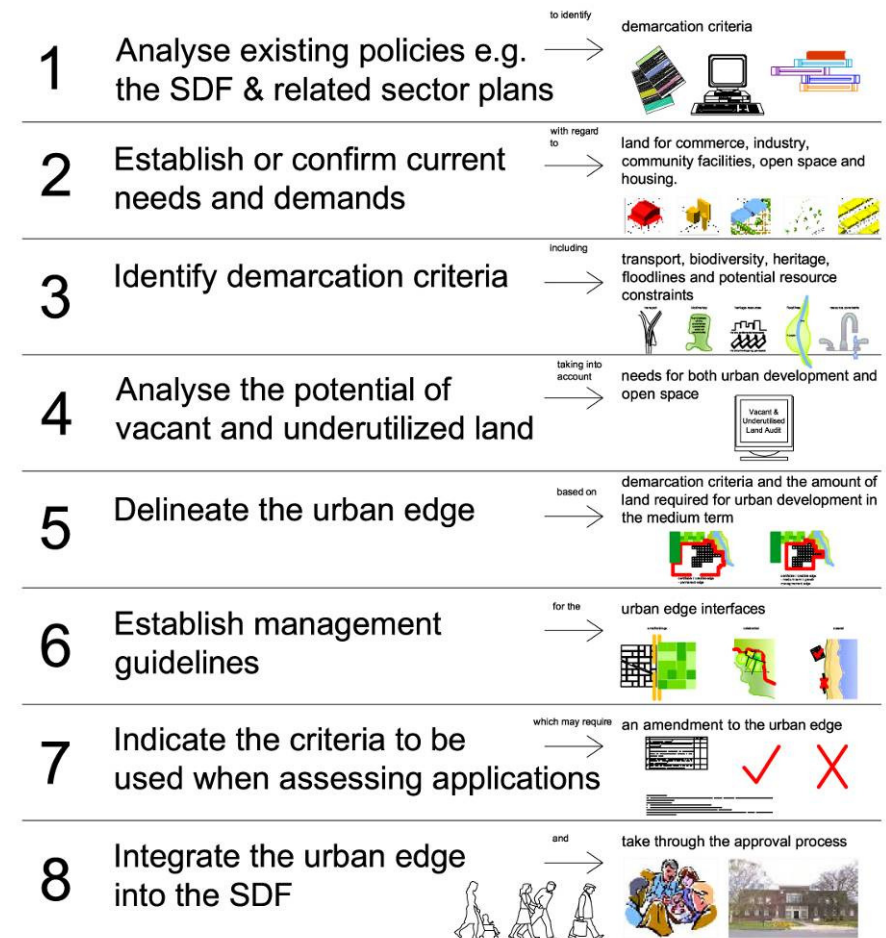
1. Analyse existing policies such as the WC SDF and related sector plans, and municipal IDPs and related sector plans with a view to identify [demarcation criteria](#) to inform the delineation of the urban edge.
2. Establish or confirm current needs and demands with respect to land for commerce, industry, community facilities, open space, and housing according to existing available information. In particular establish the current growth rate of the town and make projections of the future growth rate, using the densification and integration targets of the municipality based on existing growth rates as well as other relevant policy documents (including the densification and integration policies of the municipality), if this has not been explicitly indicated in the IDP and SDF.
3. Establish or confirm needs and demands for integration and densification.

4. Identify demarcation criteria, including transport, biodiversity, heritage, floodlines and potential resource constraints such as water availability, infrastructure capacity, and sewage and sanitation capacity.
5. Strategise and analyse the potential of vacant and underutilized land, taking into account needs for densification, integration and urban development and open space<sup>12</sup> and the proposed amount of land required in addition to land within the urban fabric for expansion. The densification study will provide input on how much additional land is required;
6. Understand the amount of land use demands, taking into account densification and integration targets and objectives, that can be accommodated within the current urban fabric and how much additional or greenfields land should be included in the urban edge. ([click here](#) for a methodology on how to establish land demand)
7. Delineate the urban edge, based on the demarcation criteria (permanent edge) and the amount of land required for urban development in the medium term (growth management edge)
8. Establish management guidelines for the urban edge interfaces (click here to view [management and interface guidelines](#))
9. Indicate the criteria that will be used when assessing applications that may require the amendment of the urban edge (click here to view a [checklist for amendment to the urban edge](#))
10. Integrated the urban edge into the Spatial Development Framework, and take through the approval process (including public participation).

NOTE: The public engagement process is critical to the credibility of a policy of this nature and should be carefully considered according the

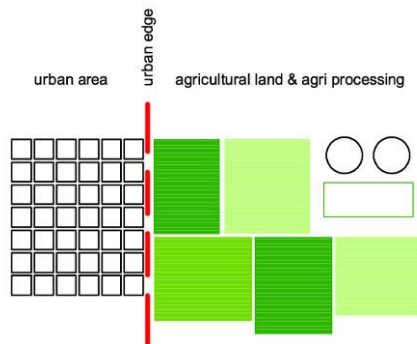
<sup>12</sup> Click here to view Vacant and Underutilised Land Audit section

policies, legislation (particularly the [Municipal Systems Act \(Act 32 of 2000\)](#) (MSA)) and experience within a particular municipality. Open days/public meetings are useful tools for the public to understand the process and the concept and to air their opinions. [Toolkit 11](#) provides generic terms of reference for the appointment of consultants to undertake an urban edge study



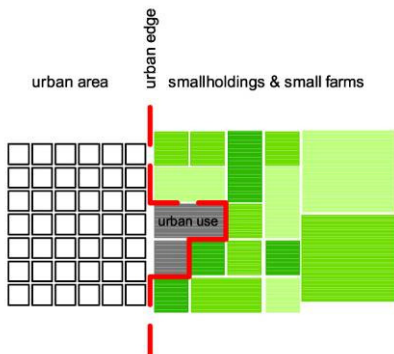
### 4.3.2 Demarcation criteria

The following information should be mapped for each settlement in the municipal area for which an urban edge will be demarcated:

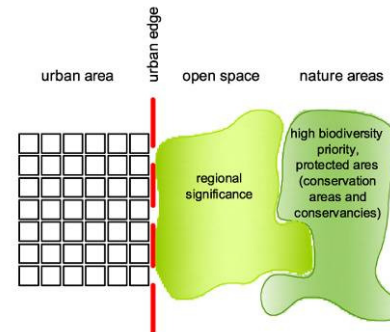


*Agricultural land and agri-processing surrounding urban areas:* Such land and uses should be kept outside of urban areas as far as possible. This is to be done in consultation with the Department of Agriculture who can advise on valuable agricultural land to be protected.

Note in this regard that the definition of valuable agricultural land is more complex than just identifying high potential soils.

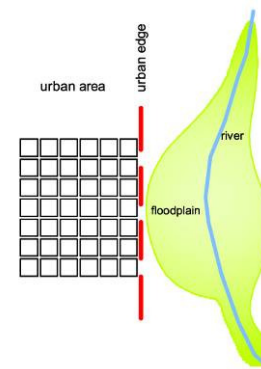


*Rural land, small farms & smallholdings:* Rural land and actively farmed smallholdings or small farms should be kept outside of urban areas. Where urban uses (such as scrap yards) occur legally on smallholdings they should be included in urban areas.

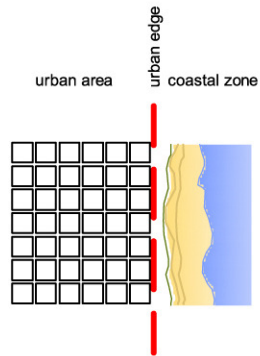


[Management: Biodiversity Act](#) (Act 10 of 2004) (NEMBA) will prove a valuable tool.

*Open space (urban and regional) and natural areas:* Open spaces of regional significance and nature areas including areas of high biodiversity priority, protected areas (i.e. conservation areas and conservancies) should be located outside of the urban edge. In this regard bioregional plans are prepared in terms of Chapter 3 of the [National Environmental](#)

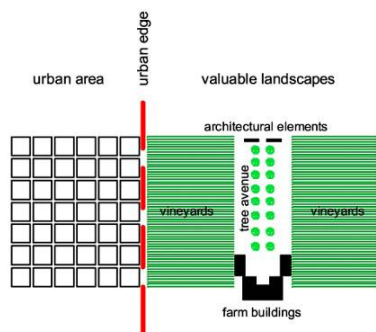
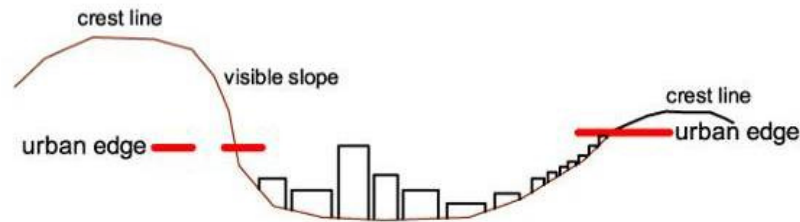


*Rivers and floodplains:* Where possible rivers and floodplains should be placed outside of urban areas.



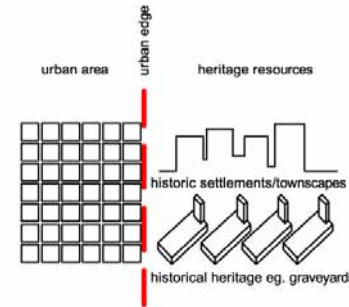
*Coastal zones and sea level rise (5m contour):* Coastal zones, storm surge zones and areas prone to sea level rise should be placed outside of urban areas.

*Topography and slopes:* The visual impact of development on crest lines and hillsides should inform the delineation of the urban edge. Visible slopes and view sheds should be placed outside the edge.

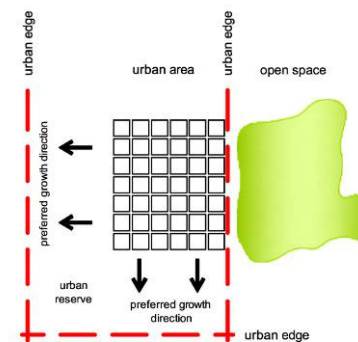


*Valuable landscapes:* Valuable landscapes consist of elements such as tree avenues of stature; farm buildings and architectural elements; places of historical interest; and vineyards which define the character and uniqueness of the area and contribute to the vistas and cultural landscapes of the Western Cape.

Note that these could be protected in terms of the [National Heritage Resources Act \(Act 25 of 1999\)](#) (NHRA.)



*Heritage resources:* These are defined in the NHRA and include the following: places, buildings, structures and equipment of cultural significance; places to which oral traditions are attached or are associated with living heritage; historical settlements or townscapes; valuable landscapes and natural features of cultural significance; geological sites of scientific or cultural importance; archaeological and palaeontological sites; graves and burial grounds; and sites related to the history of slavery. The urban edge should ensure that such resources are protected, preserved, and even enhanced.



*Existing planning & growth management:* The Spatial Development Framework and other policy documents such as a densification strategy indicate how future growth should be accommodated in the municipal area and, as such, are critical inputs to the urban edge demarcation. In particular they should determine how much

urban reserve is required to accommodate growth for an agreed period (five to eight years), and indicate where settlements should grow in the future.

*Zoning, approvals and housing projects:* Erven with existing residential, commercial or other urban rights should be included inside the urban edge. However, there may be some cases where erven with existing residential and urban development rights could be placed outside of the urban edge due to their intrinsic conservation or aesthetic value, or in order to discourage growth in a particularly undesirable location. Note that this will not take away from the rights attached to a property.

*Transportation Planning:* Transport infrastructure is a major contributor to urban growth as it creates opportunities for urban expansion. Thus, planned road upgrades and linkage, and public transport routes are important considerations in demarcating the urban edge.

*Service networks and infrastructure:* The availability of services and the reach of networks impact on the affordability of development. Thus where peripheral land is needed for expansion the availability of services would influence the demarcation of the edge.

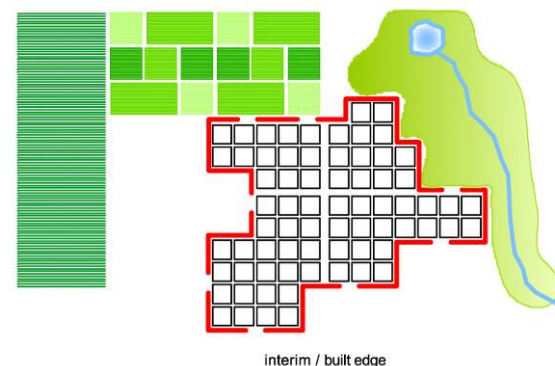
In addition to the above criteria, agreement is also needed on issues such how to deal with:

- Pockets of valuable vegetation on open space within urban areas;
- Low density, largely mono-functional urban-type development outside of urban areas, such as residential estates; and
- What features make suitable edges, e.g. cadastral boundaries, environmental features and/or road reserves?

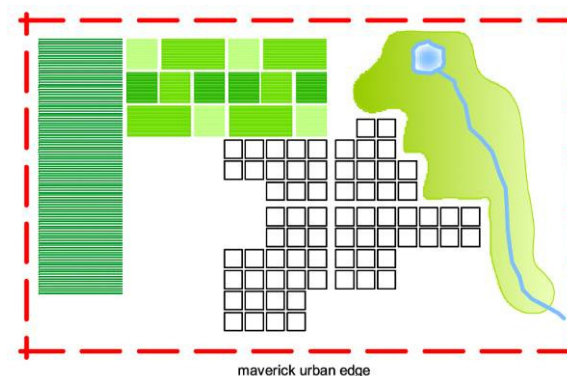
### 4.3.3 Types of Edges

The PGWC distinguishes between the following types of edges:

**Interim/Built Edge:** The interim edge follows the extent of current urban development.



**Maverick Urban Edge:** A 'maverick' edge is a wide edge that does not take cognisance of growth management and integration goals. A maverick urban edge can be approved by a municipality in terms of the [Municipal Structures Act](#) (Act 32 of 2000), but does not have the buy-in from the Provincial Government: Western Cape.

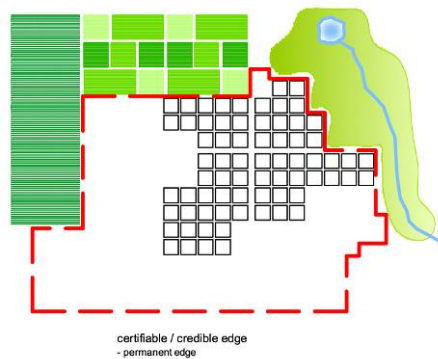




**Credible Edge** refers to an urban edge delineated and approved by the municipality and approved by PGWC Department of Environment and Development Planning. A credible edge refers to a well considered urban edge delineated through an urban edge study, using demarcation criteria, that allows for sufficient land within the urban edge to (i) accommodate growth whilst at the same time (ii) promoting integration and densification goals and (iii) protecting conservation-worthy, productive land and valuable landscapes.

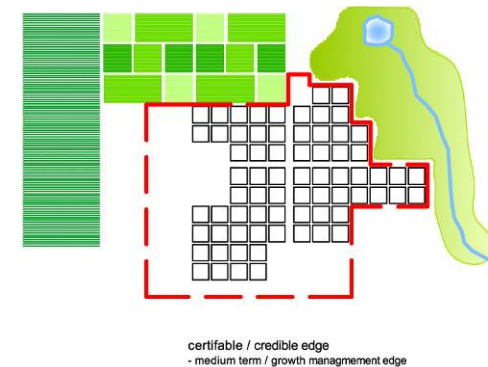
A credible edge consists of two categories of edges:

**Permanent Edge:** A 'permanent edge' is 'non-negotiable'. It is aimed at protecting valuable natural environments, farmland and areas of scenic or cultural value (identified no-go areas)<sup>13</sup>. Permanent edges could include celebration edges - non-negotiable edges aimed at celebrating the interface between the urban areas and the rural areas containing natural environments, farmland and areas of scenic or cultural value.



<sup>13</sup> A permanent edge is similar to a hard edge, as defined in the PGWC: Provincial Urban Edge Guidelines, which states that hard edges are drawn where an absolute restraint on development is essential (PGWC: Provincial Urban Edge Guidelines, 2005).

**Growth Management Edge:** A growth management urban edge is an edge boundary that is delineated to accommodate growth within a certain timeframe, or until certain growth management goals (e.g. desired density) have been achieved.<sup>14</sup>



Note: In the absence of a credible urban edge, an interim/built edge will take precedent over a 'maverick' urban edge, in the PGWC's assessment of land use and environmental authorisation applications in the particular municipal area.

<sup>14</sup> This refers to the notion put forward in the PGWC: Provincial Urban Edge Guidelines to prioritise segments of the edge (PGWC: Provincial Urban Edge Guidelines, 2005).

#### 4.3.4 Special Edges

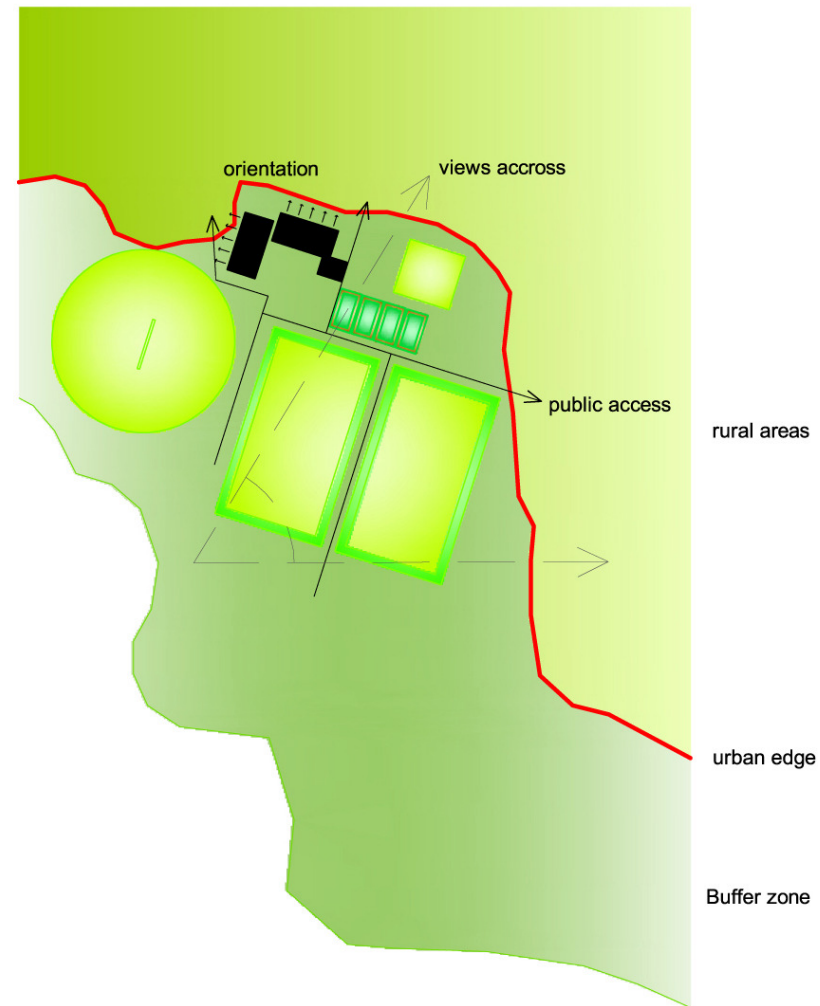
There are three types of permanent edge that warrant special mention:

**Celebration Edge:** A celebration edge is a type of permanent edge. It is a non-negotiable urban edge aimed at celebrating the interface between the urban areas and the rural areas containing natural environments, farmland and areas of scenic or cultural value.

Celebration edges have positive interfaces with the rural environment. Uses associated with celebration edges could include educational facilities, recreational facilities, and resorts.

Design guidelines for celebration edges include:

- Maintain visual permeability of the urban edge through the site
- Buildings to be oriented towards the urban edge to survey the natural resource
- Uses valued by the community to be located in the buffer zone between the urban and rural (e.g. initiation sites, recreational facilities, educational facilities)
- Uses located along the urban edge must relate to/ have a relationship with the urban edge. In other words, the development could not be accommodated anywhere but on the urban edge.
- Public access through the site, to the natural resource must be retained.



### An Example of a Celebration Edge: Clara Anna Fontein

An example of a celebration edge is the Clara Anna Fontein Game Reserve and Conference Facility in Durbanville, Cape Town. The farm is located off the Vissershoeck road, abutting the urban edge. Activities accommodated on the farm include:

- Conference facilities,
- Limited accommodation (cottages and tented camps),
- Game drives (11 species are housed on the farm),
- Obstacle course, and
- Film shoots.

Clara Anna Fontein preserves the integrity of the urban edge, while allowing people to access and sustainably utilise the rural resource, enforcing the concept of the urban edge as a resource. The preservation of the urban edge has the knock on effect of increasing the value of the residential development inside the urban edge.



**Coastal edge:**<sup>15</sup> A coastal edge is a type of permanent edge. It is a non-negotiable urban edge that is the interface between the urban areas and the coastal area/zone. It is possible for an edge to be both a coastal edge and a celebration edge.

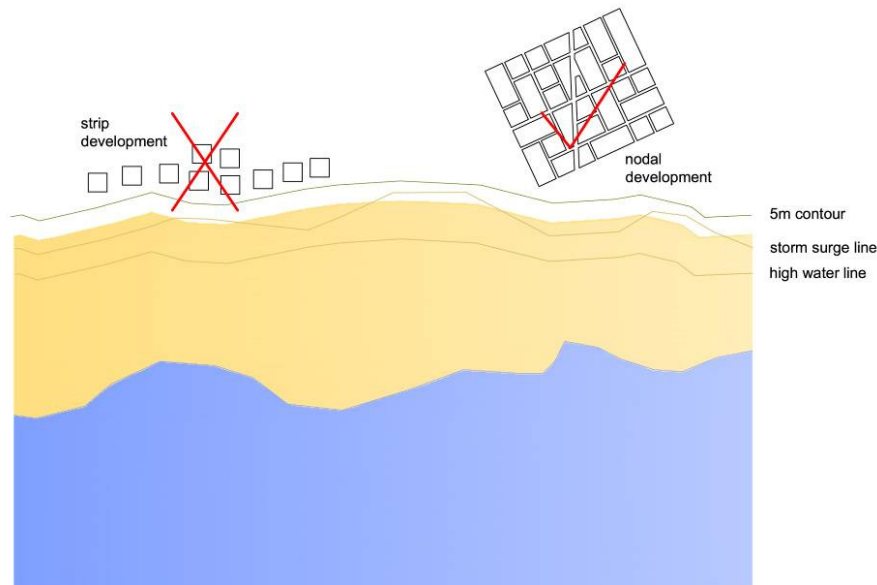
Uses associated with coastal edges could include educational facilities, recreational facilities, natural/protected areas, launch zones and resorts.

#### Principles for delineating Coastal Urban Edges

- Nodal development as opposed to strip development
- Appropriate urban development within the coastal zone in order to redress past spatial inequalities
- Enhancing the connections between the coast and existing development
- Appropriate public access to the coastal resource
- Buildings must be oriented to survey open space and create a positive interface with the coast
- Designing with nature, environmental conditions and constraints (such as high water marks, storm surge zones and prevailing high winds) must inform development along the coast
- Enhance linkages between inland natural resources and coastal resources
- Protection of the coastal resource
- Protection of coastal processes

<sup>15</sup> Also refer to WC WCPSDF RC16 and RC17





**Containment edge:** A containment edge is a type of permanent edge. It is an urban edge drawn tightly around urban anomalies (e.g. golf and polo estates, forest stations) where further development and densification is undesirable.

#### Characteristics of urban anomalies

- Do not support a full range of urban functions, such as education facilities, commercial and industrial land uses, public open space, and social services and facilities. These settlements are often mono-functional residential settlements.
- Do not have a mix of socio-economic groups.

- Most of the residents commute to a nearby settlement or industry to earn their livelihood.



#### 4.3.5 Uses that can be accommodated inside the urban edge

As per the PGWC's Urban Edges Guidelines, settlements that fall within an urban edge should include as wide a range of urban uses as possible, so as establish fully functional settlements.

- Residential, particularly a variety of typologies and densities
- Economic opportunities including, commercial, retail and industrial development (adjoining land uses should be compatible)
- Roads and public transport interchanges
- Social and institutional uses
- Recreation facilities
- Smallholdings



#### 4.3.6 Uses that can be accommodated outside the urban edge

The W Cape WCPSPDF: Guidelines for Rural Land Use Planning and Management (2008) should be consulted for land uses that are appropriate outside the urban edge.

**Note:** Land uses accommodated outside the urban edge should be inline with prevailing national, provincial and local municipal policy.

#### 4.3.7 Formal approval/adoption of an urban edge

Until further guidelines from the PGWC there are currently two options for the adoption of an urban edge policy by Council.

- In terms of the Municipal System Act (32 of 2000) it can be adopted as part of the Spatial Development Framework, which is a critical component of the Municipal IDP.
- In terms of Section 4(10) of the Land Use Planning Ordinance (Ordinance 15 of 1985) as a structure plan. Note that such structure plans may not be inconsistent with the former guide plans.

#### 4.3.8 Guidelines for amendment/alteration of the edge

The urban edge as a land use management tool is intended to be used exactly as the name implies – set a limit for urban sprawls and the outward expansion of urban development in favour of densification and infill. Thus, any amendment of the edge will require careful consideration and should only be allowed under exceptional circumstances.

Growth management/ medium term edges should be revised within a 5 to 10 year period, however, permanent edges are regarded as fixed and as a general rule should not be amended. Nevertheless, there may be compelling circumstances that warrant the amendment of a permanent edge.

In addition to consulting interested and affected parties, the municipality should use the criteria set out in [Toolkit 14](#) to assess an application that will lead to the amendment of the urban edge.

## 4.4 Inputs and linked activities

### 4.4.1 Spatial Development Framework (SDF)

The municipal spatial development framework identifies the desired direction and pattern of growth for the urban settlements and rural areas in the municipality. The SDF should provide guidance on:

- Where appropriate development can be accommodated on the periphery of an urban settlement, and
- Where medium term edges should be located in order to accommodate future growth. The SDF should conceptually indicate the path of future development, and the medium term edge should be located in areas where future growth is desired.

### 4.4.2 Densification Study

A densification study indicates how future growth should be accommodated in the municipal area and, as such, is a critical input to the urban edge demarcation. In particular it should determine how much land is required to accommodate growth for an agreed period. The densification policy should consider the requirements of all types (residential, commercial, industrial) of urban development.

### 4.4.3 Audit of Vacant and Underutilised Land

The vacant land audit will provide easily accessible information on developable land inside urban areas, to be used in the calculation of how much land should be included inside the urban edge to accommodate growth for an agreed period of time.

#### 4.4.4 Heritage register and inventory

Heritage register and inventories compiled in terms of section 30 of the NHRA will provide valuable information on properties and landscapes that should be excluded from urban areas for protection. They will also provide input into the preparation of the guidelines for the interface between urban and non-urban areas.

#### 4.4.5 Bioregional Plans

A bioregional plan(s) prepared in terms of [National Environmental Management: Biodiversity Act NEMBA Act 10 of 2004](#) will provide comprehensive information on conservation priorities and protected areas to inform the demarcation of the edge.

#### 4.4.6 Land Care/Area Wide Planning

Land Care and Area Wide planning initiatives undertaken by the Department of Agriculture will assist with indicating actively farmed land and the potential to expand agricultural activities. Such planning may also include information on land reform initiatives that may be relevant, otherwise such information should be sourced from the Department of Land Affairs.

#### 4.4.7 Strategic Environmental Assessments

A Strategic Environmental Assessment (SEA) is a decision making tool which seeks to establish the most suitable type of development for a particular area, before development proposals are formulated. A SEA will provide information on where development could potentially be accommodated. This would be useful in establishing where growth management edges could be delineated.

IEM Series 10: Strategic environmental assessment  
<http://www.environment.gov.za/Documents/Publications/2005Jan7/Book5.pdf>

#### 4.4.8 Environmental Management Frameworks

An EMF identifies the non-negotiable or “no-go” areas, areas that should be maintained or rehabilitate to as near natural state as possible, and where it would be appropriate to undertake an activity and provide design and management guidelines to guide development (based on the concept of appropriate development in appropriate locations).

#### 4.4.9 Service and infrastructure plans

The municipal service and infrastructure plans will provide information on where there is capacity for development within the urban fabric and it is possible/easier to extend services. However, an urban edge delineation study will provide guidance for future service expansion.

#### 4.4.10 IDPs and related sector plans

An integrated development plan, and related sector plans, provides a framework for the short, medium and long term development of a municipality. The IDP will give guidance as to where and how the municipality should develop.

## 4.5 Common issues and frequently asked questions

### 4.5.1 Buy-in from Council

Achieving buy-in from the Municipal Council is critical to establishing a credible urban edge. This will require extensive consultation and discussion with the Council throughout the delineation process. It would be particularly important to impress upon Councillors the requirements of co-operative governance and regard for provincial policies, as well as reassuring the Council that the urban edge makes sufficient provision to accommodate a range of developments to address the projected growth for the next five to eight years.

### 4.5.2 Conflict with developers and speculators

Conflict with developers and speculators will unfortunately remain an issue for municipal officials. A well-motivated urban edge should in the medium term reduce such conflict as there will be certainty on how the municipality would view applications. In this regard support from the Council is essential.

### 4.5.3 Cumulative effect of development outside the urban edge

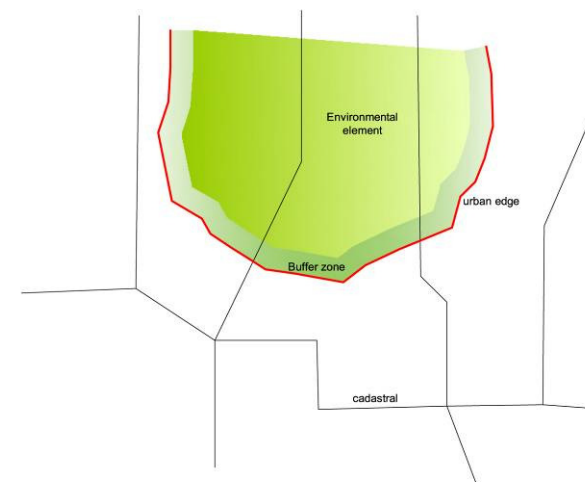
The cumulative effect of appropriate development (such as farm stalls) outside the urban edge may result in an overall negative impact which undermines the character of the rural area. In order to avoid this, the carrying capacity of the landscape needs to be assessed.

### 4.5.4 Communities motivating for development on the basis economic development and job creation

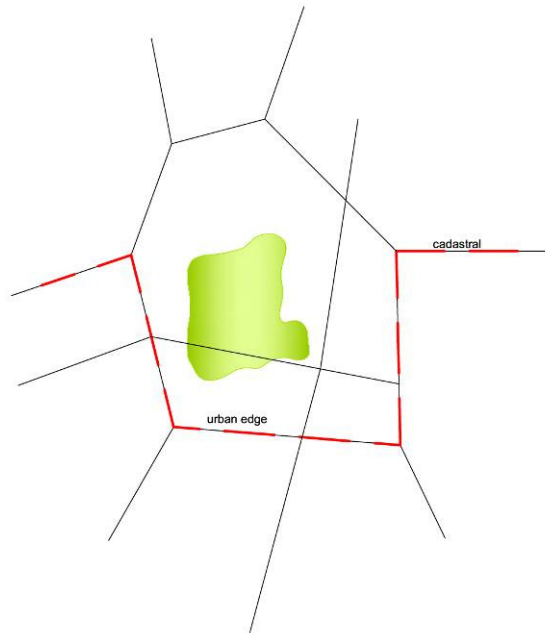
All development creates short term jobs, and injects money into the local economy. However, few developments offer sustainable job creation and economic development for a region. Therefore job creation and economic development are preconditions for any development, not a carrot to be utilised to motivate for development.

### 4.5.5 Does the urban edge always have to coincide with cadastral boundaries?

No. In order for an urban edge to be credible and defensible it should be based on an in depth assessment surrounding historical/archaeological, environmental, and agricultural resources. The urban edge should be drawn to protect heritage and environmental elements, taking cognisance of the buffer or transition zones required to protect these resources.



However, where there is insufficient information available regarding historical/archaeological, environmental, and agricultural resources a precautionary principle should be applied and the larger erf boundary (encasing the resource) should be utilised as the urban edge, to be refined once sufficient detailed information is available.



Urban edges drawn for growth management purposes (i.e. those that may be altered once growth management targets have been met) can be drawn to coincide with cadastral boundaries.

#### 4.5.6 How much land should be available inside the urban edge?

There should be sufficient land within the urban edge to accommodate the medium term growth of the settlement. Including too much land within the urban edge can prove just as detrimental to the development of a town as too little land. While too little land restricts growth through not allowing enough development opportunities, too much land can result in:

- Inappropriate forms of development - by releasing too much land the value of the land is reduced and the type and form of development may not be appropriate.
- Inability to guide or direct growth into the desired direction - releasing too much land can result in the impetus for a desired direction being diluted.

#### 4.5.7 Should smallholdings be located inside or outside the urban edge?

There is a demand, and a need for smallholding development. Small scale farms or smallholdings can offer emerging farmers an opportunity to enter into the agricultural sector. However, smallholdings pose problems for servicing as they are too dense to utilise technologies traditionally found in rural areas (such as soak-aways), and not dense enough to be serviced feasibly with urban services.

Smallholdings can be located inside or outside the urban edge. Where smallholdings are *de facto* large residential erven it is advised that they are located inside the urban edge, and identified as a character area where densification may not be appropriate. Similarly, when it is anticipated that, over time, smallholdings will be subdivided further and ultimately form part

of the urban fabric of the settlement, they should be located inside the urban edge.

However, where smallholdings are functional agricultural units, they should remain outside the urban edge.

#### **4.5.8 The municipality has limited/no land holdings. Can the urban edge be drawn wide?**

An urban edge is drawn taking into account both public and privately owned vacant or underutilised land. By drawing a credible urban edge, private owners will experience increased pressure to develop vacant or underutilised land. Therefore, a municipality **cannot** draw a wide edge based on limited land holdings alone.

#### **4.5.9 Can the municipality amend the urban edge on an ad hoc basis to accommodate a specific development?**

Each development must be considered on its individual merits (section 2j of the Development Facilitation Act, Act 67 of 1995). There may be some cases where it is appropriate to amend the urban edge; however, it must be pointed out that these developments will be few and far between. The onus will be on the developer to prove that:

- The development cannot be located inside the urban edge
- The success of the development depends on its location on the urban edge
- The development will form a permanent edge to development (celebration edge).

Also refer to [Toolkit 14](#).

#### **Example: Mnandi and Monwabisi**

Mnandi and Monwabisi are two potential recreation nodes within the coastal belt of Mitchell's Plain and Khayelitsha respectively. The resort are both in the planning phase, currently more detailed work has been done around Monwabisi, however it is unclear what the form and extent of these resorts will be.

It is felt that it is a priority to develop these nodes for a number of reasons:

- Khayelitsha and Mitchell's Plain do not have a relationship with the coast
- Residents in the south east of the metropolitan have limited recreational opportunities
- Residents in the south east have limited access to the coast

The coastal edge is currently being determined for the City of Cape Town, and it is unlikely that clarity around these areas, due to lack of baseline and planning information, will be reached in order to inform this process. .

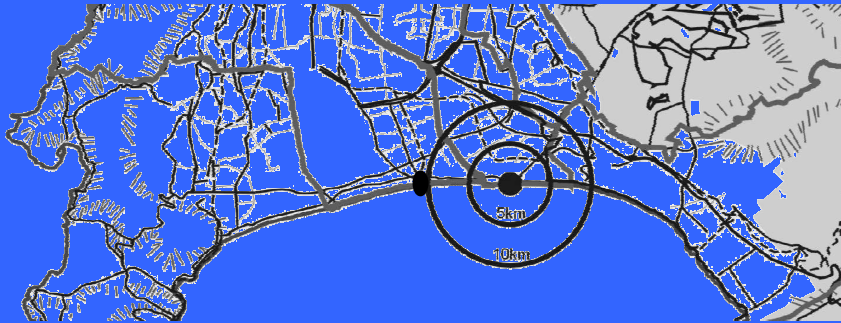
The two coastal nodes represent developments that:

- Cannot be accommodated inside the existing urban edge or urban fabric as the recreational node development is dependant on the coastal resource,
- Can only occur on the urban edge,
- Will form a permanent urban edge.

Therefore a growth management edge should be drawn around these two nodes. The nodes represent developments in which the amendment of



the urban edge should be considered in order to accommodate the development inside the urban edge, when there is sufficient detailed baseline data and information on the extent and form of development that can/should be accommodated at the nodes.



#### 4.5.10 What if we can't achieve containment/densification and integration?

In order to redress this spatial inequality and achieve integration, town and township should be allowed to spread, in a controlled manner, towards each other. This may impact negatively on the overall density of settlements, i.e. the density may remain below 25 du/ha for a longer period of time. Click here to see [integration spaces](#) in the integration chapter for more information.



## 5.0 INTEGRATION STRATEGY

### 5.1 What integration?

#### 5.1.1 Physical integration

Physical integration refers to the overlap and interdependence of functions and activities within the settlement, with the purpose of maximising the benefits of overlapping activities and uses. The challenge is to understand the complexity and to set up the preconditions for vitality during the task of place making or settlement creation.

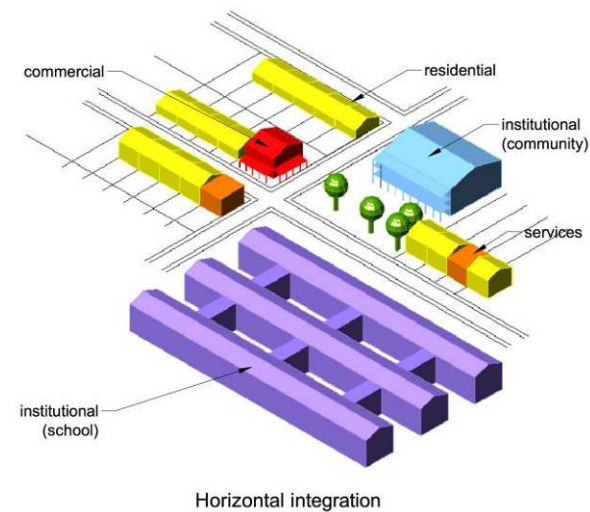
Guiding principles of integration:

- Environmental sustainability,
- Equity of access to communal resources,
- Efficiency of infrastructural utilisation, and
- The creation of settlements which engender community value and identify.

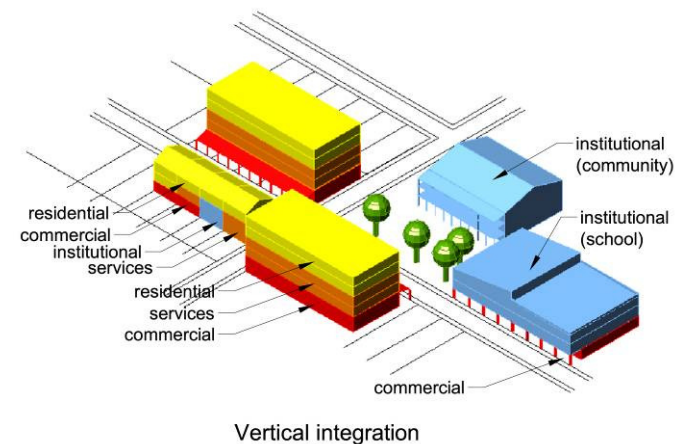
Physical integration characteristics include:

- Well-designed dense developments connected by pedestrian-friendly streets, and
- A horizontal and vertical mix of uses (including residential, non-polluting industrial, services, commercial and institutional uses)

Horizontal mixed use refers to multiple land uses in the same general area mostly on the ground plane. This form will be more common in smaller settlements where multi-storey development is less common.



Vertical mixed use refers to a variety of uses permitted on a single parcel of land, often through multi-storey development, for example where apartments are developed above retail outlets.



### 5.1.2 Socio-economic integration

In these guidelines socio-economic integration should be regarded as an important characteristic of physical integration and refers to physical proximity of different socio-economic groups in area so as to create a cohesive community.

Characteristics of socio-economic integration include the settlement of a range of socio-economic groups within walking distance of each other.

A fine-grained mix of incomes and kinship groups are universally accepted characteristics of good city form worldwide. This mix of incomes and social groups are the basis of successful cities, resilient to economic and political change.

## 5.2 Why is mixed use and socio-economic integration needed?

Settlements are not working as they should for the majority of South Africans. Whilst our towns and cities are often seen as centres of opportunity, they are not meeting the needs of most of their inhabitants. Indeed, the types of settlements that have been created often put economic opportunities out of the reach of the poor and are of poor quality, both of which contribute to many of the socio-economic problems experienced in our country.

Contributing to this issue are the factors which have influenced how we have thought (or not thought) about the planning and design of our settlements. For decades, the development of new, or extensions to existing settlements has been dominated by an ideology that seeks to separate and fragment. This ideology of separation or fragmentation is reflected in a number of ways:

- The political ideology of racial fragmentation has resulted in the segregation (as opposed to integration) of groups of people based on race and the development of non-white townships far from urban opportunities.
- The separation of land uses has lead to mono-functional environments (e.g. low income housing estates *aka* townships) which do not provide opportunities for those living in these areas. Little attention has been paid to aspects of these settlements beyond purely the housing components such as parks and public squares, leading to sterile environments.
- The dominant engineering approach to planning and development has lead to fragmentation of areas through a focus on mobility (car-oriented design). The outcomes have often left people who are reliant

on foot movement, being trapped in space needing to cross wide 'freeways' which form barriers to movement.

- The implementation of settlement development has often been fragmented. Very often planned public facilities and sites 'zoned for business purposes' never get built resulting in left over, unsafe open spaces.

The two fundamental objectives of integration are to:

- Redress past spatial imbalances, and
- Improve access to social, economic and recreational opportunities, services and facilities.

Redressing past imbalances and improving access to opportunities, services and facilities are integral for achieving sustainable human settlements, as promoted in the Western Cape Sustainable Human Settlement Strategy, "The Road Map to Dignified Communities", prepared by the [PGWC Department of Local Government and Housing](#), through promoting:

- Well-located housing (i.e. housing opportunities with good access to urban opportunities),
- Quality urban environments with safe and usable public spaces,
- Integration of racial and income groups, and
- Innovative designs.

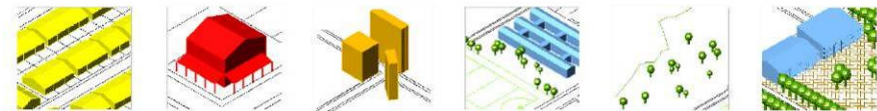
### 5.3 Application of the concept

An integration strategy is a component of a broader densification strategy. Integration can be achieved largely through two instruments, namely infill and inclusionary housing. In order to exercise these instruments a broader integration strategy for the municipality should be established.

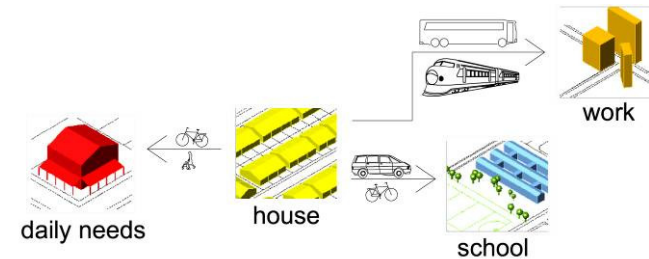
#### 5.3.1 Guiding Principles

Integration policies should be based on the following general principles:

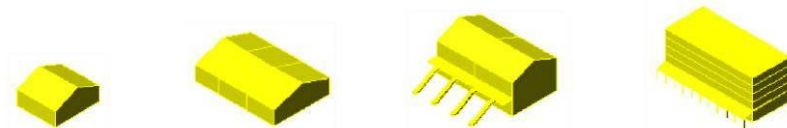
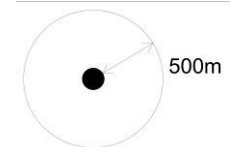
- The provision of complete, integrated urban settlements containing all elements of an urban settlement (residential, shops, offices, schools, parks, social facilities, etc) for all residents.



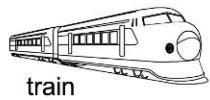
- Access to housing, jobs, and daily needs within easy walking distance.



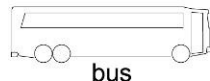
- Location of as many activities as possible within walking distance of transport interchanges.
- A wide variety of housing types to enable people of a wide range of life stages and economic status to live in close proximity.



- A transport network consistent with the location and needs of the community.



train

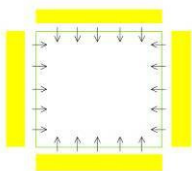


bus

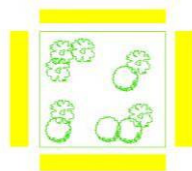


mini-bus

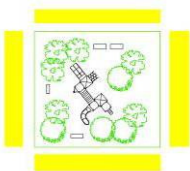
- Location and design of public spaces that encourage people to utilise them.



surveillance

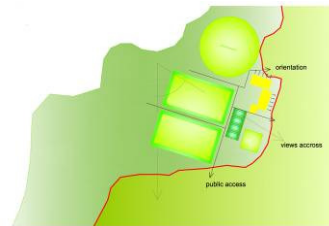


trees



furniture

- Protection of and sympathetic design with the environment.
- A fine-grained mix of income groups



### 5.3.2 Step by step

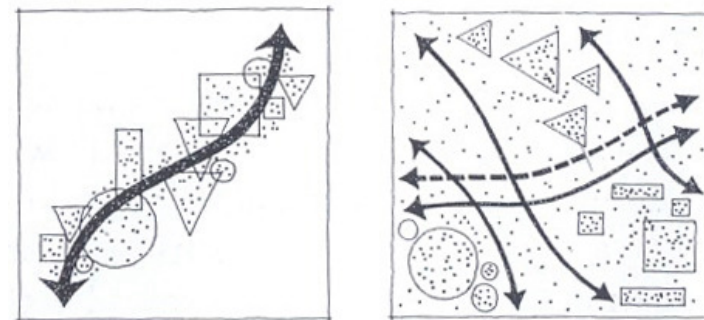
1. Analyse existing plans and policies such as the SDF, transport plans and densification strategy with a view to identify where integration should occur.
2. Establish the current locations of different income groups. This can be done using the sub-place or enumeration area categories from the StatsSA Census data to provide a sufficiently detailed level of information.
3. A similar study of available socio-economic data should be undertaken to establish the locations of different socio-economic groups.
4. Assessment of income and socio-economic information to:

- Establish the gaps or differences between the provincial socio-economic profile, and
- Establish where different socio-economic groups should be located in order to achieve integration.

### 5.3.3 Components of an integration strategy

The first step in addressing integration is establishing where the most appropriate location for such projects and initiatives would be. To this end, it is advisable to understand and establish a spatial structural logic of the settlement (this can occur in the municipal SDF or in more detailed settlement plans). Integration should be concentrated:

- In defined **integration spaces** in order to create spaces where social integration can occur (e.g. public spaces, institutions and facilities);
- Along **public transport routes** in order to improve access to opportunities, services and facilities; and
- In relation the **major urban functions** (for example concentrations of non-residential urban functions including recreational, employment, commercial land uses) in order to improve access to urban opportunities.



Integration along public transport routes (left) and segregation (right)

Source: Jan Gehl (2001) "Life between buildings"

It is proposed that integration can occur in two ways, though:

- Macro urban restructuring in planned locations between fragmented settlements (town and township), and
- Micro urban restructuring in planned locations (integration strategy areas) within settlements, and in public spaces (integration spaces) where people lived their public life, and on a case-by-case basis within settlements.

#### **a Macro Urban Restructuring: Town-township integration zones**

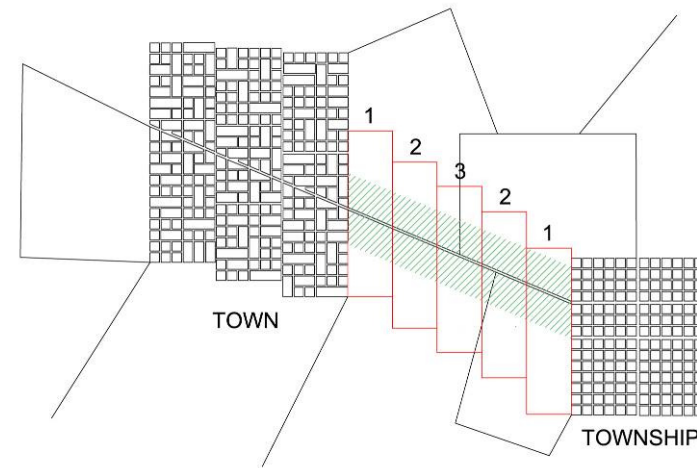
Although densification is desirable, there may be cases where densification of a settlement is sacrificed in order to achieve integration. South African settlements are characterised by a fragmented settlement pattern where townships were built on the periphery of the historical settlement in order to achieve separation along racial lines. This is a pattern that to a greater or lesser degree persists in our settlement pattern.

In order to redress this spatial inequality and achieve integration, town and township should be allowed to spread, in a controlled manner, towards each other. This may impact negatively on the overall density of settlements. Integration zones along transport routes connecting the two settlements should be identified as areas appropriate for development. The amount of land to be released and the phasing of the land should be clearly defined in order to successfully manage the development.

#### **Criteria of a town-township integration zone**

- Phasing: release land adjacent to existing development first,
- Amount of land: identify extent of land along the corridor to be released,

- Locational criteria: located along, or in close proximity to nodes and corridors.
- Functional criteria: location in proximity to transport routes and public services and facilities

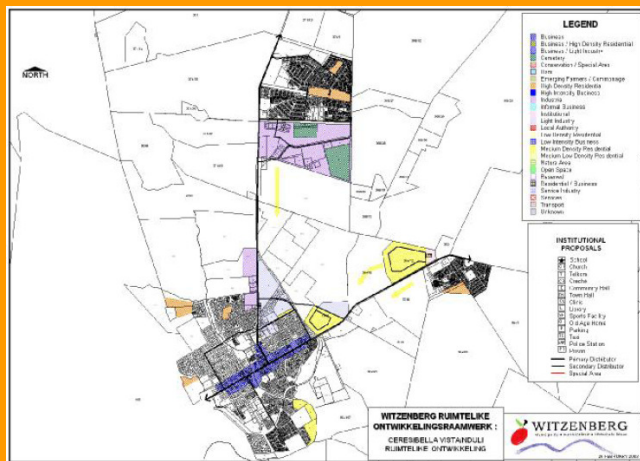




### Case Study: Ceres – Nduli

Nduli is located north-east of Ceres. Ceres is the historical previously white town, while Nduli is historically a coloured dormitory town. An urban edge has been drawn around Nduli and Ceres in order to contain growth and improve densification, however, the urban edge has not been fixed (i.e. is not permanent) along the south-west of Nduli and north-east of Ceres in order to allow for the town and the township to grow together over time.

Land abutting the connecting road is being release for urban development. There is a demand for gated communities to be developed along this route. The municipality has been allowing the development of gated communities, on condition that the development takes direct access off the road.



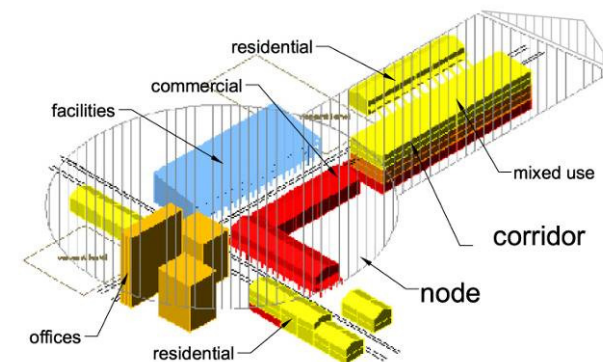
### b Micro Urban Restructuring

#### i Establish integration strategy area

Integration strategy area refers to areas where physical and/or socio-economic integration is desirable. These areas should be delineated as part of the municipality's spatial development framework (SDF), densification study or local area plan.

Potential target areas for integration strategy areas include vacant and underutilised land parcels:

- Located along, or in close proximity to nodes and corridors,
- Land located adjacent to, or in close proximity to public/social facilities (as integration spaces),
- Land located along public transport routes or in close proximity to public transport interchanges
- Located adjacent, or in close proximity to public space,
- Strategic publicly owned land parcels, and
- Urban restructuring zones ([click here](#) for more information on designating restructuring zones), urban development zones ([click here](#) for more information on use of urban development zones to promote integration) and urban renewal zones.



These land parcels are usually located within existing urban settlements, often economically or physically declining or static areas. However, this does not preclude integrated development from occurring in greenfields developments on the periphery of settlements. Nevertheless a distinction is made between integration zones (delineated within urban settlements) and greenfields development as different implementation tools/instruments apply to these varying locations.

The benefits of delineating integration zones include:

- Sending out a clear message to developers regarding where this form of development will be viewed favourably,
- Providing input into forward planning of other line functions (for example, bulk and water services plans) and thereby guiding spending, and
- Enabling financially feasible upgrading of reticulation services (if an area is targeted, development contribution levies can be co-ordinated and disruption to the area coordinated).

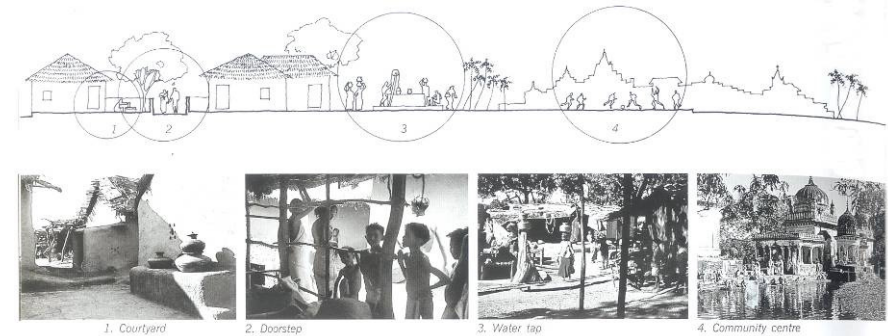
**And/or**

### *ii Integration Spaces*

One approach to achieving socio-economic integration is to focus spending on the public facilities and elements within a settlement. This approach can take two forms:

- Firstly, by improving the quality of public urban space as places of gathering and interaction (investing in elements for use by everyone). These public elements also become urban elements where new, mixed use development can 'clip on'.

- Secondly, through providing social services and facilities in the poorer areas of a settlement. Social services and facilities, such as Home Affairs, Police Stations, [Thusong Service Centres](#) etc, are utilised by all socio-economic groups. By locating these facilities in poorer community they are accessible to all, and closer to those who do not have access to private motorised transport, and encourage higher income groups to enter lower income areas.



Integration Spaces, source: Charles Correa (2000) "Housing and Urbanisation"

**And/or**

### *iii Case-by-case basis*

Assessing and allowing integration to occur on a case-by-case basis will allow integration to occur outside integration strategy areas and focus





development away from the urban fringe.

Click here for [criteria to access suitability for integration](#)

Click here for relevant [WCPSDF policy relating to integration](#).

### **c Guiding Locational criteria for integration**

Some locations within a settlement may be more appropriate for intervention than others in order to achieve the objective of integration. Locational decisions around permanent infrastructure to support achieve integration should include:

*Movement and Access:* Intervention areas (macro, micro or case-by-case) should be accessible locations. These areas should be accessible to the broadest range of people possible rather than one neighbourhood. As such, exposed locations close to public transport routes along which activity occurs are preferred above internalized locations embedded deeply in residential areas. Where possible integration interventions should be associated with a public transport stop or interchange that is a focus of movement.

*Clustering (Existing or emerging nodes of activity):* Linked to the location of integration interventions at accessible locations is the need to focus on clustering of interventions. This will also promote easy access to services and other opportunities. Existing or emerging nodes of activity within a local area are thus key informants to where integration initiatives might be located.

## **5.4 Inputs and linked activities**

### **5.4.1 Spatial development framework**

The spatial development framework should clearly identify:

- Integration strategy areas (areas where integration should be targeted),
- Urban development zones,
- Urban restructuring zones (refer to [Toolkit 20](#)), and
- Areas where densification is desirable.

### **5.4.2 Vacant and underutilised land audit**

The vacant and underutilised land audit will inform where there is potential for integration.

### **5.4.3 Densification study**

The densification strategy will provide guidelines on how and where integration can take place within the urban edge.

### **5.4.4 WCPSDF Explanatory manual and policy on Inclusionary Housing**

The Western Cape is gearing up to introduce an inclusionary housing requirement in new residential developments in line with the national initiative. The WCPSDF Inclusionary Housing Discussion Document (2009) should be referenced for guidelines in this regard.

#### 5.4.5 Zoning scheme

Zoning schemes are critical to supporting integration. The zoning scheme provides the mechanisms for achieving integration (infill, inclusionary housing, mixed erf sizes, vertical and horizontal mixed uses, etc). Refer to the Frequently Asked Questions section ([5.5.8](#)) for detail on land use management mechanism to allow for mixed use development.

In addition the zoning scheme could provide for overlay zones in areas where integration will be promoted – such overlay zones could help with simplifying consultation requirements, relaxing building lines and other constraints to integration, as well as provide clear guidance to the market as to where to focus their attention.

Click here for additional information on:

- [overlay zones and flexible zoning](#)
- [Generic infill overlay zone to accommodate mixed use development](#)

### 5.5 Common Issues and Frequently Asked Questions

#### 5.5.1 How can we overcome conflict between the overlay zoning and the existing zoning scheme?

In order to avoid conflict between the overlay zone and the provisions of the existing zoning scheme, it is advisable to provide a clause in the integrated zoning scheme stating that “in the case of conflict among regulations, the more flexible standard shall apply”.

#### 5.5.2 Development will consist of big erf, small erf, big erf, etc?

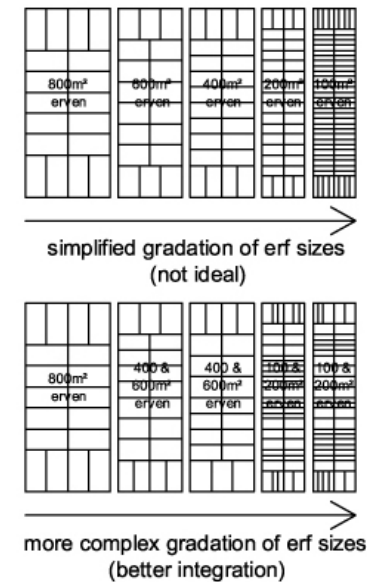
The overarching goal of integration is to achieve a balance of incomes and uses. Government subsidised housing to date has concentrated the poorest of the poor in one place, creating instant ghettos. A balanced development includes a variety of housing types at a variety of prices. The most effective way to provide for a variety of incomes within one development (be it infill development or greenfields development) is through providing a variety of erven sizes, making the development affordable to a wider mix of income groups.



A mix of erven allows for a mix of uses and incomes

The aim of developing a mix of property sizes within one development is to allow for a wider range of income groups within a development, rather than creating enclaves of rich within the municipality. This does not translate into locating large erven adjacent to very small erven. There should be small differences, not large gaps, between the different sectors of a community living in close proximity to one another (the principle of a socio-economic gradient). In other words, there should be a gradation of erf sizes, grouping erven of similar size next to one another.

Refer also to [Toolkit 17](#) for design guidelines for integrated development initiatives.



## Case Study: Stellendale Village

### Background

- The original target market for a private development along the Stellenbosch Arterial in Kuils River was buyers earning R12 000,00pm+.
- The provincial Department of Local Government & Housing owns land adjacent to development (approx 15 % size of total dev), that is well-situated in terms of accessibility and facilities.
- The intention is to include the DLG&H's land in the project as a lever to accommodate 'GAP' housing.
- The DLG&H aims to source beneficiaries from City's housing needs database, corporate employees, and a percentage of qualifying government employees.



### Mechanisms/innovative approach

- The agreement between the DLG&H and the developer:  
The developer will provide a number of 'GAP' housing units, equal to that which could potentially be obtained from the Department's property, to be spread over the whole of the project. The DLG&H will look at recovering a nominal portion of the value of land from GAP beneficiaries, while using the value of the property to lower the selling prices of the houses to them. The DLG&H is playing financial services providers (banks) up against each other to get the best financial package available for the GAP client.
- Although smaller, (approximately 43 m<sup>2</sup>), the external features of GAP houses will be the same as rest of the development.
- Intense involvement of the surrounding communities in the project. The community is in full support of this initiative, and is actively participating in the planning and implementation of the project.

**Emerging lessons**

- **Partnerships:** Innovative partnership arrangements can have integration benefits (with land used as a tool to leverage social housing) and increase the asset value of housing for the poorer market.
- The project will cater for a mix of income groups – this is easier to achieve in partnership with the private sector than what the Department would have been able to do on its own with its land.
- **Design:** A mix of income groups can be accommodated in the same development – facades, streetscapes, public environment are critical to maintain the value of properties.
- **Role of government:** Where government gets involved and active in the (private) development process, it can achieve policy objectives by taking on non traditional roles of 'negotiator' and 'deal maker'.
- **Timing:** Ideally negotiations should have started earlier, before the standard of the development was set. At the moment it is only possible to accommodate people in the R6000 pm income bracket, (though DLG&H aim also to accommodate those from R3500 pm).

**5.5.3 What if subsidy housing and social housing cannot be provided onsite?**

Although it is desirable, in some cases it may not be possible to locate subsidy and/or social housing onsite. There are a number of reasons why it may not be possible to locate the mix of housing on site:

- Size of the site: the site may be too small
- Financial feasibility
- Lack of public transport and access to amenities: High income residents have a higher reliance on private cars. It is conceivable that a development may be isolated and inappropriate for including social/subsidy housing.

However, by locating the housing off site, the aims and objective of socio-economic integration are unlikely to be achieved. Therefore, providing the mix of housing off site should not be encouraged.

See [Toolkit 21](#) for guidance on how to assess where subsidy and social housing opportunities should be located in relation to the site.

**5.5.4 Are there any financial instruments available to encourage integration?**

By aligning integration strategy areas with urban development zones (UDZ) financial incentives can be utilised to achieve integration goals and objective. The Income Tax Act (58 of 1962) permits owners/developers to write off building costs against the income of businesses in promulgated UDZ areas. The UDZ tax incentive is generally directed at the stimulation of capital investment in buildings, especially in declining or stagnating urban areas with the objective of urban regeneration and business district revitalization, including economic development and the creation of opportunity for the urban poor.

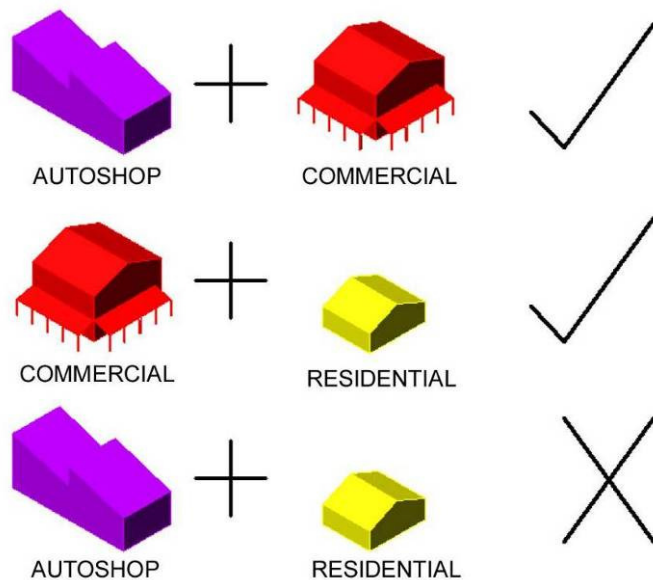


Refer to [Toolkit 19](#) for more information on Urban Development Zones.

### 5.5.5 Incompatibility and scale of integration

Good design cannot disguise rudimentary incompatibilities in uses and scale.

In order to achieve physical and socio-economic compatibility projects should be of similar or sympathetic socio-economic gradients, uses and scale with the surrounding neighbourhood. Densification and integration projects have the potential to fix the problems that exist in existing neighbourhoods. New developments (infill or greenfields) must also refer to the surrounding area and street, not just the erf.



### 5.5.6 Overcoming NIMBYism

People are generally resistant to change. People in an established community may object to a development for a number of reasons, such as:

- Design compatibility and housing type,
- Perceived impact on property values,
- Increased density,
- Parking and traffic,
- Perceived strain on public facilities, and
- More or different people moving into the community.

The key to overcoming NIMBYism is the education of and negotiation with receiving communities about the proposed development and its benefits. These engagements should provide specifics about the development and use understandable examples that illustrate the intended results.

### 5.5.7 Generally, what land use management mechanisms can be used to allow for mixed use development?

Further to the allowances contained within a Section 7 zoning scheme (or where applicable, Section 8), the following land use management mechanisms allow development within the urban edge by way of rezoning, subdivision, departure and consent policies:

#### *i Additional dwelling units by consent in terms of the Section 8 Zoning Scheme*

Additional units are allowed as set out in the definition of additional dwelling units as follows:

“... dwelling units that may be erected with the consent of the Council on a land unit in agricultural zone I or residential zone I; provided that the units shall remain on the same cadastral unit as the primary unit; provided

further that in residential zone I the unit shall be smaller than the primary unit ...”

#### *ii Double dwelling*

In the Cape Town Zoning Scheme<sup>16</sup>, for example, a double dwelling is permitted in the following zonings as of right, i.e. Intermediate, Grouped Dwelling, General Residential, Special, General Business and General Commercial.

#### *iii Second dwelling unit*

In terms of Provincial Notice 1047/1998, a Council may, in respect of any land unit falling within a Section 7 zoning scheme and on which there is the right to erect one dwelling house, grant an application for a departure for the erection a second dwelling unit, which could be used for income generation, subject to conditions.

#### *iv Occupational practice*

Many Section 7 zoning schemes allow an occupational practice or subsidiary use, such as for the conduct of a profession or specific trade or the practising of art, as a primary right within residential premises, subject to conditions.

#### *v Guest accommodation*

As determined by the zoning scheme, guest accommodation is permitted either as of right in respect of any zoning in which a residential premises is permitted, or as a consent use, departure or even rezoning, as determined by the scale of the proposed establishment.

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<sup>16</sup> Please note that reference to the Cape Town Zoning Scheme refers to the former area of jurisdiction of the pre-Interim Cape Town Municipality and not to the Interim-era Cape Town Substructure or the Current (Greater) Cape Town.

#### *vi House shop*

A house shop, also called a mobile shop, tuck shop or spaza shop, is also permitted either as a consent use (as with the Cape Town Zoning Scheme) or as a departure from the zoning scheme.

#### *vii Liquor outlet*

In terms of the proposed Provincial Regulations (Section 47 of the Land Use Planning Ordinance), any person who is permitted to operate an informal liquor outlet, in terms of the Liquor Act, can apply to Council for a consent use to operate such an enterprise on a residential property. Council will, however be required to evaluate the individual merits of each application, taking the following into account, i.e. location, surrounding land uses, anticipated impact on neighbours, noise, parking and traffic requirements, safety and health regulations and any other considerations as determined by the Council. Furthermore, both consent use applications and applications for a liquor license are required to follow a thorough public participation process in terms of the Land Use Planning Ordinance and the Liquor Act.

#### *viii Layering*

Although residential uses are only permitted as a consent use within business zonings in terms of the Section 8 Zoning Scheme, the Section 7 zoning schemes generally permit such uses as a primary right, thereby encouraging the layering of land uses on a single property, with business on the ground floor and residential uses on subsequent floors.

#### *ix Densification*

Current planning philosophy advocates, amongst other goals, management of sustainability, creating quality urban environments,



containing sprawl and attaining residential intensification and urban integration. Densification, as the process whereby residential densities are increased in a planned and meaningful manner within existing boundaries, serves as a mechanism to achieve the above objectives. Densification, particularly along activity corridors and spines and in nodes, is advocated in order to encourage the integration of public transport facilities, social and employment opportunities and residential functions and to attain the required density thresholds for the provision of efficient transport and other urban services.

#### *x Informal Residential Zone*

The Section 8 Zoning Scheme furthermore allows for an Informal Residential Zone, which permits any occupier of any unit of accommodation to utilise such unit for social, educational, religious, occupational or business purposes, subject only to the condition that the dominant use of the property remain residential, the use shall not be disturbing and the use shall not interfere with the amenity of the neighbourhood.

#### *xi Special Zone*

Zoning schemes can also make provision for a Special Zone, if special factors justify the creation of a new zone in the scheme regulations. A Special Zone may provide for a combination of different land uses, provided the land use restrictions are coordinated.

#### *xii Consent use*

The respective Zoning Schemes allow additional development rights, by way of consent use applications. Furthermore applications for departures can be submitted in terms of Section 15 of the Land Use Planning Ordinance, 1985 (Ordinance 15 of 1985).

#### *xiii Provincial Zoning Scheme Model By-Law*

The Provincial Zoning Scheme Model By-Law, which may be adopted by municipalities, includes the following, amongst others:

- The Council may prepare, review and amend overlay zones for specific areas in the municipality with the objective of giving expression, in a planning context, to the local needs and values of the communities concerned and promoting particular types of development, urban form, landscape character, environmental features or heritage values.
- Permits limited employment and additional accommodation opportunities as primary, secondary or consent uses within residential zones, provided that the dominant use of the property remains residential and the impacts of such uses do not adversely affect the quality and character of the surrounding residential environment.
- Permits home occupation as a primary right.
- Permits second dwellings and double dwelling houses and numerous economic opportunities, such as bed & breakfast establishments, guest houses and accommodation for lodgers, day care centres, house shops and taverns etc. with Council's consent.

The business zones are designed to provide locations for a wide range of economic activities and to include mixed land uses such as residential and community development. Different business zones permit different levels of development intensity.

### 5.5.8 Can lack of consistency and streamlining in policy hamstring integration?

Alignment and consistency between departmental policies with regard to integration strategy areas is essential for streamlining and allowing appropriate and desired development in these areas. Lack of alignment between policies can have the unintended effect of placing a de facto moratorium on development in integration strategy areas. Officials need to be satisfied that they will have a sufficient degree of latitude or flexibility that they can apply to proposed desirable developments with regard to municipal policy.

#### Case study: Flexibility in design and commonly accepted physical form, Usasazo Secondary School, Khayelitsha

PGWC Department of Transport and Public Works commissioned [Noero Wolff Architects](#) to design a secondary school consisting of 37 classrooms, a library, a computer room, hall, administration section and a training facility for entrepreneurs.

The school is located in an informal settlement area, where land is in high demand. The school has a small building footprint, placed to the side of the site, leaving the remaining land for a communal sports field and productive agricultural use. Typically schools are located in the middle of an erf, effectively sterilising the remainder of the property.

Innovative design features include:

- L-shaped building protecting the open spaces from the strong directional winds and wind driven sand.
- The roof lights are shaped to improve natural ventilation in summer

- The classrooms on the street edge are designed to be used for entrepreneurial teaching with hatches that open to the street to allow interaction with the public.
- The school building formalises the street character of this area creating a strong façade and positive interface.
- Central circulation space, filled with trees and benches, to receive its many users.
- The double volume of the library with its U-shaped wall of books becomes a celebration of academic study.



## 6.0 TECHNICAL MODULE

### 6.1 Definitions & Terminology

**Activity corridor:** A linear zone of development along a public transport route. Public transport facilities and mixed land uses (residential, commercial, industrial and recreational activities) are focused here. High density development is usually located immediately adjacent to the central road.

**Additional dwelling unit** means a dwelling unit which may be erected with the consent of the Council on a land unit where a dwelling house has already been lawfully erected, provided that-

- The additional dwelling unit shall remain on the same cadastral unit as the dwelling house,
- The additional dwelling unit shall have a lesser floor area than the dwelling house,
- The additional dwelling unit shall comply with the other requirements specified in these regulations;
- On a land unit in the Agricultural Zone the total number of dwelling units, including the main dwelling house, farm worker housing and any additional dwelling units, shall not exceed a density of one dwelling unit per 10 ha, subject to a maximum of five additional units per land unit; and no additional dwelling unit shall be erected within 1 km of the high water mark.

**Affordable/GAP housing:** Affordable/"GAP" housing refers to housing opportunities targeting income groups that do not traditionally earn enough to qualify for a bond from private financial institutions, but who earn too much to qualify for a housing subsidy. This generally refers to the income group earning between R3 500 and R10 000 per month.

**Agricultural industry:** An enterprise for the processing of agricultural products on or close to the land unit where these agricultural products are grown or produced, and where processing in such proximity is necessary due to the nature, perishability and fragility of such agricultural products, and includes, inter alia, farm packing stores, but does not include service trades.

**Agriculture:** The cultivation and/or utilization of land for crops and plants, or the keeping and breeding of animals, or the operation of a game farm, including use on an intensive basis of the natural veld or land, and includes only such activities and buildings as are reasonably connected with the main farming activities, but excludes an agricultural industry.

**Agricultural / Rural Area:** An area utilised for low-impact agricultural activities (such as wildflower harvesting, for natural grazing or cultivated grazing, or for commercial crop cultivation). Agricultural areas incorporate development needed to support agriculture (such as irrigation dams, farmhouses and other infrastructure).

**Brownfields** A parcel of land that has been previously developed or partially developed for an urban purpose.

**Buffer** Any area that keeps two or more other areas apart from one another. A buffer zone usually surrounds, or adjoins the core area and 'protects' the core area against consumptive human activity.

**Cadastral units:** surveyed and registered land units.

**Carrying Capacity** supportable population or amount of development, given available resources.

**Celebration urban edge:** non-negotiable edge aimed at celebrating the interface between the urban areas and the rural areas containing natural environments, farmland and areas of scenic or cultural value.

**Coastal urban edge:** non-negotiable urban edge that is the interface between the urban areas and the coastal area/zone.

**Compaction:** The process of consolidating and improving the use of space within the urban edge through increasing the intensity of use and density.

**Core:** A Core area is a (statutory protected) site designated for conserving biodiversity, monitoring ecosystems, and non-disruptive, non-consumptive land-uses, such as outdoor recreation, bench-mark research, and environmental education.

**Containment:** The concept of limiting sprawling development on the urban periphery.

**Containment urban edge:** an urban edge drawn tightly around urban anomalies (e.g. golf and polo estates, forest stations) where further development and densification is undesirable.

**Consent:** means special permission granted by the Municipality, after due consideration of all relevant facts and after following a reasonable and lawful process, in terms of which a specific type of land use or activity is permitted, in addition to the primary use rights applicable to the property concerned.

**Consent use:** in relation to a particular zone means an additional use right or a variation of a development management provision that is permitted in terms of the rules that apply to that particular zone, only with the prior consent of the Municipality.

**Credible urban edge:** a well considered urban edge delineated through an urban edge study, using demarcation criteria, that allows for sufficient land within the urban edge to (i) accommodate growth whilst at the same time (ii) promoting integration and densification goals and (iii) protecting conservation-worthy, productive land and valuable landscapes.

**Cultural heritage** means any place or object of cultural significance and the intangible aspects of inherited culture and includes all archaeological artefacts, palaeontological material and heritage resources and living heritage, as defined in section 2 of the National Heritage Resources Act, 1999 (Act 25 of 1999).

**Densification:** the process whereby residential densities (dwelling units per hectare) are increased in a planned and meaningful manner within existing boundaries of a specific area.

**Departure**, in relation to a zoning scheme, means:

a variation in respect of an identified land unit of a development rule that would otherwise apply to that land unit by virtue of its zoning that has been authorised by the Municipality in accordance with their zoning regulation or is expressly required by a provision of these regulations; or a right granted by the Municipality in accordance with their zoning regulation, which authorises a person for a limited period to use land for a purpose that is not provided for in the zoning that applies to that land;<sup>17</sup>

**Dwelling unit** means a self-contained inter-leading group of rooms with not more than one kitchen, used for the living accommodation and housing of a single family, together with such outbuildings as are ordinarily used therewith.

**Ecological Corridor:** narrow continuous areas of complimentary vegetative habitat that allow the movement of fauna and flora along them.

**Erf** means a portion of land registered or capable of being registered in a deeds registry.

**Environmental management plan** means an operational plan which organises and co-ordinates mitigation, rehabilitation and monitoring measures in order to guide the implementation of a development and its on-going maintenance after implementation.

**Farm dwelling:** a house located on a farm and occupied by a person who is principally engaged in intensive or extensive farming activities, or it is a dwelling customarily provided in conjunction with a farm use.

**Greenfields:** a parcel of semi-rural property that is undeveloped except for a rural/agricultural use.

**Gross density:** a measure of the number of dwelling units in a specified area, and is calculated, as follows: Total number of dwelling units in a specified area/ Extent of the specified area in hectares. Gross density calculations for settlements can exclude major functional space extensive land uses, such as:

- An airfield
- Safety circles around infrastructure, such as nuclear power plant safety circles and regional landfill site buffers
- Major public spaces such as river corridors and large urban parks.

<sup>17</sup> The LUPO definition reads: "'departure" means –(a) an altered development rule -  
(i) approved in terms of section 15(1);  
(ii) imposed by virtue of a condition in terms of any provision of this Act, or  
(iii) which is lawful in terms of any provision of this Act, or  
(b) a use right granted on a temporary basis in terms of section 15 [application for departure].

**Growth management urban edge:** an edge boundary that is delineated to accommodate growth within a certain timeframe or until certain growth management goals (e.g. desired density) has been achieved.<sup>18</sup>

**Infill:** the development of vacant or underutilised land within existing urban areas.

**Integration:** The process of abolishing socio-economic and land use segregation.

**Integration spaces:** public spaces, facilities and elements where people live life their public life creating places where integration can occur.

**Integrated Settlement:** a settlement containing a mix of land uses and/or income groups in the same general area – this form of development contributes significantly to creating a “whole”, functional urban area or centre.

**Interface** refers to the meeting of type land uses.

**Maverick Urban Edge:** a ‘maverick’ edge is a wide edge that does not take cognisance of growth management and integration goals.

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<sup>18</sup> This refers to the notion put forward in the PGWC: Provincial Urban Edge Guidelines to prioritise segments of the edge (PGWC: Provincial Urban Edge Guidelines, 2005).

**Mono-functional urban development:** urban development that is dominated by one land use (in other words, the opposite of integrated or mixed use development).

**Natural Area:** a natural area is characterised by undisturbed natural conditions. These areas would typically comprise mainly indigenous species (flora and fauna). In general natural areas are characterised by high conservation value due to their biophysical characteristics and the scenic appeal.

**Nett density:** the density for a specific area, calculated by deducting land set aside for ancillary uses such as open spaces and streets, from the total area.

**Nodes:** concentration of mixed use and commercial activity.

**Non-urban Use<sup>19</sup>:** agricultural uses, open space uses, conservation areas, transport zonings, etc refer to the use of the land rather than buildings erected on the land in order for the use to occur. The decision on whether a use is urban or non-urban should be primarily based on the use of the property, i.e. for the generation of primary income (urban agriculture or bona fide agricultural use) or whether it is merely a low density residential use (more than 1du/10ha) where the owner of the property generates a primary income by working elsewhere and augmenting the primary income by keeping live stock or the planting of crops.

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<sup>19</sup> PGWC, DEA&DP: Urban Edge Guidelines, 2005.

**Overlay zone:** means a zone that is applied in addition to an existing zone and that has the effect of varying or adding to the development control rules imposed by the underlying zoning and “overlay zoning” has a corresponding meaning.

**Permanent Edge:** a ‘permanent edge’ is ‘non-negotiable’. It is aimed at protecting valuable natural environments, farmland and areas of scenic or cultural value (identified no-go areas)<sup>20</sup>.

**Sustainable development** means using, conserving and enhancing the environment so that ecological processes on which life depends, are maintained, people are able to enjoy a good quality of life now and in the future, and the well-being of the whole community is improved.

**Subsidy housing:** subsidy housing refers to government/ state provided housing opportunities for low income households.

**Panhandle property:** means an erf that is configured with a narrow panhandle portion forming an access corridor to the bulk of the erf which is located behind the bulk of other erven or land units.

**Resort Development<sup>21</sup>:** holiday or recreational resorts which carry (or require) a resort zoning. A resort is frequented by tourists, holidaymakers and members of the general public to access a unique resource. In the

case of a resort development outside an urban edge, the resource must be inseparable from the resort development.

**Resource<sup>22</sup>:** A resource is

- A natural feature that includes physical amenities (e.g. hot spring, sandy beach, lake, lagoon or river). This is the most common form of resource,
- An existing or established man made feature (e.g. historic battle field, rock art) of major regional or provincial significance or with a complementary natural feature (as described above),
- A property/area that is distinct /favourable above all others in the area,
- Of high value to many holidaymakers, who spend more than one day there,
- Access is beneficial to the general public.

**Rural Development Densities<sup>23</sup>:** residential densities outside the Urban Edge less than or equal to 1du/10ha.

**Urbanisation:** the increase in the population of cities in relation to the rural hinterland’s population.

**Urban Agricultural Land:** land currently utilised for agriculture, or with medium to high agricultural soil potential.

<sup>20</sup> A permanent edge is similar to a hard edge, as defined in the PGWC: Provincial Urban Edge Guidelines, which states that hard edges are drawn where an absolute restraint on development is essential (PGWC: Provincial Urban Edge Guidelines, 2005).

<sup>21</sup> PGWC Guidelines for Resort Developments in the Western Cape, 2005

<sup>22</sup> PGWC Guidelines for Resort Developments in the Western Cape, 2005

<sup>23</sup> PGWC, Provincial Spatial Development Framework 2005.



**Urban Sprawl:** This form of urban development commonly takes the form of low-density (single dwelling units) suburban development and could result in a discontinuous pattern of development; it is undesirable because of the following direct and indirect consequences:

- An increase in the costs of infrastructure provision.
- Inefficient operation, maintenance and management of services and community facilities.
- Poor use of vacant land and poor definition of public open space.
- The ability to operate a viable public transportation system is reduced considerably due to the low population density and high dependence on private vehicles.
- Accessibility is reduced for those, such as the poor, the youth and the aged, who have limited access to private transport.
- An increase in air pollution due to the increase in car usage.
- Loss of a 'sense of community' because the cohesiveness and identity of urban areas tend to decline with decreasing densities and increasing privatisation of individual private spaces.
- Loss of the 'green and rural' visual character of an area.
- Loss of productive farmland. Even land regarded as marginal in terms of agricultural potential could contribute towards a diverse local economy and add to food production in a region.
- Urban spill-over effects could result in farming operations being less profitable, causing farmers to disinvest and even abandon farming operations in anticipation of urban development.

**Urban Reserve:** The area, within the urban edge, earmarked to accommodate further urban growth.

**Urban Edge Management Zone:** The area on both sides of the urban edge boundary, including the urban reserve. Appropriate policies and strategies are required to manage this area in order to realise the overall objectives of the urban edge and the SDF.

**Urban Development**<sup>24</sup>: urban development includes all erven zoned and used for residential (greater than or equal to 1du/ha), business, commercial, industrial, institutional and service uses, i.e. zonings where the primary use would be the construction of a building and the use of the property by building development, as opposed to the potential for use of the property with no building development<sup>25</sup>.

**Urban Development Density**<sup>26</sup>: Residential densities inside the Urban Edge greater than or equal to 1du/ha.

**Urban Development / Built Environment:** An area typically containing a predominance and variety of built structures and infrastructure, where densities are more than or equal to 1du/ha.

**Urban development zones:** An area, declares in terms of the Revenue Laws Amendment Act (Act 45 of 2003), where developers can receive tax incentives as outlined in the Income Tax Act (Act 58 of 1962).

24 PGWC, DEA&DP: Urban Edge Guidelines, 2005

25 As defined by PGWC, DEA&DP: Urban Edge Guidelines, 2005

26 PGWC, Provincial Spatial Development Framework 2005.

**Urban restructuring zones:** An area defined in terms of the National Social Housing Policy (2005) and the Social Housing Bill (2006) to accommodate subsidised social housing.

**Zone** when used as a noun, means land which has been designed for a particular zoning, irrespective of whether it comprises one or more land units or part of a land unit; or when used as a verb in relation to land, means to designate that land for a particular zoning.

**Zoning**, when used as a noun, means a category of directions regulating the development of land and setting out the purposes for which the land may be used and the land use or development rules applicable in respect of the said category of directions, as determined by relevant zoning scheme regulations.

## 6.2 Acronyms

CRUP	Community Residential Units Programme	PPP	Public Private Partnership
DEA&DP	Department of Environmental Affairs and Development Planning (Western Cape)	P.N.	Provincial Notice
DLG&H	Department of Local Government and Housing (Western Cape)	PT	Public Transport
DoA	Department of Agriculture (Western Cape)	NDoH	National Department of Housing
Du/ha	Dwelling unit per hectare	NEMBA	National Environmental Management: Biodiversity Act (Act 10 of 2004)
EEDBS	Enhanced extended discount benefit scheme	NHRA	National Heritage Resources Act (Act 25 of 1999)
EIA	Environmental Impact Assessment	NSDP	National Spatial Development Perspective
FAQ	Frequently Asked Question	MSA	Municipal Systems Act
GIS	Graphic Information System	NGOs	Non-Governmental Organizations
GLA	Gross Lettable Area	RZ	Restructuring Zones
HIA	Heritage Impact Assessment	UDZ	Urban Development Zone
Ha	Hectares (1 Ha = 10 000sqm)	WCPSDF	Western Cape Provincial Spatial Development Framework
HWC	Heritage Western Cape		
IDP	Integrated Development Plan		
IEM	Integrated Environmental Management		
I&APs	Interested and Affected Parties		
KBD	Khayelitsha Business District		
NIMBY	Not in my backyard		
SAHRA	South African Heritage Resources Agency		
SDF	Spatial Development Framework		
PDI	Previously Disadvantage Individuals		
PGWC	Provincial Government Western Cape		
POS	Public Open Space		

## 6.3 General Provisions

This section refers to requirements or proposals that are applicable to more than one of the land use management tools or integration strategies.

### 6.3.1 Public Participation Process

The policies and tools promoted by this document mark a departure from past patterns of development; as such they are likely to elicit opposition from affected communities and individuals. It is critical that the municipality, based on the buy-in of its Council, undertake comprehensive public participation processes to explain the need and implementation of the new policies in order to allay the fears of communities, land owners and investors and to avoid delays in the implementation of the policies.

#### Legal Framework for Public Participation:

Public participation is fundamental to South Africa's democracy. Two key pieces of legislation that provide the framework for public participation are the Constitution Act (Act 200 of 1993) and the Municipal Systems Act (Act 32 of 2000).

With regards to public participation the Constitution states that:

“Section 151(1) (e) - obliges municipalities to encourage the involvement of communities and community organisations in local government.

Section 152 - the Objects of local government (are) to encourage the involvement of communities and community organisations in the matters of local government.

Section 195 (e) – in terms of the Basic values and principles governing public administration – people's needs must be responded to, and the public must be encouraged to participate in policy-making”

The Municipal Systems Act defines “the legal nature of a municipality as including the local community within the municipal area, working in partnerships with the municipality's political and administrative structures....to provide for community participation”. Section 16(1) requires the municipality to develop ‘a culture of municipal governance that complements formal representative government with a system of participatory governance’. According to the Systems Act:

Section 4 (c) (e) the council has the duty to...

- (c) Encourage the involvement of the local community
- (e) Consult the community about the level quality, range and impact of municipal services provided by the municipality, either directly or through another service provider

- 5 (a) Members of the community have the right...
- (b) To contribute to the decision-making processes of the municipality and submit written or oral recommendations, representations and complaints to the municipal council...
- (c) To be informed of decisions of the municipal council.
- (d) To regular disclosure of the affairs of the municipality, including its finances

Section 16 (1):

- (a) Encourage and create conditions for the community to participate in the affairs of the municipality, including in the IDP, performance

management system, monitoring and review of performance...preparation of the budget, strategic decisions re municipal services

(b) Contribute to building the capacity of the local community to participate in the affairs of the municipality and councillors and staff to foster community participation...

Section 42: A municipality, through appropriate mechanisms, processes and procedures ...must involve the local community in the development, implementation and review of the municipality's performance management system, and in particular, allow the community to participate in the setting of appropriate key performance indicators and performance targets of the municipality"

In addition the process and timeframes of public participation for a variety of activities are guided by varying legislation and policy. Legislation guiding public participation includes:

- The Environmental Impact Assessment ("EIA") Regulations promulgated in terms of section 24(5) of the National Environmental Management Act, 1998 (Act No. 107 of 1998) ("NEMA"),
- Section 2(i) of the Land Use Planning Ordinance, Ordinance 15 of 1985,
- The National Environmental Management Act (No. 107 of 1998) ("NEMA"), whenever the Government allows something to happen that may have a significant effect on the environment, it must promote public participation and take into account the needs, interests and values of all interested and affected parties, and
- Local Government: Municipal Planning and Performance Management Regulations (2001) under section 120 of the Local Government: Municipal Systems Act (2000).

### Basic Steps in the Public Participation Process

The steps in the public participation process may vary according to action being undertaken (i.e. delineation of urban edge, development of greenfields site, or redevelopment of brownfields site) and the legislation guiding the process. However, despite the process varying processes, a generic approach can be adopted.

**Step 1: Establish the relevant legislation, and associated timeframes, to guide the public participation process.**

**Step 2: Give written notice to all interested and affected parties:** this includes the municipal/ward councillor, owners and occupiers of adjacent land and owners and occupiers within 100m of the site or urban edge, and any organ of state who has jurisdiction on the proposed activity.

**Step 3: Place an advertisement:** An advert must be placed in at least one local newspaper; or any official Gazette; and in at least one provincial newspaper or national newspaper, if the activity has or may have an impact that extends beyond the boundaries of the local municipality in which it is or will be undertaken.

**Step 4: Register of Interested and Affected Parties (I&APs):** The person(s) managing the public participation process should open and manage a register of all interested and affected parties.

**Step 5: Comments by Interested and Affected Parties:** I&APs have the right to comment on all documents arising from the study.

**Step 6:** Compile a report, including all comments received: The person(s) managing the public participation process should record comments received from I&APs in report to be submitted to the competent authority

For more information on public participation, see the [Draft National Policy for Public Participation](#) (dplg, 2005).

### 6.3.2 Integrated Zoning Schemes

In order to facilitate urban restructuring, densification and integration, integrated zoning schemes should make provision for the following:

#### a Overlay zones

##### i *The purpose of overlay zones*

The Council may prepare, review and amend an overlay zone for specific areas with the objective of:

- Within a planning context, giving representation to the local needs and values of the communities concerned
- Promoting particular types and forms of urban development, landscape character, environmental characters and/or heritage issues.

##### ii *Procedures for establishing overlay zones*

In order to adopt or amend an overlay zone, the Municipal Manager must:

- Advertise the proposed adoption or amendment inline with the public consultation policy of the Council. Interested and affected parties (I&APs) must have the opportunity to object/comment in

writing to the Municipal Manager within a period of at least 30 days.

- Submit the proposed overlay zone/ amendment to the Council for consideration and decision
- Notify I&APs who submitted comments and objections of the council's decision
- Make the adoption/amendment of an overlay zone known via the press, making it know where the overlay zone can be viewed.
- Display the overlay zone.

The Council should review the overlay zone every five years.

##### iii *Identification and numbering of overlay zones*

- Each overlay zone and sub-zone must have a distinctive name and number
- The area of the overlay must be indicated on the zoning map

##### iv *Status of overlay zones*

- An overlay zone does not change the underlying zoning of the properties to which it applies, however, it may vary the development rules relating to these properties.
- The development rules of the overlay zone may be more restrictive of more permissive than those of the underlying zoning.

## 6.4 Resources

This section provides hyperlinks to additional readings and useful websites.

### 6.4.1 National and Provincial Departments

- [Department of Environmental Affairs and Tourism](#)
- [Department of Planning and Local Government](#)
- [Heritage Western Cape](#)
- [National Spatial Development Perspective](#)
- [Growth Potential of Towns](#)
- [Department of Water Affairs](#)
- [Department of Land Affairs](#)
- [Cape Nature](#)
- [South African National Botanical Institute](#)
- [National Department of Housing](#)

### 6.4.2 Legislation and Documents

- [National Heritage Resources Act](#)
- [Municipal Systems Act](#)
- [Policy for the establishment of agricultural holdings in the urban fringe P.N no. 415/2000](#)
- [Policy for the settlement of farmworkers P.N no. 415/2000](#)
- [Guidelines for resort developments in the Western Cape](#)

### a Making the Case

#### Liveable and sustainable settlements

- <http://www.liveable-city.org/frames/home/framer.htm>
- <http://www.liveablecity.org/>
- <http://www.sustainability.dpc.wa.gov.au/CaseStudies/LivableHoods/LiveableNeighbourhoods.htm>
- <http://www.sustrans.org.uk/default.asp?sID=1090834683408>

### b Vacant and underutilised land

The [Highland Council: Planning and Development Services](#): “[Policy and Information briefing note no 13: Housing and land audit](#)”

### c Urban Edge

<http://www.capetown.gov.za/edgeguidelinesmanual/default.asp>  
<http://www.capetown.gov.za/edgeguidelinesmanual/UrbanEdgeGuidelinesManualmay2004.pdf>

### d Integration

- Maryland Department of Planning, October 2001: Managing Maryland's Growth – Models and Guidelines for Infill Development  
[http://www.mdp.state.md.us/mgs/infill/InfillFinal\\_1.pdf](http://www.mdp.state.md.us/mgs/infill/InfillFinal_1.pdf)



## 7.0 TOOLKITS

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Toolkit 1: Template for the capturing of data for vacant and underutilised land parcels

Toolkit 2: Land to value ratio – an approach to identifying underutilised land

Toolkit 3: Terms of reference for a densification study<sup>27</sup>:

Toolkit 4: Methodology for Understanding the Demand for land

Toolkit 5: Land use management mechanisms to facilitate densification

Toolkit 6: Guidelines and design considerations for different forms of densification

Toolkit 7: Criteria for assessment of development applications resulting in densification

Toolkit 8: Criteria for assessment of development applications in areas of heritage significance<sup>28</sup>

Toolkit 9: Guidelines for engagement with Heritage Western Cape with regard to development applications

Toolkit 10: Criteria for redevelopment and/or preservation of open space (including public and private open spaces and natural areas)

Toolkit 11: Terms of Reference for an Urban Edge Study

Toolkit 12: Urban Edge Management and Interface Guidelines

Toolkit 13: Generic Interface Guidelines

Toolkit 14: Checklist for amendment of the urban edge

Toolkit 15: Overlay zones and flexible zoning

Toolkit 16: Criteria to access suitability for integration

Toolkit 17: Design guidelines for integrated development initiatives

Toolkit 18: Generic infill overlay zone to accommodate mixed use development

Toolkit 19: The use of Urban Development Zones to promote integration

Toolkit 20: Designating Restructuring Zones for social housing



Toolkit 21: Location of social and subsidy housing

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<sup>27</sup> Reference: Drakenstein Municipality 2005: "Drakenstein Open Space and Densification: First Draft November 2005"

<sup>28</sup>City of Cape Town 2005: Bergvliet – Meadowridge – Diep River Local Structure Plan

## 7.1.1 Toolkit 1: Template for the capturing of data for vacant and underutilised land parcels

<b>Municipality Name</b> <i>insert name</i>								
<b>Settlement/Town Name</b> <i>insert town name</i>	<b>Reference</b> <i>insert reference</i>	<b>Area (HA)</b> <i>insert area in hectares</i>						
<b>Location/Description</b>								
<b>Indicative Site Capacity from SDF or Density Analysis</b> <i>insert number of units</i>	<b>Dwellings Built</b> <i>insert previous financial year</i>	<b>Current year</b> <i>insert number of units</i>	<b>Current year +1</b> <i>insert number of units</i>	<b>Current year +2</b> <i>insert number of units</i>	<b>Current year +3</b> <i>insert number of units</i>	<b>Current year +4</b> <i>insert number of units</i>	<b>Current year +5</b> <i>insert number of units</i>	
<b>Constraints</b>								
<b>Site Type</b>		<b>Site Effectiveness</b>						
<input type="checkbox"/> Ownership <input type="checkbox"/> Physical <input type="checkbox"/> Contamination <input type="checkbox"/> Deficit Funding <input type="checkbox"/> Marketability <input type="checkbox"/> Infrastructure <input type="checkbox"/> Land Use	<input type="checkbox"/> Greenfield <input type="checkbox"/> Brownfield	<input type="checkbox"/> Effective <input type="checkbox"/> Constrained						<input type="checkbox"/> Underutilised
<b>Site Status</b>		<input type="checkbox"/> Under Construction <input type="checkbox"/> Complete						
<b>Bulk Services Information</b>		<b>Water Supply</b> <i>Capacity exists / does not exist</i>						
<b>Sewage/Wastewater Supply</b> <i>Capacity exists / does not exist</i>								

### 7.1.2 Toolkit 2: Land to value ratio – an approach to identifying underutilised land

The land to value ratio is a tool for identifying development opportunities of underutilised land. This tool takes into account the value of the land versus the value of the improvements to the land. If the value of the land exceeds the value of the improvements to the property, the erf should be considered for redevelopment.

This toolkit will supplement the vacant and underutilised land audit. It may not be possible to undertake a land to value ratio study for all urban areas within the municipality. The SDF should provide guidance on priority areas that can be targeted. This is a useful tool to guide densification and infill development.

#### a Inventory of buildings and property within a defined area.

Information required undertaking an inventory of buildings and property include:

- Database of land values
- Database of building or improvement values

The inventory should take cognisance of “soft” or subjective issues intrinsically increase the value of a building or erf to a community, such as heritage consideration or use (e.g. park).

Erft	Erft No.	Erft Name	Erft Description	Erft Type	Erft Area (m²)	Erft Value (R)	Erft Improvement Value (R)	Erft Land to Value Ratio	Erft Status	Erft Notes	Erft Photo	Erft Map	Erft Location
1	101 100	101 100	101 100	101 100	101 100	101 100	101 100	101 100	101 100	101 100	101 100	101 100	101 100
2	102 100	102 100	102 100	102 100	102 100	102 100	102 100	102 100	102 100	102 100	102 100	102 100	102 100
3	103 100	103 100	103 100	103 100	103 100	103 100	103 100	103 100	103 100	103 100	103 100	103 100	103 100
4	104 100	104 100	104 100	104 100	104 100	104 100	104 100	104 100	104 100	104 100	104 100	104 100	104 100
5	105 100	105 100	105 100	105 100	105 100	105 100	105 100	105 100	105 100	105 100	105 100	105 100	105 100
6	106 100	106 100	106 100	106 100	106 100	106 100	106 100	106 100	106 100	106 100	106 100	106 100	106 100
7	107 100	107 100	107 100	107 100	107 100	107 100	107 100	107 100	107 100	107 100	107 100	107 100	107 100
8	108 100	108 100	108 100	108 100	108 100	108 100	108 100	108 100	108 100	108 100	108 100	108 100	108 100
9	109 100	109 100	109 100	109 100	109 100	109 100	109 100	109 100	109 100	109 100	109 100	109 100	109 100
10	110 100	110 100	110 100	110 100	110 100	110 100	110 100	110 100	110 100	110 100	110 100	110 100	110 100
11	111 100	111 100	111 100	111 100	111 100	111 100	111 100	111 100	111 100	111 100	111 100	111 100	111 100
12	112 100	112 100	112 100	112 100	112 100	112 100	112 100	112 100	112 100	112 100	112 100	112 100	112 100
13	113 100	113 100	113 100	113 100	113 100	113 100	113 100	113 100	113 100	113 100	113 100	113 100	113 100
14	114 100	114 100	114 100	114 100	114 100	114 100	114 100	114 100	114 100	114 100	114 100	114 100	114 100
15	115 100	115 100	115 100	115 100	115 100	115 100	115 100	115 100	115 100	115 100	115 100	115 100	115 100
16	116 100	116 100	116 100	116 100	116 100	116 100	116 100	116 100	116 100	116 100	116 100	116 100	116 100
17	117 100	117 100	117 100	117 100	117 100	117 100	117 100	117 100	117 100	117 100	117 100	117 100	117 100
18	118 100	118 100	118 100	118 100	118 100	118 100	118 100	118 100	118 100	118 100	118 100	118 100	118 100
19	119 100	119 100	119 100	119 100	119 100	119 100	119 100	119 100	119 100	119 100	119 100	119 100	119 100
20	120 100	120 100	120 100	120 100	120 100	120 100	120 100	120 100	120 100	120 100	120 100	120 100	120 100

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<sup>29</sup> <http://johnson-gardner.com/>

**b Ratio map**

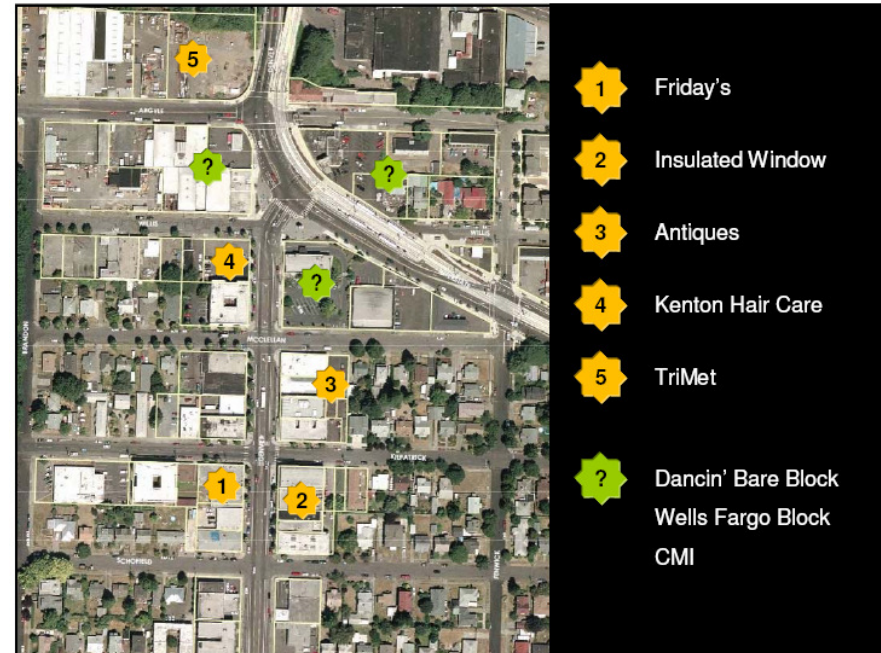


Once an inventory has been undertaken, the land value: improvement value can be mapped. This will spatially reflect areas or sites where there is a strong economic argument for demolition and redevelopment.

**c Development opportunities**

Based on the inventory and the ratio mapping exercise, development opportunities can be identified and marketed.

<sup>30</sup> <http://johnson-gardner.com/>



31

Additional resource:

Downtown Kenton Redevelopment Project

<http://johnson-gardner.com/>

<http://www.pdc.us/ura/interstate/kenton.asp>

<sup>31</sup> <http://johnson-gardner.com/>

**7.1.3 Toolkit 3: Terms of reference for a densification study<sup>32</sup>:**

1. Assess development potential of vacant and underdeveloped land within urban settlements with due regard to zoning, heritage, biodiversity, engineering services, housing demand, and local economic development (see also [audit of vacant and underutilised land](#)).
2. Identify areas suitable for urban growth.
3. Describe suitable development models with respect to space standards and norms, and density ratios.
4. Propose broad strategies and programs for implementation by Council, taking into consideration of financial, social and service delivery implications (Note: providing detailed site information and project description falls outside of the brief).
5. Take account of existing policies and those in the course of preparation, including the SDF, transport and housing plans, urban edge studies, services plans and heritage studies.

**a Methodology**

1. Analyse existing policies (SDF, transport plans, etc) for opportunities and constraints with regard to densification.
2. Confirm current needs and demands with respect to land for commercial use, industry, community facilities, open space and housing according to existing available information such as urbanisation rates and population growth rates.

3. Analyse the potential of vacant and underutilized land taking into account needs for both urban development and open space.
4. Identify constraints, including transport, biodiversity, heritage, floodlines and engineering services that should be taken into account when making densification proposals.
5. Propose a densification framework that will help to identify what land should be more intensively used for urban development, areas where a no-go strategy should be applied or contain important open space. This should include three or four case studies of how sites might be developed for either urban development or open space purposes.
6. Broadly identify sites for densification and their development potential.
7. Make recommendations as to how the proposals can be implemented.

Note: steps 2 – 4 should be undertaken as part of an [audit of vacant and underutilised land](#).

**b Deliverables for the study**

- A Site description and suitability report
- Report on the Urbanisation and Densification study.
- Posters and maps for the open house meetings and workshops
- PowerPoint presentations
- Digital version of all work and GIS compatible formatted maps

<sup>32</sup> Reference: Drakenstein Municipality 2005: "Drakenstein Open Space and Densification: First Draft November 2005"



### 7.1.4 Toolkit 4: Methodology for Understanding the Demand for land

When undertaking a densification study it is necessary to estimate the amount of land that will be required over a 5 – 10 year period to accommodate a variety of land uses. Used in conjunction with the land audit, this will allow the municipality to estimate how much land outside of the existing urban fabric to include inside the urban edge.

The following methodology proposes a simple, yet effective manner, creating an understanding of **how much** land is currently needed and **where** it is located.

#### Step 1: Understanding the Urbanisation Challenge

In order to understand the how much land is required over the next 5 – 10 years, the municipality must have an understanding of the:

- Urbanisation rates. A historic urbanisation rate for each settlement is available from a variety of sources (including the Municipal Demarcation Board, and Census data). This rate can be projected in order to gain an indication of the rate at which the population, and by implication the households, is likely to grow over the next 5 – 10 years.
- Growth potential of towns. The “Growth Potential of Towns in the Western Cape (2004)” provides an indication of the potential of the settlement to accommodate future growth. This information will help the municipality to decide **if** significant urban development should be accommodated in the settlement.
- Low income housing needs. The housing need can be determined from the waiting list. The housing need must be broken down into as

smaller spatial units as possible. Ideally the housing demand should be understood per sub-place/suburb.

- The residential challenge. This information on the urbanisation rate, growth potential of towns and the low income housing requirements can then be assimilated into a simple table which will provide a clear indication of the residential challenge facing the municipality over the 5-10 year period. The residential challenge has clear implications for other urban uses (such as community and business facilities).

Example of a table summarising the residential challenge:

Income group	Number of housing units required	Estimated land requirement at x density
Low income group	xxx	
Medium income group	xxx	
High income group	xx	
Total	xxxx	

- Demand for other urban functions. This information is not always freely available, but can be gathered through analysis past trends and discussions with local estate agents, property developers and investors, and through a set of standards.

Example of public facility space standards<sup>33</sup>

Urban Land Use	Dwelling unit per facility	Hectare per facility
Primary School	600	0,5
Secondary School	1 200	1
Clinic	900	0,2
Day Hospital	1 800	0,5
Community Hospital	14 500	1,5
Library	1 800	0,02
Community Centre	4 000	0,5
Sport Field	1 400	0,6
Fire Station	11 000	1,2
Police Station	4 500	0,3

Step 1 will provide an understanding of the amount of land required to accommodate future urban growth.

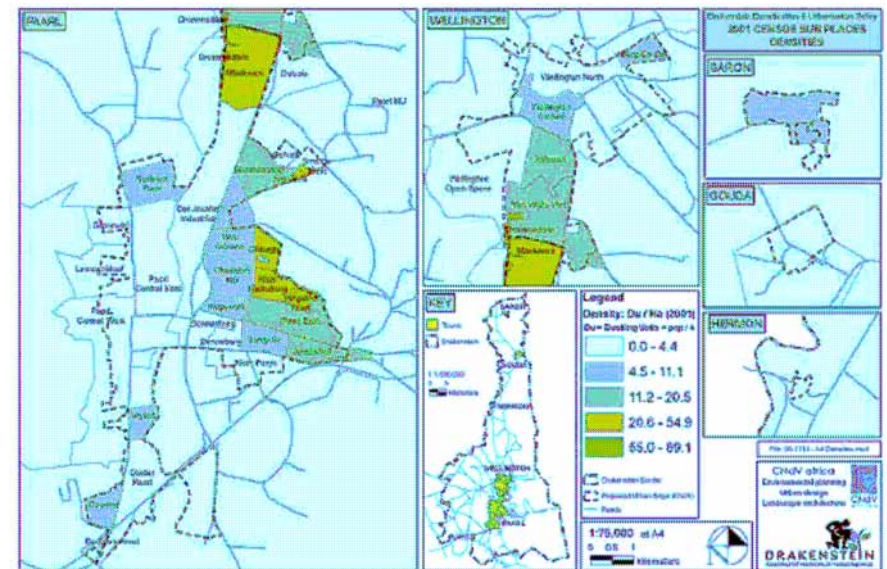
### Step 2: Analysis of Current Densities per sub place

An analysis of the current densities per sub-place will provide an understanding of where densification is required in order to achieve the desired spatial pattern. In order to achieve this, the following methodology is proposed:

- A break down per sub-place of the current average gross density of the settlement. This will highlight inefficiencies in the spatial pattern of the settlement. Typically, it will illustrate that higher densities are concentrated in low income areas on the peripheries of towns, while

lower densities will be concentrated in higher income areas with the best access to social and economic opportunities.

Example of Densities per sub-place<sup>34</sup>



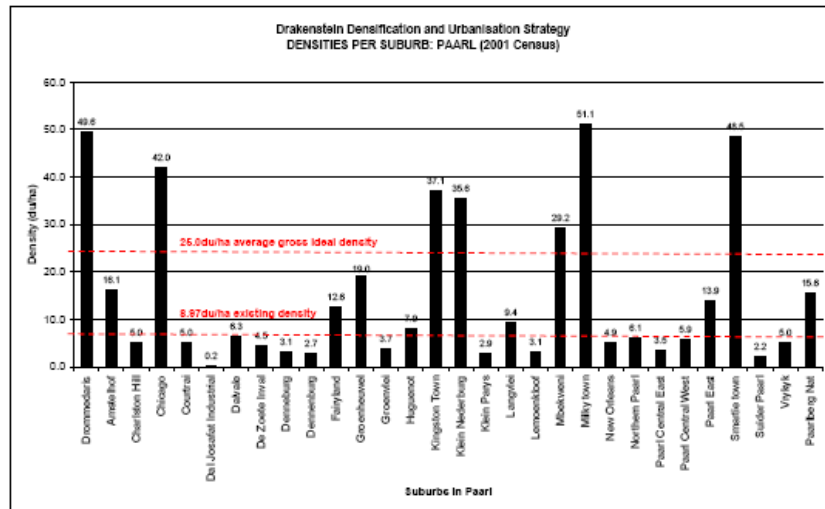
- Establish the number of housing opportunities required to achieve the ideal average density of 25 du/ha per sub-place. This will provide an indication of where to priorities densification initiatives.

<sup>33</sup> Behrens and Watson (1996) Making Urban Places: Principles and Guidelines for Layout Planning, UPRU, UCT

<sup>34</sup> Source: Drakenstein Municipality Densification and Urbanisation Strategy and Open Space Utilisation Policy (2006)



Example of a table of the average gross densities per suburb<sup>35</sup>



Example of a table of the numbers of units required in the target suburbs to achieve a density of 25 du/ha<sup>36</sup>

	Density	Area	Units			density
	Du/ha	Ha	Current	Potential	Total	Target
Paarl NU	8.6	682.64	5894	11172	17066	25.00
Amstelhof	16.1	62.40	1008	552	1560	25.00
Charlton Hill	5.0	91.15	456	1823	2279	25.00
Chicago	42.0	44.69	1877	0	0	42.01
Dalevale	6.3	95.09	599	1778	2377	25.00
Dennenburg	3.1	68.82	211	1510	1720	25.00
Dennenburg	2.7	52.79	141	1179	1320	25.00
Fairyland	12.6	8.81	111	109	220	25.00
Groenhoevel	19.0	96.97	1847	577	2424	25.00
Huguenot	7.9	43.61	344	746	1090	25.00
Kingston Town	37.1	2.31	86	0	0	37.12
Klein Nederburg	35.6	79.17	2815	0	0	35.56
Langvlei	9.4	63.05	591	986	1576	25.00
Milky Town	51.1	3.90	199	0	0	51.06
New Orleans	4.9	148.98	736	2988	3724	25.00
Paarl East	13.9	143.54	1996	1592	3588	25.00
Smarten Town	48.5	6.03	293	0	0	48.52
Van Wyks Vlei	16.3	228.37	3720	1989	5709	539
	11.9253	1922	22924	27001	44655	539
	Reqd	1922.31	22924	25134	48058	25.00

Step 2 will provide an understanding of the densification possibilities and number of housing units that can be accommodated inside the current urban fabric.

### Step 3: Determining the amount of land needed outside the current urban fabric

By deducting the number of housing units that can be accommodated through densification within the current urban fabric (number in step 2) from the total number of units required for growth in the next 5-10 ears (number

<sup>35</sup> Source: Drakenstein Municipality Densification and Urbanisation Strategy and Open Space Utilisation Policy (2006)

<sup>36</sup> Source: Drakenstein Municipality Densification and Urbanisation Strategy and Open Space Utilisation Policy (2006)

in step 1), the number of housing units and the amount of additional land needed can be calculated.

Example of calculation:

Income group	Number of housing units required	Minus Number of units that can be accommodated through densification	Total Number of units to be accommodated outside existing urban fabric	Proposed density	Total Amount of additional land required
Low income group	Xxx				
Medium income group	Xxx				
High income group	xx				
Other land uses	yyy				
Total	xxxx				

Step 3 determines thus the number of housing units that cannot be accommodated inside the current urban fabric.

#### Step 4: Determining the location of the additional land needed for growth over the next 5-10 years

The additional land required must be located adjacent to existing urban development in areas that achieve the long term strategic growth objectives identified in the Spatial Development Framework. In addition to the SDF, cognisance must be taken of:

- High agricultural potential and productive agricultural land,
- High biodiversity and conservation value,
- Protected nature areas,
- River corridors,
- High scenic value or visually sensitive,
- Buffer areas from hazardous services (e.g. landfill sites, nuclear power plants),
- Open space (urban and regional) and natural areas,
- Coastal zones and sea level rise (5m contour),
- Topography and slopes,
- Heritage resources,
- Zoning, approvals and housing projects,
- Transportation Planning,
- Service networks and infrastructure,
- Densification strategy, and
- Integration strategy.

### 7.1.5 Toolkit 5: Land use management mechanisms to facilitate densification

This table indicates a variety of densification options, ranging from small plots to accommodate single dwellings (achieved through subdivision) to group housing developments, and some of the land use management mechanisms related to the specific form of densification.

Use	Zoning	Minimum erf size	Locational criteria	Unit size	Additional consideration
Single Residential	Single residential	300 – 350m <sup>2</sup> unless (i) smaller erven exist in the area, (ii) policy identifies the area for retention of larger erven	In line with provisions made in the SDF	As indicated in zoning scheme	
Additional/ second dwelling  Duet housing / double dwelling	Single residential  Group housing or Single residential with departure	300 – 350m <sup>2</sup> unless (i) smaller erven exist in the area, (ii) policy identifies the area for retention of larger erven  Erven can be smaller than 300 -350 m <sup>2</sup> or the smallest erven in the area, as long as the double erf is in keeping with the minimum of the area.	   <ul style="list-style-type: none"> <li>Where identified in the SDF</li> <li>Along activity streets, corner plots, or along higher order residential streets to reinforce the spatial structure of the neighbourhood</li> </ul>	Up to 120m <sup>2</sup> or less than half the size of the primary residents  As indicated in zoning scheme	<ul style="list-style-type: none"> <li>If the unit is larger than 120m<sup>2</sup> or greater than 50% of the size of the primary unit, then subdivision should be considered.</li> <li>Must look like one unit</li> <li>Vertical split in ownership</li> </ul>
Group Housing	Group housing	Erven can be smaller than 300m <sup>2</sup>	In line with the SDF and densification/ integration studies	As indicated in zoning scheme	<ul style="list-style-type: none"> <li>Design must ensure privacy</li> <li>Design guidelines and streetscapes to create a positive environment</li> </ul>
Maisonettes	Group housing or single residential with departure	Erven can be smaller than 300 -350 m <sup>2</sup> or the smallest erven in the area, as long as the double erf is in keeping with the minimum of the area.	<ul style="list-style-type: none"> <li>Where identified in the SDF</li> <li>Along activity streets, corner plots, or along higher order residential streets to reinforce the spatial structure of the neighbourhood</li> </ul>	As indicated in zoning scheme	<ul style="list-style-type: none"> <li>Horizontal split in ownership (i.e. different owner on top and bottom)</li> <li>Access to top unit via external staircase</li> </ul>

### 7.1.6 Toolkit 6: Guidelines and design considerations for different forms of densification

This table sets out guidelines for various forms of densification with regard to location and built form.

Involves	Suitable Areas	Density Guideline	Design Considerations
<b>1. Form of densification: Additions</b>			
The extension of an existing dwelling unit and often occurs due to the need for expanded space for another household.	<ul style="list-style-type: none"> <li>Appropriate in low-density suburban environments.</li> <li>The form/nature of addition should adhere to strict development guidelines in heritage areas in the settlement.</li> </ul>	-	<ul style="list-style-type: none"> <li>Additions should not impact negatively on streetscapes or the architectural character of areas (specifically heritage areas).</li> <li>Same architecture and building materials as that of the existing structure.</li> </ul>
<b>2. Form of densification: Second dwelling on existing sites</b>			
Building second dwelling on existing residential property with no subdivision required.	<ul style="list-style-type: none"> <li>Appropriate in low-density suburban environments, including 'internal' suburban areas, especially where existing coverage is below 50%.</li> <li>Location of second dwellings should be carefully considered in relation to impact on aesthetics of area (especially heritage areas).</li> </ul>	-	<ul style="list-style-type: none"> <li>Impact on neighbouring properties and streetscape/architectural character.</li> <li>Pan-handle erven to be avoided where possible.</li> <li>Desired location at the back of existing dwellings</li> <li>Parking provision</li> <li>Same architecture and building materials as that of existing structure to create uniformity. Erection of walls between primary unit and additional unit must be discouraged. Encourage the use of soft edges such as plants, trees, etc to create privacy.</li> </ul>
<b>3. Form of densification: Subdivision of existing sites</b>			
Subdivision of existing properties to accommodate more dwelling unit and associated outbuildings. Subdivision would not normally require rezoning.	<ul style="list-style-type: none"> <li>Appropriate in low-density suburban environments, including 'internal' suburban areas, especially larger properties.</li> <li>Generally subdivisions should be allowed up to a maximum of half of the original erf size, provided that no resulting erf is less than 300 - 350m<sup>2</sup>.</li> <li>Within heritage areas applications should be carefully considered.</li> </ul>	-	<ul style="list-style-type: none"> <li>Impact on neighbouring properties and streetscape/architectural character.</li> <li>Impact on neighbouring properties.</li> <li>Access and parking.</li> </ul>
<b>4. Form of Densification: Redevelopment of larger site to higher density</b>			
Redevelopment of existing sites to achieve higher densities and normally requires rezoning (and potentially subdivision).	<ul style="list-style-type: none"> <li>Appropriate in areas fronting onto district distributors/'integrating routes'.</li> </ul>	Up to 40du/ha gross	<ul style="list-style-type: none"> <li>Impact on neighbouring properties and streetscape/architectural character.</li> <li>Traffic impact.</li> <li>Access, parking and landscaping.</li> <li>Capacity of municipal infrastructure.</li> </ul>

Involves	Suitable Areas	Density Guideline	Design Considerations
<b>5. Form of Densification: Infill Development</b>			
Development of mainly publicly owned land, which is well located but underutilised.	<ul style="list-style-type: none"> <li>Nodes and identified major strategic sites for infill</li> </ul>	Where contextually appropriate, promote densities of 40du/ha gross or greater in higher order nodal areas. Strategic sites should average out at approximately 40du/ha gross.	<ul style="list-style-type: none"> <li>Urban design framework for site.</li> <li>Traffic, parking impact and requirements.</li> <li>Landscaping and quality public spaces.</li> <li>Areas should accommodate a range of densities, forms and income groups.</li> <li>Capacity of municipal infrastructure.</li> </ul>
	<ul style="list-style-type: none"> <li>Other infill sites</li> </ul>	Allow up to 40 du/ha gross.	<ul style="list-style-type: none"> <li>As above.</li> </ul>
<b>6. Form of Densification: Site consolidation and redevelopment</b>			
Consolidation of existing land parcels accompanied by change in zoning to permit developments such as apartment blocks and townhouse development.	<ul style="list-style-type: none"> <li>As in 4.</li> </ul>	Up to 40 du/ha gross	<ul style="list-style-type: none"> <li>Heritage impact where applicable.</li> <li>Urban design framework.</li> <li>Impact on neighbouring properties and streetscape/ architectural character.</li> <li>Traffic impact.</li> <li>Access and parking, landscaping.</li> <li>Capacity of municipal infrastructure.</li> </ul>
<b>7. Form of Densification: Block consolidation and redevelopment</b>			
Consolidation of blocks within street block to create single larger land parcel for redevelopment to multi-storey flats.	<ul style="list-style-type: none"> <li>As in 4</li> </ul>	Up to 40du/ha gross.	<ul style="list-style-type: none"> <li>As in 6 including landscaping and quality public spaces</li> </ul>

### 7.1.7 Toolkit 7: Criteria for assessment of development applications resulting in densification

Evaluating development applications, which will result in densification, will need to be dealt with on their individual merits within this framework. As such the following criteria should serve to assist in evaluating applications. They are broadly focussed on technical issues, aesthetics/design/scale, service/infrastructural capacity, and land use compatibility.

#### *i Technical Issues*

Erf size: As a general rule single residential erven of 300 -350m<sup>2</sup> are acceptable. Smaller erven may be allowed if:

- There are erven of a similar size in the surrounding area
- There are no objections to the erf size
- Group housing is applied for

#### *ii Aesthetics/design/scale*

Consider the impact of the design on the character of the area including:

- Streetscape compatibility (e.g. roughly the same setback as exists should be encouraged; houses should relate to the street; parking garages should be screened.)
- Architectural compatibility (especially in heritage areas)
- Scale in comparison to existing structures
- Whether design encompasses provision to allow for functional open space as an integral part of the design and/or whether access to open space in the area is provided.

#### *iii Service/infrastructural capacity*

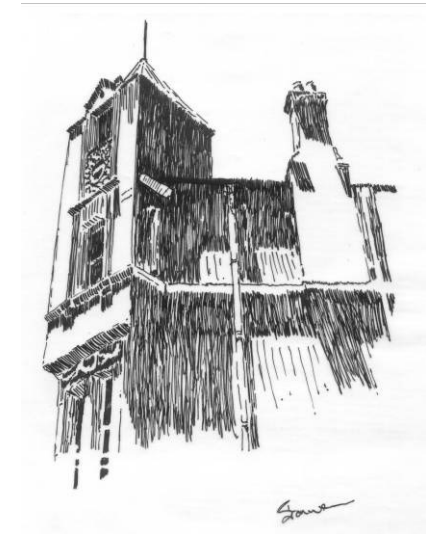
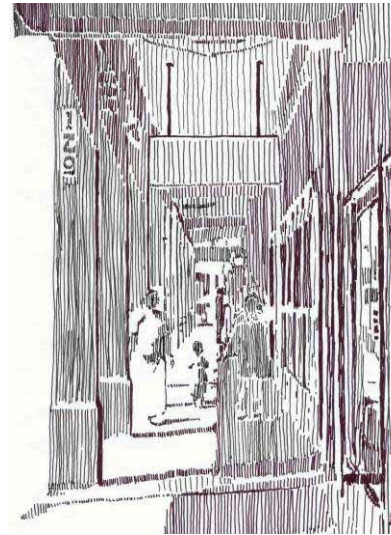
- Traffic and trip generation (whether additional units on the scale proposed can be accommodated by the route network)
- Engineering services/infrastructural capacity (whether there is spare capacity)
- Whether the site is within convenient walking distance of public transport

#### *iv Land use compatibility*

- Surrounding uses: non-compatibility (e.g. areas in proximity to heavy industry should not be supported for densification)
- Surrounding uses: compatibility (areas where there is a mix of uses – retail entertainment within walking distance)
- Further to these criteria, involvement of surrounding property owners should be prioritised in the development process

### 7.1.8 Toolkit 8: Criteria for assessment of development applications in areas of heritage significance<sup>37</sup>

1. The setting (orientation and siting) of an historic building is an essential part of its character. Development must be sympathetic to the surrounding landscape.
2. In considering proposed development in areas of heritage significance, the factors that contribute to the particular character of that area (such as uniformity of style, design, proportion, materials, vegetation, decoration, and interfaces) must be considered.
3. Buildings and other features that contribute to the character of such areas or heritage features (such as pitch and design of roofs, building materials, architectural style, scale of buildings and structures, verandas, balconies) should be retained and decay should not in itself justify demolition
4. The cumulative effect (including impacts of traffic and noise) upon the character and appearance of an area must be considered.



<sup>37</sup> Bergvliet SDF



### 7.1.9 Toolkit 9: Guidelines for engagement with Heritage Western Cape with regard to development applications

Step 1: Establish if there are any “triggers” necessitating the involvement of Heritage Western Cape

The test is whether the development needs comment/approval from Heritage Western Cape *in terms of heritage legislation, specifically section 34 35 and 38 of the [National Heritage Resources Act, Act 25 of 1999](#)*. If the development is not triggered by the NHRA the applicant need not apply to Heritage Western Cape.

“34. (1) No person may alter or demolish any structure or part of a structure which is older than 60 years without a permit issued by the relevant provincial heritage resources authority.

(2) Within three months of the refusal of the provincial heritage resources authority to issue a permit, consideration must be given to the protection of the place concerned in terms of one of the formal designations provided for in Part 1 of this Chapter.

(3) The provincial heritage resources authority may at its discretion, by notice in the Provincial Gazette, make an exemption from the requirements of subsection (1) within a defined geographical area, or for certain defined categories of site within a defined geographical area, provided that it is satisfied that heritage resources falling into the defined area or category have been identified and are adequately provided for in terms of the provisions of Part 1 of this Chapter.

(4) Should the provincial heritage resources authority believe it to be necessary it may, following a three-month notice period published in the Provincial Gazette, withdraw or amend a notice under subsection (3).”

“35. (1) Subject to the provisions of section 8, the protection of **archaeological and palaeontological sites and material and meteorites** is the responsibility of a provincial heritage resources authority: Provided that the protection of any wreck in the territorial waters and the maritime cultural zone shall be the responsibility of SAHRA.

(2) Subject to the provisions of subsection (8) (a), all archaeological objects, palaeontological material and meteorites are the property of the State. The responsible heritage authority must, on behalf of the State, at its discretion ensure that such objects are lodged with a museum or other public institution that has a collection policy acceptable to the heritage resources authority and may in so doing establish such terms and conditions as it sees fit for the conservation of such objects.

(3) Any person who discovers archaeological or palaeontological objects or material or a meteorite in the course of development or agricultural activity must immediately report the find to the responsible heritage resources authority, or to the nearest local authority offices or museum, which must immediately notify such heritage resources authority.

(4) No person may, without a permit issued by the responsible heritage resources authority—

(a) Destroy, damage, excavate, alter, deface or otherwise disturb any archaeological or palaeontological site or any meteorite;

(b) Destroy, damage, excavate, remove from its original position, collect or own any archaeological or palaeontological material or object or any meteorite;

(c) Trade in, sell for private gain, export or attempt to export from the Republic any category of archaeological or palaeontological material or object, or any meteorite; or

(d) Bring onto or use at an archaeological or palaeontological site any excavation equipment or any equipment which assist in the detection or recovery of metals or archaeological and palaeontological material or objects, or use such equipment for the recovery of meteorites.

(5) When the responsible heritage resources authority has reasonable cause to believe that any activity or development which will destroy, damage or alter any archaeological or palaeontological site is under way, and where no application for a permit has been submitted and no heritage resources management procedure in terms of section 38 has been followed, it may—

(a) Serve on the owner or occupier of the site or on the person undertaking such development an order for the development to cease immediately for such period as is specified in the order;

(b) Carry out an investigation for the purpose of obtaining information on whether or not an archaeological or palaeontological site exists and whether mitigation is necessary;

(c) If mitigation is deemed by the heritage resources authority to be necessary, assist the person on whom the order has been served under paragraph (a) to apply for a permit as required in subsection (4); and

(d) Recover the costs of such investigation from the owner or occupier of the land on which it is believed an archaeological or palaeontological site is located or from the person proposing to undertake the development if no application for a permit is received within two weeks of the order being served.

(6) The responsible heritage resources authority may, after consultation with the owner of the land on which an archaeological or palaeontological site or a meteorite is situated, serve a notice on the owner or any other controlling authority, to prevent activities within a specified distance from such site or meteorite.

(7) (a) Within a period of two years from the commencement of this Act, any person in possession of any archaeological or palaeontological material or object or any meteorite which was acquired other than in terms of a permit issued in terms of this Act, equivalent provincial legislation or the National Monuments Act, 1969 (Act No. 28 of 1969), must lodge with the responsible heritage resources authority lists of such objects and other information prescribed by that authority. Any such object which is not listed within the prescribed period shall be deemed to have been recovered after the date on which this Act came into effect.

(b) Paragraph (a) does not apply to any public museum or university.

(c) The responsible authority may at its discretion, by notice in the Gazette or the Provincial Gazette, as the case may be, exempt any institution from the requirements of paragraph (a) subject to such conditions as may be specified in the notice, and may by similar notice withdraw or amend such exemption.

(8) An object or collection listed under subsection (7)—

(a) Remains in the ownership of the possessor for the duration of his or her lifetime, and SAHRA must be notified who the successor is; and

(b) Must be regularly monitored in accordance with regulations by the responsible heritage authority.”

“38 (1) Subject to the provisions of subsections (7), (8) and (9), any person who intends to undertake a development categorised as—

a) The construction of a road, wall, powerline, pipeline, canal or other similar form of linear development or barrier exceeding 300m in length;

b) The construction of a bridge or similar structure exceeding 50 m in length;

c) Any development or other activity which will change the character of a site—

- i. Exceeding 5 000 m<sup>2</sup> in extent; or
  - ii. Involving three or more existing erven or subdivisions thereof; or
  - iii. Involving three or more erven or divisions thereof which have been consolidated within the past five years; or
  - iv. The costs of which will exceed a sum set in terms of regulations by SAHRA or a provincial heritage resources authority;
- d) The re-zoning of a site exceeding 10 000 m<sup>2</sup> in extent; or
- e) Any other category of development provided for in regulations by SAHRA or a provincial heritage resources authority, must at the very earliest stages of initiating such a development, notify the responsible heritage resources authority and furnish it with details regarding the location, nature and extent of the proposed development.”

Step 2: If engagement with Heritage Western Cape, in terms of section 38 of the National Heritage Resources Act, Act 25 of 1999 is required, then the applicant should submit a notification of intent to develop. In addition to the completion of an application form, the submission should include at least the following:

*i A description of the resource<sup>38</sup>*

The description of the status quo of the resource must be substantive and detailed. Illustrations and photographs should be utilised where appropriate.

*ii An assessment of the significance of the resource*

The degree of significance can be influenced by whether the resource:

- Has significant character, interest or value as part of the development, heritage or cultural characteristics of the local area;
- Is the site of a significant historic event;
- Is identified with a person or a group of persons who influenced society;
- Exemplifies the cultural, economic, industrial, social, political or historical heritage of the local area;
- Embodies the distinctive characteristics of a type, period or method of construction;
- Represents the work of a master craftsman, architect or building;
- Possesses high artistic values;
- Represents a significant and distinguishable entity whose components may lack individual distinction; and/ or
- Represents an established and familiar visual feature of the town due to its singular physical characteristics or landscape.

*iii An assessment of the impact of the proposed development on the character and significance of the resource.*

*iv Recommendations*

Recommendations should be written as if they are conditions of approval. This aids the officials in assessing the application, and speeds up the application process.

<sup>38</sup> Step 2 should be undertaken by a heritage professional

### 7.1.10 Toolkit 10: Criteria for redevelopment and/or preservation of open space (including public and private open spaces and natural areas)

The following questions should be posed by municipal officials and their consultants we considering the redevelopment of open spaces.

Does the open space have redevelopment potential?

	YES	NO
Does the open space form part of an ecological/biodiversity corridor or urban green system?		
Is there remnant vegetation on the open space?		
Is the open space utilised or valued by the surrounding community (including medicinal and cultural value)?		
Is the open space of heritage significance (including visual significance)?		
Does the open space form part of a protected or conservation area?		

If the answers are “yes” redevelopment of the site is (generally) not advised.

	YES	NO
Has the open space become a dangerous environment?		
Is there sufficient open space to meet the needs of the current community, and the requirements of the future community should all densification options be taken up?		

If the answers are “yes” redevelopment can be considered.

**7.1.11 Toolkit 11: Terms of Reference for an Urban Edge Study****a Purpose of the Project**

The project aims to delineate an urban edge for the urban areas in the municipality.

**b Scope of Services to be rendered**

It will be expected from the successful firm to undertake the following minimum tasks in execution of the project:

- Consult with the various stakeholders, e.g. the provincial and national government departments, municipal departments, relevant NGO's, organised business and agriculture, etc.
- Invite inputs from property owners and residents and consult with community members through ward committees.
- Investigate area specific pressure areas, with specific cognisance of all the municipal engineering masterplans.
- Take cognisance of similar studies undertaken by other municipalities;
- Take cognisance of national, provincial and municipal legislation and policy guidelines relevant to the study subject.
- Hold project management meetings with the Head: Planning, municipal project manager with the inclusion of arranging meetings with ward committees, provide a secretariat function for meetings, inclusive of meeting scheduling, notification, recording and distribution of minutes.

The study is to be undertaken for all the urban centres in the municipal area, including the rural hamlets. These settlements should be agreed with the municipality at an early stage of the project.

**c Phases, Time Frames, Monitoring and Coordination**

The study is to comprise out of the following phases:

*i Phase 1: Project Inception and Gearing*

This phase involves laying the groundwork for a successful project. It is proposed that this phase involve clarification in terms of the brief and work phasing. It is necessary in this phase to conduct a brief scoping of the policy informants to the product. The policy scan would include identifying the implications of current provincial policy for the product. The aim would be to ensure a consistent approach to planning in these areas.

End product:

Detailed work plan and revised payment schedule

Agreed public participation process & inception thereof

Time frame: 2 weeks

*ii Phase 2: Precedent, Problems and Issues*

Phase 2 should include:

- A review of lessons learned from other municipalities
- An overview of national, provincial and municipal legislation and policy frameworks
- Consultation with statutory and non-statutory organisations and the perusing of public input
- Case studies of specific pressure areas

End product: Precedent, problems and issues report

Time frame: 3 Months

*iii Phase 3: Urban edge demarcation*

The first task will be to develop a set of informants that should be considered in identifying the edge(s). These will include:

- Agricultural land and agri-processing
- Rural land, small farms & smallholdings
- Open space (urban and regional) and natural areas
- Rivers and floodplains
- Nature conservation and bio-regional planning
- Cultural and heritage resources
- Topography and slopes
- Valuable landscapes: Heritage resources
- Existing planning & growth management
- Zoning, approvals and housing projects
- Transportation Planning
- Service networks and infrastructure

These informants will then be applied to the agreed urban centres in the municipality in order to guide the demarcation of the urban edges. The product of this phase is a series of maps reflecting contextual informants for the urban centres.

Based on the informants identified, urban edges defining the outer limits of urban expansion for the various urban centres will be demarcated. It is envisaged that these edges may fall into different broad typologies:

- A 'permanent edge' that is a 'non-negotiable' aimed at protecting valuable natural environments farmland and areas of scenic or cultural value (identified no-go areas).
- A 'growth management' edge aimed at supporting policies of densification. This edge would be subject to periodic review and may

allow for urban expansion once infill possibilities have been exhausted.

Note: Wherever possible, the permanent urban edge should follow natural features (such as contour lines, ecological buffer zones) and not cadastral boundaries. Cadastral boundaries can be utilised where there is insufficient information to delineate the urban edge along a natural feature with sufficient confidence that the natural feature will not be negatively affected.

End product: Urban Edge Maps and GIS shp file

Time frame: 2 Months

*iv Phase 4: Strategy Formulation*

Phase 4 will focus on the development of land use guidelines for urban edge management zones and management policy guidelines that support urban edge and associated areas; and

*(a) Development of Land Use Guidelines*

To assist in the land use decision making process it is proposed that guidelines be developed relating to both the appropriate "type" of land use development under "typical" edge conditions as well as certain "form" guidelines relating to compatibility with and enhancement of the environment. These guidelines will aim to incorporate existing land use guidance. The guidelines will however retain special focus on appropriately dealing with the interface between wilderness/rural/settlement areas. In this regard the product will give guidance on:

- Compatible uses along the urban edge and related management zones (in typical contexts)
- Visual guidelines to ensure the integrity of scenic landscapes in these management zones dealing with interfaces
- Infrastructure and signage in these management zones

(b) Development of Management Policy Supporting the Urban Edge and Associated Areas

Whilst guidelines relating to the appropriate form of development in prototypical conditions will be highlighted, the need is identified to ensure that the mechanisms are in place for the municipality to effectively enforce these guidelines and promote desired forms of development in the urban fringe. In this regard it will be essential to:

- Ensure that current provincial policy is integrated with the guidelines;
- Detail possible amendments to zoning schemes through the guidelines product (e.g. relating to on farm subdivision or the introduction of architectural regulations for building along the edge);
- Establish a policy regarding smallholdings;
- Detail other proactive measures, which could contribute to improved patterns and form of development in urban/rural fringe area;
- Establish fiscal instruments to control development or speculation along the edge;
- Develop other complimentary policy and planning initiatives (e.g. urban infill) that will contribute to reducing pressure on rural/wilderness areas.

End product: Policy Document  
Time frame: 2 Months

*v Phase 5: Final documentation*

The documents should be finalised, based on public comment and comment from relevant authorities. Proposed amendments should be discussed and agreed with municipal officials. The final document should include a report on the comments received and the response to those comments, as well as details of the public participation process.

End product: Revised Maps and Strategy Document  
Time frame: 2 Months

**d Team Meeting and Progress Reports**

Progress reports are to be submitted on a monthly basis. At the end of each phase a project management meeting is to be held with the Head: Planning and Economic Development, Project Manager and responsible councillor to submit the end product of each phase.

**e Engagement, Consultation and Participation**

All the interested and affected statutory and non-statutory organisations have to be consulted on a one-to-one basis as well as in a formal manner where needed.

The public participation process will be critical to achieving a defensible product. A detailed process will be agreed to in phase 1. The public participation process should contain at a minimum:



- Advertisement for registration of interested and affected parties. I&APs should be kept up-to-date with the process via bi-monthly reports/newsletters.
- Two workshops targeted at key stakeholders engaging around the technical aspects of the policy. This should include officials from the municipality as well as the district and province; farming community; the local chamber of business; key community organisations and other interest groups.
- Advertisement of the draft report for input and comment.
- Further public consultation is proposed in the form of at least one 'open house' public meetings per major urban centre (this to be agreed with the municipality)

#### **f Deliverables**

The required deliverables are:

- A set of maps demarcating lines for the outer limits of urban expansion (hardcopy).
- A GIS data set, with the urban edge line as a shp file.
- A policy document in regard to urban edge demarcation and management.
- Identification of area specific management zones.
- Development application guidelines to assist developers and consultants in making decisions related to proposed developments.
- A set of criteria and guidelines to assist with the assessment of urban edge related development applications.
- A complete report on the public participation process, including records of the comments received and responses thereto.

#### **g Contents and Format of Reports**

- All documents and reports are to be compiled in English. However, executive summaries as well as press notices and information pamphlets for public notification are to be compiled in Afrikaans, English and iXhosa.
- All drawings and documents must bear the name of the professional firm responsible for the compilation of the drawing or document.
- All drawings and documents must be submitted in electronic format (MS Word and Arc View). In addition four good quality hard copies must also be provided, one of which should be in a format suitable for monochrome photocopying purposes.

#### **h Remuneration and Payment Schedule**

Tendering firms must submit a fixed tender amount in writing for the execution of the project, which must incorporate the following:

- Professional fees (Professional fees must include the costs of all non-professional assisting staff, i.e. typists, secretaries, etc.)
- Travel and subsistence costs
- Miscellaneous costs (typing, printing, telephone costs, press notices, etc.)
- Specialist inputs from outside the firm

The tender amount must also be broken down for the various phases of the project and include a projected draw down flow chart.

Payments will only be made on the satisfactory completion of the various phases of the project in accordance with the tendered amounts for the various phases. No payments will be made in advance.

Payments will be made subsequent to the delivery of products.

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Payments will only be made on the satisfactory completion of the various phases of the project in accordance with the tendered amounts for the various phases. No payments will be made in advance. Payments will be made subsequent to the delivery of products.

#### **k Details of Firm**

Information must be provided on the location of the firm's office from where the project will be executed and the composition of the professional team to be executing the project, including specialist professionals from outside the firm. This information must be provided as an annexure to the tender proposal and must include the following information:

- Name of team member
- Qualifications
- Professional registration category and registration number
- Designation (e.g., partner or professional staff member) and field of responsibility on the project (e.g., project manager or CAD-operator)
- Years of experience
- PDI category (i.e., persons with no national voting power before 1983 or 1994, women or disabled persons)

Specific reference should also be made on the firm's capacity to undertake the study and experience and knowledge of the study subject.

The project is to be overseen by a dedicated director/member/partner of the successful firm, such director/member/partner who shall be an appropriately registered professional person and who shall at all times accept responsibility, including professional responsibility, for the execution of the project. However, it will not be expected from such

Director/member/partner to accept professional responsibility for specialist inputs from professionals from outside the firm, provided that such specialists are professionally registered persons in their field of expertise.

If the project necessitates the inputs of other professional skills not available in the successful firm, the successful firm is entitled to contract such professionals to assist the successful firm. It will be expected from the successful firm to make provision for all expenditure in this regard in its tender amount and to coordinate, schedule and monitor all activities of such specialists. Details of such specialist professional skills to be contracted in must be included in the information on the composition of the professional team.

#### **I Responsibility, Copyright and Confidentiality**

This Terms of Reference, the successful firm's tender proposal, the Municipality's letter of appointment and the successful firm's letter of acceptance shall constitute the full agreement between the successful firm and the Municipality. With acceptance of the commission the directors/members/partners of the successful firm, being a company with limited liability, close corporation or partnership, shall accept full responsibility for the due fulfilment of all obligations in terms of the commission.

All work must be executed in the successful firm's office. No portion of the work may be subcontracted to any other person or firm without the prior approval of the Municipality.

The copyright of all documents prepared by the successful firm shall be vested in the Municipality, which shall have the right to their use on other

projects for which the successful firm has not been appointed. No fees resulting from such re-use shall be accrued to the successful firm. The re-use of such documents shall however be on the municipality's risk and the successful firm will not be held liable as a result of such re-use.

The successful firm shall not be entitled to disclose or furnish any information of any kind whatsoever gathered for this project to any other person or body, except with the written authorisation by the Municipality.

In the event of the successful firm becoming unable to perform its duties under this appointment or if, in the opinion of the Municipality, the progress of work or the quality thereof is not satisfactory, the Municipality shall be entitled to cancel the appointment after granting the successful firm the opportunity to rectify such progress or quality of work within a mutually agreed specified period of time and specified level.

The Municipality reserves the right to cancel the project or to temporarily defer the work, or any part thereof, at any stage. In such case the successful firm will be remunerated for the appropriate portion of work completed, calculated in accordance with the tender amount, as well as a surcharge equal to such actual losses and expenses as may have been caused by such termination of the appointment as can be substantiated by the successful firm.

### 7.1.12 Toolkit 12: Urban Edge Management and Interface Guidelines

This toolkit comprises generic land use management guidelines related to the urban edge as well as more detail on the aspects to be addressed by such guidelines.

#### a Smallholdings

Smallholdings are often regarded as unsuitable in urban areas (i.e. inside urban edges) because of their low densities and the generally inefficient pattern of development that they present. However smallholdings often provide a suitable transition area between urban and rural uses and can contribute significantly to the sense of place of an area through their “ruralness”, provided that negative visual impacts of certain uses can be mitigated adequately.

The management of smallholdings is closely related to urban growth management policies as they often present opportunities for urban development especially in the view of owners and/or developers. However current growth management policy places an emphasis on improving urban efficiency through densification and infill. The inappropriate management of smallholdings could undermine such policies and contribute to urban sprawl as both approved and illegal development can develop in the establishment of de facto urban areas overtime, especially where leap-frog development<sup>39</sup> is allowed.

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<sup>39</sup> This refers to allowing urban development away from existing urban areas but never the less relatively close to urban areas, thus resulting in pressure for the infill of land between the existing and new development. As result much larger urban areas usually in the form of low density residential development is established – a phenomenon often referred to as urban sprawl.

In summary the following aspects need consideration when establishing guidelines for smallholdings:

- Contribution to the sense of place and visual character of an area
- Impact on agricultural activities and/or agricultural potential of the property and surrounding area.
- Interface with important landscape elements (e.g. slopes, rivers and floodplains)
- Relation to the urban reserve<sup>40</sup> and growth management objectives i.e. could this area overtime develop into a more conventional urban area.
- Relation to urban structure, i.e. where are the smallholdings located in relation to major road connections or service networks. This aspect may in particular inform the future development of smallholdings.

#### i Permitted Uses

The smallholding areas that have been identified inside the urban edge are essentially extensive residential areas and Council may wish to establish such a zone within its revised zoning scheme.

Primary uses that should be permitted in this zone include:

- Residential
- Agriculture
- Keeping of animals (horse riding facilities or kennels)
- Nurseries

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<sup>40</sup> Land identified to accommodate future urban growth.

- Farm stalls

In addition Council could also consider allowing its consent for the following uses:

- Resort facilities
- Tourist and holiday accommodation
- Professional practitioners
- Day care facilities

Uses that should not be allowed include:

- Large scale or high rise development of any form
- Activities that detract from the rural atmosphere such as industrial development or commercial development.
- Mining and quarries.

#### *ii Development Rules*

The following development rules should apply:

- No subdivision beyond a minimum of 1ha should be allowed, at the discretion of Council
- Building heights should be restricted to two storeys
- Access roads should be maintained at the minimum level of service, including gravel roads to maintain the rural character
- Lateral building lines of 10 m to be imposed. Where possible (bearing in mind the need to set buildings back from water courses) 5 m building lines from the street should be imposed
- No trees may be removed without the permission of Council
- The scale and character of development should not contrast with the character of the local area

#### **b Guidelines for Celebration Edges**

A celebration edge is a type of permanent edge. It is a non-negotiable urban edge aimed at celebrating the interface between the urban areas and the rural areas containing natural environments, farmland and areas of scenic or cultural value.

Celebration edges have positive interfaces with the rural environment. Uses associated with celebration edges could include educational facilities, recreational facilities, and resorts.

Design guidelines for celebration edges include:

- Maintain visual permeability of the urban edge through the site
- Buildings to be oriented towards the urban edge to survey the natural resource
- Uses valued by the community to be located in the buffer zone between the urban and rural (e.g. initiation sites, recreational facilities, educational facilities) areas
- Uses located along the urban edge must relate to / have a relationship with the urban edge. In other words, the development could not be accommodated anywhere but on the urban edge.
- Public access through the site, to the natural resource must be retained.

#### **c Principles for delineating Coastal Urban Edges**

Delineation of a coastal edge should be guided by the following principles:

- Nodal development as opposed to strip/linear development.
- Appropriate urban development within the coastal zone in order to redress past spatial inequalities.

- Enhancing the connections between the coast and existing development.
- Appropriate public access to the coastal resource.
- Buildings must be oriented to survey open space and create a positive interface with the coast
- Designing with nature, environmental conditions and constraints (such as high water marks, storm surge zones, coastal dunes and prevailing high winds) must inform development along the coast.
- Enhancing linkages between inland natural resources and coastal resources.
- Protection of the coastal resource.
- Protection of coastal processes.

### 7.1.13 Toolkit 13: Generic Interface Guidelines

An urban edge study should include land use guidelines aimed at ensuring an appropriate interface between urban and rural uses in the municipality, based on an understanding of the informants to the edge. These informants indicate a variety of interfaces between the urban and non-urban area (i.e. the interface between a floodplain and road differs from the interface between a residential area and conservation area).

Guidelines should provide guidance on:

- Permitted and acceptable uses,
- Densities,
- Setbacks,
- Services and access,
- Fencing and landscaping,
- Height and scale of development, and
- General considerations

Specific guidelines relating to the following land uses may be required:

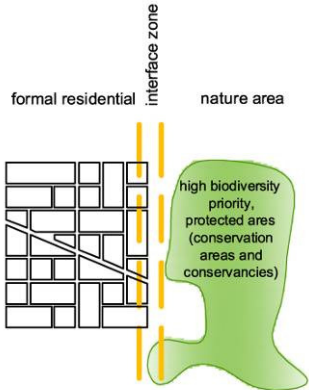
- Smallholdings
- Gateways to settlements
- Coastal edges (a type permanent edge)
- Celebration edges (a type of permanent edge)

Potential interfaces include (but are not limited to):

- Formal residential – nature area

- Formal residential – floodplain
- Formal residential – steep slope / hillside
- Formal residential – agriculture
- Formal residential – heritage resource
- Formal residential – road
- Formal residential – gateway
- Bulk services – floodplain
- Open spaces – agriculture
- Open spaces – floodplain
- Industrial – floodplain
- Industrial - agriculture
- Smallholding – floodplain
- Smallholding – agriculture
- Smallholding - nature area
- Smallholding – heritage resource
- Business use – floodplain
- Institutional – agriculture
- Informal residential – agriculture
- Informal residential – floodplain
- Permanent edge – Rural

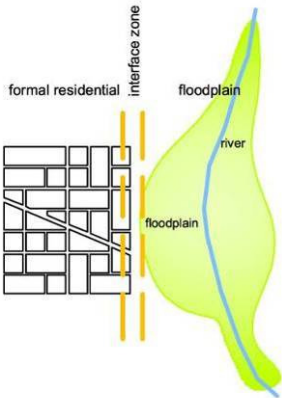


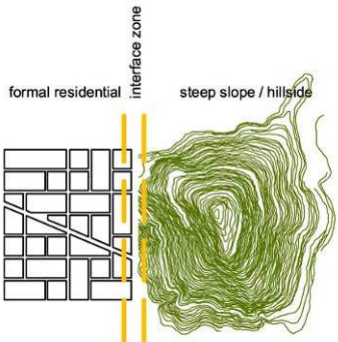
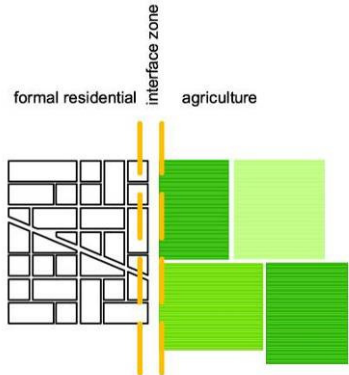
Use Inside Edge	Edge Condition/ Interface	GUIDELINES					
		General	Use	Setbacks	Services and Access	Fencing and Landscaping	Height and Scale of Development
Formal Residential 	Edge abutting nature area <sup>41</sup>	<ul style="list-style-type: none"> <li>All residents abutting or close to an interface with nature areas to be made aware of fire hazards, burning regimes and requirements for buffer zones<sup>42</sup>.</li> <li>Materials, colour and building style to compliment natural environment.</li> </ul>	<ul style="list-style-type: none"> <li>Residential densification and infill that takes cognisance's of potential fire risks, does not detract from the general character of the areas and supports the urban structure proposed by the SDF</li> </ul>	<ul style="list-style-type: none"> <li>Critical to achieve sufficient setback to minimize fire risk.</li> <li>New developments should ensure a sufficient building line from nature area to protect buildings.</li> </ul>	<ul style="list-style-type: none"> <li>Minimum capacity services</li> <li>Alternative services such as septic tanks should be considered.</li> <li>Water supply to be of sufficient pressure to allow for fire fighting.</li> <li>Road access to accommodate emergency vehicles and evacuation.</li> </ul>	<ul style="list-style-type: none"> <li>Encourage landscaping and fencing that is:                             <ul style="list-style-type: none"> <li>fire resistant, and</li> <li>will not impact on biodiversity and ecological functions in adjacent nature area.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Potential visual impact issues.</li> </ul>
Formal Residential	Edge formed by floodplain	<ul style="list-style-type: none"> <li>Buildings to be oriented to allow for surveillance of water course</li> <li>New development in 1:100 year floodplain to be subject to formal acknowledgement by owner of floodrisk<sup>33</sup></li> </ul>	<ul style="list-style-type: none"> <li>Residential densification and infill may be appropriate provided that it does not detract from the general character of the area, the use of the floodplain, and supports the urban structure as proposed by the SDF</li> </ul>	<ul style="list-style-type: none"> <li>Allow sufficient setback from edge of floodplain to ensure functioning of ecological corridor – 50m from the bank the norm, but at least 10m from top of bank is required for maintenance.</li> <li>No building in the 1:50 year zone.</li> <li>Building in 1:100 zone in exceptional circumstances</li> </ul>	<ul style="list-style-type: none"> <li>Service connection to bulk sewerage network required to reduce risk of pollution</li> </ul>	<ul style="list-style-type: none"> <li>Encourage fencing and landscaping that will not impede natural flooding of the river.</li> <li>Landscaping to minimize erosion and pollution of river.</li> <li>No impermeable fences may be allowed in the 1:50</li> </ul>	<ul style="list-style-type: none"> <li>Ensure that height and scale is in keeping with character of area – e.g. high density development could be appropriate along certain urban sections of rivers</li> </ul>

<sup>41</sup> Refer also City of Cape Town: Natural Interface Study, Veldfire Related Planning Guidelines, 2004

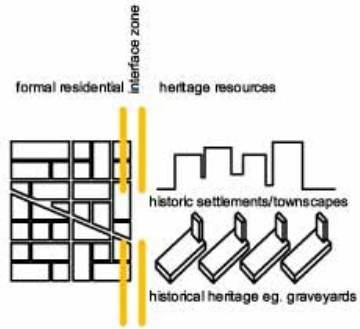
<sup>42</sup> Refer also to Cape Peninsula National Park, Recommendations for Property Owners and Occupiers: Reducing Fire Risk to Properties on the Urban Edge – Cape Peninsula, 2000 CSIR Report ENV-S-C 2000-104

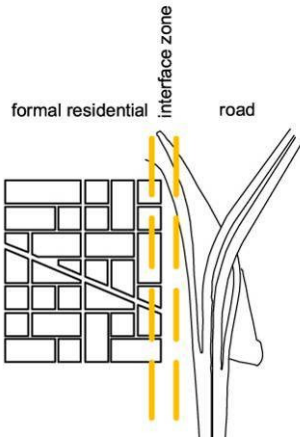
<sup>43</sup> City of Cape Town, Transport, Roads & Stormwater Directorate: Floodplain Management Guidelines, September 2003.


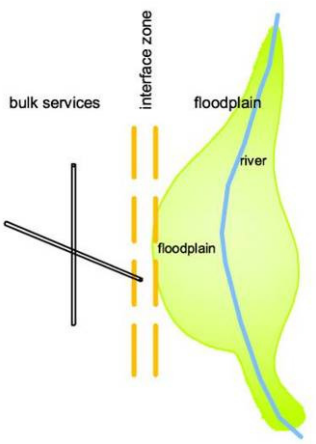
Use Inside Edge	Edge Condition/Interface	GUIDELINES					
		General	Use	Setbacks	Services and Access	Fencing and Landscaping	Height and Scale of Development
				on condition that that floor levels are above 1:100 year flood plain and basements are waterproofed to 1:50 year level. <sup>43</sup>		floodplain parallel to or perpendicular to a river system (fences must be permeable from ground level) <sup>33</sup>	

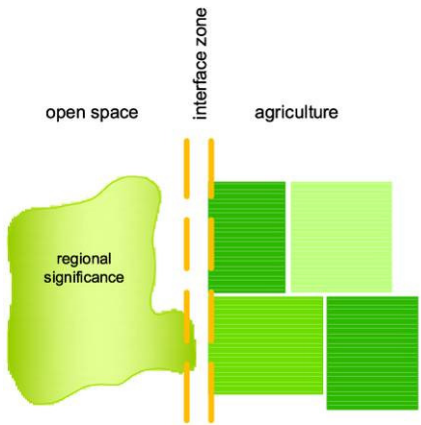
Use Inside Edge	Edge Condition/Interface	GUIDELINES					
		General	Use	Setbacks	Services and Access	Fencing and Landscaping	Height and Scale of Development
Formal Residential 	Steep slope/hillside	<ul style="list-style-type: none"> <li>Although visual impact is regarded as the most important aspect of development against hillsides, the potential threat of mudslides also needs careful consideration in the approval and design of development against steep slopes and hillsides.</li> </ul>	<ul style="list-style-type: none"> <li>Allow infill (second dwellings) &amp; densification (general residential) that does not adversely impact on the visual amenity.</li> </ul>	<ul style="list-style-type: none"> <li>Setbacks are related to issues of visual impact and interface with natural resources, e.g. indigenous vegetation</li> </ul>	<ul style="list-style-type: none"> <li>Provide minimum capacity services</li> <li>Alternative services such as septic tanks should be considered</li> <li>Never the less services requirements related to fire hazard may apply</li> </ul>	<ul style="list-style-type: none"> <li>Visual impact of fencing to be considered.</li> </ul>	<ul style="list-style-type: none"> <li>Height and scale of any proposed (re)development should be subject to a visual impact assessment.</li> <li>As a general rule no development should be allowed on slopes steeper than 1:4.</li> <li>Development should not obscure the crests of hills or ridges<sup>44</sup>.</li> </ul>
Formal Residential 	Agricultural Edge	<ul style="list-style-type: none"> <li>Residents who choose to locate next to or close to agriculture uses should be aware and accepting of the potential impacts of agricultural practices</li> </ul>	<ul style="list-style-type: none"> <li>Residential development that supports the overall urban structure</li> </ul>	<ul style="list-style-type: none"> <li>Maximum setbacks to be imposed (i.e. do not allow departures) to ensure minimum impact of agricultural practices on residential development</li> </ul>	<ul style="list-style-type: none"> <li>Service connections to municipal networks required to prevent impact on agriculture practices (e.g. ground water seepage from septic tanks)</li> </ul>	<ul style="list-style-type: none"> <li>Landscaping to be sensitive to farming practices, in particular planting should not attract pests such as fruit fly.</li> </ul>	<ul style="list-style-type: none"> <li>Scale and height should be sensitive to landscape character</li> </ul>

44 PGWC Department of Environment and Cultural Affairs and Sport: Guideline for the Management of Development on Mountains, Hills and Ridges of the Western Cape, 2002

Use Inside Edge	Edge Condition/ Interface	GUIDELINES					
		General	Use Inside Edge	Edge Condition/ interface	General	Use Inside Edge	Edge Condition/ interface
<p>Formal Residential</p> 	Heritage Resource	<ul style="list-style-type: none"> <li>Heritage resource areas on the urban edge often take the form of cultural landscapes thus many of guidelines are similar to those for agricultural interfaces</li> <li>Materials, colour and building style to compliment heritage resource</li> </ul>	<ul style="list-style-type: none"> <li>Use restrictions are related to the height, scale and character of the development. In general it is unlikely that high density development will be appropriate adjacent to heritage resources.</li> </ul>	<ul style="list-style-type: none"> <li>Setbacks to be determined for each case, assessing the impact on the heritage resources, as well as other factors such as interface with agriculture.</li> </ul>	<ul style="list-style-type: none"> <li>Scale and location of road access in relation to heritage resource will require careful consideration.</li> <li>Overhead supply of services to be avoided to minimize visual impact.</li> </ul>	<ul style="list-style-type: none"> <li>Fencing to be unobtrusive (no high walls).</li> <li>Landscaping to compliment heritage resource, e.g. traditional tree planting such as certain oak and poplar types in appropriate areas.</li> </ul>	<ul style="list-style-type: none"> <li>Scale and height should be sensitive to landscape character. New development should be subject to visual impact assessment.</li> </ul>

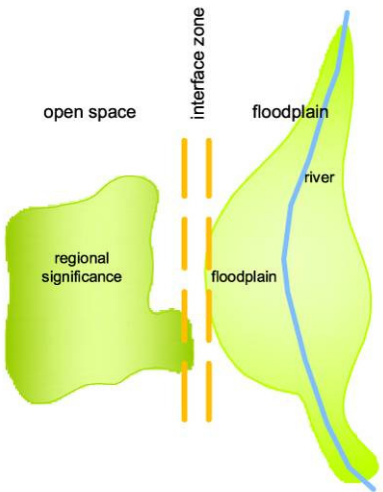
Use Inside Edge	Edge Condition/Interface	GUIDELINES					
		General	Use	Setbacks	Services and Access	Fencing and Landscaping	Height and Scale of Development
Formal Residential 	Edge formed by road	<ul style="list-style-type: none"> <li>Roads are not regarded as appropriate edges as they tend to attract development to either side. Thus roads should be used only where necessary and preferably where it combines with another element such as a floodplain to form an edge. Where roads are of such a high order that they form de facto physical barriers, they could be appropriate.</li> </ul>	<ul style="list-style-type: none"> <li>High density development may be appropriate provided it supports the overall urban structure.</li> </ul>	<ul style="list-style-type: none"> <li>Setbacks to take cognisance of noise and visual impacts.</li> </ul>	<ul style="list-style-type: none"> <li>Services and access roads should not provide scope for development to jump the road, i.e. do not provide excessive capacity or allow road layouts that make provision for future extensions.</li> </ul>	<ul style="list-style-type: none"> <li>Fencing and landscaping to compliment road reserve landscaping.</li> <li>Landscaping plan a requirement.</li> </ul>	<ul style="list-style-type: none"> <li>Will need careful assessment along scenic routes.</li> </ul>
Formal Residential	Gateways	<ul style="list-style-type: none"> <li>Residential development in an around gateways require careful consideration to retain visual amenity. Such development could be used to contribute to place making.</li> </ul>	<ul style="list-style-type: none"> <li>High rise, high density development would most likely be inappropriate</li> </ul>			<ul style="list-style-type: none"> <li>Strict fencing and landscaping requirements to be set to ensure appropriate visual character.</li> <li>Landscaping plan a requirement.</li> </ul>	<ul style="list-style-type: none"> <li>Requires careful evaluation with regard to visual impact.</li> </ul>

Use Inside Edge	Edge Condition/Interface	GUIDELINES					
		General	Use	Setbacks	Services and Access	Fencing and Landscaping	Height and Scale of Development
							
	Floodplain		<ul style="list-style-type: none"> <li>No water &amp; wastewater works, pump stations, or solid waste disposal sites may be located within the 1:100 year floodplain or surge zones.</li> </ul>	<ul style="list-style-type: none"> <li>Provision for ecological buffers/corridors</li> </ul>		<ul style="list-style-type: none"> <li>Encourage fencing and landscaping that will not impede natural flooding of the river.</li> <li>Landscaping to minimize erosion and pollution of river.</li> <li>No impermeable fences may be allowed in the 1:50 floodplain parallel to or perpendicular to a river system (fences must be permeable from ground level) 3.</li> </ul>	

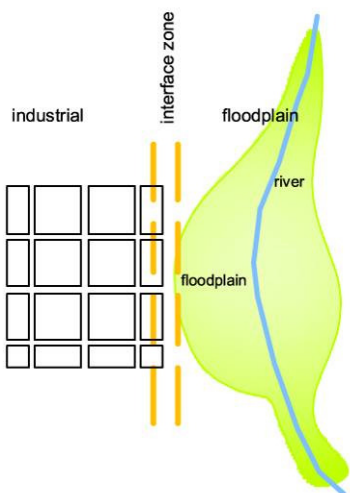
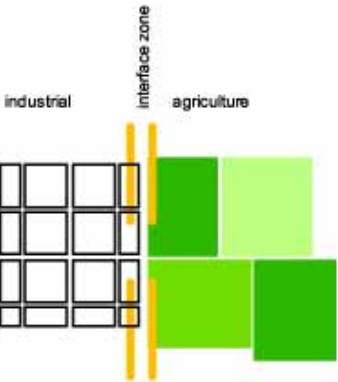
Use Inside Edge	Edge Condition/Interface	GUIDELINES					
		General	Use	Setbacks	Services and Access	Fencing and Landscaping	Height and Scale of Development
						<ul style="list-style-type: none"> <li>Landscaping needed to screen these uses from transport routes, including rail.</li> </ul>	
Open spaces 	Agriculture		<ul style="list-style-type: none"> <li>Active open spaces bordering on agricultural practices to be avoided so as to minimise problems related to use of pesticides in agriculture</li> </ul>			<ul style="list-style-type: none"> <li>Management of landscaping to be cognisant of agricultural practices (e.g. do not plant species that attract pests)</li> </ul>	
Open spaces	Floodplain	<ul style="list-style-type: none"> <li>There are a number of areas along rivers where use is made of the amenity of the river to provide active (sports &amp; community use) and passive recreation (visual amenity) space</li> </ul>	<ul style="list-style-type: none"> <li>Facilities such as picnic areas, golf courses and sports fields may be provided in the 1-50 year flood plain, provided that it does not increase the risk of flood hazards<sup>3</sup></li> </ul>	<ul style="list-style-type: none"> <li>Recreation related buildings may be allowed subject to construction of floor levels above 1:50 year flood level.</li> <li>Allow sufficient setback from edge of floodplain to ensure functioning of ecological corridor – 50m</li> </ul>	<ul style="list-style-type: none"> <li>Services and access to be cognisant of flood risk.</li> </ul>	<ul style="list-style-type: none"> <li>Management of landscaping to be cognisant of pollution risks and impact on flood risk.</li> </ul>	<ul style="list-style-type: none"> <li>Height and scale of facilities to tie in with character of surrounding area.</li> </ul>

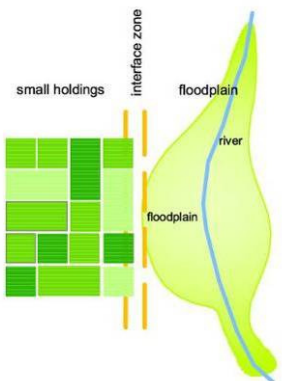
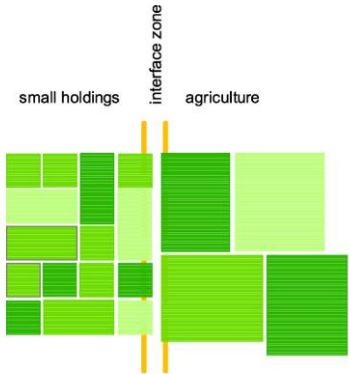
<sup>45</sup> City of Cape Town, Transport, Roads & Stormwater Directorate: Floodplain Management Guidelines, September 2003.



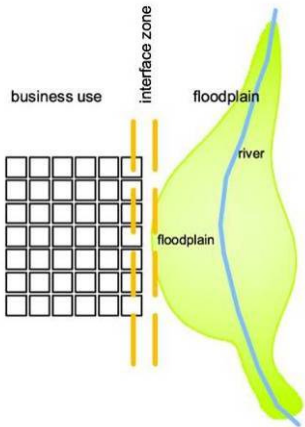
Use Inside Edge	Edge Condition/ Interface	GUIDELINES					
		General	Use	Setbacks	Services and Access	Fencing and Landscaping	Height and Scale of Development
				from the bank the norm, but at least 10m from top of bank is required for maintenance. <ul style="list-style-type: none"> <li>• No building in the 1:50 year zone</li> <li>• Building in 1:100 zone in exceptional circumstances on condition that that floor levels are above 1:100 year flood plain and basements are waterproofed to 1:50 year level.<sup>45</sup></li> </ul>			
Industrial	Floodplain		<ul style="list-style-type: none"> <li>• No form of industrial development should be allowed within the 1:100 year floodplain</li> </ul>	<ul style="list-style-type: none"> <li>• Allow sufficient setback from edge of floodplain to ensure functioning of ecological corridor – 50m from the bank the norm, but at least 10m from top of bank is required for maintenance.</li> <li>• No building in the 1:50 year zone</li> <li>• Building in 1:100 zone in exceptional circumstances on condition that that floor levels are above 1:100</li> </ul>	<ul style="list-style-type: none"> <li>• Connections to municipal networks imperative</li> </ul>	<ul style="list-style-type: none"> <li>• Appropriate landscaping to screen industry from riverine corridor and uses on opposite side.</li> </ul>	<ul style="list-style-type: none"> <li>• Massing of new development may be problematic - and visual impact assessments should be required.</li> </ul>

46 City of Cape Town, Transport, Roads & Stormwater Directorate: Floodplain Management Guidelines, September 2003.

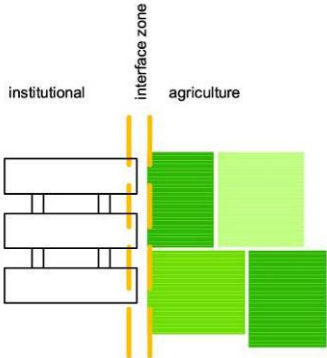
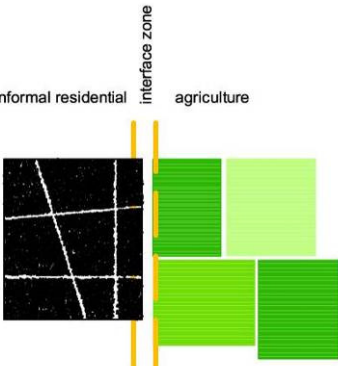
Use Inside Edge	Edge Condition/ Interface	GUIDELINES					
		General	Use	Setbacks	Services and Access	Fencing and Landscaping	Height and Scale of Development
				year flood plain and basements are waterproofed to 1:50 year level. <sup>46</sup>			
	Agricultural		<ul style="list-style-type: none"> <li>Specific uses allowed should not impact on agricultural production (e.g. heavy polluting industry)</li> </ul>	<ul style="list-style-type: none"> <li>Maximum setbacks to be enforced to minimize impact of interfacing uses on each other.</li> </ul>	<ul style="list-style-type: none"> <li>Management of waste water and ground water critical to prevent impact on agricultural production</li> </ul>	<ul style="list-style-type: none"> <li>Landscaping required to protect rural character.</li> <li>Management of landscaping to be cognisant of agricultural practices (e.g. do not plant species that attract pests)</li> </ul>	<ul style="list-style-type: none"> <li>Massing of new development may impact on rural areas and visual impact assessments should be required.</li> </ul>
Smallholdings	Floodplain	<ul style="list-style-type: none"> <li>The guidelines on</li> </ul>	<ul style="list-style-type: none"> <li>Buildings allowed in</li> </ul>	<ul style="list-style-type: none"> <li>Buildings should be</li> </ul>	<ul style="list-style-type: none"> <li>Connections to</li> </ul>	<ul style="list-style-type: none"> <li>Encourage fencing</li> </ul>	<ul style="list-style-type: none"> <li>Height and scale of</li> </ul>


Use Inside Edge	Edge Condition/Interface	GUIDELINES					
		General	Use	Setbacks	Services and Access	Fencing and Landscaping	Height and Scale of Development
		smallholdings should be read in conjunction with <a href="#">toolkit 12</a> of this report.	floodplain as per formal residential requirements above. <ul style="list-style-type: none"> <li>No cultivation in the 1:20 year flood plain.</li> </ul>	setback as far as possible from water courses	sewerage networks required to prevent pollution of river.	and landscaping that will not impede natural flooding of the river. <ul style="list-style-type: none"> <li>Landscaping to minimize erosion and pollution of river.</li> <li>No impermeable fences may be allowed in the 1:50 floodplain parallel to or perpendicular to a river system (fences must be permeable from ground level)<sup>47</sup></li> </ul>	building to tie in with character of surrounding area.
	Agricultural	<ul style="list-style-type: none"> <li>The guidelines on smallholdings should be read in conjunction with <a href="#">toolkit 12</a> of this report.</li> </ul>	<ul style="list-style-type: none"> <li>Uses on smallholdings may not negatively affect agriculture</li> </ul>	<ul style="list-style-type: none"> <li>Buildings should be setback as far as possible from agricultural use to minimize impacts</li> </ul>	<ul style="list-style-type: none"> <li>Connections to sewerage networks required to prevent pollution of groundwater</li> </ul>	<ul style="list-style-type: none"> <li>Landscaping to be sensitive to farming practices, in particular planting should not attract pests such as fruit fly.</li> </ul>	<ul style="list-style-type: none"> <li>Height and scale of building to tie in with character of surrounding area.</li> </ul>

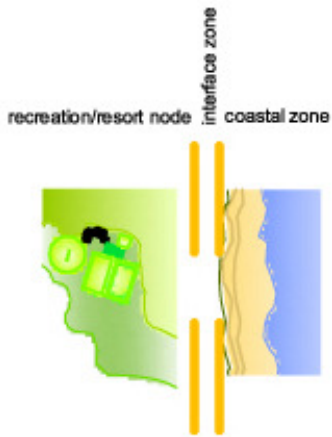
<sup>47</sup> City of Cape Town, Transport, Roads & Stormwater Directorate: Floodplain Management Guidelines, September 2003

Use Inside Edge	Edge Condition/ Interface	GUIDELINES					
		General	Use Inside Edge	Edge Condition/ interface	General	Use Inside Edge	Edge Condition/ interface
Business Use 	Floodplain		<ul style="list-style-type: none"> <li>No business development may be allowed in the 1:50 year flood plain. Some business could be allowed in the 1:50 to 1:100 year area, provided that floor levels are above the 1:100 year flood level and basements are flood-proofed to 1:50 year level.</li> </ul>	<ul style="list-style-type: none"> <li>Buildings should be setback as far as possible from water courses</li> </ul>	<ul style="list-style-type: none"> <li>Connections to sewerage networks required to prevent pollution of river.</li> </ul>	<ul style="list-style-type: none"> <li>Encourage fencing and landscaping that will not impede natural flooding of the river.</li> <li>Landscaping to minimize erosion and pollution of river.</li> <li>No impermeable fences may be allowed in the 1:50 floodplain parallel to or perpendicular to a river system (fences must be permeable from ground level)<sup>48</sup></li> </ul>	<ul style="list-style-type: none"> <li>Height and scale of building to tie in with character of surrounding area.</li> <li>Buildings to be oriented to allow for surveillance of water course</li> </ul>
Institutional	Agricultural			<ul style="list-style-type: none"> <li>Maximum setbacks to be enforced to minimize impact of interfacing uses on each other.</li> </ul>	<ul style="list-style-type: none"> <li>Service connections to municipal networks required to prevent impact on agriculture practices (e.g. ground water</li> </ul>	<ul style="list-style-type: none"> <li>Landscaping to be sensitive to farming practices, in particular planting should not attract pests such as fruit fly.</li> </ul>	<ul style="list-style-type: none"> <li>Height and scale of building to tie in with character of surrounding area.</li> </ul>

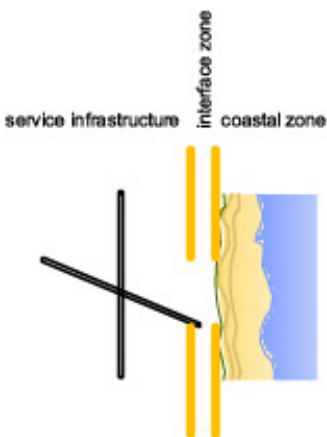
<sup>48</sup> City of Cape Town, Transport, Roads & Stormwater Directorate: Floodplain Management Guidelines, September 2003

Use Inside Edge	Edge Condition/ Interface	GUIDELINES					
		General	Use Inside Edge	Edge Condition/ interface	General	Use Inside Edge	Edge Condition/ interface
					seepage from septic tanks)		
Informal Residential 	Agricultural	<ul style="list-style-type: none"> <li>This type of interface should be avoided where possible, because of potential negative impacts on agriculture ranging from ground water pollution to security issues.</li> </ul>					
Formal Residential	Coastal Zone	<ul style="list-style-type: none"> <li>Buildings to be oriented to allow for</li> </ul>	<ul style="list-style-type: none"> <li>Residential and associated activities</li> </ul>	<ul style="list-style-type: none"> <li>New developments should ensure a sufficient building</li> </ul>	<ul style="list-style-type: none"> <li>Minimum capacity services</li> </ul>	<ul style="list-style-type: none"> <li>Encourage landscaping and</li> </ul>	<ul style="list-style-type: none"> <li>Height and scale of any proposed</li> </ul>

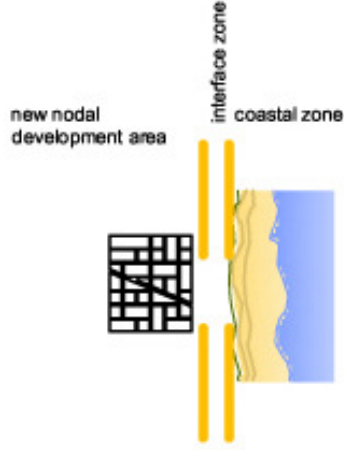
Use Inside Edge	Edge Condition/ Interface	GUIDELINES					
		General	Use Inside Edge	Edge Condition/ interface	General	Use Inside Edge	Edge Condition/ interface
		surveillance of coastal zone. • Materials, colour and building style to compliment natural environment.		line from high water mark to protect buildings	• Alternative services such as septic tanks should be considered	fencing that will not impact on coastal processes, biodiversity and ecological functions in adjacent nature areas.	(re)development should be subject to a visual impact assessment. • Visual connections to the coast should be maintained
Recreation/ Resort node	Coastal Zone	• Materials, colour and building style to compliment natural environment.	• Development, above the surge zones and the 5m contour could include: (i) Low impact accommodation facilities such as caravanning, camping, chalets (ii) Day visitors facilities (braai and picnic facilities) (iii) Commercial development such as conference facilities, low	• New developments should ensure a sufficient building line from high water mark to protect buildings • No buildings within the surge/storm lines	• Connections to sewerage networks required to prevent pollution.	• Encourage landscaping and fencing that will not impact on coastal processes, biodiversity and ecological functions in adjacent nature areas. • Landscaping to minimize erosion and pollution.	• Height and scale of buildings to tie in with character of surrounding area. • Buildings should not be visually obtrusive.

Use Inside Edge	Edge Condition/ Interface	GUIDELINES					
		General	Use Inside Edge	Edge Condition/ interface	General	Use Inside Edge	Edge Condition/ interface
			impact restaurants, limited retail (iv) Educational facilities. • Some recreational facilities, such as tidal pools, could be accommodated below the 5m contour/ within the surge zone.			• No impermeable fences should be allowed.	
Service Infrastructure	Coastal Zone	• This type of interface should be avoided unless absolutely necessary. Preference should be given to locating this interface in already developed areas.	• Harbour • Railway lines, power lines, storm water outlets, waste water substations • Slipways • Lifesaving buildings				



Use Inside Edge	Edge Condition/ Interface	GUIDELINES					
		General	Use Inside Edge	Edge Condition/ interface	General	Use Inside Edge	Edge Condition/ interface
							
	Nature areas and Conservancy Area	Coastal Zone	<ul style="list-style-type: none"> <li>• Should be maintained as non development areas</li> <li>• Limited low impact recreation and tourism activities (such as pathways and benches)</li> </ul>	<ul style="list-style-type: none"> <li>• Setbacks are related to issues of visual impact and interface with natural resources, e.g. indigenous vegetation</li> </ul>	<ul style="list-style-type: none"> <li>• Provide minimum capacity services</li> <li>• Alternative services such as septic tanks should be considered</li> <li>• Never the less services requirements related to fire hazard may apply</li> </ul>	<ul style="list-style-type: none"> <li>• Visual impact of fencing to be considered.</li> </ul>	<ul style="list-style-type: none"> <li>• Height and scale of any proposed (re)development should be subject to a visual impact assessment.</li> </ul>

Use Inside Edge	Edge Condition/ Interface	GUIDELINES					
		General	Use Inside Edge	Edge Condition/ interface	General	Use Inside Edge	Edge Condition/ interface
New Nodal Development Areas	Coastal Zone	<ul style="list-style-type: none"> <li>No strip development.</li> <li>New development to be concentrated in discrete nodes</li> </ul>	<ul style="list-style-type: none"> <li>Residential</li> <li>Commercial and retail</li> </ul>	<ul style="list-style-type: none"> <li>Setbacks are related to issues of visual impact and interface with natural resources, e.g. indigenous vegetation</li> <li>Provision for ecological buffers/corridors</li> </ul>	<ul style="list-style-type: none"> <li>Connections to sewerage networks required to prevent pollution.</li> </ul>	<ul style="list-style-type: none"> <li>Visual impact of fencing to be considered.</li> </ul>	<ul style="list-style-type: none"> <li>Height and scale of any proposed (re)development should be subject to a visual impact assessment.</li> </ul>

Use Inside Edge	Edge Condition/ Interface	GUIDELINES					
		General	Use Inside Edge	Edge Condition/ Interface	General	Use Inside Edge	Edge Condition/ Interface
							

**7.1.14 Toolkit 14: Checklist for amendment of the urban edge**

		Yes <sup>49</sup>	No
1.	Has any aspect of the informant to the edge changed or does it require revision? <sup>50</sup>		
2.	How will the proposed development contribute to the public good? <sup>51</sup>		
3.	How does the application support, long term forward planning and policy of Council and the PGWC as set out in the spatial development framework or other approved policy?		
4.	Will the approval of the application lead to further pressure for development in the area and so undermine the edge? <sup>52</sup>		
5.	How does the application respond to the interface guidelines set out in the urban edge study?		

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<sup>49</sup> If yes, please provide motivation

<sup>50</sup> For instance agricultural land may have lost its value due to the impact of ground water pollution, scarcity of irrigation water or climate change. In such instances the appropriate future use should clearly be informed by the original informants to the edge

<sup>51</sup> Specific aspects that require attention include:

- The cost to Council with regard to the provision and long term maintenance of services, vs. the additional rates income.
- The impact on transport networks and potential increased car dependency with associated problems of increased pollution and inefficiency.

Ideally applicants should undertake a cost benefit analysis to determine pros and cons of the proposed development from Council's perspective.

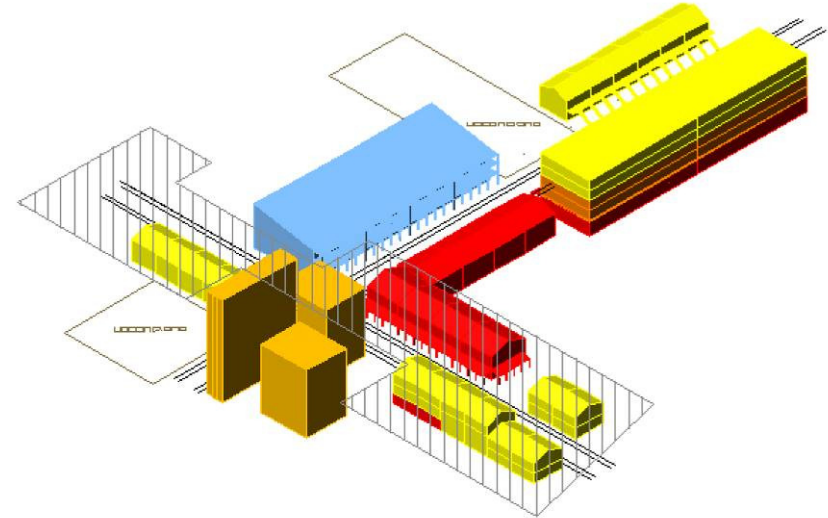
<sup>52</sup> Although precedent is not binding in planning and every application should be evaluated on its own merits, new development do nevertheless often attract pressure for further similar development and in addition Council must be seen to act fairly and consistently.

### 7.1.15 Toolkit 15: Overlay zones and flexible zoning

Most zoning schemes restrict mixed use. An overlay zone allows the municipality to target identified areas for infill development without rewriting the entire zoning scheme<sup>53</sup>. An overlay zone is attached to a designated zone/area.

Design and regulatory elements that should be addressed in overlay zones include:

- Building height
- Setbacks
- Building lines
- Bulk
- Parking requirements
- Loading dimensions or loading areas



#### Case study: Flexibility in zoning - Tulbagh, Witzenburg Municipality

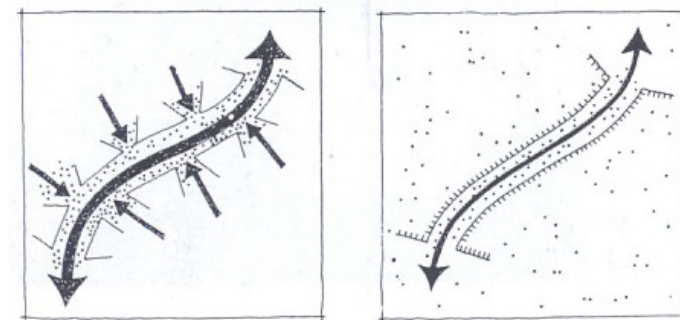
The Witzenburg Municipality is allowing and encouraging rezonings to Residential 3 (higher density residential) to allow the municipality discretion in assessing the application – erf sizes are reduced (400m<sup>2</sup>); street and side building lines are relaxed. Recommendations are made on an application-by-application basis.

<sup>53</sup> Note: Provision must have been made in the existing scheme, or should be made in the new/revised zoning scheme to allow for the development of overlay zones

**7.1.16 Toolkit 16: Criteria to access suitability for integration**

	Poor No	Good Yes
<b>1. Proximity</b>		
a) Distance to existing roads, water and sewage reticulation system		
b) Distance to food and local shops / spazas		
c) Distance to schools, day care		
d) Distance to employment opportunities		
e) If social facilities and services aren't available, what is the lead time before amenities are available		
<b>2. Mix and balance of uses</b>		
a) Street level activity generated by development		
b) Does the development respond to the unmet needs of the existing neighbourhood?		
c) In the case of a residential development, is the mix of incomes similar to that of the municipality as a whole?		
d) Is there a wide range of uses within the project?		
e) Is there vertical mix of uses?		
<b>3. Site optimisation (related to densification)</b>		
a) Is the gross density of the development high?		
b) Do the erven have narrow frontages?		
c) Is provision made for usable open space?		
d) Are the buildings located at their minimum setback or building lines?		
e) Is parking provided for underground or on a		

deck?		
<b>4. Accessibility and mobility options</b>		
a) Is the proximity to existing or proposed public transport good or bad?		
b) Is pedestrian access and permeability promoted?		
c) Are there pedestrian sidewalks on both sides of the street?		
d) Are the sidewalks wide enough?		
e) Is there direct street access to amenities?		
f) Is the development's street network integrated into the existing urban fabric?		
<b>5. Compatibility with context and site design</b>		
a) Are existing buildings preserved?		
b) Does the design reflect the local/regional style, climate, heritage, materials?		
c) Is the scale of the proposed structures in keeping with the surroundings?		



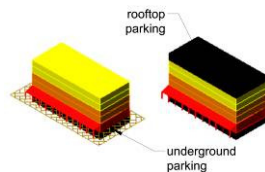
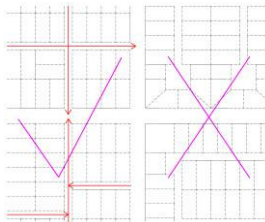
Accessibility: Permeable (left) and impermeable (right)

Source: Jan Gehl (2001) "Life between buildings"

### 7.1.17 Toolkit 17 Design guidelines for integrated development initiatives

Good design cannot overcome fundamental incompatibilities in the scale and use of development. However, there are four design principles that should guide integrated development initiatives:

- **Connectivity** to ensure physical integration with surrounding urban fabric. Streets, transport systems and open spaces should be designed as uninterrupted systems to allow connectivity and freedom of access.
- **Circulation.** A closed street system with many cul-de-sacs should be avoided. A grid or modified grid system to ensure legibility and maintain continuity with the surrounding urban fabric is preferable. The circulation system must be designed to accommodate multiple modes of transport.
- **Parking.** Parking requirements in terms of the zoning scheme may need to be relaxed in order to accommodate infill development. Alternative off-site parking solutions, such as pockets of parking shared by a number of developments or basement/ rooftop parking, may need to be considered.



#### Pockets of parking concept: Khayelitsha CBD

The draft Khayelitsha CBD - Urban Design Guidelines favours on-street parking and courtyard type parking as opposed to large car parks that front onto street fronts. In terms of the zoning scheme governing the Khayelitsha CBD, the developer or owner shall pay a contribution towards parking provision by Council equal to market value of land. The parking requirements are calculated at 25 m<sup>2</sup> for every 40 m<sup>2</sup> of total floor space (approx. 2, 5 bays per 100 m<sup>2</sup> GLA).

Summary of parking design guidelines:

- Parking should be discreet landscaped pockets.
- The design should encourage the use of trees and paving materials to define parking areas.
- The layout of parking should encourage multi-functional use.
- Pedestrian walkways should be encouraged, and nose-to-nose parking discouraged.

In keeping with this concept, parking at a parking ratio of 2 bays per 100 m<sup>2</sup> GLA<sup>54</sup> will initially be provided on the southern portion of the site, as there is no existing parking in the CBD. The majority of prospective clients rely on non-motorised and public modes of transport. There is a high level of accessibility provided to the site by the proximity of public transport stops (train station, bus and taxi station). Secure parking for tenants is to be provided in the north of the site. Parking requirements should be re-evaluated at a later stage and adjusted according to demand.

<sup>54</sup> Informed by development parameters of sub-zone PT2 area City of Cape Town Zoning By-Laws Technical Draft August 2002 and PGWC Road Access Policy.



- Compatibility
  - Special issues: heritage resources. Although a building may not be considered of national or provincial significance, old buildings can add to the character of an area. Where possible these buildings and/or their facades should be preserved, even if it is not required in terms of heritage considerations.

#### Case Study: Retaining building façade, Claremont Main Road

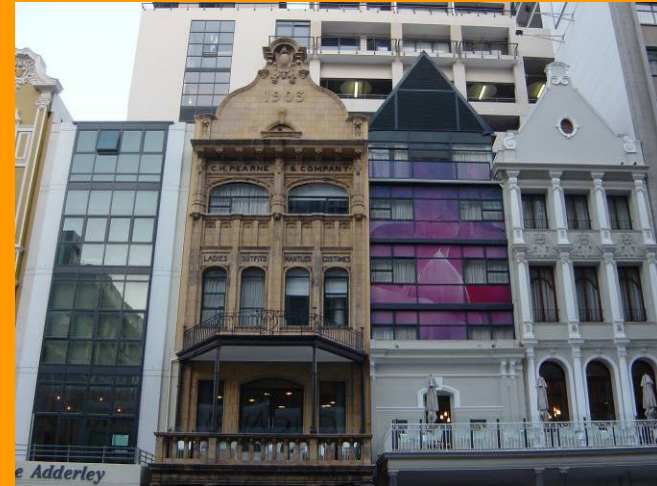
The façade of this building on Claremont Main Road is being retained, while the remainder of the building has been demolished in order for redevelopment to occur. The façade adds to the character of the Main Road which is an eclectic mix of old and new.



- Replica architecture. New construction adjacent to old/historic buildings should reflect their time, while being sensitive to the design of the older buildings. A new building that imitates or replicates historical architecture creates false historical facades.

#### Case Study: Modern buildings sensitive to the design of existing historical buildings, Adderley Street

Two new buildings/ additions to existing buildings have been developed in between two historical buildings. The new buildings are modern in appearance, utilising modern building materials. However, the facades of the new buildings emulate the horizontal lines (through similar floor spacing) and general shape/appearance of the existing buildings.



### 7.1.18 Toolkit 18: Generic infill overlay zone to accommodate mixed use development

This overlay zone applies to infill parcels within areas identified in the Spatial Development Framework and the Integration Strategy. See attached map (*map referring to the area as designated by the municipality*).

#### *i Development Standards: Residential Zones*

Applies to land parcels with underlying residential zoning.

##### a) Land uses permitted

- All uses permitted by underlying zoning
- Two- and three- storey walk-ups (sectional title) on corner erven
- Zero street building line
- Zero lateral building lines
- Attached or row housing (individual ownership)
- Additional dwelling units
- Small scale commercial<sup>55</sup> (such as convenience stores, subject to size and hours of operation)
- Horizontal and vertical mixed use on activity streets as identified in the SDF

##### b) Development Standards

- (i) **Parking:** The number of required off street parking bays should be based on the existing parking standards, reduced by a factor that takes into account opportunities for on street

<sup>55</sup> A clear definition of this use will be required

parking, shared / pocket parking and increased pedestrian activity and public transport.

- (ii) **Open Space:** developments of more than (#) units shall provide public open space of or greater than (%) of the development site, except that an open space credit may be granted when the development is connected via a continuous sidewalk to an improved public park located within 500m. All developments must provide for continuity of open space networks.
- (iii) **Orientation and Frontage:** Buildings should be orientated towards, front onto and provide direct access on to the street in order to promote safety and positive streetscapes
- (iv) **Density:** Nett residential density shall be equal to or greater than no more that (110% / 120% / ...) of the net density of the existing urban fabric
- (v) **General provisions:** Building setbacks, building coverage, erf width, erf size, building size and building height should conform within a range of 10% to the average standards of these elements in the existing urban fabric.

#### *ii Development Standards: Commercial, Mixed use*

Applies to land with an underlying commercial or mixed use zone.

##### a) Land Uses

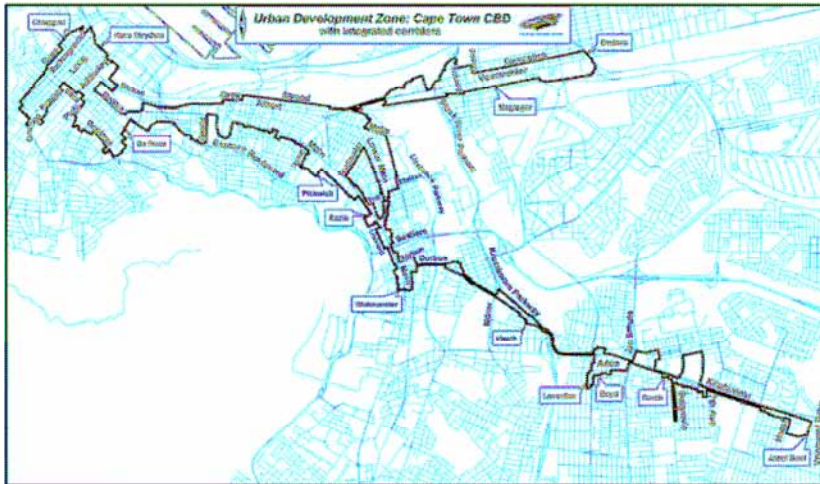
- All uses permitted by underlying zoning (exceptions can be noted here)
- Mixed use (horizontal and vertical)
- Two- and three- storey walk-ups (sectional title)
- Additional dwelling units

## b) Development Standards

- (i) **Parking:** The number of required off street parking bays should be based on the existing parking standards, reduced by a factor that takes into account opportunities for on street parking, shared / pocket parking and increased pedestrian activity and public transport.
- (ii) **Open Space:** developments of more than (#) units shall provide public open space to or greater than (%) of the development site, except that an open space credit may be granted when the development is connected via a continuous sidewalk to an improved public park located within 500m. All developments must provide for continuity of open space networks.
- (iii) **Orientation and Frontage:** Building should be orientated towards, front onto and provide direct access on to the street in order to promote safety and positive streetscapes
- (iv) **Density:** Nett commercial density shall be equal to or greater than no more that (110% / 120%/ ...) the net density of the existing urban fabric

### 7.1.19 Toolkit 19: The use of Urban Development Zones to promote integration

Urban Development Zones (UDZs) are areas where developers can receive tax incentives. The Income Tax Act (Act 58 of 1962) permits owners/developers to write off building costs against the income of businesses in promulgated UDZ areas. The UDZ tax incentive is generally directed at the stimulation of capital investment in buildings, especially in declining or stagnating urban areas with the objective of urban regeneration and business district revitalisation including economic development and the creation of opportunities for the urban poor. To date seven urban development zones have been declared in the country by National Treasury in terms of the Revenue Laws Amendment Act (Act 45 of 2003), with Cape Town being the only beneficiary in the Western Cape. It is however understood that more zones will be declared in the future.



For more detail click on:

<http://www.finance.gov.za/mfma/urban/default.htm>

<http://www.treasury.gov.za>

### 7.1.20 Toolkit 20: Designating Restructuring Zones for social housing

The [National Social Housing Policy](#) (2005) and the [Social Housing Bill](#) (2006) provides for the designation of restructuring zones, where subsidised social housing will be accommodated. Social housing is defined as rental or co-operative housing options for low income persons at a level of scale and built form which requires institutionalised management and which is provided by accredited social housing institutions or in accredited social housing projects in designated restructuring zones. One of the key aims of social housing is to achieve spatial restructuring by bringing lower income people into areas where there are major economic opportunities in areas where they would otherwise be excluded.

Designated restructuring zones are those geographic areas identified by local authorities and supported by provincial government for targeted, focused investment in social housing. The zones are finally approved by the National Department of Housing. Restructuring zones:

- may be overlap with UDZs, and
- will often coincide with nodes and corridors of economic opportunity.

The concept is being applied as follows:

Phase 1: Rapid identification and demarcation of Provisional Restructuring Zones (PRZs)

- 9 major cities and towns: Buffalo City, Ekurhuleni, eThekweni, Cape Town, Johannesburg, Mangaung, Msunduzi, Nelson Mandela, Tshwane)
- Largely based on existing plans
- MOUs entered into between local authorities, province and NDoH

Phase 2: Consolidation and expansion of Restructuring Zones (RZs)

- Formal designation of the zones
- Process will be driven by the municipality (in consultation with Province) via the IDP process

Phase 3: Expansion

### 7.1.21 Toolkit 21: Location of social and subsidy housing

The aim of inclusionary housing is to provide housing opportunities for a mix of income groups within a new development. This instrument will also be utilised to effect socio-economic integration on privately owned land.

When considering the provision of subsidised housing as a condition of a commercial housing development, it is important to ensure that providing subsidy and inclusionary housing off site is less attractive for developers than to provide the housing onsite, as it has the potential to negate the principles of integration through developing enclaves of rich and poor.

Municipalities should assist developers by favourably considering required road closures, consolidation of erven and other required approvals. The municipalities could also proactively identify sites (through the vacant and underutilised land audit) where the potential exist to accommodate new housing developments.

Refer to the [WCPSDF Explanatory Manual of Inclusionary Housing](#) for more detail.

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[http://209.85.135.104/search?q=cache:9NKbHrBkpN8J:www.thedplg.gov.za/index.php%3Foption%3Dcom\\_docman%26task%3Ddoc\\_download%26gid%3D23+public+participation+framework&hl=en&ct=clnk&cd=3&gl=za](http://209.85.135.104/search?q=cache:9NKbHrBkpN8J:www.thedplg.gov.za/index.php%3Foption%3Dcom_docman%26task%3Ddoc_download%26gid%3D23+public+participation+framework&hl=en&ct=clnk&cd=3&gl=za)

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**The specialist drafting contributors:**

**Provincial Government: Western Cape**

Marek Kedzieja (convenor)

Alexia Julius

Neil Muller

**MCA Urban and Environmental Planners**

Taryn Elliot

Bronwen Hobbs

**iKapa Enviroplan**

Rodney Cronwright