
PENINSULA URBAN EDGE STUDY

EXECUTIVE SUMMARY

BACKGROUND

The Cape Peninsula is recognised nationally and internationally as an area of outstanding scenic beauty and global importance due to its ecological, cultural and aesthetic qualities. Table Mountain has an international identity dating back to the 1500's and is an internationally recognised landmark.

In view of the ever increasing development pressures and the associated low gross urban density in the Cape Metropolitan Area, the Metropolitan Spatial Development Framework (MSDF) identified the need for the establishment of a detailed metropolitan-wide urban edge. The objectives of this edge are to protect the valuable agricultural, natural and cultural/historical resources and promote appropriate densification.

The metropolitan urban edge study has been divided into three separate studies. The Peninsula Urban Edge report documents is one of the three urban edge studies underway in the Cape Metropolitan Area (CMA), the others being the Northern Metro and Helderberg studies, respectively.

The terms of reference specified that the urban edge study must generate the following outputs:

- (i) the definition of the 20 year outer extent of urban development, cadastrally defined by way of an urban edge line;
- (ii) the identification of management zones along the Peninsula's urban edge; and
- (iii) the formulation of appropriate policies and guidelines for the management of land use on both sides of the urban edge line.

PLAN PREPARATION PROCESS

This Final Peninsula Urban Edge Report has been drawn up with substantial input from I&AP's, and on the basis of a contextual analysis of the urban and non-urban interface of the Peninsula. The findings of the contextual analysis are documented in a separately bound Technical Report.

THE URBAN EDGE

In the context of this study, the term urban edge refers to two interrelated concepts namely:

- a demarcated line that cadastrally defines the outer limits of urban development for the next twenty years; and
- associated set of management policies for management zones on one or both sides of the demarcated line

The role of the urban edge, as one of a range of instruments to manage the growth & development of the CMA, is as follows:

- to curtail the pattern of low-density, haphazard and discontinuous urban development,
- to protect significant environments and resources,
- to re-orientate expectations of continuous outward expansion of the CMA's urban Areas,
- to promote a more compact, efficient and environmentally sustainable urban form,
- to rationalise infrastructure and service delivery to designated and consolidated urban areas.

A fundamental principle is that the demarcation of an urban edge line will not necessarily limit development, but rather control, redirect and manage sustainable development in terms of applicable and feasible policies and strategies.

URBAN EDGE INFORMANTS

Table A is a synthesis of the key urban edge informants that influenced the demarcation of the urban edge line.

URBAN EDGE LINE DEMARCATION

Please refer to Maps A(i) and A(ii) for a regional assessment of the urban edge line.

MANAGEMENT POLICIES

The sustainability of the urban edge is more dependent on what happens inside and outside the edge line, than where the line is actually demarcated.

So as to assist and facilitate control over and management of the transition areas, the following management zones were created:

- ◆ Urban Transition Zone:
- ◆ Non - Urban Zone:

Urban Transition Zone (UTZ)

This refers to an area inside the Urban Edge within which all development is to be controlled by a set of policies. Ideally this area should be managed as a Special Area Zoning in terms of the relevant Zoning Scheme. This is to establish an area of transition in order to regulate urban development adjoining the urban edge line and, in so doing, protect it.

Policy proposals are recommended for this zone with respect to the following:

- ◆ Densification
- ◆ Open Space Linkages
- ◆ Development on Steep Slopes
- ◆ Landscaping and Architecture
- ◆ Provision of Services and Infrastructure
- ◆ Stormwater Management
- ◆ Public Land

- ◆ Fire Protection
- ◆ Scenic Quality
- ◆ Natural Systems and Historical Areas
- ◆ Smallholdings
- ◆ Incentives
- ◆ Scenic Routes

Non-Urban Zone (NUZ)

This refers to an area beyond the Urban Edge within which policies are prescribed for non-urban use. As with the Urban Transition Zone, this area should be managed within the context of a Special Area zoning. This is to establish controls for an area of transition so as to manage and protect rural areas beyond the edge

Policy proposals are recommended for this zone with respect to the following:

- ◆ Tradeoffs
- ◆ Rehabilitation
- ◆ Development
- ◆ Public Access
- ◆ Agriculture
- ◆ Forestry Areas
- ◆ Integration

RECOMMENDATIONS

As the Peninsula Urban Edge Study conforms to the MSDF principles, is consistent with the South Peninsula Sub-Regional Structure Plan (1998) and has conformed to the planning process regarding public participation, it is accordingly recommended that:

1. the Urban Edge Report be approved, either in terms of existing legislation as a 4 (6) Structure Plan (in terms of Land Use Planning Ordinance) or as a Specific Development Framework in terms of the new Provincial Planning & Development Act;

-
2. the Urban Edge as defined, shown in detail on GIS, and illustrated by segments 4.2.1 – 4.2.34, be approved as demarcating the limit of urban development as defined in this report;
 3. the policies' guidelines enunciated in the report for the Urban Transition Zone and Non-Urban Zone be adopted as a formal guide for the management and control of these zones by the relevant authorities;
 4. the following studies, supporting the Urban Edge Line, should be undertaken:
 - ◆ a Coastal Urban Development Plan,
 - ◆ a detailed Assessment of Cultural Landscapes
 - ◆ a local Visual Resource Analysis,
 - ◆ a declaration of the Urban Edge Management Zones as Special Areas.
 - ◆ An EIA of the Protea Ridge Area at Kommetjie to effect a natural open space link.
 5. the local authority commences the preparation of more specific local urban edge management policies as recommended; and
 6. the Peninsula Urban Edge Report with the urban edge boundary as defined, be adopted by the
 - City of Cape Town;
 - South African National Parks;
 - South African Heritage Resource Agency, and
 - Department of Environmental, Cultural Affairs and Sport (DECAS).

Table A Synthesis of Edge Informants

VARIABLE	CONSIDERATION	SIGNIFICANCE
Geophysical Environment	<i>Climate</i>	Climate has only been considered as an edge informant in that it has an impact on the geophysical environment
	<i>Topography</i>	- Slopes steeper than 1:4 152m contour served as historic limit to service delivery. - Prominent topographical features, which have visual exposure such as, ridges, spurs, promontories, <i>rims</i>, convex slopes and which provide a natural backdrop to the urban area.
	<i>Geology</i>	- Geologically unstable areas. - Unique geological & geomorphological features. - Existing and potential areas of mineral reserves, and quarries which have a visual impact on the landscape
	<i>Hydrology & Geohydrology</i>	Sub-surface groundwater reserve.
Biophysical & Ecological Environment	<i>Vegetation</i>	Conservation of endemic vegetation.
	<i>Agriculture & Forestry</i>	- Land of high to medium agricultural potential which contributes to the formation of unique rural landscapes. - Indigenous and Non-indigenous forestry areas.
	<i>Threatened & endemic species (flora & fauna)</i>	Protection of threatened & endemic species (flora & fauna) hotspots
	<i>Ecologically sensitive habitats</i>	- Protection & management of sensitive natural habitats. - Prevention of uncontrolled access into sensitive habitats.
	<i>Wilderness & maintenance of continuity</i>	- Maintenance of large continuous ecological areas. - Promote the establishment of CPNP. - Promote the establishment of functional ecological corridors between natural systems.
River & Wetland Systems		- The Elsies River; Hout Bay River; Silvermine River; and Noordhoek / Wildevleiwet Wetlands which provide a habitat for unique plant and animal species. - No land falling within 1:50 year floodline should be considered for urban development. - Reinforce the management & protection of river & wetland systems which traverse the urban edge. - Reinforce river corridors within the MOSS

Infrastructure Location & Capacity	◆ Existing & proposed road infrastructure, which serve to form a definitive barrier for urban expansion, and which can be utilised as urban edge components. ◆ Scenic drives. ◆ Capacity of existing service & social infrastructure to accommodate growth.
Land Use & Related Patterns	◆ Zoning. ◆ Consolidation and densification of existing urban areas.
Demographic and Population Profiles & Trends	◆ Population growth & future residential requirements ◆ Approved policies of densification ◆ Objective of limited urban development balanced with conservation and tourism
Legal, Planning & Land Ownership Situation	◆ Current Planning Boundaries: CPPNE; CPNP ◆ Ownership ◆ Existing development rights ◆ Existing Planning Legislation ◆ Current Planning: structure plans; existing policy statements; reports; & management plans
Socio-Cultural & Historic Environment	◆ Historical sites and areas of cultural significance
Visual Resource Analysis	◆ Consideration of landscape characteristics and edge typologies ◆ Long range & intermediate view assessments ◆ Developments prevented from breaking the skyline



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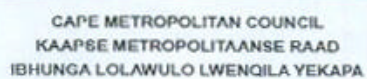


FIGURE 2a



FIGURE 2b

PENINSULA URBAN EDGE STUDY

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ACRONYMS:

CPNP	Cape Peninsula Natural Parks
CMA	Cape Metropolitan Area
CMC	Cape Metropolitan Council
CMR	Cape Metropolitan Region
CPPNE	Cape Peninsula Protected Natural Environment
CSIR	Council for Scientific and Industrial Research
CTM	Cape Town Municipality
DECAS	Department of Environment, Cultural Affairs and Sport.
EIA	Environmental Impact Assessment
I&AP'S	Interested and Affected Parties
IEM	Integrated Environmental Management
MAC	Management Advisory Committee
MOSS	Metropolitan Open Space System
MSDF	Metropolitan Spatial Development Framework
NUZ	Non-urban Zone
PUES-	Peninsula Urban Edge Study
SANPARKS	South African National Parks
SPM	South Peninsula Municipality
UE	Urban Edge
UTZ	Urban Transition Zone
WDC	Winelands District Council

SECTION 1: INTRODUCTION

1.1 BACKGROUND

This Peninsula Urban Edge report documents one of the three urban edge studies underway in the Cape Metropolitan Area (CMA), the others being the Northern Metro and Helderberg studies, respectively. The urban edge studies stem from the Metropolitan Spatial Development Framework (MSDF), an urban growth management initiative co-ordinated by the Cape Metropolitan Council (CMC).

The MSDF aims at establishing a physical framework within which the spatial restructuring of the CMA can take place. As an integral part of the spatial restructuring strategy, the urban edge studies have set out to demarcate a metropolitan-wide urban edge that will serve to contain urban sprawl and protect valuable surrounding landscapes and resources. The urban edge forms part of the MSDF's urban compaction strategy.

Pending the introduction of the new provincial Planning and Development Act (Act 7 of 1999), the MSDF is being prepared for statutory approval in terms of the provisions of Section 4 of the Land Use Planning Ordinance (LUPO) (Ordinance No. 15 of 1985). Whilst a section 4 plan does not create or take away development rights, on adoption by the Premier it is legally enforceable. Thus whilst the Structure Plan is used as a guide for future development, it will contain the Urban Edge line as a well defined cadastral description (line) which is intended to be a fixed boundary (of land usage).

The MSDF informs the land use component of the CMC's Integrated Development Plan (IDP), as required in terms of the Local Government Transition Second Amendment Act (Act No. 97 of 1996).

1.2 TERMS OF REFERENCE

In November 1997 the CMC appointed VKE Engineers and Planners to undertake the Peninsula Urban Edge study. CMC's requirement was for the study to be undertaken

in close collaboration with Cape Town Municipality (CTM), South Peninsula Municipality (SPM) and the Cape Peninsula National Park (CPNP).

The terms of reference specified that the urban edge study must generate the following outputs:

- (iv) the definition of the 20 year outer extent of urban development, cadastrally defined by way of an urban edge line;
- (v) the identification of management zones along the Peninsula's urban edge; and
- (vi) the formulation of appropriate policies and guidelines for the management of land use on the inside of the urban edge.

1.3 STUDY AREA

Figure 1 illustrates the vast extent of the study area, which comprises the entire CPNP, Table Mountain, the Peninsula Mountain Chain and the abutting land from Signal Hill in the north extending to Cape Point in the south – see **Figure 1**.

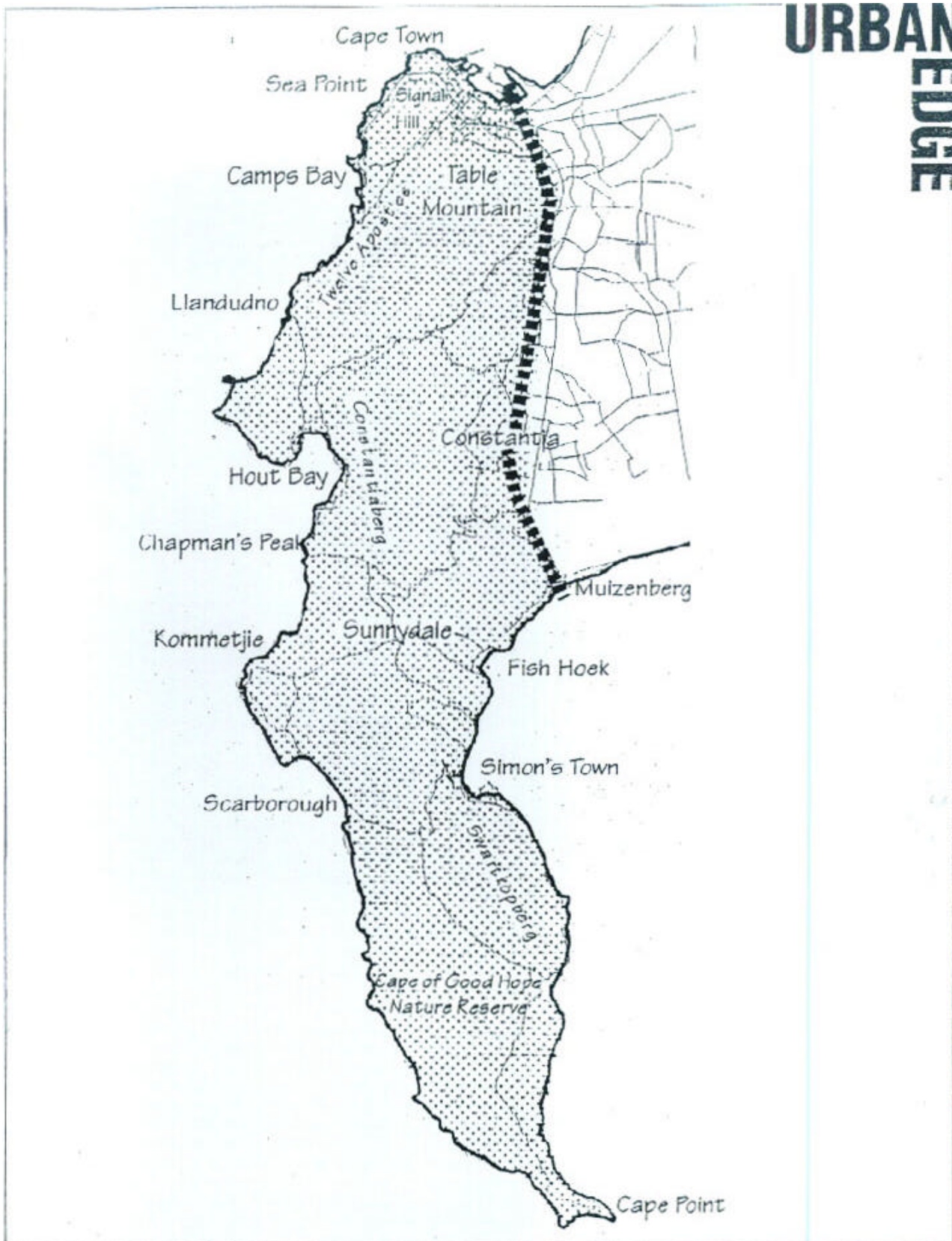
This Edge Plan deals specifically with the Peninsula's Urban Edge – please refer to **Figure 2** for relation to SANParks and CPPNE.

1.4 LIMITATIONS

The determination of an urban edge around the Peninsula is a complex task given its vastness and the unique attributes of the study area. These special features include the following:

- ◆ as the Cape's historical settlement area, it is a landscape of cultural significance; the Peninsula's natural resources are recognised to be of international significance;

URBAN EDGE



STUDY AREA

FIGURE
1



CAPE METROPOLITAN COUNCIL
KAAPSE METROPOLITAANSE RAAD
IBHUNGA LOLAWULO LWENCILA YEKAPA



- ◆ the natural environment of the Peninsula comprises a range of different habitats; some of them pristine, others degraded;
- ◆ the accommodation of diverse metropolitan communities with many of the places along the Peninsula having their own identity which is strongly influenced by the local natural setting;
- ◆ a pressure for urban growth into surrounding areas because it is a relative mature and desirable metropolitan settlement area, but with this comes community resistance due to the loss of natural areas; and
- ◆ it is a study area within which a National Park is currently being developed in the heart of the metropolis.

As a result of these complexities and given CMC's limited research and planning resources, the Peninsula urban edge study is essentially a metropolitan scale attempt at managing urban growth. It does not set-out to define the boundaries of the CPNP, nor does it attempt to replace the CPPNE.

Whilst the CMA urban edge studies recognise the importance of local and metropolitan open space systems (MOSS) serving as ecological corridors that link urban and rural areas, they do not delineate the extent of urban development along such corridors. Although the edge studies provide overall land use guidelines and management policies for the urban edge, they identify the need for a localised approach to the sustainable management of the urban edge.

It has become evident during the public participation process of this study that the various beaches situated within the proposed urban edge warranted special planning attention. This is because of the sensitivity of these areas as a focus of concentrated public demand. Therefore, notwithstanding the fact that all beaches and their environs are demarcated within the urban edge, special provisions for development and conservation must be upheld. It is recommended that these should be contained within Development Plans for each of the beaches independently as a matter of priority.

In the interim the urban edge includes beaches, which are associated with urban development for expediency, but prohibits defined urban development of the beaches and environs until the proposed Development Plans have been adopted.

1.5 PROCESS FOLLOWED

The study to determine the urban edge of the Peninsula has been undertaken in sequential phases. These phases were carried out as follows:

Phase I: Initiation

Initially the study area was defined; the terms of reference were scoped with CTM, SPM and CPNP; background information and mapping on the study area was collected; public notification took place; and workshops were held to establish consistency between the three CMA urban edge studies.

Phase II: Contextual Analysis

The analysis phase of the study involved the gathering, collation and auditing of study area information to ascertain the significance of various factors in the demarcation of an urban edge. The various factors considered ranged from bio-physical to visual aspects in accordance with the criteria set in the MSDF Technical Report.

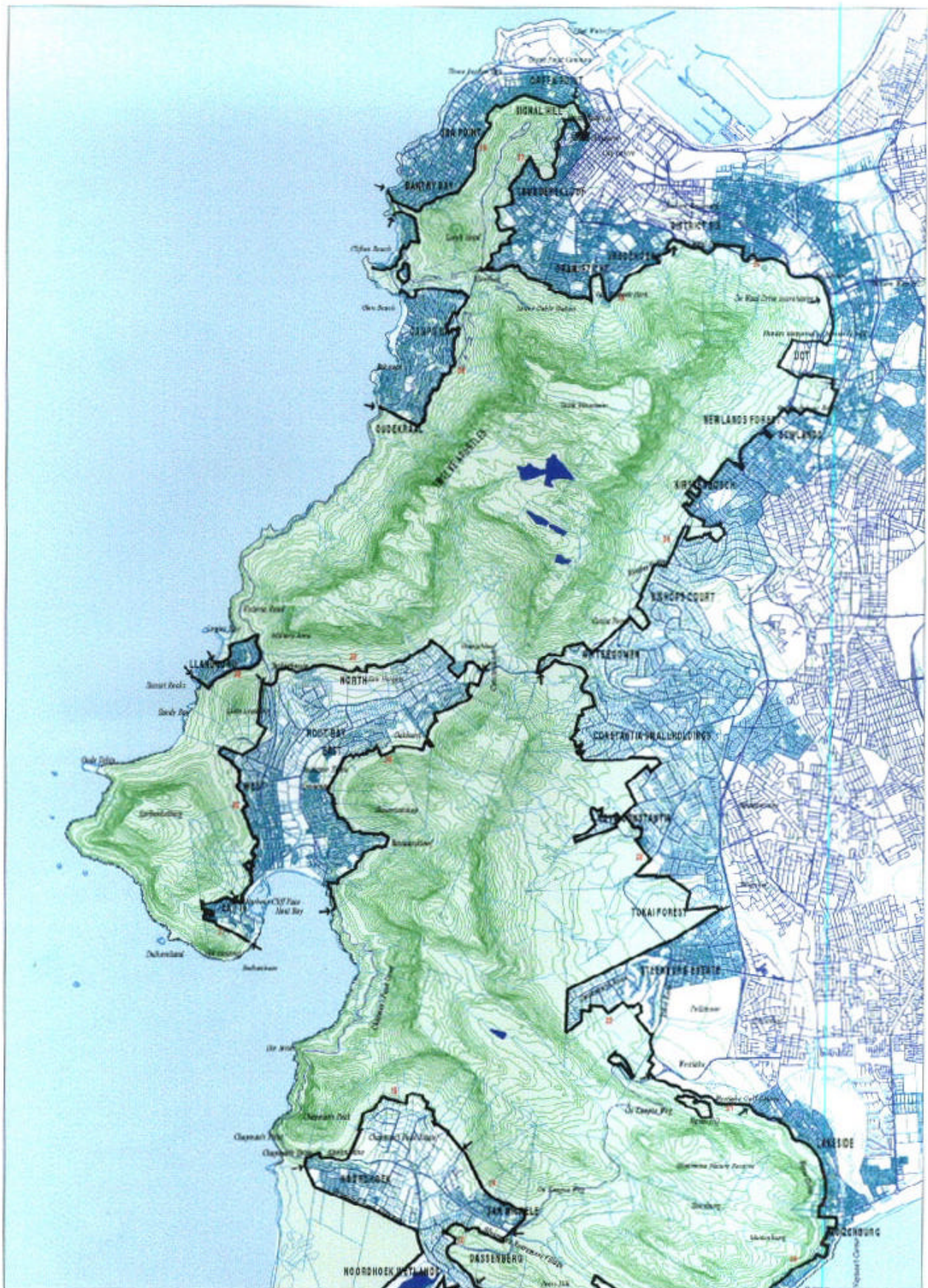
Furthermore, a series of public meetings was held throughout the Peninsula to obtain inputs from interested and affected parties on aspects of concern.

Phase III: Draft Edge Plan

The third phase of the study involved: the exploration of alternative edge demarcation and management scenarios; the formulation of sub-regional and overall draft edge proposals; and obtaining public comment on the Peninsula urban edge proposals.

Phase IV: Final Urban Edge Plan

The final phase of the study involved processing the input received on the draft Urban Edge Plan; amending the plan in the light of comment received; finalising outstanding aspects; documenting and mapping the final plan; and obtaining statutory approval for the plan.



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KAAPSE METROPOLITAANSE RAAD
IBHUNGA LOLAWULO LWENQILA YEKAPA



URBAN EDGE LINE
NORTHERN PENINSULA

FIGURE
2a



FIGURE 2b

1.6 PUBLIC PARTICIPATION

Interested and affected parties have been involved in the Peninsula urban edge study on the following basis:

- ◆ to initiate the study notices that were placed in the press and information brochures which were placed in local libraries and issued to councillors and interest groups listed on the CMC's database;
- ◆ in the contextual analysis phase a series of public meetings were held from 09 to 18 February 1998 to identify local urban edge issues and explore alternative edge scenarios;
- ◆ the draft urban edge reports were placed in public libraries in April 1999 and a second series of public meetings were held in May 1999 with local communities to obtain public comment; and
- ◆ the final draft urban edge reports were placed in public libraries and formally advertised for public comment.

Please refer to Appendix A for a summary of all comments received.

1.7 STATUTORY APPROVAL

CMC will take responsibility for obtaining statutory approval of the 3 CMA urban edge studies either in terms of existing legislation as a structure plan (in terms of the Land Use Planning Ordinance), or as a specific Development Framework in terms of the new Provincial Planning & Development Act.

Before the Peninsula urban edge study is finally approved however, the formal endorsement of CTM, SPM and CPNP will be obtained, as well as that of the CMC.

1.8 PURPOSE AND STRUCTURE OF REPORT

This report sets out the urban edge proposals for the Cape Peninsula. The report is structured as follows:

- ◆ Section 2 examines the vision put forward by leading theorists, provides a conceptual and contextual overview of the Peninsula's urban fringe, explores the role of the urban edge as a means of managing complex development pressures, and clarifies terminology used in this study.
- ◆ Section 3 examines the applicability of a range of variables in the determination of the Peninsula urban edge. The chapter represents a summary of the separately bound Technical Report, which details the contextual analysis.
- ◆ Section 4 demarcates in sections a proposed urban edge line for the Peninsula and explains the reasons underlying the demarcation. In addition proposed land use management policies for precincts lying along the urban edge are presented.
- ◆ Section 5 sets out edge management policies for various zones falling inside the urban edge.
- ◆ Section 6, which concludes the report, sets out an overall package of urban edge management guidelines in support of the MSDF.

SECTION 2: POINTS OF DEPARTURE

2.1 THE VISIONARIES

“You leave the city and turn towards the countryside. But can you find it? To do so you will follow the paths of those who tried before you. Many stayed to build. But those who did so first are now deeply embedded in the fabric of the city. So as you go you transect the rings of the thwarted and disillusioned who are encapsulated in the city as nature endlessly eludes pursuit.” (McHarg, I; 1971; p:21).

The historical growth of towns and cities were major concerns of the founding fathers of the planning discipline. To combat the problems of uncontrolled urban growth, these “visionaries” sought ways to retain ecological principles as well as ways of reconstructing them into process of city building. Lewis Mumford (1895-1990) saw urban places as containers for human life and identified a need to limit “*the cancerous growth of the city*” into the countryside, thereby ensuring the that specific identity of the region remained intact (1938; p :237).

Norberg – Schultz in his 1980 work entitled *Cenius Loci* explains how landscapes provide identity for city dwellers. He argues that the nature of man’s approach to place making should be determined by an understanding of the presence and essence of the landscape concerned. He is highly critical of what he calls the ‘placelessness’ of contemporary settlements and puts forward a compelling argument that the urban fringe is not simply a homogenous space on which to build. In his words; “*if man-made places are at all related to their environment, there ought to exist a meaningful correspondence between natural conditions and settlement morphology. The basic problem to be solved by settlement is how to gather the surrounding landscape.*” (1980; p:87).

Kevin Lynch suggests that one of the causes of placelessness is the “*divorce of the user of a place from the control over its shape and management, which lead to inappropriate form and structure being imposed on the landscape and its inhabitants.*” (1976; p:7). Whilst Lynch is an advocate of incorporating environmental structuring elements into the design of mankind’s living environments, he qualifies this with a warning that planners must “*restrict themselves to those*

features which are crucial to the quality of the place and must leave as many decisions as possible to other groups” (1975; p:54).

The viewpoints of these so-called “visionaries” provide some insights into the rationale for managing the outward growth of the city. As additional points of departure, this chapter introduces the urban fringe as the context within which an urban edge is to be demarcated; it defines the role of the urban edge in the CMA; and it also clarifies the meaning of terminology used in the CMA urban edge studies.

2.2 THE URBAN FRINGE

“The term urban fringe means differing things to different users. To the farmer it is a place to work; to the city dweller it is often the nearest ‘real countryside’; to the developer it offers potential for housing, industry, mineral extraction and leisure facilities. To central and local government it may be a place to locate the urban services which cannot be located elsewhere – sewage, rubbish dumps, airfields, motorways, etc.” (Countryside Commission, 1981: p14).

It is within the urban fringe that an urban edge is to be demarcated. In the context of the CMA urban edge studies, the term **urban fringe** refers to the zone of transition in land use and socio-economic characteristics on the periphery of metropolitan Cape Town’s urban areas.

2.2.1 Significance

“For too often this zone (the urban fringe) is merely viewed as a playground for marginal urban activities, whereby the rural origins and characteristics are neglected or even denied” (Van den Berg, L; 1983; *Land Use and Land Values in the Rurban Fringe in Lusaka*).

Van den Berg, based on his research into the processes at work on the edge of African cities, coined the term ‘rurban fringe’. He rejects use of the term urban fringe because of its urban bias, and argues that the urban fringe is just as much a part of the rural carpet as it is woven into the urban fabric.

Evans, in a recent UK research paper on redefining the urban fringe (Journal of Town and Country Planning; Feb 1997), emphasises the point made by Van den Berg. He describes the urban fringe as the geographical manifestation of socio-economic and physical reflexive links between urban and rural areas.

The significance of the urban fringe may be summarised as follows:

- ◆ it serves as the ‘gateway’ to urban areas, highlighting the importance of maintaining the quality of fringe landscapes;
- ◆ it integrates metropolitan open-space systems with the rural environment;
- ◆ it serves as the interface between multiple use urban areas and ecologically sensitive, core conservation areas;
- ◆ it provides resources vital to the functioning of urban areas (e.g. recreational, mineral, agricultural, infrastructural, etc.);
- ◆ it provides amenity spaces around urban areas; and
- ◆ it provides landscapes for the conservation of historical precincts.

2.2.2 Characteristics

Notwithstanding the significance of the urban fringe, its characteristics make it a complex area to manage. The urban fringe of the Peninsula has unique features as well as some characteristics that are similar to those found in many international cities. These similarities are as follows:

(i) Multiple Land Use Areas

Within the urban fringe there is seldom a clear distinction between what are so-called urban and what are (so called) rural activities. This is particularly apparent in the Kommetjie / Noordhoek area of the Peninsula, as well as in the Constantia Valley and Hout Bay valley, with their mixed use smallholdings.

(ii) Degraded and Under-utilised Agricultural Land

In anticipation of future urban development, or as a result of the practical difficulties of farming adjacent to urban areas, the agricultural landscape is often degraded or under-utilised within the urban fringe. Whilst this feature is more applicable to the

Northern Metro and Helderberg sub-regions of the CMA than to the Peninsula, there is some evidence of this in the Southern Peninsula.

(iii) Vandalism and Unauthorised Resource Use

It is a common occurrence to see vandalism of vacant farmsteads within the urban fringe, as well as the unauthorised use of resources. Whilst significantly less prevalent in the urban fringe of the Peninsula than in the urban fringe of the Northern Metro and Helderberg sub-regions, there have been nonetheless cases of vandalism in the Noordhoek / Kommetjie area as well as unauthorised sand and gravel mining in the South Peninsula.

(iv) Public Utilities and Bulk Infrastructure

Because of the extensive space needs of many public utilities and bulk infrastructure facilities serving metropolitan areas they are typically established in the urban fringe. Again this is not a significant feature of the Peninsula, compared to the Northern Metro and Helderberg sub-regions of the CMA. Peninsula examples include the Wildevolevlei sewerage disposal works, Polsmoor Prison and diverse military installations.

(v) Outdoor Recreation

Both formal and unofficial outdoor recreational activities are common in the urban fringe, particularly along the Peninsula. Local examples include off-road vehicles, horse-riding, walking, trails, etc., in the Peninsula’s diverse coastal and mountain environments.

(vi) Informal Settlement

With demand exceeding supply within the formal urban housing delivery market, the urban fringe provides locations for the establishment of informal settlements, which initially are not highly visible. Subsequently these expand significantly as has happened in Westlake, Noordhoek and Hout Bay. Informal settlement is stimulated by the availability of jobs in the Peninsula’s middle to higher income residential areas and exacerbated by the legacy of Group Areas and slow delivery of formal housing to the poor.

(vii) Poor Levels of Security

Circumstances of uncontrolled access, damaged and derelict land, fragmented ownership, absentee landowners and informal settlement give rise to poor levels of security. This is a feature common to the urban fringe of the CMA.

(viii) Urbanisation Expectations

Historical urban growth patterns reinforce the general perception that land within the urban fringe is earmarked for future urbanization. The process of land degradation described above is often used as motivation for allowing urban development to take place. Cheaper land values within the urban fringe accelerate this process. Whilst this phenomenon is less pronounced in the Peninsula than in Northern Metro and Helderberg sub-regions, it is nonetheless a reality.

2.2.3 Features of the Peninsula

Whilst the Peninsula's urban fringe has similarities to the Northern Metro and Helderberg sub-regions, it also has unique features. These include the following:

- (i) With the exception of viticulture in Constantia / Tokai, the urban fringe of the Peninsula is to all intents and purposes not a *bona fide* farming area, notwithstanding the anomaly that much of the area is zoned (for) Agriculture.
- (ii) Table Mountain is an international landmark and the Peninsula mountain chain is a potential World Heritage Site. It forms part of the Cape Floral Kingdom, one of six floral kingdoms. It has the highest number of species per hectare, the highest incidence of endemic species and the highest bio-diversity in the world.
- (iii) The recent establishment of the Cape Peninsula National Park consolidates, for the first time, most core conservation areas into an effective management unit. The park's uniqueness lies in its juxtaposition to the Peninsula's urban communities. It is through the Peninsula's urban fringe that access to the park will be channeled, and where certain Park facilities will be established.
- (iv) The Peninsula has a definitive sense of place characterised by the north-south mountain chain and the proximity of False Bay and the Atlantic Ocean on either

side. The topography and accessibility to coastal resources has influenced Peninsula settlement patterns, resulting in urban development hugging the slopes of the mountain chain. Where the built environment has been allowed to overshadow the natural environment, the special qualities of the place are lost.

- (v) As the Cape's historical settlement area, the Peninsula is a landscape of cultural significance. As a relatively mature settlement area the Peninsula differs from the Northern Metro and Helderberg sub-regions whose fringes are more growth frontiers. Nonetheless the Peninsula remains a desirable place to live and there is pressure for urban expansion. There are also competing pressures for low density settlement in the Peninsula's urban fringe in a form that offers a rural lifestyle.
- (vi) Counteracting these urbanisation forces is a growing environmental awareness amongst Peninsula communities who seek to conserve the natural and cultural landscapes of the Peninsula.

2.3 ROLE OF THE URBAN EDGE

“Local planning authorities, co-ordinated by the CMC and the WDC, should demarcate, in detail, urban edges surrounding all urban settlements throughout the CMR including Cape Town, Atlantis, Paarl / Wellington, Stellenbosch and Somerset West / Strand” (MSDF Technical Report; Policy 24; 1996).

As part of its spatial restructuring strategy, the MSDF proposes establishing an urban edge as a means of managing growth and development pressures. In the context of the CMA the role of the urban edge, as one of a range of instruments to manage the growth and development of the metropolis, is to:

(i) Contain Urban Sprawl

The demarcation of an urban edge will serve to curtail the pattern of low-density, haphazard and discontinuous development within the urban fringe. As such it will assist in overcoming the current problems of under-utilization of land, excessive energy consumption and air-pollution due to greater use of motorised transport, high costs of infrastructure provision, and declining aesthetic quality of urban fringe landscapes.

(ii) Protect Significant Environments and Resources

The identity of Cape Town is closely tied to its varied landscapes. Within the urban fringe the elements that contribute to its ‘sense of place’ include seascapes, topography, indigenous vegetation biomes, intensive agriculture and historical / cultural precincts. The establishment of an urban edge provides a means of protecting these enduring attributes of Cape Town’s identity.

(iii) Re-orientate Growth Expectations

Historical patterns of urban growth along the urban fringe of the CMA have become entrenched. Defining the 20 year outer limits of urban growth sends a clear signal to all that indiscriminate outward expansion of urban areas will no longer be tolerated.

(iv) Densify Built Environments

The MSDF strives to establish a more equitable, efficient and environmentally sustainable urban form. The urban edge will restrict outward expansion of the metropolitan region and promote more compact settlement patterns.

(v) Restructure Growth Patterns

Whilst the urban edge will promote ‘in-ward’ growth, it is recognized that ‘out-ward’ growth pressures will not disappear. Accordingly the demarcation of an urban edge allows for the restructuring of historical growth patterns.

(vi) Rationalise Service Delivery Areas

Defining the spatial extent of settlement on a metropolitan basis allows for the cost-effective provision of bulk infrastructure. It overcomes the current problem of the ‘leap-frogging’ of service provision within the urban fringe.

2.4 TERMINOLOGY

As final point of departure the terminology used in the CMA urban edge studies is clarified below.

2.4.1 Urban Edge

The urban edge, as proposed in the MSDF, is a means by which development pressures along the fringe of the CMA are to be managed. The urban edge, as a growth management policy instrument, has two interrelated components:

- ◆ a demarcated line that cadastrally defines the outer limits of urban development for the next 20 years; and
- ◆ management zones, on one or both sides of the demarcated line, wherein specific policies are adopted to direct and control land use and access.

2.4.2 Management Zones

Management zones along the urban edge vary in width depending on local circumstances. Those inside the urban edge may include areas earmarked for urban expansion, urban densification, or precincts of cultural or environmental importance, which should be conserved. Management zones outside the edge could include farming areas, ecologically important nature areas, and/or significant rural landscapes. Management of the urban edge is complicated where conservation areas abut urban development, without any buffer or transition areas in between.

The situation on the ground in the urban fringe of the CMA does not always allow for a gradation of land use and access management areas as set-out above. Management of the urban fringe is complicated where conservation areas abut urban development, without any buffer or transition areas in between. Specific land use policies (whether urban or non-urban) will be prescribed for the management of the edge.

So as to assist and facilitate control over and management of the transition areas, the following management zones were created:

- ◆ Urban Transition Zone:
- ◆ Non-Urban Zone:

Urban Transition Zone (UTZ) refers to:

An area inside the Urban Edge, within which all development is to be controlled by a set of policies. Ideally this area should be managed as a Special Area zoning in terms of the relevant Zoning Scheme. This is to establish an area of transition in order to regulate urban development adjoining the edge and, in so doing, protect it.

Non - Urban Zone (NUZ) refers to:

An area beyond the Urban Edge within which policies are prescribed for non-urban use. As with the Urban Transition Zone, this area should be managed within the context of a Special Area zoning. This is to establish controls for an area of transition so as to manage and protect rural areas beyond the edge.

In order to realise the overall spatial development objectives of the MSDF, appropriate policies and strategies therefore need to be formulated so as to manage this area.



Figure 3: URBAN EDGE: Conceptual Overview

2.4.3 Land Use Inside the Urban Edge Line

The CMA's urban edge will encapsulate urban areas as well as urban transition areas. Land uses inside the urban edge line includes all normal urban uses, inclusive of extensive residential uses with a rural character, as well as undeveloped areas identified for urban infill and future urban expansion. It also includes all public open spaces, nature areas, agricultural areas, formalised sports facilities and urban seafronts that are located within, and function as part of, the normal urban development fabric.

2.4.4 Land Uses Outside the Urban Edge Line

Land uses outside the urban edge line include all rural, agricultural, and conservation land and/or associated activities not surrounded by urban development or functioning as part of the conventional urban fabric. They also include low intensity uses intrinsically linked to the needs of these environments (e.g. information centres, environmental education centres, fire lookouts, ablution facilities), as well as tourism facilities directly associated with natural or rural environments.

SECTION 3: URBAN EDGE INFORMANTS

3.1 INTRODUCTION

“It will also be appropriate for local authorities to consider whether an area can be defined around distinct and identifiable features, in order to help boundary definition and assist public identification.” (Planning in the Urban Fringe; UK Department of Environment, 1998; p :8).

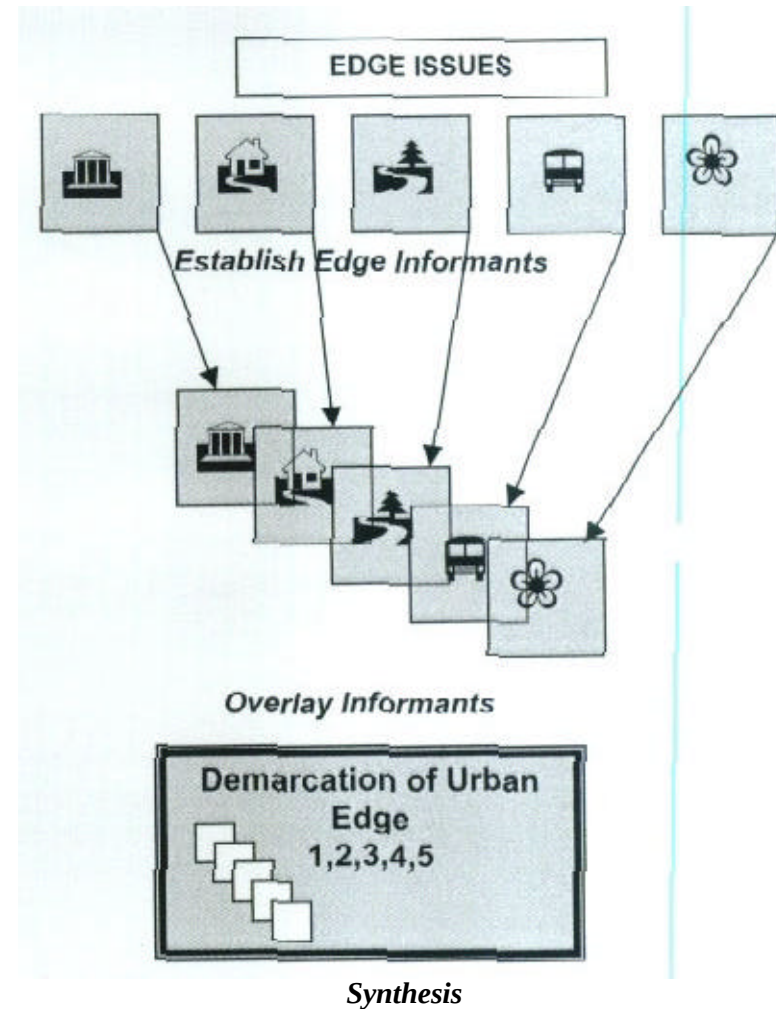
A contextual analysis of the study area was undertaken to identify the unique features of the Peninsula’s urban fringe and assess their significance in the demarcation of the urban edge. The contextual analysis was based on existing information sources. It tested the applicability of the MSDF’s urban edge criteria. The variables examined were as follows:

- ◆ the geophysical environment (inclusive of topography, climate, soils, geology, etc.);
- ◆ the biophysical and ecological environment;
- ◆ river and wetlands systems;
- ◆ infrastructure location and capacity;
- ◆ land use and related patterns;
- ◆ the demographic and population profiles and trends;
- ◆ the legal, planning and land ownership situation;
- ◆ the socio-cultural and historic environment; and
- ◆ visual resource analysis.

The separately bound Technical Report documents the findings of the analysis into these variables as well as their implications for the demarcation of an urban edge. The relevance of the respective edge informants was assessed as illustrated in **Figure 4**.

The findings of the contextual analysis of the Peninsula were presented to local communities at a series of public meetings. Concerns raised by interested and affected parties at these scoping meetings are documented in Appendix A.

In this chapter an overview of the contextual analysis is presented, and urban edge management policy implications are highlighted.



Synthesis of Edge Informants Pertaining to Edge Demarcation
Figure 4

3.2 GEOPHYSICAL ENVIRONMENT

The Cape Peninsula is a globally significant geophysical feature. Topography dominates the landscape, dictating access and settlement patterns. The oceans frame the city and the mountains form a dramatic backdrop to the urban landscape.

Geophysical considerations (e.g. slope, ridge lines, high potential agricultural soils, mineral deposits) are of importance in demarcating the outer extent of urban development along the Peninsula. Each locality's geophysical features inform the definition of the urban edge. Areas not suitable for urban development include: slopes of greater than 1:4; geologically unstable areas; prominent topographical features; mineral reserves; and aquifer discharge areas.

Authorities have for many years applied the 1:4 benchmark as the limit for urban development – together with the 131 m & 152 m contour elevation limitations of the peninsula mountain chain. This policy applied to land slopes has, it must be said, been successful, in particular, in the delimitation of new subdivisional areas and consequently areas steeper than 1:4 to remain undeveloped and so conserved. Urban pressure has continually been applied to this policy generally without success. Motivations for such a policy, which is retained in this study (refer UTZ policy 4a) include the following:

Land steeper than 1:4 is not conducive to conventional urban development, particularly residential development, due to:

- ◆ Excessive or costly earthworks resulting in unsightly cuttings and embankments, retaining walls and erosion factors
- ◆ Development of steep land often requires stilted buildings with unsightly views of undersides of dwellings
- ◆ Landscaping is generally ineffectual
- ◆ Municipal services are costly to install and often lead to maintenance problems, particularly stormwater reticulation
- ◆ Often privacy and security are difficult to monitor, and
- ◆ In aggregate development on steep land, especially at higher elevations, can be a blight on the landscape and conflict with the non-urban zone requirements specified in this report.

3.3 BIOPHYSICAL & ECOLOGICAL ENVIRONMENT

South Africa is party to the International Convention on Biological Diversity and the peninsula is “a globally important hotspot of biodiversity for higher plants and invertebrates” and “arguably the world’s foremost hotspot of terrestrial biodiversity”, (Cowling, MacDonald and Simmonds 1996. Biodiversity and Conservation 5, 527-550). Naturally, urbanization is one of the main threats to biodiversity.

Whilst reference material in this report refers to the protection of “threatened and endemic species”, it must be noted that it is the habitat of all known threatened species of flora and fauna and the Cape endemics in particular, that need to be protected. Unfortunately in-depth and updated research information is not readily available and further studies are essential to develop a workable database.

Dr AT Lombard of Conservation Systems was asked to address the position of the (proposed) urban edge in the Cape Peninsula, in relation to the distributions of floral and faunal species as reported in the scientific paper by Trindler-Smith et al. (1996).

A method was devised using distribution data of endemic fauna and flora species compiled by M.D. Picker and Trindler-Smith respectively, of identifying hotspots along the urban edge where potential conflicts occur.

Six cells were attested to be in conflict with urban development and 25 cells were vulnerable to further development; refer Technical Report 1998 and references within this report.

Adjustments to the urban edge were made as a consequence of these findings.

The four major hotspots or complexes which are important for plants, vertebrates and invertebrates are; the Table Mountain complex, the Silvermine complex, The Red Hill complex and the Cape of Good Hope Nature Reserve. These core conservation areas require careful management to protect the diverse species and habitats they contain.

Between these major hotspots and especially outside the boundaries of the CPNP, urban encroachment must be prevented to maintain the continuity of rural landscapes, to facilitate the maintenance of ecological processes, and to allow for a wilderness experience in close proximity to the city. Protection of large areas with topographic variety is also important in terms of maintaining diversity and high species turnover

between habitats. Particular areas of concern are those ecologically sensitive areas which are used intensively for recreation purposes or which about urban development.

In demarcating the urban edge attention needs to be given to the following:

- ◆ protection of the Peninsula's rich natural heritage;
- ◆ prevention of uncontrolled access into sensitive habitats;
- ◆ detailed identification and conservation of endemic plant and animal species at a local planning level;
- ◆ access to and management of Peninsula's natural resources;
- ◆ promotion of ecological corridors;
- ◆ the scope for landscape rehabilitation by the eradication of alien vegetation;
- and
- ◆ establishing buffer and transition areas around core conservation areas.

3.4 RIVERS & WETLANDS

The rivers originating in the Peninsula mountain chain are of hydrological significance, and serve as important ecological corridors between mountain catchment and coastline. Within urban areas most rivers have been modified and have all been degraded. The Peninsula's wetlands along the lower reaches of rivers are severely impacted on by settlement encroachment, uncontrolled access and contaminated stormwater run-off.

Alien vegetation removal programmes in the catchment are increasing stream flows. The introduction of catchment management programmes together with the use of an urban edge to manage settlement growth will assist in hydrological improvements and environmental rehabilitation.

For the effective utilization of rivers and drainage channels as an urban edge, they need to be deployed as continuous and multi-functional open-space corridors with respect to:

- (i) their hydrological role (i.e. inclusive of sponge areas, wetlands, primary catchment, flood areas, etc.);
- (ii) species and habitat bio-diversity;

- (iii) multiple uses (i.e. stormwater retention ponds, agriculture, recreation, etc.); and
- (iv) the scope for integration with adjacent urban areas.

For these reasons, it is necessary to use riverine corridors and not the centre of river, or a riverbank, to define the urban edge. Rivers and drainage channels are significant urban edge informants in the South Peninsula, but there is considerably less scope for their application in the Northern Peninsula.

Although the subject of detailed local investigations, each riverine system traversing the Peninsula's urban areas requires an edge definition so as to establish local open space systems.

3.5 INFRASTRUCTURE & UTILITIES

The geography of the Peninsula dictates that urban infrastructure and utilities are located in both low-lying areas (e.g. sewerage treatment works) and elevated areas (e.g. reservoirs, communication masts) of the urban fringe, i.e. localities with a high visual and environmental impact. As such the location of bulk infrastructure is a major determinant of Peninsula urban growth patterns.

Whilst waste disposal sites and wastewater treatment plants obstruct urban expansion, caution is needed in using them to define the urban edge on account of the odours and vectors they generate.

Roads can provide a distinctive divide between rural and urban areas that is easily recognised by the public. Low and medium order roads afford increased access, however, thereby putting under pressure natural resources along the urban edge. Where such roads are utilised as urban edge components, limited access must be ensured. Higher order roads with their associated limited access offer improved opportunities as edge components. There are localised applications of roads to define the Peninsula's urban edge.

Whilst power lines have a significant severance impact on land use patterns, their visual impact detracts from their use to define the urban edge. In combination with other edge components (e.g. rail, road, riverine corridor), however, they can be

successfully deployed to define the edge as they represent a substantial barrier to urban expansion. In the Peninsula they are not of major significance in defining the urban edge.

3.6 LAND USE

3.6.1 Agriculture

“The Commission does not feel that the designation of pockets of (agricultural) land on the basis of some definition of ‘prime’, and the legal protection of these through some form of zoning, nor the singling out of specific parcels of land, identified only on their productive value, is the correct approach to the problem.” (Development and Planning Commission; May 1998; Comments on the issue of the protection of prime agricultural land in light of the repeal of the Sub-division of Agricultural Land Act (Act 70 of 1970)).

The MSDF sets out to protect the agricultural resources surrounding the CMA. On its own, however, the agricultural potential of soils is an insufficient basis on which to fix an urban edge. The reasons for this are as follows:

- (i) The value of agricultural land changes over time (e.g. recent resurgence of viticulture in the Tokai / Constantia area).
- (ii) Land not classified as being of significant agricultural value is automatically perceived as being suitable for urban development, which can result in the fragmentation of rural landscapes and urban sprawl.
- (iii) The value of agricultural land can be measured in different ways, namely:
 - ◆ its intrinsic productive value resulting from nature (i.e. texture, soil depth, chemistry, etc.);
 - ◆ its enhanced value resulting from improvements (i.e. irrigation, fertilisers);
 - ◆ its relational value resulting from its location (e.g. small-scale farming in close proximity to the urban market); and

- ◆ its amenity value which results from its beauty, uniqueness, sense of place, as well as its role in preserving rural landscapes.

Notwithstanding the imperatives of encouraging small-scale farming and land redistribution in South Africa, the Development and Planning Commission conclude that *“the protection of valuable agricultural land along with all other valuable and non-renewable natural resources is a vitally important issue”*. They endorse the delineation of an urban edge that supports the functioning of both urban and rural landscapes.

The interface between urban and farming activities is a complex zone to manage. This is as a result of:

- ◆ health hazards (e.g. spray / drift of pesticides);
- ◆ the possible spread of vectors;
- ◆ dangers associated with the operation of farming equipment;
- ◆ unpleasant odours; and
- ◆ the vulnerability of farmers given the ease of access into farm lands.

The successful deployment of agricultural areas as an underlying component to the urban edge requires that:

- ◆ such farmlands be consolidated as part of continuous rural landscapes along the urban fringe;
- ◆ local authorities ensure the stewardship of such “green areas” for future generations and afford equivalent weightings to the importance of urban and rural landscapes;
- ◆ defined and controlled access to suitable localities within these green areas is provided for active and passive recreation by the urban community; and
- ◆ complementarity of land uses (e.g. agri-service industry) and joint resource utilisation (e.g. using recycled grey water or urban stormwater run-off for irrigation purposes) should be sought within this zone.

Despite Agriculture zonings in the parts of the Peninsula, it is only the Tokai – Constantia area that is of agricultural significance. This farming landscape is of economic, visual, and cultural importance, not to mention its value to the tourism market, and needs to be protected from urban encroachment

3.6.2 Conservation Areas

The Cape Peninsula National Park, private nature reserves, and privately held land of conservation value all warrant inclusion in core conservation and buffer areas that are situated outside the urban edge. Within buffer areas public access needs to be controlled as does the placement of facilities serving conservation areas.

3.6.3 Smallholdings

The smallholding areas of the Peninsula are to all intents and purposes extensive residential precincts, some with mixed use activities as secondary usage and very few with substantive farming activities. Whilst some smallholding areas have a rural ambience, the de facto usage of these properties is essentially the same as urban areas.

It is for reasons of effective urban growth management that extensive residential smallholdings in the Peninsula should preferably be managed as transition areas inside the urban edge. Their inclusion inside the urban edge in no way implies their redevelopment into formal urban areas. Urban transition areas are specifically intended to protect the character of unique landscapes along the urban fringe.

3.6.4 DEMOGRAPHIC & SOCIO-ECONOMIC CONSIDERATIONS

The South Peninsula Sub Regional Structure Plan reflects that urban development to the year 2010 can be accommodated spatially, in line with a strategy that balances urban development and environmental conservation. Of significance is the legacy of apartheid, which excluded many communities from living along the Peninsula, and evicted many who had historically lived there.

With jobs available in the middle and upper income neighbourhoods of the Peninsula, the reality is that spatial provision needs to be made for the accommodation of lower income groups at different localities. This has introduced a new paradigm to urban growth management in the Peninsula.

3.7 LEGAL, PLANNING & LAND OWNERSHIP

A review of Peninsula spatial planning frameworks (ie: Structure Plans and Zoning Schemes) revealed few inconsistencies between urban development proposals and edge informants. The importance of the Peninsula as a (natural and scenic) tourist asset is widely acknowledged in structure plans, growth management documents, and specialist studies pertaining to tourism, scenic routes, access to the National Park, etc. Development rights should not be granted unless it can be demonstrated that the integrity of the Edge is not violated.

However, where rights exist, these need to be respected and where possible (and defensible) a negotiated trade off should be established, preserving the integrity of the area. Land exchange deals, land banking, purchasing development rights and transfer of rights is integral in acquiring and protecting environmentally sensitive areas.

3.8 SOCIO-ECONOMIC & HISTORICAL ENVIRONMENT

Cultural landscapes are considered to be part of our cultural heritage, which in turn is influenced, by our political history, economic status and social upbringing.

The Institute for Cultural Landscape Studies at the Arnold Arboretum of Harvard University define a cultural landscape as:

“a geographic area (including both cultural and natural resources and the wildlife or domestic animals therein), associated with a historic event, activity or person or exhibiting other cultural or aesthetic values” (<http://www.icls.harvard.edu> - 24/03/99)

The implications of these landscapes within the context of spatial planning are qualified by Catherine Howett (1987) as:

“Historic landscapes, unlike works of art, have to function as contemporary environments – we have literally to enter and become involved with them (<http://www.icls.harvard.edu> - 24/03/99).

The historic district, the ordinary neighbourhood, working farms and protected forests, are all cultural landscapes.

It is important to note that a landscape valued by one group may be simply invisible, or even offensive, to another. With the culturally diverse composition of the South African population it is therefore critical that cultural landscapes need to be dealt with in a sensitive manner.

The Wild Almond hedge and English Oaks in Constantia, the City Gateway Park and the Bo-Kaap can be considered as cultural landscapes. Others include:

1. Green Point,
2. Bo-Kaap,
3. Tamboerskloof,
4. Upper Table Valley,
5. Platteklip Slave Route,
6. French Military Lines,
7. Rhodes Estate
8. Bishopscourt to Constantia, and
9. Kalk Bay

Other areas of cultural historical significance are Signal Hill, Apostle Battery, the old Dutch Cannons at Hout Bay (military) and Oude Kraal (cultural).

As highlighted by The Institute for Cultural Landscape Studies,

“even when landscape preservation standards are broadened to include a wide range of landscape types, preservation is not always the appropriate stance. Designers and communities may reasonably choose to transform existing landscapes or create new ones. Managing cultural landscapes thus involves planning for positive change as well as preventing the loss of existing landscapes” (<http://www.icls.harvard.edu> - 24/03/99).

3.9 VISUAL RESOURCE ANALYSIS

Elevated areas and ridgelines enclose the built environment, define localised rural settings (e.g. historic precincts), and contribute to creating a sense of place. The successful deployment of elevated areas and ridge lines as components of the Peninsula’s urban edge requires control of building height and form, as well as access up steep slopes. Variations in topography across the Peninsula prevent the adoption of uniform contour height restitution.

Locally determined height restrictions are required, taking cognisance of the degree of vegetation cover, slope stability, as well as accessibility and serviceability. Consideration should also be given to the height, texture and density of development along the contour interface.

3.10 OVERVIEW

Each of the 34 localities assessed along the Peninsula has unique features, which inform where the urban edge should be demarcated. Details of these local informants are set-out in section 4, along with the definitions of the 34 segments of the Peninsula urban edge.

To conclude this overview a Peninsula overview of the significance of different edge informants is depicted in **Table 1**

VARIABLE	CONSIDERATION	SIGNIFICANCE
Geophysical Environment	<i>Climate</i>	Climate has only been considered as an edge informant in that it has an impact on the geophysical environment
	<i>Topography</i>	- Slopes steeper than 1:4 152m contour served as historic limit to service delivery. - Prominent topographical features, which have visual exposure such as, ridges, spurs, promontories, <i>rims</i>, convex slopes and which provide a natural backdrop to the urban area.
	<i>Geology</i>	- Geologically unstable areas. - Unique geological & geomorphological features. - Existing and potential areas of mineral reserves, and quarries which have a visual impact on the landscape
	<i>Hydrology & Geohydrology</i>	Sub-surface groundwater reserve.
Biophysical & Ecological Environment	<i>Vegetation</i>	Conservation of endemic vegetation.
	<i>Agriculture & Forestry</i>	- Land of high to medium agricultural potential which contributes to the formation of unique rural landscapes. - Indigenous and Non-indigenous forestry areas.
	<i>Threatened & endemic species (flora & fauna)</i>	Protection of threatened & endemic species (flora & fauna) hotspots
	<i>Ecologically sensitive habitats</i>	- Protection & management of sensitive natural habitats. - Prevention of uncontrolled access into sensitive habitats.
	<i>Wilderness & maintenance of continuity</i>	- Maintenance of large continuous ecological areas. - Promote the establishment of CPNP. - Promote the establishment of functional ecological corridors between natural systems.
River & Wetland Systems		- The Elsies River; Hout Bay River; Silvermine River; and Noordhoek / Wildevleivlei Wetlands which provide a habitat for unique plant and animal species. - No land falling within 1:50 year floodline should be considered for urban development. - Reinforce the management & protection of river & wetland systems, which traverse the urban edge. - Reinforce river corridors within the MOSS

Infrastructure Location & Capacity	◆ Existing & proposed road infrastructure, which serve to form a definitive barrier for urban expansion, and which can be utilised as urban edge components. ◆ Scenic drives. ◆ Capacity of existing service & social infrastructure to accommodate growth.
Land Use & Related Patterns	◆ Zoning. ◆ Consolidation and densification of existing urban areas.
Demographic and Population Profiles & Trends	◆ Population growth & future residential requirements ◆ Approved policies of densification ◆ Objective of limited urban development balanced with conservation and tourism
Legal, Planning & Land Ownership Situation	◆ Current Planning Boundaries: CPPNE; CPNP ◆ Ownership ◆ Existing development rights ◆ Existing Planning Legislation ◆ Current Planning; structure plans; existing policy statements; reports; & management plans
Socio-Cultural & Historic Environment	◆ Historical sites and areas of cultural significance
Visual Resource Analysis	◆ Consideration of landscape characteristics and edge typologies ◆ Long range & intermediate view assessments ◆ Developments prevented from breaking the skyline

SECTION 4: URBAN EDGE DEFINITION

4.1 INTRODUCTION

As part of the contextual analysis, different variables were considered and their occurrence mapped, as detailed in the separately bound Technical Report. As outlined in Section 3 of this report, some variables were found to be more significant than others in terms of determining where the Peninsula urban edge should be demarcated. To integrate the different variables considered in the contextual analysis, overlay mapping was analysed. On this basis alternative edge scenarios were considered for the Peninsula. The edge demarcation process also involved the testing and refinement of edge proposals with interested and affected parties.

4.2 URBAN EDGE DEMARCATION

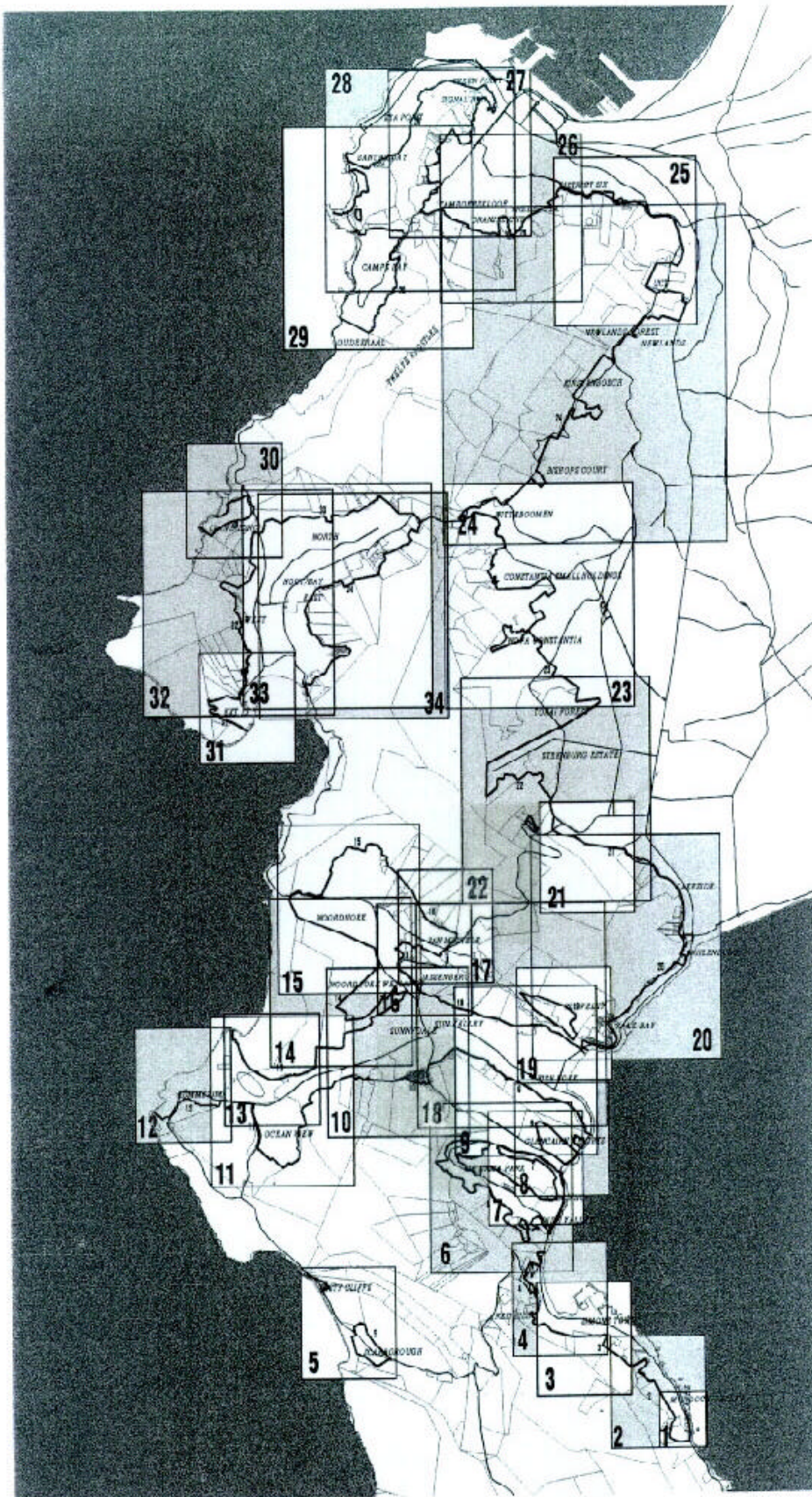
In this section of the report the Peninsula urban edge is defined in 34 segments. For each segment of the line: an overview of the local context is given; localised edge demarcation considerations are highlighted; the edge is defined and illustrated; and land use management is presented for zones inside and outside the edge line. A system of icons has been used to illustrate the determinants of the edge's position.

A composite map of the edge segments as described is attached as **Figure 5**.

For the detailed positioning of the urban edge line the set of 1:10 000 maps should be referenced.

	Cultural/urban landscape
	Fauna,
	Flora, Forest
	Geology/Geotechnical Constraints
	Historical site/Monument
	Infrastructure
	Rivers/ Wetlands/ Floodplains
	Rural/Natural Landscape
	Topography/Slope steeper than 1:4,
	Scenic Routes, Skylines and Ridges
	Visual Prominence
	Noted criteria

URBAN EDGE



CAPE METROPOLITAN COUNCIL
KAAPSE METROPOLITAANSE RAAD
IBHUNGA LOLAWULO LWENCHI & YEKAPA



KEY PLAN
LOCATION OF URBAN EDGE WINDOWS

FIGURE 5

4.2.1 Rocklands Farm

The area is characterised by a relatively high mountain backdrop (Swartkop 678m) forming a number of terraces before sloping steeply towards the sea.

The Rocklands farm is viewed as the southernmost area for potential development. The area directly above Main Road is not readily visible from the Main Road and suitable development would therefore have limited impact. On approaching Simon's Town from Smitswinkel Bay, the UTZ is partially obscured by a ridge.

Slopes steeper than 1:4 occurring at this site are regarded as being ecologically sensitive and a high occurrence of endemic amphibians and invertebrate species occur in this area. In spite of the rich diversity of fauna and flora, the area is infested with alien vegetation.

The UTZ is currently zoned as Rural and no urban development has taken place on this property. Existing agricultural activities are marginal, due to the poor soil conditions. Any development proposal would be subject to the appropriate development planning process being followed.

The historic Rocklands to Millers Point Road crosses this farm.

Edge demarcation

The Urban Edge includes all terraces with gradients less than 1:4, up to approximately the 120m contour.

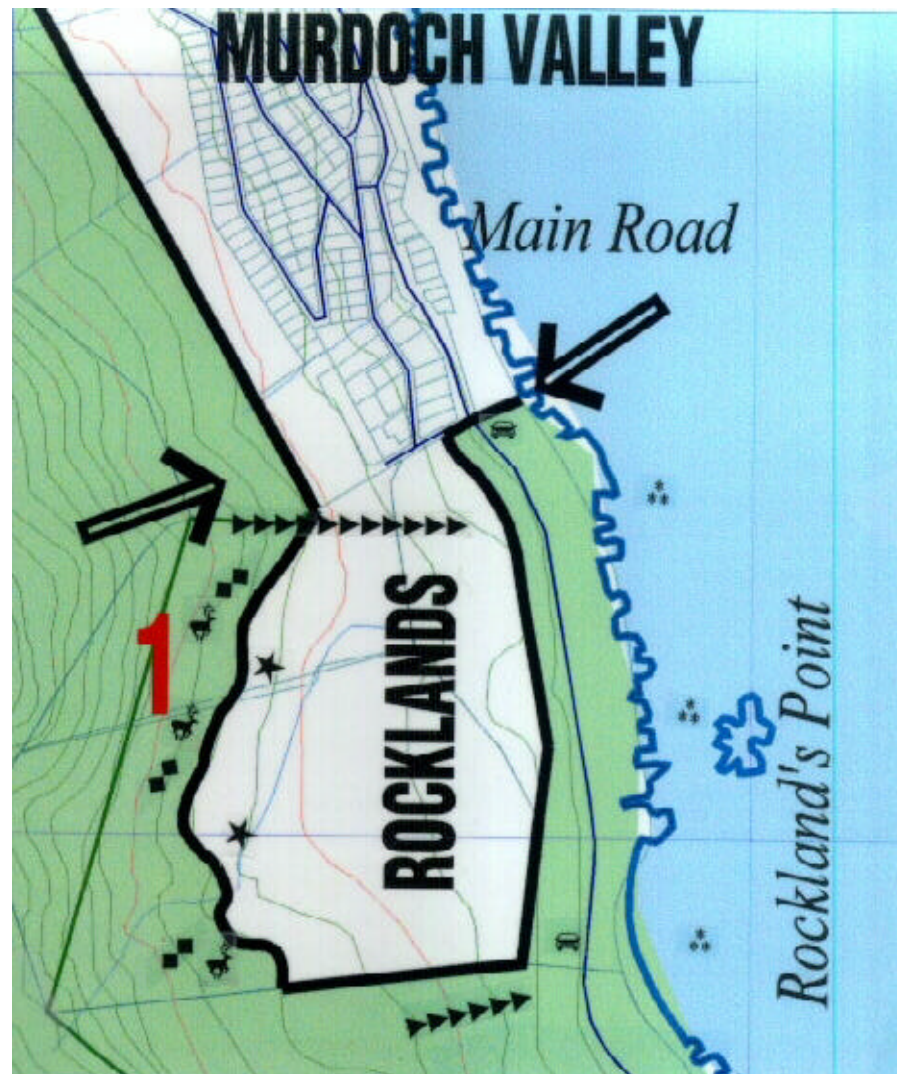
The edge is limited to areas below the sight-line from the south of the site and above the Main Road sight line so as to retain the integrity of the scenic route.

EDGE DEMARCATION CONSIDERATIONS

- This southern-most segment of the edge is unique in that it prescribes potential urban development.
- As with the adjoining Murdock Valley, development in this area must be contained to protect:
σ sensitive Fauna; and the
| skylines and ridges on the southernmost slopes.
- The (proposed) urban area is influenced by:
🚗 scenic routes where special attention should be
■ given to the urban aesthetic along Main Road,
■ topography (slopes steeper than 1:4), and
• geological instabilities.
- The edge is defined along the scenic route in this case thereby excluding the coastline from urban development

EDGE INFORMANTS			URBAN EDGE MANAGEMENT ZONES	
			INSIDE EDGE	OUTSIDE EDGE
	Physical Environment			
	Topography			✓
	Geology			✓
	Ecological Environment			
	Fauna			✓
	Flora			✓
	Land Use			
	Urban			
	Rural			✓
	Cultural/Historical Environment			
	Historical Sites		✓	
	Visual Resource			
	Scenic Route		✓	
	Skylines and Ridges			✓
POLICY REFERENCE	*	UTZ	NUZ	UTZ LOCAL OBJECTIVES
		5 & 10 (a)	15 & 16	Single storey buildings designed sensitively to permit views.
		9 & 11 (b)	17	Appropriate fire protection measures against veld fires must be taken. <i>Invasive vegetation eradicated.</i>
		10 (b)		No walls immediately above Main Rd for aesthetic reasons.
		11 (a) & 14		Cutting on Main Rd to be landscaped. Urban development abutting scenic drive is critical and requires control
				NUZ LOCAL OBJECTIVES
				Remainder of property to be ceded for National Park. Eradicate alien vegetation.
				No development below Main Rd due to visual impact and environmental sensitivity of the area.

*(this is not a comprehensive list of local objectives)



4.2.2 Murdock Valley

This area is characterised by gullies cutting through the urban landscape. These open spaces create a pleasant suburban character.

The vacant land situated below the 1:4 slope, and up to the 100m contour, does have development potential. There tends to be a high correlation between visibility and the 1:4 slope, which means that development on these steep slopes tends to become visually intrusive.

This urban development is highly visible from a distance, (i.e. Muizenberg), but appears more clustered, continuous and compact over the medium to short distance (Fish Hoek – Simon's Town).

The inaccessible slopes steeper than 1:4 occurring at this site are also regarded as being ecologically sensitive. Amphibians and invertebrate species do occur here. Natural vegetation can still be found along most of the gullies as well as the Magic Forest (a). In spite of this rich fauna and flora, the area is infested with alien vegetation.

The Magic Forest is of metropolitan significance since this break in the urban development can be observed from Muizenberg. This enhances the visual quality of Simon's Town. The Simon's Town Structure Plan (MLH - 1996) identifies the Magic Forest as being of major environmental and recreational importance.

The Urban Edge follows the existing cadastral boundary of urban development. At it's northern extreme, the edge line cuts back to exclude the Magic Forest (a), creating a break in the continuous urban development.

EDGE DEMARCATION CONSIDERATIONS

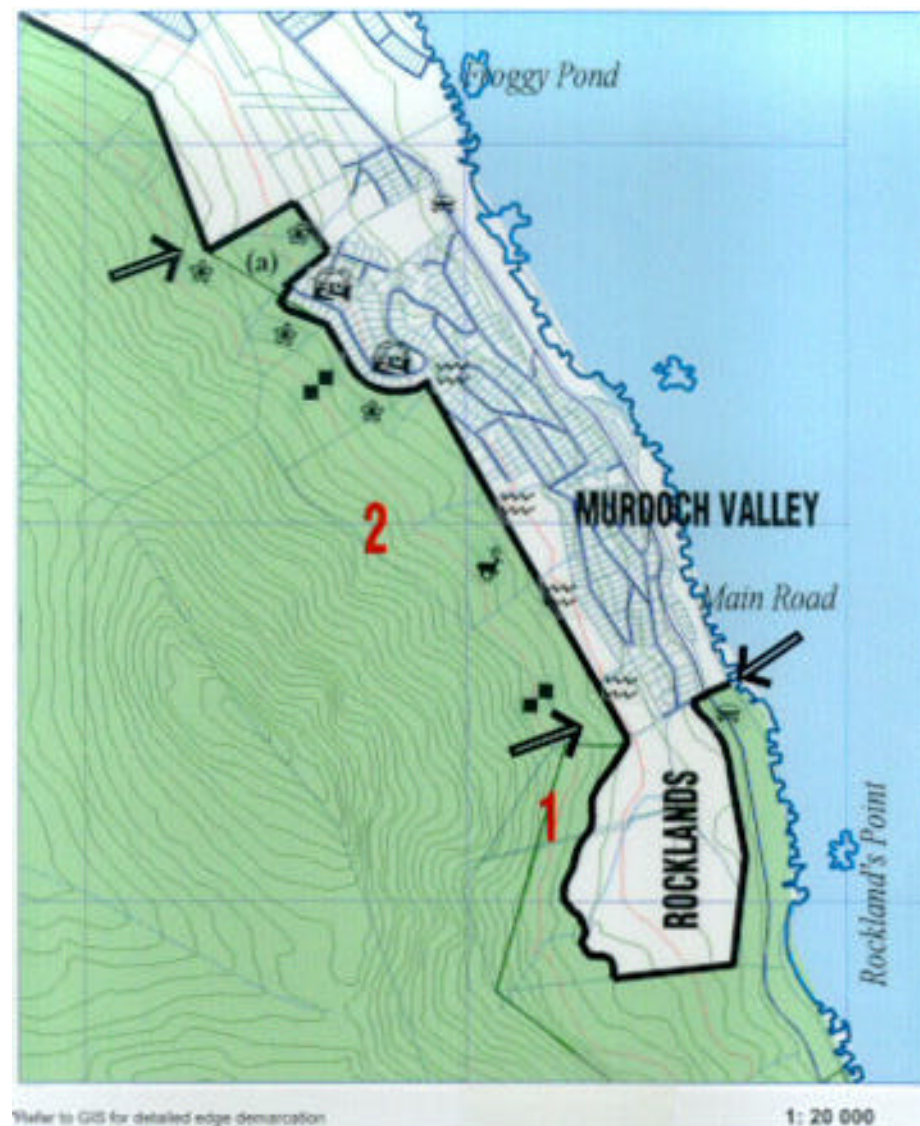
- This urban precinct has limited development potential within the UTZ due to:
 - topography (1:4 slope);
 - geology;
 - σ flora;
 - σ fauna in the area, and

The edge conforms generally to the Simon's Town Structure Plan

- The urban area is characterised by:
 - 🏠 the visual prominence of existing urban development;
 - urban extensions against the steep slopes, would have a severe negative visual impact;
 - 🌊 the river corridors, and Magic Forest (a) which are considered sensitive but complementing aspects; and
 - 🚗 the coastal scenic drive which must be maintained as a route of high visual quality.

EDGE INFORMANTS			URBAN EDGE MANAGEMENT ZONES	
			INSIDE EDGE	OUTSIDE EDGE
	Physical Environment			
	Topography			✓
	Geology			✓
	Ecological Environment			
	Fauna			✓
	Flora			✓
	Rivers and Wetlands			
	River Corridors			✓
	Land Use			
	Rural			✓
	Legal, Planning, Ownership			
	Structure Plans		✓	
	Visual Resource			
	Landscapes		✓	✓
	Skylines and Ridges			✓
	Visual Prominence		✓	
	Other			
POLICY REFERENCE	*	UTZ	NUZ	UTZ LOCAL OBJECTIVES
		2	15	Densities as proposed by Simon's Town Structure Plan
		3(a) & (b)	18 (b)	The visual integrity needs to be maintained, by protecting open spaces (gullies) and breaks in the rolling urban landscape
		4 (a) & (b)	21 (a) & (b)	No urban development on slope steeper 1:4
		5 & 10 (a)	19	Architectural and landscaping manuals to be compulsory. Scale and intensity of new developments to be managed.
		9 & 11 (b)	17	Appropriate fire protection measures against veld fires must be taken. Invasive vegetation eradicated.
				NUZ LOCAL OBJECTIVES
				The sensitive areas to be included in the National Park,
				Open space systems abutting the edge need to be rehabilitated and maintained as informal recreational areas.
				Magic Forest managed & conserved.
				Environmental educational opportunities should be explored within the natural open space systems in the urban environment.
				Fire management crucial for the survival of Hirsuta Serruria. Eradicate alien vegetation.

*(this is not a comprehensive list of local objectives)



4.2.3 Froggy Pond – Cole’s Point

This area has a fairly uniform concave slope down to the marine terrace. Two relatively gentle drainage lines bisect the area above Froggy Pond, which gets its name from the year-round seepage that collects at the bottom of the marine terrace.

This UTZ is very similar to Murdock Valley, where urban development is highly visible over a long distance and more compact over the medium and short distance.

The inaccessible slopes steeper than 1:4 occurring at this site are regarded as being ecologically sensitive. Specimens of the endangered Swartkops Spiderhead together with a high occurrence of endemic amphibians and invertebrate species have been found here (b). It is recommended that at least a 100m buffer zone (especially for fire fighting purposes) should remain between the location of these species and urban development. In spite of this rich fauna and flora the area is infested with alien vegetation.

Edge demarcation

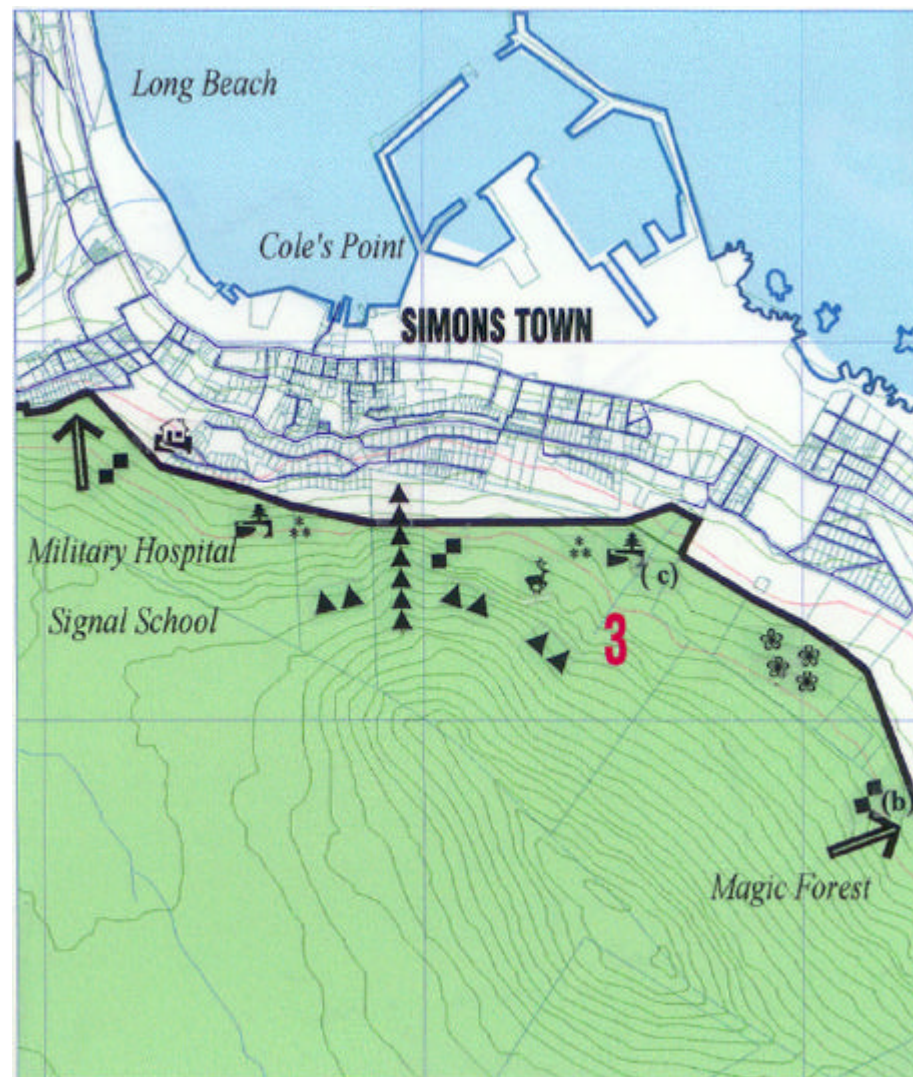
The edge line follows the extent of urban development proposed by the Seaforth Structure Plan (Chew, Bowen & Marais – 1992) as well as the Simon’s Town Structure Plan (MLH –1996). This allows for a visual break between Seaforth and Simon’s Kloof (c).

EDGE DEMARCATION CONSIDERATIONS

- The most critical considerations in this segment are:
 -  the visual prominence of this landscape both middle and long distance, and
 - the occurrence of the endangered Swartkops Spiderhead (b) above Jan Smuts Rd and Harbour Heights Close
- Also important are the relationships of the urban area to:
 - | skylines and ridges (c) &
 -  landscapes as well as
 - topography where steep land exists beyond the demarcated edge.
- In addition:
 - flora, and
 - ⊖ fauna are considered ecologically sensitive; and
 - ✓ structure plans have confirmed the edge as demarcated.

EDGE INFORMANTS	URBAN EDGE MANAGEMENT ZONES		
			INSIDE EDGE
			OUTSIDE EDGE
	Physical Environment		
	Topography		✓
	Hydrology		✓
	Geology		✓
	Ecological Environment		
	Fauna		✓
	Flora		✓
	Land Use		
	Rural		✓
	Legal, Planning, Ownership		
	Structure Plans		✓
	Visual Resource		
	Landscapes		✓
	Skylines and Ridges		✓
	Visual Prominence		✓
	Other		
POLICY REFERENCE	UTZ	NUZ	UTZ LOCAL OBJECTIVES
	2	15	Densities as proposed by Simon's Town Structure Plan
	3(a) & (b)	18 (b)	The visual integrity needs to be maintained, by protecting open spaces (gullies) and breaks in the rolling urban landscape
	4 (a) & (b)	21 (a) & (b)	No urban development on slope steeper 1:4
	5 & 10 (a)	19	Architectural and landscaping manuals to be compulsory. Impact of previous developments to be managed. Scale and intensity of new developments to be managed.
	9 & 11 (b)	17	Appropriate fire protection measures against veld fires must be taken. Invasive vegetation eradicated.
			NUZ LOCAL OBJECTIVES
			The sensitive areas to be included in the National Park,
			Open space systems abutting the edge need to be rehabilitated and maintained as informal recreational areas.
			Magic Forest managed & conserved.
			Environmental educational opportunities should be explored within the natural open space systems in the urban environment.
			Fire management crucial for the survival of Hirsuta Serruria. Eradicate alien vegetation.

*(this is not a comprehensive list of local objectives)



Refer to GIS for detailed edge demarcation.

4.2.4 Simon's Town - Long Beach

This area is characterised by an irregular slope towards the shoreline with much of the area being steeper than 1:3; particularly on the upper slopes and in the Baviaanskloof/Waterfall area.

Current development has extended into areas steeper than 1:4, reaching the 120m contour.

Although Red Hill Road has been identified as a major scenic route the Marlin Ridge development has already encroached onto the eastern side of this road. The extent and impact of this urban development will impact dramatically on this scenic route.

This area has also been identified as being an amphibian and invertebrate hotspot, but is heavily infested with alien vegetation.

Geotechnically this area is seen as being extremely unstable. Problems have occurred due to moving fills and huge road cuts, resulting in cracks appearing in houses and roads. Areas are already terraced with existing minor roads or tracks and these could be developed without major earthworks.

A number of historical sites lie within the edge line, these being:

- ***Naval batteries,***
- ***Ex-Gen. Botha Camp,***
- ***Maylands Farm, and***
- ***Former "Native Location"***

Edge demarcation

The edge line follows the existing cadastral urban boundary, allowing for infill on slopes less than 1:4 and below the 100m contour.

To the north of Marlin Ridge, development is allowed on slopes more moderate than 1:4 and below the 80m elevation to the Light Industrial area (Kelp Products factory).

EDGE DEMARCATION CONSIDERATIONS

- This segment is characterised mainly by:
 - excessively steep topography along the entire edge segment;
 - unstable geological conditions and;
sensitive flora,
-
- The irregular edge of this segment is due to the steep and rugged terrain but also:
 - σ fauna;
 -  the visual prominence &
 -  scenic route.
-
- While limited urban infill is possible including densification, the urban form should remain linear and compact along transportation routes in this area.

EDGE INFORMANTS			URBAN EDGE MANAGEMENT ZONES	
			INSIDE EDGE	OUTSIDE EDGE
	Physical Environment			
	Topography			✓
	Geology			✓
	Ecological Environment			
	Fauna & Flora			✓
	Rivers and Wetlands			
	River Corridors			✓
	Infrastructure			
	Roads		✓	
	Land Use			
	Urban		✓	
	Legal, Planning, Ownership			
	Structure Plans		✓	
	Cultural/Historical Environment			
	Historical Sites		✓	
	Monuments		✓	
	Visual Resource			
	Visual Prominence		✓	
Scenic Routes		✓		
Other				
*	UTZ	NUZ	UTZ LOCAL OBJECTIVES	NUZ LOCAL OBJECTIVES
POLICY REFERENCE	2	15	Densities as proposed by Simon's Town Structure Plan	The sensitive areas to be included in the National Park.
	3(a) & (b)	18 (b)	The visual integrity needs to be maintained, by protecting open spaces (gullies) and breaks in the rolling urban landscape	Investigate development of Naval Cable Way – tourism & management of historic sites.
	4 (a) & (b)	19	No development below rock bands & unstable formations. Development to be restricted within 20m of Redhill Drive - access to properties below; suitably screened.	Protect & promote Redhill as a scenic route.
	5 & 10 (a) & (b)	19	Architectural and landscaping manuals to be compulsory. Scale and intensity of new developments to be managed.	Environmental educational opportunities should be explored within the natural open space systems in the urban environment.
	9 & 11 (b)	17	Appropriate fire protection measures against veld fires must be taken. Invasive vegetation eradicated.	Fire management crucial for the survival of Hirsuta Serruria. Eradicate alien vegetation.

POLICY REFERENCE



*(this is not a comprehensive list of local objectives)

4.2.5 Scarborough and Misty Cliffs

Development has already taken place on slopes steeper than 1:4. The urban fabric of both areas is compact with a distinct village character.

To the south of Scarborough, the Schusters River (d) forms a vlei area before discharging into the sea. This area is ecologically sensitive. Primary plant biomes are located along the upper reaches of the river in the south.

Due to the predominant village character of existing developments, there has been little significant visual impact, despite the location of these villages on a major scenic route.

Edge demarcation

The Urban Edge coincides with the (boundaries of current townships) to the maximum extent possible.

EDGE DEMARCATION CONSIDERATIONS

- A wide range of environmental criteria surrounds these urban 'pockets'. Expansion is undesirable and not supported by the public.
- Most critical constraints are:
 - topography (steep land); and the
 - ⚡ river corridors and flood plains of Schuster's River (d)
- Also important are:
 - σ flora, fauna,
 - geology, and
 - ® provision of infrastructure in containing urban development.
- The charm of the urban areas are their compactness & size which, due to -
 - 🌲 landscapes, and
 - | skylines & ridges, identify their sense of place.
- The balance between urban & rural is so delicate in this area that urban expansion could damage this equilibrium.

EDGE INFORMANTS			URBAN EDGE MANAGEMENT ZONES	
			INSIDE EDGE	OUTSIDE EDGE
	Physical Environment			
	Topography			✓
	Hydrology			✓
	Geology			✓
	Ecological Environment			
	Flora			✓
	Rivers and Wetlands			
	River Corridors			✓
	Flood Plains			✓
	Wetlands			✓
	Infrastructure		✓	
	Land Use			
	Rural			✓
	Visual Resource			
	Landscapes			✓
	Skylines and Ridges			✓
	Scenic Routes			✓
Other				
*	UTZ	NUZ	UTZ LOCAL OBJECTIVES	NUZ LOCAL OBJECTIVES
POLICY REFERENCE	2		No Further subdivision to be allowed	
	3(a) & (b) 7	18 (b)	The Schusters River and vlel area must be managed and preserved.	Open space systems abutting the edge need to be rehabilitated and maintained as informal recreational areas.
	4 (a)	18 (a)	No urban development on slope steeper 1:4	No cutting into the marine terrace to be allowed.
	5 & 10 (b)		Architectural and landscaping manuals to be compulsory. No walls on Witsands Road Area needs to be maintained as a rural / natural area & scenic asset.	
	9 & 11 (b)	17	Appropriate fire protection measures against veld fires must be taken. Invasive vegetation eradicated.	Fire management crucial for the survival of Hirsuta Serruria. Eradicate alien vegetation.

*(this is not a comprehensive list of local objectives)



Dido Valley and Da Gama Park

This 'pocket' of urban area is characterised by a loop road connected at two access points to Main Road, and steep internal hills and valleys. Urban development exists or is planned along the loop road (Dido Valley Road)

Development in this area has to a large extent been restricted in the past to naval facilities and accommodation. The area is therefore largely characterised by existing military roads and infrastructure, which cover much of the area, albeit at a low density. Optimal utilisation of services is important for future planning.

This entire area is heavily infested with alien vegetation.

A portion of the Dido Valley area has been identified as being suitable for low-income housing. Strategies have been prepared for the relocation of the Red Hill Squatter Community to a site southwest of the Woodlands Cottages (e).

Due to its location, the majority of the area has little significant visual impact off Main Road. However, the potential for development is substantial, and although not considered visually intrusive, the management of the UTZ and NUZ is important in view of the extended length of the UE.

Edge demarcation

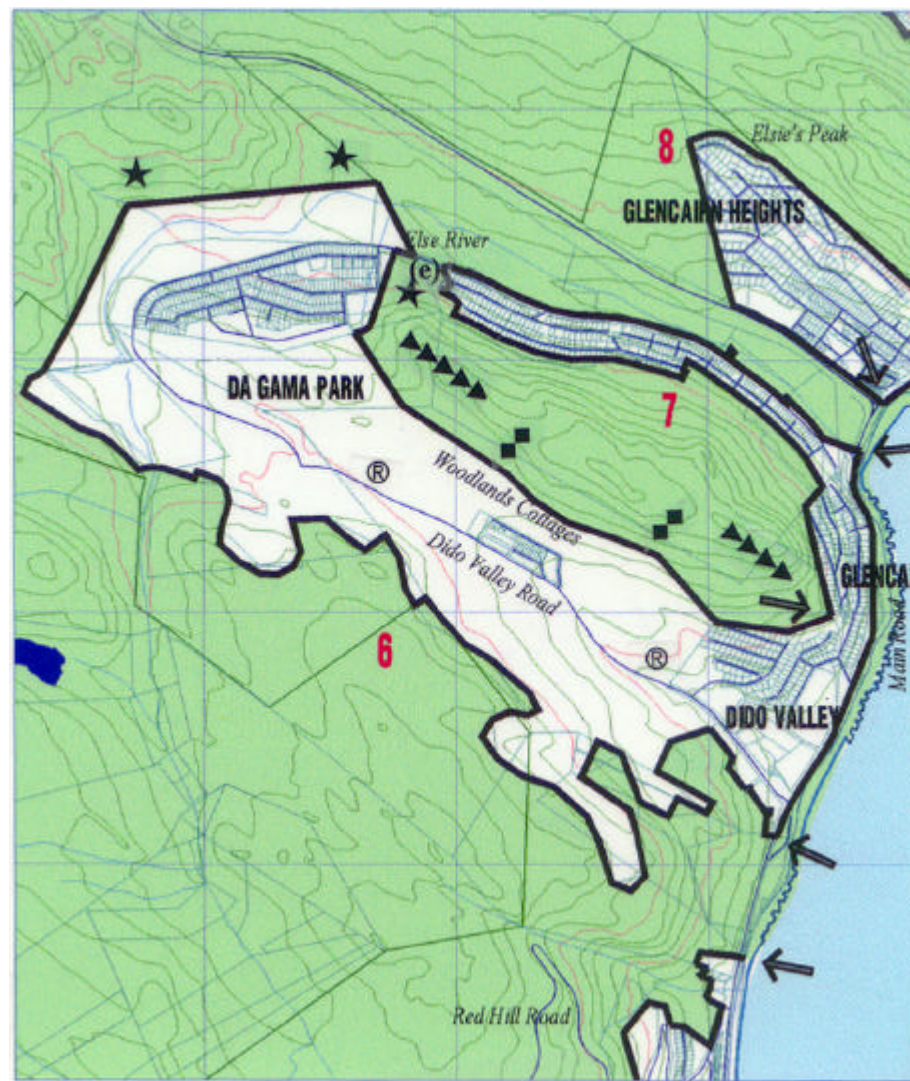
The northern edge follows the 140m contour level including the extent of the existing military facilities. The edge excludes the visually prominent koppies but includes Da Gama Park and the recreation area to the northeast. The southern boundary follows the outer edge of existing military installations.

EDGE DEMARCATION CONSIDERATIONS

- Urban development has extended up Dido Valley, occupying flatter land; but
 - steep topography around the valley, and
 - geological conditions mainly in the form of sandy soils have been a limiting factor for urban growth
- In addition:
 - ✓ structure plans,
 - ✓ ownership &
- Ⓡ infrastructure provision together with the topographical factors have assisted in the delineation of the edge, which is contorted to enclose developable land..
- Urban infill and development is proposed on flatter land including low-income housing (Red Hill Community) and extension to the Woodlands area.
- The SADF is currently considering the development potential of areas within the UTZ.
- The railway line is a physical definer along the Coast and forms a manageable edge.

		URBAN EDGE MANAGEMENT ZONES	
		INSIDE EDGE	OUTSIDE EDGE
EDGE INFORMANTS	Physical Environment		
	Geology		✓
	Topography		✓
	Rivers and Wetlands		
	River Corridors		✓
	Infrastructure		
	Roads	✓	
	Utility Services	✓	
	Land Use		
	Urban	✓	
	Demographics		
	Population Growth	✓	
	Legal, Planning, Ownership		
	Structure Plans	✓	
	Ownership	✓	
	Visual Resource		
	Skylines and Ridges		✓
	Other		
POLICY REFERENCE	* UTZ NUZ		URBAN EDGE LINE
	UTZ LOCAL OBJECTIVES		NUZ LOCAL OBJECTIVES
	4 (a)		No urban development on slope steeper 1:4
	14	18 (b)	The visual integrity off Main Road needs to be maintained
	5 & 10 (a)	19	Architectural and landscaping manuals to be compulsory. Scale and intensity of new developments to be managed.
POLICY REFERENCE	9 & 11 (b)	17	Appropriate fire protection measures against veld fires must be taken. Invasive vegetation eradicated.

*(this is not a comprehensive list of local objectives)



4.2.7 Glencairn

The gradient in this UTZ is steep, sometimes in excess of 1:4. Existing development has, in terms of the built form, created a compact and linear urban landscape.

This however, has occurred against a mountain backdrop and the limited landscaping, coupled with the existing colour schemes of the dwellings, accentuates the visibility of this development from the Glencairn Express Way.

This valley floor is an important catchment and attenuation area for maintaining the valley's sensitive wetlands.

Edge demarcation

The UE follows the cadastral boundary of the approved residential area of Glencairn.

A functional open space link (e) is created between Glencairn and Da Gama Park, allowing for continuity between Brakkloofrant to the north and the mountain to the south of Glencairn.

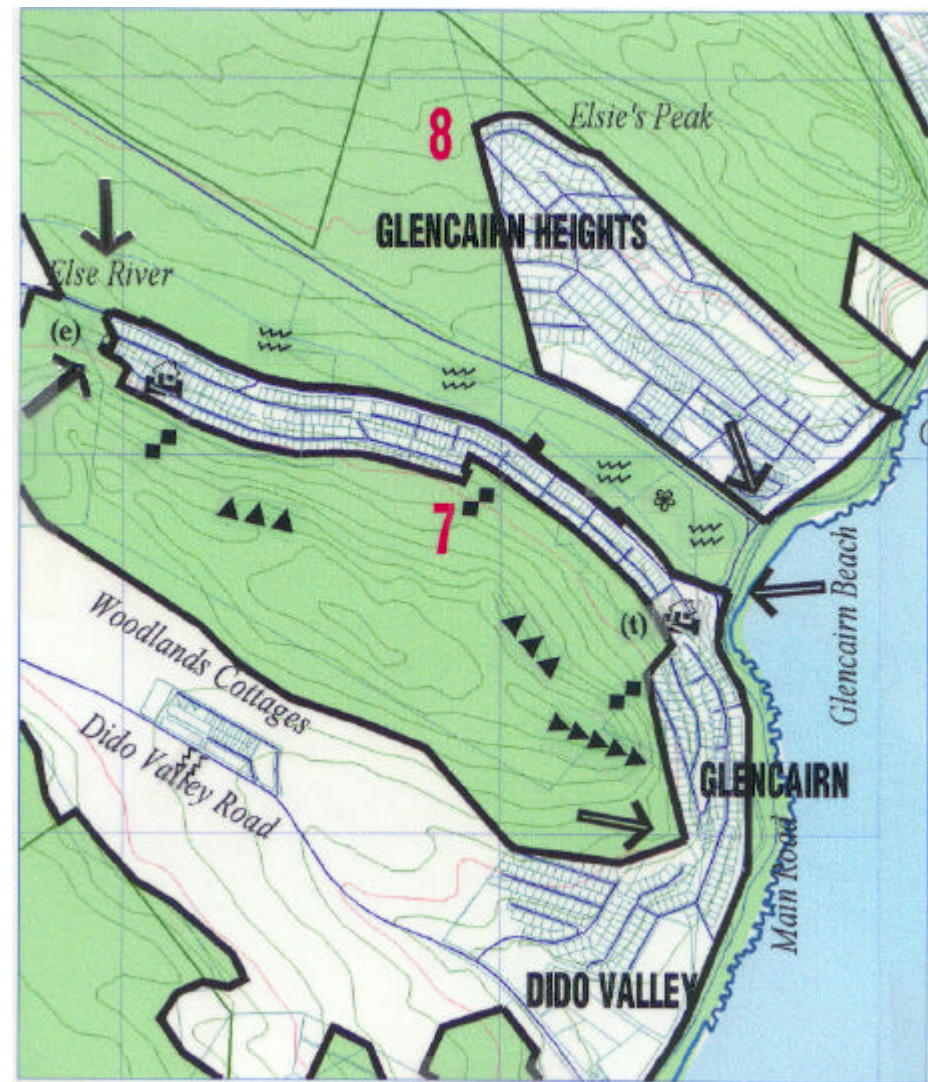
An application for Erf 3410 Simonstown (t) is pending, due to queries about the status of the land. The Urban Edge Study indicates the preferred position of the urban edge line and the approval of Erf 3410 (or part thereof) by the relevant authorities would require an amendment to the urban edge line in this area.

EDGE DEMARCATION CONSIDERATIONS

- This linear urban strip is self defined due to:
 - topography (steep land) to the south and north;
 - wetlands & Else River;
 - visual prominence & skylines & ridges that blend to make this urban area well defined and attractive in its setting between river and mountain.
- Lateral urban extensions are not recommended, as they will have a detrimental impact on the natural environment.
- Architectural & landscaping control is recommended as this zone is highly exposed and has excellent aesthetic potential with housing infill.

EDGE INFORMANTS			URBAN EDGE MANAGEMENT ZONES			URBAN EDGE LINE
			INSIDE EDGE		OUTSIDE EDGE	
	Physical Environment					
	Topography		✓		✓	
	Hydrology		✓		✓	
	Geology				✓	
	Rivers and Wetlands					
	Wetlands				✓	
	Land Use					
	Urban		✓			
	Legal, Planning, Ownership					
	Structure Plans		✓			
	Visual Resource					
	Landscapes		✓			
	Skylines and Ridges				✓	
	Architectural Control		✓			
	Visual Prominence				✓	
	Other					
*	UTZ		NUZ		UTZ LOCAL OBJECTIVES	NUZ LOCAL OBJECTIVES
POLICY REFERENCE	2				New development to be consistent with existing densities.	
	3 (a) & (b) 7		18 (b) & 22		Protect open space link between Da Gama Park & Glencairn. Control development so as to avoid flooding & siltation.	Else River to be developed as formal recreational area. No urban development below the 1:50 year flood line or 25m from the river.
	4 (a)				No urban development on slope steeper 1:4. Development to remain below rock bands & unstable slopes	
	5 & 10 (a)		19		Architectural and landscaping manuals to be compulsory. Scale and intensity of new developments to be managed.	Environmental educational opportunities should be explored within the natural open space systems in the urban environment.
	9 & 11 (b)		17		Appropriate fire protection measures against veld fires must be taken. Invasive vegetation eradicated.	Eradicate alien vegetation.

*(this is not a comprehensive list of local objectives)



*Refer to GIS for detailed edge demarcation

1: 20 000

4.2.8 Glencairn Heights

Except for the slopes approaching the road and vleij, as well as those to the west, which are moderate, development has mostly taken place on areas steeper than 1:4.

Steeper (minor cliffs) occur along the top of the ridge. These become more significant on the flanks of Elsie's Peak above the area already developed. Local undulations occur in the form of predominantly parallel dunes orientated NW-SE.

This area is regarded as an important catchment and attenuation area for maintaining the valley's sensitive wetlands. The urban area is also highly visible due to its proximity to Main Road and Glencairn Express Way (especially off an easterly approach).

Glencairn Quarry (f) is redundant and partially hidden from view. This is a significant feature, as it demands that that urban frontage be given special consideration in view of its definition (as urban edge), and the fact that it enjoys prominent exposure to the sea. Although the geo-technical report indicated this quarry as a high-risk area, it is felt that with appropriate rehabilitation of the cut faces, limited development could be accommodated on the quarry floor.

Edge demarcation

The edge line follows the existing CPPNE line.

The edge includes the lower portions of the Glencairn Quarry.

EDGE DEMARCATION CONSIDERATIONS

- Glencairn:
 - ✓ enjoys development rights, and
 - ✓ conforms to the Structure Plan
-
- Steep land to the north discourages urban expansion.
-
- Main roads including the coastal road are a good definer for this urban precinct.

			URBAN EDGE MANAGEMENT ZONES	
			INSIDE EDGE	OUTSIDE EDGE
EDGE INFORMANTS	Physical Environment			
	Topography			✓
	Hydrology			✓
	Geology			✓
	Ecological Environment			
	Fauna			✓
	Flora			✓
	Rivers and Wetlands			
	River Corridors			✓
	Flood Plains			✓
	Wetlands			✓
	Land Use			
	Urban			✓
	Legal, Planning, Ownership			
	Structure Plans		✓	
	Visual Resource			
	Landscapes			✓
	Visual Prominence			✓
	*	UTZ	NUZ	UTZ LOCAL OBJECTIVES
POLICY REFERENCE	2		New development to be consistent with existing densities.	No further development to be considered.
	3 (a) & (b) 7	18 (b) & 22	Preservation of wetlands & reed beds considered paramount. Control development so as to avoid flooding & siltation.	Else River to be developed as formal recreational area. No urban development below the 1:50 year flood line or 25m from the river.
	4 (a)	22	No urban development on slope steeper 1:4. Development to remain below rock bands & unstable slopes	The sensitive areas to be included in the National Park,
	5 & 10 (a)	19	Architectural and landscaping manuals to be compulsory. Scale and intensity of new developments to be managed.	Environmental educational opportunities should be explored within the natural open space systems in the urban environment.
	9 & 11 (b)	17	Appropriate fire protection measures against veld fires must be taken. Invasive vegetation eradicated.	Eradicate alien vegetation.

*(this is not a comprehensive list of local objectives)



Refer to GIS for detailed edge demarcation

1: 20 000

Fish Hoek (South) - Risiview

The extent of urban development against the slopes of Elsie's Peak is clearly defined. This urban edge is important: It is highly conspicuous; is very straight and has different urban texture along its path. It serves as an example of its type.

This development has encroached onto areas steeper than 1:4, up to approximately the 150m contour. The visual impact of this urban landscape is accentuated by:

- the low mountain backdrop,
- the harsh climate, (strong summer winds), relatively
- the general absence of soft landscaping or natural flora, &
- a variety of urban forms, sometimes conflicting.

Although Erf 7342 (g), is zoned as Single Residential, this allows for only one dwelling. Due to the visual prominence of Elsie's Peak, and to contain the extent of development, the further subdivision of this erf is not supported.

Edge demarcation

The Urban Edge on the Elsie's Peak mountainside is clearly defined by the boundary of existing urban development as well as the CPPNE line.

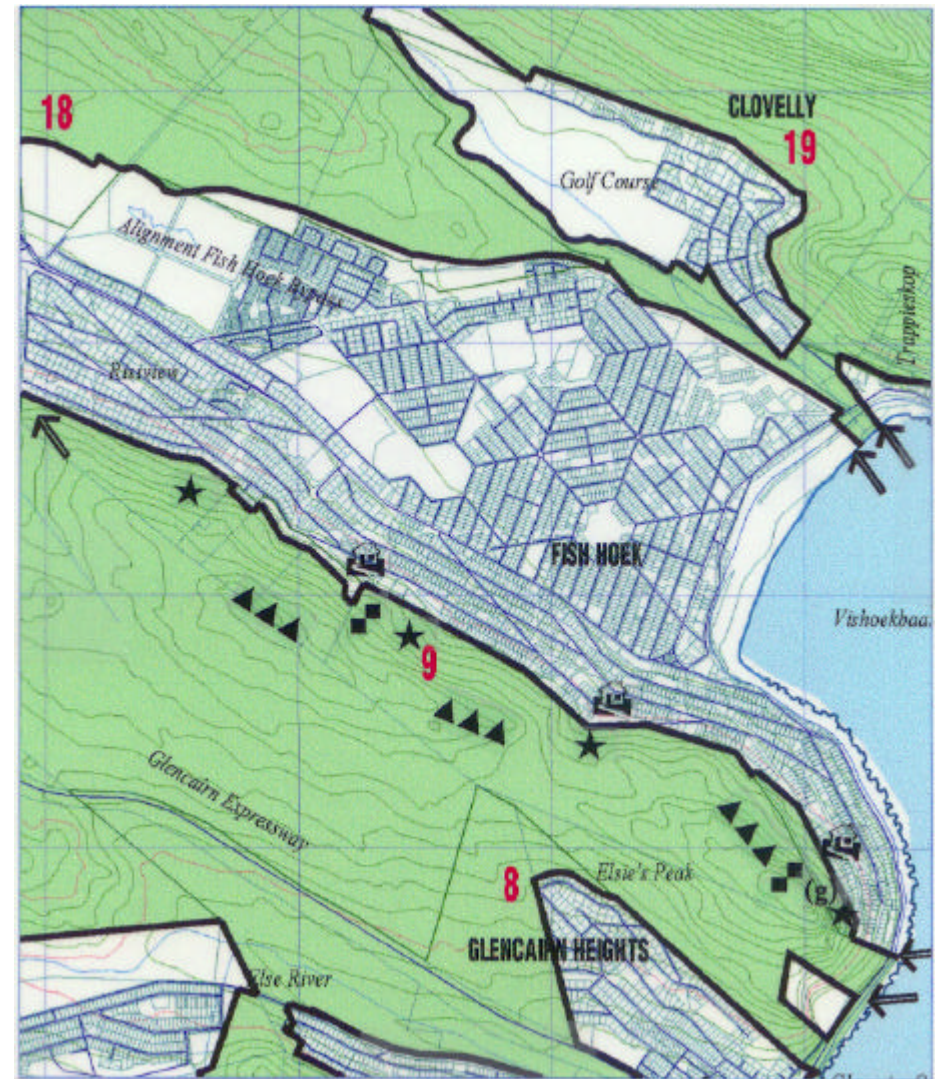
The steep topography and the visual exposure of the area above Serina / Risiview, make it imperative that the 80m contour is used to delineate the limit of urban development above this area.

EDGE DEMARCATION CONSIDERATIONS

- This segment of the edge is a classical hard urban boundary viewed against the high mountain backdrop of Elsie's Peak; refer to Visual Resource Analysis in Technical Report, p 33-39
- The UTZ is defined by single and multi storey residences, blocks of flats and tree lines. The mountain remains pristine and in sharp contrast to the suburban fabric.
- Further urban expansion is not recommended due to the:
 - topography (steep land);
 -  visual prominence &
 - geotechnical conditions
- In addition, multi storey flats and duplexes are out of character in the UTZ. One storey dwellings are more appropriate.

EDGE INFORMANTS			URBAN EDGE MANAGEMENT ZONES		
			INSIDE EDGE	URBAN EDGE LINE	OUTSIDE EDGE
	Physical Environment				
	Climate				✓
	Topography				✓
	Land Use				
	Urban		✓		✓
	Rural				✓
	Legal, Planning, Ownership				
	Existing Rights		✓		
	Structure Plans		✓		
	Visual Resource				
	Landscapes		✓		
	Skylines and Ridges				✓
	Visual Prominence				✓
Other					
*	UTZ	NUZ	UTZ LOCAL OBJECTIVES	NUZ LOCAL OBJECTIVES	
POLICY REFERENCE	2		New development to be consistent with existing densities. No rezoning for flats or group housing to be allowed on mountain slope	No further development above Fish Hoek	
	4 (a)		No urban development on slope steeper 1:4. Development to remain below rock bands & unstable slopes		
	5 & 10 (a)	16	Architectural and landscaping manuals to be compulsory. Scale and intensity of new developments to be managed. Structures to be aesthetically pleasing and restricted in size.	The possibility of negotiating development rights for cession of land to the TMNP, should be investigated	
	9 & 11 (b)	17	Appropriate fire protection measures against veld fires must be taken. Invasive vegetation eradicated	Eradicate alien vegetation.	

*(this is not a comprehensive list of local objectives)



Capri Village

Capri Village was approved up to the 80m contour and is reasonably well hidden from view. The area does present a long distance visual statement from across the Noordhoek Valley due to the low mountain backdrop.

The area constitutes a significant catchment and infiltration area for the Noordhoek aquifer with much of the water travelling sub-surface.

Urban development along the slopes is 'one of a kind'. Rapid growth is not unattractive as dwellings with green roofs match each other and look alike on the elevated land with rocky outcrops behind.

The low agricultural potential to the east of the village does not warrant protection for agricultural uses.

The approval of the residential development above Serina has lapsed.

The area is not developed to its full potential.

Edge demarcation

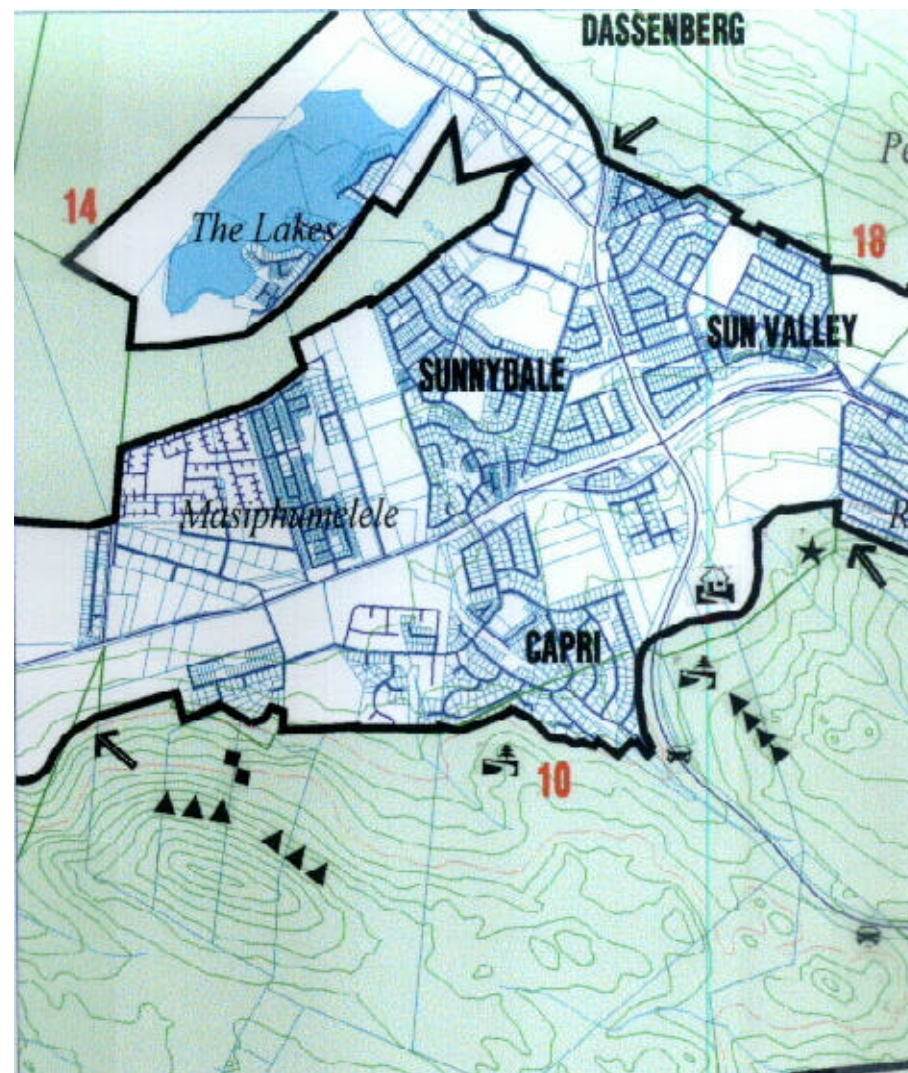
The UE follows the 80m contour line or the upper edge of existing approved townships, till the intersection in the west with the CPPNE boundary.

EDGE DEMARCATION CONSIDERATIONS

- The Capri pocket is self-defined below the 80m contour. This precinct is developing into an attractive urban area and is confined by:
 - topography (steep land);
 - geology, rock formations and
| skylines & ridges which should not be breached by urban development.
 -  Natural landscapes
- The following criteria need to be considered in providing architectural control in this area;
 - | skylines and ridges,
 -  visual prominence, and
 -  scenic routes

EDGE INFORMANTS			URBAN EDGE MANAGEMENT ZONES	
			INSIDE EDGE	OUTSIDE EDGE
	Physical Environment			
	Climate			
	Topography			✓
	Hydrology			✓
	Geology			✓
	Land Use			
	Urban		✓	
	Visual Resource			
	Landscapes		✓	
	Skylines and Ridges			✓
	Visual Prominence		✓	
	Scenic Routes		✓	
	Other			
*	UTZ	NUZ	UTZ LOCAL OBJECTIVES	NUZ LOCAL OBJECTIVES
POLICY REFERENCE	2		New development to be consistent with existing densities. No rezoning for flats or group housing to be allowed on mountain slope.	No further development to be considered.
	4 (a)	16	No urban development on slope steeper 1:4. No development to be allowed above the 80m contour.	The possibility of negotiating development rights for cession of land to the TMNP, should be investigated.
	5 & 10 (a)		Architectural and landscaping manuals to be compulsory. Scale and intensity of new developments to be managed. Structures to be aesthetically pleasing and restricted in size.	
	9 & 11 (b)	17	Appropriate fire protection measures against veld fires must be taken. Invasive vegetation eradicated	Eradicate alien vegetation.

*(this is not a comprehensive list of local objectives)



Ocean View

This residential development has reached the outer limits of expansion due to severe geotechnical constraints making further development unprofitable. This development falls well within the 80m contour level. Population expansion is putting pressure on these boundaries. Investigations will need to be conducted to explore expansion possibilities.

It is proposed that development be allowed to the east of Ocean View, along Kommetjie Main Road, up to the 80m contour (h). The extent of this development can however only be established once an appropriate planning process has been followed.

This area also constitutes a significant catchment and infiltration area for the Noordhoek aquifer with much of the water travelling sub-surface.

The development has a high visual impact from across the Noordhoek Valley due to the relatively low mountain backdrop. The urban elevation of Ocean View along Main Road should be improved.

A critical issue, which has developed through environmental initiatives, is the need for a natural open corridor through Protea Ridge linking the northern and southern eco-systems of the area. This initiative called the Noordhoek Kommetjie Wetlands Discussion Process is underway. A comprehensive study is required to determine this link and in turn the riparian urban edges based on criteria developed in this study. In the meantime, the urban edge is shown in dotted form with arrows. No urban development should be permitted in this segment until the adoption of the corridor study.

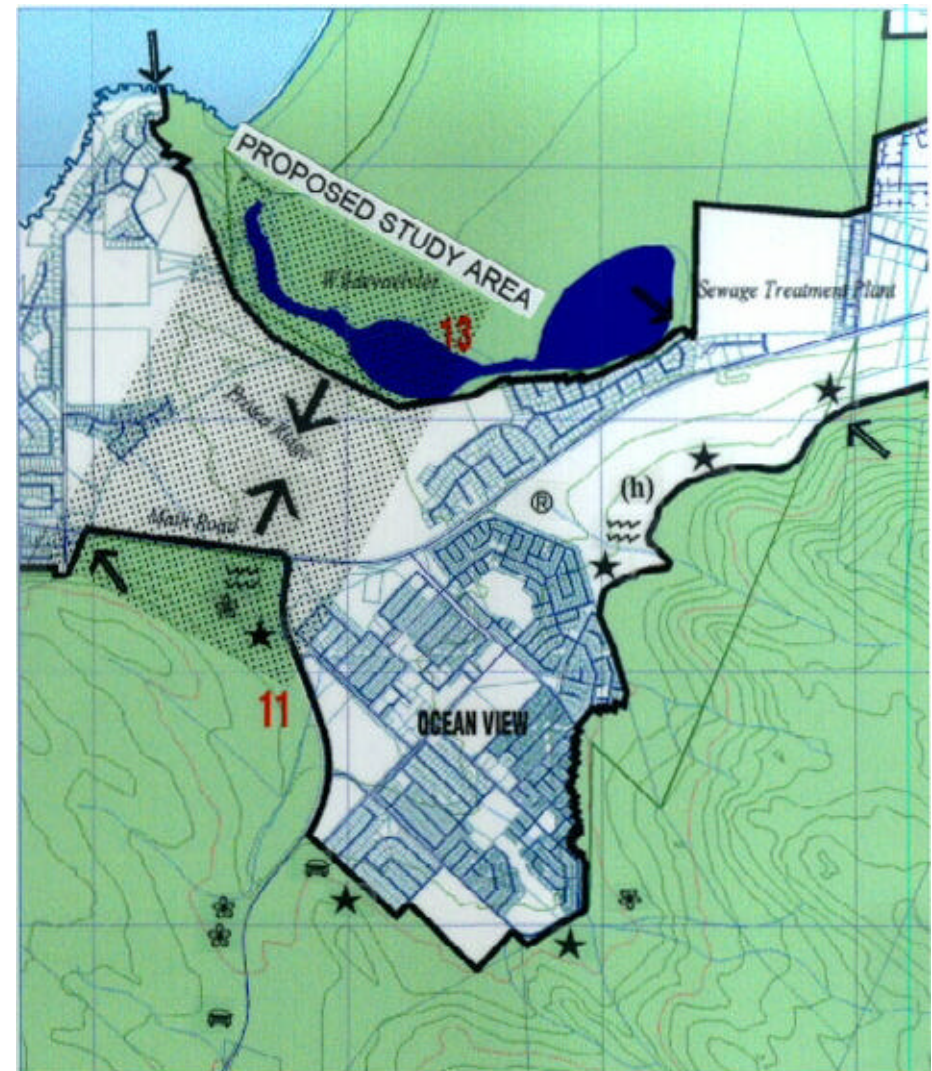
Edge demarcation

The UE follows the 80m contour level until it intersects with the eastern edge of Ocean View, from where it follows the cadastral boundaries of this township. It then joins up with the CPPNE at Slangkop Road and Kommetjie Main Road, which it follows to the most eastern subdivision of Kommetjie.

EDGE DEMARCATION CONSIDERATIONS

- Ocean View Township boundary and Main Road are self-definitive urban edges. This area is under severe pressure and needs to expand (h). Extensions of this boundary will require detailed investigation including:
 - geotechnical,
 - bulk services provision, and
 - hydrology;
 - flora,
 - fauna,
 - scenic routes
- However, internal urban concentration and densification is preferred to urban expansion and sprawl.
- An open space link is proposed at Protea Ridge to afford natural systems, (especially hydrologically), connectivity of regional significance i.e. Moss and Bokramspruit (refer to arrows).
- Such an open space corridor is subject to further study; refer to recommendations.
- The 80m contour is consistent with the CPPNE boundary and is supported by the low mountain backdrop.
- Severe geotechnical constraints exist southwest of Jupiter Street.

EDGE INFORMANTS			URBAN EDGE MANAGEMENT ZONES		URBAN EDGE LINE	
			INSIDE EDGE			OUTSIDE EDGE
	Physical Environment					
	Hydrology					✓
	Geology					✓
	Land Use					
	Urban		✓			
	Demographics					
	Population Growth		✓			
	Legal, Planning, Ownership					
	Structure Plans		✓			
	Visual Resource					
	Landscapes		✓			
	Visual Prominence		✓			
	Scenic Routes		✓			
Regional Integration		✓				
POLICY REFERENCE	*	UTZ	NUZ	UTZ LOCAL OBJECTIVES	NUZ LOCAL OBJECTIVES	
		2		New development to be consistent with existing densities.		
		3 (a) & (b)	18 (b) & 22	It is recommended that this area be the subject of a detailed IEM to create an open area natural corridor. Until such recommendations are made and approved, the proposed urban edges are recommended as an interim measure to protect the Protea Ridge functional link.	Establish a functional link between mountain & wetland.	
		4 (a) & (b)		No urban development on slope steeper 1:4. Avoid development in areas of geotechnical instability.		
		5 & 10 (a)	19	Architectural and landscaping manuals to be compulsory. Scale and intensity of new developments to be managed.	Environmental educational opportunities should be explored within the natural open space systems in the urban environment.	
		7		Implement a storm water management plan.		
	9 & 11 (b)	17	Appropriate fire protection measures against veld fires must be taken. Invasive vegetation eradicated.	Eradicate alien vegetation.		



1: 30 000

Kommetjie (South)

Kommetjie is generally on slopes less than 1:4. Development is currently limited to approximately the 40m contour elevation, which is important, taking into account the low mountain horizon. In spite of the above, this development still has a high visual impact from across the Noordhoek Valley.

A number of small vlei's, seeps and bogs occur on the marine terrace amongst the houses and between Slangkoppunt and the lighthouse.

There are graves of historical significance in this area. Archaeological surveys are of the utmost importance in finding and establishing sites of cultural and historical significance.

The upper slopes constitute part of the proposed Slangkop Nature Reservation.

Edge demarcation

The Urban Edge extends from Kommetjie Road and following the cadastral boundaries of the existing residential subdivision, onto Slangkoppunt.

EDGE DEMARCATION CONSIDERATIONS

- The edge in this segment is self-defined by reason of existing urban rights and development in an environmentally sensitive area.
- Further studies will be required to define urban edges along this coastline; refer to recommendations
- Further urban expansion is not recommended due to:
 -  high visual impact due to low mountain backdrop; skylines and ridges;
 -  coastal scenic route assist in determining the edge – urban expansion will have serious visual impact in the area of Slangkoppunt.
 - sensitive flora
 -  grave sites of historic significance

			URBAN EDGE MANAGEMENT ZONES	
EDGE INFORMANTS			INSIDE EDGE	OUTSIDE EDGE
	Physical Environment			
	Topography			✓
	Land Use			
	Urban		✓	
	Legal, Planning, Ownership			
	Existing Rights		✓	
	Cultural/Historical Environment			
	Archaeological Sites			✓
	Cultural Sites			
	Visual Resource			
	Skylines and Ridges		✓	✓
	Scenic Routes		✓	
	Other			
POLICY REFERENCE	*	UTZ	NUZ	UTZ LOCAL OBJECTIVES
		2		New development to be consistent with existing densities.
		4 (a)	18 (a)	No urban development on slope steeper 1:4. Development limited to approximately the 40m contour.
		5 & 10 (b)		Architectural and landscaping manuals to be compulsory.
		9 & 11 (b)	17	Appropriate fire protection measures against veld fires must be taken. Invasive vegetation eradicated.
				NUZ LOCAL OBJECTIVES
				No indigenous flora or fauna; vleis, seeps or bogs on the marine terrace may be destroyed or damaged.
				Eradicate alien vegetation.

*(this is not a comprehensive list of local objectives)



Refer to GIS for detailed edge demarcation

1: 20 000

4.2.13 Klein Slangkoppunt - Imhoff's Gift

This particular area is characterised by a low relief with dunes inland of a rocky shoreline with a sandstone koppie and a small cliff along the lagoon edge that forms the end of Noordhoek Beach. This area constitutes a significant catchment and infiltration area for the Noordhoek aquifer with much of the water travelling sub-surface. The Noordhoek Wetlands are a major resource within the metropolitan area and must be appropriately protected. This area experiences pressure for the establishment of tourist facilities and environmental centres in close proximity to the beach and wetlands.

With the approval of the residential rezoning at Klein Slangkop, provision was made for 2 Group Housing sites (i). The edge line will be amended once appropriate development proposals for the properties have been approved.

This area is highly visible due to the low mountain backdrop. Protea Ridge (j) is regarded as a special case. This visually prominent area is also of major ecological significance. This is the last remaining area where a continuous north-south ecological link can be established. The visual and ecological integrity of this ridge must be protected.

A critical issue, which has developed through environmental initiatives, is the need for a natural open corridor through Protea Ridge linking the northern and southern eco-systems of the area. This initiative called the Noordhoek Kommetjie wetlands discussion process is underway. A comprehensive study is required to determine this link and in turn the riparian urban edges based on criteria developed in this study. In the meantime, the urban edge is shown in dotted form with arrows. No urban development should be permitted in this segment until the adoption of the corridor study.

Edge demarcation

The Urban Edge follows the cadastral boundary southwest of the proposed Group Housing site and single residential development off Slangkoppunt. Continue along the 5m contour level up to the Wildevoëlvlei Treatment Plant.

The UE excludes the Imhoffs Gift Precinct near Noordhoek beach (i). If consent for development is granted it will represent a nodal development outside the urban area. No extensions of this node are anticipated.

EDGE DEMARCATION CONSIDERATIONS

- At the two extremes of this segment urban criteria, which include existing rights (i), subdivision and structure planning, determine the edge boundary.
- The centre segment is sensitive to a host of environmental criteria, the most important of which are:
 - hydrology and flood plains of the wetlands which are not conducive to development and must therefore be preserved;
 - the rural and coastal character of the area; and
 - the Coastal flora regimes which, although invaded, could recover to develop a unique habitat behind Noordhoek Beach.
- An open space corridor link (j) is proposed to include Klein Slangkop, Wildevoëlvlei and Protea Ridge to afford natural systems connectivity of regional significance i.e. Moss & Bokramspruit (refer to arrows).
- Such an open space corridor is subject to further study; refer to recommendations
- No development above the 5m contour or within 30m from vlei edge, whichever is the greater should be permitted.

	URBAN EDGE MANAGEMENT ZONES		
	URBAN EDGE LINE		
EDGE INFORMANTS	INSIDE EDGE		OUTSIDE EDGE
	<i>Physical Environment</i>		
	Topography		✓
	Hydrology		✓
	<i>Ecological Environment</i>		
	Fauna		✓
	Flora		✓
	Rivers and Wetlands		
	<i>River Corridors</i>		✓
	<i>Flood Plains</i>		✓
	<i>Wetlands</i>		✓
	<i>Land Use</i>		
	<i>Urban</i>		✓
	<i>Rural</i>		✓
	Legal, Planning, Ownership		
	Existing Rights		✓
	Structure Plans		✓
	<i>Visual Resource</i>		
	<i>Skylines and Ridges</i>		✓
POLICY REFERENCE	UTZ	NUZ	UTZ LOCAL OBJECTIVES
	2		New development to be consistent with existing densities.
	3 (a) & (b)	18 (b) & 22	It is recommended that this area be the subject of a detailed IEM to create an open area natural corridor. Until such recommendations are made and approved, the proposed urban edges are recommended as an interim measure to protect the Protea Ridge functional link.
	4 (a) & (b) 13	16	No urban development to be allowed below 5m contour
	5 & 10 (a)	19	Architectural and landscaping manuals to be compulsory. Scale and intensity of new developments to be managed.
	7		Implement a storm water management plan is critical.
	9 & 11 (b)	17	Appropriate fire protection measures against veld fires must be taken. Invasive vegetation eradicated.
			Eradicate alien vegetation.

*(this is not a comprehensive list of local objectives)



*Refer to GIS for detailed edge demarcation

1: 20 000



4.2.14 Noordhoek Wetlands

This area comprises the entire Noordhoek Wetlands, which is a metropolitan conservation resource of major significance.

This wetland has an undisputed environmental status due to the presence of sensitive vegetation and bird life of primary importance. This area is underlain by probably the second largest aquifer in the Peninsula, (the one at Constantia, Lakeside Sandvlei being the largest).

The encroachment of development impacts on the quality and functioning of the Wetlands.

Substantial water loss is being experienced through the presence of dense alien vegetation. This vegetation has however stabilised the dune sands over the western portion. This is a predominantly low-density area, abutting the steep interface with Chapman's Peak Drive.

The smallholdings abutting the Noordhoek Wetland are also included within the UE. These smallholdings do not only limit access to the wetland, but also provide a low density, low impact land use effectively acting as transition zone.

Incentives should be considered which would encourage, owners to maintain their smallholdings to the benefit of the urban edge and rural sense of place.

Edge demarcation

The Urban Edge follows the CPPNE along the boundary of the sewerage works. It continues on the existing cadastral boundaries north of Masiphumelele and Sunnydale, excluding "The Lakes".

From The Lakes, the edge follows the Noordhoek Main Road and a proposed road alignment (s) and includes all the smallholdings and rural properties to Chapman's Peak Drive. It should be noted that the proposed road alignment may be subject to review, and if deemed no longer appropriate, would result in the reconsideration of the urban edge line in this area.

EDGE DEMARCATION CONSIDERATIONS

- Non-urban zone criteria, or more specifically natural environmental issues are responsible in demarcating this segment of the urban edge, notably:

 hydrology and floodplains of the wetlands, in particular from the sewage plant to The Lakes.

- Importantly, urban expansion below the 5m contour in this segment is not only likely to be susceptible to flooding but will lead to the degradation of this sensitive wetlands area.

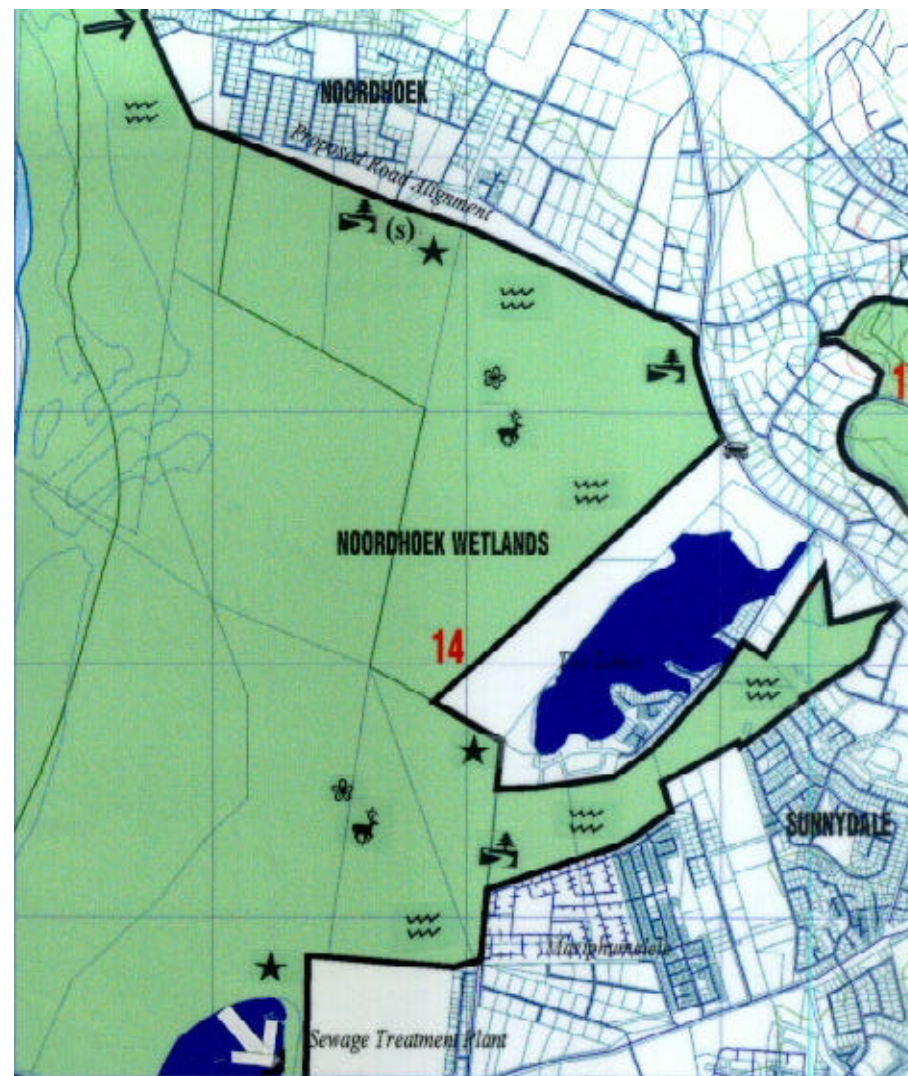
- The demarcation of this edge segment was influenced by:
 -  visual characteristics which contribute to edge delineation in maintaining the area as a natural landscape with a "wilderness" sense of place, and
 -  scenic route.

 Unique wetland comprises:
fauna &
flora

- geotechnical constraints;
- ✓ Existing rights in Noordhoek create a hard edge to Chapman's Peak.

		URBAN EDGE MANAGEMENT ZONES		
		INSIDE EDGE		OUTSIDE EDGE
EDGE INFORMANTS	Physical Environment			
	Hydrology		✓	✓
	Ecological Environment			
	Fauna			✓
	Flora			✓
	Rivers and Wetlands			
	Flood Plains			✓
	Wetlands			✓
	Land Use			
	Rural		✓	✓
	Legal, Planning, Ownership			
	Existing Rights		✓	
	Visual Resource			
	Landscapes			✓
	Visual Prominence			✓
	Scenic Routes			✓
	Sense of Place			✓
	*	UTZ	NUZ	UTZ LOCAL OBJECTIVES
POLICY REFERENCE	2		New development to be consistent with existing densities.	
	3 (a) & (b)	18 (b) & 22	No development closer than 25 m to a water body.	Functional open space linkages with the wetland are important.
	4 (a) & (b) 13	16	No urban development to be allowed below 5m contour	Formulate a policy to negotiate transfer of development rights.
	5 & 10 (a)	19	Architectural and landscaping manuals to be compulsory. Scale and intensity of new developments to be managed.	Investigate Tourist / educational potential of wetlands.
	7		Implement a storm water management plan is critical in this sensitive wetland environment.	
	9 & 11 (b)	17	Appropriate fire protection measures against veld fires must be taken. Invasive vegetation eradicated.	Eradicate alien vegetation.
	12		The inclusion of smallholdings within the UTZ does not infer future subdivision	

*(this is not a comprehensive list of local objectives)



*Refer to GIS for detailed edge demarcation

1: 30 000



4.2.15 Chapman's Peak Estate

Chapman's Peak is a primary scenic route. The proximity of this route, steep slopes and forest to the north of this road, limit any northward expansion of urban development in this area.

These Noordhoek smallholdings represent large residential estates, some of which are situated on fertile agricultural land.

Two kaolin deposits of mineable quality exist and should not be sterilised by housing.

Although these smallholdings are not regarded as being environmentally sensitive (fauna & flora), they epitomise the rural sense of place found in the Noordhoek Valley.

Due to its large catchment, this area also plays a fundamental role in supporting the Noordhoek Wetlands System. Detention ponds and soakaways are imperative for underground water replenishment (i.e. smallholdings with low density).

Development has been approved up to the 131m contour and this is to be used as a benchmark for future development applications.

Current development has, due to the relative dense vegetation and tree cover, a limited visual impact when viewed from Kommetjie.

Edge demarcation

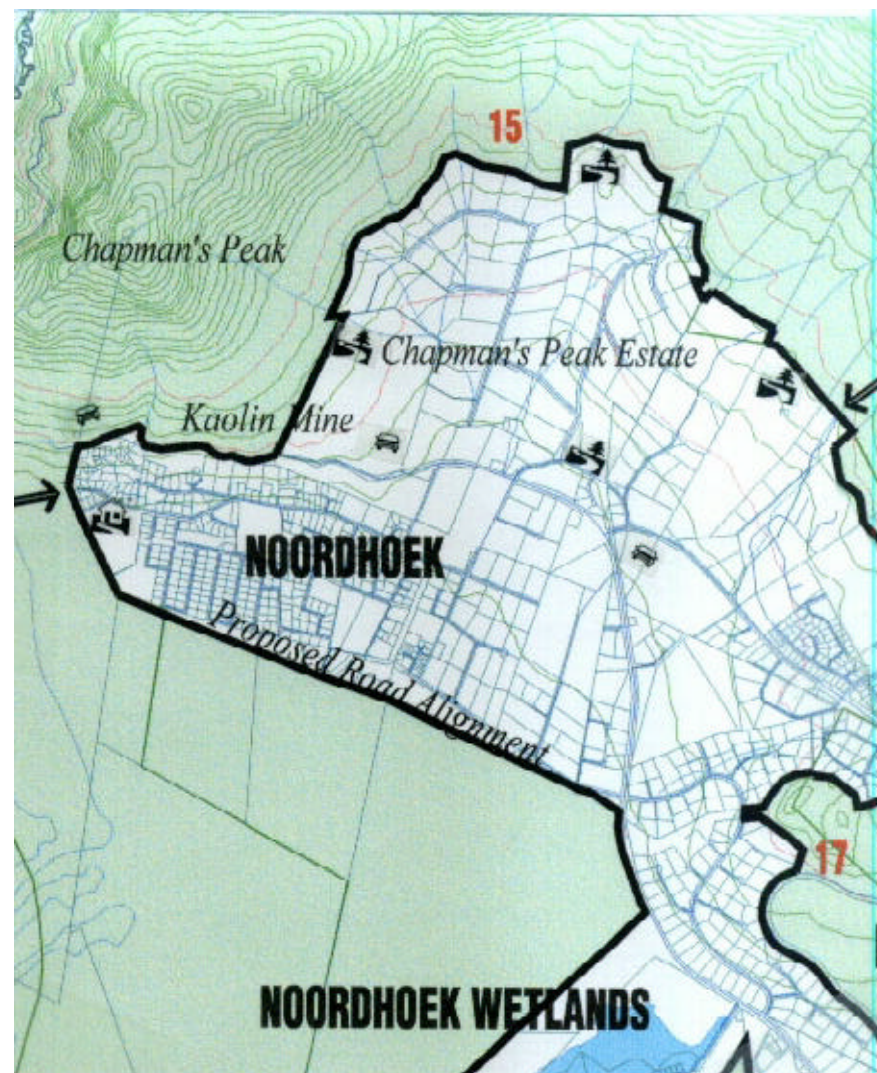
The Urban Edge coincides with the CPPNE, following the existing cadastral boundaries from the Kaolin Mine in the west up to the single residential development to the east.

EDGE DEMARCATION CONSIDERATIONS

- This segment represents a classical co-existence between agriculture (fertile land), and hinterland; i.e small holdings and mountain/national park.
- Criteria for edge demarcation include:
 -  rural landscapes reflecting a unique sense of place;
 -  visual prominence dominates the principle issues determining urban edge, and
 -  the 131m contour which has successfully controlled sprawl historically.
- The Chapman's Peak estates are designated agricultural smallholdings and as such are not recommended for subdivision below that currently permitted.
- Furthermore, architectural and landscape controls are recommended to ensure a high quality and generic "urban" environment so as to compliment the:
 -  scenic drive and protect the "historical" sense of place around Chapman's Drive.

			URBAN EDGE MANAGEMENT ZONES	
EDGE INFORMANTS			INSIDE EDGE	OUTSIDE EDGE
	Physical Environment			
	Topography			✓
	Hydrology			✓
	Land Use			
	Rural		✓	✓
	Legal, Planning, Ownership			
	Existing Rights		✓	
	Cultural/Historical Environment			
	Historical Sites		✓	
	Monuments		✓	
	Visual Resource			
	Landscapes			✓
	Visual Prominence		✓	✓
	Architectural Controls		✓	
	Scenic Routes		✓	✓
	Sense of Place			✓
	Other			
	131m Contour		✓	
POLICY REFERENCE	UTZ	NUZ	UTZ LOCAL OBJECTIVES	NUZ LOCAL OBJECTIVES
	2 12		New development to be consistent with existing densities. The inclusion of smallholdings within the UTZ does not infer future subdivision.	
	3 (a) & (b)	18 (b) & 22	No development closer than 25 m to a water body.	Functional open space linkages with the wetland are important.
	4 (a) & (b) 13	16	No urban development above the 131m contour.	Policy regarding incentives to smallholding owners needs to be formulated.
	5 & 10 (a)		Architectural and landscaping manuals to be compulsory. Scale and intensity of new developments to be managed.	
	7		Implement a storm water management plan is critical in this sensitive wetland environment.	
	9 & 11 (b)	17	Appropriate fire protection measures against veld fires must be taken.	Eradicate alien vegetation.

*(this is not a comprehensive list of local objectives



*Refer to GIS for detailed edge demarcation

1: 30 000

4.2.16 San Michelle

These lower slopes have been developed for single residential purposes, the upper limit of which flows from the 131m contour level in the west to the 150m level above Noordhoek Manor Retirement Village.

Recent subdivision approvals west of San Michelle have pegged the UE in this area.

A strategic green belt separates Noordhoek Manor from Ou Kaapse Weg

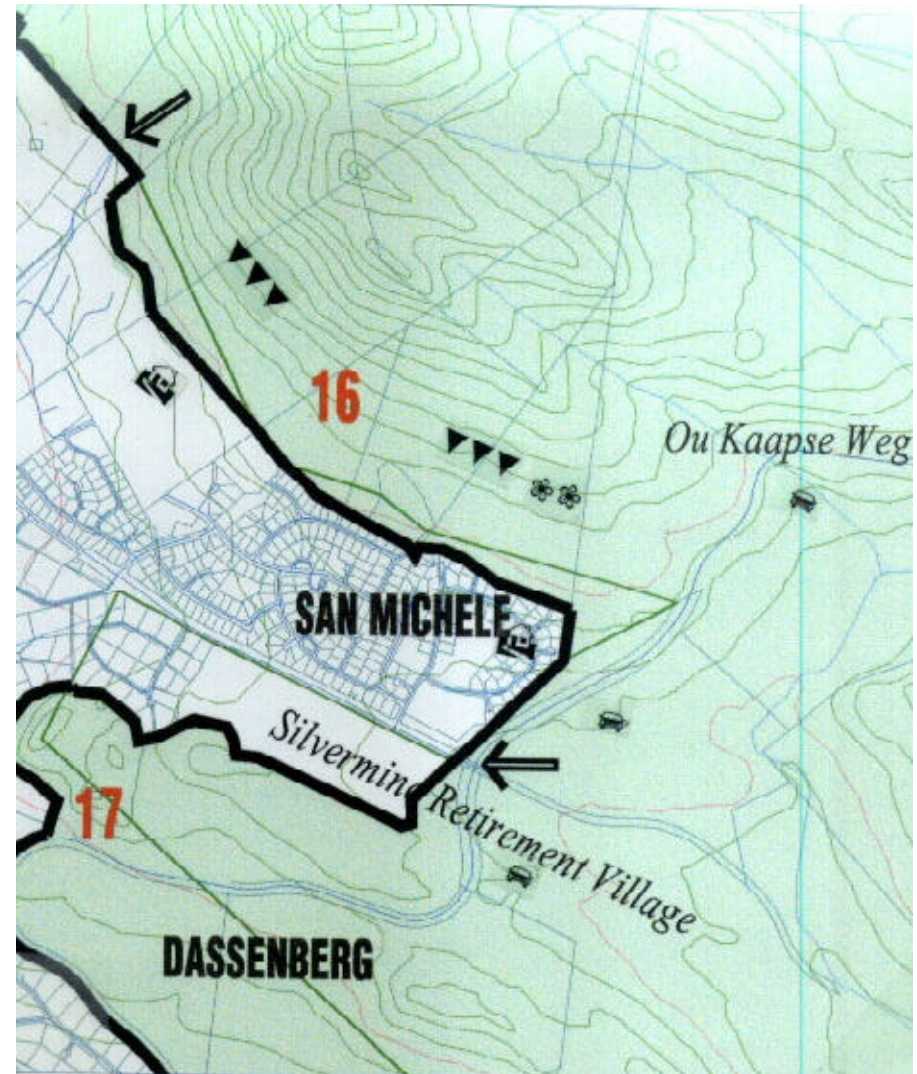
Edge demarcation

The Urban Edge follows the outer extent of the recent township development of San Michelle to the Noordhoek Manor Retirement Village.

EDGE DEMARCATION CONSIDERATIONS
• The edge is demarcated by the extent of existing township subdivision and the 131m contour delimiting urban development - Recent applications have successfully been controlled by this policy with public support.
• Existing rights of San Michelle and Noordhoek Manor should not be extended in this sensitive and highly visual mountainous landscape.

		URBAN EDGE MANAGEMENT ZONES	
		INSIDE EDGE	OUTSIDE EDGE
EDGE INFORMANTS	Physical Environment		
	Topography		✓
	Hydrology		
	Legal, Planning, Ownership		
	Existing Rights	✓	
	Structure Plans		
	Ownership		
	Visual Resource		
	Landscapes	✓	
	Sense of Place		
	Other		
	131m Contour	✓	✓
POLICY REFERENCE	UTZ	NUZ	UTZ LOCAL OBJECTIVES
	2 12		New development to be consistent with existing densities. The inclusion of smallholdings within the UTZ does not infer future subdivision.
	3 (a)		Open space linkages should be encouraged
	4 (a) 13		No urban development above the 131m contour.
	5 & 10 (a)		Architectural and landscaping manuals to be compulsory. Scale and intensity of new developments to be managed.
	9 & 11 (b)	17	Appropriate fire protection measures against veld fires must be taken.
			NUZ LOCAL OBJECTIVES
			Eradicate alien vegetation.

*(this is not a comprehensive list of local objectives)



*Refer to GIS for detailed edge demarcation

1: 20 000

Dassenberg

This is a well-developed smallholding area on the flanks of Dassenberg Ridge and the lower parts of Ou Kaapse Weg, which also borders the Silvermine Retirement Village.

The large residential smallholdings to the north-west contribute to the rural character of this area. Dassenberg Ridge is a prominent local topographical feature contributing also to the quality of the Ou Kaapse Weg scenic route experience.

An application for the development of the Dassenberg Farm (k) to the east of Ou Kaapse Weg has recently taken an appeal decision on review. The applicant has submitted a formal objection and both parties are seeking legal opinion. This procedure will ultimately resolve the issue and in the meantime the subject area is not indicated for urban development. Dassenberg Peak is considered outside the edge line due to its high visibility and relative prominence from all major scenic routes. The edge line will be amended once an appropriate development plan is approved.

This entire area is highly visible from Ocean View and Kommetjie, and consequently is a major asset as a scenic route both to and from Cape Point.

Edge demarcation

The UE line follows the existing urban cadastral boundary of the Silvermine Retirement Village including all the subdivided smallholdings and excluding Dassenberg Farm off Ou Kaapse Weg, until it reaches Sun Valley.

This entire edge between San Michelle and Sun Valley, with the exception of Silvermine Retirement Village, abuts smallholdings. Urban pressures to subdivide these smallholdings should be resisted. The character of the area is unique and should be preserved.

EDGE DEMARCATION CONSIDERATIONS

- Demarcation of the edge around San Michelle and the Silvermine Retirement Village was influenced by:
strategic road intersections;

 scenic routes;

- geotechnical constraints; and
natural landscapes

 natural landscapes

- Control of urban sprawl in this area is paramount - not only because of potential degradation of the natural environment (mountain slopes) but also to contain urban growth.

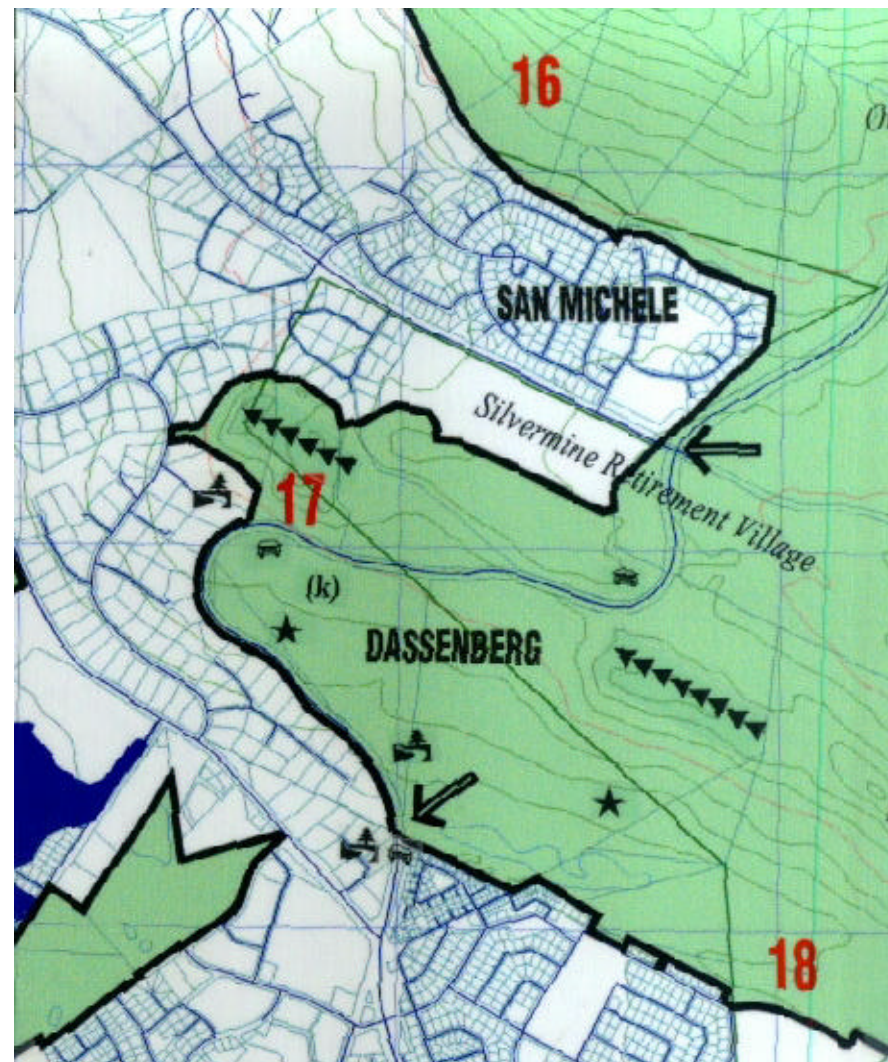
- Densification is preferred in the established and underdeveloped areas, which offer bulk services and community facilities.

- The smallholdings in this segment make provision for the sustenance of the area's desirable rural character. Neither extension nor urban intensification should be allowed.

- Application for urban development (k)

			URBAN EDGE MANAGEMENT ZONES	
EDGE INFORMANTS			INSIDE EDGE	OUTSIDE EDGE
	<i>Physical Environment</i>			
	Topography		✓	✓
	Ecological Environment			
	<i>Flora</i>			✓
	<i>Fauna</i>			✓
	Rivers and Wetlands			
	<i>River Corridors</i>			
	<i>Flood Plains</i>			
	<i>Wetlands</i>			
	Infrastructure			
	<i>Roads</i>		✓	
	<i>Land Use</i>			
	<i>Urban</i>		✓	
	<i>Rural</i>		✓	✓
	<i>Visual Resource</i>			
	Landscapes			✓
	<i>Skylines and Ridges</i>			✓
	<i>Visual Prominence</i>		✓	✓
	<i>Scenic Routes</i>		✓	✓
	<i>Sense of Place</i>		✓	✓
	<i>Other</i>			
POLICY REFERENCE	*	UTZ	NUZ	UTZ LOCAL OBJECTIVES
		2 12		New development to be consistent with existing densities. The inclusion of smallholdings within the UTZ does not infer future subdivision.
		3 (a)		Open space linkages should be encouraged. Protect and promote sight lines & ridges
		4 (a)		No urban development on slopes steeper than 1:4
		5 & 10 (a)		Architectural and landscaping manuals to be compulsory. Scale and intensity of new developments to be managed.
		9 & 11 (b)	17	Appropriate fire protection measures against veld fires must be taken.
				NUZ LOCAL OBJECTIVES
				No further development should be encouraged.
				Eradicate alien vegetation.

*(this is not a comprehensive list of local objectives)



*Refer to GIS for detailed edge demarcation

1: 20 000

Sun Valley/Peers Hill

The southern slopes of Dassenberg to the south of Ou Kaapse Weg, form the main catchment area that recharges the vlei's and wetlands along the northern edge of Sun Valley/Peers Hill as well as the aeolian dune system. The integrity of this catchment/wetland system as well as that of the Silvermine River and Wetland System to the north, needs to be protected.

A bypass route for Fish Hoek is currently under consideration. The alignment of this bypass route will determine the northern extent of the urban development of Fish Hoek.

The rezoning of Zone C (I) from undetermined to subdivisional area has been approved subject to a number of conditions, one being a permit from Cape Nature Conservation so as to develop within the CPPNE. This proposed development would be exposed and therefore highly visible. No development should be allowed north of the alignment of the proposed Fish Hoek Bypass Road.

Edge demarcation

The Urban Edge follows the cadastral boundary along the northern extent of the existing urban development and southernmost extent of the wetland and aeolian dune field. It follows the CPPNE line onto the proposed Fish Hoek Bypass that forms the northern extent of the Urban Edge, up to the mouth of the Silvermine River.

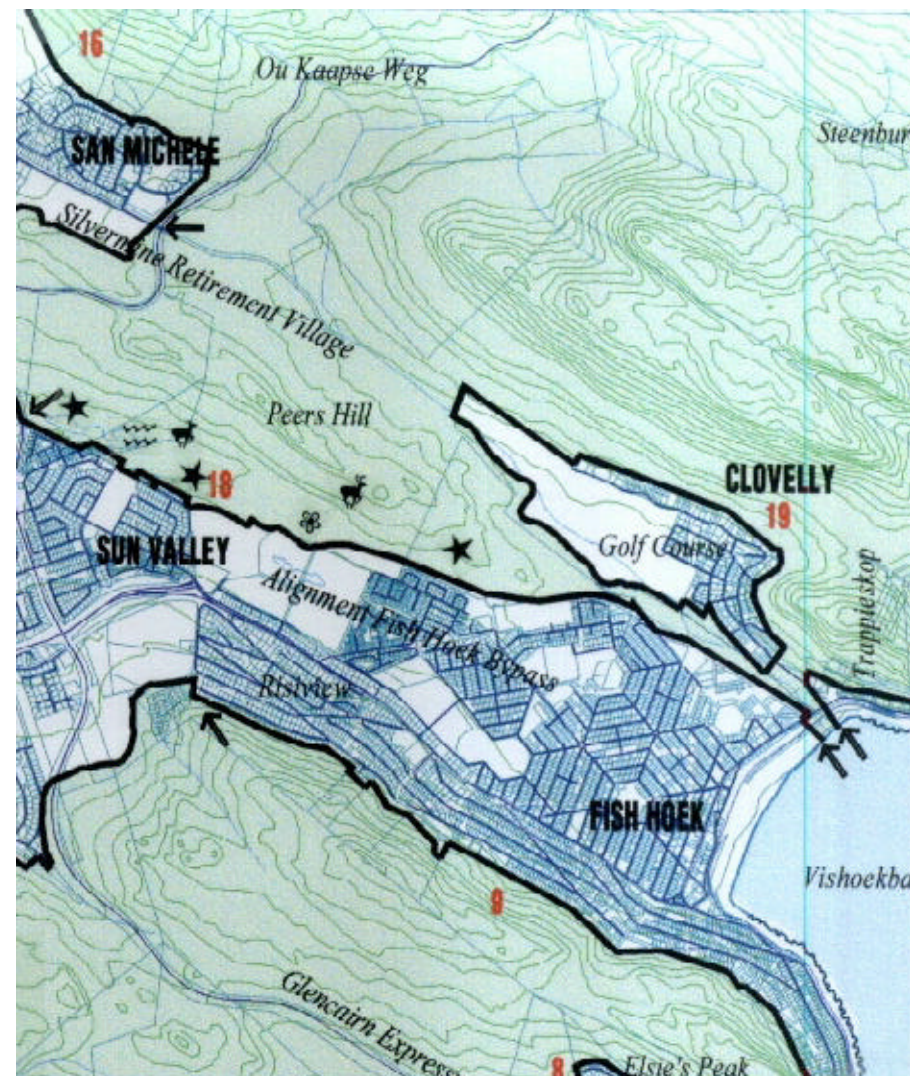
The UE along Peers Hill in particular is extremely sensitive and excludes from urban development delicate dune systems. Public access should be controlled.

EDGE DEMARCATION CONSIDERATIONS

- This segment of the edge requires connecting the urban areas of Sun Valley and Fish Hoek, which are established by reason of the existing development rights and statutory plans.
- No urban expansion is recommended towards Dassenberg and Peers Hill for reasons of:
 - flora
 - fauna;
 - geology;
 - topography (dune systems); and
 - ⚡ flooding potential
- Further, elevated encroachment up these slopes will create undesirable visual prominence.
- The Fish Hoek bypass is an adequate definer for the edge as an
 - ✓ Infrastructural element
- Pressure for urban development will continue north of this edge (Zone C- (I)) and should be resisted due to environmental sensitivities and visual prominence

EDGE INFORMANTS			URBAN EDGE MANAGEMENT ZONES		
			INSIDE EDGE	OUTSIDE EDGE	
	Physical Environment				
	Climate			✓	
	Topography			✓	
	Hydrology			✓	
	Geology			✓	
	Ecological Environment				
	Fauna			✓	
	Flora			✓	
	Rivers and Wetlands				
	River Corridors			✓	
	Flood Plains			✓	
	Wetlands			✓	
	Infrastructure				
	Roads		✓		
	Land Use				
	Urban		✓		
	Legal, Planning, Ownership				
	Existing Rights		✓		
	Structure Plans		✓	✓	
	Visual Resource				
	Landscapes			✓	
	Visual Prominence		✓	✓	
	*	UTZ	NUZ	UTZ LOCAL OBJECTIVES	NUZ LOCAL OBJECTIVES
	POLICY REFERENCE	2		New development to be consistent with existing densities.	No further development should be encouraged to the North of the alignment of the proposed Fish Hoek Bypass Road.
3 (a) & (b) 7		18 (b) 19	Open space linkages to the wetlands should be encouraged.	Control public access to dune system.	
4 (a)			No urban development on slopes steeper than 1:4		
5 & 10 (a)			Architectural and landscaping manuals to be compulsory. Scale and intensity of new developments to be managed.		
9 & 11 (b)		17	Appropriate fire protection measures against veld fires must be taken.	Eradicate alien vegetation.	

*(this is not a comprehensive list of local objectives)



*Refer to GIS for detailed edge demarcation

1: 40 000

+ - Clovelly

Presently the most elevated houses are located at their limit in terms of the 1:4 slope.

Visual impact is limited to the medium and foreground from Fish Hoek Main Road.

The steeper slopes and the golf course are regarded as sensitive due to their visual prominence and the occurrence of endemic amphibian and invertebrate species.

The edge of the Silvermine River and Wetland system needs to be protected.

This area is unique and represents an urban island within a rural area. Any modifications to the UE are likely to have an impact on the environment. Densification of the area should be considered holistically.

Edge demarcation

The Urban Edge is self-defined and follows the extent of the Clovelly Township, including the golf course. This allows for a functional river/wetlands corridor to the sea, which incorporate the Silvermine River System.

EDGE DEMARCATION CONSIDERATIONS

- This "island" is characterised by the existing urban development (rights) in the form of housing and the Clovelly Country Club (Golf Course).
- Further urban expansion is contained by steep mountain slopes with sensitive:
 - flora
 - fauna;
 -  landscapes in the form of dune systems and river corridors, and
 - unstable rock formations.
- This is a unique enclave in the region with a charm and character of its own. Extension of urban development will not only negate these qualities, but could prove disastrous by reason of impact on the natural environment.

			URBAN EDGE MANAGEMENT ZONES	
EDGE INFORMANTS			INSIDE EDGE	OUTSIDE EDGE
	Physical Environment			
	Topography			✓
	Ecological Environment			
	Fauna			✓
	Flora			✓
	Rivers and Wetlands			
	River Corridors			✓
	Infrastructure			
	Roads		✓	
	Legal, Planning, Ownership			
	Existing Rights		✓	
	Visual Resource			
	Landscapes			✓
	Sense of Place		✓	✓
POLICY REFERENCE	UTZ	NUZ	UTZ LOCAL OBJECTIVES	NUZ LOCAL OBJECTIVES
	2		Development of the golf course should reflect a low density, rural character.	No further development should be encouraged.
	3 (a) & (b) 7	18 (b) 19	Golf course must remain as primary open space thereby encouraging a functional river corridor to the sea.	The edge of the Silvermine River & Wetland system needs to be protected.
	4 (a) & (b)		No urban development on slope steeper 1:4. Avoid development in areas of unstable rock formations.	
	5 & 10 (a)		Architectural and landscaping manuals to be compulsory. Scale and intensity of new developments to be managed.	
	9 & 11 (b)	17	Appropriate fire protection measures against veld fires must be taken.	Eradicate alien vegetation.

*(this is not a comprehensive list of local objectives)



*Refer to GIS for detailed edge demarcation

1: 20 000



4.2.20 Kalk Bay To Lakeside

Urban development, especially in the Kalk Bay and Muizenberg areas has encroached on slopes steeper than 1:4. Residential development on these slopes has resulted in unsightly accesses off Boyes Drive, as well as unsightly garages being built on this major scenic route.

The burial site of Abe Bailey is to be found along these slopes below Boyes Drive and has been excluded from the Urban Edge. The Kalk Bay area has been declared as a Conservation Area due to its cultural significance. The Battle of Muizenberg took place along the lower reaches of this segment especially the area between Kalk Bay and Muizenberg.

The public has informal access to Steenberg Mountain as an outlook point and recreational area.

Due to the steep slopes, the existing residential development is highly visible and, any further extension thereof to either the west (Kalk Bay and Muizenberg), or south (Lakeside) would have a negative visual impact.

Steenberg Mountain is regarded as being a primary conservation area due to the high occurrence of endemic plant, amphibian and invertebrate colonies along its lower reaches above Boyes Drive.

Any further residential development on the slopes of Trappieskop above Main Road, Kalk Bay is also restricted in terms of slope, visual impact and ecological sensitivity.

All the land situated above Boyes Drive (irrespective of ownership) has been included voluntarily into the National Park.

Edge Demarcation

The line follows the existing outer limits of urban development above Main Road and Godfrey Street in the south, and runs below Boyes Drive. The few residential properties above Boyes Drive are included within the Urban Edge. These are not regarded as a precedent to further urban development. All areas of cultural/historical significance are outside the edge line.

EDGE DEMARCATION CONSIDERATIONS

 This urban edge segment has been arguably the least controversial of all, inasmuch as there is consensus that no further urban development must occur above Boyes Drive, as it is a notable Scenic route with majestic views of mountain and sea.

- Literally all the environmental criteria come into play in the NUZ reinforcing the view that urban expansion must not extend above the road:
 fauna & flora

 Kalk Bay's historical integrity needs to be protected

 The notable exception of the NUZ protruding into the UTZ at Muizenberg is to accommodate the Abe Bailey burial site and battle sites.

EDGE INFORMANTS	URBAN EDGE MANAGEMENT ZONES		
			INSIDE EDGE
			OUTSIDE EDGE
	Physical Environment		
	Topography		✓
	Ecological Environment		
	Fauna		✓
	Flora		✓
	Land Use		
	Urban		✓
	Cultural/Historical Environment		
	Historical Sites		✓
	Monuments		✓
	Archaeological Sites		✓
	Cultural Sites		✓
	Visual Resource		
	Landscapes		✓
	Scenic Routes		✓
POLICY REFERENCE	UTZ	NUZ	UTZ LOCAL OBJECTIVES
	2	15 16	Urban development on the Edge interface, should be complementary, low intensity, low bulk structures that do not intrude on the visual quality of the mountain backdrop, or on the scenic quality of Boyes Drive. No rezoning on the interface to any other use than single residential, should be permitted.
	4 (a)	19	No urban development on slope steeper 1:4.
	5 & 10 (a)		Architectural and landscaping manuals to be compulsory. Scale and intensity of new developments to be managed.
	9 & 11 (b)	17	Appropriate fire protection measures against veld fires must be taken.
	14		Maintain the integrity of this scenic route.

*(this is not a comprehensive list of local objectives)



*Refer to GIS for detailed edge demarcation

1: 40 000



Silvermine Naval Area

The Silvermine Naval Area is situated on the lower reaches of Steenberg, encroaching on slopes in excess of 1:4.

The naval headquarter buildings (m) are a significant visual landmark but cover only a small part of the site. Existing buildings are situated high up the slope, well above the 120m contour and are extremely prominent, even at night due to the naval headquarters' illumination. It should be noted that the urban edge line here is provisional, following the boundary fence as seen on aerial photography, since no clear cadastral line exists.

A township near Protea Road was fully serviced in the late 1970's but no residential development has taken place other than the headquarters and the sports field.

This area is heavily infested with alien vegetation and poses a definite fire risk. In spite of this infestation, the surrounding natural area is prized for its biodiversity and is therefore regarded as being highly sensitive.

One of the underpinning principles of the Urban Edge is to allow for the optimal use of services and infrastructure.

Edge Demarcation

The Urban Edge follows the 80m contour from Boyes Drive, including the sports field above Westlake Golf Course leading onto the 90m contour to the west, including most of the undeveloped township, up to Ou Kaapse Weg.

The contour elevations are considered the principal criteria of delimitation in this UE segment. The naval headquarters (excluding the playing fields) are included within the non-urban zone implying retention and enhancement of the buildings and setting, but not expansion.

EDGE DEMARCATION CONSIDERATIONS

- This segment has offered various options, one being to include the Naval Headquarters and residential precinct within the UTZ. However due to:



visual presence and building massing;



the skyline; and

landscapes that the complex presents, they are excluded from the UTZ and identified as "islands".

- To include this complex would imply extensive urban development up to and around the Naval HQ (m) (at 120m elevation), which in aggregate would create an undesirable visual intrusion on the Silvermine Nature Reserve.
- Generally the 80 m contour has accordingly been prescribed as the edge to unobtrusively connect Lakeside to the existing Protea Road complex.

- All infrastructure up to approximately the 90m contour has been included.
 - This option protects the flora and fauna of Silvermine as well as the visual integrity of the mountain:
- fauna & flora

		URBAN EDGE MANAGEMENT ZONES	
		INSIDE EDGE	OUTSIDE EDGE
EDGE INFORMANTS	Physical Environment		
	Topography	✓	
	Ecological Environment		
	Fauna		✓
	Flora		✓
	Infrastructure		
	Roads	✓	
	Utility Services	✓	
	Land Use		
	Urban	✓	
	Visual Resource		
	Landscapes		✓
	Skylines and Ridges		✓
	Visual Prominence		✓
	Scenic Routes		✓
POLICY REFERENCE	*	UTZ	NUZ
		2	
		4 (a)	
		5 & 10 (a) & (b)	
		9 & 11 (b)	17
		UTZ LOCAL OBJECTIVES	NUZ LOCAL OBJECTIVES
		Urban development on the Edge interface, should be complementary, with densities that do not intrude on the mountain backdrop.	No development to be allowed.
		No urban development on slope steeper 1:4.	
		Due to the steepness and high visibility of the area, a landscaping plan must form part of the physical development of this terrain A policy regarding the erection of fences/walls on roads should be employed so as to curb the erection of unsightly (prefabricated) walls, as contained in other zoning schemes.	
		Appropriate fire protection measures / management plan against veld fires must be undertaken.	Eradicate alien vegetation.

*(this is not a comprehensive list of local objectives)



*Refer to GIS for detailed edge demarcation

1: 20 000

4.2.22 Steenberg – Tokai Forest

This area has a moderate to high agricultural potential and has been extensively farmed in the past. Recently, development applications motivating the enhancement of this rural character have been approved.

In this regard a residential development (for 13 units) (n) has been approved on the 120m contour, immediately to the east of Ou Kaapse Weg, opposite the Silvermine Naval Area. Similar plots were approved (1350 meters square) releasing the remainder of the farm for agricultural purposes (viticulture).

The Steenberg Golf Estate extends up to the 60m contour and was approved to allow for the extension of the Steenberg Wine Estate.

There is also an existing smallholding development along Zwaanswyk Road. These units are essentially residential in nature and are included within the edge.

This area is heavily wooded by mature alien trees and surrounded by commercial forestry. The Tokai Forest has great value as a metropolitan open space resource.

Fundamental to the Urban Edge philosophy in this area is the protection of valuable agricultural resources from the effects of urban sprawl and to manage public access to afforested areas.

Edge Demarcation

The edge includes the nursery (**) at the intersection of Tokai Road with Ou Kaapse Weg, the residential component of the Steenberg Estate and the Small Holdings along Zwaanswyk Road up to the Public Open Space at the eastern extent of the Tokai Forest. The 13 approved units, as well as adjacent 15 approved units, which are located just below the Ou Kaapse Weg are included as ‘development islands’ outside the urban edge.

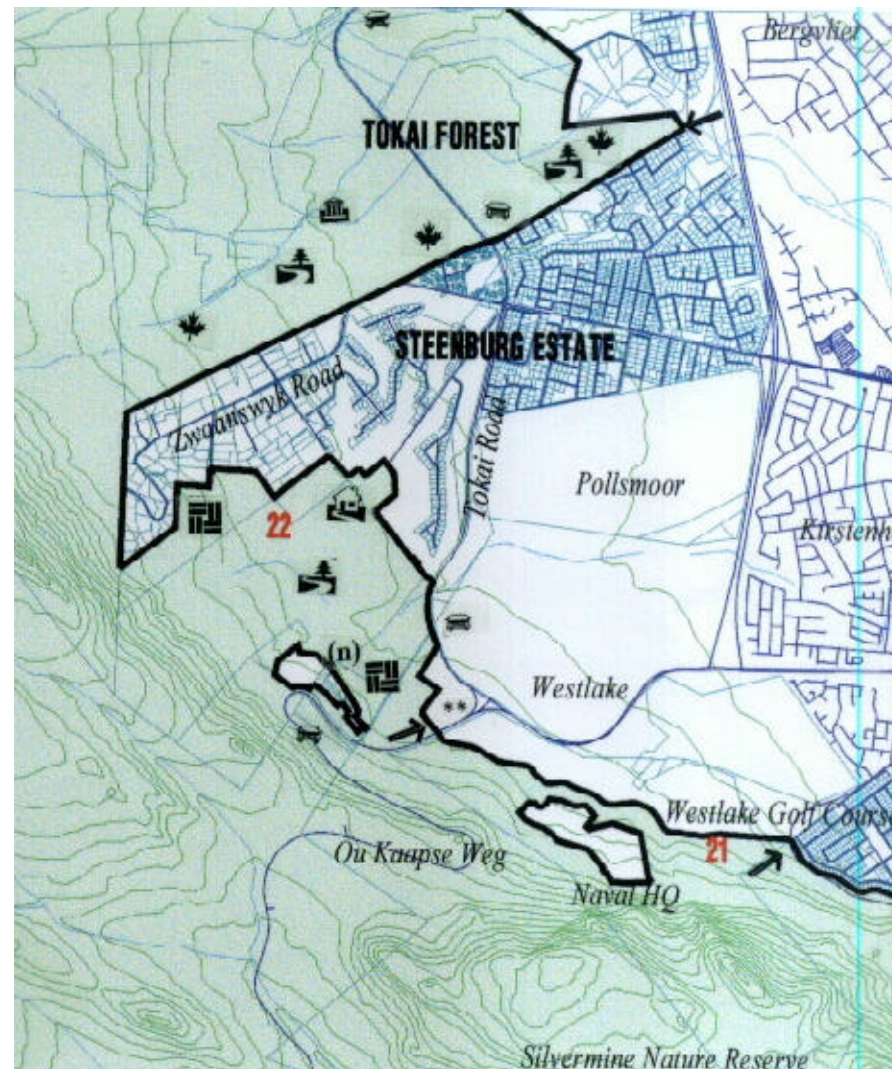
Development of the nursery site would be subject to further investigation.

EDGE DEMARCATION CONSIDERATIONS

- The heavy weighting of NUZ criteria; has been the most significant in demarcating the edge, criteria being:
 - Ω forested areas (Tokai Forest boundaries);
 -  rural character along the mountain slopes;
 -  views from scenic routes (Ou Kaapse Weg);
 - i high agricultural potential of land
- Traditional urban zoning and development, the most recent being the Steenberg Golf course development and the Westlake project on Steenberg Road, established the UTZ.

			URBAN EDGE MANAGEMENT ZONES	
EDGE INFORMANTS			INSIDE EDGE	OUTSIDE EDGE
	Physical Environment			
	Climate			✓
	Ecological Environment			
	Fauna			✓
	Flora			✓
	Land Use			
	Rural			✓
	Cultural/Historical Environment			
	Historical Sites		✓	✓
	Monuments		✓	✓
	Visual Resource			
	Landscapes			✓
	Visual Prominence			✓
	Scenic Routes			✓
	Sense of Place			✓
POLICY REFERENCE	UTZ	NUZ	UTZ LOCAL OBJECTIVES	NUZ LOCAL OBJECTIVES
	2 12	20	New development to be consistent with existing densities. The inclusion of smallholdings within the UTZ does not infer future subdivision.	Rezoning of high-productive lands is not permitted.
	4 (a) 13	16	No urban development on slopes steeper than 1:4.	Policy regarding incentives to smallholding owners needs to be formulated.
	5 & 10 (a) & (b)	21 (a) & (b)	Architectural and landscaping manuals to be compulsory. Scale and intensity of new developments to be managed. A policy regarding the erection of fences/walls on roads should be employed so as to curb the erection of unsightly (prefabricated) walls, as contained in other zoning schemes.	Tokai Forest should be managed as a open space of metropolitan significance.
	9 & 11 (b)	17	Appropriate fire protection measures against veld fires must be taken.	Eradicate alien vegetation.

*(this is not a comprehensive list of local objectives)



*Refer to GIS for detailed edge demarcation

1: 40 000

.2.23 Tokai Forest - Constantia

This is a high potential agricultural area farmed from the early 1700's for viticulture and other agricultural produce. The urban development occupies the lower reaches of the Constantia Valley.

The Wine Estates in the area are the major rural character anchors. These are characterised by lush vegetation in summer, which screens the residential developments to a large extent, and contributes positively to the rural character of this area. The Constantia/ Witteboomen Area including Bishop's Court are identified as a cultural landscape due to the historical settlement along the upper reaches of the Diep River, Burgersbos River and Liesbeeck River.

Urban development is characterised by large residential smallholdings, which form the interface between the more formal suburban type developments and the adjacent farms.

This area has a rich cultural/historical background originating from the earliest settlement and farming practices.

Fundamental to the Urban Edge philosophy is the protection of valuable cultural/historical and agricultural resources from the effects of urban sprawl. The Constantia/Tokai Growth and Development Plan (1992) has relevance.

Although open space areas such as De Hel have been included within the Urban Area, control over these areas and protection of their natural integrity, would be accomplished in terms of the formulated policies, which are proposed in Section 5.

Edge Demarcation

The Urban Edge is to follow the cadastral boundary of the existing smallholding subdivisions and the Wine Estates up to the Rhodes Avenue Hout Bay Main Road intersection at Constantia Neck.

EDGE DEMARCATION CONSIDERATIONS

- The primary objective of the edge in this sector is to protect the unique environment and urban setting, in this case mainly smallholdings, up the Constantiaberg slopes.

- The main criteria taken into account were:

1 protection of agricultural resources;

 historical sites;

 cultural landscape;

• geological constraints,.

 rural landscapes;

 scenic routes;

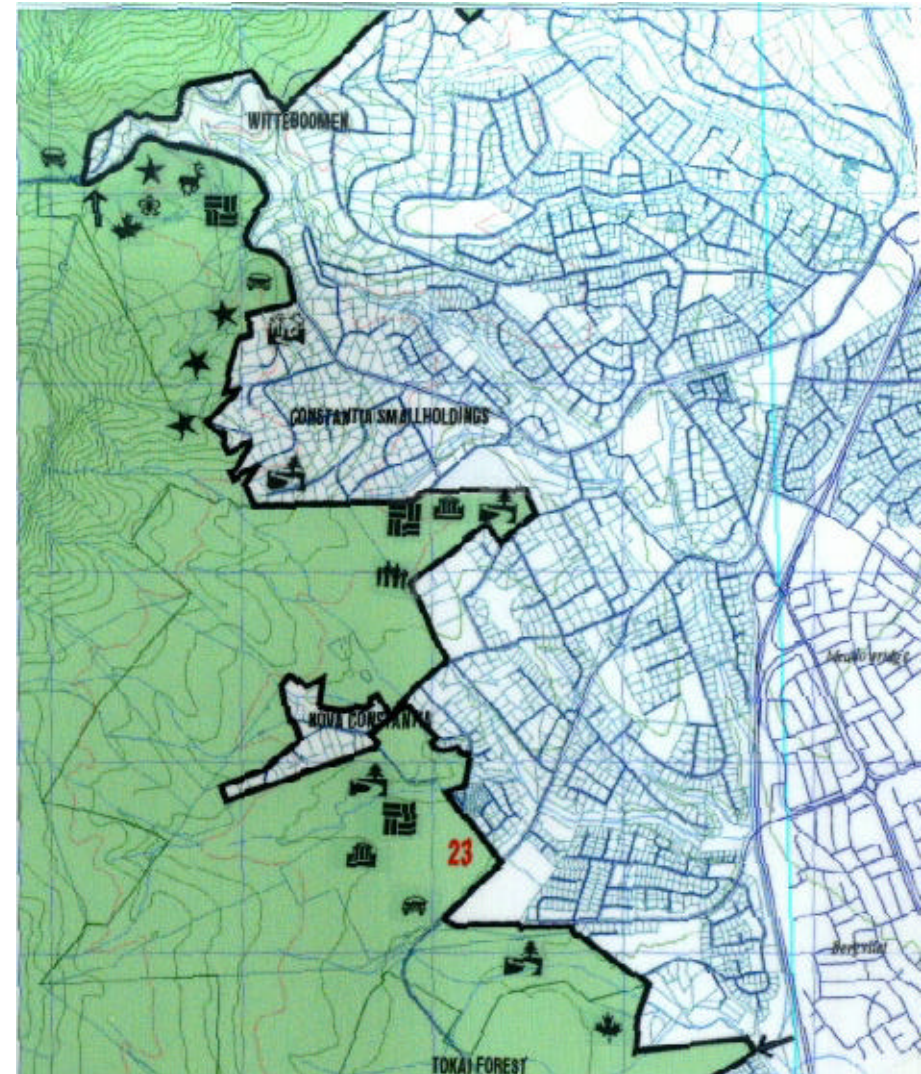
The unique sense of place, existing rights and the, Growth Management Development Plan for Constantia and Tokai were also acknowledged.

- Nova Constantia is (in part) an "island" within the NUZ due to the existing township rights.

- Tokai Forrest (non-indigenous) is protected on grounds of its scenic quality.

		URBAN EDGE MANAGEMENT ZONES	
		INSIDE EDGE	OUTSIDE EDGE
EDGE INFORMANTS	Land Use		
	Rural/Agricultural		✓
	Cultural/Historical Environment		
	Historical Sites	✓	✓
	Monuments		✓
	Cultural Sites		✓
	Legal, Planning, Ownership		
	Existing Rights	✓	
	Structure Plans	✓	
	Visual Resource		
	Landscapes		✓
	Scenic Routes		✓
	Sense of Place		✓
POLICY REFERENCE	*	UTZ	NUZ
		2 12	20
		4 (a) & (b) 13	16
		5 & 10 (a) & (b)	21 (a) & (b)
		9 & 11 (b)	17
		UTZ LOCAL OBJECTIVES	NUZ LOCAL OBJECTIVES
		Minimum subdivision standards to apply. The inclusion of smallholdings within the UTZ does not infer future subdivision.	Rezoning of high-productive lands is not permitted.
		No urban development on slopes steeper than 1:4. Avoid development in areas of unstable rock formations.	Policy regarding incentives to smallholding owners needs to be formulated.
		Architectural and landscaping manuals to be compulsory. Scale and intensity of new developments to be managed. A policy regarding the erection of fences/walls on roads should be employed so as to curb the erection of unsightly (prefabricated) walls, as contained in other zoning schemes.	Tokai Forest should be managed as a open space of metropolitan significance.
		Appropriate fire protection measures against veld fires must be taken.	Eradicate alien vegetation.

*(this is not a comprehensive list of local objectives)



*Refer to GIS for detailed edge demarcation

1: 40 000



4.2.24 Constantia Nek to De Waal Drive Interchange

Urban development along the lower slopes of the eastern side of the mountain has in places reached the 152m contour. This has led to a uniform and well-defined urban edge. This segment is undulating and crossed by many rivers and is well vegetated. Because of these features, the UE projects a significant visual image.

Rhodes Drive/Edinburgh Drive and Newlands Drive are major scenic routes and provide access to a number of important tourist attractions e.g. Rhodes Memorial, Mostert's Mill (o), the UCT Campus, Kirstenbosch Botanical Gardens, etc. The integrity of this route needs to be protected.

The Kirstenbosch Botanical Gardens are regarded as a major international tourist destination. The residential development next to Kirstenbosch known as Fernwood, consists of 50 erven with a single residential zoning. The remainder of the farm is zoned as Agricultural.

The river course of the Liesbeeck below Kirstenbosch Botanical Gardens is regarded as a rural contact into the urban area and needs to be maintained and protected. This area has also been identified as a cultural landscape due to the historical settlement pattern along the Liesbeeck River.

The commercial forests along this edge have high recreational value and provide access to Table Mountain. Control of 'gateways' is essential in the NUZ.

Areas such as Cecilia Forest are considered to be primary conservation areas.

Edge Demarcation

The UE essentially follows Rhodes Avenue and the extension thereof into Rhodes Drive, excluding:

- ☐ Kirstenbosch,
- ☐ rural zoned land,
- ☐ The Mill (Mostert's), and
- ☐ Grootte Schuur Estate,

but including the Fernwood residential development directly north of Kirstenbosch, as well as the University of Cape Town.

EDGE DEMARCATION CONSIDERATIONS

- As with the Boyes Drive segment, this urban edge is self-definitive due mainly to the existing urban development, but also:

- Ⓡ roads (along the contour);



scenic routes;
forested areas; and



historical sites (o).

- Protrusion beyond the edge would conflict with literally all environmental principles including:

- topography (steep slopes);

- ⊗ flora
fauna;



rural character;



cultural sites;



visual prominence, as well as the

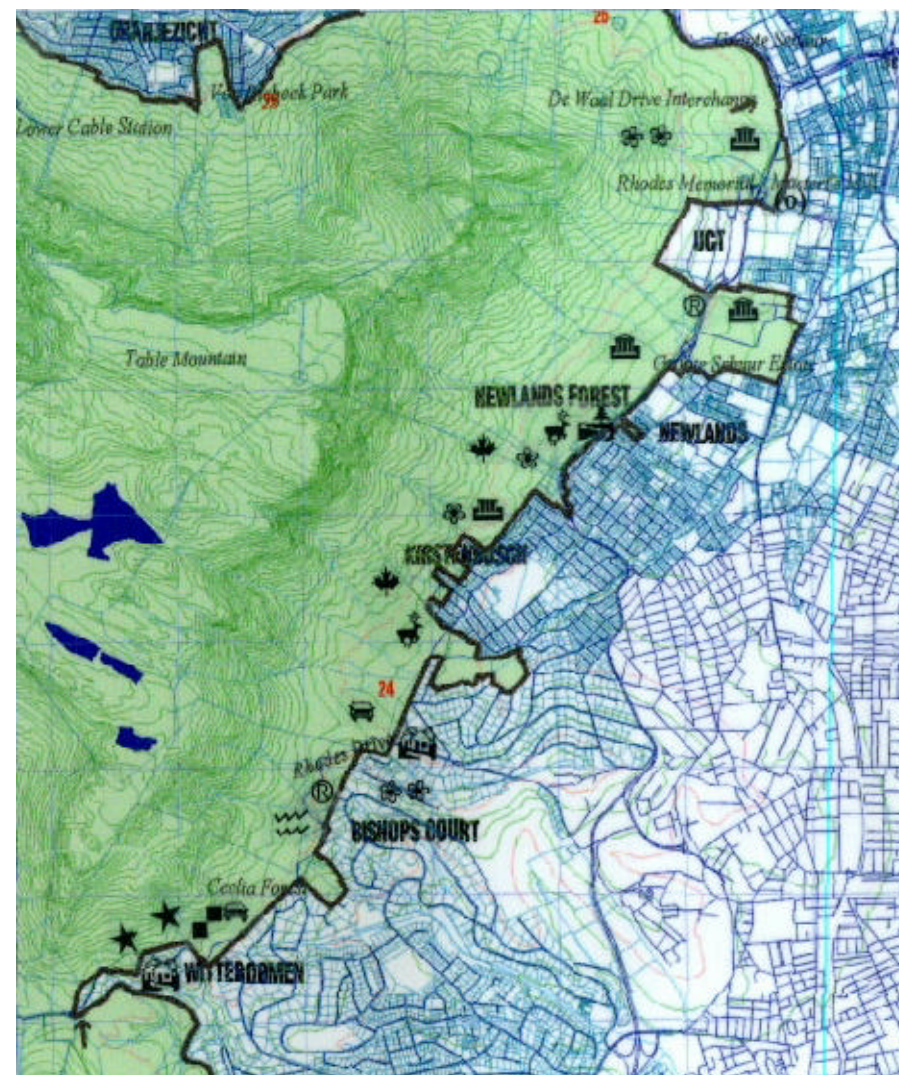
CPPNE & CPNP boundaries.

- As with Constantia Valley, the urban edge has reached its limit in this segment. It can be said that a delicate balance has been reached between nature and urban creep.
- The "green" intrusion into the urban area at Celia Park, Kirstenbosch and Groote Schuur Estate are all well documented and acknowledged as rural areas to be preserved as such.

In contrast, UCT enjoys prominence on the upper slopes as a landmark.

		URBAN EDGE MANAGEMENT ZONES	
		INSIDE EDGE	OUTSIDE EDGE
EDGE INFORMANTS	Physical Environment		
	Topography		✓
	Ecological Environment		
	Fauna		✓
	Flora		✓
	Infrastructure		
	Roads	✓	
	Land Use		
	Urban	✓	
	Rural		✓
	Cultural/Historical Environment		
	Historical Sites	✓	✓
	Monuments		✓
	Cultural Sites		✓
	Visual Resource		✓
	Landscapes		✓
	Skylines and Ridges		✓
	Visual Prominence		✓
	Scenic Routes		✓
	Sense of Place		✓
POLICY REFERENCE	* UTZ	NUZ	UTZ LOCAL OBJECTIVES
	2		Minimum subdivision standards to apply. No rezoning to higher density should be allowed.
	3 (a) & (b)	18 (b)	The Liesbeeck River needs to be maintained & protected.
	4 (a) & (b) 13		No urban development on slopes steeper than 1:4. Avoid development in areas of unstable rock formations.
	5 & 10 (a) & (b)	19 & 21 (a) & (b)	Architectural and landscaping manuals to be compulsory. A policy regarding the erection of fences/walls on roads should be employed so as to curb the erection of unsightly (prefabricated) walls.
	9 & 11 (b)	17	Appropriate fire protection measures against veld fires must be taken.
			NUZ LOCAL OBJECTIVES
			No development allowed.
			Cecilia & Newlands Forest have a high recreational value and provides access to Table Mountain. Control of gateways is essential.
			Eradicate alien vegetation.

*(this is not a comprehensive list of local objectives)



*Refer to GIS for detailed edge demarcation

1: 60 000

4.2.25 De Waal Drive Interchange to Devil's Peak Estates

Urban development along the lower slopes of Devil's Peak has taken place up to the 80-100m contour, reaching De Waal Drive as the upper limit. De Waal Drive is a major scenic route and the visual integrity of this area must be protected as it now forms a significant segment of the urban edge.

All the land to the south of De Waal Drive has been incorporated into the National Park and there should consequently be no pressure for urban development. Mosterts Mill (0) is of cultural/historic significance.

Considerable infill and densification of urban development is anticipated in the UTZ, particularly in District Six.

Edge Demarcation

The Urban Edge follows De Waal Drive up to the new Devil's Peak Estate Development.

EDGE DEMARCATION CONSIDERATIONS

- The edge is defined by the SANParks who have secured land south of De Waal Drive, the outer extent of existing urban development (&rights), taking into account the following:



scenic routes,



visual prominence of development,
skylines and ridges, and



cultural landscapes, and

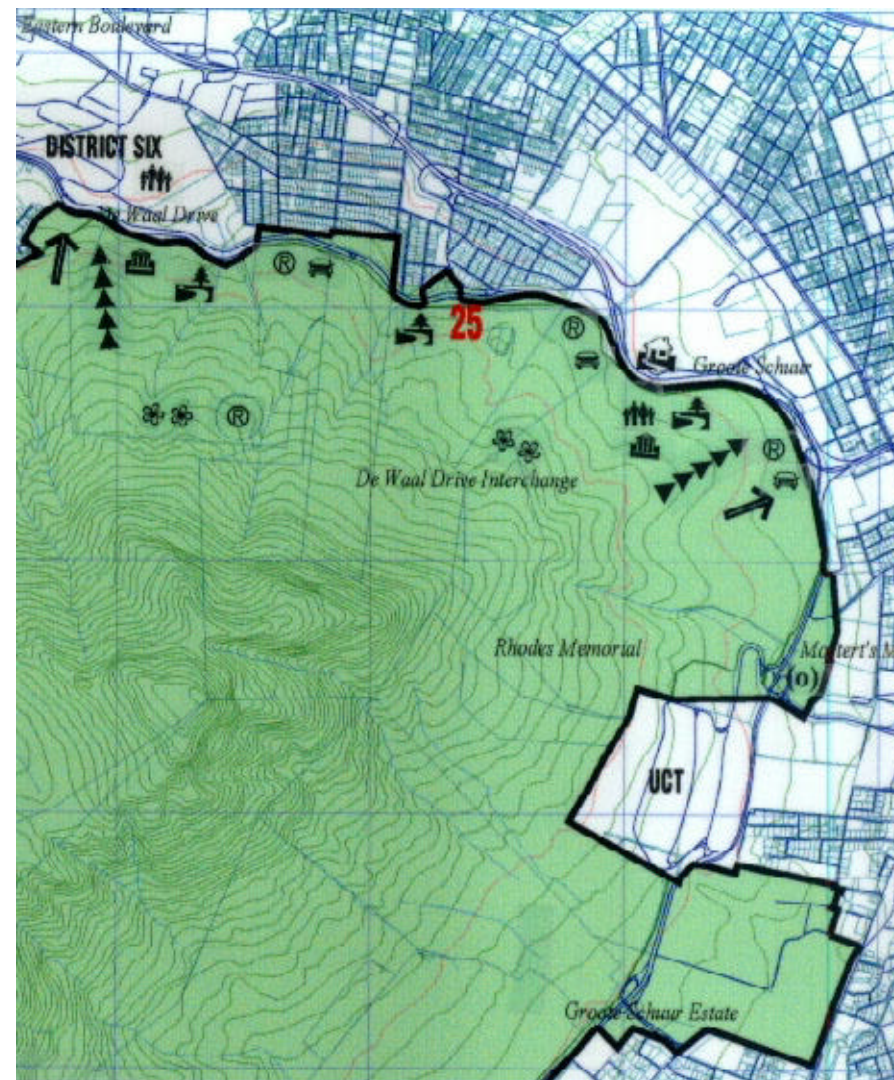


natural & rural landscapes

Public open spaces and Mosterts Mill abutting De Waal Drive have been included within the rural area so as to protect the scenic quality of the mountain.

EDGE INFORMANTS			URBAN EDGE MANAGEMENT ZONES	
			INSIDE EDGE	OUTSIDE EDGE
	Ecological Environment			
	Fauna			✓
	Flora			✓
	Infrastructure			
	Roads		✓	
	Land Use			
	Urban		✓	
	Rural			✓
	Legal, Planning, Ownership			
	Existing Rights		✓	
	Cultural/Historical Environment			
	Historical Sites		✓	
	Cultural Sites		✓	
	Visual Resource			
	Landscapes			✓
	Skylines and Ridges			✓
	Visual Prominence			✓
	Scenic Routes			✓
Sense of Place			✓	
*	UTZ	NUZ	UTZ LOCAL OBJECTIVES	NUZ LOCAL OBJECTIVES
POLICY REFERENCE	2		Urban development on the Edge interface, should be complementary, low intensity, low bulk structures that do not intrude on the visual quality of the mountain backdrop.	No further development to be considered.
	4 (a)		No urban development on slope steeper 1:4. No development to be allowed above De Waal Drive.	
	5 & 10 (a) 13	18 (b)	Scale and intensity of new developments to be managed. Complementary urban development reflecting on the 1800's architecture should be encouraged.	Incentive policy should be explored in order to preserve the treescapes from being destroyed by inappropriate residential developments (not only on the edge).
	9 & 11 (b)	17	Appropriate fire protection measures against veld fires must be taken. Invasive vegetation eradicated	Eradicate alien vegetation.

*(this is not a comprehensive list of local objectives)



*Refer to GIS for detailed edge demarcation

1: 30 000



4.2.26 High Cape To Higgovale

The City Bowl, from High Cape to Higgovale is characterised by a changing urban environment nestled against the slopes of Table Mountain. As a result of spatial, natural, and social (cultural) landscapes, different characteristics are displayed.

The distinguishable high density urban landscape of High Cape is clearly visible due to the intensity of recent residential development coupled with built forms of which the Disa Towers are probably the most visually blighting/ deplorable feature. The density of the High Cape development was too high since limited tree planting and landscaping could be accommodated. An urban fabric characterised by 3-4 storey dwellings with no visual relief cannot be acceptable.

Vredehoek, Highlands and Oranjezicht are characterised by a low-density residential pattern, complemented by well-established tree cover. The development of these areas is consistent with the historical demand for housing in close proximity to the Cape Town city centre. The encircling mountain slopes, the tree-covered valleys and spectacular views, create a marked sense of place. Higgovale is characterised by an extensive stone pine tree canopy providing visual continuity of the greenery on the mountain slopes, creating a gradual transition from the higher density urban development below to the low density urban development abutting the mountain edge.

The recommendations of the Cape Town's City Bowl Development Area: Executive Summary (1997), in respect of urban/rural, integration is supported, i.e. Van Riebeeck Park should be integrated into the "Landscape Framework" and pedestrian linkages, including that off Molteno Road, formalised so as to strengthen the integration of rural/urban integration.

Localized endemic plant communities of conservation importance, together with amphibian and invertebrate hotspots, are found all along the mountain slopes, on the outer extent of current urban development.

The primary importance of the proposed urban edge lies in the protection of the cultural and historical heritage of this area and preserving the integrity of Table Mountain, Devil's Peak and Kloof Nek.

Edge Demarcation

The Urban Edge follows the cadastral boundary of the outer limit of urban development, excluding major public open spaces e.g. Van Riebeeck Park along the edge and conforms generally to the CPNP boundary and CPPNE boundary.

EDGE DEMARCATION CONSIDERATIONS

- One of the most important landscapes in the world - it is vital to sustain a high quality character and composition of the built and natural environment, which is photographed daily with Table Mountain as the backdrop.
- This study contends that urban development has reached its limit in terms of elevation on the mountain slopes in the City Bowl. Planned densification is preferred to urban expansion with lower densities building and massing towards the mountain /urban edge.
- The existing, historical urban (and rural) landscape and sense of place have influenced edge demarcation while taking into consideration such aspects as:
 -  visual prominence,
 -  cultural/urban landscape;
 - flora, and
 - σ fauna.
 -  historical sites;

		URBAN EDGE MANAGEMENT ZONES	
		INSIDE EDGE	OUTSIDE EDGE
EDGE INFORMANTS	Physical Environment		
	Topography		✓
	Ecological Environment		
	Fauna		✓
	Flora		✓
	Infrastructure		
	Roads	✓	
	Land Use		
	Urban	✓	
	Rural		✓
	Cultural/Historical Environment		
	Historical Sites	✓	
	Monuments	✓	
	Cultural Sites	✓	
	Visual Resource		
	Landscapes		✓
	Visual Prominence		✓
	Sense of Place		✓
	Other		
POLICY REFERENCE	*	UTZ	NUZ
		2	
		4 (a)	19
		5 & 10 (a) 13	
		9 & 11 (b)	17
		UTZ LOCAL OBJECTIVES	NUZ LOCAL OBJECTIVES
		Urban development on the Edge interface, should be complementary, low intensity, low bulk structures that do not intrude on the visual quality of the mountain backdrop. Minimum subdivision standards to apply.	No further development to be considered.
		No urban development on slope steeper 1:4.	Public access to the mountain should be controlled.
		Scale and intensity of new developments to be managed.	
		Appropriate fire protection measures against veld fires must be taken. Invasive vegetation eradicated.	Eradicate alien vegetation.

*(this is not a comprehensive list of local objectives)



*Refer to GIS for detailed edge demarcation

1: 40 000

4.2.27 Tamboerskloof To Bo-Kaap

This area, from Tamboerskloof to Bo Kaap displays different cultural/ historical settlement patterns and therefore also contrasting urban environments and cultures.

The backdrop of Lions Head and Signal Hill and a location on elevated slopes, overlooking the city, contribute to this area's particular *genus loci*/sense of place.

Tamboerskloof is essentially a low-density residential area. However, horizontally bulky, extensive developments above Quarry Hill Rd, impact negatively on the visual quality of this urban edge, which is predominantly characterised by a finer grain urban fabric. Urban development along this edge could be considered on the military magazine site (p). The extent of such development can however only be established once an appropriate planning process has been followed.

The Bo-Kaap has a rich cultural history dating back to the 1840's. This area has a higher density and more compact residential character when compared to Tamboerskloof and is situated below Signal Hill, overlooking the city and the harbour.

Localized endemic plant communities of conservation importance, together with amphibian and invertebrate hotspots, are found all along the outer extent of current urban development. The principles of the Cape Town's City Bowl Development Area: Executive Summary (1997), identifying the "Mountain Edge" on the slopes of Signal Hill, Lion's Head and Table Mountain, as being the outer extent of urban development, are supported.

The protection of the cultural and historical heritage associated with this area as well as preserving the integrity of Table Mountain, Signal Hill and Lion's Head as visual, conservation and recreational resources is of primary importance.

Edge Demarcation

The Urban Edge follows the cadastral boundary of the outer limit of urban development, excluding major public open spaces along the edge, allowing for limited infill urban development at the Military Magazine Site. The Signal Hill Batteries and Strand Street Quarry are not regarded for potential urban development and have been excluded. The Urban Edge does not penetrate the Cape Peninsula National Park Boundary.

EDGE DEMARCATION CONSIDERATIONS

- This area, from Tamboerskloof to Bo Kaap is locationally unique, displays different cultural/ historical settlement patterns and therefor contrasting urban environments and cultures.
- This study contends that urban development has reached its limit in terms of elevation on the mountain slopes in the city centre. Planned densification is preferred to urban expansion with lower densities towards the mountain /urban edge.
- The existing, historical urban (and natural) landscape, low mountain backdrop and sense of place have influenced edge demarcation while taking into consideration such aspect as:
 -  visual prominence,
 -  cultural landscapes,
 - flora, and
 - fauna.
 -  skylines and ridges, and
 - forested areas;

The City Bowl area is of critical importance. As both a Heritage Site and a National Park, the conservation of and in fact upgrading of the mountain slopes needs to be in harmony with public access and recreation.

The Bo-Kaap Area should be declared a Conservation Area in its entirety, so as to protect its unique cultural and urban character.

		URBAN EDGE MANAGEMENT ZONES	
		INSIDE EDGE	OUTSIDE EDGE
EDGE INFORMANTS	Physical Environment		
	Topography		✓
	Ecological Environment		
	Fauna		✓
	Flora		✓
	Infrastructure		
	Roads	✓	
	Land Use		
	Urban	✓	
	Rural		✓
	Cultural/Historical Environment		
	Historical Sites	✓	
	Monuments	✓	
	Cultural Sites	✓	
	Visual Resource		
	Landscapes		✓
	Visual Prominence		✓
	Sense of Place		✓
POLICY REFERENCE	*	UTZ	NUZ
		2	
		4 (a)	19
		5 & 10 (a) 13	
		9 & 11 (b)	17
		UTZ LOCAL OBJECTIVES	
		NUZ LOCAL OBJECTIVES	
		Urban development on the Edge interface, should be complementary, low intensity, low bulk structures that do not intrude on the visual quality of the mountain backdrop. Minimum subdivision standards to apply.	
		No urban development on slope steeper 1:4.	
		Scale and intensity of new developments to be managed.	
		Appropriate fire protection measures against veld fires must be taken. Invasive vegetation eradicated.	
		No further development to be considered.	
		Public access to the mountain should be controlled.	
		Eradicate alien vegetation.	

*(this is not a comprehensive list of local objectives)



*Refer to GIS for detailed edge demarcation

1: 30 000

4.2.28Signal Hill to Bantry Bay

The development of the respective suburbs provides a range of urban environments, which range from single residential, mainly on steep land, to high-rise apartments and commercial development. Urban development has taken place up to approximately the 150m contour along the lower slopes of Signal Hill. The Urban Edge is well-defined by the outer extent of township development, and also by the row of blue gum trees bordering urban development, offering a transition to the rural areas beyond. In some instances, especially on the west-facing slopes above Bantry Bay, development has taken place on slopes in excess of 1:2. This has resulted in highly visible, and often intrusive and insensitive developments.

Sea Point reflects a high rise, high-density character whereas Fresnaye and Bantry Bay have a distinct lower density, single residential character. This aspect is also reflected in the current zoning scheme.

The Green Point area is characterised by an historical settlement against the backdrop of Signal Hill. Due to it’s cultural significance certain areas have been declared as Conservation Areas.

Lion’s Head is of particular conservation interest due to the occurrence of sensitive plant locations on its western slopes. Further along the urban interface, localised endemic plant communities are found together with amphibian and invertebrate colonies.

This segment of the urban edge has virtually unlimited mountain access which can lead to the degradation of the western slopes of Signal Hill. It is important that limited structured public access be provided.

Edge Demarcation

The Urban Edge follows the cadastral boundary of the outer limit of existing urban development. Further urban pressure on this UE should be resisted.

EDGE DEMARCATION CONSIDERATIONS
The Urban Edge is well defined not only in terms of the outer extent of township development, but also by the row of blue gum trees bordering urban development
This study contends that urban development has reached its limit in terms of elevation on the mountain slopes. Planned densification is preferred to urban expansion.
The existing, historical urban (and rural) landscape, low mountain backdrop and sense of place have influenced edge demarcation while at the same time taking into consideration such aspects as:  visual prominence;  cultural landscape;  steep land  flora;  fauna; and  landscapes beyond the edge.  fauna. skylines and ridges, and
Structured, but limited public access to the mountain is needed so as to avoid further degradation.

4.2.29 Clifton to Bakoven

The 150m contour as well as the steepness of the mountain slopes have, to a large extent, limited the spread of urban development up the mountain in this area. This area has a number of open space /river systems establishing functional coast to crest conservation linkages as well as extending the visual continuity of greenery through the urban fabric.

Clifton is a contained urban entity with no further development proposed beyond its existing edges.

The Bungalows at Glen Beach, although declared as Urban Conservation Area, have been included within the Urban Area. The Glen Country Club has been excluded to maintain the rural quality of the area and protect the crest to sea visual corridor objectives.

Both Camps Bay and Bantry Bay are characterised by low-density single residential urban development. Extensive tree coverage throughout the residential areas and especially on the Urban Edge allows for a sensitive transition from urban to natural landscapes.

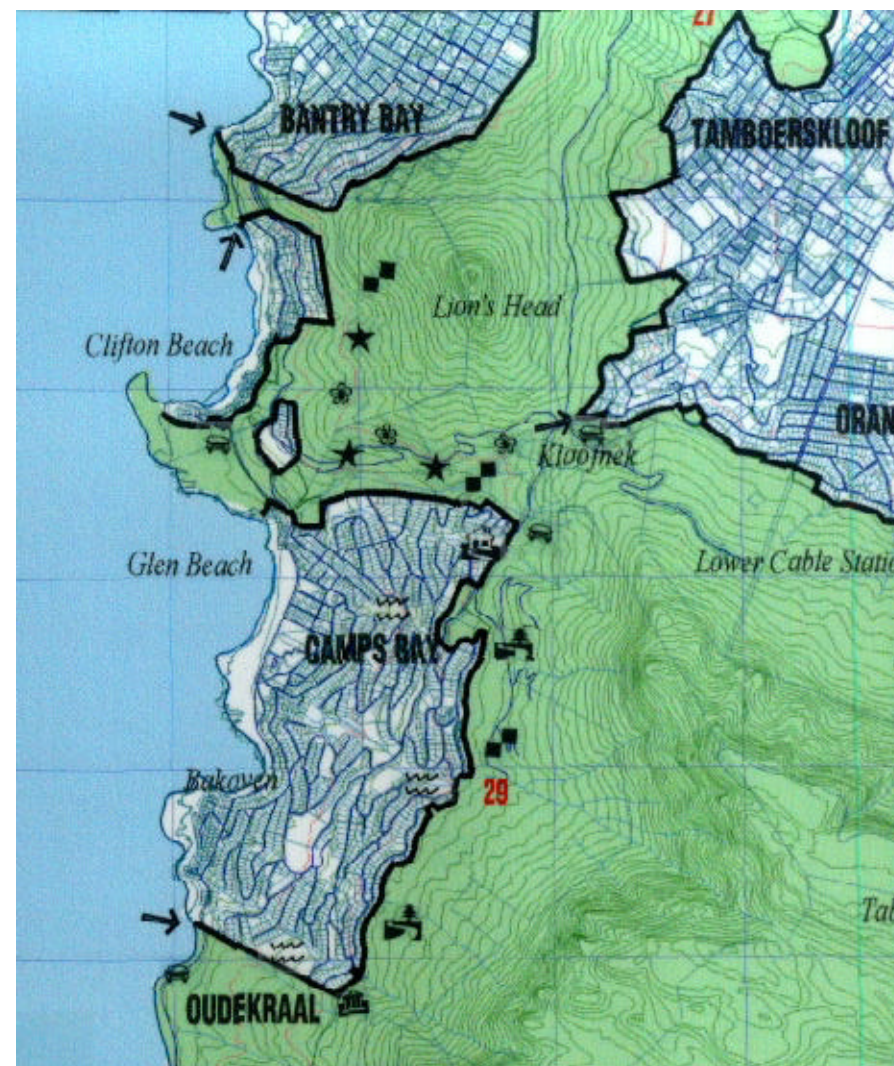
Lion’s Head and the Twelve Apostles are of particular conservation interest due to the occurrence of sensitive plant species. Further along the urban interface, localised endemic plant communities are found together with amphibian and invertebrate colonies. The area south of Bakoven is of particular cultural significance due to the occurrence of a number of (unsurveyed) kramats in this area.

Edge Demarcation

The Urban Edge follows the cadastral boundary of the outer limit of existing urban development. The Oudekraal property to the south of Bakoven and beyond has not been conclusively demonstrated as having urban development rights. Should the relevant authorities grant rights, the edge boundary can be adjusted accordingly.

EDGE DEMARCATION CONSIDERATIONS	
	This area is characterised by the existing development on steep slopes with open space /river systems through the urban area. These systems must be protected.
	The urban development, bordering the Cape Peninsula National Park, has reached its limit in terms of elevation on the mountain slopes.
	- Geological constraints and steep slope (>1:4) above Clifton and Camp’s Bay restrict further urban expansion. - Aspects such as:  visual prominence,  landscapes, and  scenic routes,  historical monuments are also considered important in the demarcation of the edge line.  flora and, fauna

		URBAN EDGE MANAGEMENT ZONES	
		INSIDE EDGE	OUTSIDE EDGE
EDGE INFORMANTS	Physical Environment		
	Topography		✓
	Geology		✓
	Ecological Environment		
	Fauna		✓
	Flora		✓
	Rivers and Wetlands		
	River Corridors	✓	✓
	Land Use		
	Urban	✓	
	Legal, Planning, Ownership		
	Existing Rights		
	Cultural/Historical Environment		
	Historical Sites	✓	✓
	Monuments		✓
	Archaeological Sites		✓
	Cultural Sites		✓
	Visual Resource		
	Landscapes		✓
	Skylines and Ridges		✓
	Visual Prominence		✓
	Scenic Routes		✓
POLICY REFERENCE	*	UTZ	NUZ
		2	
		4 (a)	19
		5 & 10 (a) 13	16
		9 & 11 (b)	17
		UTZ LOCAL OBJECTIVES	NUZ LOCAL OBJECTIVES
		Urban development on the Edge interface, should be complementary. Minimum subdivision standards to apply.	No further development to be considered.
		No urban development on slope steeper 1:4.	Public access to the mountain should be controlled.
		Scale and intensity of new developments to be managed. Incentive policy to encourage responsible urban redevelopment (in terms of height bulk and architectural materials) should be formulated and encouraged	Incentive policy to encourage tradeoffs for development rights on property for cession of remainder to National Parks should be formulated.
		Appropriate fire protection measures against veld fires must be taken. Invasive vegetation eradicated.	Eradicate alien vegetation.



Refer to GIS for detailed edge demarcation

1: 40 000

4.2.30 Llandudno

This urban development along the lower slopes of the Twelve Apostles has taken place up to Victoria Road. As with Clovelly, it represents an urban island within an extremely sensitive natural environment.

Above Victoria Road there is a small, largely redundant military base known as Apostle Battery. There have been indications that this area could be used for conservation purposes. No additions to existing buildings, nor new building developments should be allowed without an intensive EIA.

Against Klein Leeukop, the urban development has encroached onto slopes in excess of 1:2.

Localised plant and invertebrate communities of secondary conservation importance are found all along the outer extent of current urban development.

This urban development is situated on a primary scenic route and is moderately visible.

Edge Demarcation

The Urban Edge follows the cadastral boundary of the outer limit of urban development, excluding the Military base, east of Victoria Road. Unfortunately the southern UE boundary is unsightly, but follows old farm cadastral boundaries.

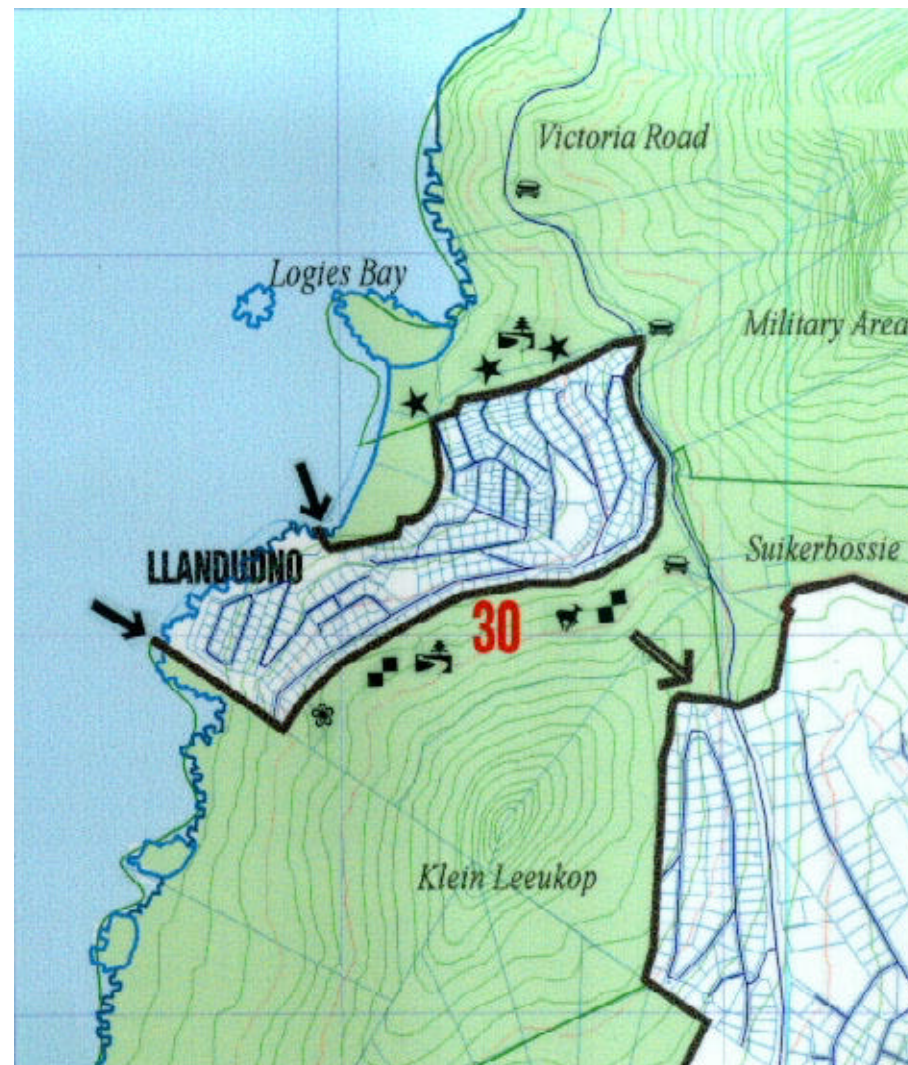
EDGE DEMARCATION CONSIDERATIONS

- Key Criteria to be considered in the edge are:
 -  scenic route
 -  excellent landscapes and mountain prominence
 - . geological constraints.
- Llandudno's established urban development is confirmed as the edge with no expansion recommended.
- Intrusions onto:
 - flora,
 -  fauna,
 -  steep land (topography), and
 -  natural rural areas,

will have detrimental implications on the quality of the environment.

		URBAN EDGE MANAGEMENT ZONES	
		INSIDE EDGE	OUTSIDE EDGE
EDGE INFORMANTS	Physical Environment		
	Topography		✓
	Ecological Environment		
	Fauna		✓
	Flora		✓
	Infrastructure		
	Roads	✓	
	Land Use		
	Urban	✓	
	Demographics		
	Population Growth		✓
	Living Environment		✓
	Visual Resource		
	Landscapes		✓
	Skylines and Ridges		✓
	Visual Prominence		✓
	Scenic Routes		✓
POLICY REFERENCE	* UTZ	NUZ	UTZ LOCAL OBJECTIVES
	2		Urban development on the Edge interface, should be complementary. Minimum subdivision standards to apply.
	4 (a)	19	No urban development on slope steeper 1:4.
	5 & 10 (a) 13	16	Scale and intensity of new developments to be managed. Incentive policy to encourage responsible urban redevelopment (in terms of height bulk and architectural materials) should be formulated and encouraged
	6 (b)		No expansion of the existing military facilities should be allowed.
	9 & 11 (b)	17	Fire management should be of paramount importance with erven abutting onto Twelve Apostles / National Park Invasive vegetation eradicated.
			NUZ LOCAL OBJECTIVES
			No further development to be considered.
			Public access to the mountain should be controlled.
			Incentive policy to encourage tradeoffs for development rights on property for cession of remainder to National Parks should be formulated.
			Eradicate alien vegetation.

*(this is not a comprehensive list of local objectives)



*Refer to GIS for detailed edge demarcation

1: 20 000

4.2.31 Hout Bay Harbour

The Hout Bay Harbour with associated industries is the focus of this area.

Extension 15, a residential extension directly above the harbour on the southern slopes of the Karbonkelberg, is only visible from Chapman’s Peak Drive. It is partially hidden from the rest of Hout Bay by the concave ridge above the Harbour cliff face. The areas to the south of Karbonkel Road, including the informal settlements on the northern slopes of Hangberg are in urgent need of upgrading.

These developments on the slopes of the Karbonkelberg and Hangberg reach the 80-100m contour level, allowing for further development opportunity due to moderate slope (less than 1:4). Development options for Erf 3477 (u) are currently being pursued. The extent of the Urban Edge will be determined by the outcome of appropriate development proposals for this property.

The Harbour Cliff Face separates the Hout Bay Harbour Area effectively from the rest of Hout Bay. The changing topography allows for different perspectives and therefore-different assessments. The Hout Bay harbour is viewed as a potential tourist destination that needs appropriate development.

Plant, amphibian and invertebrate communities of primary conservation importance are found on the Karbonkelberg.

Edge Demarcation

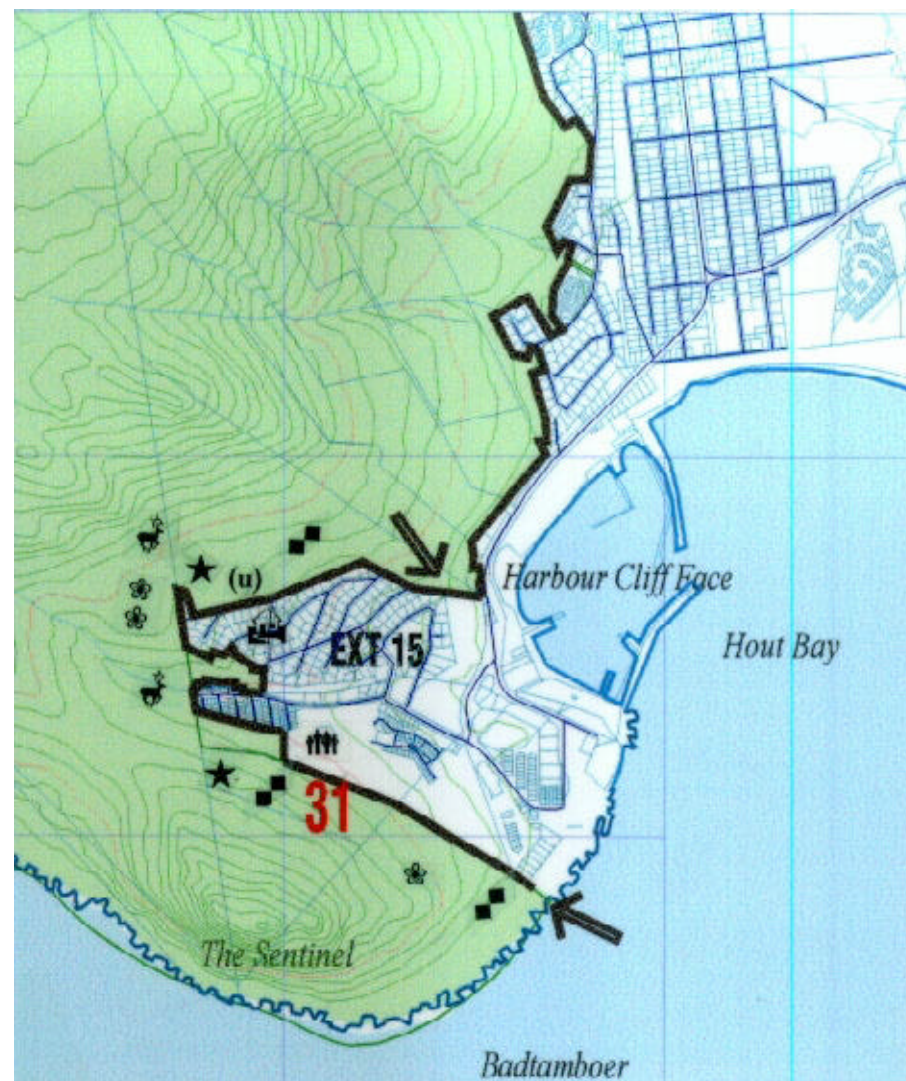
The Urban Edge follows the existing cadastral boundary of Extension 15, cutting back to exclude the concave Harbour cliff face ridge.

Erven 4868-4672, are deemed unsuitable for urban development and fall outside the Urban Edge.

EDGE DEMARCATION CONSIDERATIONS
This residential precinct has historic connotations related to the harbour operations, i.e. fisherman’s housing.
- Some infill is possible but: ■ topography (1:4 and steeper); - flora, ⊙ fauna,  visual prominence, and • geological constraints,  cultural/urban landscapes; are critical factors in containing urban expansion.
- Development options are being considered for erven 3477 and 1510, however isolated building groups (islands) should be avoided on these visually exposed slopes. - Provision of infrastructure, i.e. roads must be sensitively designed.

		URBAN EDGE MANAGEMENT ZONES	
		INSIDE EDGE	OUTSIDE EDGE
EDGE INFORMANTS	Physical Environment		
	Topography Geology		✓
	Ecological Environment		
	Fauna & Flora		✓
	Rivers and Wetlands		
	River Corridors		✓
	Land Use		
	Rural		✓
	Demographics		
	Population Growth	✓	
	Legal, Planning, Ownership		
	Existing Rights	✓	
	Structure Plans		
	Cultural/Historical Environment		
	Historical Sites		✓
	Visual Resource		
	Landscapes		✓
	Skylines and Ridges		✓
	Visual Prominence		✓
	Scenic Routes		✓
	Sense of Place		✓
POLICY REFERENCE	*	UTZ	UTZ LOCAL OBJECTIVES
		2	New development to be consistent with existing densities.
		4 (a) & (b)	19 No urban development on slope steeper 1:4. Limit development in unstable geological areas.
		5 & 10 (a) 13	16 Architecture & landscaping manuals of primary importance.
		9 & 11 (b)	17 Fire management should be of paramount importance with erven abutting onto Twelve Apostles / National Park Invasive vegetation eradicated.

*(this is not a comprehensive list of local objectives)



Refer to GIS for detailed edge demarcation

1: 20 000

4.2.32 Hout Bay West

Although the quality of the Hout Bay environment is generally good, a suburban character is gradually replacing the rustic character.

Urban development along the upper reaches of Klein Leeukop, up to the 200m contour level, is highly visible and intrusive.

The dune field to the west of the urban area historically used to be a corridor of sand transported from Hout Bay beach to replenish Sandy Bay. Development in Hout Bay has stopped this movement of sand and resulted in slow vegetation stabilisation. The dune field is geotechnically not suitable for development due to variable unstable founding conditions exacerbated by over excavation.

Limited potential for urban development exists on the lower reaches of Klein Leeukop. The eastern most portion of Leeukoppie Estate could be considered for urban development, this being a logical infill area within the existing urban development pattern. The development of this erf is restricted to below the 120m contour level and will therefore not impact on the visual integrity of Klein Leeukop.

Edge Demarcation

The Urban Edge follows from the Harbour cliff face, the cadastral boundary of the existing urban development and passes below the dune system, thus allowing for no further development except for the erf identified in Klein Leeukoppie Estate.

EDGE DEMARCATION CONSIDERATIONS

- This is one of the most sensitive segments in the region for co-habitation between urban and rural.
- Historic growth of Hout Bay is linear-shaped as a result of the Disa River and its valley.
- The urban area however, is now contained by:
 - steep slopes,
 - ✓ delicate dune systems of Karbonkelberg,
 - flora,
 - σ fauna, and
 -  visual impact, especially below Klein Leeukop.
- Urban protrusions will violate the natural environment.
- Klein Leeukop development is an example of such intrusion on elevated slopes and is arbitrarily defined due to historic planning approvals.

URBAN EDGE MANAGEMENT ZONES			
		INSIDE EDGE	OUTSIDE EDGE
	Physical Environment		
	Topography & Geology		✓
	Ecological Environment		
	Fauna & Flora		✓
	Rivers and Wetlands		
	River Corridors		✓
	Land Use		
	Rural		✓
	Demographics		
	Population Growth		✓
	Legal, Planning, Ownership		
	Existing Rights / Structure Plans		✓
	Cultural/Historical Environment		
	Historical Sites		✓
	Archaeological Sites		✓
	Cultural Sites		✓
	Visual Resource		✓
	Landscapes		✓
	Skylines and Ridges		✓
	Visual Prominence		✓
	Scenic Routes		✓
	Sense of Place		✓
POLICY REFERENCE	UTZ	NUZ	UTZ LOCAL OBJECTIVES
	2		New development to be consistent with existing densities.
	4 (a) & (b)	19	No urban development on slope steeper 1:4. Limit development in unstable geological areas such as dunefield.
	5 & 10 (a) 13	16	Architecture & landscaping manuals of primary importance.
	9 & 11 (b)	17	Fire management should be of paramount importance with erven abutting onto Twelve Apostles / National Park. Invasive vegetation eradicated.
			NUZ LOCAL OBJECTIVES
			No further development to be considered.
			Public access to the mountain should be controlled.
			Incentive policy to encourage tradeoffs & development on less sensitive lands.
			Eradicate alien vegetation & restore degraded land.

*(this is not a comprehensive list of local objectives)



*Refer to GIS for detailed edge demarcation

1: 40 000

4.2.33 Hout Bay North

Despite development pressure experienced in Hout Bay Valley, this area still reflects a rural ambience and character. However, the rustic character is slowly being eroded due to the subdivision of rural/agricultural land as well as densification.

The integrity of the Twelve Apostles is not severely impacted upon due to development having in the past been restricted to the 152m contour level. Plant, amphibian and invertebrate communities that are of primary conservation importance are found on the southern slopes.

Suikerbossie (q), which has been in existence for many years, is placed outside of the Urban Edge because of its gateway siting on Victoria Road. Any further development must be subject to careful investigation.

A management plan for the Orangethicket Forestry site to the north east of Hout Bay was prepared by Cape Town City Council. This area could accommodate land uses directed at conservation, as well as gateway opportunities, and could be promoted as an environmental recreation and education area. This area has been placed outside of the Urban Edge. No expansion should be permitted.

The Orange Kloof Lower Wetland (r) extending into the UTZ, needs to be protected in terms of the appropriate policies.

Edge Demarcation

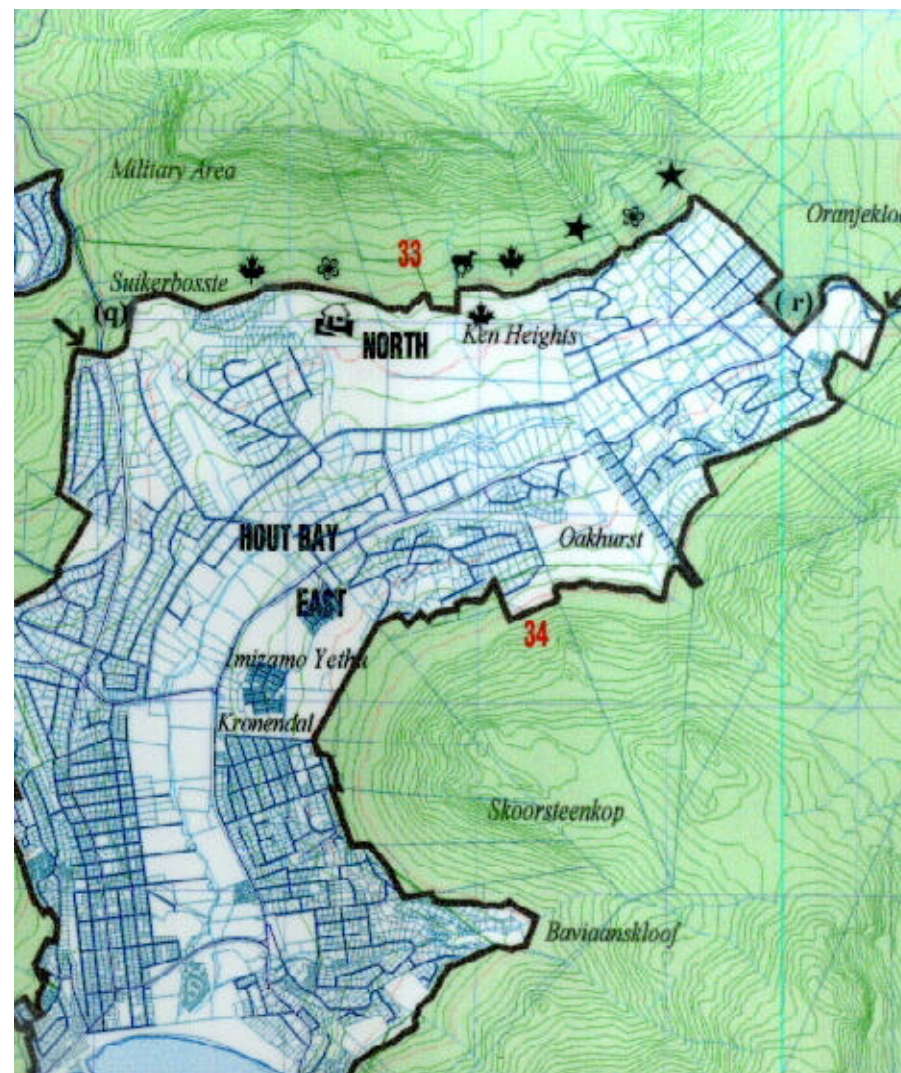
The Urban Edge south of the Twelve Apostles from Victoria Road to Hout Bay Main Road, is defined by either the existing cadastral township boundaries, or the 150m contour level, whichever is the more restrictive.

EDGE DEMARCATION CONSIDERATIONS

- The approved development plans and subdivisions for Ruyterplaats and Ken Heights has established a suitable urban edge along the contour. This was done with trade-offs of land now defined in the NUZ.
- The edge has:
 -  visual prominence over Hout Bay;
 - potential geotechnical problems
 -  attractive landscapes (forested areas); and
 -  protects flora, and fauna.
- The historical Suikerbossie as well as Orange Kloof forestry station are not incorporated within the edge due to its elevation.
- The smallholdings and rural character of the north-east sector must be retained as primarily agricultural smallholdings

				URBAN EDGE MANAGEMENT ZONES	
				INSIDE EDGE	OUTSIDE EDGE
EDGE INFORMANTS	Physical Environment				
	Topography & Geology				✓
	Ecological Environment				
	Fauna & Flora				✓
	Rivers and Wetlands				
	River Corridors				✓
	Land Use				
	Rural				✓
	Demographics				
	Population Growth			✓	
	Legal, Planning, Ownership				
	Existing Rights			✓	
	Structure Plans			✓	
	Cultural/Historical Environment				
	Historical Sites			✓	✓
	Visual Resource				✓
	Landscapes				✓
	Skylines and Ridges				✓
	Visual Prominence				✓
	Scenic Routes				✓
	Sense of Place				✓
POLICY REFERENCE	* UTZ		NUZ	UTZ LOCAL OBJECTIVES	NUZ LOCAL OBJECTIVES
	2			New development to be consistent with existing densities. The inclusion of smallholdings within the UTZ does not infer future subdivision.	No further development to be considered.
	12				
	3(b)		18	Allow for open space link	
	4 (a) & (b)		19	No urban development on slope steeper 1:4.	Public access to the mountain should be controlled.
	5 & 10 (a) 13		16	Architecture & landscaping manuals of primary importance.	Incentive policy to encourage tradeoffs & development on less sensitive lands.
	9 & 11 (b)		17	Fire management should be of paramount importance with erven abutting onto Twelve Apostles / National Park Invasive vegetation eradicated.	Eradicate alien vegetation & restore degraded land.

*(this is not a comprehensive list of local objectives)



*Refer to GIS for detailed edge demarcation

1: 40 000

4.2.34Hout Bay East

Some developments have impacted dramatically on the visual quality of this area.

There are a number of cases where privately owned land extends beyond the Urban Edge. Inclusion of agricultural zoned land, i.e. along the Hout Bay River, within the Urban Edge does not imply that subdivision should be considered. The cession of the remainder of these properties should be considered for the incorporation into the Table Mountain National Park.

Plant, amphibian and invertebrate communities that are of primary conservation importance are found on the southern slopes of Skoorsteenkop.

Since Hout Bay is accessed off all the major tourist routes, residential expansion should be dealt with in such a way that visual intrusion is limited and the rural character strengthened.

Erf 7826 (portion of erf 2734) (v) is currently under consideration by the City of Cape Town for urban development, and although the urban edge line indicates its preferred position, approval of this erf (or part thereof) by the relevant authorities would require an amendment to the urban edge line in this area.

Edge Demarcation

The Urban Edge from Hout Bay Main Road, essentially follows the cadastral boundary of existing township development, allowing for limited urban infill in those areas with a slope of less than 1:4 below the 150m contour level, up to Baviaanskloof.

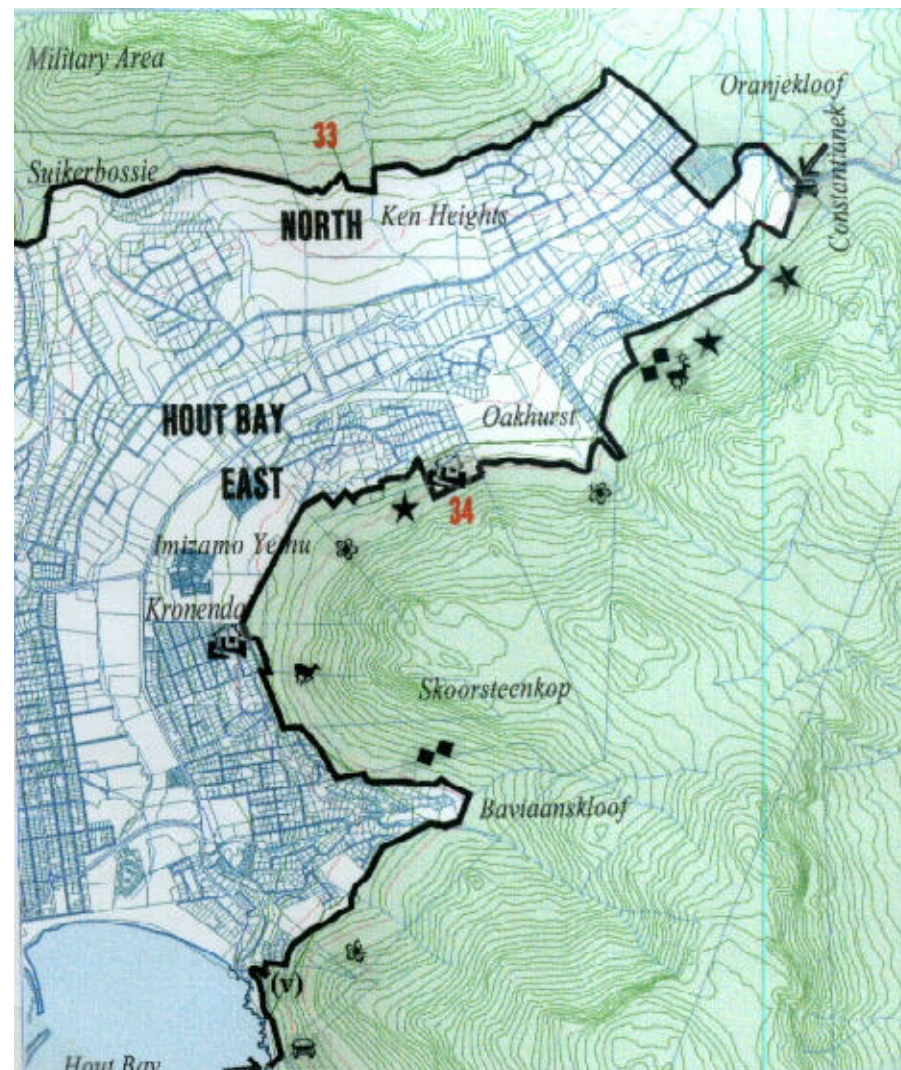
From Baviaanskloof the edge includes the existing approved subdivisions, as well as vacant land below the 90m contour, but with slopes less than 1:4.

EDGE DEMARCATION CONSIDERATIONS

- There have been considerable development pressures on this segment over the years and the edge has reached its equilibrium.
- This is mainly due to:
 - topography – where steep land exits beyond the edge,
 - geology with rocky and broken ground,
 - visual prominence of these slopes,
 - flora, and
 - ⊗ fauna.
- It is critical in this segment that where development rights might exist beyond the edge, these rights be negotiated with the local authority to transfer rights to areas within the edge; refer to policy 16.

			URBAN EDGE MANAGEMENT ZONES	
			INSIDE EDGE	OUTSIDE EDGE
EDGE INFORMANTS	Physical Environment			
	Topography & Geology			✓
	Ecological Environment			
	Fauna & Flora			✓
	Rivers and Wetlands			
	River Corridors			✓
	Land Use			
	Rural			✓
	Legal, Planning, Ownership			
	Existing Rights		✓	
	Structure Plans		✓	
	Cultural/Historical Environment			
	Historical & Cultural Sites		✓	✓
	Monuments			✓
	Visual Resource			✓
	Landscapes			✓
	Skylines and Ridges			✓
	Visual Prominence			✓
	Scenic Routes			✓
	Sense of Place			✓
	*	UTZ	NUZ	UTZ LOCAL OBJECTIVES
POLICY REFERENCE	2 12		New development to be consistent with existing densities. The inclusion of smallholdings within the UTZ does not infer future subdivision.	No further development to be considered.
	3(b)	18	Allow for open space link	
	4 (a) & (b)	19	No urban development on slope steeper 1:4.	Public access to the mountain should be controlled.
	5 & 10 (a) 13	16	Architecture & landscaping manuals of primary importance.	Incentive policy to encourage tradeoffs & development on less sensitive lands.
	9 & 11 (b)	17	Fire management should be of paramount importance with erven abutting onto Twelve Apostles / National Park Invasive vegetation eradicated.	Eradicate alien vegetation & restore degraded land.

*(this is not a comprehensive list of local objectives)



Refer to GIS for detailed edge demarcation

1: 40 000

SECTION 5: EDGE MANAGEMENT POLICIES

5.1 INTRODUCTION

Having defined the urban edge line, this section of the report initially sets out policy guidelines for managing land inside and outside the edge. Thereafter the Peninsula is divided into 5 sub-regions, and for each region management issues that need to be addressed at a local level are specified.

5.2 POLICY RECOMMENDATIONS

The Urban Edge defined herein is considered a legally defensible limit to urban development so as to protect the integrity of the Peninsula's natural ecosystems, scenic beauty, cultural/ historical heritage and agricultural resources. It will be a cadastrally defined line described by land survey pegs and descriptions.



FISH HOEK

Urban Edge

POLICY 1:

No urban development as described, is to be permitted to extend beyond the urban edge.

5.2.1 Urban Transition Zone

The UTZ is an area inside the Urban Edge, within which all development is to be controlled by a set of policies. This is to establish an area of transition in order to regulate urban development adjoining the edge and, in so doing, protect it. These policies inside the urban edge are in effect development controls and compliance is essential to maintain the statutory provisions of the urban edge. They are inter-related with specific objectives, have been intensively workshopped publically and need to be applied and interpreted collectively. The following policies and their motivations apply to the UTZ as described.

◆ DENSIFICATION:

Development of the urban areas must be seen within the context of the MSDF, which advocates higher urban densities in selected areas and the containment of urban sprawl.

A policy of densification is promoted within the urban context and is supported by the provision of more efficient and cost-effective public transport and service delivery.

With large portions of land reserved as a Protected Natural Environment or National Park, population growth will need to be accommodated within the existing metropolitan urban areas.

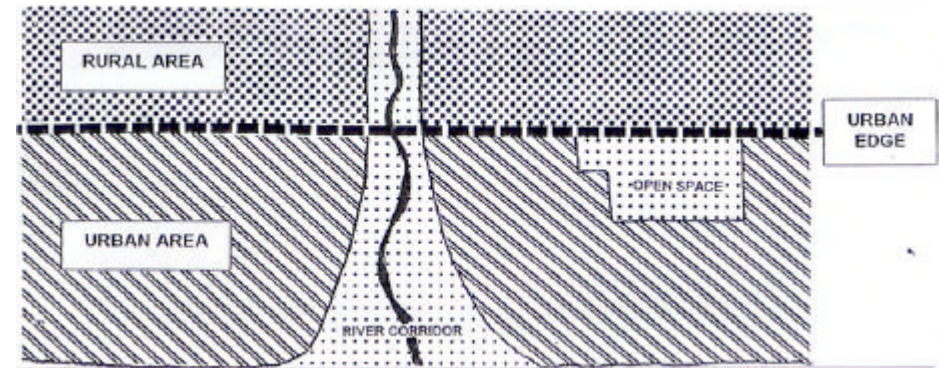
Higher densities can be achieved in a number of ways:

- ◆ use of multi-storey developments,
- ◆ subdivision and infill of low density areas,
- ◆ smaller erven,
- ◆ a more intensive, multi-functional use of land.

Whilst generally higher densities can and should be encouraged in selected areas as required by the MSDF, generally lower densities are preferred in the UTZ. This is to establish a more meaningful transition between urban and rural areas. Higher densities than those that exist or are planned in the UTZ are not supported.



NOORDHOEK



OPEN SPACE LINKAGES

Urban Transition Zone

POLICY 2:

The average planned gross density of urban development that exists or is committed in the UTZ must not be increased. Lower gross densities are recommended where enhanced development rights are granted. Higher densities can be considered subject to approved studies to the satisfaction of the Local Authority.

♦ **OPEN SPACE LINKAGES:**

Many river courses and open space linkages penetrate the UTZ. The urban edge has not followed the riparian edges of these systems because these areas will be included in open space and MOSS. The urban edge has therefore been drawn through these open systems to link urban fringes. The river courses and open spaces so included within the urban areas and UTZ, are thus not intended for urban development and must be preserved as open space and watercourses e.g. Disa River in Hout Bay.

Urban Transition Zone

POLICY 3(a):

Natural watercourses and open spaces within the UTZ are not intended for urban development and must be preserved as such for their intended use.

Urban Transition Zone

POLICY 3(b):

Within the UTZ natural / open space corridors enabling crest to river / sea linkages must be preserved & promoted to link with MOSS.

♦ **DEVELOPMENT ON STEEP SLOPES**

It is generally accepted that slopes no steeper than 1:4 can accommodate development without major cut-and-fill work being required. This policy has been practised in the area for many years with successful results. It is proposed that this policy be continued.



LLANDUDNO

Urban Transition Zone

POLICY 4(a):

No urban development to take place on slopes steeper than 1:4.

A specialist study to establish and assess the geotechnical conditions and feasibility of development on the urban edge, was conducted. This study by Mr M van Wierengin, has highlighted certain areas where development should not be allowed on the urban edge due to the unstable geotechnical conditions.

Urban Transition Zone

POLICY 4(b):

No urban development to be permitted where geological conditions have been proved unstable.

♦ **LANDSCAPING AND ARCHITECTURE:**

All urban development within the Urban Transition Zone areas should adhere to appropriate landscaping and sympathetic architectural policies.

The beautification objectives of the UTZ apply to public land, (streets, open spaces etc), as well as to private land. New developments in the UTZ should conform to the urban density, texture and character of the local area. Urban contrast in scale & massing should be avoided. On steep slopes in particular, controls are required by local authorities to combat unsightly and prominent structures, houses on stilts, contrasting styles and materials etc. Local Authorities should investigate the formulation of a general landscaping policy.



Appropriate architecture-NOORDHOEK

Urban Transition Zone

POLICY 5

Special attention must be given in the processing of architectural and landscaping proposals in the UTZ to create an attractive zone as a transition between urban and rural areas.

◆ PROVISION OF SERVICES AND INFRASTRUCTURE:

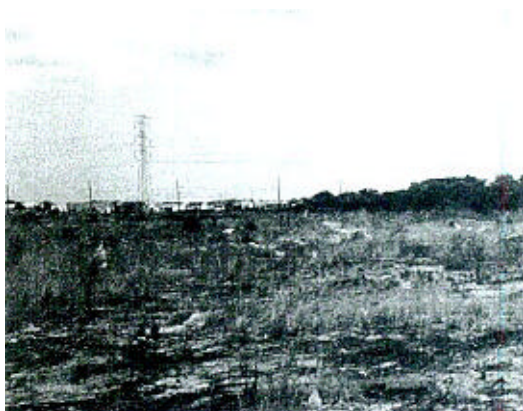
Bulk services and utilities such as electricity pylons, radio and TV masts, reservoirs, dams and cut-and-fill along roads can be visually intrusive and unattractive.

With reference to achieving lower densities in the UTZ, capacity of bulk services can be limited in an effort to limit urban development.

Urban Transition Zone

POLICY 6(a):

Regional and local bulk utility facilities must be provided without impacting negatively on the scenic quality of the Edge Zone.



Pylons – KOMMETJIE

Urban Transition Zone

POLICY 6(b):

Where serious visual intrusions of unattractive utilities exist, they should be remedied by rehabilitation or redevelopment.

◆ STORMWATER MANAGEMENT:

It is imperative that the wetland areas of the Peninsula are protected, and in some cases, restored to ensure not only stormwater catchment, but also habitats for wildlife and flora. In many cases the areas surrounding these wetlands are also in need of protection. The runoff must be of a high quality if these areas are to be functional and worthy of conservation.



Sensitive area - NOORDHOEK WETLANDS

Urban Transition Zone

POLICY 7:

Identified wetland areas, river floodplains and their tributaries within the UTZ must be clearly defined and statutorily protected. Furthermore they must be continually monitored to ensure protection of the system.

◆ PUBLIC LAND:

Large tracts of under-utilised public land exist in close proximity to urban areas for which appropriate uses can be found. Neglect of these areas could seriously undermine the objectives strived for within the UTZ.

Appropriate urban development, or conservation if necessary, of these areas should be encouraged

Urban Transition Zone

POLICY 8:

Strategically located underutilised public land within the urban edge should be investigated and the appropriate use determined. .

♦ FIRE PROTECTION:

Veld fires play an integral role in the life cycle of indigenous vegetation and will occur from time to time no matter what preventative measures are taken. The UTZ is thus susceptible to fire.

Fire protection is the joint responsibility of owners on both sides of the urban edge and appropriate fire protection measures should be installed to safeguard properties. In approving new building plans, the authorities should be satisfied that the plans they have approved include all necessary basic fire protection precautions. Authorities should also compile detailed fire protection measures to control the spread of veld fires.

Urban Transition Zone

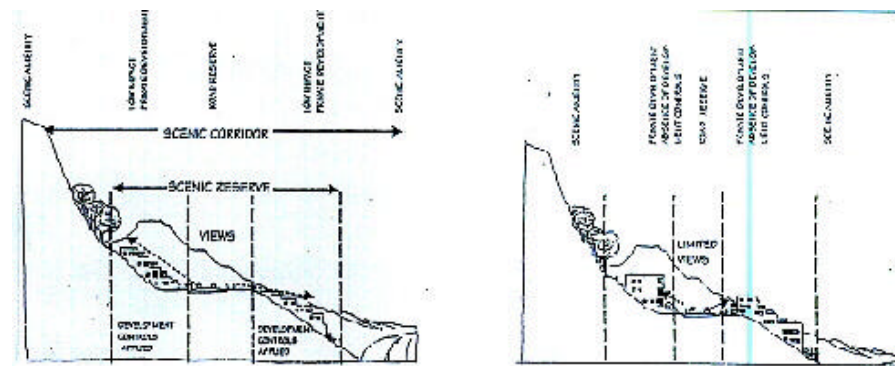
POLICY 9:

Appropriate fire protection measures against veld fires must be compiled and applied to all new structures in the UTZ. Owners of existing structures should also be encouraged to install fire protection measures.

♦ SCENIC QUALITY:

It is of critical importance to ensure the aesthetic attractiveness of this zone as it is in close proximity to the natural environment. Special attention should therefore be given to the design of residential buildings, as well as to the development and landscaping of public land, streets and walling. Of particular importance is the treatment of the urban edge itself, which becomes a contrasting element in the landscape. It can be a hard or soft edge, with higher or lower densities, on steep or flatter slopes, and on rugged or undulating slopes.

The Urban Edge must in all cases be developed to be visually pleasing. Long lengths of precast concrete walling for example, are to be avoided in preference to hedgerows and screen planting.



PRESERVATION OF SCENIC QUALITY (Revel Fox -1997)

Urban Transition Zone

POLICY 10(a):

Developments, which would have an adverse effect on the scenic quality of this zone, should not be approved.

Urban Transition Zone

POLICY 10(b)

Visually obtrusive boundary walls should not be permitted in this zone.

Refer to: UTZ Policy 5 [Landscaping & Architecture]

♦ NATURAL SYSTEMS AND HISTORICAL AREAS:

These refer to nature's ecosystems such as rivers, wetlands and endemic vegetation hotspots, which may intrude within the urban edge and into the Urban Transition Zone. Similarly many historic sites, farmsteads, kramats etc. may, for various reasons, lie within the Urban Transition Zone. These elements warrant special attention, as urban pressures are likely to increase around them.

Areas where invasive vegetation infestations have taken place must not be permitted to be used as motivation to permit development, but should instead be rehabilitated. Given that invasive plants constitute a principle threat to fynbos, it is suggested that the planting of invasive vegetation within the UTZ should be discouraged, whilst the planting of locally occurring indigenous plant species in gardens within the UTZ should be encouraged.



THE CAPE PENINSULA

Urban Transition Zone

POLICY 11(a):

Developers should be encouraged to integrate and rehabilitate natural areas/elements of historical and cultural significance.

Urban Transition Zone

POLICY 11(b):

All invasive vegetation that is threatening indigenous plant communities should be eradicated.

Refer to: UTZ Policy 3(a) & (b) [Open Space Linkages]

♦ SMALLHOLDINGS:

Within the Urban Edge, smallholdings have a rural character, but are often associated with an urban (residential) use. This aspect has enjoyed intensive discussion at public workshops. It has generally been publicly accepted that these smallholdings may be included within the Urban Edge since they play an important role in protecting the integrity of the edge.

As a result of the low-density character of smallholdings in general, the impact of urban development on the Urban Edge is restricted. Smallholdings also act as a logical transition from Urban to Rural Areas, being desirable both in terms of land use and visual quality.

It may not be assumed that smallholdings included within the UTZ are identified as urban developments and can therefore be subdivided. The smallholdings found in Constantia, Noordhoek and Hout Bay Valley play a significant role in contributing towards the specific rural character of these areas.



NOORDHOEK

Urban Transition Zone

POLICY 12:

So as to preserve the unique rural ambience created by these smallholdings, their inclusion within the Urban Edge does not infer future subdivision.

◆ **INCENTIVES:**

Rates incentives; transfer of development rights, land banking and compensation (not necessarily financial) can all be explored and negotiated with owners/developers within the UTZ. This applies in particular to land parcels which straddle the urban edge and where perceived development rights exist beyond the edge. The objectives will be to: encourage appropriate distribution of urban densities; to arrange the transfer of land for conservation purposes; and also, to transfer urban development rights from outside the edge to within.

Urban Transition Zone

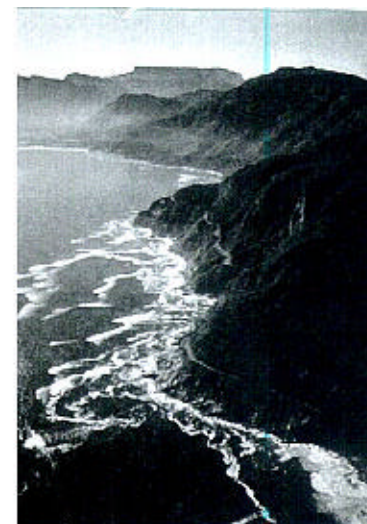
POLICY 13:

So as to achieve a desirable land use density and distribution and to reserve land for conservation, land development incentives should be negotiated with owners/developers.

◆ **SCENIC ROUTES:**

In a number of instances, especially at Red Hill Road and Noordhoek (Chapman's Peak Drive), the Urban Edge abuts scenic drives. Most of the tourist attractions and recreational activities in the Cape Peninsula are linked to the scenic character of this region. Prominent land features (such as Cape Point, Chapman's Peak and the breathtaking views from major routes) form the basis of these tourist attractions.

The Draft Scenic Drive Network Report (September 1997) by Revel Fox and Partners for CMC has relevance. The objectives, criteria, classifications and recommendations are supported as they impact upon the Urban Transition Zone and visa versa.



Simon's Town - SCENIC ROUTES - Chapman's Peak

Urban Transition Zone

POLICY 14:

Special attention must be given to scenic routes located within the UTZ for the following reasons: to avoid visual intrusion; to maximise views from the road; to achieve appropriate set-backs and access; and to ensure proper maintenance of the right of way.

5.2.2 Non-Urban Zone (NUZ)

The NUZ is an area beyond the Urban Edge within which policies are prescribed for non-urban use. This is to establish controls for an area of transition so as to manage and protect rural areas beyond the edge. Compliance of these policies is essential to maintain the statutory provisions of the urban edge.

The following policies and their motivations apply to the Rural and Wilderness Area (NUZ) as described.

Whilst the Urban Transition Zone (UTZ) prescribes policies for the control of urban development, the Non-Urban Zone (NUZ) contains policies (below) to prohibit urban uses as defined, and manage and enhance the rural areas. These policies are inter-related with specific objectives, have been intensively workshopped publically and need to be applied and interpreted collectively.

Non-Urban Zone

POLICY 15:

All areas outside the Urban Edge should be considered as belonging to the National Park, or to Protected Natural Environments, or considered for declaration as Limited Development Areas in terms of the Environment Conservation Act, 1989 (No. 73 of 1989).

◆ PRIVATE, CONSERVATION-WORTHY LAND:

In the Peninsula, it is fortunate that large tracts of environmentally and visually sensitive land are already part of nature reserves. However, some of the most sensitive areas (i.e. Elsie's Peak, Oude Kraal, and Noordhoek Wetlands) are in private ownership.

Non-Urban Zone

POLICY 16:

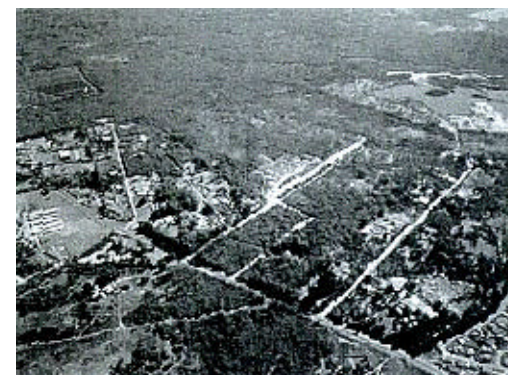
Where defensible, negotiations should be undertaken by conservation authorities and local authorities to secure privately owned, conservation-worthy land situated outside the urban edge, into public ownership through such mechanisms as land exchanges, trade offs, etc.

The possibility for land exchange deals, land banking, purchasing development rights and transfer of rights is integral to the proposal.

Refer to: UTZ Policy 13 [Incentives]

◆ REHABILITATION:

Areas of land in the NUZ that are infested with invasive vegetation, or which are physically disturbed or unsightly should be rehabilitated to a satisfactory rural condition and suitably maintained. Where deemed appropriate, the use of firebreaks in management zones should be considered, and vegetation with low fuel loads should be planted close to houses in this zone.



Infestation of Invasive Vegetation – NOORDHOEK WETLANDS

Non-Urban Zone

POLICY 17:

Disturbed natural habitats must be rehabilitated and may not be accepted as motivation to permit urban development. Requirements pertaining to the eradication of invasive vegetation and the rehabilitation of disturbed areas must be imposed on the owner.

◆ **DEVELOPMENT:**

Limited forms of development are permitted, where desirable, beyond the urban edge and this is specified in the South Peninsula Regional Structure Plan. Types of development are restricted depending on their locality within the following designated wilderness areas, national parks, CPPNE areas and rural areas. Such development is generally tourist related and is limited in scale. The same philosophy applies to the NUZ.

Development proposals in the Non-Urban Zone (including roads and infrastructure) are likely to be subject to Environmental Impact Assessment in terms of Regulations 21 and 22 (Act 73 of 1989).

All areas capable of sustaining natural vegetation must be identified and rehabilitated to their natural state.



OUDEKRAAL

Non-Urban Zone

POLICY 18(a):

Any form of development proposed within the NUZ, including infrastructural proposals, will be required to follow the IEM procedures.

Non-Urban Zone

POLICY 18(b):

No indigenous flora or fauna, watercourses, wetlands, historical/archaeological/cultural sites or other unique or conservation-worthy environments may be destroyed or damaged, and they should be managed appropriately for their conservation or protection.

◆ **PUBLIC ACCESS:**

Public access to sensitive natural areas often gives rise to environmental degradation. The greater the degree of uncontrolled access, the worse the potential for degradation is. This often occurs whether or not adequate facilities are provided for the public. It is important that access to these areas be limited and balanced with the carrying capacity of the area.

Non-Urban Zone

POLICY 19:

Opportunity for access to natural areas should remain and access routes should be managed to be in harmony with their carrying capacity. The provision of adequate public facilities are acceptable and must be appropriately located, designed and maintained.

Gateways are places of access to protected natural areas and serve to channel visitors as part of a broader conservation strategy. They are particularly relevant to open access parks such as the Cape Peninsula National Park. Gateways are best established at accessible points on main road systems and routes that are close to public transport.

Channelling directs the impacts of visitors to areas where they can be managed most effectively. It also limits the bulk of impacts to a few areas that are designed to handle these impacts. This is the so-called “90% of the impacts on 2% of the area” concept.

The specific nature, scale and location of each gateway will depend on a range of variables and will be subject to the determination of broader guidelines, detailed planning and public participation.

Whilst it is the objective to locate all gateway related facilities within the UTZ, this may not be possible in all instances due to localised conditions such as land availability and the location of existing facilities. However, such facilities and amenities must only serve visitors to the nature areas and should not provide for urban related needs.

Appropriate gateway amenities could include information centres, environmental education centres, ablution facilities, fire lookouts, kiosks, and, only where appropriate, overnight accommodation. All such amenities will be subject to IEM procedures.

It is not possible or appropriate to identify the gateways in this report as this is a related but separate planning exercise being co-ordinated by the Cape Peninsula National Park.

◆ AGRICULTURE:

Land within recognised urban areas (eg: Constantia) that has real agricultural potential in terms of soil quality, water, orientation, etc., is to remain in the form of agricultural units, not only because of the agricultural resource potential, but also because of the visual quality and rural ambience that it lends to those specific areas. All land that is gainfully farmed is excluded from the urban edge.

Infrastructure and buildings in these areas should be in keeping with their rural character.

Non-Urban Zone

POLICY 20:

The rezoning and subdivision of high-potential agricultural land for urban type land use is not permitted.

◆ FORESTRY AREAS:

The multiple use of existing indigenous and non-indigenous forestry areas should be promoted for conservation and recreation purposes, where possible. Limited activities related to the nature of all such areas, including nurseries, farmstalls and tourist markets at appropriate locations, could also be considered.

Forestation areas that occur near urban development often offer scenic, passive and recreation opportunities to residents. This should be encouraged, but stringent conditions should be imposed to avoid abuse of the areas, by including controlling public access and parking, lighting of fires, littering and by providing public toilets.

Non-Urban Zone

POLICY 21(a):

The passive and recreational opportunities offered by existing forests close to urban residents is to be encouraged but controlled to avoid degradation.

Non-Urban Zone

POLICY 21(b):

Existing plantation areas in the NUZ can be retained. Should they be eliminated, the land should revert to appropriate non-urban use. The establishment of new forests is not supported.

♦ **INTEGRATION:**

It is important in the planning of the non-urban areas that various natural regimes be integrated to form sub-regional systems as opposed to piecemeal isolated smaller tracts. This is essential in the natural propagation of vegetation such as fynbos & wilderness. At the same time, connectivity of the National Park and CPPNE (and other management areas) must be considered.

Non-Urban Zone

POLICY 22:

The integrated management of a continuous conservation area (National Park and CPPNE) from Cape Point through to Signal Hill must be actively promoted.

5.3 EDGE MANAGEMENT ZONES

5.3.1 Rocklands to Glencairn Heights

General

This entire sector is characterised by linear urban development confined between sea and steep mountain slopes - both areas being ecologically sensitive. Any urban expansion therefore (including increased urban densities) must be carefully dealt with and the non-urban zone requires strict administration to protect the integrity of the natural environment. Most of the management issues relate to steep slopes, visual prominence and vegetation hot spots.

Management Issues to be addressed:

- i) All beaches and areas of public congregation (including Boulders and Seaforth) require a Development Framework (or equivalent) to control urban development on the one hand and conservation of natural resources on the other.
- ii) Main Road in this district requires formal scenic drive status together with the controls to ensure that its future as a tourist attraction is preserved. However a detailed study is required for this district, but especially for the entire sub-region.
- iii) The Urban Edge does not always conform to the 1:4 slope or the 131 m elevation limitation between Dido Valley and Rocklands. Due to the steepness of the terrain, architectural controls are needed in visually prominent areas, particularly those in proximity to the scenic route.
- iv) The maintenance of the quarry site deserves special attention (and incentives) for specific land uses.
- v) The wetlands at Glencairn are worthy of continued monitoring and management with clear directives for preservation.
- vi) The Dido Valley planning proposals should be implemented as a matter of urgency.

- vii) The urban nodes of Scarborough and Misty Cliffs are identified as 'Conservation Villages' in terms of the South Peninsula Spatial Development Framework, and hence no further urban expansion is supported.
- viii) Adjustments to the CPNNE boundary to conform to Urban Edge need to be made.
- ix) A detailed study of amphibians and invertebrates in the Murdock Valley / Froggy Pond Area is required.

5.3.2 Kommetjie to Kalk Bay / Fish Hoek to Noordhoek

General

Considerable urban expansion and densification has occurred in this district in recent years. This urban area resembles an island surrounded by steep mountain slopes and beaches (Fish Hoek & Noordhoek). The balance between urban and rural appears to be delicately poised. Statutory control of the urban edge is essential in this area destined to become a sought after decentralised urban enclave.

Management issues to be addressed:

- i) A composite development framework plan for this entire district is warranted to ensure an orderly and sustainable urban precinct with a range of community facilities. At the same time containment of urban sprawl is essential and the sensitivities of the rural areas should be catalogued.
- ii) The Noordhoek wetlands require further investigation with particular reference to sustainability and proximity of urban development.
- iii) Preservation of the smallholdings, agricultural production, and recommendations for new (intensive) farming is required.
- iv) Preservation and enhancement of the main scenic routes through the district is required.

- v) Planning of the beaches and coastal areas to control urban development and preserve the natural environment is required.
- vi) The clear definition of Protea Ridge natural open space corridor as part of MOSS is required.
- vii) An environmental assessment is needed with emphasis on natural vegetation. Visual and slope analysis for the non-urban zone (and beyond) between Clovelly and Dassenberg, and including Pears Hill is also needed.
- viii) A similar assessment is needed between Capri and Ocean View so as to accommodate urban expansion, westwards, in terms of the Ward 21 Structure Plan.

5.3.3 Hout Bay and Llandudno

General

This precinct also has characteristics of an urban island surrounded by steep mountain slopes and two beaches. The Disa River is an additional conservation factor. Because it is included within the urban edge as part of the MOSS, it must be protected from urban encroachment and enhanced as an open space corridor. At the same time, the urban interface should be controlled with appropriate architectural and landscaping guidelines.

Management Issues to be addressed:

- i) The beaches of Hout Bay and Llandudno require planning initiatives for urban control and conservation.
- ii) The Disa River, its tributaries and wetland areas (i.e.) Orange Kloof) should have management parameters according to an approved plan. In particular, its interface with riparian urban development, flood potential, open space usage and agricultural prospects should be protected.
- iii) The rural character and agricultural potential in this valley should be protected. Landowners of smallholdings should be encouraged to retain the property as a single unit.

- iv) The western Non-Urban Zone of Hout Bay along Karbonkel berg and Klein Leeukop escarpments are environmentally sensitive due to sand erosion and delicate flora. A management plan is required for this area including recommendations for the enhancement and stabilization of the area.
- v) Architectural and landscaping controls are recommended on the exposed slopes in the eastern and western urban transition zones. This is particularly relevant on steep lands where stilts are used which expose the underside of dwellings.
- vi) Formulas need to be devised to negotiate trade-offs with landowners with development rights in the Non-Urban Zone eg. near Oakhurst.

5.3.4 Muizenberg to UCT

General

This district has two district management zones; a “hard” urban edge of suburbia abutting mainly afforested areas between UCT and Constantia Nek, and the lower density “soft” interfaces of Constantia and Tokai/Westlake. Whilst the Urban Edge is well defined statutorily (in the case of Constantia which has the growth management and development plan), if the area is not properly managed pressure will threaten the edge and consequently the natural environment and visual quality.

Management issues to be addressed:

- i) The arbitrary 80m-elevation contour above Westlake Golf course as a limit for urban development requires rationalisation and needs to be fixed by means of cadastral co-ordinates. Whilst defined as a limit to urban expansion, the line may be nominally adjusted by well motivated biophysical studies demonstrating a compatible urban edge. This precinct is visually prominent and requires further detailed assessments including the prospects of residential islands and agriculture in the Non-Urban Zone as well as architectural controls within the Urban Transition Zone.

- ii) The Tokai forest and related areas are almost totally surrounded by urban development (or committed development). The proper management of this state land is required for public access and safety from fires as well as for the protection of valuable agricultural resources where incentive policies could be explored to preserve the rural character of the area.
- iii) The area between Tokai and Witteboomen is unique as it contains large smallholdings, mostly used for viticulture, within the urban edge. Preservation of agricultural production and resistance to sub-divisional pressures and land use change is critical here. Policing of non-conforming uses, land invasion and retention of historical farmsteads and tree avenues is a high priority. Preservation of the sylvan character of the area is important.
- iv) The (various) river courses penetrating the management zones lend character. Continued protection and management of these public recreational areas and walkways, is critical.
- v) The line between Bishops Court and UCT is clearly defined but historic planning consents in the Non-Urban Zone may prove contentious and require legal resolution. Fire control measures remain a high priority.
- vi) Public access to mountain slopes via “gateways” with concomitant parking will remain an important management issue - coupled with the issue of public safety.
- vii) De Waal Drive as a quality scenic route must be continually enhanced. Maintenance of this segment of the route is currently inadequate. Graffiti appears on boundary walls, which are becoming visually intrusive in places.
- viii) The boundaries of the National Park, CPPNE and Urban Edge could be fused to create a concise urban and rural interface.

5.3.5 De Waal Drive Interchange to Oudekraal

General

This segment of the edge must be managed at the cost of urban expansion to sought-after high elevations in one of the most beautiful areas of the world. At the same time urban aesthetics are a high priority to ensure attractive townscapes against breathtaking scenic and well-preserved mountains.

Management issues to be addressed:

- i) A detailed study of this entire segment is proposed to achieve the objectives outlined with the emphasis on permissible urban aesthetics in the Urban Transition Zone. These will relate to; density, scale and building massing, height controls, urban design principles, landscaping. Special attention should be given to visual appreciation and views from prominent public vantage points, including Victoria Road as a scenic drive. Such a study should make realistic recommendations of remedial measures of urban blight and obsolescence and must address the conservation status of areas such as Bo-Kaap and Green Point.
- ii) Public access to the mountains must be controlled and public safety ensured.
- iii) Soil erosion remains a problem, especially after fires have denuded the vegetation. Planning and mitigation measures should strive to circumvent such disasters.
- iv) The historic cultural and religious sites on the mountain should have policy criteria regarding preservation, restoration and public access.

SECTION 6: OVERALL MANAGEMENT GUIDELINES

6.1 INTERNATIONAL EXPERIENCE IN MANAGING THE URBAN FRINGE

There are fundamental differences in approach between eastern and western countries in their management of the so-called urban fringe. The following quotation by Herbert sums-up the Japanese approach:

“The Japanese metropolitan edge / rural area offers an interesting experience of a dense intermixture of supposedly incompatible land uses, for example horticulture, industry, schools, housing, garages and offices, as well as a refreshing absence of social aggregation. This land use mix or mosaic reflects a distinctive cultural tradition, but is regarded as a failure by European and American planning criteria.

Instead the Japanese emphasize the positive aspects of a development philosophy based on expansion and on urban / rural mixture and regard it as a more useful and realistic proto-type for the rapidly urbanizing and industrializing countries of Asia than the segregationist restrictive notions of land use planning embodied in the West”. (Herbert, 1986).

Development planners in Taiwan and Japan (Erskine, 1992) stress the importance of drawing together government and non-governmental bodies to simultaneously address the following urban fringe management aspects:-

- ◆ Human resources development (i.e. basic education, skills training, organisational development, institution building and agricultural extension).
- ◆ Land use management (i.e. land reform, agriculture, forestry, agroforestry, settlements and conservation).
- ◆ Infrastructure and services (i.e. electrification, water resources and sanitation).
- ◆ Rural industry (i.e. agri-processing, component manufacturing).
- ◆ Adaptive research (i.e. appropriate technology and farming systems).
- ◆ Community health and population control.

A collaborative approach to managing the urban fringe is also favoured in western countries. Western countries, however, tend to strive to segregate urban and rural land uses within the urban fringe. The British, for example, emphasise the need for retention and enhancement of rural areas and their amenities (i.e. agricultural areas, forests, conservation areas), with an emphasis on organisational arrangements to achieve this, as opposed to relying on statutory controls. “Countryside management” (Joint Special Advisory Group, 1994) in one form or another has been promoted to resolve urban fringe problems. Two basic approaches are employed, namely, local authority run Country Management Schemes, and privately promoted Groundwork Trusts.

Current mechanisms employed to implement the above include:

- ◆ Countryside management projects (e.g. river valley development) often including inter-authority and inter-department efforts (e.g. conservation, water utilisation, recreation).
- ◆ Groundwork trusts including volunteer / community involvement in environmental issues and improvements (e.g. fencing and securing sensitive land) working in partnership with local authorities.
- ◆ Countryside services including management by local authorities or contractors of open space and coastal areas.
- ◆ Community forests and woodland projects involving volunteer groups in the establishment and maintenance of forestry areas, with plant material, equipment and technical advice being supplied by local authority.
- ◆ Public access projects to improve accessibility to recreational and natural areas, (e.g. volunteer and authority participation).

A serious loss of Canada’s agricultural land due to urban expansion and mega-project development (e.g. airports), has emphasised the preservation of agricultural land as an important aspect of the conservationist movement (Gayler, 1982). This has resulted in “Designated Agricultural Areas” with limited non-farm development allowed in British Columbia and Quebec provinces.

The production and economic importance of agricultural land in the United States (Nation Agricultural Lands Study, 1992) has led to farmland protection measures and legislation in several states. These include:

- ◆ the declaring of agricultural districts;
- ◆ agricultural zoning;
- ◆ right-to-farm laws;
- ◆ differential assessment and death tax benefits for farmland and ownership; and
- ◆ purchase of interests in land to avoid non-farm utilisation.

According to Bunker urban edge management *“should send very clear signals and guidelines to the community as to the patterns, locations and limits of investment and development in the fringe that are desired and in the public interest”* (1992; p:232).

In reviewing the Australian experience Bunker (1992) emphasises the importance of the rural urban fringe for primary production (i.e. horticulture, vineyards and flowers), but notes that planning policy has failed to insulate rural activities from urbanisation pressures. Current problems within the urban fringe of Australian cities include ‘right to farm’ disputes, perceived ‘development rights’, and a deterioration in socio-economic and environmental conditions.

Bunker cites Adelaide as a case study where they attempted to resolve different farming, recreational, residential and environmental interests in a management plan. Essentially the plan comprises a series of land use zones and related controls / codes of practise. Here land capability information is used to determine the suitability of land for various activities, ranging from stringent protection to primary production and residential uses. The plan also allows for the transferral of development rights to less sensitive locations.

Thus whilst the east and west reflect cultural differences with respect to the desirability of mixing urban and rural activities within the urban fringe, a common theme emerging is their emphasis on public-private partnerships for the affective management of these complex areas.

An internal CMC memo dated 29-08-2000 from the Head Housing, discusses some international research on urban edges and points out that while advantages are gained in the form of reduced traffic congestion and costs of infrastructure, urban edges are seen internationally “as measures to limit land supply and thus causing land prices

especially affordable housing, to increase”. The impact of the urban edge should be considered holistically, considering both its advantages and disadvantages.

6.2 MANAGING THE URBAN FRINGE

“In developing any kind of strategic approach to land management, each city will need to build up its capabilities in formulating as well as assessing alternative management approaches, establishing clear institutional arrangements, encouraging public participation in the planning and decision-making processes, and building broad-based support.” (Bernstein, J, 1994; p:8).

The urban edge seeks to contain and direct the outward growth of the CMA, not curtail it. It forms one of the cornerstones of the MSDF’s strategy of spatial restructuring and is part of a package of reforms aimed at:

- ◆ building a denser, safer, more equitable, accessible and livable city;
- ◆ promoting public transport and local economic development in impoverished communities by way of an integrated system of activity nodes and corridors; and
- ◆ protecting and rehabilitating environmentally significant metropolitan and local open space systems.

The sustainability of the urban edge is more dependent on what happens inside and outside the edge, than where the line is actually demarcated. If substantive progress is not made in speeding-up urban infill and densification, then it will prove impossible to stop urban growth spilling-over the designated boundaries. Similarly, if the rural periphery is allowed to deteriorate in environmental quality, then it will prove difficult to counter urbanization pressures here. In short the success of the urban edge will be dependent on how effectively the overall urban fringe is managed.

There are a range of policy instruments available to public authorities in their management of the urban fringe. The previous chapter set-out land use guidelines for the urban edge management zones. This chapter puts forward an overall package of management policies in support of the MSDF in general and the urban edge specifically.

6.3 REGULATORY INSTRUMENTS

6.3.1 Designation of Urban Fringe as Special Area

Towards the effective management of the different precincts lying inside and outside the urban edge, local authorities should undertake detailed studies of these areas. Unique precincts and habitats should be accurately defined in these studies, detailed land use policies specified, and recommendations made on the designation of Special Areas (in terms of the Town Planning Scheme) and Protected Natural Environments.

6.3.2 Statutory Declaration of the Urban Edge

Once the 3 urban edge studies have been finalised, the demarcated urban edge lines as well as the associated management policies and land use guidelines will need to be adopted as part of the statutory approval process.

6.3.3 Urban Fringe Spatial Planning

The Western Cape Draft Policy for the Establishment of Agricultural Holdings in the Urban Fringe sets out procedures and requirements in terms of which local authorities should undertake urban fringe spatial planning. The CMC have endorsed this policy, and its application needs to be incorporated into the MSDF.

6.4 LAND ACQUISITION ALTERNATIVES

Several land acquisition alternatives can be employed by municipalities to manage land use and urban growth within the urban fringe. These medium to long term policy options include the following (Bernstein, J.D., 1994):

- ◆ Land banking or advanced land acquisition can be used by municipalities to control land use or the pattern of growth, through the acquisition of strategic land. Its application can include redirecting urban growth from vulnerable areas or the acquisition of land along urban growth corridors. It is recommended that CMC investigates these policy options with a view to strengthening existing urban growth management initiatives.
- ◆ Land exchange can be utilised to acquire strategically located land required to consolidate land holdings or to acquire additional land, especially where a scarcity of public land exists.
- ◆ Expropriation as a means of land acquisition is not widely advocated due to time and cost considerations, but represents a last resort option.

- ◆ Purchase or transfer of development rights offers opportunities for municipalities to protect intrinsically valuable rural landscapes and precincts without the cost of land acquisition and administration.
- ◆ Land re-adjustment or the consolidation or pooling of municipal land to either make it available for development or to initiate development in certain areas.
- ◆ The purchase and sellback (or leaseback) of land allows municipalities to acquire land, attach use restrictions or other development requirements and then resell or lease the land to achieve land management objectives.

6.5 ECONOMIC AND FISCAL INSTRUMENTS

Additional medium to longer term policy options that should be considered are, economic and fiscal instruments employed by municipalities to protect sensitive land, encourage urban consolidation and discourage speculative dealings in land. Options include the following (Bernstein, J.D., 1994):

- ◆ Differential rates can be used to protect agricultural land, environmental and cultural resources, and also to reduce land holding and speculation.
- ◆ Punitive rates can be used to encourage the sale and development of vacant and under-utilised land, and discourage future speculative dealings in land.
- ◆ User charges and taxes, especially those levied at historic sites or from tourist accommodation facilities, can be used to fund conservation of historic precincts within the urban fringe.
- ◆ Grants can be made on low income loans by local, provincial and national government in conjunction with private enterprise and public groups for the planning and acquisition of cultural resources and sensitive environmental (e.g. wetlands), and the subsequent management thereof.

6.6 PROPERTY RIGHTS

Through clarifying land ownership and boundaries and providing security of tenure to residents of informal settlements, municipalities can promote investment in housing and infrastructure improvements. Securing property rights will facilitate access to funding, (e.g. housing subsidies), and encourage residents to participate in upgrading programmes. Securing of property rights extends to facilitating the entry into farming areas by emerging farmer groups.

6.7 COMMUNICATION AND INFORMATION

International experience highlights the importance of local authorities collaborating with communities for effective land use management of the urban fringe. A partnership approach is required for the monitoring and control of urban fringe land uses, the rehabilitation of degraded landscapes, and the conservation of historic and environmentally sensitive precincts.

In devising urban fringe land management programmes local authorities should involve both territorial communities (e.g. residents and farmers of the urban fringe) as well as interest groups who are users of the area (e.g. horse riding fraternity).

To expand the knowledge of the issues, land conditions and environmental implications of alternative development scenarios, local authorities should disseminate information on the urban fringe and undertake educational campaigns. These can be used to support land use decisions and encourage interested and affected parties to carry out voluntary conservation.

6.8 BALANCING ENVIRONMENTAL PROTECTION AND URBAN DEVELOPMENT

The success of the various measures adopted to protect priority land, and cultural and environmental resources in the urban fringe of the CMA, is dependent on the performance of the urban land market. Without attention to urban infill, densification and urban consolidation attempts at protecting the urban fringe will be undermined. Local authorities can improve the functioning of the urban land market by guiding development to environmentally appropriate sites through the provision of bulk infrastructure, and by actively promoting the densification of urban areas.

SECTION 7: CONCLUSIONS & RECOMMENDATIONS

7.1 CONCLUSIONS

The authors of the Peninsula Urban Edge Study, Technical Report September 1998 and Urban Edge Report 1999 are satisfied that due process has been followed in the formulation of these reports and, in particular, there has been thorough public participation with appropriate comments and inputs from I&AP's and the public.

The Peninsula Urban Edge Study is consistent with the MSDF principles as well as other Urban Edge studies conducted in the metropolitan area.

It is imperative that the Urban Edge Report be adopted for implementation as soon as possible.

7.2 RECOMMENDATIONS

As the Peninsula Edge Study conforms to the MSDF principles, is consistent with the South Peninsula Regional Structure Plan (1998) and has conformed to the planning process regarding public participation, it is recommended that:

- 7.2.1 the Urban Edge Report be adopted either in terms of existing legislation as a Structure Plan (in terms of the Land Use Planning Ordinance) or as a specific Development Framework in terms of the new Provincial Planning & Development Act;
- 7.2.2 the Urban Edge as defined and shown in detail on the 1:10 000 orthophotos (represented by segments 4.2.1 – 4.2.34) be approved as demarcating the limit of urban development as defined in the above report;
- 7.2.3 the policies' guidelines enunciated in the report for the Urban Transition Zone and Non-Urban Zone be adopted as a formal guide for the management and control of these zones by the relevant authorities;

7.2.4 the following studies, supporting the Urban Edge Line, should be undertaken:

- 7.2.4.1 a Coastal Urban Development Plan,
- 7.2.4.2 a detailed Assessment of Cultural Landscapes
- 7.2.4.3 a local Visual Resource Analysis,
- 7.2.4.4 a declaration of the Urban Edge Management Zones as Special Areas,
- 7.2.4.5 an EIA of the Protea Ridge area at Kommetjie to effect a natural open space link.

7.2.5 the local authorities commence the preparation of more specific local urban edge management policies as recommended; and

7.2.6 the Peninsula Urban Edge Report with the urban edge boundary as defined, be adopted by the

- Cape Town Administration;
- South Peninsula Administration;
- Cape Metropolitan Council;
- SANParks;
- National Monuments Council, and
- Dept of Nature Conservation.

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