Spatial Development Plan
Outer West

Draft for Public Comment
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Prepared by:
Development Planning - Ethekwini Municipality
in conjunction with
Urban Explorations

The preparation of this draft document has involved many individuals and organisations.
The document forms part of an ongoing consultative process and comments are welcomed from all interested and affected parties.
4.3.4 Waste Disposal .................................................................................................................................................................30
4.4 Functional District Development Guidelines..................................................................................................................................................30
  4.4.1 Western Suburbs .................................................................................................................................................................31
  4.4.2 Botha’s Hill/Inanda Dam.................................................................................................................................................32
  4.4.3 Cato Ridge ........................................................................................................................................................................33
  4.4.4 Mpumalanga .....................................................................................................................................................................34
  4.4.5 Shongweni ........................................................................................................................................................................35
  4.4.6 Zwelibomvu.........................................................................................................................................................................36
1 Introduction

1.1 Land Use Management in the Municipality
The Ethekwini Municipality is currently engaged in establishing a Land Use Management System for the entire municipal area. The system will eventually contain a number of elements (i.e. a planning and development management “toolbox”) which will include a package, or hierarchy, of plans as well as a variety of development policies, planning and development standards, regulations and by-laws. The establishment of the system includes a range of planning activities all running parallel to each other and with the common purpose of updating, refining, creating or establishing appropriate mechanisms for managing land use and development in the Municipality.

A package of plans component is being developed by the Municipality at this point in time which will initiate spatial and physical planning at scales and levels of detail appropriate to the levels of development and management intervention required in different parts of the municipality.

Figure 1 and Table 1 indicate the package of plans concept and identify the purpose and scope of each level of plan in the package whilst the following section 1.2 describes in more detail the purpose of the Spatial Development Plan (SDP) for the Outer West.

Figure 1: Package of Plans
Table 1: Emerging Package of Plans

<table>
<thead>
<tr>
<th>Plan Type</th>
<th>Scope</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long Term Development Framework</td>
<td>Strategic: Economic Social and Environmental Objectives</td>
<td>Strategic Development Direction for the City</td>
</tr>
<tr>
<td>IDP</td>
<td>Strategic: Operational Implementation</td>
<td>Strategic Implementation Direction and Imperatives for the Municipality</td>
</tr>
<tr>
<td>Spatial Development Framework</td>
<td>Strategic: Spatial Development</td>
<td>Strategic Spatial Development Intentions for the City based on the LTDF and IDP</td>
</tr>
<tr>
<td>Spatial Development Plan</td>
<td>Strategic: Spatial Development</td>
<td>Translation of Spatial Development Intentions into Land Use, Transport, Environmental, Infrastructure implications</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Broad based Land Use Directives to guide Local Area Planning and LUMS, Bulk Infrastructure and Transportation Planning Directives for the Municipality</td>
</tr>
<tr>
<td>Local Area Plan</td>
<td>Detailed Physical Plan</td>
<td>Detailed Physical Planning Directives for the City and the Municipality Refining Land Use, Transport, Environment, Infrastructure to a level that informs the preparation of a Land Use Scheme. Also includes Urban Design Directives for Public and Privately owned Land. May include implementation proposals</td>
</tr>
<tr>
<td>Precinct Plan/Special Area Plan</td>
<td>Detailed Physical Plan for special areas</td>
<td>Detailed Physical Planning Directives for the City and the Municipality for areas with special environmental, economic, heritage etc characteristics. Detailed Urban Design Directives and / or Proposals. May include implementation proposals</td>
</tr>
<tr>
<td>Land Use Scheme</td>
<td>Zoning and Development Control Regulations</td>
<td>Detailed Land Use Management Tool for the Municipality and Allocation of Potential Development Rights to private and publicly owned land.</td>
</tr>
</tbody>
</table>

1.2 Scope and Purpose of the Outer West SDP

The Spatial Development Framework (SDF) of the Ethekwini Municipality is the primary spatial strategy response to the development context, needs and vision of the municipality as described in the IDP. It is the primary level of translation of social, economic and environmental development and management policy into spatial terms and is the primary Land Use Management (LUMS) tool of the Municipality.
In order for this spatial strategy to become achievable and successful and in order for the city to be spatially restructured the SDF needs to be translated into more geographically specific physical development and land use management guidelines. This can be achieved through the preparation of a Spatial Development Plan (SDP).

The purpose of the SDP is therefore:

- To translate the SDF into a more detailed and geographically specific land use management tool to assist in the evaluation of development applications and in directing investment for physical and human development.
- To consolidate, update and review existing spatial planning and development management mechanisms in the Outer West.
- To guide the preparation of more detailed local area plans, precinct plans and land use schemes.
- To provide a more concrete spatial and land use guideline policy for use by municipal and other infrastructure service providers in planning and delivering their services.
- To provide direction and guidance to private sector and community investors with respect to the levels, locations, types and forms of investment that need to be made, and that will be supported by the Municipality.

Accordingly, a strategic assessment of the Outer West study area has been undertaken, the key roles of the area have been investigated; key opportunities and constraints for development of the area are identified, as are spatial development guidelines. All of the above have been generated in line with the vision and development principles of the Municipal IDP.

### 1.3 The Study Area

The metropolitan area can be divided into cohesive and functional areas by virtue of the geophysical features of the Municipality and the associated settlement patterns and linkages that have developed in response to these (Figure 2). The first division that is apparent is at the metropolitan level where the Umgeni River, the Umlazi River and the Kloof Ridge dissect the municipal area into four sub metro areas (i.e. central, north, west, south). These features are such that physical linkages between the sub metro areas are constrained to narrow corridors (bridges across the Umgeni and the Umlazi and a very limited access corridor through the Kloof Ridge.

![Figure 2: Functional Areas](image)
2 Spatial Development Approach

2.1 Introduction
The Ethekwini Municipality is the amalgamation of a myriad of various sized municipal authorities that transformation within local government has required. Each of these authorities had planning systems and approaches that best suited them as individual entities and which led to spatial and physical planning and development management strategies that they implemented. New and emerging planning and development requirements, as determined through various pieces of national and provincial legislation, requires that planning systems within local municipalities are regularized and are updated in a manner that will result in an improved spatial organisation of the municipal area. Specifically the systems and approaches adopted should begin to redress the adverse effects of apartheid and separate areas planning.

As such it has been necessary for the Ethekwini Municipality to develop a spatial planning approach that is consistent with legislation but also which is appropriate to management requirements of a metropolitan city. The sections which follow outline the approach currently being used and developed by the Municipality as part of the overall spatial development planning initiative and as part of the process of establishing a common spatial planning language for the city.

2.2 The Spatial Nature of Human Settlements

2.2.1 Overlapping Systems of Movement and Activity
Human beings experience and use the city through a number of scales of movement and through a wide range of day-to-day activities. At one level they access some of their needs by being able to move all over the city and at another level they access benefits from within their local neighbourhood. In order for the city to perform optimally for all its inhabitants these overlapping systems of movement and activity need to be accessible to all communities, need to operate efficiently and they need to be sustainable. The legacy of apartheid is such that some areas perform better than others due to their interconnectedness with other areas and due to their ability to support human activity adequately at the local neighbourhood level. Spatial development planning seeks to ensure that access to opportunity and amenity at the local and metro scale is equally available to all communities through the protection of natural resource systems that provide benefit for human communities and through the establishment of man made movement, activity and service systems that support human activity and endeavour.

The following sections describe the nature of the overlapping spatial systems that need to be either upgraded or established in order for the city to perform at an optimal level for all inhabitants in the future.
2.2.2 Metropolitan Levels of Interconnectedness and Exchange

a) Open Space As A Primary Structuring Element
At the metropolitan scale the open space system of the city is the primary structuring element of space in that, through its major physiographic features, it physically defines areas of land that are suitable or unsuitable for development. The open space system connects these areas of land through ecological, hydrological and geological processes and systems so that whilst they may be distant or separated from one another they are interrelated and inter dependent. The interconnectedness of the open space system is critical for its own sustainable survival but also for the sustainable delivery of environmental services and benefits it provides for humans (i.e. water supply, flood protection, building materials, medicinal products, clean air and water, carbon sequestration etc.).

b) Metropolitan Movement And Linkage As Primary Structuring Element
The developable areas of land and the communities that are established on them are connected through the primary movement and linkage elements of the city (i.e. major roads or railways). These movement systems allow communities to experience the city at its metropolitan scale and to access benefits, in the form of employment or amenity, that are located large distances from their homes or immediate and local neighbourhoods. This system needs to be upgraded and enhanced to ensure that all communities and metropolitan opportunity and amenity are adequately connected.

2.2.3 Local Levels of Interconnectedness and Exchange
Despite the need to be connected at the metropolitan level individuals and communities experience or undertake most of their day to day activities at a local level in and around their residential neighbourhood, their workplace or at some place where they access goods and services or recreation etc. (i.e. within a local neighbourhood or area which provides one or other form of benefit). These neighbourhoods are located within the developable portions of the metro as described in the previous section. Invariably there are a number of discrete and or interconnected local neighbourhoods that are linked together and which form larger areas of functionally linked human settlement (i.e. functional districts). The manner in which these districts perform as a living environment for its inhabitants will be dependent on the number and quality of services and amenities located therein. The type of services and amenities will also be dependent on the thresholds available in the functional district to support them. Thresholds will be determined by numbers of people and their income levels.
2.3 Metropolitan Spatial Planning and Development Objectives

2.3.1 Objective One: Redress Imbalances
There is a need to redress the adverse impacts of previous planning and group area policies through the elimination of imbalances in the performance and environmental quality of the Municipality’s residential, recreational and business areas.

a) Respond to Existing Outstanding Needs
This will entail the upgrading of poorly-serviced and poor quality residential environments to provide essential services and social infrastructure to be able to support communities and to promote vitality and a sense of place in these settlements.

b) Restructure Existing Settlements
Existing settlements need to be restructured to ensure that they become functional entities and high performance settlements within the EMA. This will entail the internal re-organisation of these areas to improve access and circulation and it will require the efficient and effective use of vacant and/or underdeveloped land. It will entail the integration of these areas with surrounding urban and rural areas through improved linkages with the main metropolitan movement routes and opportunities.

2.3.2 Objective Two: Build for the Future
The SDP cannot simply focus on redressing past imbalances; it also needs to build for the future by responding appropriately to future needs and anticipated growth patterns and trends.

a) Accommodate Population Growth
In order to address metropolitan population growth trends, development within the Outer West must focus on utilising the capacity of the area to accommodate growth. This will include the densification of some existing areas and the opening up of vacant and/or under utilised peripheral land.

b) Structure New Growth
The key elements of the spatial structure need to be identified and established to guide the future physical growth and development of the Outer West towards a more efficient, equitable and sustainable urban form. If the energy and investment directed at accommodating population growth and urban development is correctly harnessed, it holds the potential to redress existing spatial deficiencies as well as create a more efficient, equitable and sustainable municipality. Accordingly, growth axes or corridors and associated nodal service points need to be identified and supported.
c) Conserve the Natural Resource Asset Base
The existing natural resource asset base needs to be conserved to ensure that this asset continues to provide services and benefits to an expanding EMA. This will entail the restriction of development within important natural areas as well as the management of adjacent and upstream land uses and activities which impact on the ecosystems contained within these areas.

d) Establish More Responsive Settlement Structure and Built Form
Identify and establish settlement forms and building types which are more responsive to environmental concerns, increasing living costs and lifestyle patterns so as to support a wider choice of identifiable and sustainable lifestyles. This will entail the development of a range of housing options at various densities and in various locations.

2.4 Metropolitan Spatial Development Framework
The Municipal IDP and associated Spatial Development Framework identifies a number of key development principles which have been used as an overarching guideline for directing all land use, development and management strategies in the Municipality and hence for the preparation of the SDP. They are summarised below for ease of reference.

<table>
<thead>
<tr>
<th>Equity</th>
<th>Promote an equitable city by:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>reducing infrastructure and service disparities</td>
</tr>
<tr>
<td></td>
<td>redressing imbalances in the location of employment opportunities</td>
</tr>
<tr>
<td></td>
<td>providing adequate, accessible and affordable housing opportunities</td>
</tr>
<tr>
<td></td>
<td>promoting integration by linking and reducing distances between people, places and activities</td>
</tr>
<tr>
<td></td>
<td>making the city work better for the disadvantaged (the poor, the disabled and women)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Efficiency</th>
<th>Promote an efficient city by:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>promoting more compact development by encouraging higher densities where appropriate</td>
</tr>
<tr>
<td></td>
<td>reducing the separation between places where people live and work</td>
</tr>
<tr>
<td></td>
<td>optimising development in areas of greatest opportunity</td>
</tr>
<tr>
<td></td>
<td>encouraging effective use of infrastructure and facilities</td>
</tr>
<tr>
<td></td>
<td>promoting cost effective movement systems</td>
</tr>
<tr>
<td></td>
<td>promote accessibility through improving relationships between people, places and activities</td>
</tr>
<tr>
<td></td>
<td>promoting a well-managed spatial form</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sustainability</th>
<th>Promote a sustainable city by:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>promoting optimal use of remaining land opportunities</td>
</tr>
<tr>
<td></td>
<td>promoting the inherent value of the natural and built environment and introducing environmentally sensitive management of development</td>
</tr>
<tr>
<td></td>
<td>alleviating environmental health hazards</td>
</tr>
<tr>
<td></td>
<td>promoting total living environments</td>
</tr>
<tr>
<td></td>
<td>retaining and enhancing positive qualities and productive assets of the DMA</td>
</tr>
</tbody>
</table>

The spatial response that is to deliver on these principles is contained in the Municipal SDF and is based on notions of the compact city and densification, protection of natural assets, establishment of development nodes and corridors and associated systems of access, linkage and circulation for public and private forms of transport.
2.5 Spatial Structuring Elements

A number of spatial structuring elements or devices can be used to direct development investment and to guide development actions. Collectively these elements form a spatial structuring and spatial development management system that can be used by all municipal departments in their planning endeavours as well as direct private developer investment and decision making. It is a system that can be used to define/describe how an area works and functions as well as assess its performance as a living environment for people.

<table>
<thead>
<tr>
<th>Metropolitan Spatial Structuring Elements</th>
<th>Description</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Landscape Structuring Elements (The Urban Edge)</td>
<td>A line demarcating the limit to which built up (urban) areas, that are reliant on full service levels, will be allowed to establish and that will result in a more convenient, comfortable, efficient, equitable and sustainable settlement forms. Urban Edge implies that there is a rural periphery or hinterland that is different in character and which has different servicing needs. It implies also that there is a need for different settlement patterns and lifestyles.</td>
<td>An urban edge is temporal in that it is to be used to manage the growth patterns of a city over time. As such parts of it may be amended as and when development pressures within the edge require additional land to be made available. The edge should be used to enforce density targets and physical development patterns within specific time periods until such time as growth and development pressures require a rethink on the line position of the line. Since the line will also be determined by sensitive environmental areas, cultural and heritage assets its position in some areas will be fixed and non negotiable. An urban edge should take cognisance of the following : - geophysical environment - biophysical and ecological environment - rivers and wetland systems - infrastructure location and capacity - land use and related patterns - demographics and population profiles and trends - legal, planning and land ownership - socio-cultural and historic environment - visual resource analysis</td>
</tr>
</tbody>
</table>

| Local Districts | Functional areas are clusters of settlement within the sub metro areas which contain various mixes of settlement form but which are physically and functionally connected. | An important spatial structuring device at a local level that can be used to create identifiable, integrated and cohesive districts, precincts and neighbourhoods that perform well in terms of their role in the sub metro as living areas, employment areas, economic opportunity areas, recreation areas etc. |

| Open Space System | Core Conservation and Resource Areas, Core Conservation and Resource Corridors Core Conservation and resource Isolated Small Areas | Establishment of a clearly identifiable system of conservation and resource reserve open space elements that perform specific functions regarding the sustainability of the ecological systems within the Municipal area as well as the delivery of environmental services within the human living environment. |
| Corridors: Investment and Linkage Lines | Regional Access and Linkage  
Metropolitan Development Corridor  
Inter District Corridor  
Inter Neighbourhood Linkage  
Intra Neighbourhood Linkage | Establishment of corridors of mixed use development that act as growth or development axes that spatially structure development. The corridors comprise of a mix of activity making them intense robust and diverse environments that service the city. Establishment of links between districts and neighbourhoods that ensure cohesiveness and integration of activity and communities. |
| Nodes: Investment and Access Points | Regional, Sub-metropolitan  
Local District  
Neighbourhood  
The form of the nodes will be dependent on the function. Size and age of the node and could take the form of Grids, Intersections, Strips, Streets, Sites | Establishment of a hierarchy of services points within the city that provide convenient and efficient access to a hierarchy of commercial and community facilities. The form will follow the function of the node and will reflect the market threshold it serves. |
| Settlement Forms | Urban  
Suburban  
Rural Agricultural  
Rural Traditional | The protection, conservation, establishment and maintenance of a variety of lifestyle options at the scale of the local district. To provide housing areas at different densities and with varying forms for various income groups, cultures and preferences. |
| Densities | Gross, Net: Dwelling units per hectare (du/ha), persons per hectare (pph), Floor Area Ration (FAR), Floor Space Rate (FSR). | Different measures of density that can be used for describing different lifestyle options, landscape character and for evaluating impacts on infrastructure and community facilities. |
3 Strategic Assessment of the Outer West

3.1 Introduction
The primary aim of planning is to continually try to balance the demands of growth and change within a city and its hinterland with a diminishing or scarce supply of resources. Demands are in the form of population growth and economic development and supply is in the form of land availability, infrastructure capacity and environmental constraints. This section provides a strategic overview of the relationship between these two variables within the Outer West thereby identifying key issues and development opportunities and constraints that require some form of planning and management intervention.

3.2 Overview
The Outer West, as defined by this study stretches 30km east to west from the near the base of Field’s Hill, to Cato Ridge and 40km from beyond Inanda Dam on the Umgeni River in the north to beyond the Umlazi River in the south. The area accounts for 34% of land in the metropolitan area, however due to its extreme topography, 38% of the area is undevelopable. Due to its location, and height above sea level the area is significantly milder than areas along the coastal plain and is protected from windy conditions experienced along the coast making it a desirable environment in which to live.
3.3 Supply Assessment

3.3.1 Environment

The Outer West is a vital component of the Ethekwini Municipality's Open Space System and contains 50% of the total system within its boundaries. Key habitats include 100% of rocky outcrops, 80% of dry valley thicket, 53% of primary and secondary grasslands and 44% of coastal scarp forest. One of the main reasons for this area remaining largely undeveloped is its topography.

The topography is dramatic and ranges from flat plateaus, to the escarpments surrounding the Kloof/Waterfall plateau and the Valley of a Thousand Hills. Deeply incised river valleys and steep slopes characterise much of the area and the headwaters of many of Ethekwini's main rivers are found in the Outer West. The open space asset acts as a buffer to the environmentally depleted coastal plain through the provision of numerous environmental services e.g. stormwater protection, protection of water supply, estuaries protection, flood attenuation, regional bio-diversity, preservation of sub-tropical character, soil erosion protection etc. The ecological services provided by Ethekwini's open space system have been valued at R1bn per annum.

The main river catchments flowing through the area include the Umgeni, Umhlutuzana and Umlazi Rivers. 64% of the metropolitan artificial waterbodies are contained within the Outer West and the area contains both the Inanda and Shongweni Dams. The general health of rivers in the area is good and systems are functioning well. There are isolated areas of concern where rivers are being impacted on by human settlement and poor management.

Key environmental assets include the Kranzkloof Nature Reserve, the Shongweni Dam and the Resources Reserve, the Giba Gorge, the Alverstone Conservancy and the Hammarsdale Falls. There are also large tracts of untransformed land along the Umlazi River and around Sithumba Hills and north of Inanda Dam.

3.3.2 Social

Whilst the Outer West accounts for 34% of the total land mass of the Ethekwini Municipality, it is only home to 10% of the metropolitan population. The largest concentration of urban households is in Mpumalanga (40%), followed by the Western Suburbs and Cato Ridge (16% each).

The area is largely rural/traditional in nature and 56% of the area falls under Traditional Leadership structures. Development within these tribal areas is being administered/facilitated by the Rural Area Based Management Team.
The rural population is generally disconnected from the rest of the Municipality and suffers from high unemployment levels, which is related to low skills and literacy and numeracy levels as well as few employment opportunities. Overall unemployment is 21%, however 52% of the economically active population seeking employment, remain unemployed.

Metro Housing’s long term programme has identified the need for some 30,604 housing sites that predominantly take the form of in-situ upgrading and associated greenfields sites. The bulk of these projects are located in Molweni, Mpumalanga, and the settlements around Cato Ridge, Fredville and Salem.

Middle-upper income housing demand in the Western Suburbs area is experiencing unprecedented demands and has lead to a new housing trend of medium density “cluster housing” predominating the market.

Social facilities within the Outer West are mainly lower-order in nature. There are 26 community halls, 7 libraries, 111 Primary Schools, 42 Secondary Schools and 5 Combined Schools. These facilities are scattered across the area with higher concentrations in Mpumalanga and the Western Suburbs. A variety of private education institutions are also located within the Western Suburbs. Health facilities are limited to clinics and there is a small provincial hospital within Hillcrest.

3.3.3 Economic
The economy of the Outer West is small relative to its population. The estimated GDP of the area is R4,0bn to R6,0bn which constitutes between 5%-7% of Municipality’s GDP and GDP per capita indicates severe poverty levels in some areas. Unemployment levels are high are there is a dearth of employment opportunities. Most employment opportunities for all sectors of the population occur outside of the Outer West.

The spatial economy of the Outer West is diverse and ranges from commercial and retail centres in Kloof and Hillcrest, to depressed industrial areas in Cato Ridge and Hammarsdale. Agricultural activities account for 40% of land use in the area and these vary from community based gardens to large-scale commercial farming endeavours.

Cato Ridge is the only area that offers a comparative advantage for industrial development in the Outer West and is ideally located for development as an inter-modal distribution hub for road and rail transport.

Commercial and retail activities are increasing in the Hillcrest and Kloof areas where purchasing thresholds are high, but in relation to the rest of the Metro, these are still small in significance.
3.3.4 Infrastructure
The Outer West falls outside of the Ethekwini Municipality’s urban edge and the capacity of infrastructure is commensurate with this.

a) Roads and Rail
Due to the topography of the area, access to and within the Outer West is problematic. The N3, the main Durban/Johannesburg freeway, and the R103 from Key Ridge through Pinetown traverse the area from east to west. There are few north/south linkages. Due to difficulties in topography and the low and dispersed nature of the population of the Outer West, public transport will remain road based.

Generally the road network within the Outer West is operating within capacity. There are areas of congestion along the network that require intervention. Particularly problematic areas are Inanda Road, Old Main Road and Fields Hill for which a roads solution has been developed and in the process of being implemented.

The main Durban/Johannesburg rail link traverses the southern portion of the Outer West from Pinetown through Mpumalanga and Cato Ridge, whilst there is secondary line running though the Western Suburbs to Cato Ridge, it is predominantly used for tourist trips.

There is a current proposal to relocate the existing tollbooth on the N3 at Marianhill to Cato Ridge.

b) Sanitation and Water
Despite the Outer West falling outside of the water-borne services edge of the Ethekwini Municipality, there are 5 wastewater treatment works: Hammarsdale, Mpumalanga, Fredville, Cato Ridge and Hillcrest. These works are generally working within their capacity and cater to existing developments within their catchment. Given that the Outer West is outside of the EM urban there is no intention to expand the capacity of the existing waterworks to deal with additional water-borne effluent.

The most predominant settlement patterns in the Outer West are low-density settlements that support on-site sanitation in the form of septic tanks and evapo-transpiration areas. These low densities make it unviable to provide for a water-borne system across the board in the Outer West. There has been a trend for the installation of package plants, small privately owned wastewater treatment plants, but at present these plants are unable to meet operational standards set by DWAF and the Municipality’s Water and Sanitation Department.

The responsibility for the supply of water in most areas of the Outer West falls under the responsibility of Ethekwini Metro Water Services whilst Umgeni Water is responsible for the bulk supply of water.
The bulk water supply infrastructure is in place in most of the Outer West area with adequate trunk mains and storage reservoirs to meet immediate and predicted future demands.

c) Stormwater
Increases in hardened surfaces results in increases in stormwater runoff. Stormwater controls are in place and all developments are required to mitigate their post-development runoff on site.

d) Electricity and Telecommunications
Access to electricity and telecommunications is good. Cost is a prohibitive factor.

3.3.5 Key Spatial Characteristics
Historically the role of the Outer West has been that of a dormitory suburb. Small commercial centres are located within Hillcrest and Kloof, with smaller nodes at Gillits, Botha’s Hill, Mpumalanga and Cato Ridge, but most residents are required to travel to other parts of the Metro to access economic and employment opportunities.

Settlement types in the area range from large-scale commercial farms, small-holdings, “arcadian” (country) suburbs, to township areas, informal settlements and tribal areas. Settlement within tribal areas is fragmented and tends to occur along narrow ridge ridges lines and access roads.

Good, productive agricultural land straddles the N3 and M13/R103. South of the N3 is predominantly sugar cane farming.

3.4 Demand Assessment
The demand assessment highlights what assumptions are made about change and how this change will influence settlement patterns and development trends.

3.4.1 Social Drivers
According to the middle AIDS scenario developed by the Ethekwini Municipality, Durban is assumed to reach a 0% population growth rate. Whilst natural growth rates may well reach a nil growth pattern, due to increased poverty and pressures in areas outside of the Municipality, it is assumed that the population of the area will continue to grow. The rural periphery will likely undergo consolidation and increases in density as these areas begin to fulfill the function of reception areas to the Municipality.

The future growth of the population can also be linked to increases in economic activity and public investment in housing and social infrastructure. Poverty Alleviation Programmes in rural areas, whilst meeting the needs of existing populations, will act as attractors for
further settlement especially if rural development programmes continue to meet with limited success. As perceptions of economic opportunities in Ethekwini increases, international immigration from neighbouring countries is also likely to increase.

Population growth will place a number of pressures on urban systems within the Municipality including: increased pressure on the limited vacant land available; increased pressure on the natural resource base; increased pressure on social facilities, transportation and utility services and greater demands for housing and employment opportunities. These pressures will tend to be felt in the “soft” areas where vacant land is available on the periphery although densification is likely to occur mostly in central areas as a result of infill and densification policies.

Perceptions, and the reality of crime have also lead to new ways of living and are fueling the rise of “gated-communities” on the urban periphery.

3.4.2 Environment Drivers
Whilst there may be other drivers pushing for development within the Outer West, the environment could be viewed as a negative driver for development. Any additional development within the Outer West would result in the open space system having to perform at a higher level in order to mitigate the effects of human settlement i.e. the need to deal with increased waste outputs as well as urban and rural recreation needs.

The desire to grow the tourism industry in Ethekwini is intrinsically linked to the protection of the coastline and remaining inland riverine and aquatic assets. To diminish these assets would threaten segments of the tourism industry.

As communities become more environmentally aware, there will be increased pressure from local communities and international lobbies to protect, conserve and manage environmental assets which will result in the tightening of restrictions relating to the development of areas that either contain important environmental service generating open spaces and assets, or that are adjacent to such areas. Additional pressure in this regard is also been placed though new legislation.

It is not only the assets within the open space footprint that are important, the functioning of the system is intrinsically linked to adjacent land uses and as such greater care should be taken to enhance the existing footprint. Natural resource bases also provide a survival cushion for lower income communities as they are a source of survival products i.e. food, firewood, building material etc.

3.4.3 Economic Drivers
A substantial portion of the Ethekwini Municipality’s economic development opportunities (such as major industry, commerce and tourism) are concentrated within the coastal plain beyond the boundaries of the Outer West, and the current spatial structure of the municipality suggests that this is likely to continue into the future. However major economic initiatives such as the Dube Tradeport and
the Harbour will enable Durban to gain a comparative advantage in the global logistics market. The impacts of these initiatives will be felt in the Outer West as commerce and industry looks for secondary growth areas to locate in.

Renewed confidence in the South African economy and low interest rates has lead to increased investment in the housing market which in turn is rapidly transforming either undeveloped, or agricultural land into housing developments.

The decentralisation and deconcentration of commercial and retail sectors is changing the pattern of South African spatial economy.

3.5 Synthesis of Issues

The existing spatial structure of the Outer West can be described as follows:

- Extent and quality of natural assets make the area a high priority environmental management area
- Fragmented and un-articulated open space system will reduce ecological viability
- Poor inter linkages between different settlements and communities resulting in inefficient and inconvenient travel patterns
- Under provision of community facilities in rural and informal settlements resulting in inconvenience and lack of productivity
- Large under serviced informal settlements resulting in poor living conditions and pressure on the natural environment
- Low densities and fragmented settlement pattern with low thresholds for efficient service delivery
- Low densities, fragmented settlement pattern and low incomes with resultant low thresholds for viable commercial nodes and service points
- Poor linkages from rural and informal settlements to metropolitan transport links and to metropolitan facilities and services resulting in inefficient travel patterns, inconvenience, lack of productivity, social/family impacts.
- Diminishing capacity of major road transportation corridors to serve the metropolitan area from an economic point of view.
- Under performing agricultural areas resulting in pressure for land use change.
- Imbalance between availability of and location of employment opportunities in relation to economically active population.

4 Application of the Spatial Structuring Approach to the Outer West

4.1 Strategic Roles of the Outer West Sub Metropolitan Region

In determining a role for the Outer West it is important to note that the area has environmental, social and economic linkages to the wider metropolitan area. Development in the Outer West therefore needs to respond to the long term vision of the EM and is integral in assisting the EM to reach its vision:-
“By 2020 the Ethekwini Municipality will enjoy the reputation of being Africa's most liveable city, where all citizens live in harmony. This vision will be achieved by growing its economy and meeting peoples needs so that all citizens enjoy a high quality of life with equal opportunities, in a city that they are truly proud of”.

In order to achieve this vision, all the sub metropolitan areas of the EM will have to play particular roles consistent with their inherent characteristics and capacities to support development.

In order to understand the role of the Outer West it is useful to sketch a broad spatial scenario based on the anticipated demographic and economic development outlooks for the EM. Key elements of the scenario are as follows:

- The constraint on land in the central area, particularly for residential development, has resulted in a significant thrust for development in the north and to a certain extent in the west. This growth and the associated poor access to the central areas has manifested in a push for the location of commercial and key community facilities in the outlying areas where access to or availability of commercial and major community facilities is limited. These conditions have been exacerbated to a certain extent by changes in municipal capital expenditure patterns that have been designed to improve living conditions in outlying areas thus creating the perception that infrastructure and management in central areas and investments are being reduced.
- Intensive mixed-use development of the coastline between Durban and Richards Bay due to land ownership patterns, land availability, existing and future infrastructure, geophysical conditions and regional accessibility and the objective of establishing Durban as an international logistic hub along the eastern seaboard.
- Consolidation of hinterland road and rail transportation linkages to accommodate flow of goods and services to immediate hinterland and Gauteng.
- Continual demand for middle-income living environments associated with employment and amenity zones within the coastal plain.
- Continual demand for lower density suburban and or rural lifestyle options located within high quality environmental settings in the municipal hinterland.
- Increasing demand for decentralised commercial and community facilities to support growth areas within the coastal plain particularly along the north coast.
- Continuing pressure to convert marginal agricultural land within the municipal boundaries to residential industrial or commercial uses.

The role of the OW has been determined in accordance with the inherent character and capacity of the Outer West to support envisaged growth and development within the EM. The role in turn provides the basis for identifying the most likely, or preferred land use responses for each area that should be protected and planned for in order to key principles of equity, efficiency and sustainability.
### Table 2: Outer West: Spatial Development Roles

<table>
<thead>
<tr>
<th>Economic Growth and Development</th>
<th>Metro Strategies</th>
<th>Outer West Role in the Metro</th>
<th>Key Implications for Sectors in the Outer West</th>
</tr>
</thead>
</table>
|                                | ▪ International and National Logistics Hub: Airport and Harbour  | ▪ Support Tourism through Cultural Asset Development: Traditional and Colonial. | ▪ Land Use:  
  ○ Consolidate existing development within Mpumalanga and promote expansion of Cato Ridge as Investment and Urban/Rural Service Nodes.  
  ○ Consolidate and/or establish new Investment and Service Nodes along N3.  
  ○ Limit residential settlement densities in line with infrastructure capacity.  
  ○ Industrial growth permitted within areas that have water-borne sanitation. |
|                                | ▪ International, National and Provincial Tourism Destination | ▪ Subsistence Agriculture Outputs |  |
|                                | ▪ International, National and Provincial Trade Centre | ▪ Export and Domestic Commercial Agriculture (including “muthi” farming) |  |
|                                | ▪ International and National Industrial Investment Location | ▪ Secondary locations for Industrial Development. |  |
|                                | ▪ Infrastructure and Housing Development | ▪ Supply of non-regional type retail outlets |  |
|                                |                  | ▪ Environmental asset management |  |
| Social                         | ▪ Improving Quality of Life  | ▪ Suburban, Rural and Agrarian Residential Lifestyle Locations. |  |
|                                |  ○ Life Style Choice. | ▪ Rural Services Nodes and Networks. |  |
|                                |  ○ Meet basic needs | ▪ Community services (schools, clinics etc) |  |
|                                |  ○ Sustainable Livelihoods |                  |  |
|                                |  ○ Enhance skills, capacity and technology. |                  |  |
|                                | ▪ Bio Diversity Protection. | ▪ Visual Gateway to Metro and Coastal Destinations |  |
|                                | ▪ Catchment Management. | ▪ Waste Disposal Location |  |
| Spatial                        | ▪ Densification of the Core. | ▪ N3 integrating corridor linking the Metro to the national and regional economy. |  |
|                                | ▪ Creation of Urban Edge. | ▪ N3 low-density residential settlement expansion axis |  |
|                                | ▪ Improve High Priority Linkages network. | ▪ Linkage corridor to national and regional hinterland. |  |
|                                | ▪ Creation and Consolidation of Nodes and Investment Corridors. |                  |  |
4.2 Development Concept for the Outer West

Environmental Priority Area
The extent, location and environmental service value of the environmental assets located in the Outer West demands that it perform an important regional and municipal role as a priority area for the management of environmental services. These assets perform a substantial and significant role in conserving biodiversity as well protecting the quality of life of the residents of the EMA. Substantial cores of natural asset are located in the OW and they support and mitigate impacts in the intensively developed coastal plain of the EMA.

Local Areas
The Outer West sub metropolitan area can be organized into six local areas that are physically and functionally interrelated. It should be a specific aim to develop the assets and attributes of each of these local areas into high performance and balanced living environments that fully support the range of lifestyles contained within them. As such local facilities and services should be balanced with the needs of the population resident in each Local Area.

Integrating Corridor
The Local Areas described above are to be linked to each other and into the metropolitan system via the N3/M13 corridor so that residents of the Outer West can access the benefits of the municipality and the wider region in a convenient and efficient manner. The corridor is to be developed to perform local, regional and national roles relating to the provision community and commercial facilities and services required by the thresholds of the six Local Areas, employment opportunities and economic development opportunities required in the sub metropolitan area and the wider region and tourist attractions consistent with the character and capacity of the Outer West. These roles will be accommodated through the establishment of a number of different types and sizes of service nodes located adjacent to the N3/M13 movement corridor.

Lifestyle Options And Settlement Densities
Each Local Area needs to be managed in a manner that will retain and maintain existing sought after neighbourhoods and lifestyles and developed over time in a manner that will provide additional neighbourhoods and lifestyle options consistent with the growth of the Municipality and with the specific characteristics and capacity of the Outer West. The characters that should be supported and protected at this stage of development within the Outer West are the lower density suburban and both agricultural and traditional rural options. Local services for these communities should be provided through the establishment of well located local order nodes that provide neighbourhood services. Settlement densities are to be consistent with the lifestyle character that is to be established in each neighbourhood and in accordance with the capacity of available infrastructure.
Figure 3: Spatial Concept

- Consolidate and Upgrade Rural Lifestyles
- Consolidate and Upgrade Intensive Settlements
- Integrating Corridor (Includes existing and potential new nodes)
- Reconceptualise and revitalise Industrial Nodes
- Consolidate and Upgrade Intensive Settlements
- Environmental Services Priority Area
- Protect Strategic Installation and Develop Appropriate Metro Recreation
- Redevelop Tourist Corridor M13/R103
- Main Access and Economic Route

Locations:
- CATO RIDGE
- MPUMALANGA
- SHONGWENI
- ZWELIBOMVU
- WESTERN SUBURBS
- BOTHA'S HILL/INANDA DAM
Figure 4: Draft SDP (insert A3 map)
4.3 Sub Metropolitan Systems

4.3.1 Sub Metro Open Space System

The open space system in the Outer West is a major spatial and functional component that performs a wide range of ecological, educational, agricultural, tourist, recreational and stormwater management functions. Spatially, open space helps to structure urban development patterns and contributes to the legibility and variety of the OW as well as providing relief from the built environment.

The key open space guidelines for the OW are listed as follows and should be read in conjunction with the EM Open Space System Policy Document.

a) Manage Drainage Catchments

The creation of viable ecosystems in the open spaces within the OW is dependant on the effective management of the various catchments that pass through the area. The terrestrial and riverine resources within these catchments are linked together through complex hydrological, climatic and migratory processes and the efficiencies, or inefficiencies of these system are felt downstream and impact on the coastal plain of Durban. It is vital therefore that the adverse impacts of urban land uses such as industry and informal settlements be managed.

b) Conserve Riverine Systems

A vital component of drainage catchments are the main rivers and their tributaries. These need to be conserved in order to protect the ecological viability of the open space system. The main rivers (which run in a west/east direction) and their tributaries (which run in a north/south or south/north direction) are as follows:

- Umgeni River: Tributaries include the Molweni, Nkutu, Sikelekelheni, Nontshebelezwana, Mogoweni, KwaGogoda, Umsunduza and Mshwali Rivers
- Umhlatuzana River: Tributaries include the Giba River
- Umlazi River: Tributaries include the Shongweni, Wekeweke, Sterkspruit, Mpelengwane and Mopel Rivers

C) Conserve Functional Ecosystems

There are a number of major open space areas that contain functional ecosystems and which act as key conservation areas “feeding” the open spaces elsewhere in the EM. These areas are as follows:

- Krantzklouf and Molweni Nature Reserves (associated with the Molweni River)
- Giba Gorge (associated with the Giba Stream)
- Alverstone Conservancy (associated with the watershed between the Wekeweke and Umhlatuzana Rivers)
- Hammarsdale Falls (associated with the Sterkfontein River)
- Shongweni Dam and Resources Reserve (at the confluence of the Umlazi, Sterkfontein and Wekeweke Rivers)
- Grassland and Forest Area (associated with the Sikelekelheni River)
- KwaXimba Grassland and Forest Area (associated with KwaGogoda River)
- KwaXimba Grassland and Forest Area (associated with Mshwali River)

**d) Establish N3 Open Space Corridor**
The N3 road reserve represents a substantial open space component which links across the OW from the hinterland to the coast and should therefore be appropriately managed to enable it to function as an effective ecological component of the system.

**e) Maintain Smaller Open Space Fragments**
Fragments of open space that may not be directly connected to the broader open space network should be conserved and linked, where possible, to provide critical “stepping stones” for the movement of animals and genetic material between larger and better functioning open spaces. These fragments include:
- local parks, sports fields and public gardens
- private gardens
- undeveloped land with ecological significance

**f) Incorporate Undeveloped Land**
 Appropriately located undeveloped land should be incorporated into the open space system and managed to enhance its contribution to the ecological viability if the broader system. Such pockets of undeveloped land include:
- topography with slopes steeper than 1:3
- unstable land
- road reserves and utility servitudes etc

**g) Conserve Visual Features**
The visual amenity and character of the OW is closely associated with highly visible natural features. These should be conserved for both residents and tourist and include components such as:
- cliffs, escarpments and quarries
- hilltops and ridgelines
- large water bodies
h) Manage Development Impacts

Land uses adjacent to, or upstream from, open spaces can have major impacts on sensitive ecological systems. Industrial, informal and agricultural activities therefore need to be carefully controlled to ensure that they do not undermine the ecological viability of the open space system. Sandwinning operations need to be carefully controlled as environmental damage tends to occur from unmonitored mining operations and from insufficient rehabilitation plans.

4.3.2 Corridors

A key component of the SDP is to establish a movement system which not only operates in terms of improved circulation, access and linkage, but which also reinforces the social, economic and spatial importance of the movement network. Particularly as public transport routes for locating and structuring the provision of community facilities and economic activities.

a) Improve Sub-Metropolitan Linkages

These need to be improved between the OW, the rest of the EM and adjacent municipalities. Suggested improvements include:

- reinforcing the importance of the N3 and M13 (Old Main Road) in providing links between Durban, the OW and the EM hinterland
- upgrading the gravel road MR430 link with Tala Valley to the south via Mophela
- investigating the possibility of establishing a bridge across the Umlazi River at Shongweni
- upgrading the MR259 linkage with Inanda Dam in the north
- upgrading the gravel linkage MR528 linkage with the KwaSondela and Mabedane communities (Valley Trust Road)
- improving the gravel linkage D1027 with the adjacent local
- upgrading the MR255
- improving the linkages east into the EM

- N3 Development Corridor

The N3 is a major metropolitan movement route that could be used for the location of mixed-use developments incorporating high intensity agricultural activity, office parks, housing and commercial facilities. Industrial activity only within vicinity of Cato Ridge. However, this development should be concentrated at nodes at the main intersections with the north/south routes to minimise the impact of these developments on the visual character of the route and the OW. Development will limited in intensity by the lack of water-borne sanitation.
- **Old Main Road Tourism Corridor**
  The Old Main Road (M13) has a major tourism potential and its role as an arts and crafts meander route should be promoted. Intersections along the route should respond to the nature of the threshold which accesses the Old Main Road via these routes. This route should form part of a network of routes which together create a tourism meander for visitors to the OW.

- **Railway Line Development**
  The railway line is underutilised and could be used together with the D210/MR551/MR454 to create an east/west development corridor through Mpumalanga. Due to the steep topography of the area, this would take the form of a number of key nodes along the route.

- **Mpumalanga Loop Road Development**
  The development of the MR385 loop road would contribute to the integration of Mpumalanga with the remainder of the OW. This loop road development could incorporate higher density housing, light and agri-industry, commercial development and major community facilities. This development should help to relieve the pressure for residential expansion in the peripheral Mpumalanga area close to sensitive environmental resources.

- **KwaXimba Tourism Route**
  The major loop road connecting KwaXimba to the R103 and N3 has major potential to provide access to this relatively isolated tribal area and its associated tourism opportunities. This route could incorporate a range of service centre and tourism facilities and activities serving local residents and visitors to the area.

### 4.3.3 Sub Metro Nodes
A clear hierarchy of nodes should be established, consolidated and distributed throughout the OW area including regional shopping specialised nodes, sub-metropolitan/high order mixed use civic/retail/office nodes and local nodes which provide essential commercial/retail/services for local communities.

#### a) Regional Specialised Nodes
There are no regional specialised nodes within the Outer West. The high order regional shopping and entertainment node (i.e. Pavilion Node), which is located at the intersections of regional north-south and east-west routes, can be considered a regional specialised node.
b) Sub-Metropolitan Nodes
Cato Ridge should be consolidated and upgraded to offer a high order mixed use (commercial, office, retail, civic and residential). This high order metropolitan node should be focused towards generating economic activities and providing high order health, education and welfare services to the OW area. This node should also be developed as a transportation, administrative, recreation and entertainment hub. There is potential to develop a sub-metropolitan node at Shongweni, where the M13, N3 and MR454 converge. This node should have limited commercial/business opportunities associated with it and should cater to the surrounding neighbourhoods. Industrial activity would not be permitted.
- Cato Ridge (M13/N3.M385)
- Proposed Shongweni (N3/MR454Kassier)

Cato Ridge (M13/N3.M385)
Proposed Shongweni (N3/MR454Kassier)

Cato Ridge should be consolidated and upgraded to offer a high order mixed use (commercial, office, retail, civic and residential). This high order metropolitan node should be focused towards generating economic activities and providing high order health, education and welfare services to the OW area. This node should also be developed as a transportation, administrative, recreation and entertainment hub. There is potential to develop a sub-metropolitan node at Shongweni, where the M13, N3 and MR454 converge. This node should have limited commercial/business opportunities associated with it and should cater to the surrounding neighbourhoods. Industrial activity would not be permitted.

- Cato Ridge (M13/N3.M385)
- Proposed Shongweni (N3/MR454Kassier)

c) Local Nodes
A range of lower order nodes serving the needs of local areas only should be consolidated and/or established. These nodes should be located at the intersections of local activity routes. Their role should be to provide essential ‘day to day’ social and commercial services to immediately adjacent communities. Local nodes will vary in activity mix since some nodes will be serving larger or many communities whilst others will be servicing only one or part of a single community. These local nodes should be structured as follows:

- **Town/Village Centres (e.g. Kloof, Hillcrest, Hammarsdale)**
  These nodes should accommodate comparison retail and offices related to local needs (e.g. banking, administration, etc.), social facilities and recreation and local entertainment facilities.
  - Kloof
  - Hillcrest

- **District/Neighbourhood Nodes (e.g. Waterfall, Drummond, Fredville)**
  These nodes are smaller than the town and village nodes and would accommodate convenience shopping and social facilities for local needs. In the OW these nodes have either an urban or rural dimension to them.
  - Waterfall
  - Botha’s Hill
  - Drummond
  - Mpumalanga
  - Gillits
  - KwaXimba
  - Inchanga
  - Fredville
4.3.4 Waste Disposal
Whilst the Outer West has been identified as an environmental services priority area, it is acknowledged that there is a need for the siting of a solid waste dump within the area for the long-term sustainable disposal of solid waste. The communities in the area are unlikely to support such a move, but strategically, it is not environmentally or economically sustainable to move solid waste from the west to areas either north or south of Durban.

The two sites identified in the Outer West include Shongweni and Cato Ridge (Ferralloys). In terms of this SDP the preferred site is Cato Ridge however until such time as a final decision is made, a buffer preventing settlement within the vicinity of both waste sites is suggested.

4.4 Functional District Development Guidelines
Six functional districts have been identified which are separated from one another by major topographical features and major barriers such as river valleys and main roads. The districts identified in the OW each have their own character and opportunities for development and need to be planned and managed accordingly.

The planning and management of these districts should be aimed at turning these functional districts into local activity systems which provide a range of facilities, opportunities and services required by local residents. The role, key characteristics, spatial development concepts and key actions are outlined for each of these functional districts in the following tables. More detailed studies are required at the local area level.
### 4.4.1 Western Suburbs

The Western Suburbs are located in the eastern corner of the Outer West and are home to 16% of the Outer West population on 14% of the land mass. 23% of the area is included in the Metro ESMP, 42% is formal urban settlement and 28% of the area is potentially developable as it is either presently undeveloped or under agriculture.

| Functional District Roles | International and domestic cultural and environmental tourism destination  
|                         | Low density residential infill and expansion  
|                         | Environmental asset protection and consolidation  
|                         | Local commercial and services consolidation  
| Nodes                  | Consolidate Kloof and Hillcrest/Gillits as Urban Local District Nodes  
|                       | Consolidate Waterfall as Urban Neighbourhood Node  
|                       | Permit Sub-Metropolitan Nodal development on the N3  
| Movement System        | Establish Old Main Road as a Inter-District Corridor  
|                       | Establish Inanda and Kassier Roads as Inter Neighbourhood Corridors  
|                       | Ensure that Arthur Hopewell Highway (Field’s Hill) operates as a Metropolitan Development Corridor  
|                       | Improve internal circulation and access by upgrading existing Inter and Intra Neighbourhood Access and Linkage Corridors  
| Land Use & Density     | Nett residential densities to be no greater than 5du/ha and must be commensurate with surrounding landscape and architecturally must respond to the local vernacular  
|                       | Discourage the further subdivision of land below 2000m²  
|                       | Discourage non-residential land uses outside of Hillcrest/Gillits Activity Corridor  
|                       | Medium density housing (5-10du/ha) may be permitted within the natural catchment of the existing sewerage works  
|                       | Upgrade and consolidate existing Molweni as a low to medium density suburban settlement with on-site sanitation  
|                       | Upgrade and consolidate Embo, Ngcolosi, KwaNuywa as low density suburban settlements  
|                       | Protect existing arcadian (country) lifestyle options in areas where this form of settlement predominates  
|                       | Consolidate light industrial activity at Waterfall  
|                       | Permit growth of suburban residential settlement along Kassier Road and between Hillcrest and the M13  
| Open Space/ Environment| Protect and manage KrantzKloof Nature Reserve as a conservation core  
|                       | Expand open space footprint in areas previously under sugar cane (Luke Bailes Farm and Hillcrest South)  
|                       | Manage land uses adjacent to strategic environmental assets e.g. Giba Gorge, KrantzKloof  
|                       | Expand the open space system around river corridors especially in the lower Molweni and Upper Umhlatuzana Rivers  
| Service Levels         | On-site sanitation, with the only exception of Hillcrest provided development occurs within the natural catchment of the Hillcrest Water Works  
|                       | The management of stormwater to occur on-site  

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*Outer West Spatial Development Plan*
### 4.4.2 Botha’s Hill/Inanda Dam

The Botha’s Hill/Inanda Dam Functional District includes the areas of the Outer West north of the N3 and between the D1004 and the Western Suburbs. It is predominantly traditional/rural in nature and is home to 19% of the Outer West population on 36% of the land mass. 54% of the area is in the Metro Open Space System that accounts for 24% of the Metro ESMP, and it contains the Inanda Dam.

| Functional District Roles | ▪ Key Metro International and domestic cultural and environmental tourism destination  
▪ Environment resource reserve  
▪ Expansion of low density suburban and rural settlements  
▪ Hinterland water based recreation  
▪ Consolidation of low density rural settlement  
▪ Local commercial and services consolidation  

| Nodes | ▪ Consolidate Botha’s Hill as Local District Node  

| Movement System | ▪ Establish MR528 and D1004 as Inter Neighbourhood Corridors  
▪ Establish R103 as Inter District Corridor with a special emphasis on tourism opportunities  
▪ Improve internal circulation and access by upgrading existing Inter and Intra Neighbourhood Access and Linkage Corridors  

| Land Use & Density | ▪ Residential densities in Drummond/Assegay/Alverstone areas to be no greater than 2du/ha and must be commensurate with and respond to the surrounding landscape  
▪ Protect high scenic value of R103 tourism corridor  
▪ Protect high yielding agricultural land by limiting development opportunities and encourage intensive agriculture between R103 and N3  
▪ Upgrade and consolidate existing traditional rural settlements as rural lifestyle options in KwaSondela and Mabedlane along district roads  
▪ Discourage the further subdivision of land below 2000m²  
▪ Limit non-residential land uses to along R103  
▪ Permit low impact tourism related development at Inanda Dam  
▪ No industrial activity permitted  

| Open Space/ Environment | ▪ Designate Inanda Dam as a Resource Core area  
▪ Protect, manage and enhance open space footprint  
▪ Permit sustainable harvesting of resources in open space footprint  

| Service Levels | ▪ On-site sanitation  
▪ The management of stormwater to occur on-site  

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*Outer West Spatial Development Plan*
### 4.4.3 Cato Ridge

The Cato Ridge Functional is located in the north-west corner of the Outer West. The area is home to 16% of the Outer West Population on 16% of the land mass. 39% of the district is in the open space system. The district is predominately suburban traditional in nature.

| **Functional District Roles** | ▪ Medium impact industrial district expansion  
▪ Waste disposal – preferred location  
▪ Environmental asset protection and consolidation  
▪ Low and medium density suburban and rural settlement expansion  
▪ Local commercial and services consolidation |
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<tbody>
<tr>
<td><strong>Nodes</strong></td>
<td>▪ Consolidate, rehabilitate and revitalise Cato Ridge/Harrison Flats as Sub-Metropolitan Node for mixed use, manufacturing and service industry</td>
</tr>
</tbody>
</table>
| **Movement System**           | ▪ Establish R103 as Inter District Corridors  
▪ Establish R556/MR423 and D1002/D1004 as Inter Neighbourhood Corridors  
▪ Improve internal circulation and access by upgrading existing Inter and Intra Neighbourhood Access and Linkage Corridors |
| **Land Use & Density**        | ▪ Residential densities to be no greater than 5du/ha, except within existing Cato Ridge village.  
▪ Areas outside of Cato Ridge village and Fredville to be developed as Rural Lifestyle options  
▪ Medium density suburban settlements permitted in Fredville and Cato Ridge village but must be commensurate with existing settlement patterns and service infrastructure  
▪ Upgrade and consolidate existing traditional rural settlements in KwaXimba along district roads  
▪ Discourage the further subdivision of land below 2000m²  
▪ Limit non-residential land uses along R103  
▪ Landscaping required to protect visual gateway to 1000 hills meander route |
| **Open Space/Environment**    | ▪ Protect and manage Isithumba Hills as Resource Core  
▪ Protect, manage and enhance open space footprint  
▪ Permit sustainable harvesting of resources in open space footprint |
| **Service Levels**            | ▪ On-site sanitation  
▪ Water-borne sanitation within the natural catchment of Fredville Water Works  
▪ The management of stormwater to occur on-site |
### 4.4.4 Mpumalanga

The area of Mpumanga is located on the western edge of the Outer West north of the Umlazi River and contains 40% of the Outer West population on 16% of the land. 27% of the area is reserved for open space; it contains 32% of agricultural land in the Outer West and 30% of low-income and peri-urban settlement.

| Functional District Roles | • Medium impact industrial development consolidation and revitalisation  
|                          | • Environmental asset protection and consolidation  
| Nodes                    | • Consolidate existing local town centres in units A, D and H in Mpumalanga as Local District Nodes  
|                          | • Hammarsdale to be established a Sub-Metropolitan industrial node  
| Movement System          | • Establish MR385 as a Inter District Corridor  
|                          | • Develop the MR385 as a feeder route to the HPPTN in order to create a viable public transport system  
|                          | • Upgrade the MR430 as a Inter District Corridor between Zwelibomvu and the adjacent local council  
|                          | • Improve internal circulation and access by upgrading existing linkages and establishing new linkages  
|                          | • Maintain visual character of the N3 by creating a “green” corridor along this route to enhance the scenic attractiveness of this gateway to the EM  
|                          | • upgrade link from Ntshongweni through to Summerveld/Shongweni  
| Land Use & Density       | • Discourage densification in areas on the periphery of existing Mpumalanga and outside the “water-borne edge”, especially areas along the Umlazi River  
|                          | • Maintain and enhance formal suburban residential areas through maintenance and improvements to the public environment and the provision of support facilities such as recreational amenities  
|                          | • Changes in land use around Camperdown Rural need to be addressed in a sensitive manner on order to protect the headwater basin of the Sterkspruit and ensure vital environmental management of the area  
|                          | • Consolidate existing formal settlements by utilising opportunities of residential in-fill on well located portions of vacant and/or underutilised land near Mpumalanga, Mini-Town, Hammarsdale and Cato Ridge  
|                          | • Consolidate and rehabilitate existing industrial district  
|                          | • Residential density to conform Greater Mpumalanga Area Land Use Plan (2001) and range from <5du/ha to no greater than 35du/ha (nett)  
|                          | • Perform analysis (access mapping) to determine the social facilities backlogs for the area with a view to catering to community needs  
| Open Space/Environment    | • Protect, manage and enhance open space footprint  
| Service Levels            | • Water-borne sanitation within catchment of Mpumalanga Waste Water Works  
|                          | • On-site sanitation in southern areas of Mpumalanga outside of water-borne edge  
|                          | • The management of stormwater to occur on-site  

Outer West Spatial Development Plan
### 4.4.5 Shongweni

Shongweni is located to the east of the Outer West and is adjacent to the N3. The area is the least developed and contains 8% of the metro population in 8% of the land. Agricultural activity (45%) predominates and the open space system comprises 32% of the area.

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<thead>
<tr>
<th>Functional District Roles</th>
<th>National equestrian center</th>
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<tbody>
<tr>
<td></td>
<td>Low density rural and suburban residential expansion</td>
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<tr>
<td></td>
<td>Sub Metropolitan commercial/service expansion</td>
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<tr>
<td></td>
<td>Environmental asset consolidation and protection</td>
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<td></td>
<td>Consolidation of low density suburban settlement</td>
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| Nodes | Permit the establishment of a Sub-Metro Node at Shongweni between the N3 and M13 (excludes industry) |

| Movement System | Establish D828 and MR 559 as Inter Neighbourhood Corridors |
|                 | Establish MR461 as a Inter District Corridor to Shongweni Dam via Salem |
|                 | Establish a Inter District Corridor from Shongweni to Mpumalanga |
|                 | Improve internal circulation and access by upgrading existing linkages and establishing new linkages |

| Land Use & Density | Create buffer around proposed Shongweni general land fill site |
|                   | Maintain and enhance equestrian and rural lifestyle options |
|                   | Residential densities to be no greater than 5du/ha |
|                   | Encourage intensive agriculture of land around Peacevale/Bux Farm and Cliffdale |

| Open Space/ Environment | Protect, manage and enhance open space footprint |
|                        | Establish Shongweni Resource Reserve as a key conservation area and investigate possibilities associated with developing a metropolitan nature reserve |
|                        | Protection of Umhlatuzana Gorge |
|                        | Expand open space footprint in areas previously under agriculture |

| Service Levels | On-site sanitation |
|               | The management of stormwater to occur on-site |
4.4.6 Zwelibomvu

Zwelibomvu is disconnected from the majority of the Outer West and enjoys greater access via the Inner West. The area houses 7% of the Outer West population on 10% of the land. 46% of the area falls within the open space system and the area is predominately low density rural settlement.

| Functional District Roles | ▪ Low density rural settlement areas  
▪ Environmental asset consolidation and protection |
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<tr>
<td>Nodes &amp; Corridors</td>
<td>▪ Low order rural service nodes along district road to service local community</td>
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<tr>
<td>Movement System</td>
<td>▪ Establish MR430/MR489 as Inter District Corridor</td>
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</tbody>
</table>
| Land Use & Density        | ▪ Rural residential lifestyle options at densities no greater than 5du/ha  
▪ Secure key agricultural assets |
| Open Space/ Environment   | ▪ Protect, manage and enhance open space footprint  
▪ Potential to develop Shongweni Resource Reserve into a metropolitan nature reserve |
| Service Levels            | ▪ On-site sanitation  
▪ The management of stormwater to occur on-site                                                  |