FINAL DRAFT

CitySpace
Planning Cape Town

BLAAUWBERG
DISTRICT PLAN

SPATIAL DEVELOPMENT PLAN &
ENVIRONMENTAL MANAGEMENT FRAMEWORK

TECHNICAL REPORT

2012

CITY OF CAPE TOWN | ISIXEKO SASEKAPA | STAD KAAPSTAD

THIS CITY WORKS FOR YOU

Approved as a Structure Plan in terms of section 4(10) of the Land Use Planning Ordinance, Ordinance 15 of 1985

27 September 2012

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3. KEY STRATEGIES: THE CONTEXT AND CENTRAL SPATIAL IDEAS	• Key spatial strategies of the CTSDF and how they are applied to the district. • Contextualises strategies in terms of the "district now" and "what action is needed" to address issues. • Identifies what spatial concepts should be applied to achieve strategy and address issues. • Highlights the central spatial ideas, specific to the district, that are key to reinforcing a positive long term metropolitan and district spatial structure
3.1. Plan for employment and improve access to economic opportunities	• Identifies the key challenges in respect of economic activity and employment in the district, giving consideration to the form and functioning of economic activity, the relationship between transport systems and land use
	• Spatial concepts and structuring elements include: multi-directional accessibility grid, areas for intensification.
3.2. Manage urban growth and create a balance between urban development and environmental protection	• Identifies the key challenges in terms of the natural environment and managing urban growth within the district.
	• Spatial concepts and structuring elements include: natural assets, development edges, future urban growth areas.
3.3. Build inclusive, integrated and vibrant city	• Identifies opportunities for integration and improving public environments including opportunities for civic precincts, destination places.
	• Spatial concepts and structuring elements include: civic precincts, destination places, structuring open space and critical public links, integrated settlement patterns.
4. SPATIAL DEVELOPMENT PLAN: DISTRICT DEVELOPMENT GUIDELINES	• Application of the spatial concepts and structuring elements identified in section 3, to the district. • Forms the "broad level" guide to the desired future spatial form of the district and is supplemented by more detailed "sub-district land use guidelines" in section 6.2. Guidelines are grouped into 5 sections.
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4.3. Conceptual designations	• Provides broad guidance in relation to spatial concepts that are not precisely spatially defined at the district scale. (e.g. urban nodes, civic precincts, destination places). Land use and form implications may be detailed through local area plans.
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6.1. Urban restructuring and upgrading: framework for capital investment	• Provides an informant to aligning spatial planning (including new development areas and areas for land use intensification) with service and infrastructure planning. • Identifies sector specific proposals (capital investment framework) in support of the spatial development plan (including for example new transport links, areas for public space investment, publicly assisted housing, new district scale open space proposals).
6.2. Sub-district development guidelines	• Supplements the spatial development plan: district development guidelines with more detailed "sub-district development guidelines" that provide further direction in terms of achieving desired spatial form at a local level. • Reference is made to where more detailed local area plans exist and will continue to provide guidance to decision making.

6.3. Local area planning priorities	• Identifies key local area planning priorities for the district where further work is required along with lead actions and role players.

REFERENCE GUIDE TO ENVIRONMENTAL MANAGEMENT FRAMEWORK (EMF)*:

Content elements	Guide to location of content in the district plan
• Identification of the area to which EMF applies • An indication of the conservation status of the area	• Baseline information and analysis report: Section 2.1
• A description of how information was captured;	• Baseline information and analysis report: Section 1
• Identification of information gaps	• Baseline information and analysis report: Section 1
• Specification of the environmental attributes in the area as well as parts of the area to which attributes relate • Interrelationship and significance of the attributes;	• Baseline information and analysis report: Section 2.1 – 2.3 • Summarised in Technical report: Section 5.2
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***The EMF** is an integrated though distinguishable component of the district plan. For ease of reference, the table indicates how the EMF is structured across the district plan product.

ACRONYMS AND ABBREVIATIONS

Acronym	Abbreviation
BCA	Blaauwberg Conservation Area
CBA	Critical biodiversity area
CBD	Central business district
CESA	Critical ecological support area
CMA	Cape Metropolitan Area
CoCT	City of Cape Town
CTIA	Cape Town International Airport
CTSDF	Cape Town Spatial Development Framework
CTZS	Cape Town Zoning Scheme
DFA	Development Facilitation Act (No 108 of 1996)
DSDP	District Spatial Development Plan
du/ha	dwelling units per hectare
EIA	Environmental Impact Assessment
EIMZ	Environmental Impact Management Zone
EIP	Environmental Implementation Plan
EMP	Environmental Management Plan (in terms of Section 11 of NEMA)
EMF	Environmental Management Framework
GIS	Geographic Information System
ICT	Information communication technology
IDP	Integrated Development Plan (in terms of the MSA)
IDZ	Industrial development zone
IEM	Integrated environmental management
IRT	Integrated rapid transit
ITP	Integrated Transport Plan
KNPS	Koeberg Nuclear Power Station
LGTA	Local Government Transition Act
LUMS	Land use management system
LUPO	Land Use Planning Ordinance (No. 15 of 1985)
MOSS	Metropolitan open space system
MSA	Municipal Systems Act (No 32 of 2000)
MSDF	Metropolitan Spatial Development Framework
NEMA	National Environmental Management Act (No 107 of 1998)
NLTA	National Land Transport Act (No 5 of 2009)
NHRA	National Heritage Resources Act (No 25 of 1999)
NMT	Non-motorised transport
NSDP	National Spatial Development Perspective
OESA	Other ecological support area
PAZ	Precautionary Action Zone
PGDS	Provincial Growth and Development Strategy
PIIF	Public Infrastructure Investment Framework
POS	Public open space
PSDF	Provincial Spatial Development Framework
PTP	Public Transport Plan
SANRAL	South African National Roads Agency Ltd
SAHRA	South African Heritage Resources Agency
SDF	Spatial Development Framework
SDP	Spatial Development Plan
SMME	Small, medium and micro enterprises
TPC	Town-planning compliant
UDZ	Urban development zone
UPZ	Urgent Protective Action Planning Zone
VPADD	Voluntary proactive deal driven
WSUD	Water-sensitive urban design

TERMS AND DEFINITIONS (A-Z)

Term	Definition
Accessibility grid	The grid of structuring routes (development and activity routes and activity streets) that facilitates convenient public transport access and multidirectional movement between the district and other parts of the city and within the district .See also section 3.1.3
Activities	In the context of the development guidelines (section 4), refers to the use of land or pursuits in particular locations that may be related to projects or programmes.
Activity route	See section 3.1.3
Activity street	See section 3.1.3
Aquifer	Area identified as reflecting physical extent of a water-bearing layer of soil, sand, gravel, or rock that will yield significant usable quantities of water.
Biodiversity	Biological wealth of a specified geographical region: including the different marine, aquatic and terrestrial ecosystems, communities of organisms within these, and their component species, number and genetic variation.
Biodiversity network	The map of protected and critical biodiversity areas (including natural vegetation and wetlands) for the city based on the fine scale systematic conservation plan, in accordance with legal requirements.
Buffer 1 and 2 areas	See section 3.2.3
Cemetery	A place for the burial of human remains, and may include ancillary buildings such as an office and chapel, but does not include a crematorium.
Civic precinct	Concentration of public facilities (e.g. schools, clinics, library) located in close proximity. See also section 3.3.3
Coastal edge	Demarcated area around the coast, primarily to protect coastal resources, and to avoid hazards and financial risks pertaining to areas at risk of flooding
Coastal node	Concentrated development at a specific coastal location.
Commercial / business area	General business activity and mixed-use development of a medium to high intensity. Whilst the focus of development of these areas is commercial (office and retail development) a mix of uses including high and medium density residential development could be appropriate in these areas. Industrial development is generally not suitable in these areas.
Connector route	See section 3.1.3
Core 1 and 2 areas	See section 3.2.3
Critical biodiversity areas	Critical biodiversity areas are terrestrial and aquatic features in the landscape that are critical for conserving biodiversity and maintaining ecosystem functioning.
Critical ecological support area	Natural and rural areas with biodiversity importance which are essential for management consolidation, connectivity and viability of biodiversity in CBAs and protected areas.
Critical public link	Route link / public access that does or should serve to provide access to destination places and/or is associated with an existing or potential positive experiential quality relating to the surrounding environment along its length.
Cultural landscape	Sites and landscapes of historical significance, areas of scenic beauty and places of spiritual and/or cultural importance.
Densification	Increased use of space, both horizontally and vertically, within existing residential areas / properties and new developments, accompanied by an increased number of units.
Destination place	A place that forms a significant landmark or area of attraction and is part of the unique identity of Cape Town. Due to these qualities, these places hold potential for exploiting economic opportunities particularly in relation to their role as destinations for locals and tourists.
Development corridor	See section 3.1.3.
Development edge	A demarcated edge line defining the outer limits of urban development for a determined period of time; there are two types of edge lines, namely urban edge lines and coastal edge lines, - the former being a medium- to long-term edge line, where the line has been demarcated in a position to phase urban growth appropriately, or to protect natural resources.
Development route	See section 3.1.3
District park	Park of landscaped / maintained open space with recreational facilities which serves the needs of several surrounding local communities or suburbs. Generally multifunctional, can include formal & informal recreational facilities, sports facilities including kick-about areas, playing fields & playgrounds (perhaps with play equipment). The diversity of activities caters for different age groups & may include a special interest component and/or a natural feature (e.g. river, water body or nature conservation area).
District plan	Document which includes integrated District Spatial Development Plan (DSDP) and Environmental Management Framework (EMF)
District spatial development plan	Document of which sections 4 and 6.2 feature as statutory components in terms of section 4(10) of LUPO.
Ecological buffer	Strip of land adjacent to a watercourse, wetland or vlei required for the protection and enhancement of aquatic and riparian ecosystems.
Flood prone areas	Areas that are susceptible to inundation by a specific recurrence interval flood (e.g. a 1:100 year flood) which must be managed in terms of catchment management policies and by-law.
50yr flood line	Line to which flooding is likely to occur on average once every 50 years.

100yr flood line:	Line to which flooding is likely to occur on average once every 100 years.
Gap housing	Housing for households with a monthly income that fall outside the government housing subsidy income limit and find it difficult or are unable to access finance for housing in the private market (as their income is below the minimum typical income which would allow them to qualify for a conventional mortgage loan).
Incremental densification	Small-scale densification that is almost invisible, e.g. subdivisions and second dwellings.
Inclusionary housing	Used to describe the inclusion (preferably on site) of residential units targeted at the gap and/or rental (social housing) market as part of the development of new areas. Where contextually appropriate and feasible, a subsidy housing component may be targeted.
Industrial area	Area proposed to accommodate manufacturing and related processes. Some allowance could be made for non-industrial activities, but these should not compromise the general use of the area zoned for industry. In these areas, the intensive nature of the industrial activity or the scale of the operation could generate some negative impact on adjacent properties.
Industrial development	Allows for all forms of industrial uses, except noxious industries. Allowance is made for limited forms if non-industrial activity such as a factory shop, service station, motor repair garage, but these activities should not compromise the general use of the industrial area.
Informal settlement	Settlement area consisting of informal structures, the occupants of which may or may not have rights to the property or land upon which they reside.
Land use intensification	Refers to achieving a greater spectrum of mixed uses (commercial, industrial and residential) through the increased use of space, both horizontally and vertically, within existing areas or properties and new developments, accompanied by an increased number of units and/or population thresholds, in accessible, high-opportunity locations.
Metropolitan park	Park of landscaped / maintained open space with recreational facilities or an aspect of special interest which serves the needs of the metropolitan community. Generally significant in size and tend towards being large-scale multi-functional parks. Likely to be integrated with other large scale public facilities such as formal sports fields or with natural areas or including natural features such as a river or water body.
Mixed land use	Area of existing or proposed horizontal and/or vertical integration of suitable and compatible residential and non-residential land uses within the same area or on the same parcel of land; implies contextually-appropriate intensity of land use that should facilitate efficient public transport and a vibrant local urban environment.
Metropolitan open space system	Inter-connected and managed open space network that supports interactions between social, economic and ecological activities, sustaining and enhancing both ecological processes and human settlements; includes natural areas, and active and passive recreation areas such as sports fields and parks, but also cemeteries, detention ponds servitudes, river corridors and road reserves to promote interconnection and multi-use.
Mobility	The ease with which people can travel with minimal delay on route.
Multi-functional	The combination of different yet compatible functions within one physical framework to serve a variety of social and community groups; allow for a wider range of facilities that reinforce one another in close proximity, offering greater access to potential users. Differentiation in activity may be physical (different activities on different floors or premises of the same building) or in time (using the same facility for different activities, but at different times).
New development area	An area earmarked for future development.
Nodal development	Significant and concentrated development in terms of scale, location, impact, diversity and agglomeration of function (facilities, services and economic activities).
Non-motorised transport	Transport modes which are not motorised (e.g. walking and cycling).
Noxious industry/ Risk activity /	Comprises hazardous and noxious land uses in terms of smell, product, waste or other objectionable consequences of operation, or that carry a high risk in the event of fire or accident.
Other ecological support area	Transformed (e.g. extensive agriculture) sites with conservation importance.
Other structuring open space	Open space which is not part of the biodiversity network or significant agricultural areas, but has been identified to promote access to open space for active and passive recreation. Whilst the focus is on areas that usable and accessible for most of the year, the identification has included cemeteries, detention ponds, servitudes, river corridors and road reserves in order to promote the notion of a linked open space system.
Overlay zone	A category of zoning applicable to a particular area or land unit which: (i) stipulates development rules in addition to the underlying zone or base zone requirements, which may be more or less restrictive; (ii) may include provisions and development rules relating to primary uses additional uses or consent uses, limitations in addition to the underlying base zone, subdivision and subdivisional areas, special planning areas, development incentives, urban form, urban renewal, heritage and environmental protection, etc.
Potential high density development	Area proposed for new higher density development where the gross density should average 40+ du/ha. The achievement of this target could occur via a range of housing typologies and varying net densities across the area. The development of required community facilities and open space should be addressed as part of the development of this area. Controlled opportunities for home employment and low intensity mixed use development could be

	considered in these areas.
Potential medium density development:	Area proposed for new medium density development where the gross density should average 25-40du/ha du/ha. The achievement of this target could occur via a range of housing typologies and varying net densities across the area. The development of required community facilities and open space should be addressed as part of the development of this area. Controlled opportunities for home employment and low intensity mixed use development could be considered in these areas.
Potential low density development	Area proposed for new lower density development where the gross density could average 10-25du/ha. The achievement of this target could occur via a range of housing typologies and varying net densities across the area. The development of required community facilities and open space should be addressed as part of the development of this area. Controlled opportunities for home employment, additional dwellings and low intensity mixed use development on could be considered within these areas.
Precautionary action zone	The area within a five kilometre radius of the central point between the Koeberg Nuclear Power Station's reactor buildings
Public transport interchange	Public transport interchange which supports the transfer of public transport users between modes (rail/bus/taxi), but also functions to support economic activity.
Publicly assisted housing	The realisation of a range of housing opportunities, formal or informal, that the public sector plays a role in providing or supporting through its housing programmes.
Railway station upgrade	Upgrading of the physical station buildings and / or station environment. This could include the development of station forecourts, public access and landscaping intervention.
Rural living estates	Extensive land units (ranging in size) located inside the urban edge.
Scenic routes (SR1 and SR 2)	Public roads that traverse areas of outstanding scenic quality or that provide a view of scenic areas. Scenic routes facilitate appreciation of Cape Town's natural, built and cultural heritage, and in themselves have become attractions. Two types of scenic routes exist – SR1 routes, which are limited access routes that traverse areas of high scenic quality and SR2 routes which traverse areas of high scenic quality and are frequently accessed.
Smallholdings	Extensive land units (ranging in size) located outside the urban edge
Spatial concept	A concept used to describe a particular set of spatial features (e.g. urban node, civic precinct).
Strategic site	A land parcel or group of land parcels which due to its/their location or other unique attributes holds the potential to impact significantly on planning policy objectives such as densification and integration and in so doing make a significant contribution to restructuring the city.
Structuring element	Spatial aspect that provides structure or form to urban development (e.g. a main road provides structure to which land uses respond).
Subsidised housing	Housing supplied in terms of the National Department of Housing's housing subsidy scheme.
Transit station area	Refers to the areas that support transit (public transport) stations (including rail stations and trunk, road based IRT stations). These supportive areas are conceptually defined in the district plan, but are generally within comfortable walking distance of these stations (i.e. +/- 800m). Transit stations are categorised in the district plan (e.g. neighbourhood station / urban station), which provides an informant to potential development opportunities / desired land use mix in the supportive areas and which should be further defined and detailed at the local area level.
Urban civic upgrade	An area where public investment and/or improved urban management is required as a precondition for an improvement in the local social and economic conditions. These areas are generally strategically located to ensure that public investment has the greatest impact on the most number of people.
Urban development	Buildings and infrastructure with a residential purpose as well as offices, shops, community facilities and other associated buildings, infrastructure and public open space necessary to provide for proper functioning of urban areas and amenity and recreation. The term 'urban development' includes golf estates, vineyard estates with a residential component, equestrian estates with a residential component, rural living estates, eco-estates, gated communities and regional shopping centres, Urban development excludes noxious industry and generally excludes land for industrial purposes. However, service trades that generate a low impact on surrounding urban uses may be permissible if the nature and type of service trade is deemed to form an integral part of an area demarcated for urban development purposes.
Urban edge	See development edge.
Urban node	Area characterised by the intensity, mix and clustering of activities/land uses (including commercial/business development and associated employment opportunities, higher-order services and higher residential densities). See also section 3.1.3.
Urban edge management zone	Zone or buffer area on either side of the urban edge, where land uses are to be managed to protect the integrity of the urban edge line.
Urgent protective action planning zone	The area within the 16 kilometre radius of the central point between the Koeberg Nuclear Power Station's reactor buildings, but excluding the precautionary action zone (PAZ).
Zoning	A category of directions setting out the purpose for which land may be used and the land use restrictions (e.g. height limits, building lines, bulk, coverage) applicable in respect of the said category of directions by the scheme regulations.
Zoning scheme	A scheme consisting of scheme regulations and a register with (or without) a zoning map.

ANNEXURES

Annexure A	List of withdrawn planning policy documents
Annexure B	Principles for assessing development proposals in “areas of potential impact” on selected natural environment
Annexure C	Relevant legislation and policies per environmental impact management zone
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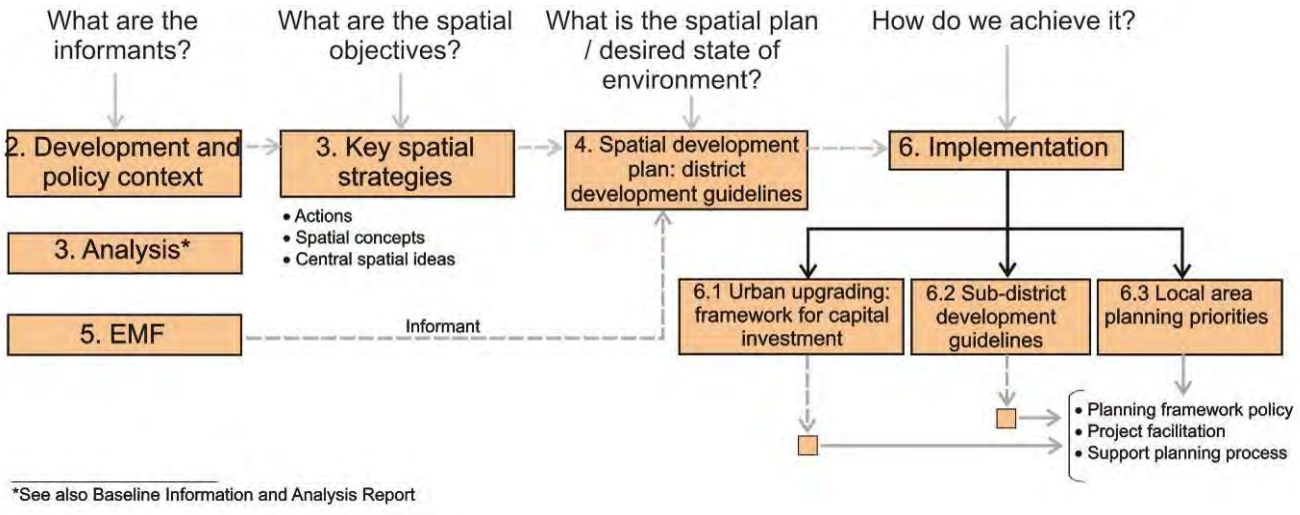
1. INTRODUCTION

This district plan forms one of 8 plans developed for each of the planning districts of the City of Cape Town (CoCT), all of them informed by the city-wide Cape Town Spatial Development Framework (CTSDF). Whilst this plan is grounded in a sense of the current realities in the district, its focus is influencing the future today. In doing so it needs to have relevance to a wide range of stakeholders including communities and interest groups, the drivers of development and regulatory decision makers who all play a role in shaping urban development. As such the plan comprises of a number of elements which include a discussion of the context and informants to the plan, the objectives of the plan (and spatial concepts and structuring elements), the plan itself and related to this, a set of implementation tools that are targeted at taking the broad proposals of the plan to a greater level of detail and action. To assist users of the plan, the diagram below summarises its contents.



1.1 Purpose

The District Plan is a medium term plan (developed on a +/- 10 year planning frame) that will guide spatial development processes within the district. It will pursue the several strategic actions including:

- Aligning with and facilitating the implementation of the Provincial Spatial Development Framework (PSDF), Cape Town's Integrated Development Plan (IDP) and Cape Town Spatial Development Framework within the district;
- Performing part of a package of decision support tools to assist in land use and environmental decision making processes;
- Delineating fixes and sensitivities which will provide an informant to such statutory decision making processes;
- Clearly giving direction to the form and desired structure of areas for new urban development as well as areas for land use change in the district in a manner that is in line with the principles and policies of higher level planning frameworks;
- Providing a strategic informant to public and private investment initiatives which will assist in achieving the principles and policies of higher level planning frameworks;

Note:

- This district plan has been informed by a Baseline Information and Analysis Report prepared separately. It is used as an information source and it is not intended that this separate report be consulted for statutory decision making processes.
- The "district plan" is the term given to the integrated "structure plan" or spatial development plan (SDP) and environmental management framework (EMF) as contained in this document.

- Informing the development of priorities for more detailed local area planning exercises and frameworks that should provide detailed guidance to land use management and public and private investment.

1.2 Towards a rationalised policy-drive land use management system

The City's planning framework comprised outdated plans with inconsistent status and conflicting development objectives. The City is updating and rationalising all aspects of the current planning framework guided by the relevant legislative and policy development environment. These initiatives promote a more responsive, flexible and policy-driven approach to land use management, in which a broader range of instruments and policies set the guidelines against which all land use decision-making takes place. The District Plan is one of the tools for evaluating applications for new or enhanced land use rights. The hierarchy and role of plans, policies and guidelines that form the cornerstone of the rationalised, policy-driven LUMS are outlined in Table 1.1.

Table 1.1: Hierarchy of spatial plans and policies

Spatial plan/ policy	Purpose	What it is replacing/ adding to	Who approves	Legislation/ policy guiding approval
CTSDF	Long-term (20+ years) citywide spatial structuring elements and plans, and overarching policy framework	Guide Plans (citywide), Metropolitan Spatial Development Frameworks and sub-regional plans approved in terms of Section 4(6) of LUPO	Province Council	MSA LUPO (Section 4(6)
District SDP	Medium-term (±10 years) district-level spatial development plans which indicate land uses in new development areas, and upgrade interventions	Selected district and local structure plans approved in terms of LUPO and policy plans of district and sub-district significance.	Council	LUPO (Section 4(10)) – provision on the lapsing of structure plans after a specified time frame City's system of delegations
Environmental Management Frameworks	Environmental Impact Assessment and review of development applications.	First EMF for the district	DEA&DP with the concurrence of DWEA	GN 547 of 18 June 2010 under the NEMA and draft EMF guidelines
Local Development Plans	Detailed SDF related to, for example, the management of land uses and detailed local-level planning such as density plans.	Selected local structure plans approved in terms of LUPO and policy plans of local significance.	Council	LUPO (Section 4(10)) City's system of delegations
Strategy/policy documents	Detailed issue/land use-specific policy parameters that should determine land use decisions, such as densification, urban edge, and guest houses and bed and breakfast (B&B) policy	Will replace or complement existing policies	Council	City's system of delegations
Development guidelines	Detailed guidelines that should inform land use decisions, such as fire protection guidelines and urban design guidelines (for example tall buildings guidelines)	Will replace or complement pre-existing guidelines	Council	City's system of delegations

The CTSDF has initiated the process of rationalisation of spatial plans and policies by replacing the Guide Plans (Urban Structure Plans), where relevant, and previous metropolitan level planning frameworks. The District Plan will further contribute to the rationalisation of spatial plans through replacing selected s4(10) and City approved spatial plans of relevance to district planning.

The list of plans to be withdrawn is reflected as it pertains to this district in Annexure A.

Central to policy rationalisation efforts will be the **retention of a number of local development plans and policies that continue to provide direction** to development in parts of the metropolitan area. These will be reviewed over time and supplemented by new local plans in areas that are selected as priorities for local area planning initiatives. Selected local development plans and policies that will continue to provide direction are listed, where relevant, in relation to the sub-district development guidelines (see section 6.2) of the district plan.

1.3 Legal status of the district plan and consistency principle

The district plan consists of two components, a Spatial Development Plan (SDP) and Environmental Management Framework (EMF) developed in terms of separate pieces of legislation:

- The “Spatial Development Plan” (SDP) term has been used to differentiate it from the Cape Town Spatial Development Framework. It is however regarded as a structure plan as provided for in terms of section 4(10) of the Land Use Planning Ordinance (LUPO) of 1985 and/or the equivalent as provided for in terms of any subsequent legislation that may replace LUPO.
- The Environmental Management Framework has been developed in compliance with the requirements of the National Environmental Management Act (NEMA) Action 107 of 1998 and regulations pertaining to environmental management frameworks promulgated under sections 24(5) and 44 of the said Act.

The statutory components of the District Spatial Development Plan in terms of section 4(10) of LUPO include:

- Section 4: Spatial Development Plan: District Development Guidelines and the accompanying Spatial Development Plan
- Section 6.2: Sub-district development guidelines and accompanying sub-district plans

The request for deviation from the spatial development plan will therefore only relate to cases in which the City of Cape Town deems there is a conflict between a development proposal and the statutory components of the SDP. The other maps, figures and text in the district plan are included for illustrative purposes and are intended to broaden the general understanding of the SDP and act as informants to the interpretation of the statutory components of the SDP. The preparation of local development plans and the assessment of development applications should therefore be guided by due consideration of these informants when interpreting the statutory components of the plan.

As specified in terms of section 5(3) of LUPO, neither the CTSDF, nor the district spatial development plan will confer or take away rights in terms of land. No guidelines or policies or any other provisions in respect of land designation that result from the CTSDF or district plan shall create any rights or exempt anyone from their obligations in terms of any other legislation.

With regard to the EMF, no provision in law is made for its amendment or for deviation processes. It must, however, be taken into account in the consideration of applications for environmental authorisation in or affecting the geographical area to which the framework applies. (see regulations pertaining to environmental management frameworks under sections 24(5) and 44 of the National Environmental Management Act, 1998, (Act No. 107 of 1998).

1.3.1 Determining policy compliance and measuring consistency between plans

In line with the consistency principle and hierarchical system of plans, a development proposal (or proposal contained in a lower-order framework plan) must be measured for consistency against the statutory components of the PSDF and the CTSDF. The findings of such an assessment must be weighed as follows:

1. The statutory designation and/or text of the CTSDF provides for the proposal (and is generally in line with land development proposals);
2. The statutory designation and/or text of the CTSDF does not explicitly provide for the proposal; but on the other hand, the proposal is not necessarily clearly in conflict with the intent and purpose of the designation and/or text concerned;
3. The proposal is in conflict with the statutory designation and/or text of the PSDF or CTSDF.
4. The proposal is in conflict with the statutory designation and/or text of the District SDP and / or any other structure plan in terms of s4(10) of LUPO or City of Cape Town approved local development plans / land use policies.

These four initial findings lead to different planning and procedural outcomes, respectively:

- In the case of (1), the proposal is considered to be policy compliant and evaluated further, without any further action in terms of the framework or plan against which the proposal was measured;
- In the case of (2), a consistency ruling must be made. If it is positive, the development proposal can be further evaluated or considered;
- In the case of (3), consideration may be given to amending the framework or plan against which the proposal was measured as provided for in terms of Section 34(b) of MSA and Section 4(7) of LUPO (or subsequent provisions in legislation, which may replace it). The amendment of the impacted framework or plan should occur prior to or simultaneous with any other applications in terms of LUPO. Should this amendment not be approved, the proposal is not supported and may not go ahead.
- In the case of (4), the City of Cape Town can consider condoning a deviation from the approved policy. This deviation should be fully motivated as part of any LUPO or building plan applications that may be required. A guide is provided to inform the approach to considering these deviations. (see second note below).

Note: **The hierarchy of plans and the consistency principle**

- In terms of the consistency principle lower order spatial plans and policies must be consistent with higher order spatial plans and policies.
- The CTSDF is deemed to be consistent with the PSDF. Should the provisions of plans of a lower order in the hierarchy (including local scale structure plans) be deemed to be inconsistent with the CTSDF, the CTSDF will take precedence.
- The district spatial development plan, as a structure plan in terms of s4(10) of LUPO is be deemed to be consistent with the CTSDF. Should the provisions of plans of a lower order in the hierarchy be deemed to be inconsistent with the district plan, the district plan will take precedence.
- In cases where an amendment of the CTSDF is approved, a simultaneous amendment to the district spatial development plan will be deemed to have been affected.

Note: Guide to considering deviations from the district plan

If no amendment to the CTSDF is required, but the findings of the assessment of an application trigger 4 (see above), a deviation from the district spatial development plan (relating specifically to the statutory components of the district spatial development plan) could be considered.

Should a deviation from policy be determined to be necessary, this should be advertised as part of the land use application. The assessment of a deviation from the district plan, should be integral to the LUPO process (i.e. consideration of LUPO applications such as rezoning). In relation to considering deviation from the district plan, reflection on the desirability of the proposed development (as specified in LUPO or replacement legislation), along with any possible negative impacts should be considered in the context of, but not limited to:

- The provisions of relevant legislation and higher order planning policy principles;
- Whether the proposal supports broader city planning imperatives including the CTSDF spatial development principles and strategies and city wide planning policies (e.g. policies relating to densification);
- Whether the proposal, in terms of proposed use and development form, supports the overall goals for the local area in which it is proposed, as reflected by City of Cape Town policy (e.g. local area spatial development frameworks);
- Whether the proposed land use reflects general compatibility or appropriateness within the surrounding land use context;
- The extent of any negative impacts on safety, health and well-being of the local community that may be affected and the degree to which these can be mitigated against.
- The extent of opportunity costs in terms of considerations of the highest and best use of the site(s) in question.
- Whether there are likely to be unacceptable impacts on the environment;
- Any changes in underlying context (e.g. environmental features) or new information which potentially support a different view of development suitability (as may be reflected in the district plan) at the location in question.
- Whether the land use is appropriate to occur in the proposed location at this point in time (i.e. a timing consideration related to growth informants, for instance the availability of bulk services).

1.3.2 Relationship between the SDP and EMF

The EIA regulations promulgated in terms of NEMA provide for the development of EMFs, which are intended to inform planning and environmental management. The various components of the EMF (as required in terms of the NEMA regulations) are spelt out in the reference guide in the front of the district plan.

The CoCT has integrated an EMF into each of the SDPs in order to ensure that the EMF effectively informs and responds to the planning context. The broad objectives of the EMF are:

- To inform and guide spatial planning in the district;
- To assist in facilitating investment;
- To function as a support mechanism in the environmental impact assessment process in the evaluation and review of development applications, as well as making strategic informed decisions regarding land use planning applications (as an integral part of the District Plan);
- To guide sustainable development in the area and determine the environmental management priorities; and
- To provide support to the process of delineating geographical areas within which specified activities are to be identified (or excluded from those listed) in terms of NEMA based on sensitivity of the environment to the potential impacts.

The EMF is developed as an input to the Spatial Development Plan, whilst also having some overlapping components. This should not create confusion or a basis for misalignment as:

- the proposals of the SDP (specifically the spatial development plan: district development guidelines, section 4) are also regarded as the "desired state of environment" (fulfilling the requirement for such a component of an EMF in terms of NEMA);

- the area / activity suitability matrix reflected as EIMZs should be read as an informant to section 4 (the spatial development plan: district development guidelines / EMF desired state of the environment) rather than a stand-alone component of the district plan.

In a limited number of cases, there are instances where significant environmental attributes are potentially impacted by the development proposals in the spatial development plan. These areas of impact are identified as part of the EMF in section 5. Development proposals in these areas would be evaluated as reflected in section 1.3.1 and would be subject to normal statutory processes where required in terms of LUPO, NEMA or other relevant legislation. Furthermore, a set of principles are proposed to guide the manner in which these "areas of potential impact" are addressed. These are included as Annexure B.

1.4 Alignment with Cape Town Zoning Scheme

The district plan offers a broad level of guidance to decision making at the district scale with supplementary guidelines at a sub-district level. In many cases, there will be a need to develop policies and plans at a greater level of local detail that provide further direction to land use management decision making. As part of these local area planning initiatives, a number of potential products may be developed (e.g. local area structure plans or spatial development frameworks or plans, densification plans, urban design frameworks).

In addition to these policy and guideline tools, and with the approval of the Cape Town zoning scheme, the concept of overlay zones is introduced. A number of these overlay zones will be put in place with the promulgation of the CTZS. An overlay zone may be imposed if it complies with the rules set out in the CTZS, and, as the City aims to establish a policy-driven LUM system, it must as far as possible be preceded by local planning policies. The development or updating of such local planning policies may be motivated and prioritised through the district plan process. Overlay zones are thus not developed as part of the district plan itself. The introduction of overlay zones is not an inevitable consequence of local area planning initiatives, but needs to be considered carefully, based on the strength of individual motivation around the need for (more or less restrictive) development rules in addition to the underlying zone or base zone requirements. Overlay zones are a tool that would be employed on an exceptional basis, when it is critical and strategic that actual land use rights are managed to achieve the vision for Cape Town.

1.5 Overview of the District Plan drafting process

The drafting of the district plan has been undertaken in line with the legislative requirements of LUPO as well as NEMA. The district plan has also been the subject of a process of internal engagement within the City of Cape Town. A rigorous and inclusive public engagement process is critical for the successful preparation of the district plan(s) and as such has included three phases:

- **Phase 1**: In February 2008, the City initiated the first phase of the public engagement process in its 23 Subcouncil areas. The purpose was to launch the process; create a sense of public / stakeholder ownership of and involvement in the process; to elicit stakeholder views on the development issues facing Cape Town and also to identify the principles and strategic goals that should guide the preparation of the district plan (and CTSDF).
- **Phase 2**: The aforementioned engagement informed the preparation of the draft district plan(s) circulated for public comment between August 2009 and November 2009. The purpose of this round of engagement was to table and discuss the proposals contained in the draft district plan(s) including the integrated EMF and SDP.
- **Phase 3**: A final draft for public engagement was undertaken in 2011. This round of engagement was aimed at allowing for comments on the amended draft district plan(s), following which the final draft district plan has been submitted to Council structures for approval. The EMF (as a component of the district plan) is submitted to the PGWC, (who have been granted concurrence of National government) for approval.

1.6 Review of the District Plan

It is envisaged that the district plan will be reviewed on a 10 year basis and to some extent should fulfil the need for a sense of continuity and predictability, however, within that period there are likely to be components of the district plan that will require amendment or review as summarised below.

Table 1.2: Schedule for review of the district plan

Component of district plan	Scope of review	Period
District plan (SDP and EMF)	Comprehensive	10 years
Spatial development plan: district development guidelines	Limited, focussed on urban edge line.	5 year basis to coincide with review period for urban edge line.
EMF (EIMZ)	Limited to components that are potentially dynamic (e.g. biodiversity network)	5 year basis (may be updated more frequently)
Urban upgrading plan / framework for capital investment	Comprehensive	5 year (if required)
Local area planning priorities	Comprehensive	5 year (may be updated more frequently as progress made with local area planning initiatives)

The district plan could also be the subject of amendment as contemplated under section 4(7) of LUPO should this be necessary on a basis other than specified above.

1.7 Study area

The Blaauwberg district covers a vast area, totalling some 55 000ha and incorporates part of the urban core in the south, large areas of agricultural and conservation land, as well as outer lying towns. It includes some of the fastest growing new development areas in the City, but in contrast also includes a number of underdeveloped; lower-income areas. It is bounded by the Atlantic Ocean to the west, the N7 freeway to the east and stretches from the area of Paarden Eiland in the south, to the rural town of Mamre in the north. In terms of the City's 8 planning districts, the Blaauwberg district is bordered by the Northern district to the east, Table Bay to the south and the Swartland Municipality in the north, which forms part of the West Coast District Municipality.

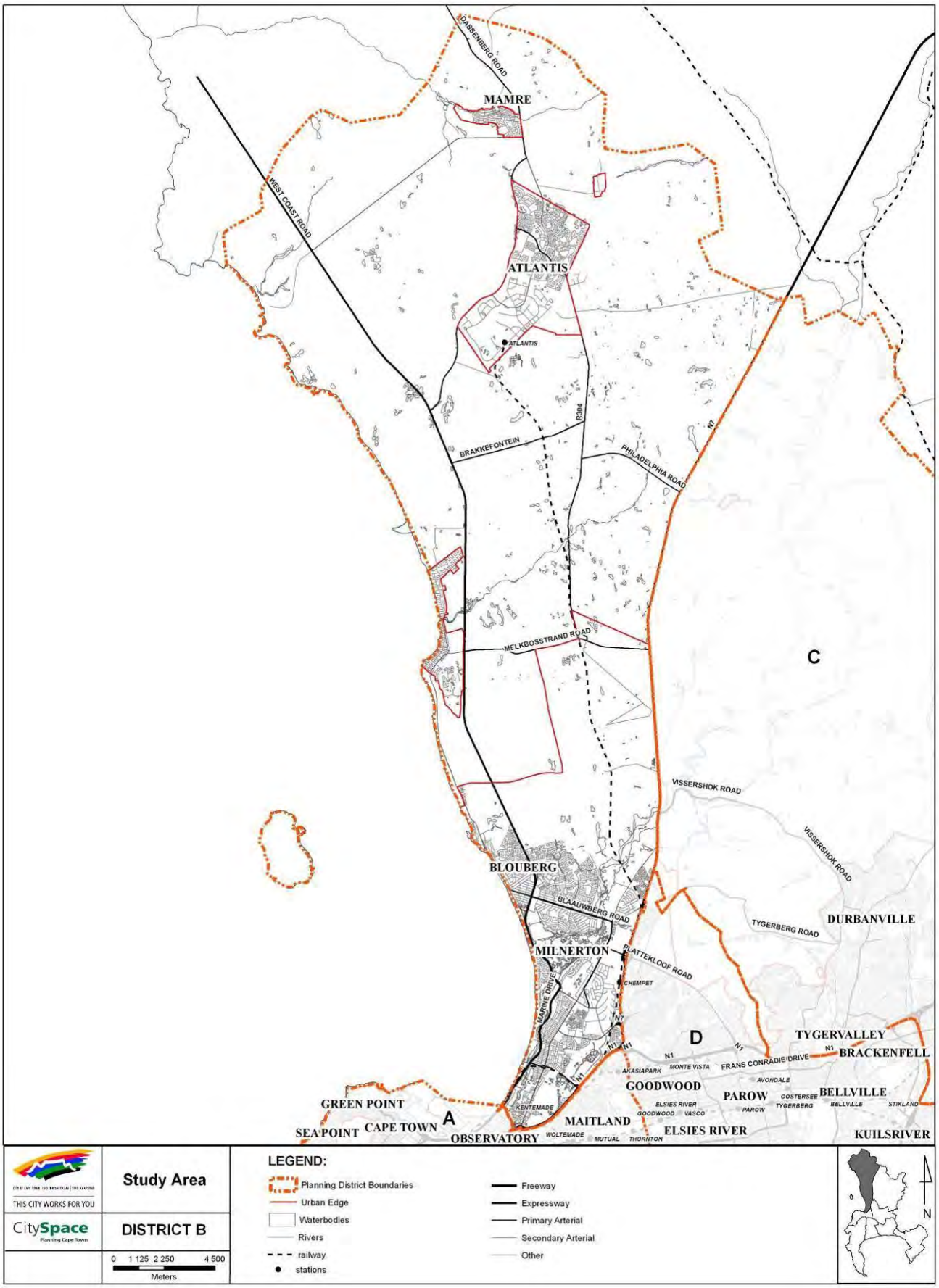


Figure 1-1: Blaauwberg district study area

2. DEVELOPMENT AND POLICY CONTEXT

2.1 Legislative context

The district plan which forms a structure plan in terms of the Land Use Planning Ordinance and an EMF in terms of NEMA has also aligned with the requirements of legislation including:

- Municipal Systems Act (No 31 of 2000) and municipal planning and performance management regulations (2001). The district plans compliment and support the Cape Town SDF (2011) which is a central component of the IDP in terms of the Act. They provide guidelines for land use management and inform a Capital Investment Framework
- Development Facilitation Act (no 108 of 1996): its principles apply in the Western Cape and have informed the preparation of the CTSDF and District Plan
- National Environmental Management Act (107 of 1998): it has informed the preparation of the district plan and specifically the EMF component.
- National Environmental Biodiversity Management Act (Act 10 of 2004)
- National Heritage Resources Act (Act 25 of 1999)
- National Land Transport Act (Act 5 of 2009)
- Land Use Planning Ordinance (No 15 of 1985). Section 4(10) makes provision for the preparation and submission of structure plans to council for its approval. The purpose is to lay down guidelines for the future spatial development of the area to which it relates in such a way as will most effectively promote the order of the area as well as the general welfare of the community concerned.

2.2 Strategy and policy planning informants

2.2.1 National and regional planning informants

The District plan is developed and aligned to the CTSDF (2012) and as such is aligned to a range of national and provincial planning informants including:

- The policy directives of the National Spatial Development Perspective
- Provincial Growth and Development Strategy (2008)
- Provincial Spatial Development Framework (2009);

2.2.2 Metropolitan and district planning informants

The District plan is developed in a manner that is strongly aligned to the CTSDF (2012), seeking to detail its strategies and proposals at the district scale. Proposals regarding land development and public investment in space have thus been informed by:

- The spatial principles reflected in the CTSDF which should be used to guide decisions regarding the future development of Cape Town as reflected in Figure 2.1.
- The three spatial strategies of the CTSDF – which have been detailed through the district plan reflected in table 2.1:
- The spatial development policies and guidelines for land use management as detailed in the CTSDF.

Table 2-1: Key CTSDF strategies to achieve sustainable, equitable and managed growth

Strategy	Sub strategy
PLAN FOR EMPLOYMENT AND IMPROVE ACCESS TO ECONOMIC OPPORTUNITIES: To improve the accessibility of people to urban opportunities, the City must adopt an integrated approach to land use planning, economic development and transport	• Promote inclusive shared economic growth and development • Address spatial economic imbalances • Establish an integrated city-wide public transport system that supports the

operations. Spatial planning will have a limited impact on economic growth and development unless the key drivers of growth are recognised and land and infrastructure are made available to guide and support economic investment and facilitate specialisation in desirable city locations. To this end, the City must ensure that it remains competitive and capitalises on existing and future sectoral comparative advantages to promote economic integration and efficiency. A clear spatial logic is necessary to inform economic investment and accommodate freight and logistics demands and improves access to economic opportunities.	accessibility grid • Integrate land use, economic and transport planning. • Support the rationalisation, upgrade and/or development of economic gateways, and manage land uses around the appropriately.
MANAGE URBAN GROWTH AND CREATE A BALANCE BETWEEN URBAN DEVELOPMENT AND ENVIRONMENTAL PROTECTION: To put Cape Town on a more sustainable growth path the City needs to protect and enhance its exceptional natural and rural environments. New urban development should be directed towards locations where its impact on critical biodiversity areas, wetlands and agricultural areas will be minimised. The City needs to promote a compact and efficient form of urban development. Densification must be promoted in appropriate locations in order to improve economies of scale and increase thresholds required for public transport. Urban expansion should be managed and ensure effective and efficient use of the city's resources. Planning decisions must be balanced, weighing the competing and conflicting demands of different interests in order to arrive at an optimum level of consensus to ensure short, medium and long term social equity, economic efficiency and environmental sustainability.	• Facilitate urban development • Support incremental development processes • Encourage a more compact form of development • Appropriately protect the citizens of Cape Town from hazardous areas/activities • Appropriately manage urban development impacts on natural resources critical biodiversity networks • Make efficient use of non-renewable resources] • Protect and enhance the city's rural environment
BUILD AN INCLUSIVE, INTEGRATED, VIBRANT CITY: The City must promote integrated settlement patterns in existing and new residential areas to accommodate Cape Town's growing population and redress social and land use fragmentation. An inclusive, integrated and vibrant city requires that basic services, social facilities and public open spaces are available and accessible to everyone. The City needs to promote equal opportunities, improve the quality of living environments, and reduce the levels of crime. Cape Town's heritage must be respected, protected and enhanced and a network of great destinations and public spaces should be established.	• Transform the apartheid city • Proactively support publicly-led land reform and new housing delivery • Encourage integrated settlement patterns • Enhance the unique sense of place and quality of built form of Cape Town • Enhance the value of heritage resources and scenic routes • Promote accessible, city wide destination places

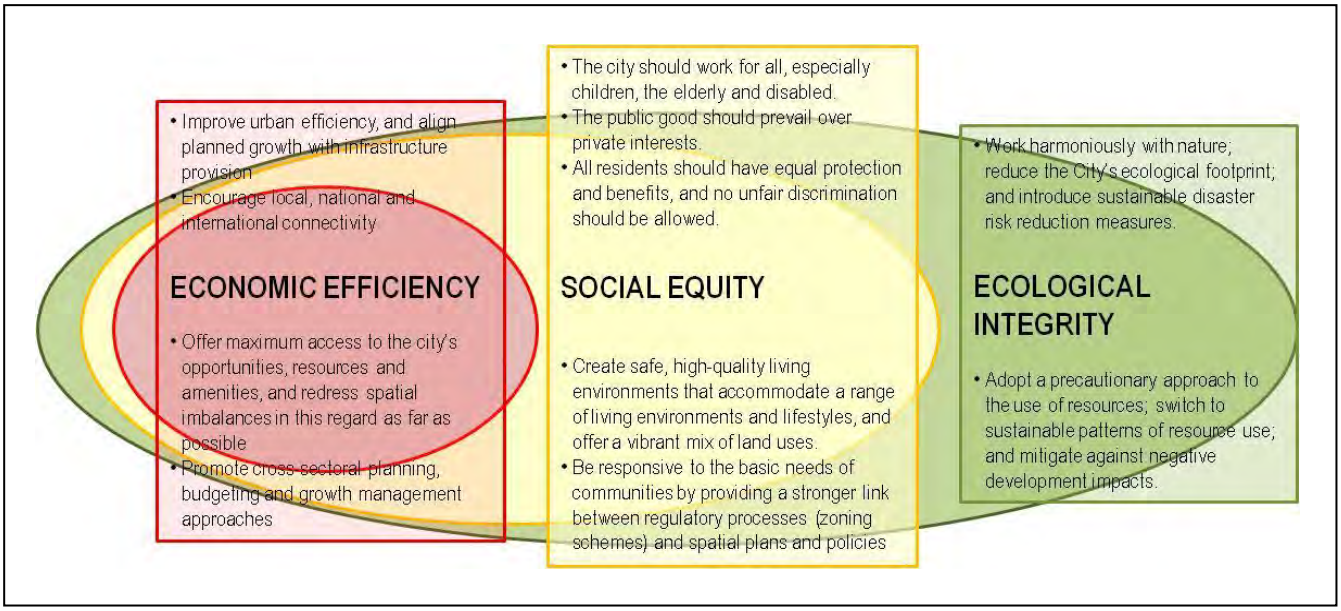


Figure 2-1: PSDF and City spatial development principles

Furthermore, as part of the preparation of the District Plan for Blaauwberg, several key metropolitan and district level plans have been reviewed and served as informants. These include the following:

a) Scenic Drives Network

Scenic drives provide a means of preserving and experiencing prime portions of Cape Town's natural and cultural landscapes. A network of Scenic Drives across the metropolitan area has been identified. A few of these routes fall within the Blaauwberg district and are subject to specific guidelines and regulations.

b) Cape Metropolitan Area Guide Plan (1988) - (portions applicable to the Blaauwberg district)

The Cape Metropolitan Area Guide Plan applies only to the central and southern portions of the district with the majority of the plan applying to the broader Cape Metropolitan Area. The areas of the Blaauwberg district detailed in the guide plan are largely developed with proposals in the guide plan generally having been realised.

c) Rural Management Framework for the City of Cape Town (2002)

The aim of this policy was to introduce a consistent and sustainable basis for managing the Cape Metropolitan Area's (CMA) unique rural areas (i.e. areas outside the urban edge), with specific objectives as follows:

- To establish principles on which the management of the City's rural areas should be founded
- To develop a spatial framework for the rural areas of the City of Cape Town, that compliments the MSDF
- To formulate a set of management guidelines for the City's different rural sectors
- To set out procedural guidelines for the compilation of local area action plans for specific rural precincts and/or rural activities

The Rural Spatial Framework component of the policy focuses on the following key strategies:

- Accommodation of all urban development pressures inside the urban edge and strict prevention of urban intrusion into the rural hinterland.
- The containment of rural settlement growth within existing settlement boundaries.

- Rehabilitation and protection of Cape Town's unique rural environmental qualities (i.e. ecological, cultural and scenic) and the spatial integration of conservation areas so as to establish an overall "green structure" to serve as long term building block of a regional city.
- Protection of the established and emerging farming areas in and around the city, and the opening up of opportunities for new and emergent farmers.
- Diversification and intensification of rural activities and land uses (e.g. eco- and agro-tourism ventures)
- Development of rural gateways to the city.

In terms of specific proposals related to the Blaauwberg District the Rural Spatial Framework identifies a large portion of the district as the Blaauwberg Rural Development Area (BRDA). Broad land use guidelines are proposed for the BRDA which is aimed at accommodating space extensive uses and support facilities. In terms of rural settlements, the framework identifies the need to maintain and reinforce existing settlements with new settlement formation not being supported. As part of this approach, it is suggested that a settlement edge be demarcated around Pella.

d) Northern Metro Urban Edge Study, Urban Edge Report (2001)

This study formed part of the series of urban edge studies, which set out to demarcate a metropolitan-wide urban edge for Cape Town with the aim of containing urban sprawl and protecting valuable surrounding landscapes and resources. In terms of the Blaauwberg district, recommendations related to the Blaauwberg sub-region are contained in the Northern Metro Urban Edge Study. The plan identifies an urban edge for the northern growth corridor with specific management zones identified which include:

- Bloubergsvlei Infill Area
- Melkbosstrand
- Blaauwberg Conservation Area
- Blaauwberg Rural Periphery
- Diep River MOSS

Guidelines are proposed for these management zones. In addition overall management guidelines for the urban edge are proposed, which particularly focus on guidance for managing the urban fringe area. Urban edges for rural settlements and Melkbosstrand are not dealt with as part of this study, but are recommended as further pieces of work that should be pursued.

This study is an important informant to the district plan in terms of managing the growth of the district. It is important to note that since the council approval of the Urban Edge Report, the City has reviewed certain sections of the proposed urban edge line. In terms of the Blaauwberg district the review impacts on the portion of the urban edge line that relates to the BCA, which has been amended to align with the latest BCA proposals. The district plan contains the latest urban edge proposals in this regard.

e) Melkbosstrand Urban Edge Study, Urban Edge Report (2001)

This study formed part of the series urban edge studies set out to demarcate a metropolitan-wide urban edge for Cape Town with the aim of containing urban sprawl and protecting valuable surrounding landscapes and resources. Melkbosstrand was originally excluded from the Northern Metro Urban Edge Study, but the need for a Melkbosstrand urban edge was identified as part of the study. The Melkbosstrand Urban Edge Study therefore follows the recommendation of the Northern Metro Urban Edge Study and defines an urban edge for Melkbosstrand. The urban edge is relatively conservative due to the unique context of Melkbosstrand.

In addition to the edge, the following management zones with related guidelines were identified:

- Existing Urban Area
- Koeberg Private Nature Reserve
- Melkbosstrand Fringe

- Urban Infill Area
- Atlantic Beach Golf Club and Estate
- Kleine Zoute Rivier Smallholding Area
- Sout River Conservation Area
- R27 Route
- Rural Area
- Proposed Primary Conservation Zone (PCZ) of the Blaauwberg Conservation Area (BCA)
- Proposed Conservation Interface Zone (CIZ) of the Blaauwberg Conservation Area (BCA)

This study is an important informant to the district plan in terms of managing the growth of the district. The district plan indicates the urban edge for Melkbosstrand as reflected in this study.

f) Draft Urban Edge Plan: Atlantis, Mamre, Pella, Philadelphia and Klipheuwel (2008)

This policy delineates urban edges for the settlements in the City's rural periphery. In terms of the Blaauwberg district, this includes Atlantis, Mamre and Pella. This policy guides the urban edges indicated in the district plan.

g) Atlantis and Environs Guide Plan (1981)

The Atlantis and Environs Guide Plan applies to the majority of the Blaauwberg district and was approved in terms of section 6A of the Physical Planning Act, 1967 (Act 88 of 1967). In pursuance of the apartheid government's policy of deconcentration, the National Physical Development Plan made provision for a development axis along the West Coast between the Cape Metropolitan Area (CMA) and Vredenberg-Saldanha. In support of this policy, the plan proposes that development in the direction of Vredenberg – Saldanha should be stimulated on a large scale through the provision of infrastructure at Atlantis. The plan details the township development of the Bloubergstrand/Melkbosstrand area, and of Atlantis including proposals for residential and industrial areas as well as recreational areas located along the coast.

The proposals contained in the plan are not consistent with more recent policy positions relating to national government policy, the urban edge, the Blaauwberg Conservation Area and the Cape West Coast Biosphere Reserve (CWCBR), and as a result is deemed to be outdated and should be replaced by the Blaauwberg District Plan.

The safety requirements relating to Koeberg contained in the document have been superseded by more recent National Nuclear Regulator (NNR) regulations.

h) Draft Blaauwberg Spatial Development Plan (2002)

The Blaauwberg Spatial Development Framework (BSDF) was originally intended as the Spatial Development Framework (SDF) component of the former Blaauwberg Municipality's IDP, as legislated by the Local Government Municipal Systems Act (Act 32 of 2000). It was agreed that with additional work, the Atlantis Growth Corridor Management Plan (2000) (AGCMP) could be converted into the Blaauwberg Spatial Development Framework (BSDF). The AGCMP focussed on the development of the Northern Corridor and the extension of Koeberg Road to the north along the railway line as proposed in the Bloubergsvlei Sub-regional Plan (1998).

Subsequent to the above, the 7 MLCs were amalgamated into the Unicity. In light of this, the purpose of the BSDF shifted and rather aimed to provide a spatial plan of a more detailed nature that could inform and align with the City of Cape Town's SDF. The intention was to approve the plan as a structure plan in terms of the Land Use Planning Ordinance, No 15 of 1985 (LUPO) and in order to prevent any confusion, its name was change to the Blaauwberg Spatial Development Plan (BSDP).

The plan promotes the use of nodes, activity corridors and activity streets to form the basis for the spatial structuring of the area. The method of planning aims to create the preconditions for these structures to take root. This incorporates the use of high-density, mixed-use development along linkages to encourage activity corridors and streets. The success of most of the proposals contained

in the plan, are based on an efficient public transport system. A number of proposals for extending and improving road networks are made, with the intention of reducing congestion and improving the integration of the area with the greater Metropole.

The BSDP identifies two main development corridors as structuring elements to the area, namely the Koeberg Road Corridor and the Northern Corridor. Both of these corridors are planned on the assumption that the Atlantis rail line will be upgraded to cater for passenger transport. The use of the rail line for public transport is seen as the major structuring element for the study area.

i) Table View North Structure Plan (1991)

This plan is an approved statutory document in terms of section 4(6) of LUPO. The key structuring elements of the plan include a proposed activity spine and open space and nature areas.

- The plan proposes the majority of the area for single residential development with higher density residential development located on the edge of the proposed open space network and along the activity spine.
- Mixed use development is proposed to reinforce the activity spine, which links the Bayside Centre with the proposed rail station on the Atlantis rail line and continues north along the rail line.
- A hierarchy of activity centres are proposed along the activity spine.
- Most of the land east of the railway is proposed for industrial use.
- The Diep River and Potsdam Outspan are proposed as nature areas.

This plan is considered to be outdated and should be replaced by the Blaauwberg District Plan.

2.2.3 Local Area Planning Informants

In addition to the above district scale policies and plans, there are a number of local area plans that have relevance to the district. These plans have been considered to carry through any relevant and scale appropriate proposals into the district plan.

These plans include the following:

- BCA: Blaauwberg Conservation Area: Development and Management Plan (2000)
- Diep River Management Plan (1999)
- Klein Dassenberg Smallholding Area Development Framework (2002)
- Koeberg Road Management Strategy (2002)
- Management Strategy for Blaauwberg Road (1999)
- Zoarvlei Management Plan (1999)
- Atlantis Coastal Zone Spatial Development Framework (1999)
- Bosmansdam Road Management Strategy (2001)
- Draft Blaauwberg City Integrated Development Framework (2000)
- Atlantis Town Regeneration Project: Draft Spatial Development Framework (1999)

3. KEY SPATIAL STRATEGIES: THE CONTEXT AND CENTRAL SPATIAL IDEAS

The District Plan gives effect to the key spatial strategies proposed by the CTSDF (2012) at a district scale. These strategies are used as a basis for organising this chapter in relation to four key questions:

1. **What are the key spatial planning challenges facing the *Blaauwberg District Now***? Key issues are drawn from the *Blaauwberg District Spatial Development Plan: Baseline Document,* which provides detailed information on the state of the district.
2. **What Action is needed to address these challenges**? This includes an articulation of a number of spatial objectives (both in terms of the role of the Blaauwberg District in the City and at an intra-district level) which aim to address the key issues identified.
3. **What are the general structuring elements and spatial concepts** proposed by the CTSDF (2012) and district plan to contribute to addressing those challenges.
4. Associated with these structuring elements and spatial concepts, what are the **central spatial ideas** around which proposals for the future spatial development of the Blaauwberg District will be built?

The chapter concludes by bringing together the ideas into a spatial vision and a composite spatial concept for the Blaauwberg District.

3.1 Strategy 1: Plan for employment and improve access to economic opportunities

This strategy focuses on encouraging economic development, both formal and informal, in accessible locations in order to ensure that the opportunities they offer can be accessed by a broader range of people.

3.1.1 Blaauwberg District now

This section identifies the key challenges in respect of economic activity and employment in the Blaauwberg District, giving consideration to the form and functioning of economic activity, the relationship between transport systems and (economic) land use, and reflecting on accessibility of economic opportunities in the district.

A number of issues require consideration in respect of the Blaauwberg District in relation to the City of Cape Town as a whole. These include the following:

Population:

- The Blaauwberg district has one of the smaller percentages of inhabitants of the eight City districts, about 7% of the City's total population. However, it is the fastest growing district (7.82% per annum); with most of the growth concentrated within the new development areas of Sunningdale, Parklands and along the west coast as well as overcrowding occurring in areas like Du Noon and Doornbach.
- Employment: Most of the economically active people in the district are employed (77.9%), with 22.6% unemployed. However, in the more isolated outer lying towns, especially in Atlantis, as well as informal settlements, unemployment figures are higher and in some cases residents have to travel long distances to the urban core to seek work opportunities.

Socio-economic issues:

- Although the district covers a vast area and includes affluent areas along the Atlantic Coast, it also includes pockets of lower-income areas including informal settlements with poor access to amenities and other services - especially economic opportunities.

Economy and Development:

- Commercial activities are concentrated along Koeberg Road, Blaauwberg Road and Parklands Main Road as well as commercial centres located in relation to the intersection of major transport routes. In Melkbosstrand commercial activities are limited to the CBD area and 6th avenue. In Atlantis, the majority of commercial activities take place in the Atlantis CBD.
- The outer lying rural settlements within the district (Atlantis, Mamre and Pella) are some distance from the urban core and district growth areas and have not been subject to the same growth pressures as the southern areas of the district (e.g. Parklands). These areas are in dire need of investment and job creation as unemployment figures are high and members of these communities are generally forced to travel long distances to the urban core to seek work opportunities.
- Illegal small businesses have located within the Tableview and Parklands areas along residential connector routes that experience high traffic volumes such as Wood Drive and Raats Drive.
- The district includes some of the most important industrial areas in the city, e.g. Killarney Gardens, Montague Gardens and Paarden Eiland. Significant industrial land exists in the Atlantis industrial area; however take up of these opportunities has been limited.

Movement:

- The Blaauwberg district is characterised by a high number of discontinuous east-west linkages, which result in congestion on the north-south routes, particularly at intersections with the N7 and N1. The rapid pace of development in recent years has added further to the congestion as more people settle in the area.
- Public transport services in the area are limited making connectivity to other parts of the city difficult. This has the dual impact of residents in the more affluent areas of the district tending to use private cars as a means of commuting between residential areas and places of employment such as the city centre and Bellville, and placing a long and costly commuting burden on lower income communities, particularly in the outer lying towns of Atlantis, Pella and Mamre. The implementation of the IRT system has begun to assist in beginning to addressing this issue.

3.1.2 What action is needed?

The following spatial objectives are aimed at addressing key spatial challenges and are relevant to the district in relation to the economy and movement networks of the City as a whole. They include:

Create a more efficient movement system:

- Create a system of continuous east-west linkages that connect coastal areas to the infrastructure corridor in the east of the district; lessening dependence on oversubscribed north-south routes and improving movement within the district.
- Improve public transport to create a more efficient movement system within the district and improve connectivity between the district and the rest of the city thereby facilitating access to economic opportunities.
- Reinforce lower order structuring routes (N/S and E/W) to create local level grid systems, thereby improving internal accessibility and helping to integrate activities.

Attract economic investment to the district:

- Explore innovative ways of attracting investment to the outer lying towns in the district, particularly Atlantis, including the release of publicly-owned land for development.
- Promote the intensification of land uses (where context appropriate) along major development routes and activity routes which link the district to the rest of the city.

Promote intensification along public transport corridors including:

- The Atlantis corridor refers to the north-south infrastructure corridor which includes Parklands Main Road extension, the Atlantis rail line, and the M12 development route. Intensification along this corridor is promoted as a means of creating economic opportunities, supporting public transport and making effective use of infrastructure such as the rail line. Intensity should vary along the length of the route, with more intense development located at the intersection of major routes and in relation to public transport interchanges. The corridor

provides significant opportunity for residential (including a range of housing opportunities), commercial and industrial development.

- Opportunities exist for intense, mixed use development along parts of Koeberg Road, taking advantage of the exposure the route offers and in the process reinforcing public transport.
- The Atlantis town centre is considered to be underdeveloped. Intensification of commercial development with possible opportunities for mixed use development, particularly in relation to IRT infrastructure, will assist in improving the urban environment.

3.1.3 Spatial concepts and structuring elements

Spatially, there is a need to ensure that the movement system provides convenient access to jobs and other opportunities. Furthermore, there is a need to concentrate employment in areas that are convenient and easy for people to access. In this regard, several spatial concepts and structuring elements are significant in thinking about the spatial organisation of the City and district:

a) The multi-directional accessibility grid

The aim is to set up a grid of accessibility that facilitates convenient access and multidirectional movement between the district and other parts of the city ("primary accessibility grid") and within the district ("secondary accessibility grid") which will feed the primary grid.

This grid will comprise a hierarchy of routes which provide varied, but complimentary roles in terms of accommodating a continuum of mobility and accessibility functions.

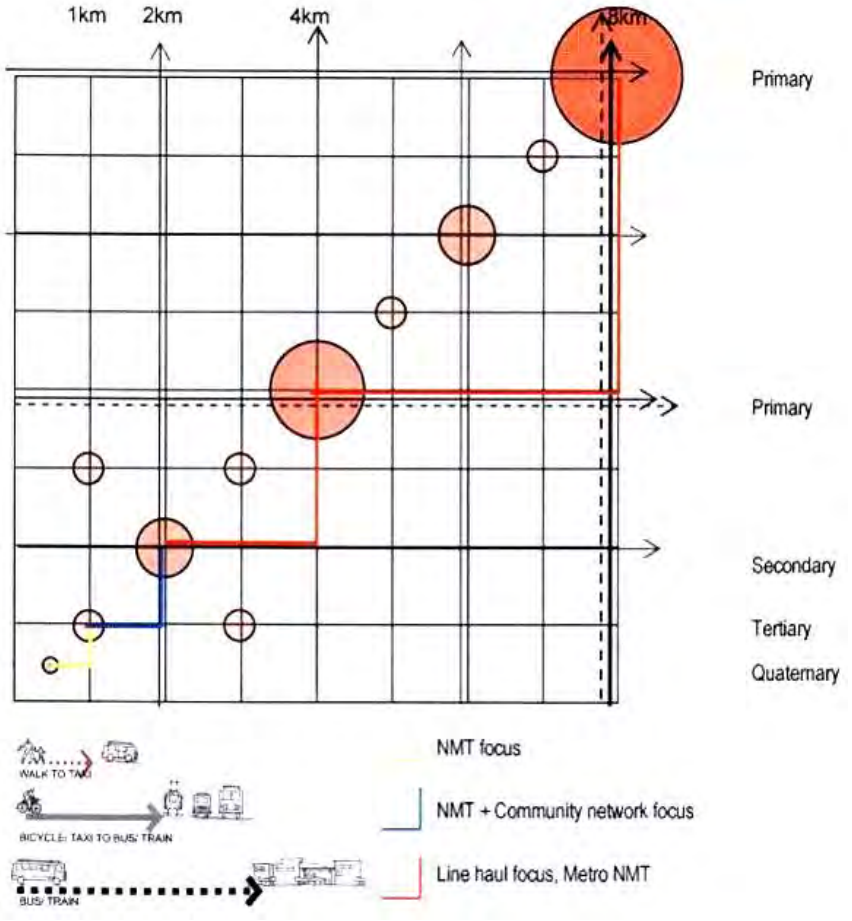


Figure 3-1: Conceptual multi-directional accessibility grid

The **primary accessibility grid** incorporates:

- **Activity Routes:** Activity routes are characterised by strip and/or nodal urban development along sections of the route. Activity routes are generally supported by a mix of land uses and higher density urban development. Activity routes are characterised by direct access and interrupted movement flows, especially at bus and taxi stops and traffic lights.

- ***Development Routes*:** Development routes have a greater mobility function than activity routes. Mixed land use and higher-density development tend to be nodal, with access provided at intersections and generally linked to parallel and connecting side routes. Development routes may include short stretches of activity route-type development.

The primary accessibility grid is supported by a system of mobility links, which play a key role in reinforcing urban structure and include:

- **Urban freeways:** Urban freeways fulfil a mobility function, and do not permit direct accessibility to abutting land uses. The high connectivity provided by direct freeway/expressway connections tends to attract manufacturing, warehousing, major retail and industrial land uses. These opportunities tend to be realised around key intersections / off ramps and roads running parallel or linked to urban freeways.
- **The rail network:** the rail network provides for mobility over longer trip distances. The stations supporting the rail service are primary points of accessibility, particularly when associated with areas of high road based accessibility and can generally support intense concentrations of activity and medium to high land use densities.

The **secondary accessibility grid** incorporates:

- **Activity Streets:** Activity streets are characterised by strip and/or nodal urban development along sections of the route, although generally of lower intensity than typically found on activity routes. Activity streets are generally supported by a mix of land uses and medium-higher density residential development. Activity streets are characterised by direct access and interrupted movement flows, especially at bus and taxi stops and traffic lights.

- **Other Structuring Routes**: Routes which provide structure (ordering land use configuration and intensities) to local areas and may accommodate a mixed activity / mobility function, but their role in accommodating activity is less intense than activity routes/streets.

The secondary accessibility grid is supported by a system of lower order mobility links which may include:

- **Connector route**: Connector routes connect different areas of the city and are typically characterised by high volumes of fast-moving traffic. In some instances, direct access to abutting land uses and residential properties is provided along connector routes.

STRATEGY 1 - THE CENTRAL SPATIAL IDEAS

a) Blaauwberg District: Accessibility Grid

- **The Atlantis Corridor:** The Atlantis Corridor is the major structuring element in the district that begins in the south of the district as Koeberg Road and the Atlantis rail line and then extends north of the Diep River as the N7, M12, Atlantis rail line and Parklands Main Road extension. This system does, and will provide access to employment opportunities, a range of housing opportunities as well as public transport and higher order public facilities.

- **Development of East West Links:** Creating a system of continuous east-west linkages that connect coastal areas to the Atlantis corridor in the east of the district is critical to lessen dependence on oversubscribed north-south routes and improve movement within the district. In the long term, this would include the construction of the proposed R300, which would connect the metropolitan node of Bellville, and the south east of the City, with the district.

- **Mobility Network:** A number of north-south and east-west routes form the backbone of the mobility network in the district that is reinforced by the IRT system. As the IRT system becomes operational it will greatly improve access to economic opportunities and connect disparate areas of the district.

The hierarchical, multidirectional accessibility grid envisaged for Cape Town lays the foundation for the routing and service design of an Integrated Public Transport Network (IPTN) intended to place over 85% of the city's population within 1 km of a high-quality public transport system. The IPTN will inform a hierarchy of public transport services relating to the accessibility grid, including:

- A **rail service** that provides a high-performance, high-volume and safe public transport service, which will be the preferred mode of choice of long-distance commuters. Conceptually, this service should be provided at 8-16km intervals on a city-wide to district level - forming part of the *Primary* tier of the accessibility grid.
- A **road based trunk service**, provided by articulated and standard buses on dedicated and semi-dedicated right-of-way infrastructure that offers an 18-hour frequent and rapid service along major metropolitan and district level roads, and along development and activity routes – forming part of the *Primary* tier of the accessibility grid.
- A **community (feeder and distribution) service**, at 4-8km intervals, provided by standard buses and smaller vehicles, that feeds into the trunk bus and rail services. The community service will operate at a district to inter-suburb scale, along district-level activity routes and streets – forming the *Secondary* tier of the accessibility grid.
- **Pedestrian and cycle lanes** should be provided along public transport routes and around public transport stops, stations and interchanges to facilitate safe and convenient access to public transport services – forming the *Tertiary and Quaternary* tier of the accessibility grid.

Note: The route designation reflected above does not replace the City's Hierarchical Road Network Classification system, nor is it intended to run in parallel as a duplicate classification system. Annexure E describes the relationship between the CTSDF / district plan route designations and DoT, the PSDF and the City's hierarchical road classification network.

b) Areas of land use intensification

The city's intention is to encourage land use intensification along the accessibility grid to ensure that the opportunities they offer can be accessed by a broader range of people (see Table 3.1). The process of land use intensification refers to achieving a greater spectrum of mixed uses (commercial, industrial and residential) through the increased use of space, both horizontally and vertically, in accessible, high-opportunity locations. Employment-generating activities, retail development, social

facilities, public institutions and intensive mixed-use and residential development should be encouraged on and adjacent to the accessibility grid, particularly the primary accessibility grid. The spatial organisation of development in the areas of land use intensification can take a variety of forms, including development corridors, strip development and urban nodes.

- **Development corridors**: Development corridors are broad areas of high intensity urban development centred around activity and development routes. They are characterised by a dynamic, mutually supporting relationship between land use and the supporting movement system. Development corridors are generally supported by a hierarchy of transport services which function as an integrated system to facilitate ease of movement for private and public transport users. Corridor development is focused predominantly on activity / development routes serviced by mass rapid public transport services (i.e. rail or BRT); however, the system of routes may serve different functions, with some routes combining route functionality in terms of accessibility and mobility. Figure 3-2 shows the basic elements of development corridors, including activity routes, passenger rail, stations, modal interchanges and freeways/expressways. The combined operational capacity of the public and private transportation system supports a mix of land uses, and enables the development of medium and high levels of land use intensity.

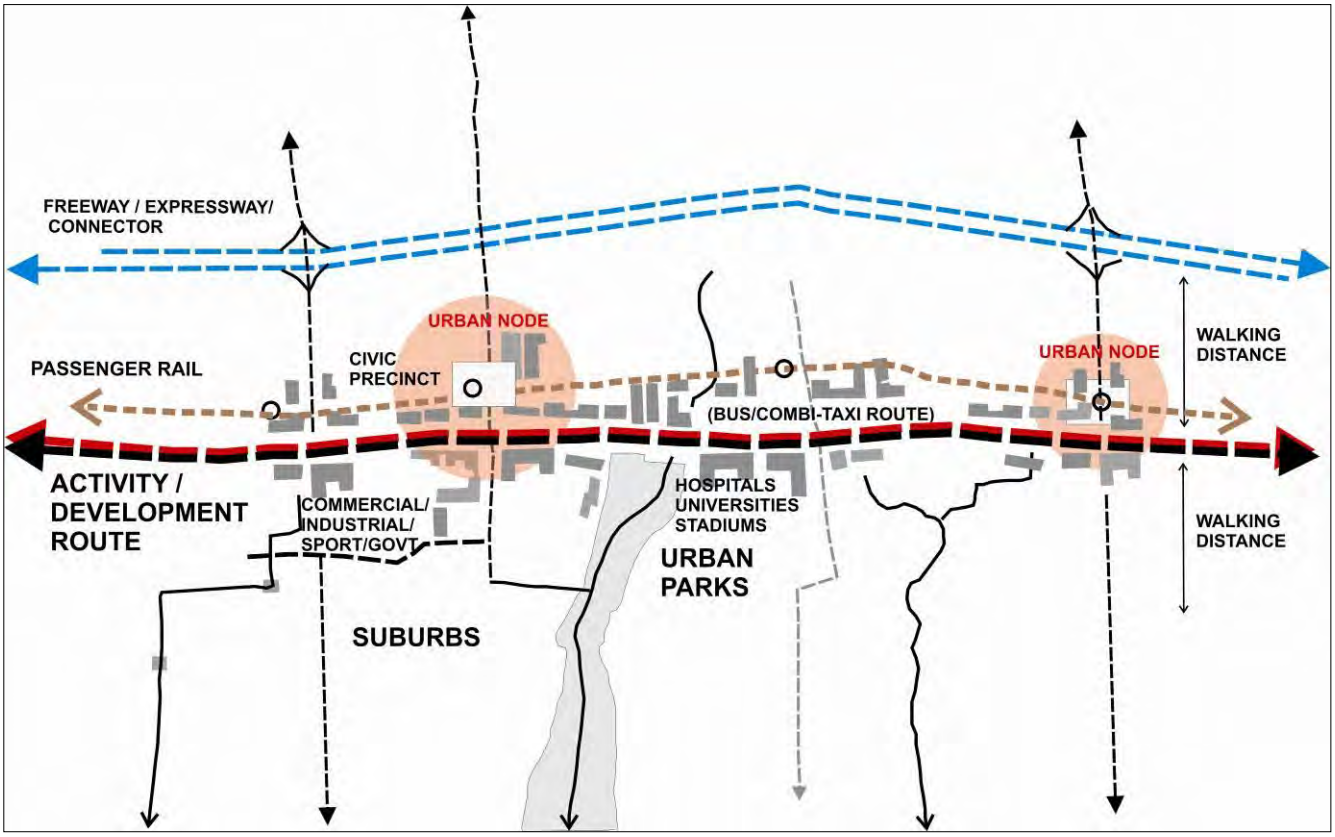


Figure 3-2: Conceptual development corridor

- **Urban nodes**: Urban nodes are characterised by the intensity, mix and clustering of activities or land uses (including commercial/business development and associated employment opportunities, higher-order services and higher residential densities) at points of maximum accessibility, exposure, convenience and urban opportunity. The generative capacity of an urban node is generally a function of the mix of land uses that it supports and its position in the accessibility grid (see Table 3.1). The role and function of urban nodes is differentiated in terms of scale (metropolitan, sub-metropolitan, district, local) based upon its structural position within the accessibility grid, and the intensity and mix of land uses it supports. Urban nodes are identified as areas for further land use intensification, clustering and reinforcing economic land uses, public services and high-density residential development.

Table 3-1: Alignment and hierarchy of the accessibility grid and areas of intensification

Accessibility grid	Span	Associated nodal development	Scale of operation	Areas of land use intensification
Primary	8–16 km	Metropolitan node	Citywide	Corridor/strip development/urban nodes
Primary	4–8 km	Regional node	Sub-metropolitan	Corridor/strip development/urban nodes
Secondary	2–4 km	District node	Inter-district significance	Strip development/urban nodes
Tertiary	1–2 km	Local node	Inter suburb	Usually urban nodes
Quaternary	0,5–1 km	Neighbourhood centre	Suburb	Usually nodal

- **Strip type development**: Strip development is characterised by intense and mixed use development often located along portions of activity routes/streets and development routes. Depending on the intensity of development, the width of the strip could range from half a street block to two or more blocks. The mix of activity along these strips may vary, with some areas having a stronger commercial/retail focus, while other may be characterised by dense residential development.

Other forms of intensification of development, on the accessibility grid (development routes, activity routes and streets) could be encouraged in a locally appropriate manner including:

- **industrial areas** where the changing of their nature is supported by the District plan;
- particular **business complexes** that are on the accessibility grid (development and activity routes / streets);
- areas associated with **transit stations** (**system of rail stations** and the **IRT trunk stations**) especially those which are a component of identified urban nodes. With regard to these areas, a typology of opportunities is proposed which considers the transport and land use role of the transit stations (rail and IRT trunk stations) and associated areas (comfortable walking distance from the station) in the broader urban system (see table below). Transit station areas that are associated with urban nodes as well as associated significant foot movement (based on their role in the transit system) are generally more likely to support more intense mixed use environments.

Table 3-2: Transit (Rail and IRT trunk) station precinct typology

Transit station area typology	**Land use character / role**	**Intermodal connectivity**	**Structural urban position**	**Example station**
Metropolitan station	High intensity land use mix (office, residential, commercial, civic and government)	Major intermodal connectivity and destinations	Generally associated with metropolitan urban node	Cape Town Station
Major urban station	Mix of office, retail, residential, commercial and public uses	Major intermodal connectivity	Generally associated with sub-metropolitan / district urban node	Wynberg Station
Employment station	Specific industrial / commercial uses and destination	Limited intermodal connectivity	Generally associated with industrial area.	Blackheath Station
Urban station	Local centre of activity, live, work, shop	Transit feeder station with parking	Generally associated with local urban node	Rondebosch station

Neighbourhood station	Primarily residential function.	Local transit feeder station with limited parking	Likely to reflect embedded position in urban fabric.	Harfield Station
Coastal station	Coastal amenity with surrounding residential / tourism / restaurant orientation.	Limited intermodal connectivity	Generally outlying areas with minor urban catchments.	St James Station

STRATEGY 1 - THE CENTRAL SPATIAL IDEAS

b) Blaauwberg District: Areas of land use intensification

- **The Atlantis corridor**: The Atlantis corridor refers to the north-south infrastructure corridor which includes Parklands Main Road ext, the Atlantis rail line, the M12 development route and the N7 in the north, and the Koeberg Road extension, Atlantis rail line in the south. Intensification along this corridor is promoted as a means of supporting public transport and making effective use of infrastructure such as the rail line. Intensity should vary along the length of the route, with more intense development located at the intersection of major routes and in relation to public transport interchanges. The corridor provides significant opportunity for residential (including a range of housing opportunities), commercial and industrial development.

- **A System of Urban Nodes**: A system of regional, district and local nodes is identified where intensification of land uses is supported. These nodes are generally associated with the intersection of major routes and public transport interchanges and present opportunities for increased economic opportunity due to levels of accessibility.

- **Atlantis infill and buffer strip:** Significant undeveloped public land holdings occur in Atlantis residential, commercial and industrial areas. Release of this land is required to facilitate economic development and create a more vibrant urban environment that will attract further development and create job opportunities. An opportunity for a strategic infill project of significant scale is offered by the Atlantis buffer strip, which could accommodate a range of uses.

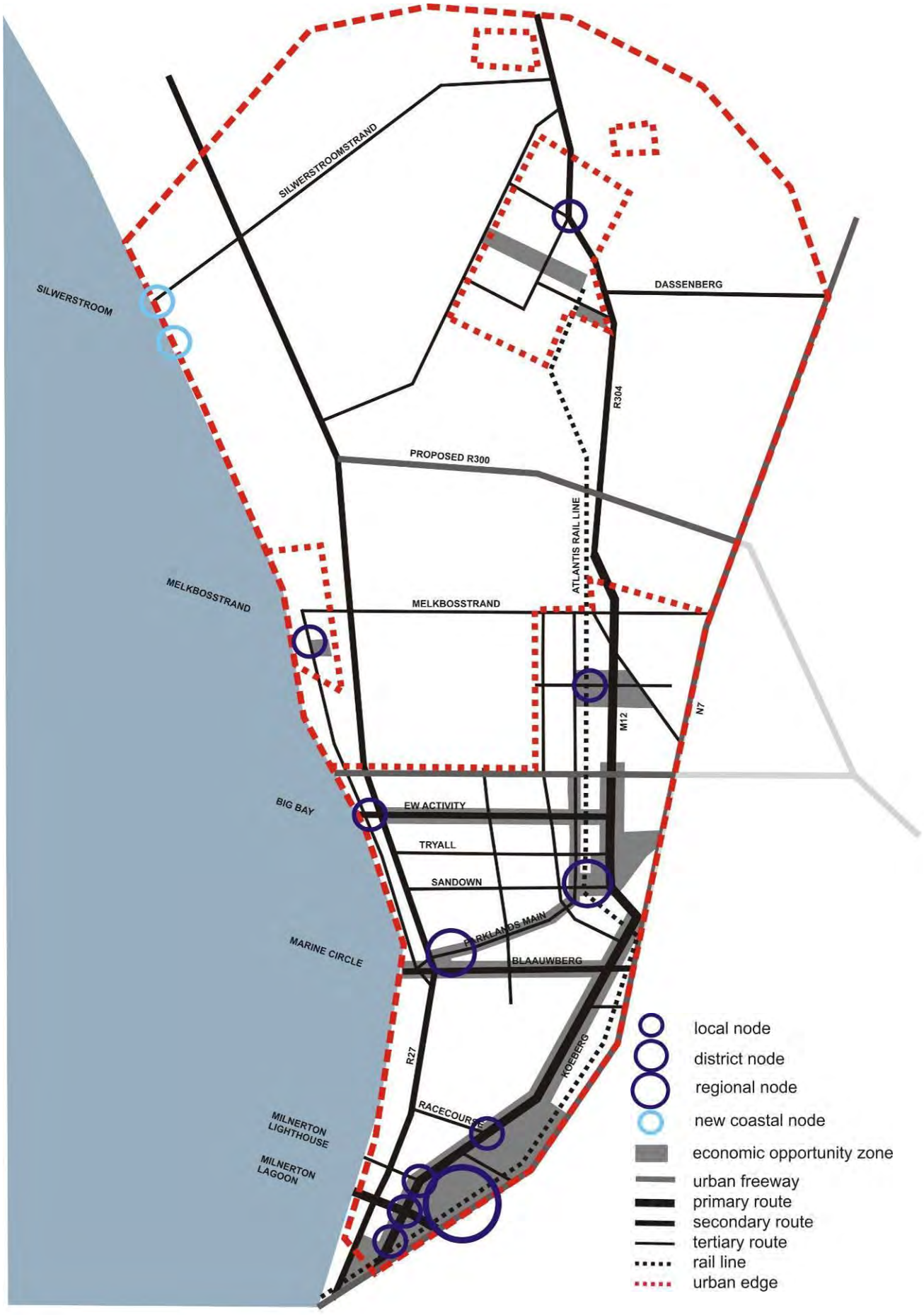


Figure 3-3: Blaauwberg district accessibility grid and areas for intensification

3.2 Strategy 2: Manage urban growth and create a balance between urban development and environmental protection

This strategy focuses on managing the pressures of urbanisation in a deliberate and coordinated manner and one that is environmentally sustainable.

3.2.1 Blaauwberg District now

A number of challenges are evident when considering the Blaauwberg District in relation to the City of Cape Town as a whole, and include:

- The district is identified as one of two major growth corridors for the city, accommodating a large proportion of city growth over the last decade and identified to accommodate a significant portion of the city's future growth.
- The district includes remaining tracts of some of South Africa's rarest vegetation types, namely Sand Fynbos and Renosterveld.
- The Koeberg Nuclear Power Station located near Melkbosstrand has a number of associated emergency evacuation requirements that impact on the extent and form of development that can be accommodated in the district.
- The Atlantic coastline presents an area of natural amenity with unique views of Table Mountain that is subject to development pressure.
- Vast areas of rural land are located in the district including extensive farms and smallholding areas. Whilst portions are actively farmed, a large proportion is the subject of private sector land banking and development speculation.
- Portions of the coastline and inland areas are susceptible to the effects of sea level rise which may impact on coastal development and infrastructure.

Within the district, there are also a number of challenges that distinguish some parts of the district from others in respect of the open space system and development pressure, including:

- The rural settlements of Atlantis, Mamre and Pella are located in the district. Whilst Mamre and Pella are historic Moravian mission stations, Atlantis was established under the previous apartheid government's policy of racial segregation and industrial decentralisation. These areas are underdeveloped and Atlantis in particular contains extensive undeveloped public land holdings. The settlements experience high levels of unemployment and crime.
- Parts of the district (e.g. Parklands, Sunningdale, Tableview, Big Bay) have been experiencing rapid growth, while other areas within the district in need of investment have been largely avoided by the market. This presents a challenge as market driven development is not catering towards the needs of a large portion of the district's population. The lack of publicly owned land within the major growth areas of the district, further limits the City's ability to deliver on public objectives such as providing for low-income housing and public facilities and creating integrated settlements. Entry level housing opportunities in this major city growth corridor are limited and subsidised housing opportunities to date have largely been limited to Marconi Beam, Du Noon and Atlantis. As a result, existing well located areas such as Du Noon and Marconi Beam experience overcrowding as a result of the development of backyards as more people try to access limited entry level housing opportunities.
- Although large-scale development has taken place, the creation of permanent employment opportunities (other than significant construction related employment opportunities) within the new development areas has largely been limited to retail and some commercial opportunities. This has implications for unemployment in the district, but also requires people to commute to work opportunities within the city centre (CBD) and Bellville.
- The majority of remaining undeveloped land within the urban edge is owned by a limited number of private entities, which has an impact on the scale of development taking place in the area. While developer contributions have contributed significantly to the development of new infrastructure needed for servicing new large-scale developments, the cumulative impact on existing infrastructure is a concern.

- The district is viewed as a major growth axis of the City. However, the undeveloped land parcels within the district contain some of the last remaining tracts of two of South Africa's rarest vegetation types, namely Sand Plain Fynbos and West Coast Renosterveld. From a biodiversity perspective, it is imperative that high conservation worthy remnants are protected and that ecological corridors are provided to allow for the movement of fauna and flora. This situation often leads to conflict between environmental and developmental objectives within the district. The challenge is therefore to create a balance between these competing needs to ensure the sustainability of the district, the environment and communities. The form and location of development therefore needs to happen in a way that allows for the provision and accommodation of the development needs of a growing City, but still ensures the sustainable conservation and management of valuable natural assets.

3.2.2 What action is needed?

The following spatial objectives are aimed at addressing key spatial challenges relevant at a city scale in relation to proactively managing the natural and rural environment and urban growth. They include:

- Guiding the phasing and location of growth within the district growth corridor in relation to citywide growth considerations including infrastructure provision.
- Directing growth away from key environmental resources and hazards in the district, including:
    - Sensitive coastal areas
    - Conservation and Biodiversity areas (BCA, CWCBR core areas, biodiversity corridors and fynbos remnants)
    - Agricultural areas (e.g. Klein Dassenberg smallholdings)
    - Koeberg Nuclear Power Station and relevant emergency zones
- Increasing the range of well-located housing opportunities available with the district, including publicly assisted housing, as a means of contributing to addressing the city's housing backlog.

The following spatial objectives are aimed at addressing the key spatial challenges related to specific areas within the district and are relevant in relation to proactively managing the natural and rural environment and urban growth:

- Ensure well located public land holdings in the district are used to leverage public benefit including housing opportunities and public facility provision.
- Release public land within urban edges for development.
- Integrate fynbos remnants within the urban edge into the urban fabric ensuring sustainable biodiversity conservation and providing key open spaces.
- Establish core conservation areas to meet biodiversity targets and act as district parks.
- Rationalise and upgrade the Atlantis open space system.
- Ensure development does not compromise the evacuation requirements of the Koeberg Nuclear Power Station.

3.2.3 Spatial Concepts and Structuring Elements

a) Natural Assets

Cape Town's natural assets and biological diversity are part of what makes Cape Town a unique and desirable place in which to live, work and play. Because people derive benefits from the natural environment in a number of direct and indirect ways, natural resources play an important role in shaping where and how the city develops. The recreational functionality and functional integrity and connectivity of ecosystems must be improved, and an interlinking network of linear parks with foot and cycle paths should be established to facilitate easy movement of fauna and flora. Urban development must respect the presence, role and function of natural assets, and should make the most of the possible benefits residents and visitors can derive from them. The CTSDF and district plan identifies the natural assets that are of value to the city, merit protection in the longer term, and/or where the impacts of development need to be carefully managed.

Informed by their underlying environmental significance (e.g. agricultural land, biodiversity areas), the natural assets are categorised, each demanding different management approaches:

- **Core 1**: Statutory conservation areas (biodiversity areas that are formally protected and managed); critical biodiversity areas; conservation priority zones; critical, irreplaceable and restorable biodiversity sites; public conservation areas and private conservation areas.
- **Core 2**: Ecological corridors; critical ecological support areas; significant coastal and dune protection zones, major river corridors and waterbodies excluding waste water treatment works.
- **Buffer 1**: Rural areas, game and livestock farming areas and other natural vegetation areas that do not form part of the core areas, but are recognised as areas that could provide opportunities to establish biodiversity offsets. Essential utility service infrastructure may be located in buffer 1 areas.
- **Buffer 2**: Other ecological support areas, transformed game and livestock farming areas, and rural areas that do not form part of core 1 and core 2 areas. Essential utility service infrastructure, cemeteries outside the urban edge, and areas zoned public open space may be accommodated in buffer 2 areas.
- **Intensive agriculture** (**high potential and unique agricultural land)**: high potential and unique agricultural land worthy of long term protection given unique production, cultural and heritage attributes.
- **Intensive agriculture (agricultural areas of significant value):** agricultural areas of significant value given (1) existing use, (2) potential and emerging agricultural use due to new cultivation technology, availability of irrigation water, new varieties and crop types and the realisation of terroir qualities, and (3) food security.

This categorisation is consistent with the categorisation contained in the Provincial Spatial Development Framework (PSDF, 2009) and also the CTSDF (2012). The network of natural assets is further integrated and linked into the urban areas via a system of structuring open space (including parks, sports fields).

STRATEGY 2 - THE CENTRAL SPATIAL IDEAS

a) Blaauwberg District: Natural assets

- **The Blaauwberg Conservation Area and the Cape West Coast Biosphere Reserve:** Support the establishment of the Blaauwberg Conservation Area both as an important biodiversity conservation area as well as a metropolitan park with appropriate/sensitive recreational activities. As part of the Cape West Coast Biosphere Reserve, protect the Atlantis dune fields and associated biodiversity areas. Ensure north-south ecological corridors are maintained to allow for faunal movement and ecological processes.

- **River systems and green linkages**: The identified river corridors and ecological corridors provide important habitat protection and also fulfil an important linkage role between the various core conservation areas, ensuring an integrated green network in the district. This includes the Diep River system, Rietvlei, Milnerton Lagoon, Zoarvlei, Sout River, Silwerstroom Spring and related sensitive natural environments and flood prone areas. Active and passive recreational opportunities should form part of this open space system including a proposed district sports complex in the Parklands area.

- **Coastline and beaches:** The West Coast and associated beaches offer significant amenity to residents of the district and metropolitan area. Development on the coast should be nodal in nature to ensure the protection of the coastal environment and to limit the impacts of sea level rise.

b) Development edges

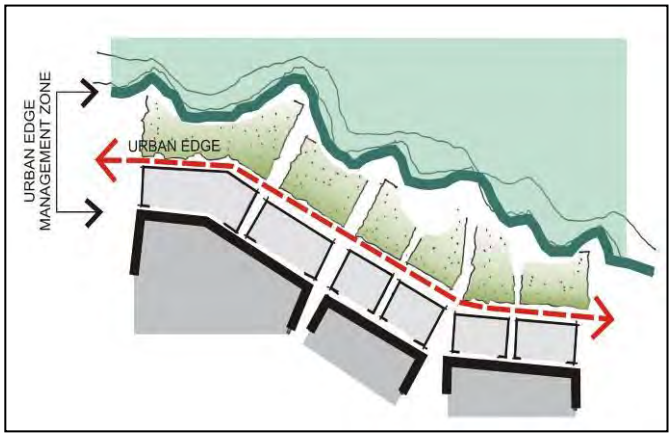
The spatial growth of the district will be managed through the use of development edges, and the identification of future urban growth areas.

Two types of development edges will be used to manage urban development: the urban edge and coastal edge.

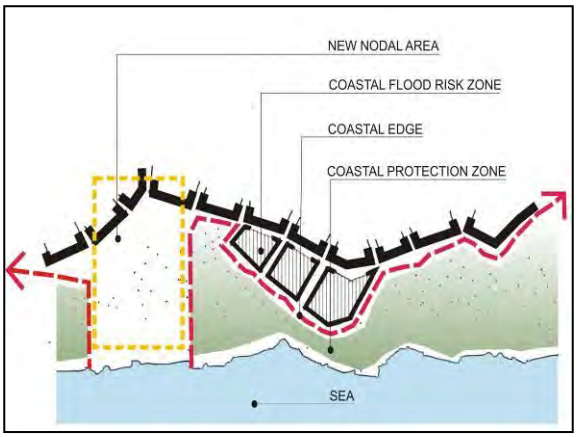
- The **urban edge line**: a medium to long-term edge line that has been demarcated to phase urban growth appropriately, or to protect natural resources. Spatial growth in the medium term (10–15 years) should be prioritised within the urban edge. In the longer term (15–50 years), the City will need to provide more undeveloped land for urban development, and the edge line will have to be adjusted on the basis of the city's growth direction.

- The **coastal edge line**: established to protect coastal resources, and to avoid hazards and financial risks pertaining to areas at risk of flooding.

Urban Edge



Coastal Edge



STRATEGY 2 - THE CENTRAL SPATIAL IDEAS

b) Blaauwberg District : Urban and coastal edge: The designation of edge lines is vital for the protection of environmental areas, for protecting human habitation and activities (re-sea storms, sea and riverine flooding, and veldfires) and for managing City growth.

c) Future urban growth areas

Urban development should be directed away from significant natural asset resource areas (e.g. nature and agricultural areas, aquifers) and hazards. It should occur as a priority within the existing footprint (such as development of underutilised infill sites or other forms of densification), and where it expands beyond this into areas of settlement / developmental opportunity that are appropriate for urban development. Future urban development should be as part of a phased, coordinated growth process associated with infrastructure provision (e.g. roads, stormwater, water, waste water, solid waste, and electricity services) as well as planning for the required range of social and community facility provision (e.g. health facilities, schools, libraries, parks and cemeteries).

STRATEGY 2 - THE CENTRAL SPATIAL IDEAS

c) Blaauwberg District: Future urban growth areas

- **Atlantis Corridor**: The Atlantis corridor is considered the main growth area of the district as there is significant vacant land available for development within the proposed urban edge within this corridor. Development should respond to the significant north-south transport infrastructure within this corridor including the Atlantis rail line, the proposed M12, proposed Parklands main road extension and the N7. Intensification of land uses should occur along this corridor particularly where these routes intersect with east-west linkages. The corridor provides significant opportunity for residential (including a range of housing opportunities), commercial and industrial development and should be prioritised for infrastructure provision.

- **Parklands/Sunningdale**: The Parklands/Sunningdale area offers significant growth opportunities, which should be linked to the Atlantis corridor and respond to IRT infrastructure provision in the area. Development within this growth area will be largely residential in nature, with mixed use and commercial development associated with significant east-west linkages and at the intersection of east-west and north-south routes.

- **Atlantis:** Whilst Atlantis is not considered a major growth area, there are significant residential and industrial infill opportunities available within the proposed urban edge which should be released for development. In addition, opportunities have been created through the amendment of the urban edge along Blombosch Road for private sector development to respond to the exposure offered by this route. This development should include a range of uses including commercial, residential and service industrial opportunities.

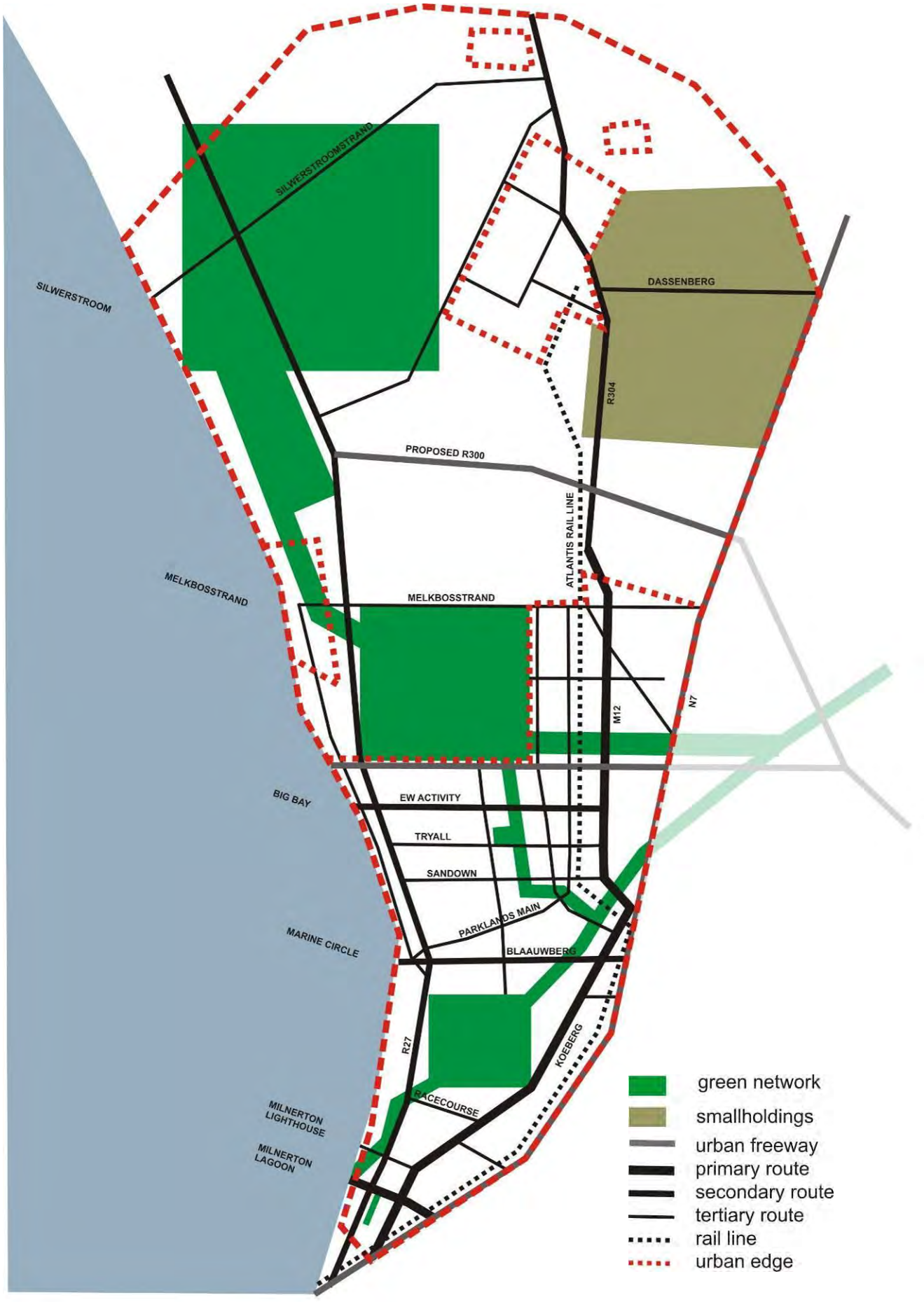


Figure 3-4: Blaauwberg district natural assets and urban growth

3.3 Strategy 3: Build an inclusive, integrated and vibrant City

This strategy focuses on transforming the apartheid city and encouraging more integrated settlement patterns. Furthermore, the intent is to enhance the quality and value of the qualitative aspects of the urban fabric and the unique aspects of the City and district for its people as well as those that visit the area.

3.3.1 Blaauwberg District now

A number of challenges are evident when considering the Blaauwberg District in relation to the City of Cape Town as a whole, and include:

- The Blaauwberg district is one of the least populated areas of the City, but the fastest growing, and as a result has not benefitted from the historical provision of metropolitan scale facilities. There are therefore a limited number of higher order public facilities to service the growing population and people are forced to travel far distances to access this scale of public facility. e.g. people from Atlantis access tertiary health facilities at Somerset Hospital in Green Point, a journey of approximately 50km with costly public transport opportunities.
- The district includes the apartheid planned settlement of Atlantis, which is spatially isolated from metropolitan opportunities and facilities due to distances from the urban core and limited access to public transport. The historical Moravian settlements of Mamre and Pella experience similar challenges. Furthermore, past changes in industrial policy and the more recent economic recession have resulted in disinvestment in the industrial areas of Atlantis and associated job losses.
- Due to the significant number of job opportunities provided by the industrial areas of Paarden Eiland, Montague Gardens and Killarney Gardens, and the limited number of entry level housing opportunities within these areas, job seekers are either forced to travel far distances from the southern parts of the City to access work opportunities in these areas, or locate in local settlements such as Joe Slovo, Marconi Beam, Doornbach and Du Noon, resulting in the existing conditions of overcrowding due to limited housing opportunities. This is reflected in an increase in informal dwellings between 2001 and 2008 from 5.3% to 8.5%. In addition, an increase in backyarding is evident. This trend has been most evident in Du Noon where backyarding has increased from 61 backyard dwellings in 2001 to 3551 backyard dwellings in 2008.
- Public land ownership within the current growth area, south of Morningstar, is limited. This negatively affects the ability of the public sector to provide housing opportunities. The result is that housing opportunities in this part of the district are limited to higher and middle income opportunities, as well as limited rental opportunities.

Within the district, there are also a number of challenges that distinguish some parts of the district from others in respect of access to public facilities and amenities, access to economic opportunities, as well as the general quality of the urban environment, including:

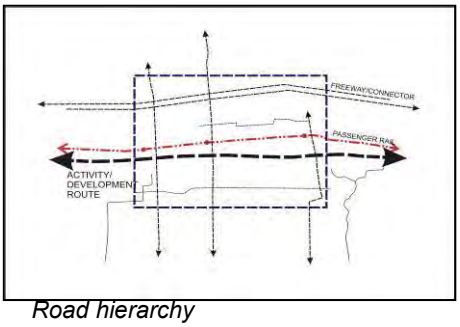
- Facilities within lower income areas such as Du Noon, Doornbach and Marconi Beam are generally oversubscribed and poorly maintained, with open spaces and sports fields within these areas under pressure from settlement encroachment in some parts and generally poorly maintained. The upgrade of open spaces and improving accessibility to higher order facilities such as Community Health Centres is urgently required to service these communities.
- In terms of quantity of facilities, Atlantis is well served, however the quality and location of facilities is not optimal and therefore does not meet all the community's needs. A poor relationship between open spaces and the built environment creates negative, dangerous spaces and further contributes to their neglect.
- Facility provision in Mamre and Pella is generally limited to lower order facilities due to the small sizes of these communities and their close proximity to Atlantis in order to access higher order facilities.
- Facility provision in the more recently developed areas north of Blaauwberg Road including Blouberg/West Beach, Big Bay, Parklands and Sunningdale, is largely privately funded (e.g.

private schools and hospitals). Public provision of facilities such as schools, sports fields, clinics etc. has to date been limited. As a result, public facilities are limited in these areas and largely restricted to passive open spaces or pocket parks, which has led to the community acquiring land for the provision of additional facilities (e.g. Parklands Sports Complex). In particular, there is a lack of district scale facilities to serve the broader community, resulting in existing facilities of this scale being oversubscribed in the broader area. The provision of public facilities is largely restricted to historically developed areas.

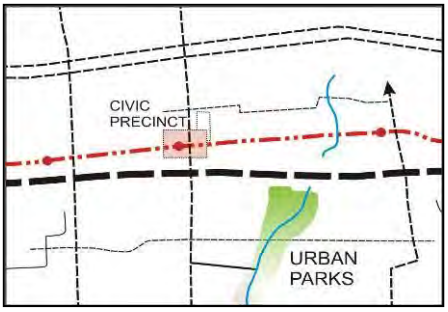
- Although the district is vast and mostly affluent, especially along the Atlantic Coast, it also includes concentrations of lower-income areas including informal settlements with poor access to amenities and other services - especially economic opportunities. These communities are spatially segregated through a lack of connectivity to and proximity to opportunities which are concentrated in more affluent areas.

3.3.2 What action is needed?

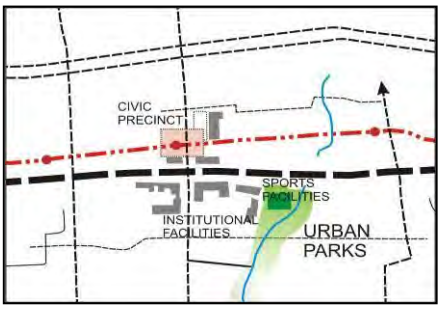
The following spatial objectives are aimed at addressing key spatial challenges in relation to building inclusive, integrated and vibrant living environments. They include:



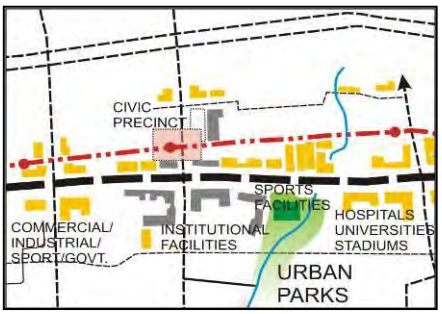
Road hierarchy



Interchange



Public investment



Private response

- Facilitating access to public facilities, economic opportunities and environmental assets by improving the efficiency of the public transport system through the implementation of the IRT system.
- Clustering higher order public facilities at points of high accessibility in relation to the accessibility grid and IRT trunk routes.
- Locating lower order local civic precincts in relation to local structuring routes and feeder public transport routes in proximity to areas of highest need.
- Upgrading and rationalisation open spaces in Atlantis to improve the functioning of the overall open space network and unlock development opportunities.
- Encouraging private investment in underdeveloped areas through the release of strategic public land holdings.
- Investing in creating a system of public places throughout the district that provide access to areas of significant amenity, creating spaces for communities to interact and experience the natural assets of the district; providing important relief from the urban environment.

3.3.3 Spatial Concepts and Structuring Elements

a) Civic Precincts

Social facilities and public institutions should be clustered in civic precincts, at the points of highest accessibility (the intersections of the grid). The hierarchy of the civic precincts will be determined by the hierarchy of the accessibility grid (see Table 3.1). The civic precincts that are of citywide significance will by and large be located at the intersection of the primary grid, such as the proposed Sandown Road civic precinct. The civic precinct will be the focus of public investment, and will create opportunity for private-sector investment in commercial, mixed-use and higher-density residential development. They will therefore be closely associated with urban nodes.

STRATEGY 3 - THE CENTRAL SPATIAL IDEAS

a) Blaauwberg District: Civic precincts

- **A hierarchy of civic precincts:** Reinforcement of a hierarchy of civic precincts distributed equitably across the district and located in highly accessible locations, particularly on public transport routes, including:
    - A proposed higher order civic precinct which offers facilities and services of metropolitan significance located adjacent to the future Parklands rail station which is located at the intersection of Parklands Main Road and Sandown Road. This precinct should include higher order civic amenities such as municipal offices, libraries, community health centre etc, thereby functioning as the main civic precinct for this portion of the district.
    - Establishment of new and reinforcement of existing, accessible local civic precincts that provide access to local level public facilities and services and which are accessible using public transport.

b) Destination places

A destination place is a node, landmark or location that forms a significant point or area of attraction, and is part of the identity of Cape Town and the district.

Table 3-3: Types of destination places

Destination place	Examples
Nature-based	Zoar Vlei, Riet Vlei, Blaauwberg Conservation Area, Atlantis Dunes
Built/heritage-based	Mamre, Pella
Coastal-based	Milnerton Lagoon, Marine Circle, Big Bay, Melkbosstrand, Silwerstroomstrand

STRATEGY 3 - THE CENTRAL SPATIAL IDEAS

b) Blaauwberg District: Destination places

- **Coastal Gateways**: Points of access are identified along the coastline which provide a series of access points to the coast for residents to take advantage of the amenity value offered by beaches. These gateways can accommodate large numbers of people and associated recreational and economic activities. A series of coastal gateways supports the notion of nodal coastal development and prevents coastal strip development and its associated negative environmental impacts.

- **Natural Assets**: Significant natural assets occur in the Blaauwberg district that offer amenity value to residents and which are of national and international conservation importance. These nature-based destination places function as the anchors to the integrated green network in the district. Opportunities exist for the establishment of active and passive recreational facilities within these areas.

- **Historical Settlements**: The historical Moravian settlements of Mamre and Pella offer a rich settlement and architectural heritage unique to the district.

c) The structuring open space system and critical public links

The structuring open space system reflects an interlinking network of parks, sports fields and green links for walking and cycling. This system provides structure to urban areas and provides for escape from the intense urban environment.

Critical public links are identified as a component of the broader non-motorised transport network creating links to significant destinations through the urban environment.

STRATEGY 3 - THE CENTRAL SPATIAL IDEAS

c) Blaauwberg District: Structuring open space system and critical public links

- **Other district structuring open space**: In addition to the district's major natural assets and associated green linkages, sports facilities, school grounds, golf courses, cemeteries and linear open spaces also contribute to the open space system of the district. The specific functions of each, as well as open space linkages between them, should be reinforced to support the greater open space system. These networks and associated linkages should be extended and integrated into new development areas in the district. In certain parts of the district including Tableview and Atlantis, existing structuring open spaces require maintenance and upgrading, and in some instances, rationalisation.

- **Critical Public Links**: Critical public links are proposed within the urban areas to ensure access and linkage to natural assets and the coastline. These generally relate to the promotion of NMT and pedestrian movement along these links. The critical public links proposed include the coastal link between the V& A waterfront and Melkbosstrand, as well as the link between the BCA and the Rietvlei along Wood Drive. The proposed north-south and east-west ecological corridors also provide important linkages within the urban fabric.

d) Integrated human settlement patterns

The promotion of integrated human settlement patterns is based on the qualitative aspects of the built environment as it pertains to the new growth areas of the City as well as upgrading of existing areas. In principle these areas should support the accommodation of a wider mix of residential options and income groups, as well as make provision for an appropriate provision of social (including civic precincts) and economic opportunities. The concept of the mixing of income groups within a settlement is illustrated below.

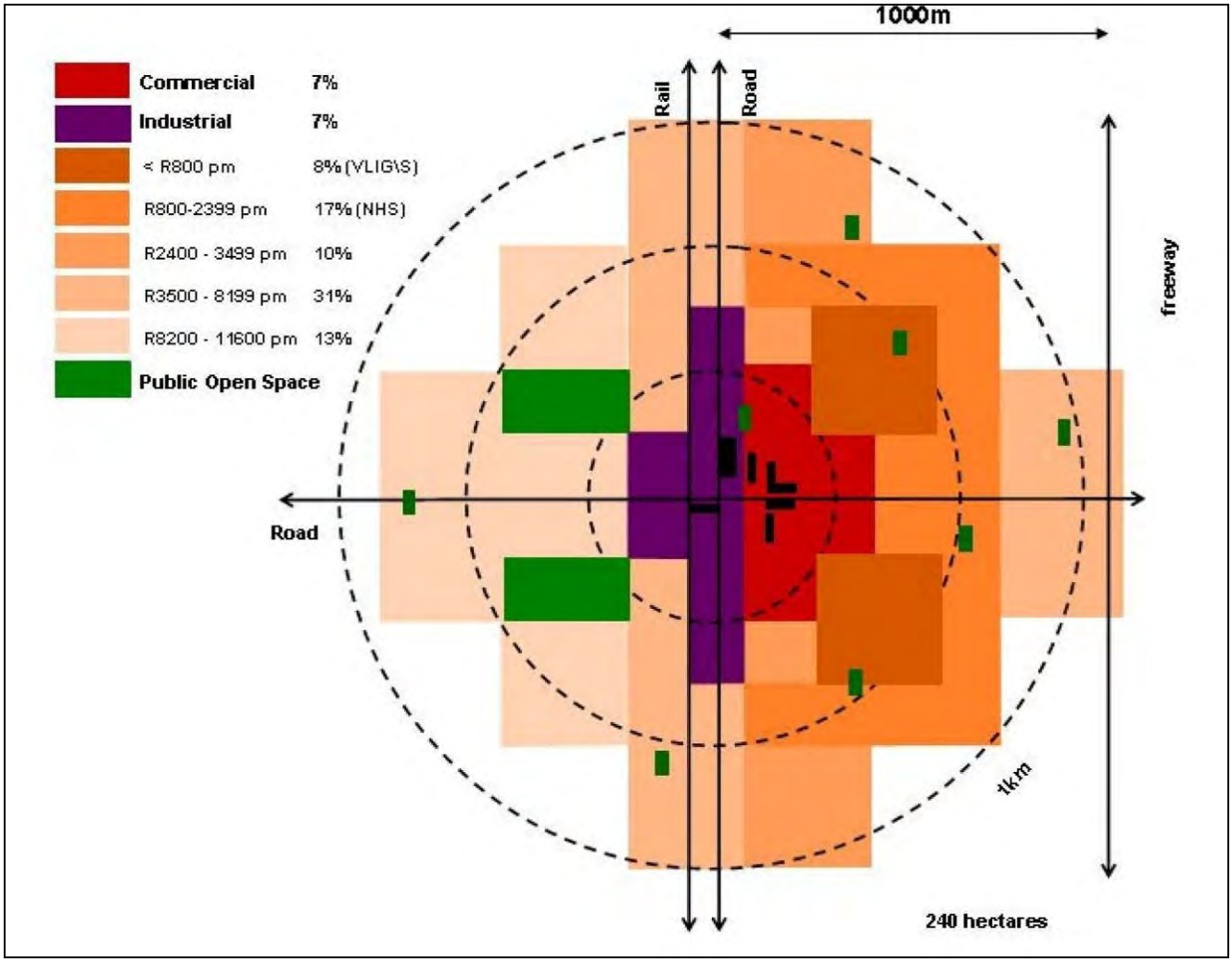


Figure 3-5: Spatial model of socio-economic gradient principle (PSDF, 2009)

STRATEGY 3 - THE CENTRAL SPATIAL IDEAS

d) Blaauwberg District: Integrated settlement patterns

- **The infill pockets:** Those undeveloped areas within the urban edge which are suitable for urban development should be identified for such. These should in general be developed at slightly higher densities than their surrounding areas in support of a more compact city, but not to the detriment of the local area. Attention should be given to their potential role in addressing the imbalances in access to housing opportunities close to amenity and other opportunities. Public housing provision is mostly possible on state owned, and most particularly city-owned land, subject to access to public transport, work opportunities, and social facilities.

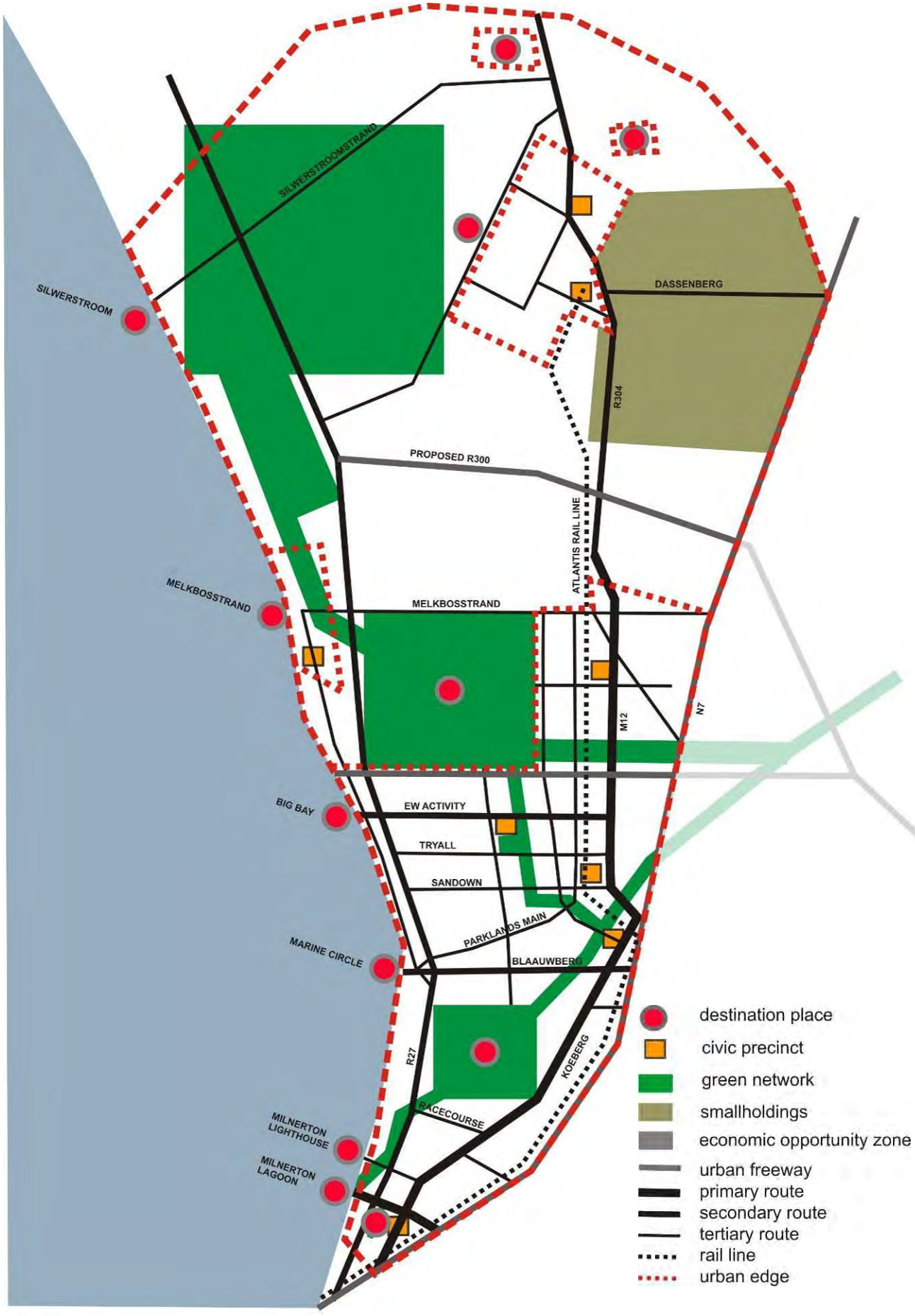


Figure 3-6: Blaauwberg district destination places

3.4 Synthesis: The Blaauwberg District spatial concept and vision

The spatial concept for the Blaauwberg district synthesises the central spatial ideas for the area. The key elements include:

- The Atlantis corridor and associated urban nodes and civic precincts;
- A system of north-south and east-west routes forming an accessibility grid linked to the Atlantis corridor that is supported by public transport;
- A green network consisting of core natural assets which are linked via river systems and ecological corridors;
- A network of destination places that provide relief from the urban environment and celebrate the natural and cultural heritage of the district.
- Infill and managed growth of outer lying towns

These elements have contributed to the spatial vision for the district which reflects the desired spatial outcome for the area in the context of the broader City spatial development vision. It is an idea that is specific to this district, and a response to the particular development issues faced in the area. It has been informed by a number of vision elements and principles which are a result of the consultation process as well as processes related to the formulation of the SDP. The vision statement for the district is:

"A district that is defined by its public environment and natural amenity, providing relief from the intense urban environment, which is characterised by integrated, mixed-use development. Targeted growth and redevelopment that is context appropriate and linked to public transport infrastructure will help to reduce urban sprawl and celebrate and conserve the varying landscapes within the district including urban, rural and agricultural. Local residents will have improved access to public facilities, work, and a range of housing opportunities, thereby reducing the district's dependence on the City Centre and encouraging a self-sustaining urban environment."

Acknowledging the role of this district in the metropolitan context and how it needs to contribute to broader, city-wide planning objectives is vital. In terms of the vision, its strategic role is to focus primarily on the following:

- **Accommodating growth**: The Blaauwberg district is one of two major growth corridors available in the City. As a result it has a significant role to play in accommodating City growth without compromising the goals of achieving a compact city.
- **Conserving threatened habitats**: The Blaauwberg district contains some of the last remaining remnants of critical biodiversity species. As growth is accommodated in the district, care needs to be taken to conserve sufficient habitat to sustain biodiversity species in an integrated and sustainable green network.
- **Providing a range of housing and job opportunities**: As a growth corridor, the district has an important role to play in addressing the City's housing backlog by providing an integrated range of housing opportunities, and promoting economic development as a means of creating job opportunities. This requires a focus on the Atlantis corridor, as well as Atlantis itself to ensure equitable urban development.

The vision is not developed without recognition, understanding, mitigation and balancing of the challenges faced in the district. The highest risk factors in the Blaauwberg District, with the potential to have the most serious or damaging consequences and which must be central to planning the future in the district, are the following:

- **Sea level rise**: Certain areas are already at risk and significant further areas are predicted to be at risk. These are mainly low lying urban areas in the Milnerton area and coastal areas.
- **Rapid urbanisation**: Blaauwberg has seen rapid urban growth over the last 10-15 years. As the local economy recovers, this growth is likely to continue. Sufficient infrastructure investment and planning is required to ensure sustainable growth takes place. In addition, the maintenance of infrastructure is required to account for densification of existing areas.

- **Koeberg Nuclear Power Station**: The KNPS is a risk to development in the district and development must comply with the safety standards and development restrictions imposed by the Department of Energy in relation to the KNPS. If sufficient infrastructure provision to implement the necessary safety procedures of KNPS is not incorporated in forward planning for the district, the consequences should an event occur at the KNPS, could be disastrous.

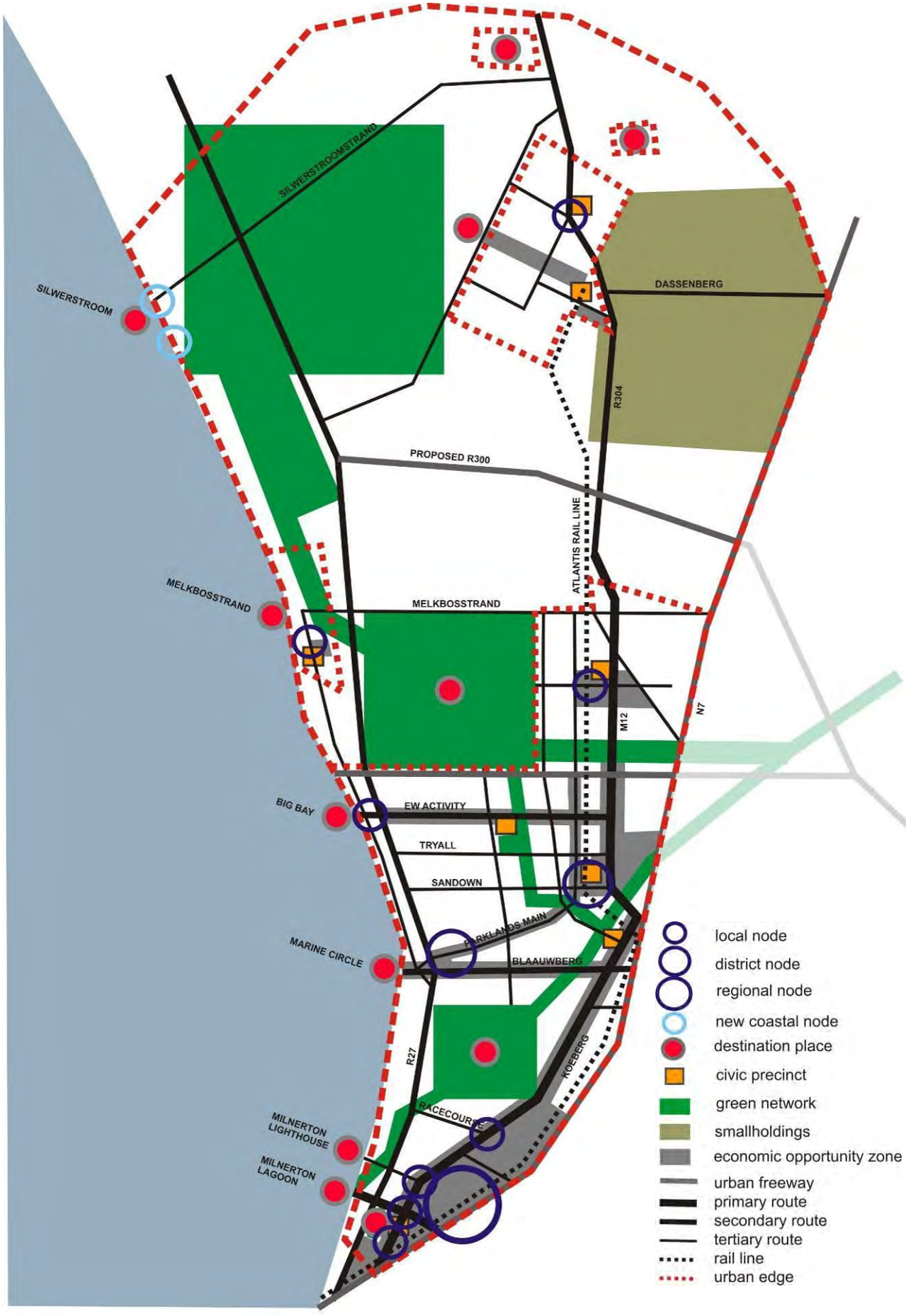


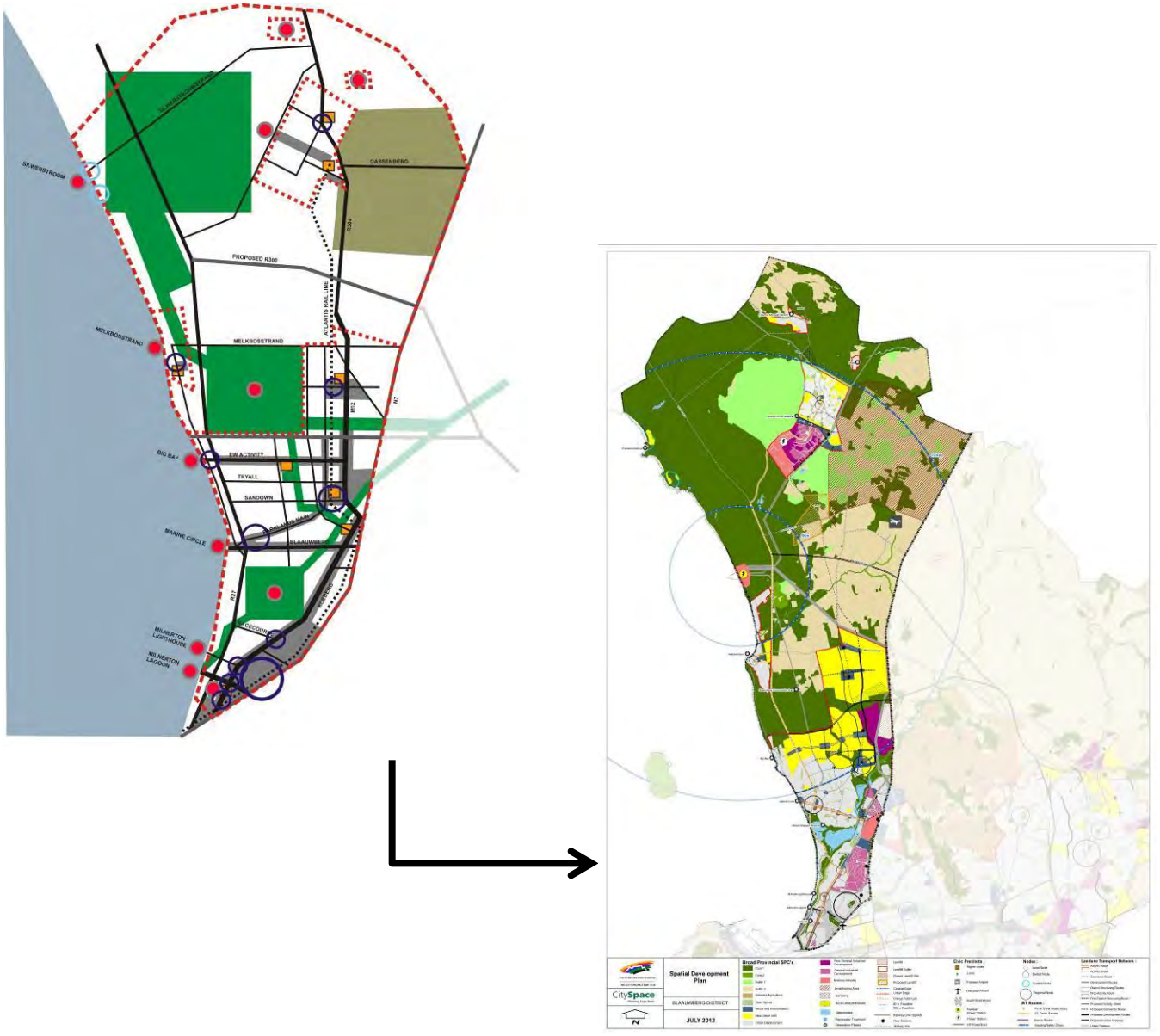
Figure 3-7: Blaauwberg district spatial concept

4. SPATIAL DEVELOPMENT PLAN: DISTRICT DEVELOPMENT GUIDELINES

EMF: DESIRED STATE OF THE ENVIRONMENT

The spatial development plan essentially comprises the application of the spatial concepts and structuring elements discussed in chapter 3 to the context of the Blaauwberg district. The identification and active promotion of the structuring elements are fundamental to responding to the 3 spatial strategies and realising the appropriate medium to long term spatial structure for the district. This section also serves to synthesise the proposed broad spatial structure for the district and intended "end state" that will provide a guide to investment and land use decision making. It should be read in conjunction with the CTSDF (2012) policies, sub-district guidelines for land use decision making (contained in section 6.2 of this document)

The spatial development plan is the application of the conceptual framework and structuring elements to the Blaauwberg district at a greater level of detail.



The District plan comprises 5 broad types of categories:

- Spatial planning categories
- Transport infrastructure and route designation
- Conceptual designations
- Development edges
- Precautionary areas and utility service infrastructure installations and networks

The District plan has been generated on a geographic information system (GIS), which improves the accuracy and legibility of mapping. This is particularly useful to the mapping of development edges and the precautionary areas, which are generally cadastrally defined. However, the spatial planning categories, although appropriate at a district and sub-district scale, are generally broad classifications, which may require a greater level of detail, through sectorally specific plans or local area planning frameworks, to further guide decision-making at a local and site level with regard to land use and form

4.1 Spatial planning categories

The land use classification system adopted by the Blaauwberg District Plan is consistent with the bio-regional planning framework and broad provincial Spatial Planning Categories (SPCs) adopted by the PSDF (2009), and utilised by the CTSDF (2012). Additional categories included in the District Plan, commensurate with the greater level of planning detail, are included (e.g. other structuring open space, mixed use intensification, and cemeteries). The SPCs specify the inherent land use suitability of the city's environmental, cultural, and urban landscapes.

Table 4-1: Spatial planning categories (SPCs)

Spatial planning category	District elements	District development guidelines	Relevant CTSDF policies*
a. Core 1	Core 1 areas identified within the Blaauwberg district include: • The Blaauwberg Conservation Area (BCA) and associated north-south and east-west ecological corridors linking to the Diep River. • The Diep River and associated ecological buffers • The Rietvlei wetland and estuarine complex • Parts of the Cape West Coast Biosphere Reserve • Koeberg Private Nature Reserve • Atlantis Dunefield which overlies the strategically important Atlantis Aquifer	1. Activities in these areas should focus on conservation use with conservation management activities (e.g. alien clearing, research) encouraged. 2. In general, low impact activities such as passive recreation (e.g. walkways and trails), environmental education and tourism may be appropriate, but should be subject to stringent controls. (e.g. limits to development footprint, management plans). 3. Where possible, all new utility infrastructure, services and structures should be located outside of these areas. 4. Formalised reserves and sites (e.g. Blaauwberg Conservation Area, Rietvlei) should be regarded as 'no-go' areas and no further development of any kind should be allowed in these areas without a detailed assessment of the impacts and reference to the Reserve Zonation Plan (2010). 5. Further subdivision of these areas should generally be discouraged and consolidation encouraged. 6. Where ecological corridors are located within proposed urban areas the extent of the ecological corridor is indicative and precise configuration should be determined through relevant land use and statutory processes including, but not limited to a local development framework as part of future land use applications. 7. Reference should be made to the EMF's conservation and biodiversity priority zone and specific environmental attribute detail for further guidance around the desirability of specific activities in these areas.	P1, P25-27
b. Core 2	Core 2 areas identified within the Blaauwberg district include: • Flood risk areas associated with the river systems within the district • Part of the proposed Koeberg north-south ecological corridor	1. Activities in these areas should focus on conservation use with conservation management activities (e.g. alien clearing, research) encouraged. 2. In general, low impact activities such as passive recreation (e.g. walkways and trails), environmental education and tourism may be appropriate, but should be subject to stringent controls (e.g. limits to development footprint, management plans). 3. Where possible, all new utility infrastructure, services and structures should be located outside of these areas. 4. Sites indicated as Core 2, but which also fall within identified precautionary areas (i.e. floodprone areas) should take into account district development guidelines identified for these areas. 5. Further extension of agricultural activity, beyond existing uses and rights within these areas should generally be discouraged. 6. Where ecological corridors are located within proposed urban areas the extent of the biodiversity corridor is indicative and precise configuration should be determined through relevant land use and statutory processes including, but not limited to a local development framework as part of future land use applications 7. Reference should be made to the EMF's conservation and biodiversity priority zone and specific environmental attribute detail for further guidance around the desirability of specific activities in these areas.	P1, P25-27

c. Buffer 1	Buffer 1 areas identified within the Blaauwberg district include: • Natural areas to the west and south east of Atlantis that fall outside of core conservation classifications. • Natural areas within smallholdings areas which are undeveloped or uncultivated.	1. Low impact activities (as per Core 1/2) may be appropriate. 2. Development (e.g. structures) in support of both tourism and biodiversity conservation in Core Areas should preferably be located in Buffer 1 and 2 areas if logistically feasible. 3. Extensive agricultural activities occurring in these areas, and which may impact on remnant natural vegetation should adopt low impact practices. (e.g. rotational grazing / resting cycles). 4. Reference should be made to the EMF's conservation and biodiversity priority zone and specific environmental attribute detail for further guidance around the desirability of specific activities in these areas.	P24-27, P32, P33
d. Buffer 2	Buffer 2 areas identified within the Blaauwberg district include: • Parts of the smallholding areas of Klein Dassenberg • Extensive agricultural areas that contribute to the rural and cultural landscape, some of which include historic farmsteads.	1. Low impact activities (as per Core 1/2) may be appropriate. 2. Development (e.g. structures) in support of both tourism and biodiversity conservation in Core Areas should preferably be located in Buffer 1 and 2 areas if logistically feasible. 3. Furthermore, agricultural use could be considered appropriate in these areas as well as uses or activities directly relating to the agricultural enterprise. This could include farm buildings and farm worker accommodation. 4. Further uses and activities could be considered where contextually appropriate such as small scale holiday accommodation, restaurants, farm stall / shop and tourist facilities. 5. Non-agricultural uses (i.e. those specified in point d.4 above) should be managed through spot rezoning or consent uses and fragmentation of farm units should be discouraged. 6. Reference should be made to the EMF's conservation and biodiversity priority zone and specific environmental attribute detail for further guidance around the desirability of specific activities in these areas.	P25-27
e. Small-holdings	• Klein Dassenberg smallholdings	1. Discourage the development of further smallholding areas in the district. 2. For detailed guidance regarding the management of land uses in these particular areas, refer to section 6.2 3. Sand and gravel mining in these areas must be subject to applicable land use, environmental and licensing regulations. 4. Limited residential development as per zoning rights and applicable frameworks should be accommodated in these areas.	P32-34

f. Other structuring open space	Other Structuring Open Space includes recreational, sports, and education related open spaces, which are closely related to urban development and meeting human need and satisfaction within them. It also includes smaller linkage open spaces aimed at creating a broader integrated and linked open space system.	1. In general, avoid development of these areas in a manner that would compromise open space linkage. 2. Encourage development to respond to and promote opportunities for linkage between identified structuring open spaces in developed areas. 3. In general, development adjacent to open spaces, or which rationalises these spaces, should be orientated towards the open space to encourage the use and passive surveillance of these areas. Design which compromises this condition (e.g. excessive blank walls and backing of development onto these spaces) should be discouraged. 4. Subject to contextual informants, appropriate high or medium density development (e.g. 2/3 storey development) along open space interfaces could be considered to improve passive surveillance. 5. Safety and security should be considered in the upgrading, landscaping or development of public open spaces. 6. Where contextually appropriate, consider commercial activities such as small cafes, kiosks and restaurants that will enhance the open space. 7. Where feasible, opportunities for low impact sustainable use of open spaces, by local communities, should be considered (e.g. small scale urban agriculture) but this should take into account the wider access / linkage needs and public open space provision requirements.	P41
g. Urban development	General (all areas)	1. These areas should be considered for a wide variety of urban uses such as housing development, public open spaces, community facilities, mixed use / business development (where appropriate), but should not include noxious industrial uses. 2. Sites indicated for urban development, but which also fall within identified precautionary areas should take into account associated district development guidelines. 3. Sites indicated for urban development, but where potential impact may occur with natural ecosystems (e.g. critical biodiversity areas) should be subject to EIA processes which take into account principles for dealing with development proposals in these areas of potential impact (see annexure B).	P1-50
	Existing developed urban areas	4. Support the incremental densification over time of urban areas where appropriate. This should be guided by available infrastructure capacity, neighbourhood density and character, proximity to job opportunities and social facilities, and access to public transport. 5. Consider the existing character and heritage value of areas of significance (as may be reflected in detailed policies) as an informant to development and redevelopment proposals.	P1-50

	New development areas / new urban infill: • Mamre infill sites • Atlantis buffer strip • Melkbosstrand CBD • Erf 1117 • Parklands and Sunningdale extensions • Long terms development area • Blouberg School site infill • Tableview school site infill • Flamingo Circle node • Potsdam Interchange • Ysterplaat	6. Acknowledge and respect the surrounding urban environment and develop accordingly. This includes considerations relating to neighbourhood density and character, and access to public transport, job opportunities and social facilities. 7. In general, support the development of new development areas at higher densities than exist in these locations, but with due regard for appropriate transition to surrounding areas. 8. Develop utilising the principle of socio-economic gradient. 9. Particular design attention should be given in applications to interface areas between existing development and new development areas, especially where urban character may be impacted or where socio-economic gradient is steep. 10. Support the appropriate development of identified new development areas subject to infrastructure availability and in line with requirements for provision of associated social facilities and recreational spaces.	P39-42
	Informal Settlements: • Du Noon Holding sites 1,2 &3 • Du Noon School site • Doornbach • Lindanyi • Meadowvale Farm • Melkbosstrand • Morningstar • Ogieskraal • Pine Grove Farm • Rooidakkies • Saxon World • Skandaalkamp • Spoorkamp • Tableview Tipsite • Tafelozono • Witsand • Wolwerivier	11. Support incremental upgrading and formalisation of existing formal settlements that are identified as appropriate to remain as urban areas according to the criteria for categorisation of informal settlements (see section 6.1). 12. Support for incremental upgrading and formalisation should also apply to areas where backyard shacks are widely prevalent. 13. Limit expansion of informal settlements into identified precautionary areas (e.g. flood prone and landfill site buffers), or sensitive environmental areas such as biodiversity network areas. 14. Support relocation of Rooidakkies and Skandaalkamp informal settlements due to restrictions imposed by the Vissershok landfill operational license conditions.	P36
h. Mixed use intensification	• All business areas associated with identified urban nodes • Business strip areas, including along Koeberg Road, Blaauwberg Road, Parklands Main Road, Sandown Road and the proposed Big Bay east-west activity route	1. Generally, support mixed use intensification as indicated, subject to any local guidelines and bulk service and transport infrastructure availability. 2. Promote an appropriate interface between these mixed use areas and adjacent residential areas through the use of sensitive design and informed by local level guidance and plans where applicable.	P11-P16, P20, P22 P39-42

i. Industrial development	• Atlantis infill • Vissershok landfill buffer area	1. General industrial uses should generally be supported in these areas. 2. Due to particular requirements for road and waste infrastructure associated with industrial zoned land, these areas should generally be reserved to optimise this infrastructure and mitigate potential impacts. 3. Allowance could be made for limited forms of non-industrial activity, but these activities should not compromise the general use of the areas zoned for industry or the operations of the Vissershok landfill site. 4. The different types of heavy industries, which may be permitted within the 800m buffer zone around the Vissershok Waste Disposal Facility must be determined in consultation between developers, the operators of the Vissershok Waste Disposal Facility and the City of Cape Town's Solid Waste Disposal Department, in order not to jeopardise any of the permit conditions under which these facility operate. 5. Focus on the development of specialised high value small and medium-scale light industrial activities within the existing industrial areas, where permitted. 6. Where proposed new industrial areas are surrounded by dense residential development, consideration should be given to the social, health and safety impacts of proposed industries. 7. Industrial development in Atlantis should comply with the requirements of the Atlantis Aquifer Water Supply Scheme.	P4, P5, P7, P8, P16,
j. Noxious industry	• Koeberg Nuclear Power Station • Atlantis noxious industrial	1. These areas should be reserved for noxious trade, and risk activity. Consent for uses outside of this zoning should take into account potential negative impacts.	P4, P5, P7, P8, P16
k. Cemeteries	• Atlantis • New cemetery to be identified	1. Support continued use of cemeteries for this purpose. 2. Support the utilisation of parts of older cemeteries (such as Atlantis) for other social and recreational activities (e.g. memorial gardens, public parks) subject to further exploration. 3. The identification of the southern portions of the district as a growth focus, including significant "green-fields" development west of the N7 and up to Melkbosstrand Road (M19), will require new cemetery development. In this regard, the Vissershok landfill buffer area could provide opportunities for above ground burial.	P41, P47

* list is not exhaustive

4.2 Transport infrastructure and route designation

Transport infrastructure is reflected indicating selected elements of the district-wide movement system. In alignment with the CTSDF (2012), the Blaauwberg District Plan utilises a route designation indicating land use functionality that will encourage an appropriate level of development and more intense land uses to locate on, or adjacent to, the accessibility grid. This will contribute towards establishing the thresholds required for sustainable and cost effective public transport. It is important to note that opportunities along routes can also be linked to parallel streets and side roads. Furthermore, routes exhibit different characters and do not exhibit a uniform mix and density of land uses along their length. The district development guidelines should thus be read along with sub-district guidelines and local plans and policies where applicable and not necessarily be interpreted in a blanket manner for the length of the route.

The route designation reflected does not replace the City's Hierarchical Road Network Classification system, nor is it intended to run in parallel as a duplicate classification system. Annexure E describes

the relationship between the CTSDF (2012) / district plan route designations and DoT, the PSDF and the City's hierarchical road classification network.

Table 4-2: ***Transport infrastructure and route designations***

Transport infrastructure and route designations	District elements	District development guidelines	Relevant CTSDF policies*
a. Activity routes	• Koeberg Road (south of Racecourse Road) • Blaauwberg Road • Big Bay east-west activity route	1. Support the functioning of Blaauwberg Road and Koeberg Road as an activity route through encouraging its line haul public transport role. 2. In general, intensification of land use along most sections of Blaauwberg Road and Koeberg Road is appropriate in close proximity to the route and subject to sub-district and local area policy guidelines where relevant. 3. Greater intensification of land use, including mixed use development, is proposed along highly accessible sections of these routes (such as at major intersections). 4. The process of land use intensification along the route must consider the nature of access roads, additional traffic impacts, and parking requirements. 5. In general, development should front onto the activity route, active interfaces should be encouraged and large extents of blank wall should be avoided. 6. Civic upgrades, landscaping and NMT provision should be made as and where appropriate to ensure quality streetscapes. 7. A wide range of facilities and services that are supported and shared by communities should be encouraged. 8. Where open spaces intersect with the corridor, the former should be retained and enhanced in order to develop the 'green' network, and also contribute to a variety of uses along the corridor.	P3-4, P10-11, P13-16, P35, P39
b. Activity streets	• 6th avenue, Melkbosstrand • Racecourse Road, Milnerton • Freedom Way, Marconi Beam • Parklands Main Road, Parklands • Christopher Starke Street, Atlantis	1. Support the functioning of these routes as activity streets through encouraging their role as community service public transport routes, 2. Whilst these routes are not likely to reflect the same level of intensity of land use as activity routes, higher intensity land uses, including mixed use development should be supported at high accessibility areas. 3. The process of land use intensification along these streets must consider the nature of access roads, additional traffic impacts, and parking requirements. 4. In general, development should front onto the activity street, active street interfaces should be encouraged and large extents of blank wall should be avoided. 5. Direct access onto these streets from abutting properties is generally supported, but should be consolidated where possible. 6. Civic upgrades, landscaping and NMT provision should be made as and where appropriate to ensure quality streetscapes. 7. A wide range of facilities and services that are supported and shared by communities should be encouraged. 8. Where open spaces intersect with the street, the former should be retained and enhanced in order to develop the 'green' network, and also contribute to a variety of uses along the street.	P3-4, P10-11, P13-16, P35, P39
c. Development routes	• M12 • Koeberg Road (north of Racecourse Road)	1. These routes should continue to perform a primarily mobility function. Their role as structuring routes providing improved access	P3-4, P10-11, P13-16, P35, P39

	• Plattekloof Road • Bosmansdam Road • Sable Road ext.	and movement continuity between districts and between distant work and living areas should be reinforced. 2. In general, intensification of development should be promoted to support line haul public transport, but this should be concentrated at identified nodal points. 3. The process of land use intensification along these routes must consider the nature of access roads, additional traffic impacts, and parking requirements. 4. Direct access onto these routes from abutting properties is not supported. Instead, limited access, with a focus on high access nodal points, should be permitted, and where necessary service roads should be developed. 5. Mitigation of the impact of the road's dominant mobility function (including design efforts to slow traffic) may be appropriate at high intensity nodal areas. The route between these nodes should remain primarily mobility orientated through residential areas, with appropriate landscaping and adherence to the boundary walls policy. 6. Civic upgrades, landscaping and NMT provision should be made as and where appropriate to ensure quality streetscapes.	
d. Urban freeways	• N7 • Proposed east-west toll freeway • Proposed R300	1. In general, the mobility role of these routes should not be compromised. 2. Access from the freeway system onto the primary accessibility grid should be promoted where appropriate, to encourage proposed mixed use intensification. 3. The alignment of the proposed east-west toll freeway (as reflected on the spatial development plan) should be subject to further testing aimed at aligning this with the urban edge and southern extent of the BCA and avoiding sensitive environmental / heritage sites.	P6, P10, P14-16
e. Connector routes	• R27 • Northern portion of Koeberg Road ext. • M12 (north of Melkbosstrand Road) • R304 • Melkbosstrand Road • Philadelphia Road • Klein Dassenberg Road • Dassenberg Road • Silwerstroomstrand Road	1. In general, support the dominant mobility role of these routes. 2. Development along connector routes which are also indicated as scenic routes should take related guidelines into account (see point (i) below).	P10, P14-16
f. Other structuring routes	• Loxton Road, Milnerton • Omuramba Road, Montague Gardens • Montague Drive/Century Blvd (Montague Gardens/Century City) • Racecourse Road (east of Koeberg Road), Milnerton • Raats Drive (between Blaauwberg Road and Parklands Main Road) • Wood Drive, Tableview/Parklands • Porterfield Road • Sandown Road, Parklands • Tryall Road, Parklands	1. The role of these routes as significant community service public transport routes should be reinforced. 2. Support, where appropriate, limited commercial or mixed use activity at points on or along specified portions of these routes, subject to sub-district development guidelines and / or local area plans. Expansion of these uses should be strongly controlled. 3. Civic upgrades, landscaping and NMT provision should be made as and where appropriate to ensure quality streetscapes.	P10, P13

	• Southern portion of Koeberg Road ext. • Big Bay Blvd, Big Bay • Otto Du Plessis Road • Reygersdal Drive, Atlantis • Charl Uys Avenue, Atlantis • Neil Hare Road, Atlantis • Blombosch Road, Atlantis • Johan Van Niekerk Street, Atlantis		
g. Railway infrastructure	• The Atlantis rail line and proposed extension, including proposed passenger rail stations	1. Adopt a precautionary approach to alienation of land associated with freight rail. 2. Retain the opportunity for new public transport right of way links associated with the proposed Atlantis rail line extension. 3. Reserve land for the establishment of new rail stations associated with the proposed upgrade of the Atlantis line to a passenger line.	P9-18
h. IRT (trunk routes)	• Doornbach/Du Noon – waterfront • Atlantis – Racecourse Road – Montague Gardens • Atlantis – Melkbos - Tableview	1. Support the general alignment of proposed IRT trunk routes in the district with the accessibility grid (designated Activity Routes, Development Routes, and Activity Streets) and subject to the spatial planning principles for public transport route alignment (see CTSDF (2012)). 2. Ensure public transport infrastructure is complimentary to the identified land use and development role of the route. 3. Any future redevelopment of these routes, associated pavement areas, and land uses fronting these, should take place with the potential IRT infrastructure improvements in mind (e.g. potential stations). This focus should also include NMT considerations.	P9-18
i. Scenic routes	**SR 1 routes:** • Otto Du Plessis Drive (portions) • Marine Drive (portions) • Melkbosstrand Road • N7 • R304 • Charl Uys Drive **SR 2 routes:** • Otto Du Plessis Drive (portions) • Marine Drive (portions) • R304 Mamre Road	1. In general, development along scenic drives and routes should seek to retain views from the route and avoid negatively affecting the character of the landscape through which it passes. 2. Any redevelopment along scenic drives and routes should focus on landscaping improvements to the (public and private) areas abutting the road. 3. Land use management decisions should be guided by the Scenic Drive Network Management Plan (Vol 3, 2003) or subsequently approved management plans.	P48

4.3 Conceptual designations

These are designated areas in the District plan having significance in guiding urban development, but which are not precisely geographically defined (or exclusive) areas, but rather conceptually indicated. Land use and form implications may be detailed through local area plans.

Table 4-3: Conceptual designations

Conceptual designations	District elements	District development guidelines	Relevant CTSDF policies*
a. Urban nodes	Sub-metropolitan urban nodes: • Century City	1. In general, support high intensity mixed use development (e.g. office, retail, residential), the extent of which should be guided by relevant city/district and local area policy guidelines. 2. In general, support residential densification in line with the provisions of the City's densification policy (2012) and sub-district / relevant local area development guidelines. 3. Support a more flexible position to parking provision and related departures in these nodes, where well served by public transport.	P3-4, P10, P16, P22
	District urban nodes: • Bayside • Sandown Road	4. In general, support high intensity mixed use development (e.g. office, retail, residential), the extent of which should be guided by relevant city/district and local area policy guidelines. 5. In general, support residential densification in line with the provision of the City's densification policy (2012) and sub-district / relevant local area development guidelines. 6. Support a more flexible position to parking provision and related departures in these nodes, where well served by public transport.	P3-4, P10, P16, P22
	Local urban nodes: • Brooklyn • Sable Road • Loxton Road • Potsdam Road • Long Term Development Area • Melkbosstrand CBD • Atlantis CBD	7. In general, support locally appropriate mixed use development. 8. In general, support locally appropriate residential densification in line with the provision of the City's densification policy (2012) and sub-district / relevant local area development guidelines. Except for Potsdam Road where this is deemed inappropriate due to the neighbouring Chevron refinery) 9. Support a more flexible position to parking provision and related departures in these nodes, where well served by public transport.	P10, P16, P22
b. New coastal nodes	• Silwerstroomstrand • Springfontein	1. Support mixed-use development in proposed coastal nodes where appropriate. 2. The actual footprint of development within these nodes should be determined through more detailed studies/ plans. 3. When assessing development applications along the coast the areas potentially affected by climate change and sea-level rise, and adjacent to river outlets should be taken into account 4. Development proposals must protect and enhance the scenic visual quality of the area. 5. Development proposals must protect and enhance existing and potential destination places, including public access to these places. 6. Development proposals should take into account land use guidelines in section 6.2	P1, P7, P23, P27, P48, P50
c. Transit station areas	Major urban station • Atlantis town centre • Bayside • Dunoon	1. See sub-metropolitan or district urban nodes as relevant.	P10

	Employment station • Charl Uys • Gerwyn Owen • Killarney Gardens • Killarney Racetrack • Neptune • Omuramba • Paarden Eiland • Sati • Section • Vrystaat • Zoar Vlei	2. Promote intense development focussing on employment (e.g. industrial uses) and where contextually appropriate local mixed use development.	
	Urban station • Boy de Goede • Birkenhead • Diep River • Grey • Janssens • Mediclinic • Racecourse • Sunningdale • West Coast Village • Wood	3. Promote appropriate mixed use development (e.g. including local retail development) and densification in line with guidelines for the associated urban nodes and areas for mixed use intensification. 4. Retain opportunities for park and ride (including shared parking opportunities), subject to local assessments and transport planning.	
	Neighbourhood station • Doornbach • Gardenia • Links View • Sunset Beach	5. Allow for moderately scaled densification where appropriate in a manner that is sensitive to existing preservation worthy character and subject to infrastructure availability. 6. Retain opportunities for park and ride, subject to local assessments and transport planning.	
	Coastal station • Lagoon • Woodbridge	7. Support appropriate local mixed development that compliments the coastal role of the station, particularly those that are tourism gateways. 8. Adopt a precautionary approach to enhancement of development rights in station areas that are subject to the impacts of sea level rise.	
d. Civic precincts	Higher order civic precincts: • Generally associated with metropolitan and sub-metropolitan urban nodes including the Sandown Road node	1. Support the development and improvement / upgrade of higher order public facilities / facility clusters and public spaces at the identified higher order civic precincts. 2. Where feasible, link the development of civic precincts to the development of business districts through public-private partnerships.	P41, P47, P50
	Local civic precincts: • Generally associated with district and local nodes.	3. Support the development and improvement / upgrade of local public facilities / facility clusters and public spaces at the identified local civic precincts.	

e. Destination places	Coastal-based: • Milnerton Lighthouse • Milnerton Lagoon • Marine Circle • Big Bay • Silwerstroomstrand • Melkbosstrand Nature-based: • Zoarvlei • Rietvlei • Blaauwberg Conservation Area • Atlantis Dunes (Witzands Aquifer Conservation Area) Urban-based: • Mamre • Pella	1. Promote greater recreational and tourism opportunities at these key high visitor number destination places, and particularly where potential exists for significant improvement. 2. Appropriate development opportunities in the adjacent urban areas could be associated with these improvements. 3. Support the retention and improvement of public access and recreational opportunities associated with further development of destination places. 4. Support the maintenance and enhancement of the character of natural, recreational, and / or heritage aspects of smaller (i.e. those that shouldn't or can't expand) but hugely valuable recreational and tourism nodes. 5. Support the many existing small natural special places, which are not appropriate for large numbers of people and attendant support facilities, but which nevertheless are valuable natural assets that contribute to quality of life, recreation and the tourism economy.	P1, P50
f. Critical public links	• V & A waterfront to Melkbosstrand • Wood Drive • Proposed east-west and north-south ecological corridors	1. Any development should ensure that critical public links are maintained including: • uninterrupted public access along the coastline • directed public access to conservation areas • grade separated NMT infrastructure should be included where links are located within the urban fabric. 2. Critical public links should accommodate directed NMT movement	P13
g. Proposed airport	• Proposed future Atlantis airport	1. Manage surrounding land uses so that the possible accommodation of a future airport in the proposed location is not compromised.	P24

* list is not exhaustive

4.4 Development edges

Development edges are lines defining the outer limits of urban development for a determined period of time. In the Blaauwberg District these are resource and hazard protection lines that should be maintained in the long term as well as growth edges that can be amended in line with the City's development edges policy.

Table 4-4: Development Edges

Development edges	District elements	District Development Guidelines	Relevant CTSDF policies*
a. Urban edge	• Northern metro, Melkbosstrand, Atlantis, Mamre and Pella urban edge	1. Land beyond the urban edge line should not be used for urban development. 2. Promote development form which supports positive urban edge conditions with due regard for local considerations (e.g. fire risk, visual impact). 3. The edge lines determined to the south east of Atlantis and the north of Melkbosstrand Road in the Atlantis corridor are considered growth edges that can be amended as land is taken up within the urban edge and additional land for development is required. Other edges within the Blaauwberg District are generally considered a long-term edge line, where the line has been delineated in a position to protect natural resource areas (incl. Agricultural smallholdings, Atlantis aquifer and recharge area) or as hazard protection (e.g. due to restrictions associated with the Koeberg Nuclear Power Station). 4. Development outside the urban edge into "other agricultural areas" or smallholding areas should only be considered under exceptional circumstances and subject to compelling motivation. 5. Rural development outside of the urban edge should not exceed densities of 1 dwelling unit per 10 ha (PSDF, 2009) and may be considerably lower in landscapes with low visual carrying capacity. 6. The portion of the Melkbosstrand urban edge line that cuts across erf 1694 should be amended to align with the Koeberg Precautionary Action Zone line.	P22, P23, P25, P26, P28, P33

b. Coastal edge	• West coast coastal edge	1. Land on the seaward side of the coastal edge line should not be used for urban development. 2. At identified destination places, amenity opportunities on the seaward side of the coastal edge line could be considered to enhance its tourism and recreation role. This should not negatively affect the coastal environment and processes. These nodes include Marine Circle/Blouberg beachfront, Big Bay, Melkbosstrand and Silwerstroomstrand. 3. Should development be accommodated at Silwerstroomstrand, the river mouth and the sensitive headland dunes close to the mouth must be avoided and protected. 4. Outside of destination places, only low impact activities are appropriate within the coastal protection zone (i.e. seaward side of the coastal edge line), for example conservation and restoration activities, passive recreation and tourism, essential coastal environmental management activities, as well as sustainable harvesting of natural resources. 5. Encourage development form which reflects a positive urban interface with the coastal protection zone. 6. Reference should be made to the EMF's coastal and dune zone for further guidance around the desirability of specific activities.	P22, P23, P25-27 .

* list is not exhaustive

4.5 Precautionary areas and utility service infrastructure installations and networks

These areas are generally defined at a cadastral level and are likely to present a form of risk to development or activities. Although this may not exclude any underlying use as depicted (e.g. urban development) the risks related to the identified precautionary areas may place certain restrictions on development (e.g. In terms of use, density, form).

Table 4-5: Precautionary areas and utility service infrastructure installations and networks

Precautionary areas and utility service infrastructure installations	District elements	District development guidelines	Relevant CTSDF policies*
a. Airport height restrictions	• Ysterplaat height restrictions	1. In terms of the Government Air Navigation Regulations, restrictions exist on the heights of buildings and structures in the vicinity of the Ysterplaat Air Force Base. Such restrictions are defined on Plans No's TPR.8356, TPR.8357, TPR. 8358 and TPR. 8359 of the Map. No building or structure shall be erected within the areas defined on such plans to a greater height than is prescribed for such areas on such plans. 2. In terms of point a1 above, the height restrictions zones specific to runway 15/33 have been waivered by the South African Air Force.	P24

b. Koeberg Nuclear Power Station safety zones	• Koeberg Urgent Protective Action Planning Zone (UPZ) (5-16km) • Koeberg Precautionary Action Zone (PAZ) (0-5km)	1. All urban development within the KNPS Precautionary Action Zone (PAZ) (area within a 5 km radius of the Koeberg nuclear reactors (X = -52727.4000, Y = -3727966.6500)) and Urgent Protective action planning Zone (UPZ) (area within a 5 km – 16km radius of the Koeberg nuclear reactors (X = -52727.4000, Y = -3727966.6500))[32] must conform to the following restrictions necessary to ensure the viability of the Koeberg Nuclear Emergency Plan: • No new development is permissible within the PAZ (as defined above) other than development that is directly related to the siting, construction, operation and decommissioning of the Koeberg Nuclear Power Station or that is as a result of the exercising of existing zoning rights. On this basis, no application for enhanced development rights (rezoning, subdivision, departure from land use, or Council's consent, including application for a guesthouse or second dwelling) that will increase the transient or permanent resident population, and that is not directly related to the siting, construction, operation and decommissioning of the Koeberg Nuclear Power Station, can be approved. Furthermore, the projected population within the PAZ must be evacuated within four hours from the time that an evacuation order is given, as demonstrated by means of a traffic evacuation model approved by Council and acceptable to the NNR. • New development within the UPZ (as defined above) may only be approved subject to demonstration that the proposed development will not compromise the adequacy of disaster management infrastructure required to ensure the effective implementation of the Koeberg Nuclear Emergency Plan (version approved by the National Nuclear Regulator (NNR)). Specifically, within the UPZ area, an evacuation time of 16 hours of the projected population, within any 67,5° sector to designated mass care centres (as appropriate), must be demonstrated by means of a traffic (evacuation) model approved by Council and acceptable to the NNR. The evacuation time must be measured from the time that the evacuation order is given. These development controls will be superseded by National 'Regulations on Development in the Formal Emergency Planning Zone of the KNPS to ensure effective implementation of the Koeberg Nuclear Emergency Plan' when approved.	P24

c. Floodprone areas	• Diep River • Rietvlei • Zoar Vlei • Donkergat River • Sout River	1. Reference should be made to the EMF's hydrological zone, and specific environmental attribute detail for further guidance around the desirability of specific activities within specified flood risk areas. 2. Undesirable activities in terms of the EIM Zone should only be authorised under exceptional circumstances, subject to compelling motivation (e.g. where there is an existing right). 3. Apply more restrictive building setback lines and maximise on-site water infiltration and permeability in relation to redevelopment initiatives in flood prone areas. 4. Although some agricultural activities may be permitted within the flood risk and flood fringe areas, the nature of the impacts and appropriate mitigation must be determined in the EIA process, and must be shown to be acceptable prior to approval (i.e. they must not pollute water resources or increase flood risk). 5. No agricultural activities should be approved within the 1:2 year flood line. 6. New development within the 1:100 year flood line should be subject to formal acknowledgement by the owner of flood risk, and is only permissible where there are existing rights. 7. Where facilities associated with sports fields, golf courses or picnic areas have been conditionally permitted in the 1:50 year zone, floor levels must be above the 1:50 year flood line. 8. In general, new buildings and developments abutting rivers should be orientated towards the river, where possible, and the principles of Water Sensitive Urban Design should be applied. 9. Aquifer re-charge areas and sole-source aquifers should be protected from potential sources of pollution.	P24
d. Coastal flood risk areas	• As identified in the EMF's Coastal and Dune EIM Zone (section 5)	1. Where possible, avoid major new urban development infrastructure and bulk services investment in coastal areas that are vulnerable to coastal storm events and inundation. 2. Appropriate emergency planning must be formulated for any development within coastal flood risk areas, including flood warnings, evacuation procedures and routes. 3. Where development proposed in these areas requires new or amended land use rights, the economic and social value of the development must be demonstrably in the interests of Cape Town as a whole and should reflect consideration of potential flood risks and include mitigation measures as may be deemed necessary. This may include areas proposed by the district plan for intensification in support of the IRT. 4. Undeveloped areas within the coastal flood risk area should be considered as "no-go" areas for any type of development, excepting at strategic coastal nodes, as identified by the City of Cape Town.	P27

e. Landfill sites and associated buffer zones	• Vissershok landfill site • Possible future Atlantis regional landfill site	1. Environmental conditions in these areas should be monitored to assess the need for appropriate buffer areas around landfill sites. 2. Do not permit groundwater abstraction and residential land use in landfill buffer zones, or any other activities where people are required to remain permanently on site. 3. The location of the new regional landfill site has not been decided. Should it be located at the proposed Atlantis site, surrounding land uses will need to comply with the operational requirements of the landfill site operating license. 4. Ensure development in the Vissershok buffer zone is compliant with the operational licensing requirements of the landfill site. 5. The different types of heavy industries, which may be permitted within the 800m buffer zone around the Vissershok Waste Disposal Facility must be determined in consultation between developers, the operators of the Vissershok Waste Disposal Facility and the City of Cape Town's Solid Waste Disposal Department, in order not to jeopardize any of the permit conditions under which this facility operates.	P24
f. Utility service infrastructure installations and networks	• Potsdam, Melkbos and Wesfleur WWTW • Electricity transmission / powerline and utility / bulk services servitudes • Ankerlig Power Station • Koeberg Nuclear Power Station • Other bulk infrastructure	1. Where possible, all new infrastructure services and structures should be located outside of patches of vegetation that have been identified as Core 1 and 2 areas. 2. In general, and in addition to the upgrade of existing installations, land within the structure plan designated as buffer 1 or buffer 2 may be used for the establishment of space extensive essential engineering infrastructure services and installations such as municipal engineering services, power substations, landfill sites, wind turbine infrastructure and for telecommunications purposes, subject to any necessary environmental authorisations. 3. Linear infrastructure which forms part of a services network such as power lines, bulk service pipes and ICT cabling may be suitable in any of the identified planning categories subject to relevant statutory authorisations and taking visual impact into account. 4. Where feasible, new electrical power lines should be located or planned for underground through existing urban areas or new development areas. This infrastructure should avoid or at worst be sensitively located in relation to areas of scenic or visual significance (e.g. associated with scenic drives / routes). 5. In general, support the use of bulk services servitudes for uses such as public open space, and urban agriculture.	P24

* list is not exhaustive

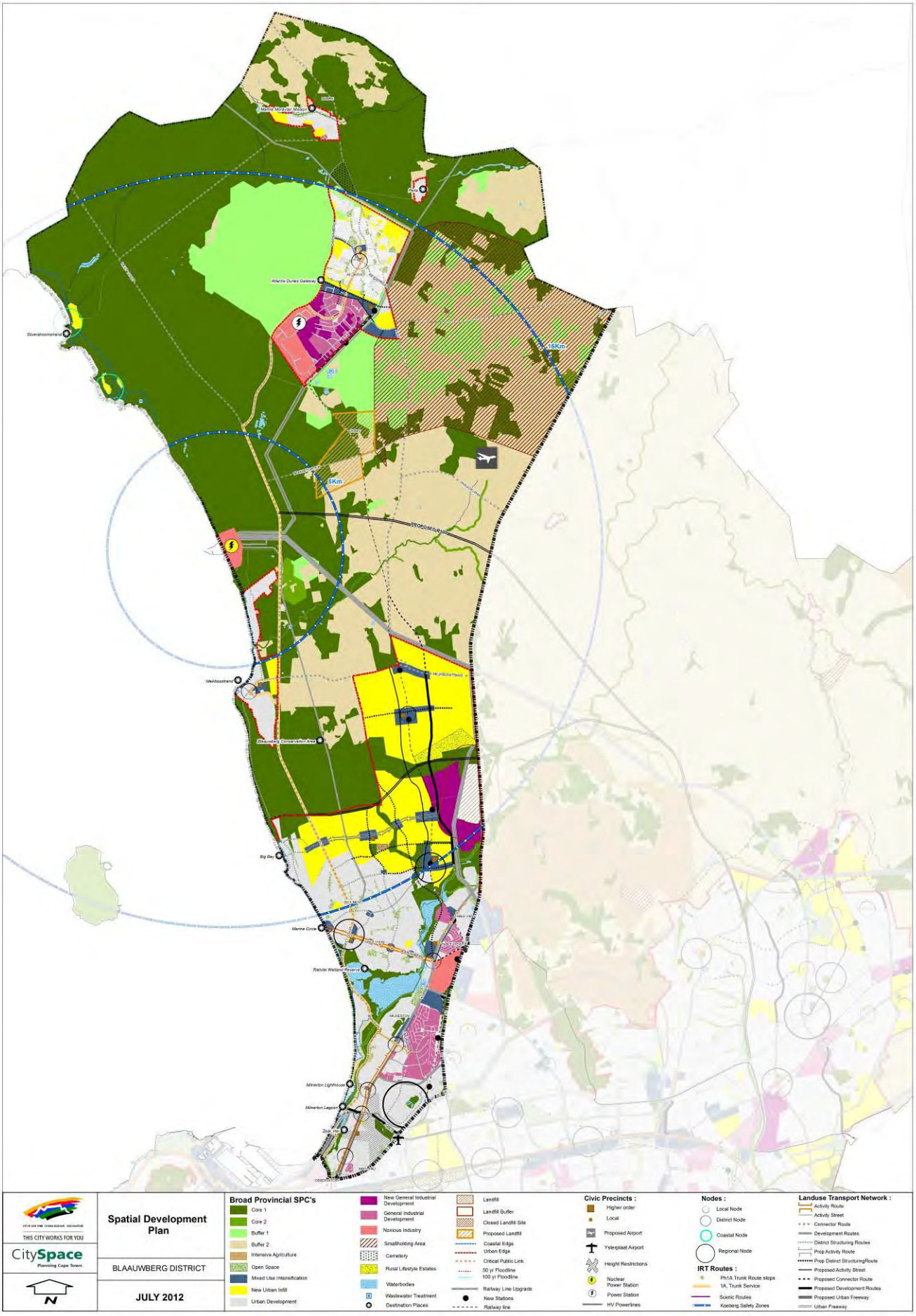


Figure 4-1: Blaauwberg district spatial development plan

5. ENVIRONMENTAL MANAGEMENT FRAMEWORK

5.1 Introduction

The following section describes the Environmental Impact Management Zones (EIMZ), which must be considered in planning, development and environmental and land management decisions. The information provided in this section has been informed by the attributes (characteristics and sensitivity) of the various environments described in the baseline information and analysis document. This chapter included management guidelines for each management zone. Further to these impact management zones, areas of potential impact have been identified that reflect areas prioritised for development purposes, but where underlying environmental attributes may be impacted.

5.2 Environmental impact management zones and land use development informants

Environmental Impact Management (EIM) zones have been identified using the best available information at the time of report compilation. They comprise areas with homogenous or similar environmental attributes. These EIM zones are intended to guide and inform planning and decisions regarding activities that require environmental authorisation and / or planning approval within these areas. They should be regarded as a basis for the possible future exclusion of certain activities listed in the NEMA EIA Regulations (2010) from the requirement for environmental authorisation. The following tables should be read together with the accompanying EIM Zone maps[1]. Each attribute which is mapped as an environmentally sensitive zone, has an accompanying table indicating the following:

- **Kinds of developments, land uses or activities that would be undesirable**: These are types of activities which may be contrary to the desired state of the environment in a particular zone and should be discouraged, unless there is compelling motivation to the contrary.
- **Kinds of developments, land uses or activities that may have a significant impact**: These are types of activities that could be considered in a particular zone, provided potential impacts resulting from the activity are adequately assessed, prior to approval, and adequate mitigation measures to limit and reduce the negative impacts are identified and implemented.
- **Kinds of developments, land uses or activities that may not have a significant impact**: These are types of activities that are generally desirable and unlikely to cause significant impacts in a particular zone. However these activities are still subject to legislative requirements in terms of NEMA and other relevant legislation, as well as impact management norms and standards such as implementation of an Environmental Management Programme (EMP).

Additionally, each table indicates relevant **policy and guideline documents** which should be consulted (see also Annexure C).

Important note: The **kinds of developments, land uses or activities** described in the EIM tables below are not the listed activities as contained in the National Environmental Management Act (NEMA) EIA Regulations (2010). In order to determine which activities will trigger the requirements for an Environmental Assessment process, reference must always be made to the NEMA EIA Regulations as well as the National Environmental Management (NEM): Waste Act, the NEM: Integrated Coastal Management Act and the NEM: Air Quality Management Act. Reference should also be made to section 38 of the National Heritage Resources Act.

The need to undertake an EIA in any of the environmental impact management zones listed below should be determined by whether the proposed project includes one or more listed activities as identified in the EIA Regulations (2010, as amended).

[1] The District Planning Office needs to be contacted for finer scale maps that enable the placement of individual properties relative to the EIM zones.

Furthermore, should an EIA not be required, the local authority may still require an assessment of possible impacts on environmental attributes or specific environmental information in order to have sufficient information to evaluate an application made in terms of the Land Use Planning Ordinance (15 of 1985) or replacement legislation. Such requests for assessment or information may also apply in cases when there is likely to be any significant damage to or degradation of the environment, in which case an environmental assessment (or other precautionary steps as listed in section 28(3)) should be undertaken in terms of the Duty of Care Principle of NEMA (see below), sections 28(1), (2) and (3).

The environmental attributes are grouped on a number of EIM Zone maps as shown in Table 5.1 below.

Note: Duty of Care Principle

Any person undertaking any activity that may cause damage or degradation to the environment is subject to the Duty of Care Principle in terms of NEMA, section 28.

NEMA (S 28(1)) requires that: Every person who may cause significant … degradation of the environment must take reasonable measures to prevent such degradation from occurring …or, in so far as such harm to the environment is authorized by law or cannot reasonably be avoided … to minimize or rectify such … degradation of the environment.

The Duty of Care Principle therefore may apply to any activity or land use, irrespective of whether it is included in the listed activities in the EIA Regulations (2010).

The measures required in terms of subsection (1) may include measures to -

(a) investigate, assess and evaluate the impact on the environment;
(b) inform and educate employees about the environmental risks of their work and the manner in which their tasks must be performed in order to avoid causing significant pollution or degradation of the environment;
(c) cease, modify or control any act, activity or process causing the pollution or degradation;
(d) contain or prevent the movement of pollutants or the cause of degradation;
(e) eliminate any source of the pollution or degradation; or
(f) remedy the effects of the pollution or degradation.

Each zone is preceded by a summary of its status (summarised from the detailed description in the baseline report) and a description of the environmental management priorities.

Table 5-1: Blaauwberg District Overview of EIM Zone Maps

ZONE MAP NUMBER	Figure 5.1	Figure 5.2	Figure 5.3	Figure 5.4	Figure 5.5	Figure 5.6
ZONE MAP NAME	*Hydrological Zone*	*Coastal Protection and Dune Zone*	*Protected areas* *Critical Biodiversity Priority Zone*	*Cultural and Recreational Resources Zone*	*Natural Economic Resources Zone*	*Urban Uses and Utilities Zone*
ENVIRONMENTAL ATTRIBUTES	**Flood Risk Areas** • Flood risk area 1 (1:50 flood line) • Flood risk area 2 (1:100 flood line) • Flood risk area 3 **Rivers, Estuaries and Wetlands** • Rivers, wetlands and associated buffers **Aquifers** • Highly productive aquifers • Moderately productive aquifers	**Coastal Protection Areas** • Coastal Protection Zone • Coastal risk areas **Dune Areas** • Sensitive dune fields	**Conservation and Biodiversity Areas** • Protected areas • Critical Biodiversity Area 1 • Critical Biodiversity Area 2 • Critical Ecological Support Areas • Other Ecological Support Areas • Other Natural Vegetation	**Cultural and Heritage Areas** • Cultural landscapes • Potential archaeological / paleontological sites • Other significant heritage resources potential heritage areas • Grade 2 heritage resources • Scenic Routes **Public Open Spaces** • Structuring Open Spaces	**High Potential Agricultural Areas** • High potential and unique agricultural land worthy of statutory and long-term protection • Agricultural area of significant value given existing, potential and emerging use • Other Agricultural areas • Smallholdings and agricultural areas **Mineral Extraction Areas** • Priority mineral resources	**Nuclear and Landfill Exclusion Areas** • Nuclear Exclusion zones • Landfill sites and buffer zones **Industrial and Commercial Areas** • Industrial areas • Commercial areas **Infrastructure and Utilities Areas** • Infrastructure servitudes, including WWTWs

5.2.1 Hydrological Zone

a) Summary of Environmental Status

The pollution and degradation of rivers, wetlands and groundwater systems within the Blaauwberg district and the Western Cape in general, are critical issues. Many of the rivers in this District, particularly the Diep River, have lost much of their natural riparian habitat and their environmental functioning has been seriously compromised (see Pollution and Waste Management in Volume 1). Rivers have been degraded by pollution from agricultural and urban stormwater run-off, treated effluent from WWTW and new industrial areas as well as infestation by alien invasive fish and vegetation. The degradation of rivers also affects coastal deposition and sedimentation processes. The Silverstroom River, in the north of the District, is a sensitive and unique river system with unusually high water quality. This river springs from the Atlantis Aquifer and contains a unique fish species worthy of conservation. The Atlantis Aquifer is an important sole-source aquifer and the quality of the water could be compromised by development pressures adjacent to the Witzands dunes and at Silverstroom (the aquifer's recharge areas), as well as pressure on the Wesfleur WWTW. Treated effluent from this facility is currently used to recharge the aquifer, so water quality monitoring and maintenance of the Wesfleur facility is critical.

b) Environmental Management Priorities

Management Priority	Priority area of focus
1. Enhance and Restore	• Improve water quality, particularly in the Milnerton lagoon, the Sout and Diep rivers
2. Retain and Protect	• Establish appropriate wetland and riverine buffers. • Protect the recharge areas of the Atlantic Aquifer and restrict abstraction to acceptable limits • Manage the Sout River to ensure refuge areas (pools and runs) are maintained for indigenous fish species
3. EIA requirements	• A detailed Environmental Management Programme (EMP) must be drawn up and implemented for all activities approved in these zones, in accordance with the City of Cape Town's specifications for EMPs. • A stormwater analysis is required to determine the extent and scale of activities that are or are not permitted. • Activities abstracting large volumes of water from major aquifers must demonstrate that such abstraction is sustainable. • Key issues to be addressed: stormwater quality and quantity management, catchment management, health & safety issues, biodiversity and rehabilitation, visual and heritage issues & infill and illegal dumping & groundwater contamination and sustainable water abstraction.
4. Monitor and manage impacts	• Identify and implement measures to prevent *E.coli* contamination of rivers and wetlands – particularly the Milnerton Lagoon and Diep River. Measures include provision of basic services to Du Noon and Doornbach • Control illegal infilling of wetlands, often as a result of dumping. • Control illegal dumping and littering, particularly where dumped material can affect stormwater and river systems • Manage reed growth where it becomes problematic • Maintain environmental flow requirements in the Silverstroom River, should abstraction re-commence • Remove invasive vegetation, particularly from the Sout and Modder Rivers • Monitor treated effluent and improve water quality standards at the Melkbosstrand WWTW as well as the Wesfleur WWTW. • Ensure no contaminants enter the ground water system • Ensure effluent is not discharged into the stormwater system or rivers, particularly in especially environmentally sensitive areas such as the Atlantis aquifer and Diep River systems.

c) Environmental Impact Management Table: Hydrological Zone: Refer to Figure 5.1

Table 5-1a): Flood Risk Areas

Note: All activities contemplated within the 'hydrological zone' must be supplemented with the activities as contained in the Floodplain and River Corridor Management Policy (2009)

Environmental attributes	Kinds of developments, land uses or activities that would be undesirable	Kinds of developments, land uses or activities that may have a significant impact	Kinds of developments, land uses or activities that may not have a significant impact	Relevant policy and guideline documents for environmental management
Flood Risk Area 1 *These constitute areas within the 1:50 flood line i.e. floods of this magnitude are equalled or exceeded on average once in 50 years* *NOTE: ALL ACTIVITIES LISTED AS 'UNDESIRABLE' ARE PROHIBITED IN TERMS OF THE FLOODPLAIN AND RIVER CORRIDOR MANAGEMENT POLICY (2009).*	• Any activity which impedes the hydrological functioning and flooding of a river. • Bulk infrastructure, including Waste Water Treatment Works (WWTWs), pump stations and power generation, electrical substations. • Solid and liquid waste disposal. • Telecommunication exchangers and transmitters. • Manufacturing, storage, treatment, transportation or handling of hazardous substances. • Any permanent building with foundations including residential, business, educational, community and public facilities and institutions e.g. prisons, military bases, police stations, fire stations, hospitals, old age homes. • Informal residential areas • Railway stations, modal interchanges or bus depots. • Any structure that would pollute the river if it was flooded. • The infilling or depositing of any material into a watercourse, in stream dam or wetland.	• Conservation related facilities or infrastructure. • All excavation and mining related activities. • Essential engineering and utility services relating to outfall sewers, stormwater systems and underground services. • Transmission towers • On-site sewage treatment (conservancy tanks). • Road, rail, pipeline and cable crossings and bridges. • Bank protection, flow diversion structures and earthworks (e.g. dams weirs, walls, levees). • Parking areas. • Pedestrian walkways. • Agricultural and Agri-industrial activities. • Resorts and camping/caravan sites. • Sustainable harvesting of natural resources. • Sports fields and picnic areas.	• Conservation activities. • Public open space areas with appropriate low-impact recreation activities. • Agriculture (excluding types of agriculture that may have a negative impact on adjacent water courses – e.g. from trampling and erosion by stock or ploughing activities)	• City of Cape Town's t Floodplain and River Corridor Management Policy (2009) • City of Cape Town's Management of Stormwater Impacts Policy (2009) • City of Cape Town (2008) Diep River Estuary Management Plan

Environmental attributes	Kinds of developments, land uses or activities that would be undesirable	Kinds of developments, land uses or activities that may have a significant impact	Kinds of developments, land uses or activities that may not have a significant impact	Relevant policy and guideline documents for environmental management
	• Establishment of cemeteries. • Abattoirs. • Industrial activities. • Service stations.			
Flood Risk Area 2 *These constitute areas from the 1:50 to the 1:100 year flood line. NOTE: ALL ACTIVITIES LISTED AS 'UNDESIRABLE' ARE PROHIBITED IN TERMS OF THE FLOODPLAIN AND RIVER CORRIDOR MANAGEMENT POLICY (2009).*	• Bulk infrastructure, including WWTWs, pump stations and power generation, electrical substations. • Solid waste disposal sites. • Telecommunication exchangers and transmitters. • Manufacturing, storage, treatment, transportation or handling of hazardous substances. • Community and public facilities (including hospitals, old age homes, fire stations, educational facilities etc.) • Informal residential areas • Railway stations or bus depots. • Any structure that would pollute the river if it was flooded. • Establishment of cemeteries. • Abattoirs. • Industrial activities. • Service stations. • Filling or reclamation	• Conservation related facilities or infrastructure. • All excavation and mining related activities. • Pedestrian walkways. • Transmission towers. • Formal residential development (which complies with specific conditions for development within this zone*). • Bank protection, flow diversion structures and earthworks (e.g. dams weirs, walls, levees, infilling) • Road, rail, pipeline and cable crossings and bridges. • Tourism facilities (which comply with specific conditions for development within this zone*). • Commercial development (which complies with specific conditions for development within this zone*). • Renewable power generation. • Facilities for the temporary landing of helicopters (but not maintenance or storage thereof). • Agri-industrial activities. • Resorts • Parking areas	• Conservation activities. • Public open space areas with appropriate low-impact recreation activities. • Resorts and camping/caravan sites. • Essential engineering and utility services relating to outfall sewers, stormwater systems and underground services. • On-site sewage treatment (conservancy tanks). • • Agricultural activities. • Sustainable harvesting of natural resources.	
Flood Risk Area 3 *These are areas prone to flooding. They are not necessarily*	• #Activities can be considered in conjunction with the implementation of appropriate engineering solutions to localised potential flooding.	• # Activities can be considered in conjunction with the implementation of appropriate engineering solutions to localised potential flooding	• # Activities can be considered in conjunction with the implementation of appropriate engineering	

Environmental attributes	Kinds of developments, land uses or activities that would be undesirable	Kinds of developments, land uses or activities that may have a significant impact	Kinds of developments, land uses or activities that may not have a significant impact	Relevant policy and guideline documents for environmental management
associated with river or vlei systems, as flooding may originate from groundwater or collection of storm water or runoff in low lying areas.			solutions to localised potential flooding	

Table 5-1b): Rivers, Wetlands and Estuaries: Buffer Areas

Environmental attributes	Kinds of developments, land uses or activities that would be undesirable	Kinds of developments, land uses or activities that may have a significant impact	Kinds of developments, land uses or activities that may not have a significant impact	Relevant policy and guideline documents for environmental management
Rivers and Wetlands and their associated buffer areas *These are the buffer areas that have been determined via a series of standardised methodologies for the calculation of buffers (refer to the Floodplain and River Corridor Management Policy, 2009).River buffer widths range from 10 – 40 m from the top of river bank. Wetland buffer widths vary in width and may extend up to 75m from the outer delineated edge of the wetland.*	• Any land use or activity that will have an impact on the vegetation cover or hydrological functioning of the buffer area, including: – Industrial development; – Mining activities; – Business/Commercial development; – Residential development; – Community and public facilities; – Utilities and infrastructure; – Agricultural activities; – Transport systems and – Infilling/reclamation.	• Conservation related facilities or infrastructure. • Essential engineering and utility services relating to outfall sewers and storm water systems. • Essential road, rail, pipeline and cable crossings and bridges. • Sports fields and picnic areas. • Resorts and camping/caravan sites. • Sustainable harvesting of natural resources.	• Conservation activities. • Public open space areas with appropriate low-impact recreation activities. • Where applicable, appropriate boating activities	• City of Cape Town's Floodplain and River Corridor Management Policy (2009) • City of Cape Town's Management of Urban Stormwater Impacts (2009). • City of Cape Town: Prioritization of City Wetlands (2009) • City of Cape Town: Biodiversity Strategy • Zoarvlei Management Plan (1999). • Rietvlei Management Plan • The Diep River Corridor Management Plan

Table 5-1c): Aquifers

Environmental attributes	Kinds of developments, land uses or activities that would be undesirable	Kinds of developments, land uses or activities that may have a significant impact	Kinds of developments, land uses or activities that may not have a significant impact	Relevant policy and guideline documents for environmental management
Highly productive aquifers *This zone includes highly productive intergranular, fractured and intergranular-and-fractured aquifers.*	• Manufacturing, storage, treatment, transportation or handling of hazardous substances. • Solid and unregulated liquid waste disposal. • WWTWs. • Any activity that can cause groundwater pollution or prevent the abstraction of water.	• Water abstraction. • Industrial activities. • Mining related activities and infrastructure. • Establishment of cemeteries. • Agricultural activities. • Stormwater management by means of infiltration	• Conservation activities and related facilities or infrastructure. • Engineering and utility services (excluding waste disposal and WWTW). • Roads, rail, pipelines and cables. • Public open space areas. • Residential development. • Tourism facilities. • Commercial development. • Institutional facilities (including educational facilities). • Transmission towers and rooftop base stations. • Sustainable harvesting of natural resources.	• Department of Water & Environmental Affair's (DWEA)Guideline for the Assessment, Planning and Management of Groundwater Resources in South Africa (2008) • DWEA's Groundwater Resource Directed Measures (2006) • DEAD&DP's Guideline for Involving Hydrogeologists Specialists in EIA Processes (2005) • City of Cape Town's Management of Urban Stormwater Impacts Policy (2009)
Moderately productive aquifers *This zone includes moderately productive intergranular, fractured and intergranular-and-fractured aquifers*	• N/A	• All activities can be considered in this zone, however the following activities may have a significant impact: – Manufacturing, storage, treatment, transportation or handling of hazardous substances. – Solid and liquid waste disposal. – WWTWs. – Mining activities. – Establishment of cemeteries. – Water abstraction. – Industrial activities. – Agricultural activities – Stormwater management by means of infiltration	• Conservation activities. • Conservation related facilities or infrastructure. • Engineering and utility services (excluding waste disposal and WWTW). • Public open space areas with appropriate recreation activities. • Residential development. • Commercial development. • Tourism facilities. • Light industrial activities. • Roads, rail, pipelines and cables. • Transmission towers and rooftop base stations. • Sustainable harvesting of natural resources.	

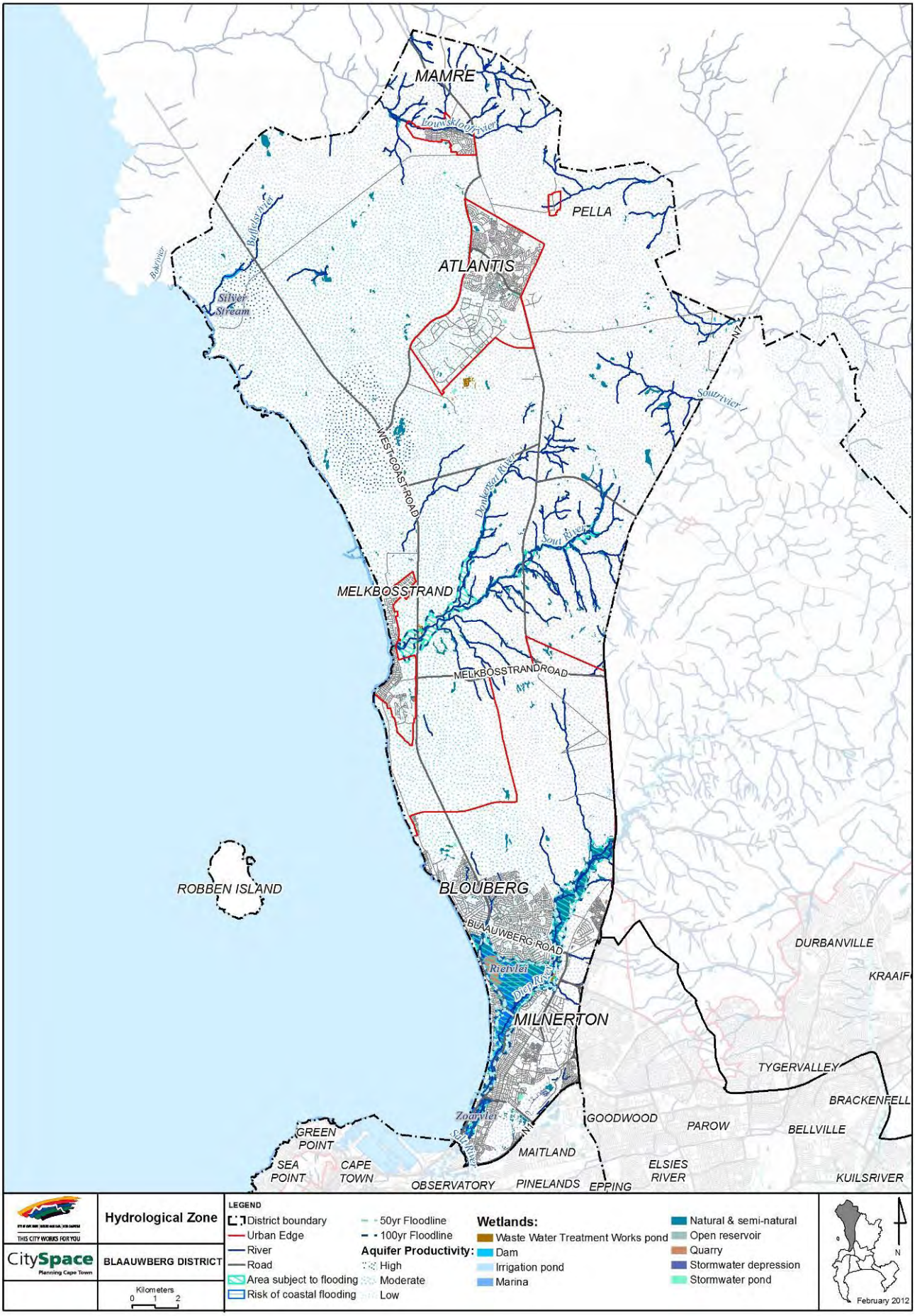


Figure 5-1: Hydrological zone

5.2.2 Coastal and Dune Zone

a) Summary of Environmental Status

The west coast consists of long sandy beaches with occasional rocky outcrops and is particularly vulnerable to erosion from storms and tidal action. Reclamation and development around Duncan Dock / Port of Cape Town and stabilisation of sand by urbanisation are the primary causes of the coastal erosion in Table Bay, and the Milnerton coast has already been severely altered. Additionally many of the linear and embryo dunes close to the coast have been impacted on by invasive alien vegetation (predominantly *Acacia*) or urbanisation. In light of future climate change and sea level rise predictions, these floodprone areas will have increased occurrence of storm events due to higher sea levels and increased storm energy. These factors combine to create significant safety issues for development in close proximity to the coast and emphasise the need for the protection of the remaining dune systems.

b) Environmental Management Priorities

Management Priority	Priority area of focus
1. Enhance and Restore	• Retain and rehabilitate primary coastal dune systems to act as a barrier against storm damage
2. EIA requirements	• This zone should, in principle, be regarded as a "no-go" area and no further development should be allowed, without a detailed assessment of the impacts on the dune system. • Undesirable activities should not be authorised except under exceptional circumstances and subject to compelling motivation. • An EMP must be drawn up and implemented for all activities approved in this zone, in accordance with the City of Cape Town's specifications for EMPs. • Development of coastal nodes must consider the functioning of the coastal ecological corridor in the EIA and implement measures to retain this functioning. • If development is considered at Silwerstroom, the mouth and sensitive headland dunes close to the mouth must be avoided and protected. • Key issues to be addressed: sea level rise, storm events and coastal erosion, vegetation, health and safety issues, access to the coastal zone, pollution, dunes and sand movement, risk and liability issues.
3. Monitor and manage impacts	• Remove alien vegetation in areas where it is negatively impacting dune systems – e.g. near Melkbosstrand • Prevent inappropriate use of sensitive dunes by 4X4 vehicles, e.g. at Skulpbaai, Matroosbaai and Witzands
4. Research and Educate	• Establish clear coastal management responsibilities and increase skills and capacity within CCT to optimise coastal management

c) Environmental Impact Management Table: Coastal and Dune Zone: Refer to Figure 5.2

Table 5-2a): Coastal Protection Area

Environmental attributes	Kinds of developments, land uses or activities that would be undesirable	Kinds of developments, land uses or activities that may have a significant impact	Kinds of developments, land uses or activities that may not have a significant impact	Relevant policy and guideline documents for environmental management
Coastal protection zone *The coastal protection zone is delineated by the coastal urban edge line. It has been determined by the CoCT, using a number of parameters, including sea level rise, storm surge events, biodiversity, coastal access and other dynamic coastal processes.*	• Any activity which will impact on the coastal environment and natural coastal processes; including*: – Bulk infrastructure, including WWTWs and power generation; – Manufacturing, storage, treatment, transportation or handling of hazardous substances; – Any permanent structure with foundations, including residential and tourism uses as well as canals, weirs and dams; – All excavation and mining related activities and infrastructure; – Transmission towers and rooftop base stations; – Cemeteries; – Agricultural activities; and – Outdoor advertising. • Any other activity entailing clearance of indigenous vegetation within 100 m of the high water mark.	• Tidal pools; embankments; stabilizing walls. • Infrastructure associated with marine and safety uses (e.g. lifesaving). • Essential engineering and utility services (outfalls). • Pedestrian walkways and trails. • Landscaping. • Environmental educational facilities. • Tourism facilities at identified nodes. • Renewable energy.	• Conservation activities. • Public open spaces with appropriate low impact recreation activities. • Essential activities required for the environmental management of the coastal area • Sustainable harvesting of natural resources • Where applicable, appropriate boating activities	• D:EA&DPs Coastal Zone Policy • Draft Delineation of the Proposed Coastal Protection Zone for the City of Cape Town: Draft Report (2009) • City of Cape Town Coastal Protection Zone Policy (in preparation 2010) • City of Cape Town Coastal Development Guidance for Cape Town Coastline into the Future (2007) • City of Cape Town Biodiversity Strategy • National Policy for Sustainable Coastal Development in South Africa • Draft Coastal Zone Policy for the Western Cape • City of Cape Town Energy and Climate Change Strategy • A Climate Change Strategy and Action Plan for the Western Cape, South Africa (2008)
Coastal Risk Areas	These are areas that have been developed in the past, but which have been identified as being vulnerable to flooding. In most cases, they are located outside (inland of) the coastal edge. However, there are some pockets of developed or semi-developed land on the seaward side of the coastal edge which would also qualify as coastal risk areas. The City Of Cape Town will be developing a policy for the management of coastal risk areas. In all cases, a precautionary approach must be adopted and emergency planning for flood and storm events undertaken.			

Table 5-2b): Dune Areas

Environmental attributes	Kinds of developments, land uses or activities that would be undesirable	Kinds of developments, land uses or activities that may have a significant impact	Kinds of developments, land uses or activities that may not have a significant impact	Relevant policy and guideline documents for environmental management
Sensitive dune fields *This zone constitutes sensitive dune fields, including embryo, linear, parabolic, sand sheet and transverse dunes.*	• Activities involving excavation and mining. • Activities restricting the natural movement of sand. • Activities which harden the surface and stabilise the dunes. • Activities which result in high traffic (pedestrian and vehicular) activity. • Any other activity entailing clearance of indigenous vegetation within 100m of the high water mark.	• Pedestrian walkways. • Landscaping associated with coastal and dune management.	• Conservation activities. • Public open spaces with appropriate low impact recreation activities. • Essential activities required for the environmental management of the coastal and dune areas.	• DEA&DPs Coastal Zone Policy • City of Cape Town Coastal Zone Policy • City of Cape Town Coastal Development Guidance for Cape Town Coastline into the Future. • City of Cape Town's Management of Urban Stormwater Impacts Policy (2009) • City of Cape Town Biodiversity Strategy • National Policy for Sustainable Coastal Development in South Africa • Draft Coastal Zone Policy for the Western Cape.

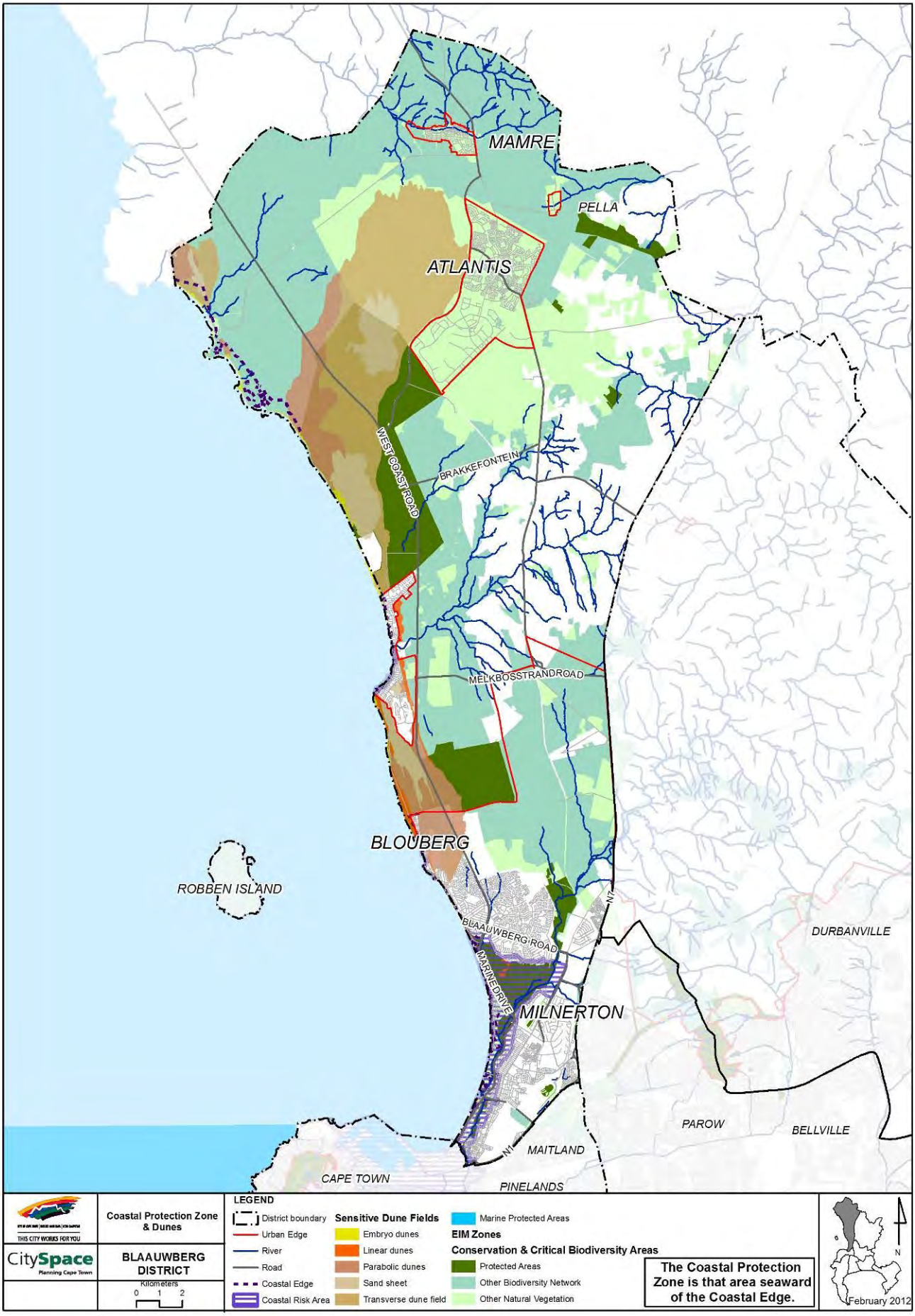


Figure 5-2: Coastal and dune zone

5.2.3 Conservation and Biodiversity Priority Zone

a) Summary of Environmental Status

The West Coast region includes some of the most important unpreserved lowland sites within the Cape Floristic Region, which have been identified as a conservation priority and are of international significance. The Blaauwberg District contains some of the remaining tracts of two of South Africa's rarest vegetation types, namely Sand Fynbos and Renosterveld. Both these types are exceptionally high in species diversity, and have a high incidence of Vulnerable and Endangered Red List plant species and many endemic faunal species. Biodiversity in this district is under threat from agricultural activities, frequent veldfires, rapid development; infestation by invasive alien species and overexploitation of water resources and marine resources. A large portion of the district is included in the West Coast Biosphere Reserve.

b) **Environmental Management Priorities**

Management Priority	Priority area of focus
1. Enhance and Restore	• Rehabilitate and maintain sensitive areas of vegetation and high biodiversity value and establish 'green' corridors, particularly east west and north south.
2. EIA requirements	• New development inside the urban edge that potentially impacts on areas of high biodiversity importance should only be considered under exceptional circumstances, subject to compelling motivation and in consultation with the City of Cape Town's Biodiversity Branch • Specialist botanical input must be obtained for proposed new development inside the urban edge that potentially impacts on areas of high biodiversity importance • If tourism facilities are proposed, that include buildings or other major infrastructure (roads, parking areas etc.) – such developments should wherever possible, be located outside the biodiversity area on adjacent land, unless disturbed areas of low biodiversity value exist on the site. • Other natural vegetation sites may become important as biodiversity offset sites. Some higher impact activities could be considered on degraded portions but vegetation in good condition should be subject to low impact activities only. • An EMP must be drawn up and implemented for all activities approved in this zone, in accordance with the City Of Cape Town's specifications for EMPs. • Key issues to be addressed: vegetation, connectivity and access, fire control and land management issues, pollution, invasive alien vegetation and faunal species.
3. Monitor and manage impacts	• Control and remove alien vegetation, particularly in and close to nature conservation and biodiversity priority areas e.g. east of the R27, in and close to the Koeberg Nature Reserve and in the dune fields near Melkbos • Control development pressure in key sensitive areas such as Silverstroom Strand, Atlantis and the northwards expansion of urban area near the Blaauwberg conservation area. Where conflicts occur between proposed development and biodiversity ensure the required assessments are undertaken to ensure appropriate mitigation actions. • Conserve remnants of sensitive and threatened vegetation types, particularly Cape Flats Sand Fynbos, and control development pressure in key sensitive areas. • Implement effective veldfire management strategies • Control illegal dumping, particularly in and adjacent to important biodiversity sites • Restrict access to and illegal removal of terrestrial and marine species
4. Educate	• Maximise integration of biodiversity areas with the Metropolitan Open Space System and the educational and recreational benefits of eco-tourism, botanical tours and environmental education

c) Environmental Impact Management Table: Biodiversity: Refer to Figure 5-3

Table 5-3a): Conservation and Critical Biodiversity Areas

Environmental attributes	Kinds of developments, land uses or activities that would be undesirable	Kinds of developments, land uses or activities that may have a significant impact	Kinds of developments, land uses or activities that may not have a significant impact	Relevant policy and guideline documents for environmental management
Protected Areas *This zone includes protected and managed biodiversity areas.*	• Any land use or activity that will have an impact on the vegetation cover or ecological functioning of the area, including: – Manufacturing, storage, treatment, transportation or handling of hazardous substances. – Solid and liquid waste disposal. – Industrial activities. – Residential and commercial development. – All excavation and mining related activities. – Establishment of cemeteries. – Abattoirs. – Agricultural and agri-industrial activities. – Outdoor advertising.	• Tourism and hospitality facilities. • Environmental education facilities. • Essential engineering and utility services. • Institutional activities (museums etc.) • Parking areas and offices (related to conservation activities). • Transmission towers and rooftop base stations. • Any other activity entailing clearance of 3 hectares or more of critically endangered indigenous vegetation.	• Conservation activities. • Activities necessary for the management of the conservation area/ reserve. • Hiking trails and walks.	• City of Cape Town Biodiversity Strategy • City of Cape Town Biodiversity Network: C-plan and Marxan Analysis: 2009: Methods and Results • City of Cape Town's Natural Interface Study: Veldfire Planning Guidelines (2004) • DEAD&DP's Guideline for Involving Biodiversity Specialists in EIA Processes (2005) • The Fynbos Forum's Guidelines for Environmental Assessment in the Western Cape (2005) • Western Cape Provincial Spatial Development Framework:
Critical Biodiversity Area 1 *This zone encompasses critical irreplaceable, minimum selection, consolidation and connectivity biodiversity sites i.e. Bionet categories CBA 1a) – e)*	• Any land use or activity that will have an impact on the vegetation cover or ecological functioning of the area, including: – Manufacturing, storage, treatment, transportation or handling of hazardous substances. – Solid and liquid waste disposal. – Bulk infrastructure including	• Conservation related facilities or infrastructure. • Essential roads, rail, pipelines and cables. • Essential engineering and utility services. • Tourism facilities. • Hiking trails and walks. • Environmental education facilities.	• Conservation activities • Urban open space areas with appropriate low-impact recreation activities.	

Environmental attributes	Kinds of developments, land uses or activities that would be undesirable	Kinds of developments, land uses or activities that may have a significant impact	Kinds of developments, land uses or activities that may not have a significant impact	Relevant policy and guideline documents for environmental management
	– WWTWs and power generation. – Industrial and agri-industrial activities. – Residential and commercial development. – All excavation and mining related activities. – Establishment of cemeteries. – Abattoirs. – Outdoor advertising.	• Sustainable harvesting of natural resources. • Any other activity entailing clearance of critically endangered indigenous vegetation. • Agricultural activities (outside the urban edge).		Statutory Report • City of Cape Town's Management of Urban Stormwater Impacts Policy (2009) • Reserve Sensitivity and Zonation Plans (June 2010) • A Climate Change Strategy and Action Plan for the Western Cape, South Africa (2008) • BCA Environmental Management Plan • KPNR Environmental Management Plan and site safety plans. • MCA Environmental Management Plan. • Cape West Coast Biosphere Reserve reports
Critical Biodiversity Areas 2 **(Restorable Irreplaceable Sites)** *This zone encompasses the irreplaceable restorable biodiversity sites i.e. Bionet category CBA 2*	• Any land use or activity that will have an impact on the vegetation cover or ecological functioning of the area, including: – Manufacturing, storage, treatment, transportation or handling of hazardous substances. – Solid and liquid waste disposal. – Bulk infrastructure including WWTW and power generation. – Industrial and agri-industrial activities. – Residential and commercial development. – All excavation and mining related activities. – Establishment of Cemeteries. – Abattoirs. – Outdoor advertising.	• Conservation related facilities or infrastructure. • Essential roads, rail, pipelines and cables. • Essential engineering and utility services. • Tourism facilities. • Hiking trails and walks. • Environmental education facilities. • Sustainable harvesting of natural resources. • Any other activity entailing clearance of critically endangered indigenous vegetation. • Agricultural activities (outside the urban edge).	• Conservation activities • Urban open space areas with appropriate low-impact recreation activities.	

Environmental attributes	Kinds of developments, land uses or activities that would be undesirable	Kinds of developments, land uses or activities that may have a significant impact	Kinds of developments, land uses or activities that may not have a significant impact	Relevant policy and guideline documents for environmental management
Critical Ecological Support Areas *These sites may comprise any habitat quality from very low condition to pristine. They provide for essential ecosystem services. They are required for additional consolidation and ecological support and are essential for management consolidation, connectivity and viability of biodiversity elements in protected areas and CBAs.* **Other Ecological Support Areas (OESAs)** Transformed (e.g. extensive agriculture) sites with conservation importance. These sites are essential for management consolidation, connectivity and viability of biodiversity elements in CBA1, CBA 2 and Protected sites	• Any land use or activity that will change the existing land use and /or harden the surface of the site, including: – Manufacturing, storage, treatment, transportation or handling of hazardous substances. – Solid and liquid waste disposal. – Bulk infrastructure including WWTW and power generation. – Higher-density residential development. – Industrial activities. – Mining related activities. – Establishment of Cemeteries. – Abattoirs.	• Agricultural activities (outside the urban edge). • Conservation related facilities or infrastructure. • Essential road, rail, pipelines and cables. • Essential engineering services relating to tourism facilities. • Tourism facilities. • Transmission towers and rooftop base stations. • Sustainable harvesting of natural resources. • Any other activity that is in keeping with the existing land use.	• Conservation and restoration activities. • Urban open space areas with appropriate low-impact recreation activities. • Pedestrian walkways and trails.	
Other Natural Vegetation *This zone encompasses other natural vegetation sites that do not fall into the categories discussed above.*	• Manufacturing, storage, treatment, transportation or handling of hazardous substances. • Industrial activities. • Mining related activities.	• Conservation related facilities or infrastructure. • Essential road, rail, pipelines and cables. • Essential engineering services relating to tourism facilities. • Pedestrian walkways and trails • Tourism facilities. • Institutional activities. • Residential and commercial development. • Agricultural activities. • Transmission towers and rooftop base stations.	• Conservation activities. • Urban open space areas with appropriate low-impact recreation activities.	

Environmental attributes	Kinds of developments, land uses or activities that would be undesirable	Kinds of developments, land uses or activities that may have a significant impact	Kinds of developments, land uses or activities that may not have a significant impact	Relevant policy and guideline documents for environmental management
		• Establishment of cemeteries. • Sustainable harvesting of natural resources. • Any other activity entailing clearance of critically endangered indigenous vegetation.		

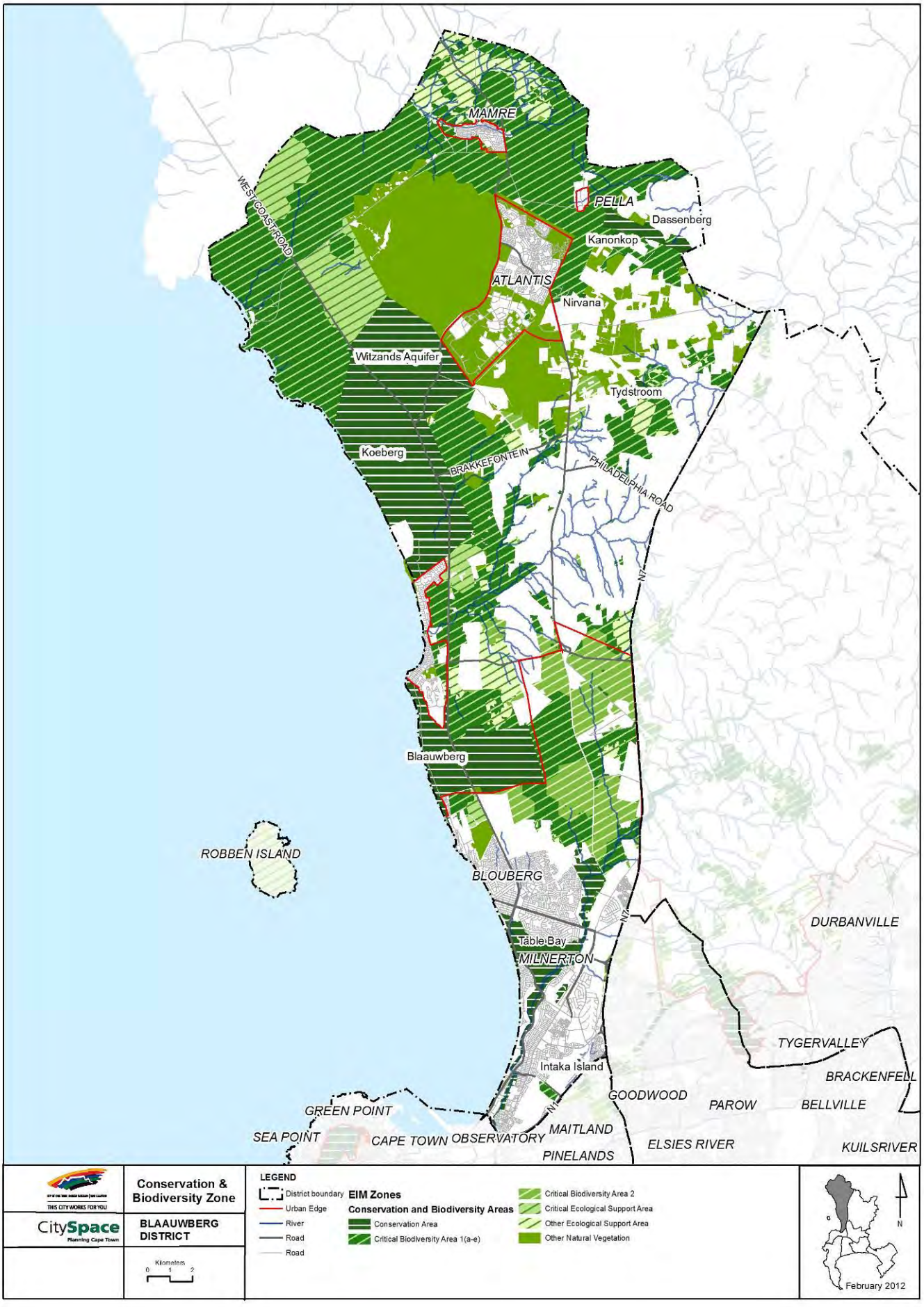


Figure 5-3: Conservation and biodiversity zone

5.2.4 Cultural and Recreational Resources Zone

a) Summary of Environmental Status

The Blaauwberg district displays much historic layering and a high degree of archaeological and palaeontological potential. The wealth of archaeological remains, particularly in the coastal zone, testifies to a long period of human occupation and use of marine resources in the area. The cultural landscapes, which include the historical farmlands, associated infrastructure and historical homesteads are important heritage resources and are under increasing pressure as a result of urbanization, urban expansion and industrialisation. The loss of agricultural grounds in ecologically marginal areas has also contributed to this loss. Blaauwberg Hill and surrounds have high heritage significance in terms of the Battle of Blaauwberg (1806).

b) **Environmental Management Priorities**

Management Priority	Priority area of focus
1. Enhance and Restore	• Protect and rehabilitate the Mamre Cultural Landscape and surrounds
2. Retain and Protect	• Protect the Koeberg Farms Cultural Landscape and Battle of Blaauwberg historical landscape • Formalise Urban Conservation areas where applicable (e.g. in Mamre, Bloubergstrand and Brooklyn)
3. Manage land use and form	• Maximise sustainable and appropriate development of opportunities associated with the area's cultural assets, e.g. the scenic route network (R307 and R 304), cultural tourism and adding value to sense of place through conservation and development of features of historical value e.g. Mamre • Maintain rural character of cultural landscapes • Minimise loss of agricultural potential through subdivision of farms into uneconomically viable units
4. Monitor and manage impacts	• Undertake archaeological assessments in the coastal zone if there are any activities or developments likely to affect potential archaeological resources • Ensure any development does not negatively impact the rural nature of the cultural landscape. • Ensure that heritage resources are not negatively impacted
5. Assessment requirements	*Important heritage issues in these zones include: archaeological, palaeontological, built environment, landscape, and visual issues.* • Authorisation of the activities must be in compliance with the requirements in the National Heritage Resources Act 25 of 1999. (Heritage Protections include: S27 - provincial and national heritage sites, S28 – protected areas, S29 – provisionally protected areas, S30 – heritage register, S31 – heritage areas, S34 – structures over 60 years old, S35 archaeology, palaeontology and meteorite sites, S36 – burial grounds and graves, S37 – public monuments and memorials, S38 – development triggers for impact assessment). • A Heritage Overlay is being developed and will become part of the new Cape Town Zoning Scheme. Compliance to the CTZS and any Heritage Overlay will be required when it is in place. • Notification of Heritage Western Cape or other responsible heritage authority of any proposed development activity, and the undertaking of an appropriate level of heritage assessment is recommended for proposed development in any of the areas below. • Undertake archaeological and palaeontological assessments in the coastal zone if there are any activities or developments likely to affect potential archaeological or palaeontological resources. • Where high priority mineral deposits occur, mining can be considered, subject to a Heritage Impact Assessment and the appropriate mitigation measures (e.g. the recovery and removal of any archaeological/palaeontological material prior to mining).

	• *Mining activities are generally not desirable within the Archaeological and Koeberg Farms Cultural Landscape Zones; however some high priority mineral deposits are located in the southern portion of the zone. Where these occur, mining can be considered, subject to an Archaeological Impact Assessment and the appropriate mitigation measures (e.g. the recovery and removal of any archaeological material prior to mining). • #Proposed residential, mixed use and open space development within the Blaauwberg Conservancy Zone, can be allowed where it falls within the urban edge and outside of the proclaimed BCA. However this development should be sympathetic to historical context of the area and EIA processes for activities in this area should include a Heritage Impact Assessment. • A minimum of a 1km corridor should be maintained as a "no-development" zone between Atlantis and the Mamre landscape to avoid visual contamination. • Environmental legislation, zoning requirements and bylaw requirements must be adhered to • Zoning requirements include Urban Conservation Areas, Scenic Drives, and Special Areas which require appropriate protection. • Key issues to be addressed: archaeological, cultural, heritage, visual, architectural/landscape issues <u>Best Practice</u> • Investigate heritage protections and heritage triggers applicable in terms of the National Heritage Resources Act. • Confirm the heritage processes required with the relevant heritage authorities and the City of Cape Town's district Heritage Resources Section office. • Investigate if any heritage surveys have taken place and whether there any heritage policies or guidelines for the area of the proposed development or the type of proposed development. • Consult relevant heritage brochures and guidelines for the area and type of work proposed. • Investigate whether the site has been identified on the City's inventory of heritage resources. • Undertaking of an appropriate level of heritage assessment is recommended for proposed developments, and in some cases may be a requirement of the relevant authority.
6. Research and Educate	• Confirm and refine mapping of cultural landscapes and heritage resources • Undertake research

c) Environmental Impact Management Table: Heritage: Refer to Figure 5.4

Table 5-4a): Cultural and Heritage Areas

Environmental attributes2	Kinds of developments, land uses or activities that would be undesirable	Kinds of developments, land uses or activities that may have a significant impact	Kinds of developments, land uses or activities that may not have a significant impact	Relevant policy and guideline documents for environmental management
Koeberg Farms Cultural Landscape **This is characterised by a sparse distribution of old farm homesteads set within a rural farming environment.**	• *Mining related activities and infrastructure. • Industrial activities. • Sub-division and densification. • High density residential or commercial. • Any alterations, additions or new structures unsympathetic to protected buildings or the general character of area. • Inappropriate outdoor advertising	• Institutional facilities. • Agri-tourism. • Tourism and hospitality facilities. • Hiking and horse trails. • Transmission towers and base stations. • Establishment of cemeteries. • Additional built agricultural infrastructure such as cellars and depots. • Upgrading of roads (widths, surfacing materials and edge treatments).	• Agricultural activities, excluding built agricultural infrastructure such as cellars and depots.	• D:EA&DP's Guideline for Involving Heritage Specialists in EIA Processes (2005) • D:EAD&DP's Guideline for Involving Visual Specialists in EIA Processes (2005) • D:EA&DP's EIA Guideline Series: Guideline for the Management of Development on Mountains, Hills and Ridges of the Western Cape (2002) • City Of Cape Town Scenic Drives
Blaauwberg Heritage Conservancy **This area includes the site where the Battle of Blaauwberg took place, the surrounding landscape, the link from the sea via the river which was instrumental to the landing of the British in the Cape as well as a military grave site. It also has high archaeological potential.**	• Mining related activities and infrastructure. • Industrial and Agri-Industrial activities. • Inappropriate commercial and residential development • Inappropriate outdoor advertising	• #Residential and commercial activities. • #Institutional facilities. • #Tourism and hospitality facilities. • #Bulk infrastructure and power generation. • #Engineering and utility services. • #Essential road, rail, pipelines and cables. • #Public open space. • Upgrading of roads (widths, surfacing materials and edge treatments).	• Conservation activities. • Viewing sites. • Tourism facilities • Pedestrian walkways and trails.	
Mamre, Pella and	• Any development in the immediate surroundings	• Engineering and utility services.	• Restoration of	

[2] Please note that cultural landscapes, potential archeological areas and other heritage areas have been mapped based on the best available data and have not been refined, peer-reviewed or ground-truthed.

Surrounds **This area includes the village of Mamre, which was a VOC werf and later a Moravian mission station, Pella and the surrounding landscape, particularly on the northern side of the Modder River.**	of the historic centre. • Any development outside of the Mamre urban edge. • Any alterations, additions or new structures unsympathetic to protected buildings or the general character of area. • Inappropriate outdoor advertising	• Road, rail, pipelines and cables. • Appropriate residential and commercial development. • Agricultural activities. • Institutional (including educational) facilities. • Tourism and hospitality facilities. • Industrial activities. • Bulk infrastructure and power generation • Waste disposal activities. • Mining activities. • Sustainable harvesting of natural resources. • Transmission towers and rooftop base stations. • Establishment of cemeteries. • Upgrading of roads (widths, surfacing materials and edge treatments). • Any work involving below ground disturbance.	historical sites, facilities and urban areas. • Landscaping. • Conservation related facilities or infrastructure. • Tourism facilities for day visitors.	Network Management Plan (Vol 3) • City Of Cape Town Heritage Resources Strategy • National Heritage Resources Act (1999)
Potential archaeological and palaeontological sites **This zone includes areas of archaeological and palaeontological value.**	• *All excavation and mining related activities and infrastructure. • Off-road vehicle trails. • Any development outside the urban edge.	• Essential engineering services and infrastructure. • Tourism and hospitality facilities. • Institutional and educational facilities. • Special coastal node development. • Sustainable harvesting of natural resources. • Bulk infrastructure and energy generation (including renewable energy). • Any work involving below ground disturbance.	• Conservation activities. • Public open space. • Viewing sites	
Scenic Routes **These include parts of the N7, M14, R304, R27 (Marine Drive), Otto Du Plessis, Melkbosstrand Road**	• Activities which compromise or restrict views. • Activities inconsistent with the landscape / townscape. • Outdoor advertising.	• Dependent on section of road. Suitable activities should be congruent and sympathetic to landscape / townscape. • Upgrading of roads (widths, surfacing materials and edge treatments).	• N/A	

and some connector roads.		• Service Stations		
Planning and Environmental Decision Guidelines:	*Important issues in these zones include: archaeological, heritage, visual, architectural and landscaping issues.* **<u>EIA and Land Use Requirements</u>** • *Mining activities are generally not desirable within the Archaeological and Koeberg Farms Cultural Landscape Zones; however some high priority mineral deposits are located in the southern portion of the zone. Where these occur, mining can be considered, subject to an Archaeological Impact Assessment and the appropriate mitigation measures (e.g. the recovery and removal of any archaeological material prior to mining). • #Proposed residential, mixed use and open space development within the Blaauwberg Conservancy Zone, can be allowed where it falls within the urban edge and outside of the proclaimed BCA. However this development should be sympathetic to historical context of the area and EIA processes for activities in this area should include a Heritage Impact Assessment. • A minimum of a 1km corridor should be maintained as a "no-development" zone between Atlantis and the Mamre landscape to avoid visual contamination. • Environmental legislation, zoning requirements and bylaw requirements must be adhered to • Zoning requirements include Urban Conservation Areas, Scenic Drives, Special Areas which require appropriate protection. **<u>Other Compliance Requirements</u>** • Authorisation of the activities must be in compliance with the requirements in the National Heritage Resources Act 25 of 1999 including impact assessment and for heritage resources. (Heritage Protections: S27 - provincial and national heritage sites, S28 – protected areas, S29 – provisionally protected areas, S30 – heritage register, S31 – heritage areas, S34 – structures over 60 years old, S35 archaeology, palaeontology and meteorite sites, S36 – burial grounds and graves, S37 – public monuments and memorials, S38 – development triggers for impact assessment). • A Heritage Overlay is being developed and will become part of the new Cape Town Zoning Scheme. Compliance to the CTZS will be required when it is in place. **<u>Best Practice</u>** • Investigate heritage protections and heritage triggers applicable in terms of the National Heritage Resources Act. • Confirm the heritage processes required with the relevant heritage authorities and the City of Cape Town's district Heritage Resources Section office. • Investigate if any heritage surveys have taken place and whether there any heritage policies or guidelines for the area of the proposed development or the type of proposed development. • Consult relevant heritage brochures and guidelines for the area and type of work proposed. • Investigate whether the site has been identified on the City's inventory of heritage resources. • Undertaking of an appropriate level of heritage assessment is recommended for proposed developments, and in some cases may be a requirement of the relevant authority.			

Table 5-4b): Public Open Spaces

Environmental attributes	Kinds of developments, land uses or activities that would be undesirable	Kinds of developments, land uses or activities that may have a significant impact	Kinds of developments, land uses or activities that may not have a significant impact	Relevant policy and guideline documents for environmental management
Structuring Open Spaces *This includes structuring public open spaces.*	• Waste disposal activities (including WWTW). • Mining activities. • Industrial activities. • Residential development.	• * Limited commercial activities. • Institutional activities (museums, churches etc.). • Tourism facilities. • Establishment of cemeteries. • Sustainable harvesting of natural resources. • Transmission towers and rooftop base stations. • Outdoor advertising. • Small-scale urban agricultural activities.	• Conservation related facilities or infrastructure. • Public open space areas with appropriate recreation activities. • Essential engineering services relating to outfall sewers and storm water systems. • Road, rail, pipeline and cable crossings and bridges. • Landscaping.	• City of Cape Town's CMOSS Strategy • City of Cape Town's Management of Urban Stormwater Impacts Policy (2009)

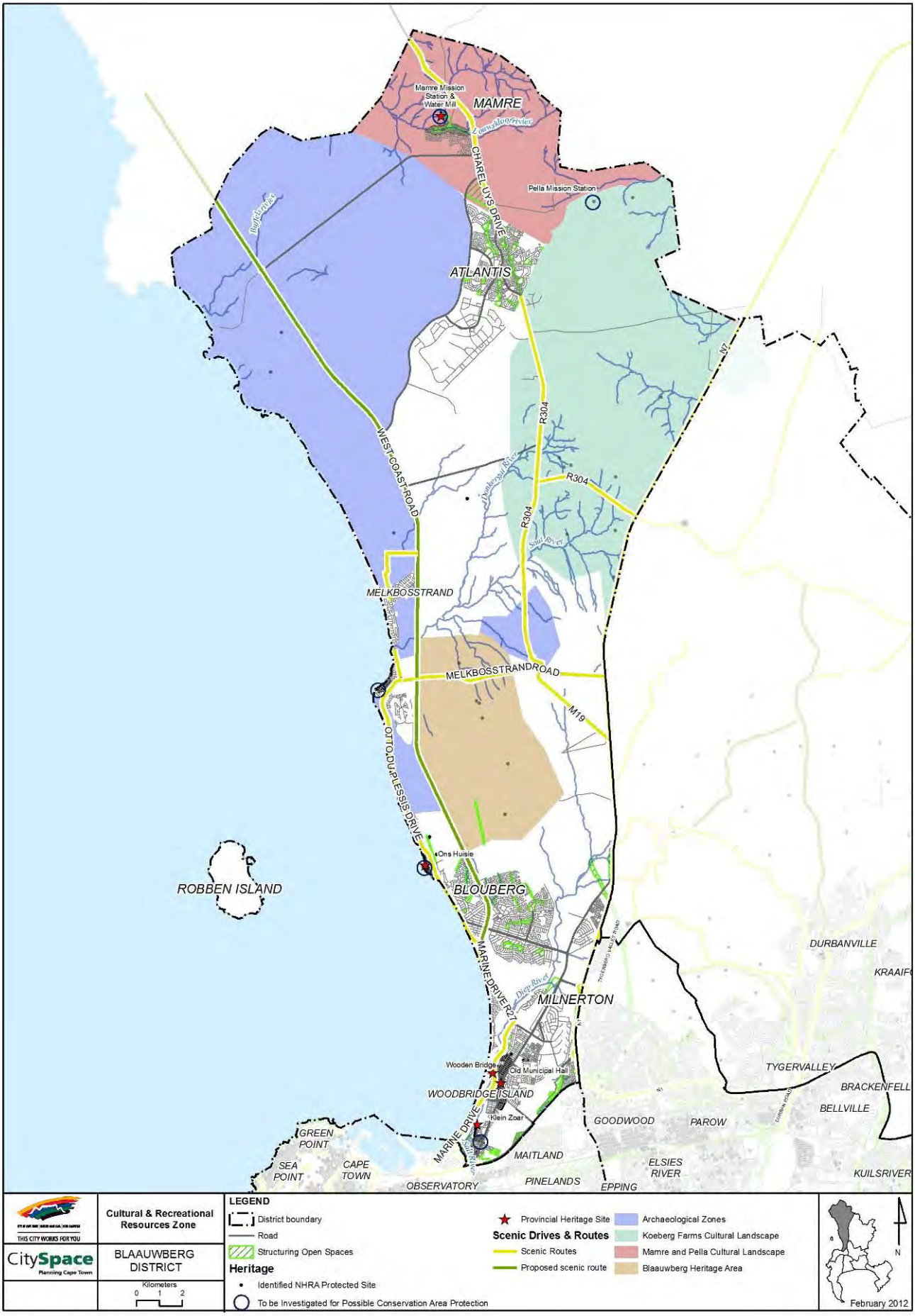


Figure 5-4: Cultural and recreational resources zone

5.2.5 Natural Economic Resources Zone

a) Summary of Environmental Status

Sand and gravel is used for building material and is considered a limited economic resource. There are concerns regarding the limited availability of unexploited sand and gravel resources and this creates conflict between demands to exploit remaining resources and maintaining the integrity of the receiving environment in which these resources occur. The main issues with regards to mineral extraction in the Blaauwberg district are the sterilization of economic mineral resources by urban development as well as illegal sand mining.

Agricultural land contributes significantly to the province and country's Gross Domestic Product. The Blaauwberg district borders the West Coast provincial district and includes a relatively small portion of high potential agricultural land in the north-eastern section of the district, with some smallholdings directly south of this area and at Morningstar. These areas are under threat from development pressure.

b) Environmental Management Priorities

Management Priority	Priority area of focus
1. Retain and Protect	• Preserve and utilise high potential agricultural areas for agricultural purposes
2. EIA requirements	• Where high priority mineral resources conflict with areas of archaeological and heritage importance, an assessment of these impacts must be undertaken and appropriate mitigation measures approved by Heritage Western Cape, prior to authorisation. • Where high priority mineral resources conflict with areas of high agricultural potential, input must be obtained from the Department of Agriculture, prior to authorisation. • Sand mining can be considered in areas of high potential agricultural soil provided sufficient measures are implemented to stock-pile and return top-soil. In addition, the depth of mining should not exceed a minimum level above the water table (±500mm). • In some areas where smallholdings and mineral resource areas overlap, applications to mine should be considered on their merits and in consultation with the Department of Agriculture. • Mining activities should not be authorised without the required EMPs and rehabilitation plans. • Mining companies must commit sufficient financial resources to rehabilitation, prior to approval. • Where high priority mineral resources conflict with areas of biodiversity importance, specialist input from the Biodiversity Management Branch is to be obtained, prior to the authorisation of mining activities. • Sand mining of dunes can only be considered *outside* of the Coastal Protection Zone, and subject to specialist input and the implementation of appropriate mitigation measures. • Mineral resource close to visually sensitive areas, scenic routes and residential areas must consider the visual, health and

	safety impacts and adequate mitigation measures must be determined, prior to approval. • Key issues to be addressed: soil potential, water pollution, biodiversity, economic and social issues, slope, heritage and visual issues.
3. Research and Education	• Refine and confirm the mapping of high priority agricultural areas

c) Environmental Impact Management Table: Economic Resources: Refer to Figures 5.5a) and 5.5b)

Table 5-5a): High Potential Agricultural Areas

Environmental attributes	Kinds of developments, land uses or activities that would be undesirable	Kinds of developments, land uses or activities that may have a significant impact	Kinds of developments, land uses or activities that may not have a significant impact	Relevant policy and guideline documents for environmental management
High potential and unique agricultural land *This encompasses areas that are deemed worthy of statutory or long-term protection.*[3]	• *Residential and commercial development. • Manufacturing, storage, treatment, transportation or handling of hazardous substances. • Industrial activities. • Activities that can pollute water or soil resources (which are required for agricultural activities). • Other non-agricultural land use (except those permitted in zoning schemes). • Mining activities.	• Dams and weirs. • Water abstraction. • Road, rail, pipelines and cables. • Engineering and utility services and infrastructure. • Agri-tourism (including farm shops/stalls). • Animal care facilities. • Sustainable harvesting of natural resources. • Transmission towers and rooftop base stations. • Riding stables.	• Agriculture (excluding abattoirs and feedlots). • Horticultural activities. • Handling and storage of agricultural product. • Hiking trails and paths. • Residential units (as allowed in zoning schemes).	• National Policy on the Protection of High Potential and Unique Agricultural Land (2006) • Strategic Plan for South African Agriculture (2001) • Land Redistribution Policy for Agricultural Development • DEAD&DP's Guideline for Involving Economists in EIA Processes (2005) • Urban Agricultural Policy for the City of Cape Town (2007) • City of Cape Town's Agricultural Land Review (2008)
Agricultural land of significant value *These areas have significant value given their existing or potential and emerging use.*	• *Residential and commercial development. • Manufacturing, storage, treatment, transportation or handling of hazardous substances. • Industrial activities. • Activities that can pollute water or soil resources (which are required for agricultural activities). • Other non-agricultural land use (except those permitted in zoning schemes). • Mining activities.	• Dams and weirs. • Water abstraction. • Road, rail, pipelines and cables. • Engineering and utility services and infrastructure. • Agri-tourism (including farm shops/stalls). • Institutional activities (e.g. agricultural schools). • Animal care facilities. • Sustainable harvesting of natural resources. • Transmission towers and rooftop base stations. • Riding stables. • Retail and commercial activity related to	• Agriculture (excluding abattoirs and feedlots). • Horticultural activities. • Handling and storage of agricultural product. • Hiking trails and paths. • Residential units (as allowed in zoning schemes).	

[3] The areas were assessed in terms of a broad range of informants, including agricultural potential and economic, land use, landscape and environmental significance (CoCT, 2008*a*).

Environmental attributes	Kinds of developments, land uses or activities that would be undesirable	Kinds of developments, land uses or activities that may have a significant impact	Kinds of developments, land uses or activities that may not have a significant impact	Relevant policy and guideline documents for environmental management
		marketing of the area's produce.		
Other agricultural areas *This constitutes areas of lower agricultural potential or value, but which function as the rural hinterland.*	• Urban development *outside* of the urban edge. • Industrial activities. • Storage of hazardous substances. • Activities that can pollute water and soil resources (which are required for agricultural activities). • Institutional facilities. • Mining activities	• Dams and weirs. • Water abstraction. • Road, rail, pipelines and cables. • Agri-industrial activities. • Cellars and storage facilities. • Offices for agricultural related activities. • Tourism and hospitality related facilities. • Sustainable harvesting of natural resources. • Transmission towers and rooftop base stations.	• Agriculture (excluding abattoirs and feedlots). • Agri-tourism (including farm shops/ stalls). • Animal care facilities. • Engineering and utility services and infrastructure. • Hiking trails and paths. • Residential units (as allowed in zoning scheme). • Conservation activities. • Riding Stables.	
Smallholdings and agricultural areas *This constitutes areas currently being used for agricultural purposes, regardless of soil potential.*	• Urban development *outside* of the urban edge. • Industrial activities. • Storage of hazardous substances. • Activities that can pollute water and soil resources (which are required for agricultural activities).	• Dams and weirs. • Water abstraction. • Road, rail, pipelines and cables. • Agri-industrial activities. • Residential and institutional facilities for rural community. • Retail and commercial activity for the rural community. • Cellars and storage facilities. • Offices for agricultural related activities. • Tourism and hospitality related facilities. • Sustainable harvesting of natural resources. • Transmission towers and rooftop base stations.	• Agriculture (excluding abattoirs and feedlots). • Agri-tourism (including farm shops/ stalls). • Animal care facilities. • Engineering and utility services and infrastructure. • Hiking trails and paths. • Residential units (as allowed in zoning scheme). • Conservation activities. • Riding Stables.	

Environmental attributes	Kinds of developments, land uses or activities that would be undesirable	Kinds of developments, land uses or activities that may have a significant impact	Kinds of developments, land uses or activities that may not have a significant impact	Relevant policy and guideline documents for environmental management
		• Mining activities		

Table 5-5b): Mineral Resource Areas

Environmental attributes	Kinds of developments, land uses or activities that would be undesirable	Kinds of developments, land uses or activities that may have a significant impact	Kinds of developments, land uses or activities that may not have a significant impact	Relevant policy and guideline documents for environmental management
Priority Mineral Resource areas *These are areas that have been identified in the Mining Structure Plan (2002) as high priority mineral deposits.*	• Mining activities extending below the water table. 1. Mining activities that do not effectively implement the required EMP and rehabilitation plans.	• Urban and infrastructure development prior to mineral extraction. • Mining activities which have the relevant approved environmental procedures and documents. • Related infrastructure and facilities.	2. Post mining and rehabilitation land uses that are in harmony with the proposals in the SDP.	• The Mining structure Plan 2002.

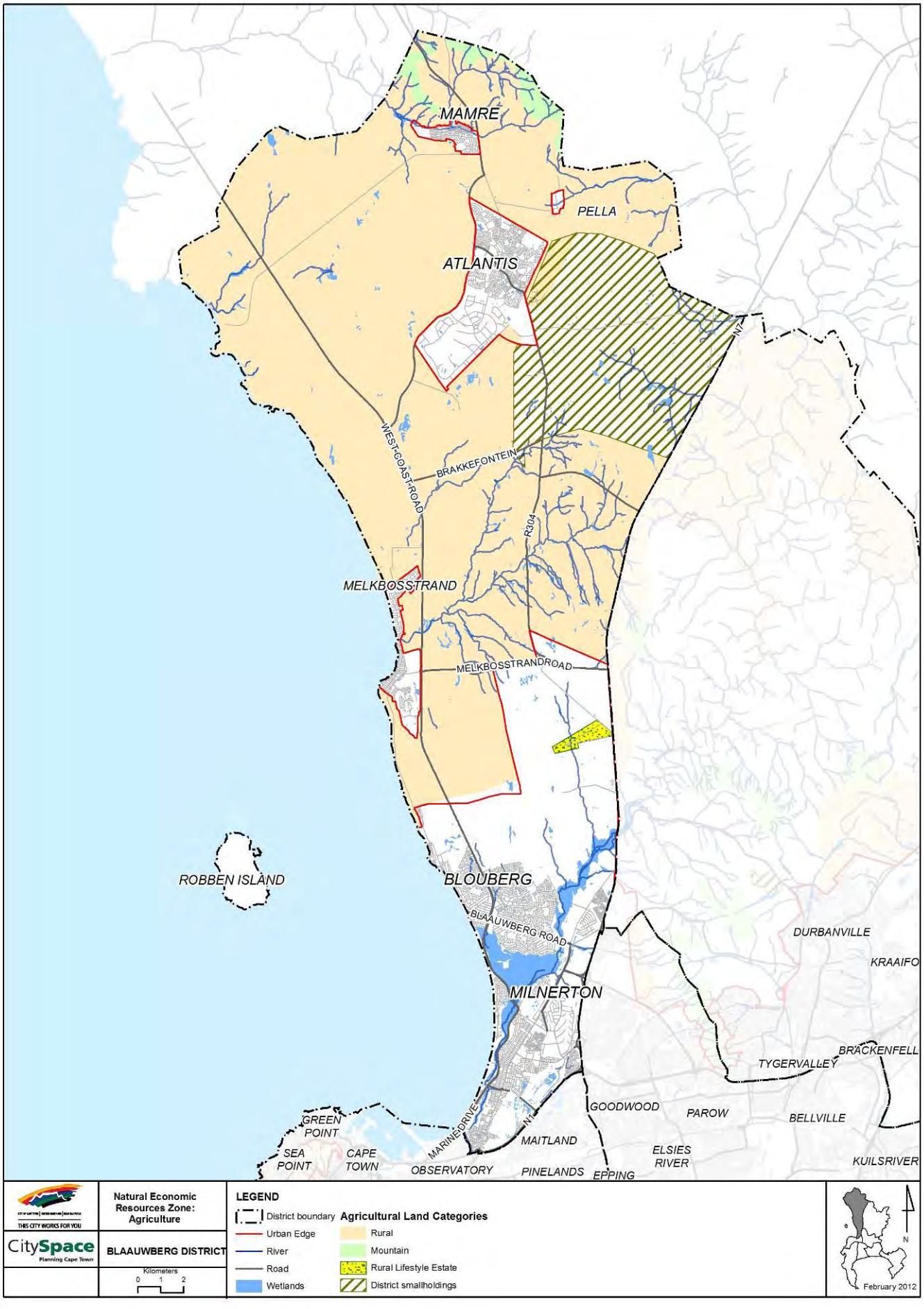


Figure 5-5 a): Natural economic resources zone: agriculture

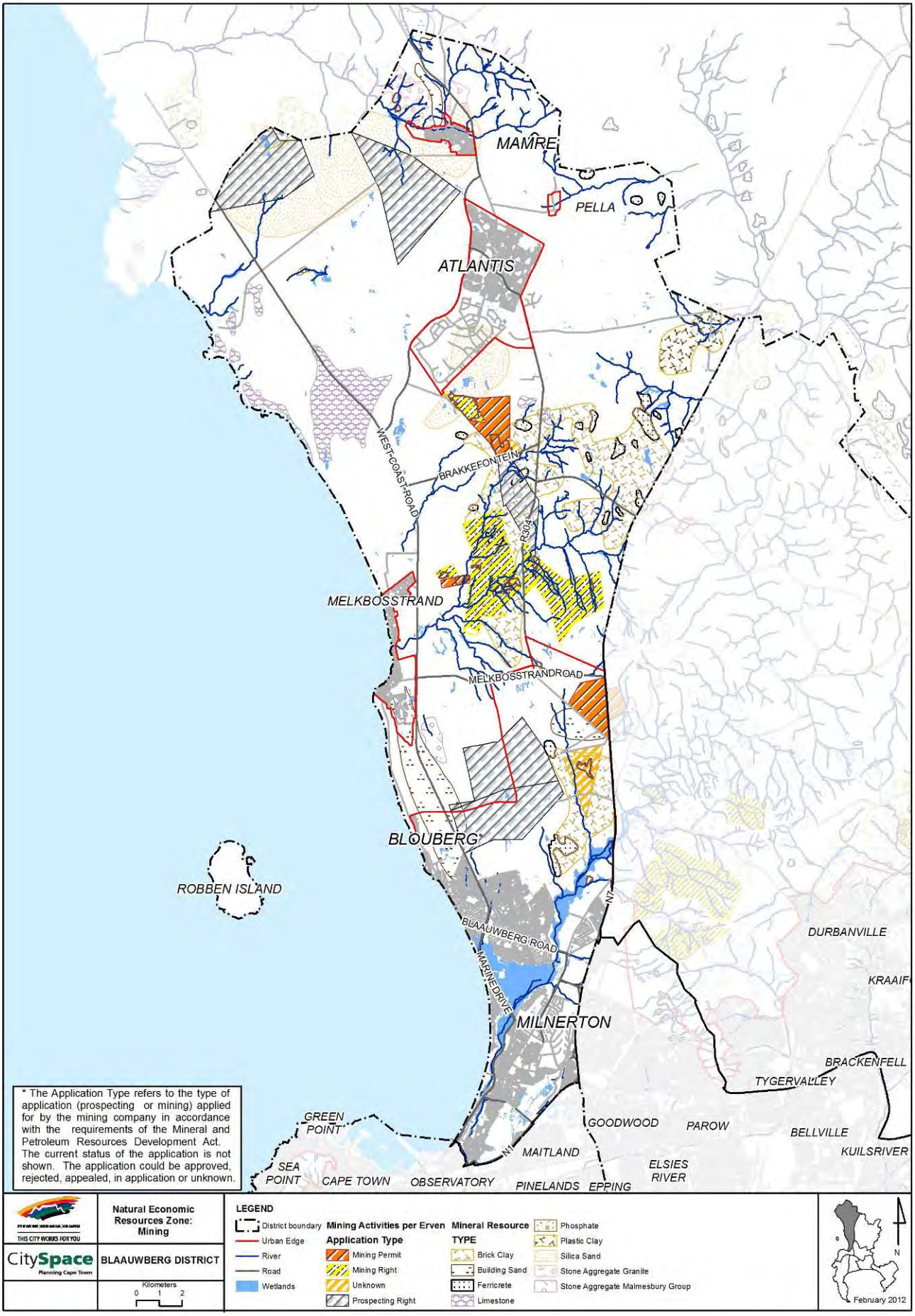


Figure 5-5 b): Natural economic resources zone: mining

5.2.6 Urban Uses and Utilities Zone

a) Summary of Environmental Status

The Blaauwberg district has the lowest percentage of inhabitants of the eight city districts. However, it is one of the largest and fastest growing districts, with a poor transport network (particularly running east-west). This is resulting in rapid market-driven development and urban sprawl as well as increased traffic congestion. Most of the development pressure within the district is residential development driven by private landowners and is focused in the central portion of the district. The settlement of Atlantis is dislocated from the rest of the district, which has resulted in higher unemployment and a lack of access to social services and facilities in this area.

Increasing waste generation leads to cumulative contamination and pollution in the long term, as the receiving environment has limited capacity to assimilate and breakdown waste. Two landfills at Vissershok are permitted to receive hazardous and general waste, and a substantial extension to one of these sites managed by the City of Cape Town has been authorised. In addition, the City is rapidly running out of space for solid waste disposal and a new regional landfill site is urgently required. A potential site for a new regional landfill is situated in the Blaauwberg district, south of Atlantis. Without interventions to minimise and recycle waste, the City will face an environmental and public health crisis.
Pollution and degradation, particularly of rivers and wetland systems within the Blaauwberg district, is a critical issue. Many of the rivers in this district have lost much of their natural riparian habitat and their environmental functioning has been seriously compromised. Air pollution is also a problem in the district and the Milnerton/Killarney area in particular continues to exceed acceptable air quality thresholds.

b) Environmental Management Priorities

The SDP proposes a variety of strategies to address urban settlement areas and growth pressures. They are not repeated here. The management priorities below are largely related to pollution and waste management

Management Priority	Priority area of focus
1. EIA requirements	• Freshwater and/or groundwater specialist input must be obtained, and appropriate mitigation measures implemented, for industrial activities proposed on highly productive aquifers or close to river and wetland buffers. • An EMP must be drawn up and implemented for all activities approved in these zones, in accordance with the City of Cape Town's specifications for EMPs. • No activity or use which includes the on-site storage of hazardous substances shall be permitted unless a risk management and prevention plan has been submitted and Council has given approval thereto
2. Monitor and manage impacts	• Implement the strategies (including waste minimisation and recycling) contained in the Integrated Waste Management Policy • Improve effluent quality from the WWTW by ensuring sufficient capacity and upgrading the Potsdam and Melkbosstrand WWTW as soon as possible • Provide additional pump stations and bulk infrastructure (sewer and water reticulation) • Monitor and enforce industry's compliance with air pollution standards and control illegal dumping and enforce landfill site's compliance with environmental requirements.

c) Environmental Impact Management Table: Urban Uses and Utilities: Refer to Figure 5.6

Table 5-6a): Nuclear, Landfill and Other Exclusion Areas

Environmental attributes	Kinds of developments, land uses or activities that would be undesirable	Kinds of developments, land uses or activities that may have a significant impact	Kinds of developments, land uses or activities that may not have a significant impact	Relevant policy and guideline documents for environmental management
Precautionary Action Planning Zone *Area within a 5 km radius of the Koeberg nuclear reactors (X = -52727.4000, Y = -3727966.6500)*	• Any new development which results in increased population (permanent or transient). Except for place-bound activities[4]	• Any activity required for the functioning and maintenance of the Nuclear Power Plant (place-bound activities). • Upgrading of existing settlements within this zone.	• N/A	• Draft Blaauwberg Spatial Development Plan 2002 • Atlantis and Environs Urban Structure Plan (1981) • National Nuclear Regulator Act (No 47 of 1999) • National 'Regulations on the Development in the Formal Emergency Planning Zone of the Koeberg Nuclear Power Station (Draft 2011) • NNR Report on the Technical Basis for Emergency Planning at the Koeberg Nuclear Power Station, 2000. • City of Cape Town, Koeberg Nuclear Emergency Plan, traffic Evaluation Model, HHO. March 2006. • DWEA, Second Edition, 1998 Waste Management Series.
Urgent Protective Action Planning Zone *Area within a 5 -16 km radius of the Koeberg nuclear reactors (X = -52727.4000, Y = -3727966.6500)*	• Any development, which accommodates or caters for people that could **not** be evacuated within a 16 hour period.	• Facilities and residential development catering for vulnerable groups, such as the elderly or children.	• N/A	
Landfill sites and buffer zones *This includes landfill sites and the buffer areas around existing and proposed landfill sites.*	• Residential development. • Educational facilities. • Health and social facilities. • Groundwater abstraction.	• Commercial activities. • Industrial activities.	• Other activities, subject to conditions and approvals of the relevant authorities and specifications of the relevant closure plans.	
Chevron (previously Caltex) buffer zone *This includes the buffer around the Chevron refinery.*	• Residential development. • Educational facilities. • Health, social and community facilities, including hospitals and churches. • Any additional activities which exceed air emission standards or will contribute to ambient pollution exceedences.	• Commercial activities and offices. • Light industrial activities / warehouses. • Sub-stations and electrical infrastructure. • Cemetery.	• Conservation activities. • Engineering and utility services and infrastructure.	
Airport noise buffer zones *This includes the 65dB*	Within the 65 decibel zone (controlled area)*: • Educational facilities.	• Commercial activities (excluding offices). • Light industrial activities.	• Heavy (scheduled) industrial. • Major roads.	

[4] "place-bound" refers to any development which forms an integral part of, or support to, the process of generation of electricity through the use of nuclear energy as carried out by Eskom at the Duynefontein site. (NNR, 1999)

Environmental attributes	Kinds of developments, land uses or activities that would be undesirable	Kinds of developments, land uses or activities that may have a significant impact	Kinds of developments, land uses or activities that may not have a significant impact	Relevant policy and guideline documents for environmental management
noise cone around the Ysterplaat military airport.	• Institutional and community facilities, including hospitals and churches. • Commercial - offices. • Residential development.		• Air fields. • Incinerators. • Engineering and utility services and infrastructure. • Sub-stations and electrical infrastructure. • Conservation activities. • Public open space. • Landscaping. • Roads and rail. • Transmission towers and rooftop base stations.	• DWEA, *Draft* Third Edition, 2005 Draft Waste Management Series. .

Table 5-6b) Industrial and Commercial Areas

Environmental attributes	Kinds of developments, land uses or activities that would be undesirable	Kinds of developments, land uses or activities that may have a significant impact	Kinds of developments, land uses or activities that may not have a significant impact	Relevant policy and guideline documents for environmental management
Industrial areas *This includes areas currently zoned for industrial use.*	• Any upgrades or additional industrial activities which exceed air emission standards or will contribute to ambient pollution exceedences.	• Heavy (Scheduled) Industrial activities. • Incinerators. • Major roads. • Air fields.	• Light industrial. • Commercial. • Infill development. • Engineering and utility services and infrastructure. • Sub-stations and electrical infrastructure.	• A Guide to Reporting and Estimating Emissions for the Integrated Pollutant and Waste Information System (IPWIS) 2005. • City of Cape Town's Air Pollution Control By-Law (2001). • Air Quality Management Plan for the City of Cape Town (Sept, 2005).
Commercial areas *This includes areas currently zoned for commercial use.*	• Heavy (scheduled) industrial activity.	• Light industrial • Incinerators. • Major roads. • Air fields.	• Commercial. • Infill development. • Engineering and utility services and infrastructure. • Sub-stations and electrical infrastructure.	

Table 5-6c): Infrastructure and Utilities Servitudes

Environmental attributes	Kinds of developments, land uses or activities that would be undesirable	Kinds of developments, land uses or activities that may have a significant impact	Kinds of developments, land uses or activities that may not have a significant impact	Relevant policy and guideline documents for environmental management
Infrastructure Servitudes *This includes power cables and underground pipelines and infrastructure*	• Permanent structures and buildings other than those related to service provision.	• Roads and rail. • Transmission towers and rooftop base stations. • Agricultural activities (including urban agriculture).	• Conservation activities. • Public open space. • Landscaping. • Stormwater management. • Pipelines and cables. • Engineering and utility services and infrastructure. • Power generation activities and power lines. • Pedestrian walkways. • Sub-stations	• City of Cape Town's Management of Urban Stormwater Impacts Policy (2009) • City of Cape Town's Floodplain and River Corridor Management Policy (2009)

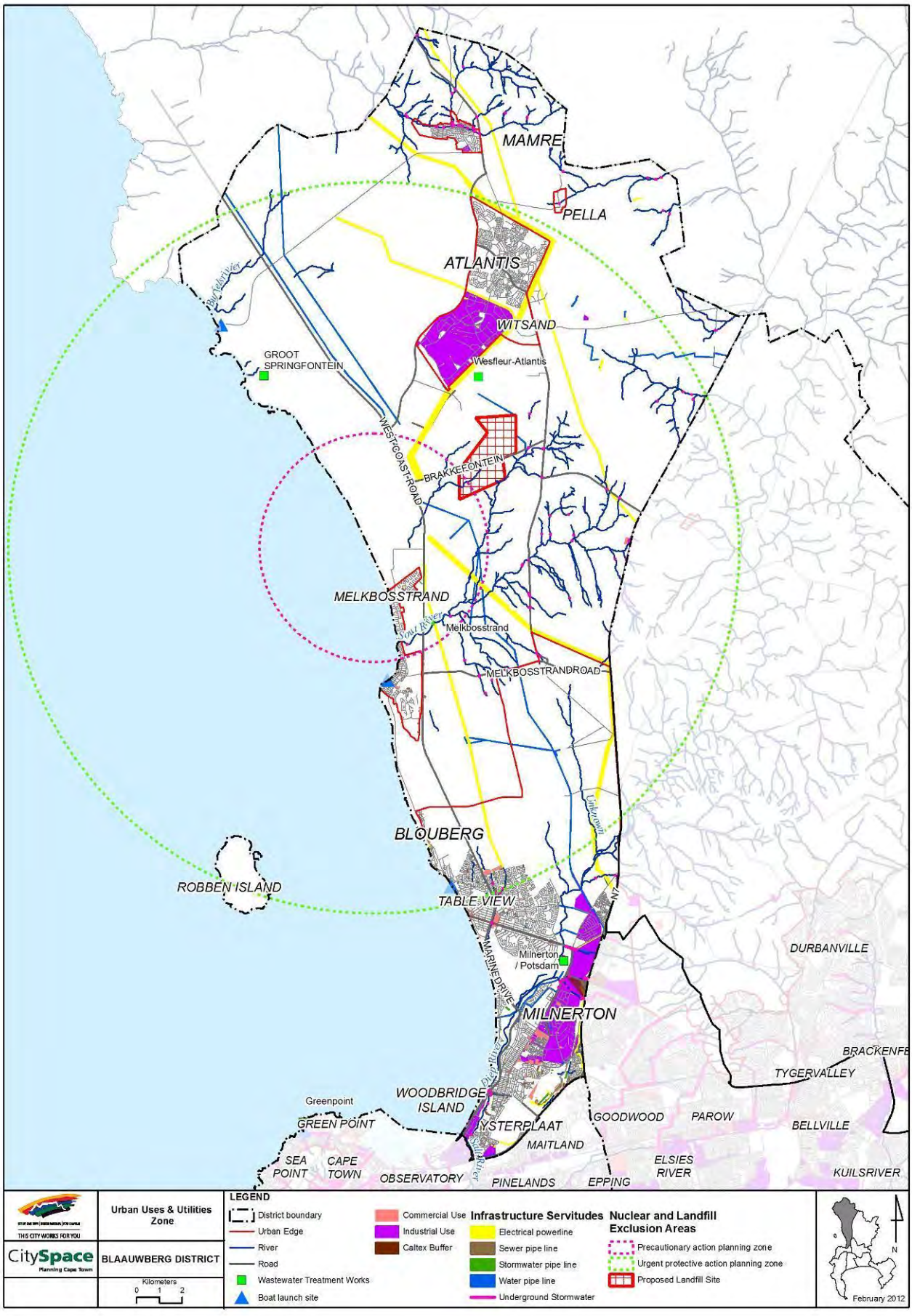


Figure 5-6: Urban uses and utilities zone

5.3 Areas of potential impact on selected natural environmental attributes

In the context of the Environmental Impact Management (EIM) zones, **areas of potential impact** are identified where new development is proposed on areas which have natural environmental attributes that are sensitive or have ecological value. These potential impact areas are shown in figure 5.7. The purpose of identifying these areas is to 'flag' the potential impacts that will need to be assessed in detail as part of an application for Environmental Authorisation, should this not already have occurred.

There are several important considerations in terms of the assessment of these potential impacts as part of the application for environmental authorisation:

- The development proposals in the SDP reflect the desired future spatial development pattern in area, provide a strategic context and act as an informant to the project level assessment of impacts.

- The assessment of the potential impacts related to areas identified in figure 5.7 should occur within a broader assessment of the sustainability of any particular development proposal. This would include consideration of social justice / equity and economic development / prosperity in addition to ecological integrity factors.

- No relative significance has been assigned in the SDP/EMF to the potential impacts relating to the selected environmental attributes – this will need to be assessed as part of the EIA process.

- Figure 5.7 identifies areas of potential impact on wetlands and conservation and biodiversity areas only. The assessment of other environmental factors including the features identified within other EIM zones is required as part of the project specific EIA process.

Annexure B provides principles for assessing development proposals in the identified areas of potential impact.

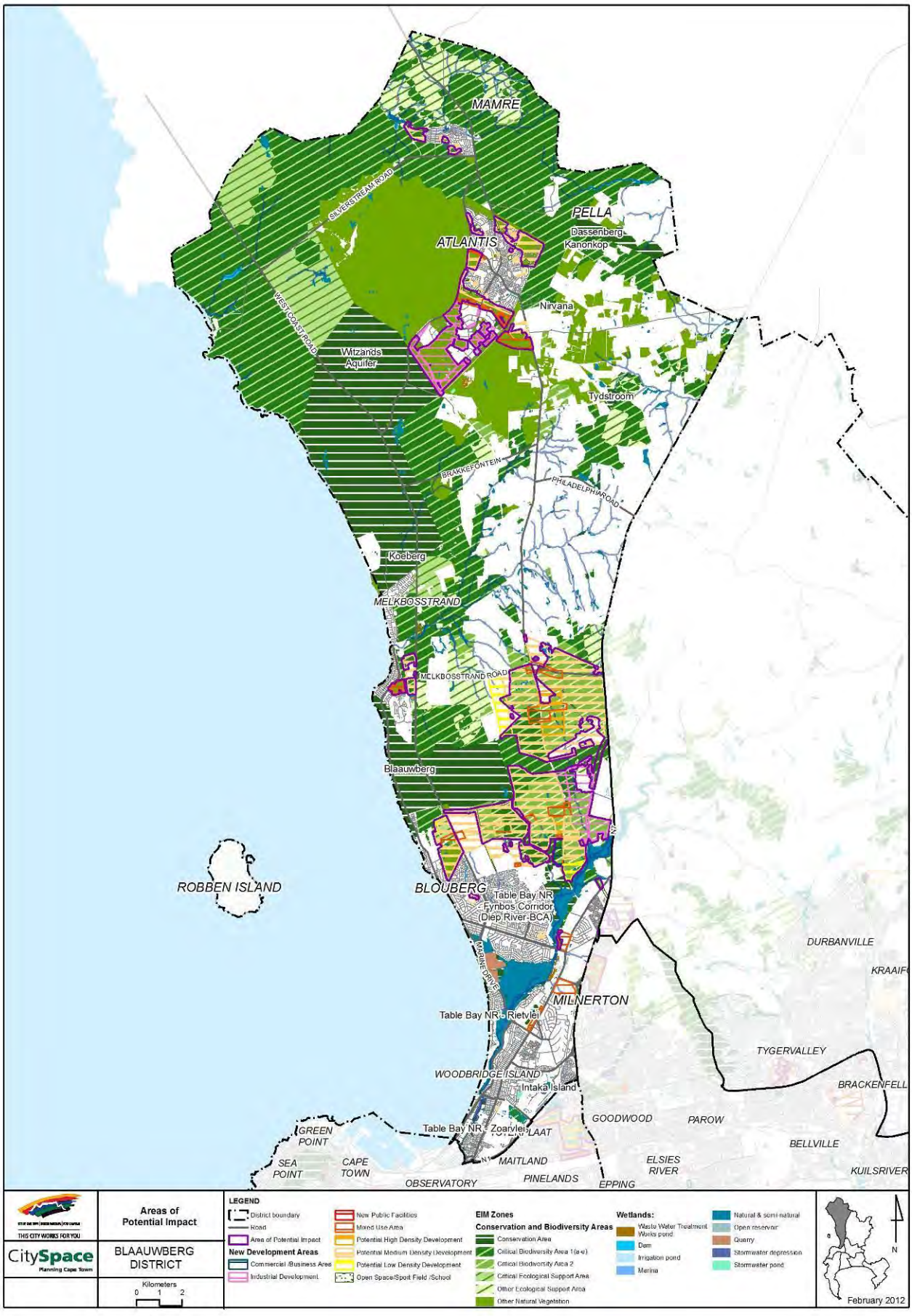


Figure 5-7: Areas of potential impact

6. IMPLEMENTATION

6.1 Urban restructuring and upgrading: framework for capital investment

Urban restructuring and major upgrading deals with:

- changes that need to occur within the existing urban footprint to reinforce the SDP, which require sector specific capital investment.
- informing planning around the capital investment requirements (public and in some cases private) associated with new development areas and areas where major intensification is proposed (introduced in the box below).

ALIGNING SERVICE AND INFRASTRUCTURE PLANNING WITH THE SPATIAL DEVELOPMENT PLAN

Two considerations are important in terms of planning for services (public facilities, parks) and infrastructure (transport, bulk infrastructure / utility services). Firstly, there is a need to address backlogs based on the existing demands and secondly a need to plan for new demand. In terms of the latter the SDP attempts to inform by:

- locating areas for intensification of urban use (e.g. areas where redevelopment is being promoted) as well as new development areas (focussed on significant green field development).
- Providing some indication, where possible of the quantum of development and likely phasing of development

This planning approach will be supplemented by more detailed modelling exercises conducted on a sectoral basis.

New development areas

AREA	LIKELY LAND USES	POSSIBLE YIELD
Brooklyn	Residential	115du
Tableview school site	Residential	320du
Blouberg school site	Residential	320du
Parklands/Sunningdale	Residential, mixed use, industrial	25000du
Erf 1117	Mixed use, residential	5000du
Melkbosstrand	Mixed use, residential	1300du
Atlantis Infill	Industrial , residential	15000du, 1 845 000 GLA industrial
Atlantis buffer strip	Mixed use, residential	3000du
Mamre	Residential	1520du
Long term development area (+ 10years)	Mixed use, residential	35000du

Major intensification areas include:

- Portions along Koeberg Road
- Portions along Blaauwberg Road
- Portions along Parklands Main Road
- Atlantis CBD

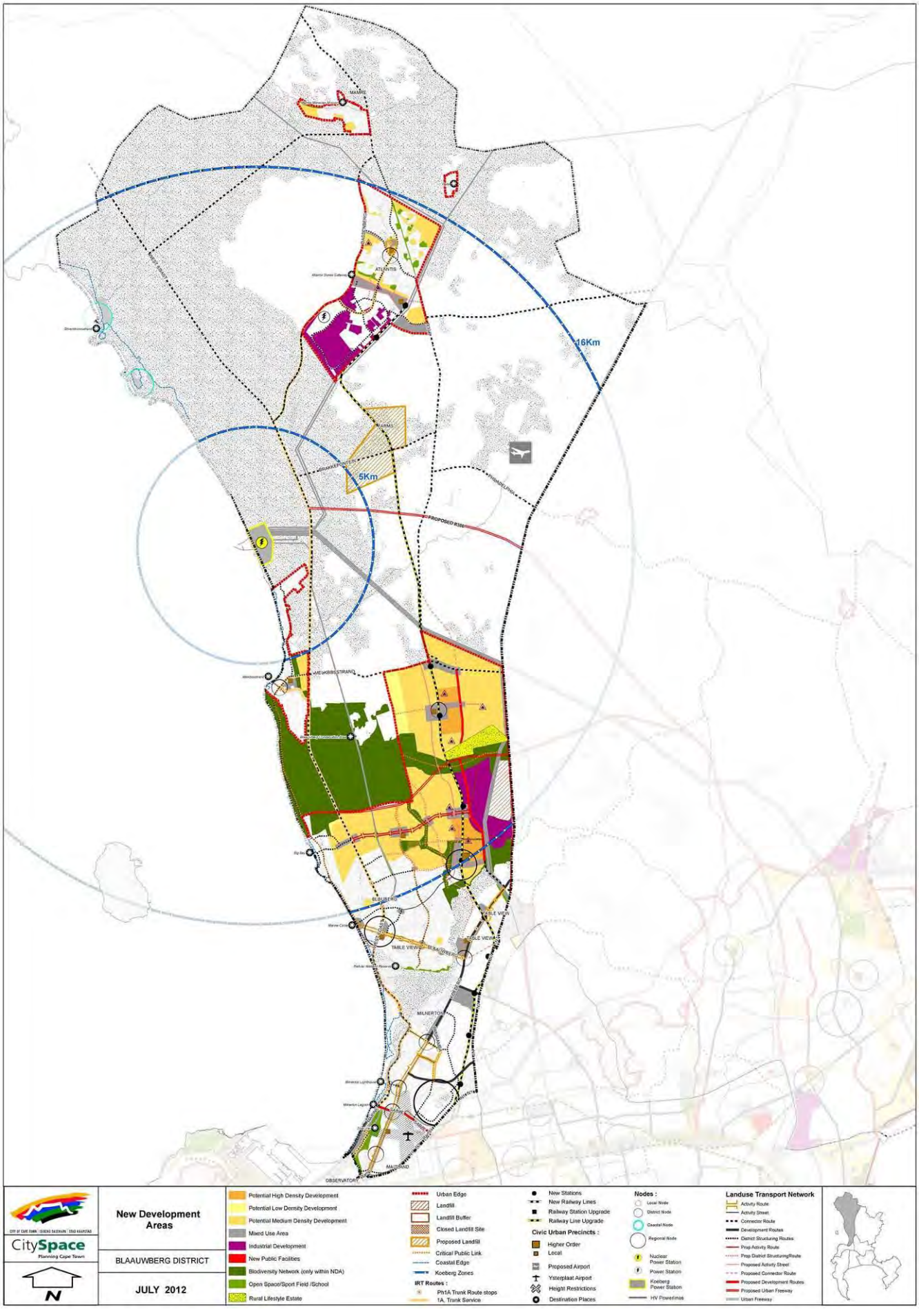


Figure 6-1: Blaauwberg new development areas

6.1.1 Transport infrastructure

The prioritisation of interventions in relation to transport infrastructure requires a fundamental shift from the historical approach to movement infrastructure development in this district. Key principles informing intervention around transport infrastructure include:

- Prioritisation of interventions to support non-motorised transport above mobility;
- Prioritisation of public transport over private mobility;
- Prioritising interventions that will release economic development associated with the accessibility and opportunity grid

a) New Road links and bridges

Several route connections are necessary to promote more efficient movement within and through the district. Proposals include:

i. **Sandown Road:** Sandown Road is a major east-west link in the district that is due for completion during 2013 and which will help ease traffic congestion in the district. Part of its construction includes the construction of a road-over-rail bridge to cross the Atlantis rail line. The road is an important component of the movement network that is necessary to implement the Koeberg Emergency Plan, and will ultimately form part of the IRT trunk network.

ii. **Blaauwberg Road Extension**: The extension of Blaauwberg Road eastwards will provide a link to the N7 and M12. This provides an important east-west connection to the Northern district and would help relieve the current congestion experienced at the Blaauwberg Road/ Koeberg Road intersection and the Plattekloof Road/ Koeberg Road intersection. In addition, it would reinforce Blaauwberg Road as an activity and public transport route.

iii. **Sable Road Extension***:* The extension of Sable Road will provide an important connection between the areas of Rugby/Brooklyn, Century City and Kensington. Should Ysterplaat be redeveloped in the future, this route would also provide access to the site.

b) New Connector Routes

i. Northern portions of the Koeberg Road Extension: The Koeberg Road extension is a long term proposal that will form part of the district's north-south mobility network. The portions of the route through the proposed east-west ecological corridor and north along the edge of the BCA will function as a connector route to Melkbosstrand Road.

ii. M12 north of Melkbosstrand Road: The portion of the M12 north of Melkbosstrand Road will function as a connector as it links the development route with the R304 through the rural area.

c) New Other Structuring Routes

i. **Koeberg Road Extension:** The Koeberg Road extension is a long term proposal that will form part of the district's north-south mobility network. The portions south of the proposed east-west ecological corridor allow for commercial activity at points of intersection with east-west linkages.

ii. **Wood Drive**: The continuation of Wood Drive is an important structuring route that acts as a critical public link between the Rietvlei and the BCA. This route is largely residential in nature, but does allow opportunity for lower order commercial activity at points along its length, particularly at the intersection with east-west linkages such as Sandown Road. Grade separated NMT should be accommodated as part of the route design.

iii. **Tryall Road**: Tryall Road is an additional lower order east-west link that will connect to the M12 contributing to the accessibility grid of the district.

d) **New Activity Routes**

i. Big Bay east-west Activity Route: The Big Bay east-west activity route is a new road that will serve as an activity route linking Big Bay to the proposed Bloubergsvlei station and the M12 development route. The construction of this route will need to include a road-over-rail bridge in order to cross the Atlantis rail line.

e) New Activity Streets

i. **Parklands Main Road:** Parklands Main Road is proposed to extend north along the alignment of the Atlantis rail line and will accommodate mixed use intensification at points of intersection with east-west routes**.** This route forms part of the Atlantis corridor.

f) New Development Routes

i. **M12**: The proposed M12 development route is a major north-south mobility route that will provide connectivity to the N7 and proposed industrial areas surrounding Vissershok. It will also form an important link as part of the IRT system. This route will need to accommodate significant volumes of industrial traffic once development has been realised. In terms of the implementation of the route, the bridge over the Diep River has been completed along with portion of the route linking the bridge to the Sandown Road intersection. This route forms part of the Atlantis corridor.

g) New Urban Freeways

i. **R300 and the proposed east-west toll freeway:** The proposed R300 will function as a ring road connecting the south east of the City via Durbanville to the R27. In addition to the ring road, an east-west toll freeway is proposed to run along the southern boundary of the BCA, connecting the west coast to the R300. The proposed east-west toll freeway will provide significant points of economic opportunity, particularly where the route intersects with the N7 and Koeberg Road extension. The proposal still needs to go through the necessary environmental and public processes and agreements need to be reached between the various transport authorities on route alignment and operations before construction can commence. Tolling of the route is not supported at this stage.

h) Public transport infrastructure

Significant public transport infrastructure is being implemented in the district as part of the City's IRT programme. Investments include:

i. **IRT trunk routes and stations:** Three IRT trunk routes, and associated stations, are proposed to service the district as part of phase 1A of the IRT project including:
   a) Doornbach/Du Noon – waterfront
   b) Atlantis – Racecourse Road – Montague Gardens
   c) Atlantis – Melkbos – Tableview

ii. **IRT feeder routes and stations:** An extensive feeder network is proposed to integrate with the IRT trunk routes. These routes are in the process of being finalised by the City's Transport department.

iii. **Rail Line Upgrades**: There is an urgent need to improve public transport connections to Atlantis. As a result, the plan proposes the upgrading of the Atlantis rail line so that it is able to function as a passenger line. Although this is a long term proposal, which is dependent on PRASA funding; the initial stages of the upgrade will impact the southern portion of the line, with new stations proposed in the Parklands area. It is important that the urban environment responds appropriately to the planned future rail stations.

In Atlantis it is proposed that the rail line is ultimately extended along the eastern edge of the industrial area with the line terminating at a station on the northern edge of the industrial area near Witsand. This alignment will ensure that the line will service existing urban development as well as any future development in a south-easterly direction.

6.1.2 Open space system

Open space upgrading, enhancement and development (associated with the natural environment and higher order sports and recreation facilities) is critical to achieving the vision for this district. In particular, the latent potential of the existing (degraded) natural systems and proposed biodiversity

corridors should be optimised. In this regard, several interventions relating to the open space system are proposed.

a) **Atlantis:** Public open space and sports facilities in Atlantis are generally poorly maintained and degraded. There is a need to selectively upgrade these spaces and facilities and rationalise the public open space system, which is largely overprovided as a legacy of apartheid facilities standards. Although a broader open space rationalisation study is needed, it is proposed as an initial project that the gum avenue running diagonally through Atlantis be upgraded. As part of this upgrade, open spaces and sports facilities attached to the avenue should also be upgraded.
b) **Zoarvlei:** The Zoarvlei is not well utilised as a recreational amenity and is in need of upgrade and maintenance, particularly in areas that are edged by urban development. When redevelopment of the properties abutting the vlei does occur, property owners should be encouraged to create a positive built edge with the Zoarvlei. Formalised public links will also help to improve use of the space and prevent the negative impacts of informal pedestrian pathways on the sensitive environment. Initiatives in this regard are already being implemented as part of the IRT system.
c) **Rietvlei**: Although the Rietvlei is well utilised by members of the existing boating club, access to the broader area is somewhat limited and undefined. As part of the critical public link between the Rietvlei and the BCA, it is proposed that the northern edge of the Rietvlei is upgraded to provide an improved linear open space system. This will help to encourage use of the amenity in a sustainable and low impact manner.
d) **Ecological corridors**: In order to contribute to more detailed planning of identified ecological corridors, detailed specialist botanical studies should be conducted as part of local area development frameworks and/or EIA processes in order to accurately define the future conservation and development areas. It is proposed that partnerships between stakeholders, including the City of Cape Town and the main land owners, should be pursued in order to secure critical and irreplaceable remnants and address management issues particularly invasive alien plant control and fire management as well as encourage the use of the amenity now and in the future in a sustainable and low impact manner.
e) **District Sports Complex**: A district sports complex is proposed on the old Milnerton landfill site located in the Parklands area. This site has been closed for some time and has potential to be redeveloped for sports purposes. This requires further investigation to ensure the landfill site is compacted sufficiently to be able to accommodate sports facilities. This sports complex will link into the surrounding broader fynbos ecological corridor network and will form part of a proposed local civic precinct. Public facilities should be clustered in this location and development of the sports complex should include associated multi-use club facilities. Due to limited City budgets, consideration should be given to exploring public/private partnerships to realise this proposal.

6.1.3 Publicly assisted housing

Publicly assisted housing, in the context of the district plan, relates to the realisation of a range of housing opportunities, formal or informal, that the public sector plays a role in providing or supporting through its housing programmes.

The spatial plan supports housing sector planning by:

- giving direction to where these opportunities could occur by identifying land suitable for urban development (refer to section 4 and figure 4.1: Blaauwberg spatial development plan).
- giving further spatial direction through identifying “new opportunities” for publicly assisted housing development (section 6.1.3a),
- providing a framework for “informal settlement development and upgrading” processes in the district (section 6.1.3b).

In the context of the housing backlog, urbanisation trends and land availability patterns at a City and district level, publicly assisted housing, in this district, will generally focus on:

- Small to medium scale residential infill development building on opportunities around pockets of well-located underutilised land that exists within the urban edge.
- Incremental upgrading particularly in relation to informal settlements and existing housing estates.
- Significant green field inclusionary and new public housing development on well-located land with access to public transport and employment opportunities.

As an identified City growth corridor, the district has a particularly important role to play in providing a significant number of new entry level, and publicly assisted housing opportunities.

Consideration from both a planning and services infrastructure (solid waste, sewage, stormwater and water) perspective must be given to the accommodation of backyard dwellings in all formal low cost residential developments. The lack of up-front planning has already resulted in significant pollution and environmental degradation.

a) New opportunities

In this district, well located public land is limited and the majority of undeveloped land within the growth areas of the district is privately owned. However, a number of sites which may be part of new subsidised housing projects on the 5 year housing plan, as well as sites that should be further investigated for publicly assisted housing projects are identified.

Table 6-1: Criteria to be used to guide the identification of land for subsidised and gap housing

Principle	Subcomponents
Contain urban sprawl and protect the urban edge	The land identified should: • contribute to the development of a more compact city; • maximise the use of existing infrastructure and service capacity; and • not be located adjacent to the urban edge (where possible).
Facilitate urban integration, and promote the establishment of viable communities	The land identified should: • be in close proximity to existing economic, social and public transport opportunities; and • support a mutually beneficial mix of social, residential, recreational, commercial and employment opportunities.
Facilitate a range of housing options and delivery approaches	The land identified should: • be suited to the development of new settlements, the upgrade and de-densification of existing informal settlements, high-density housing, rental accommodation, and the release of land to the homeless; and • note that the size of the housing project and type of delivery agent influence its economic viability.
Be suited to housing development	The identified land should: • encourage environmentally sustainable land development practices and processes; • not lead to the loss/have a damaging impact on natural and built assets that merit longer-term protection; and • ensure healthy, safe living conditions.
Take the beneficiaries' economic and social well-being into account	• When identifying land, and providing infrastructure and shelter for the unhoused and poorly housed, it is important to take their livelihood strategies and social support networks into account.

b) New subsidised housing projects

A number of infill sites are identified, which are the subject of subsidised housing infill projects in the short to medium term. These are reflected in figure 4.1.

These new subsidised housing projects identified for the Blaauwberg district include:

Site	Anticipated yield (dwelling units)
• Atlantis extension 12	500
• Joe Slovo Park Infill	90
• Witsand Phase 2	1600

It is important that the development of these sites occurs in an integrated manner. In this regard, there needs to be concurrency in the planning, budgeting and roll out of required social and services infrastructure relating to the development of these sites.

c) Further land identification for publicly assisted housing projects

Further land has been identified specifically for investigation for publicly assisted housing projects (see figure 6.3). This is limited to publicly owned land and will be updated over time based on new information. In addition to these sites, other smaller infill opportunities should be explored as identified. These could include:

- the development of new buildings as part of existing housing estates, especially where these can contribute to a safer well defined public environment and improved safety;
- development of over-scaled road reserves and buffer strips.
- rationalising underutilised open space.

The intention is that those sites that are found developable should be pursued as new public housing projects or if not feasible for development by the public sector alone, should be the subject of partnership efforts where the provision of inclusionary housing should be a priority.

The areas where land has been identified for publicly assisted housing projects within the Blaauwberg District include:

- Parklands 3 development framework area
- Long term growth area
- Atlantis buffer strip and hospital site

d) Partnerships and inclusionary housing

The provision of new affordable housing opportunities in the district cannot be addressed through the development of public land alone nor should all publicly owned land be developed solely for public housing purposes. In this regard, the role of partnerships in line with the inclusionary housing provisions of the PSDF should be pursued. Areas which should be a particular focus of these efforts are those where their location can contribute to restructuring through the provision of affordable housing close to socio-economic opportunities. This includes:

- Public land developed for a mix of uses where there would be an opportunity to provide inclusionary housing (potentially through cross subsidisation initiatives). Examples of these sites include erf 1117, the Atlantis buffers strip and the Atlantis hospital site.
- Parastatal or private land where inclusionary housing should be targeted as part of development efforts. Examples of these sites include identified areas in the Atlantis growth corridor.

In this regard, existing partnerships with relevant financial institutions and Communicare in the Brooklyn area are supported.

f) Informal settlement development and upgrading

Informal settlement upgrading is a priority in terms of the City's obligation to provide basic services in terms of its constitutional mandate, as well as more broadly, improving the quality of life of its citizens through improving the urban environment. The City of Cape Town's incremental approach to upgrading is illustrated in Figure 6-2 below.

The Blaauwberg district includes types of informal housing ranging from backyard shacks, informal dwellings on serviced sites, and informal settlements of different extents, with varying levels of access to basic services. Some informal settlements are located on private land, servitudes or uninhabitable land. A differentiated approach is required.

In terms of accommodating the demand for housing in relation to informal settlements, the focus in the Blaauwberg district will be on in situ upgrading due mainly to constraints around land availability in the district as well as the general desire to ensure minimal social disruption to communities. There is, however, also a need to plan for new housing opportunities, which may, at least initially, accommodate residents on an incremental basis.

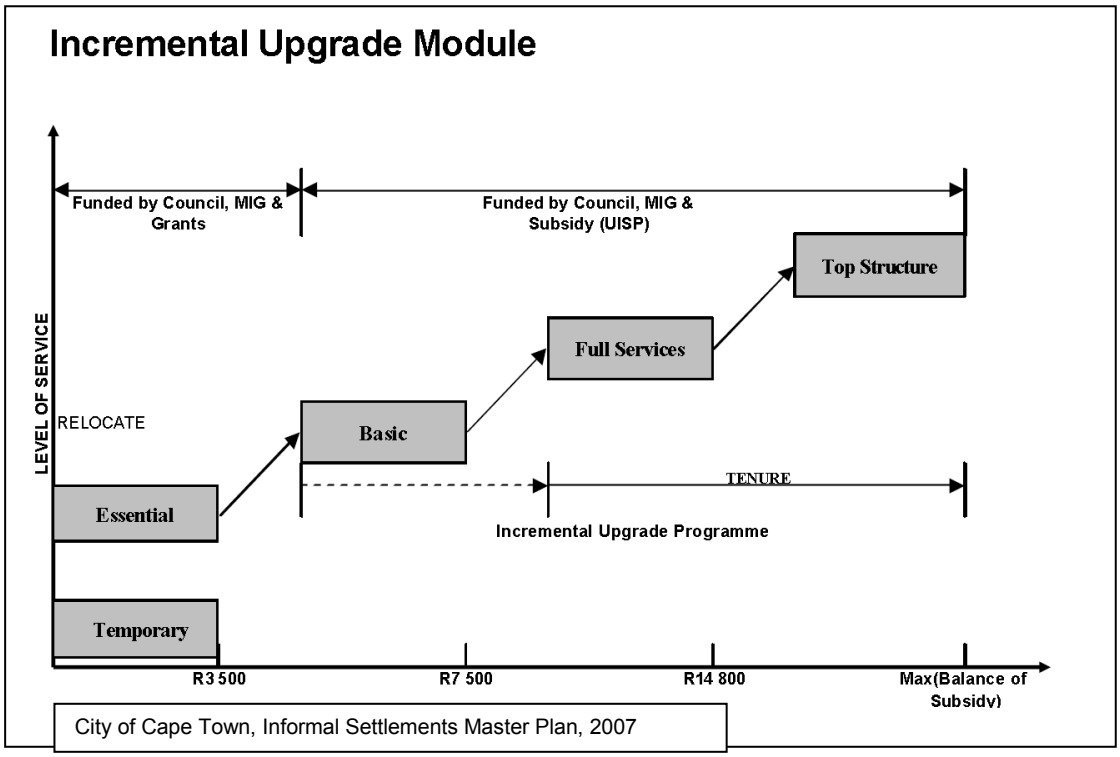


Figure 6-2: Informal settlement incremental upgrade module

g) In-situ upgrading

One of the key issues facing informal settlement upgrade is the issue of which settlements should be regarded as permanent and thus becoming the focus of upgrading beyond access to basic services (e.g. in situ upgrading) and which settlements or areas within settlements should be considered temporary and suited to relocation. In this regard the City of Cape Town's Informal Settlements Department has proposed that informal settlements be categorised into three types according to their location and circumstances, which will inform the nature of appropriate interventions. More than one category could be applied within an informal settlement to account for the existence of multiple circumstances. The proposed categories are as follows:

- A – occupation is permitted.

- B – occupation is only temporarily allowed because it is either demonstrably to the disadvantage of existing rights holders or it is very difficult or costly for services to be supplied.
- C – occupation is prohibited because it is hazardous to the residents or the wider community.

The following table indicates in more detail how the categories would be defined and suggests the kind of intervention that could be appropriate. The extent to which such interventions are possible will depend upon the availability of resources and the strength of the required partnerships between the City and resident communities.

Category	Circumstances		Intervention
C	1	Occupation poses a direct threat to the safety of the wider urban community (*e.g.* under power lines)	Registration of addresses and their occupants, Essential Services to the periphery only, no electricity connections and an arrangement between the City and residents (and any other party that is involved with the community) which will organise the vacating of the area and securing it from re-occupation
	2	Occupation poses a real danger to the resident community because of hazardous soil conditions (*e.g.* flooding, methane)	
B	3	Occupation prevents a higher use for which the land is intended to be used within 5 years	Registration of addresses and their occupants, Essential Services, individual electricity connections and the potential for a partnership-based programme that will create physical and socio-economic improvements for the residents to the extent possible.
	4	Occupation reduces the value of neighbouring property	
	5	Occupation contravenes the rights of servitude holders, but is not necessarily dangerous	
	6	The settlement cannot be serviced without great difficulty or inordinate expense	
A		None of the above	Registration of addresses and their occupants, at least full Essential Services (communal water standpipes and toilets to prescribed ratios, solid waste removal and area lighting), individual electricity connections and the potential for a comprehensive partnership-based improvement programme that could include access to greater security of tenure.

In the light of these criteria, some informal settlements within the district are regarded as permanent settlement areas. In this regard, it is critical that apart from addressing requirements for basic services as is constitutionally mandated, these areas are upgraded into dignified neighbourhoods with associated social and economic opportunities as informed by a clear plan and programme for these settlements.

g) Emergency housing and new incremental development areas

The identification process for land for new incremental development areas should reflect on the land for investigation for publicly assisted housing (see section 6.1.3a). It is critical that land identified and planned in this regard is developed in a manner that supports the future development of integrated human settlements i.e. the development of these areas requires comprehensive planning taking into account needs for public facilities, engineering services, open space and principles of good urban form.

In terms of the emergency housing programme within the district, there is a need to relocate the Skandaalkamp and Rooidakkies informal settlements due to their location in proximity to the

Vissershok landfill site and the landfill site licensing requirements that need to be met in order to expand and continue operating.

6.1.4 Infrastructure upgrading

In order to support proposals contained in the district plan, infrastructure maintenance and upgrading is necessary. Current budgeted upgrades include the implementation of the following projects:

a) Water (bulk and reticulation)

i. De Grendel reservoir
ii. De Grendel reservoir link
iii. Contermanskloof water main

b) Waste Water (bulk and reticulation)

i. Du Noon sewer pump station and rising main
ii. Railway sewer pump station and rising main
iii. Sewer gravity main to Melkbos
iv. New sewer pump station to Melkbos
v. Rising main to Melkbos
vi. Welbeloon pump station and rising main
vii. Potsdam wastewater treatment works upgrade

c) Stormwater

Stormwater challenges in the district largely relate to maintenance issues associated with waste water ingress caused from illegal dumping into the stormwater system. New developments are required to follow the City of Cape Town's Management of Urban Stormwater Impacts Policy which encourages best practice measures to manage both the quality and quantity of stormwater on the development site. Options for retrofitting such measures into existing developed areas are also possible and are for example currently being investigated along the eastern edge of the lower Diep / Rietvlei / Milnerton complex.

d) Solid Waste

i. **Vissershok landfill extension**: The existing Vissershok landfill site will be extended to the north to prolong the lifespan of the site.

ii. **Proposed regional landfill site**: There is a critical shortage of landfill space in the City, as a number of existing facilities are rapidly reaching capacity. As a result, there is a need to establish a new regional landfill site for the City to accommodate its waste. The City embarked on a process to identify a suitable new regional landfill site. This process identified two preferred sites, one to the south of Atlantis and one in the vicinity of Kalbaskraal; however the final record of decision from the Department of Environmental Affairs and Development Planning regarding the preferred location of the site is still pending.

e) Electricity (bulk and reticulation)

Electricity is supplied by Eskom and distributed in the district by two distributors, namely the City of Cape Town and Eskom. The main substations within the district are currently operating at over capacity and will require upgrading to accommodate growth in the district.

Specifically, a new power intake point is required to accommodate growth of Atlantis. This is the responsibility of Eskom and is in the planning phase and will take approximately 5 years to complete.

In terms of the Bloubergstrand/Melkbos area the existing Eskom infeed points for this region are at their technical limit and require upgrade. In this regard a new power supply point is to be installed by Eskom and is in the planning phase and due to be complete over the next 5 years. Eskom's capacity for their area of supply (most of the area east of the R27) is close to its limit.

6.1.5 Public Facilities and Public Space

a) Urban/Civic Upgrade

i. **Du Noon:** Du Noon suffers from a degraded public environment and public investment is needed in this regard. In particular, the interface between Du Noon/ Doornbach and Potsdam Road is degraded and results in informal, ad hoc use of the road verges as well as an unsafe pedestrian environment. Upgrading of this interface would structure the use of the space as well as improve pedestrian safety. The upgrade should incorporate the taxi rank and sports field located next to the rail line. Opportunities for commercial activity in relation to the upgrade of the taxi rank should be investigated.
ii. **Marconi Beam and Joe Slovo Park**: The public environment of Joe Slovo Park and Marconi Beam is degraded and requires public investment. In particular, the edges of Freedom Way and Omuramba Road require upgrading of the pedestrian environment. This should be done in conjunction with releasing the unlandscaped road verges along Freedom Way for mixed use development which will dramatically improve the public environment and unlock commercial opportunities along the well-travelled stretch of road.
iii. **Silwerstroomstrand**: Silwerstroomstrand is a public coastal resort which is a valuable amenity for the Atlantis and Mamre communities as well as the broader city. The resort buildings have become degraded and are in need of public investment. This upgrade should be linked to future development possibilities related to public and privately owned land in the vicinity.
iv. **Atlantis CBD**: The public environment of the Atlantis CBD is degraded with neglected public spaces and generally negative interfaces between the built environment and the street. Upgrading of this environment would revitalise the CBD of Atlantis with possible benefits for attracting private sector investment. Upgrades should take IRT investments into account.

b) Critical Public Links

i. **Wood Drive:** Wood Drive links the BCA in the north with the Rietvlei in the south. It therefore functions as a critical public link, allowing access to this amenity.
ii. **Coastal Link:** The coastal link connecting the V & A waterfront to the coastal areas further north including Blouberg and Melkbosstrand provides an important opportunity for a recreational link along the coast. While parts of the coast are inaccessible due to development, there is potential for this idea to take place in parts and create an important pedestrian/cycle link along the coast.
iii. **Parklands fynbos ecological corridor link:** Whilst performing a conservation role, the Parklands/Sunningdale fynbos ecological corridor also plays an important role of facilitating NMT movement within the area.

c) Special/Destination Places

The conceptual framework proposes a series of urban, natural and coastal special places. These are areas/locations of unique significance which are public by nature and which should receive public investment to create places with high amenity value, including:

i. **Zoarvlei:** The Zoarvlei is a unique natural wetland linking the Black River to the sea. The space is currently neglected, but offers a unique recreational opportunity to the areas of Brooklyn, Rugby and the future redevelopment of Paarden Eiland if upgraded and maintained.
ii. **Rietvlei Wetland Reserve**: Rietvlei and Milnerton Lagoon is an estuarine wetland complex located on the lower floodplain of the Diep River before it enters Table Bay. The Rietvlei is a declared P.N.E (Protected Natural Area), which provides opportunities for water sports recreation and bird watching. There is a need to improve public access and amenity within

this area to ensure that the Rietvlei becomes easily accessible and better used by the community.

iii. **Blaauwberg Conservation Area:** The Blaauwberg Conservation Area (BCA) is a unique, valuable and special place that is regarded as an important part of the Cape Floristic Region global biodiversity hotspot . It harbours a unique treasure of cultural historical artefacts and has the potential to become an open-air classroom which is easily accessible to millions of people in its proximity. It also provides a strategic visual link between Table Mountain and Robben Island and provides opportunities for a multitude of recreation activities. (www.bca.org.za)

iv. **Atlantis Dunes Gateway:** The Atlantis dunes are of high conservation value and are located within the proposed southern section of the Cape West Coast Biosphere Reserve. The proposed special place would provide a gateway to this portion of the reserve and a special community space for the Atlantis community.

v. **Milnerton Lagoon Mouth:** The Milnerton Lagoon mouth is a unique natural environment where the Milnerton lagoon breaks through to the sea. Public access to this area needs to be maintained.

vi. **Milnerton Lighthouse:** The Milnerton lighthouse is a unique urban landmark and access point to the Table Bay coastline. Public access should be maintained and public areas upgraded.

vii. **Marine Circle:** Marine Circle is the first major gateway to the coastline along the West Coast, north of the V&A Waterfront. It is located at the intersection of two main structuring routes, ensuring access via public transport. The area is dominated by vehicles and requires urban upgrading to be transformed into a truly great public space.

viii. **Big Bay:** Big Bay is a unique coastal bay offering visual linkage to Table Mountain and Robben Island. The historic area has a unique character, which results from the area being used as a holiday location for the early settlers of Cape Town. This character should be preserved where possible.

ix. **Silwerstroomstrand:** Silwerstroomstrand was originally created as a coastal resort for the town of Atlantis. The buildings of the resort have degraded over time and are in need of public investment to create a positive public space. The upgrading of Silverstroom would reinforce the policy of supporting nodal development along the coast. This needs to be done in conjunction with possible private development initiatives as mentioned in section 6.2. The Silwerstroom Spring which is a unique groundwater-dependant, freshwater spring fed by the Atlantis Aquifer, emerges on the beach at Silwerstroom Strand. Due to its uniqueness and the fact that it is home to a genetically distinct population of the indigenous fish species (*Galaxias zebratus*), the stream should be protected from urban development or activity impacts.

x. **Melkbosstrand:** Melkbosstrand was initially established as a holiday location for residents of Cape Town. The area provides access to amenity including the coast as well as the Koeberg Nature Reserve. Public access and amenity along the coast should be maintained and enhanced.

xi. **Mamre:** The Mamre Mission Station was established at Groenkloof in 1808 by the Moravian Mission Society. Development of the village has included a historic “kerkwerf” and garden plots along the Louwskloof and Groenkloof Rivers, as well as pastoral agriculture on the commonage. (City of Cape Town, 2008)

xii. **Pella:** The Pella Mission Station was established in 1869, with the development of the historic village to accommodate members of the Moravian Church. (City of Cape Town, 2008)

d) Cemetery Spatial Requirements

No existing cemetery in the southern portion of the District, and significant “green-fields” development (i.e. > 100 000 households), requires the reservation of a 20ha cemetery site within such “green-fields” development. Such a site is required to address existing grave demand together with an additional 0,8ha of cemetery space per annum to cater for the “green-fields” development, as well as grave demand emanating from District A in the short-medium term (i.e. 5-15 years). The Atlantis cemetery (43,5ha), while located favourably to accommodate the future growth of Atlantis and environs, is not an economical consideration for communities in the southern portion of the district, especially those of lower income status.

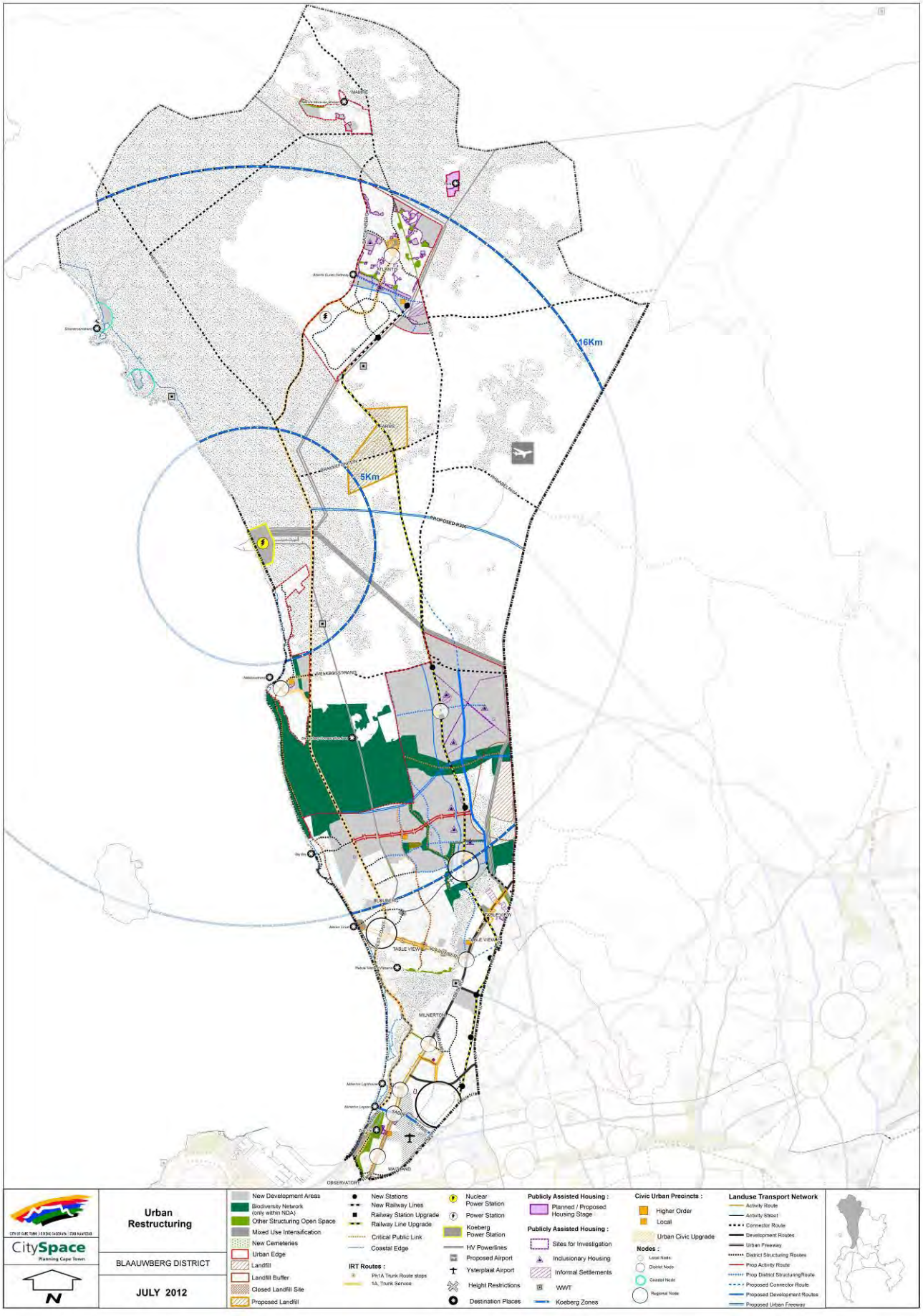


Figure 6-3: Blaauwberg urban restructuring

6.2 Sub-district development guidelines

As indicated in section 1.1 the purpose of the district plan is to provide broad guidance for land use and environmental decision-making across the district. This is reflected in a spatial plan of the desired future development vision across the district (Chapter 4). However, districts are essentially large areas identified for management purposes, determined primarily by population number, and bounded by clear management boundaries such as urban freeways. The future spatial development vision for one part of the district, for example Milnerton, is quite different to that in a different part of the district, such as Atlantis. Thus, land use guidance in support of achieving this variable vision needs to be reflective of local area character, and development capacity and desirability.

The purpose of this section is to provide more localised, or sub-district, guidance for land use and environmental decision-making.

In the Blaauwberg district, sub-districts can be identified within which district future spatial development visions apply. These are:

1. **Greater Milnerton**: This sub-district is bounded by the N1 in the south, N7, Bosmansdam Road, Koeberg Road, the northern edge of the Rietvlei and the West Coast. It mostly includes the older established parts of the district including Paarden Eiland, Brooklyn, Rugby and Milnerton.

2. **Koeberg Road Corridor**: This sub-district is bounded by Bosmansdam Road to the south, the N7, proposed east-west biodiversity corridor in the north, and Koeberg Road and its proposed extension. It is predominantly an industrial corridor and the economic backbone of the district.

3. **Greater Tableview**: This sub-district is bounded by the Rietvlei in the south, Koeberg Road and its proposed extension, the southern boundary of the BCA and the West Coast. It is the growth area of the district and includes significant coastal amenity and residential development.

4. **Long Term Development Area**: This sub-district is bounded by the southern edge of the proposed east-west biodiversity corridor, the N7, the urban edge to the north and the eastern boundary of the BCA. It is considered a longer term development area that will continue the pattern of development associated with the Atlantis corridor.

5. **West Coast**: This sub-district includes the BCA, Melkbosstrand, associated rural and coastal areas up to the City boundary in the north, but excluding Atlantis and the associated Klein Dassenberg smallholdings area. It is the largest of the sub-districts and includes important biodiversity and coastal resources.

6. **Atlantis and Surrounds**: This sub-district includes the outer lying towns of Atlantis, Mamre and Pella as well as the Klein Dassenberg smallholdings area and associated rural areas contained within the City boundary. This area is generally underdeveloped and requires significant public and private sector investment.

The sub-district guidance for land use and environmental decision-making is essentially dealt with in two parts. The first is to provide broad sub-district guidance towards achieving desirable medium to long term future development for these identified sub-districts, which aligns with the overall aims and policies of the spatial development plan. It should be noted, however, that this broad sub-district guidance does not replace detailed local area guidance (e.g. local area structure plans), which is usually at a significantly greater level of detail (including street and even erf scale).The second part of this section is to specifically include guidance for undeveloped areas identified for future development (see tables headed ‘New Development Areas’).

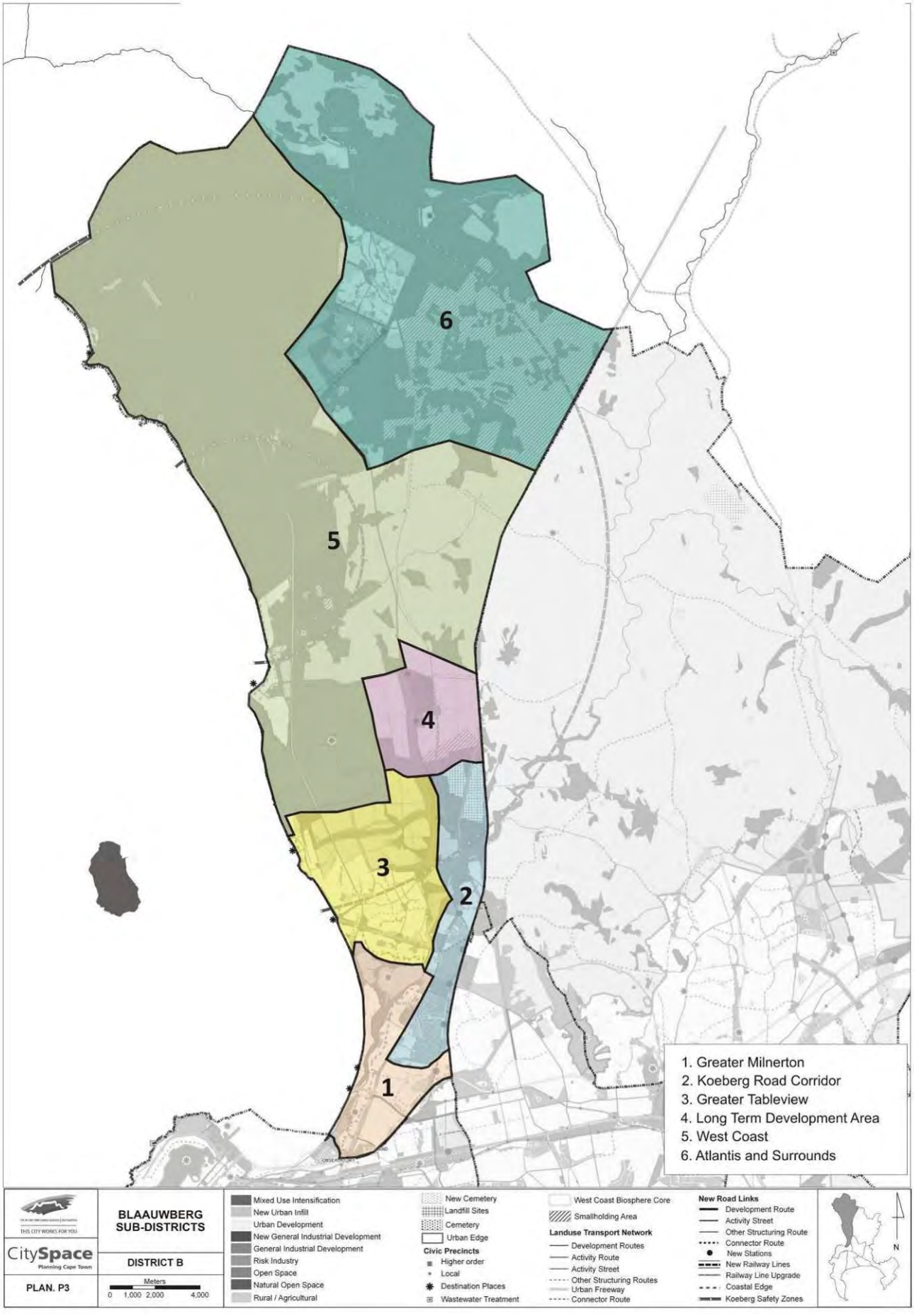


Figure 6-4: Blaauwberg sub-districts

6.2.1 Sub-district 1: Greater Milnerton

SUB-DISTRICT 1: GREATER MILNERTON - CHANGES IN LAND USE AND FORM		
Spatial Development Objectives	**Supporting Land use Guidelines**	**Existing frameworks**
a) Encourage a mix of uses in Paarden Eiland that includes residential development as a means of reinforcing the IRT system and improving the public environment.	1. Support medium rise development and a mix of uses along the IRT route, on the edges of the Zoar Vlei and along Marine Drive.	• Cape Town Sea Level Rise Risk Assessment project (2009/2010) • City of Cape Town, Koeberg Road Management Strategy (2000) • City of Cape Town, Coastal Zone Management Strategy (2003) • Cape Town Densification Policy (2012) • City of Cape Town, Zoarvlei Management Plan (1999)
b) Improve the interface between the built environment and Zoarvlei/Rietvlei to create safe and usable public open space	1. Support medium rise, mixed use redevelopment on the edges of the Zoarvlei in Paarden Eiland that results in an active interface with the open space without compromising the wetland buffer zone 2. Promote the use of Water Sensitive Urban Design techniques to limit the runoff effect of development on the Zoarvlei and Rietvlei. 3. Ensure public space investments are included as part of any redevelopment proposals edging the Zoarvlei	
c) Ensure the location and form of development takes into account sea level rise considerations to mitigate future impacts.	1. The outcomes of the Cape Town Sea Level Rise Risk Assessment project should be considered when assessing development applications within the identified Coastal Protection Zone. (see EMF for detail)	
d) Ensure land uses in proximity to the IRT route facilitate use of the system.	1. Support densification in appropriate locations (assessed using the City's Densification Policy criteria) along the routes of the IRT system.	
e) Promote access to the coast by the general public and tourists	1. Explore and promote public amenity and tourism opportunities at accessible locations along the coast such as Milnerton Lighthouse, Milnerton Lagoon and Sunset Beach	
f) Reinforce the IRT system within the Koeberg Road corridor	1. Support higher density, mixed use development, along Koeberg Road, creating a vibrant environment with densities that support public transport. 2. Redevelopment along Koeberg Road should be sensitive to the adjacent residential fabric. 3. Reinforce east-west links between Koeberg Road and the IRT trunk route along the R27.	
g) Protect/conserve built heritage resources in the Brooklyn/Rugby and Milnerton South areas	1. Buildings older than 60 years subject to National Heritage Resources Act regulations	
h) Protect/conserve heritage sites	1. Protect sites of heritage significance according to National Heritage Resources Act regulations including Brooklyn Chest Hospital, Klein Zoar, the Wooden Bridge and the Old Municipal Hall	

SUB-DISTRICT 1: GREATER MILNERTON - NEW DEVELOPMENT AREAS		
Spatial Development Objectives	**Supporting Land use Guidelines**	**Existing frameworks**
YSTERPLAAT (indicated as a strategic site on Figure 6-5)		
i) Recognise Ysterplaat as an urban infill opportunity and give guidance to its possible redevelopment as a high density mixed use precinct	1. The present function of the airfield at Ysterplaat must not be expanded. 2. Redevelopment proposals should integrate the site into the surrounding urban fabric and IRT system, particularly Koeberg Road, Wemyss Road, Piet Grobler Road, Sable Road and Ratanga Road 3. Redevelopment proposals should include a mix of uses including a range of housing opportunities and densities	

Figure 6-5: Blaauwberg sub-district 1: Greater Milnerton

6.2.2 Sub-district 2: Koeberg Road Corridor land use guidelines

SUB-DISTRICT 2: KOEBERG ROAD CORRIDOR - CHANGES IN LAND USE AND FORM		
Spatial Development Objectives	**Supporting Land use Guidelines**	**Existing frameworks**
a) Ensure development aligns with the safety requirements of the Koeberg Emergency Plan and relevant legislation applicable to the Koeberg Nuclear Power Station.	1. All urban development within the KNPS Precautionary Action Zone (PAZ) (area within a 5 km radius of the Koeberg nuclear reactors (X = -52727.4000, Y = -3727966.6500)) and Urgent Protective action planning Zone (UPZ) (area within a 5 km – 16km radius of the Koeberg nuclear reactors (X = -52727.4000, Y = -3727966.6500))[32] must conform to the following restrictions necessary to ensure the viability of the Koeberg Nuclear Emergency Plan: • No new development is permissible within the PAZ (as defined above) other than development that is directly related to the siting, construction, operation and decommissioning of the Koeberg Nuclear Power Station or that is as a result of the exercising of existing zoning rights. On this basis, no application for enhanced development rights (rezoning, subdivision, departure from land use, or Council's consent, including application for a guesthouse or second dwelling) that will increase the transient or permanent resident population, and that is not directly related to the siting, construction, operation and decommissioning of the Koeberg Nuclear Power Station, can be approved. Furthermore, the projected population within the PAZ must be evacuated within four hours from the time that an evacuation order is given, as demonstrated by means of a traffic evacuation model approved by Council and acceptable to the NNR. • New development within the UPZ (as defined above) may only be approved subject to demonstration that the proposed development will not compromise the adequacy of disaster management infrastructure required to ensure the effective implementation of the Koeberg Nuclear Emergency Plan (version approved by the National Nuclear Regulator (NNR)). Specifically, within the UPZ area, an evacuation time of 16 hours of the projected population, within any 67,5° sector to designated mass care centres (as appropriate), must be demonstrated by means of a traffic (evacuation) model approved by Council and acceptable to the NNR. The evacuation time must be measured from the time that the evacuation order is given. These development controls will be superseded by National 'Regulations on Development in the Formal Emergency Planning Zone of the KNPS to ensure effective implementation of the Koeberg Nuclear Emergency Plan' when approved.	• City of Cape Town, Koeberg Nuclear Emergency Plan: Traffic Evacuation Model (2006) • Department of Energy, draft Regulations on Development in the Formal Emergency Planning Zone of the Koeberg Nuclear Power Station to Ensure Effective Implementation of the Koeberg Nuclear Emergency Plan (2010)
b) Reinforce the IRT system within the Koeberg Road corridor	1. Support densification in appropriate locations (assessed using the City's Densification Policy criteria) along Koeberg Road creating a series of nodes along the length of the route. In particular the following intersections along Koeberg Road are well located and suited to higher densities: Sable Road, Loxton Road and Racecourse Road and which should reinforce east-west linkages	• City of Cape Town, Koeberg Road Management Strategy(2000) • City of Cape Town, Floodplain and River Corridor Management

	into surrounding areas. Mixed use development is encouraged for the portion of the route between Racecourse Road and Plattekloof Road with corresponding higher densities. 2. Support a mix of uses for industrial properties that border Koeberg Road. 3. Support a mix of uses along trunk IRT routes within industrial areas that do not compromise industrial transport movement.	Policy (2009) • City of Cape Town, Management of Urban Stormwater Impacts Policy (2009) • City of Cape Town, Diep River Management Plan (1999)
c) Improve provision and access to higher order public facilities.	1. Cluster higher order public facilities at points of high accessibility, concentrated at the intersection of Sandown Road and the Atlantis rail line. 2. Support the provision of lower order public facilities in proximity to areas of highest need and within proximity of public transport.	
d) Ensure an active interface between the built environment and the Diep River	1. Promote the use of Water Sensitive Urban Design techniques to limit the runoff effect of development on the Diep River. 2. Support active built interfaces with the Diep River including permeable perimeter fencing of developments adjacent to the river. 3. Reinforce and upgrade points of public access to the river. 4. Do not support heavy industrial uses on the edge of the Diep River.	
e) Support a range of housing opportunities within proximity of job opportunities	1. Ensure new development applications provide a range of entry level housing opportunities and associated public facilities. 2. Support acquisition of land for public housing provision within the Koeberg Road corridor.	
f) Upgrade Du Noon and Doornbach public environment	1. Upgrade the interface between Du Noon and Doornbach, and Potsdam Road. The upgrade should incorporate the taxi rank and sports field located next to the rail line. 2. Opportunities for commercial activity in relation to the upgrade of the Du Noon taxi rank should be investigated.	
g) Upgrade Marconi Beam public environment	1. Upgrade pedestrian environment along Freedom Way and Omuramba Road. 2. Release land along Freedom Way for mixed use development.	

SUB-DISTRICT 2: KOEBERG ROAD CORRIDOR - NEW DEVELOPMENT AREAS		
Spatial Development Objectives	**Supporting Land use Guidelines (how and where?)**	**Existing frameworks**
h) Ensure development aligns with the safety requirements of the Koeberg Emergency Plan and relevant legislation applicable to the Koeberg Nuclear Power Station.	1. All urban development within the KNPS Precautionary Action Zone (PAZ) (area within a 5 km radius of the Koeberg nuclear reactors (X = -52727.4000, Y = -3727966.6500)) and Urgent Protective action planning Zone (UPZ) (area within a 5 km – 16km radius of the Koeberg nuclear reactors (X = -52727.4000, Y = -3727966.6500))[32] must conform to the following restrictions necessary to ensure the viability of the Koeberg Nuclear Emergency Plan: • No new development is permissible within the PAZ (as defined above) other than development that is directly related to the siting, construction, operation and decommissioning of the Koeberg Nuclear Power Station or that is as a result of the exercising of existing zoning rights. On this basis, no application for enhanced development rights (rezoning, subdivision, departure from land use, or Council's consent, including application for a guesthouse or second dwelling) that will increase the transient or permanent resident population, and that is not directly related to the siting,	• City of Cape Town, Koeberg Nuclear Emergency Plan: Traffic Evacuation Model (2006) • Department of Energy, draft Regulations on Development in the Formal Emergency Planning Zone of the Koeberg Nuclear Power Station to Ensure Effective Implementation of the Koeberg Nuclear Emergency Plan (2010)

	construction, operation and decommissioning of the Koeberg Nuclear Power Station, can be approved. Furthermore, the projected population within the PAZ must be evacuated within four hours from the time that an evacuation order is given, as demonstrated by means of a traffic evacuation model approved by Council and acceptable to the NNR. • New development within the UPZ (as defined above) may only be approved subject to demonstration that the proposed development will not compromise the adequacy of disaster management infrastructure required to ensure the effective implementation of the Koeberg Nuclear Emergency Plan (version approved by the National Nuclear Regulator (NNR)). Specifically, within the UPZ area, an evacuation time of 16 hours of the projected population, within any 67,5° sector to designated mass care centres (as appropriate), must be demonstrated by means of a traffic (evacuation) model approved by Council and acceptable to the NNR. The evacuation time must be measured from the time that the evacuation order is given. These development controls will be superseded by National 'Regulations on Development in the Formal Emergency Planning Zone of the KNPS to ensure effective implementation of the Koeberg Nuclear Emergency Plan' when approved.	
ATLANTIS CORRIDOR (area of sub-district north of the Diep River)		
g) Improve provision and access to higher order public facilities.	1. Cluster higher order public facilities at points of high accessibility, concentrated at the intersection of Sandown Road and the Atlantis rail line in relation to the proposed Parklands rail station.	• Diep River Management Plan (1999) • Cape Town Densification Policy (2012)
h) Promote a range of housing opportunities in proximity to job opportunities and public facilities.	1. Support increased densities along Sandown Road and in proximity to proposed rail stations 2. Develop significant social housing opportunities within the area to ensure entry level housing opportunities are available.	
i) Ensure an active interface between the built environment and the Diep River	1. Promote the use of Water Sensitive Urban Design techniques to limit the runoff effect of development on the Diep River. 2. Support active built interfaces with the Diep River including permeable perimeter fencing of developments adjacent to the river. 3. Reinforce and upgrade points of public access to the river. 4. Do not support general industrial development on the edge of the Diep River	
j) Reinforce Sandown Road as an important east-west public transport route.	1. Support higher density, mixed use development along Sandown Road. 2. Encourage building design to promote an active urban environment and accommodate NMT movement. 3. Promote a high density node at the intersection of Sandown Road and the Atlantis rail line in relation to the proposed Parklands rail station. 4. Allow for business / service industrial development in line with the local area development framework compiled for the Rivergate development area.	
k) Ensure development is compliant with the operational requirements of the Vissershok landfill site.	1. The different types of heavy industries, which may be permitted within the 800m buffer zone around the Vissershok Waste Disposal Facility must be determined in consultation between developers, the operators of the Vissershok Waste Disposal Facility and the City of Cape Town's Solid Waste Disposal Department, in	

	order not to jeopardize any of the permit conditions under which this facility operates.	
POTSDAM INTERCHANGE SITE (located at the intersection of Blaauwberg Road and Potsdam Road)		
I) Unlock City land for redevelopment ensuring public benefit is maximised.	1. Redevelopment of the site should incorporate a mix of uses including public facilities to serve the communities of Du Noon and Doornbach. 2. Redevelopment of the site must not compromise the Caltex Oil Refinery emergency plan. 3. The development should be integrated into the surrounding road network and public transport infrastructure. 4. Redevelopment of the site must create an active interface with Koeberg Road, Potsdam Road and the Diep River. 5. Public access to the Diep River should be maintained. 6. Redevelopment of the site needs to be integrated with the future use of the Killarney Racetrack.	City of Cape Town, SPUD Department, draft Potsdam Interchange Site Prefeasibility Phase 1 (2009)

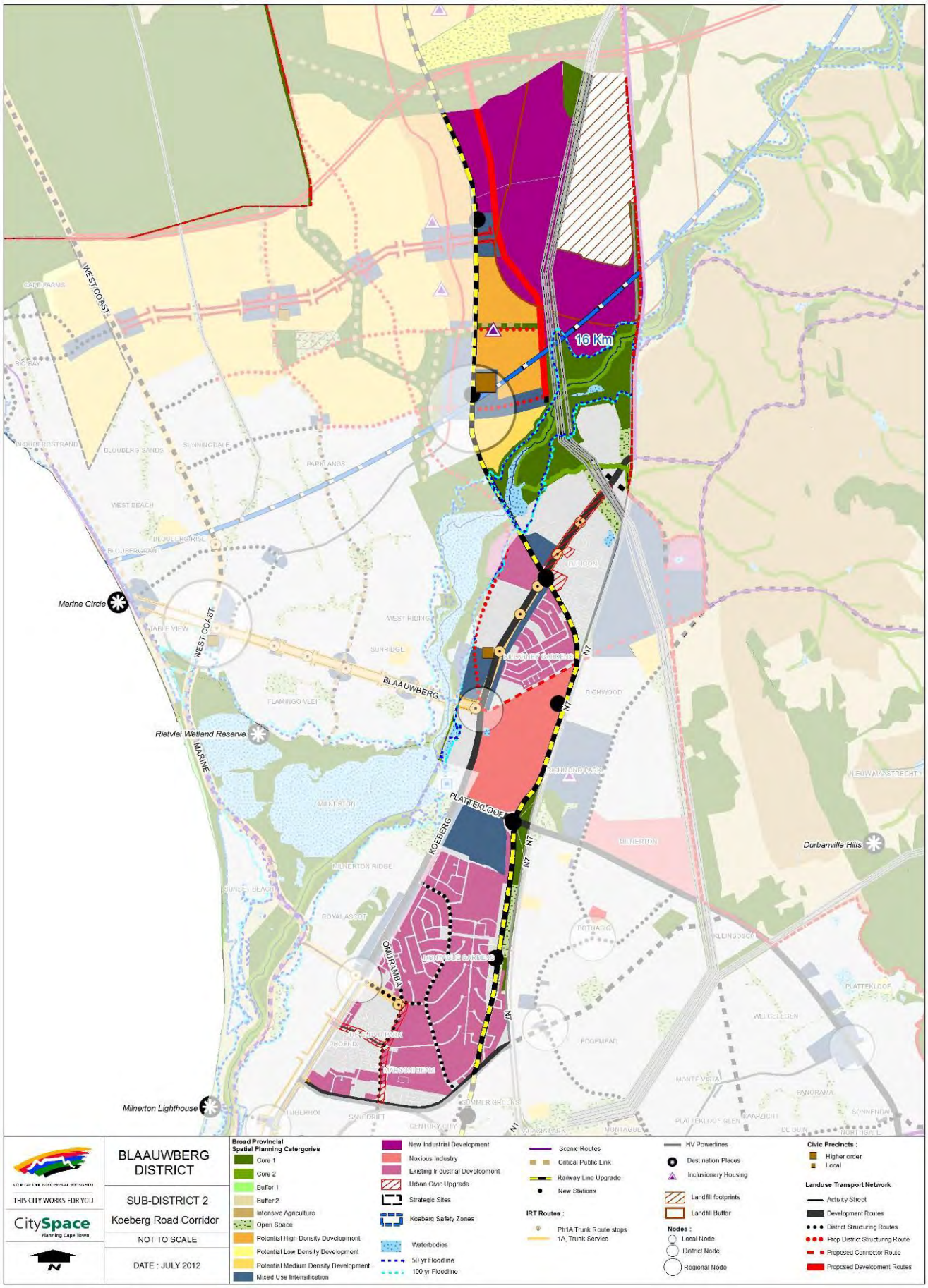


Figure 6-6: Blaauwberg sub-district 2: Koeberg Road Corridor

6.2.3 Sub-district 3: Greater Tableview land use guidelines

SUB-DISTRICT 3: GREATER TABLEVIEW - CHANGES IN LAND USE AND FORM		
Spatial Development Objectives (what?)	**Supporting Land use Guidelines (how and where?)**	**Existing frameworks**
a) Ensure development aligns with the safety requirements of the Koeberg Emergency Plan and relevant legislation applicable to the Koeberg Nuclear Power Station.	1. All urban development within the KNPS Precautionary Action Zone (PAZ) (area within a 5 km radius of the Koeberg nuclear reactors (X = -52727.4000, Y = -3727966.6500)) and Urgent Protective action planning Zone (UPZ) (area within a 5 km – 16km radius of the Koeberg nuclear reactors (X = -52727.4000, Y = -3727966.6500))[32] must conform to the following restrictions necessary to ensure the viability of the Koeberg Nuclear Emergency Plan: • No new development is permissible within the PAZ (as defined above) other than development that is directly related to the siting, construction, operation and decommissioning of the Koeberg Nuclear Power Station or that is as a result of the exercising of existing zoning rights. On this basis, no application for enhanced development rights (rezoning, subdivision, departure from land use, or Council's consent, including application for a guesthouse or second dwelling) that will increase the transient or permanent resident population, and that is not directly related to the siting, construction, operation and decommissioning of the Koeberg Nuclear Power Station, can be approved. Furthermore, the projected population within the PAZ must be evacuated within four hours from the time that an evacuation order is given, as demonstrated by means of a traffic evacuation model approved by Council and acceptable to the NNR. • New development within the UPZ (as defined above) may only be approved subject to demonstration that the proposed development will not compromise the adequacy of disaster management infrastructure required to ensure the effective implementation of the Koeberg Nuclear Emergency Plan (version approved by the National Nuclear Regulator (NNR)). Specifically, within the UPZ area, an evacuation time of 16 hours of the projected population, within any 67,5° sector to designated mass care centres (as appropriate), must be demonstrated by means of a traffic (evacuation) model approved by Council and acceptable to the NNR. The evacuation time must be measured from the time that the evacuation order is given. These development controls will be superseded by National 'Regulations on Development in the Formal Emergency Planning Zone of the KNPS to ensure effective implementation of the Koeberg Nuclear Emergency Plan' when approved.	• City of Cape Town, Koeberg Nuclear Emergency Plan: Traffic Evacuation Model (2006) • Department of Energy, draft Regulations on Development in the Formal Emergency Planning Zone of the Koeberg Nuclear Power Station to Ensure Effective Implementation of the Koeberg Nuclear Emergency Plan (2010)
b) Reinforce Blaauwberg Road as a public transport route and activity route	1. Support densification along Blaauwberg Road in terms of proposals contained in the Blaauwberg Road Management Strategy (1999) and any future reviews of this policy. 2. Support mixed use development along Blaauwberg Road with average building heights of 3-5 storeys. 3. Where possible, parking areas should be located	• City of Cape Town, Management Strategy for Blaauwberg Road (1999)

	behind buildings or in basements to ensure an active built interface with Blaauwberg Road. 4. Support an intensification of development in relation to IRT trunk stations along the route and in relation to the nodes of Marine Circle, Bayside, Flamingo Square and Boy de Goede crescent.	
c) Improve public amenity of the beachfront area	1. Improve the pedestrian environment along the beachfront by reducing the dominance of vehicles and upgrading NMT infrastructure 2. Support the provision of sufficient tourism amenities along the beachfront in appropriate locations 3. Promote positive urban design responses to the beachfront by the private sector. 4. Consider impacts of sea level rise risk on beachfront infrastructure and future development	
d) Guide the interface between urban development and the Parklands fynbos ecological corridor	1. Promote an active interface and permeable perimeter fencing on properties bordering the fynbos ecological corridor 2. Support properties fronting on to the fynbos ecological corridor 3. Promote higher density, medium scale development on the edges of the fynbos ecological corridor to improve passive surveillance.	
e) Promote Wood Drive as an NMT link between the Rietvlei and the Blaauwberg Conservation Area	1. Where feasible, implement a grade separated cycle way linking Rietvlei to the BCA	
f) Protect/conserve built heritage resources in Stadler Street and historic Bloubergstrand	1. Buildings older than 60 years subject to National Heritage Resources Act regulations	

SUB-DISTRICT 3: GREATER TABLEVIEW- NEW DEVELOPMENT AREAS		
Spatial Development Objectives	**Supporting Land use Guidelines**	**Existing frameworks**
g) Ensure development aligns with the safety requirements of the Koeberg Emergency Plan and relevant legislation applicable to the Koeberg Nuclear Power Station.	1. All urban development within the KNPS Precautionary Action Zone (PAZ) (area within a 5 km radius of the Koeberg nuclear reactors (X = -52727.4000, Y = -3727966.6500)) and Urgent Protective action planning Zone (UPZ) (area within a 5 km – 16km radius of the Koeberg nuclear reactors (X = -52727.4000, Y = -3727966.6500))[32] must conform to the following restrictions necessary to ensure the viability of the Koeberg Nuclear Emergency Plan: • No new development is permissible within the PAZ (as defined above) other than development that is directly related to the siting, construction, operation and decommissioning of the Koeberg Nuclear Power Station or that is as a result of the exercising of existing zoning rights. On this basis, no application for enhanced development rights (rezoning, subdivision, departure from land use, or Council's consent, including application for a guesthouse or second dwelling) that will increase the transient or permanent resident population, and that is not directly related to the siting, construction, operation and decommissioning of the Koeberg Nuclear Power Station, can be approved. Furthermore, the projected population within the PAZ must be evacuated within four hours from the time that an evacuation order is given, as demonstrated by means of a traffic evacuation model approved by Council and acceptable to the NNR. • New development within the UPZ (as defined	• City of Cape Town, Koeberg Nuclear Emergency Plan: Traffic Evacuation Model (2006) • Department of Energy, draft Regulations on Development in the Formal Emergency Planning Zone of the Koeberg Nuclear Power Station to Ensure Effective Implementation of the Koeberg Nuclear Emergency Plan (2010)

	above) may only be approved subject to demonstration that the proposed development will not compromise the adequacy of disaster management infrastructure required to ensure the effective implementation of the Koeberg Nuclear Emergency Plan (version approved by the National Nuclear Regulator (NNR)). Specifically, within the UPZ area, an evacuation time of 16 hours of the projected population, within any 67,5° sector to designated mass care centres (as appropriate), must be demonstrated by means of a traffic (evacuation) model approved by Council and acceptable to the NNR. The evacuation time must be measured from the time that the evacuation order is given. These development controls will be superseded by National 'Regulations on Development in the Formal Emergency Planning Zone of the KNPS to ensure effective implementation of the Koeberg Nuclear Emergency Plan' when approved.	
PARKLANDS GROWTH AREA (located north of existing urban development)		
h) Guide the interface between urban development and Blaauwberg Conservation Area	1. Promote an active interface and permeable perimeter fencing on properties bordering the BCA 2. Lower density residential development to be supported as a transition to the BCA core areas except where Wood Drive terminates at the BCA and where higher intensity uses could be supported to reinforce the gateway to the BCA.	• Blaauwberg Conservation Area Development and Management Plan (2000)
i) Promote a sports precinct at the intersection of Tryall Road and Wood Drive	1. Investigate the possible rehabilitation of the closed Milnerton landfill site into a regional sports facility. 2. Integrate the proposed sports facility with the adjacent biodiversity areas ensuring accessibility for pedestrians and cyclists 3. Surrounding urban development should front on to the proposed sports facility 4. Medium density development should be encouraged on the edge of the sports facility to improve passive surveillance 5. A cluster of public facilities should be located in close proximity of the proposed facility.	
j) Reinforce the Parklands fynbos ecological corridor linking the Diep River and BCA.	1. The extent of the fynbos ecological corridor is indicative and precise configuration should be determined through a local development framework as part of future land use applications, which should align with the parameters of the relevant ROD and should further take into consideration: • the need to ensure convenient and safe crossing for pedestrians between the station node and residential areas to the west; • the key need to ensure that more intense activity is promoted along the Parklands Main Road extension activity street; • the impacts of potential fire risk and related safety considerations • ecological processes and functioning, where specialist botanical/ecological inputs should be an informant. 2. Promote an active interface and permeable perimeter fencing on properties bordering the fynbos ecological corridor 3. Encourage layout design which reflects the orientation of properties that front on to the fynbos ecological corridor 4. Promote higher density, medium scale development on the edges of the fynbos ecological corridor to improve passive surveillance.	• Fynbos Corridor Operational Environmental Management Plan (OEMP)

	5. Based on its scale and location within the urban fabric, the fynbos ecological corridor should accommodate passive recreational activities, including walking trails that encourage usage of the open space and facilitate NMT movement within the area. By its nature, the corridor should have a higher level of accessibility than areas such as the BCA.	
k) Promote Wood Drive as an NMT link between the Rietvlei and the Blaauwberg Conservation Area	1. Where feasible, implement a grade separated cycle way linking Rietvlei to the BCA	
l) Reinforce east-west routes and associated public transport	1. A mix of uses and higher densities should be supported at intersections along Sandown Road and the proposed Big Bay east-west activity route. 2. Development along east-west routes should face onto the routes and should create a positive pedestrian environment. Solid boundary walls on the edges of these routes should be minimized where possible. 3. Where possible, parking areas for business uses should be encouraged to locate at the back of buildings and not on the street edge, to support the creation of an active street interface. 4. Township layouts edging these routes should facilitate pedestrian access to public transport routes and stations.	
m) Promote the development of a node at the proposed new Parklands station and intersection of Parklands Main Road extension and Sandown Road	5. Higher density development should be supported at the intersection between Parklands Main Road extension and Sandown Road. 6. Mixed use, commercial and service industrial uses should be supported to reinforce the node, including areas specified for these purposes by the Rivergate Development Framework 7. Development should face onto roads and create a positive pedestrian environment. 8. A cluster of public facilities should be located in the node.	
n) Promote mixed use intensification along Parklands Main Road extension	9. A mix of uses and higher densities should be supported at intersections along Parklands Main Road extension 10. Development should face onto the route and should create a positive pedestrian environment. Solid boundary walls on the edges of these routes should generally be discouraged. 11. Where possible, parking areas for business uses should be encouraged to locate at the back of buildings and not on the street edge, to support the creation of an active street interface. 12. Township layouts edging these routes should facilitate pedestrian access to public transport routes and stations.	
ERF 1117 (identified as a strategic site on Figure 6-7)		
o) Protect areas of high conservation worthy vegetation	1. The northern portion of erf 1117 containing critically endangered vegetation and the associated dune ridge should be incorporated into the BCA as indicated.	
p) Guide interface between urban development and the Blaauwberg Conservation Area	1. Promote an active interface and permeable perimeter fencing on properties bordering the BCA.	• Blaauwberg Conservation Area Development and Management Plan (2000)
q) Reinforce east-west routes and associated public transport	1. A mix of uses and higher densities should be supported at intersections along the proposed east-west activity route. 2. In general, medium density residential development should be supported on the site with higher densities associated with main structuring routes.	

r) Ensure public objectives are achieved through the development of the site	3. Redevelopment of the site should facilitate provision of public facilities and a range of entry level and subsidy housing opportunities in the broader area.	

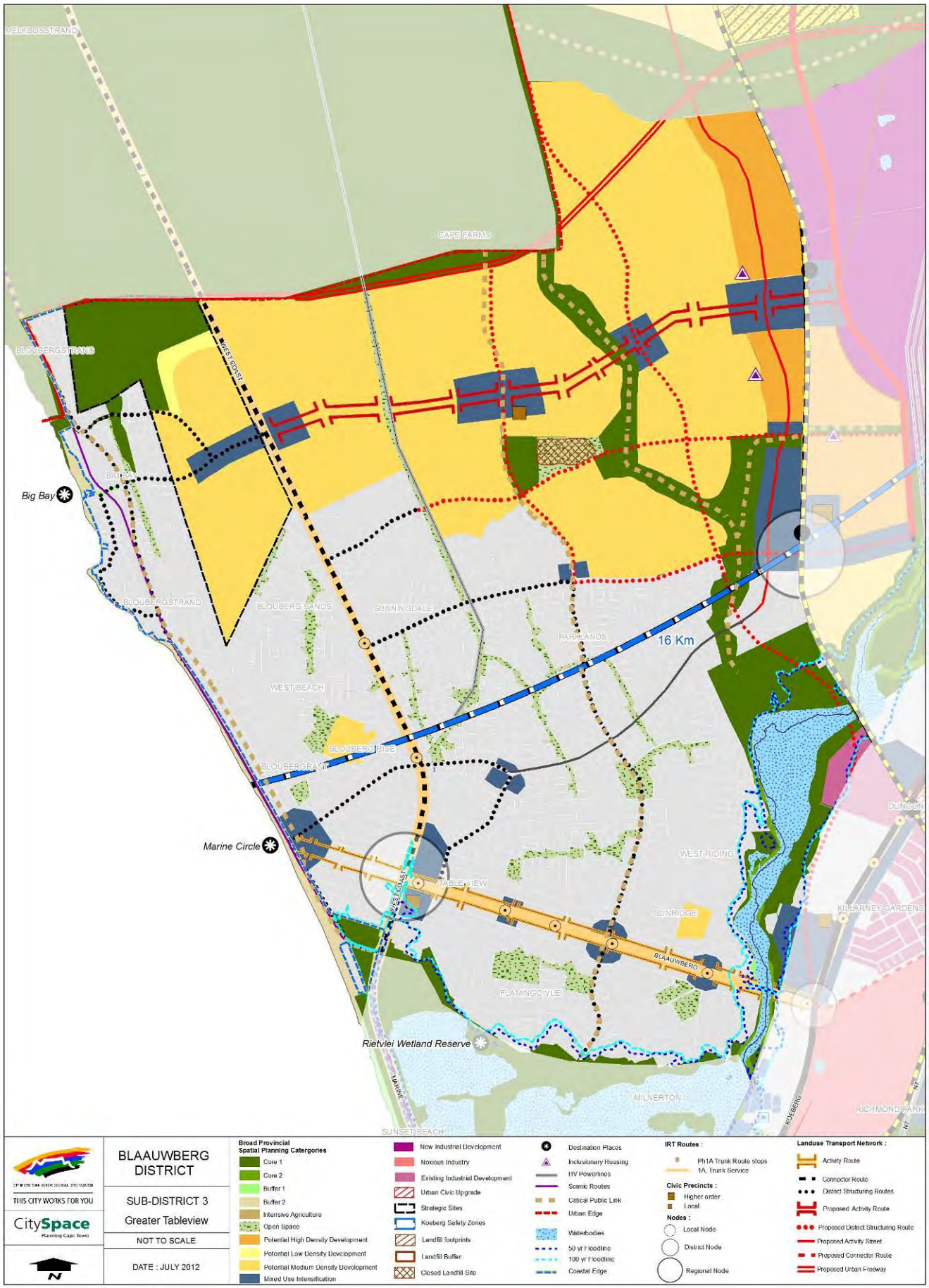


Figure 6-7: Blaauwberg sub-district 3: Greater Tableview

6.2.4 Sub-district 4: Long Term Development Area land use guidelines

SUB-DISTRICT 4: LONG TERM DEVELOPMENT AREA - NEW DEVELOPMENT AREAS		
Spatial Development Objectives	**Supporting Land use Guidelines**	**Existing frameworks**
a) Ensure development aligns with the safety requirements of the Koeberg Emergency Plan and relevant legislation applicable to the Koeberg Nuclear Power Station.	1. All urban development within the KNPS Precautionary Action Zone (PAZ) (area within a 5 km radius of the Koeberg nuclear reactors (X = -52727.4000, Y = -3727966.6500)) and Urgent Protective action planning Zone (UPZ) (area within a 5 km – 16km radius of the Koeberg nuclear reactors (X = -52727.4000, Y = -3727966.6500))[32] must conform to the following restrictions necessary to ensure the viability of the Koeberg Nuclear Emergency Plan: • No new development is permissible within the PAZ (as defined above) other than development that is directly related to the siting, construction, operation and decommissioning of the Koeberg Nuclear Power Station or that is as a result of the exercising of existing zoning rights. On this basis, no application for enhanced development rights (rezoning, subdivision, departure from land use, or Council's consent, including application for a guesthouse or second dwelling) that will increase the transient or permanent resident population, and that is not directly related to the siting, construction, operation and decommissioning of the Koeberg Nuclear Power Station, can be approved. Furthermore, the projected population within the PAZ must be evacuated within four hours from the time that an evacuation order is given, as demonstrated by means of a traffic evacuation model approved by Council and acceptable to the NNR. • New development within the UPZ (as defined above) may only be approved subject to demonstration that the proposed development will not compromise the adequacy of disaster management infrastructure required to ensure the effective implementation of the Koeberg Nuclear Emergency Plan (version approved by the National Nuclear Regulator (NNR)). Specifically, within the UPZ area, an evacuation time of 16 hours of the projected population, within any 67,5° sector to designated mass care centres (as appropriate), must be demonstrated by means of a traffic (evacuation) model approved by Council and acceptable to the NNR. The evacuation time must be measured from the time that the evacuation order is given. These development controls will be superseded by National 'Regulations on Development in the Formal Emergency Planning Zone of the KNPS to ensure effective implementation of the Koeberg Nuclear Emergency Plan' when approved.	• City of Cape Town, Koeberg Nuclear Emergency Plan: Traffic Evacuation Model (2006) • Department of Energy, draft Regulations on Development in the Formal Emergency Planning Zone of the Koeberg Nuclear Power Station to Ensure Effective Implementation of the Koeberg Nuclear Emergency Plan (2010)
ATLANTIS CORRIDOR		
b) Reinforce the Atlantis corridor as a major north/south development corridor supported by public transport	1. Intensify development along the rail/M12 /Parklands Main Road extension corridor 2. Support a mix of uses along the length of the route with more intense development located at major intersections and in relation to public transport interchanges.	
c) Manage the urban interface with the Blaauwberg Conservation Area to	1. Support lower density residential development as an interface with the BCA core areas to the south and east of the conservation area 2. Promote an active interface and permeable	• Blaauwberg Conservation Area Development and Management Plan (2000)

minimise negative urban impacts and promote passive surveillance	perimeter fencing on properties bordering the BCA	
d) Support the creation of employment opportunities to ensure a mix of living and working opportunities in the future growth areas of the district	1. Mixed use, commercial and service industrial uses are supported at points of high accessibility. 2. Commercial/mixed use nodes to be supported in relation to future proposed east-west toll freeway interchanges.	
e) Promote integrated human settlement development	1. Ensure a range of housing opportunities and densities is provided particularly in proximity to public transport and public facilities. This should include the provision of entry level, rental and subsidy housing opportunities.	
f) Reinforce the proposed east-west ecological corridor, linking the BCA and Diep River and integrate with the urban environment to ensure passive surveillance and active usage of the open space	1. The extent of the biodiversity corridor is indicative and precise configuration should be determined through a local development framework as part of future land use applications and/or EIA processes, which should take into consideration: • The need to create active land use conditions along its edges; • the impacts of potential fire risk and related safety considerations • ecological processes and functioning, where specialist botanical/ecological inputs should be an informant. 2. Support medium density development on the edge of the proposed east-west ecological corridor, linking the BCA and Diep River, which encourages low impact activity on the edges of the corridor. 3. Promote an active interface and permeable perimeter fencing on properties bordering the biodiversity corridor. 4. Implement passive recreational activities in the ecological corridor, including walking trails that encourage usage of the open space.	• City of Cape Town, Diep River Management Plan (1999) • Blaauwberg Conservation Area Development and Management Plan (2000)
g) Manage subdivisions within the Morningstar area to ensure the integrity of the area is maintained	1. Subdivision and land use applications within the Morningstar area to be guided by the provisions of the approved Morningstar Subdivision Policy in the short to medium term.	• City of Cape Town, Morningstar Subdivision Policy (1995)

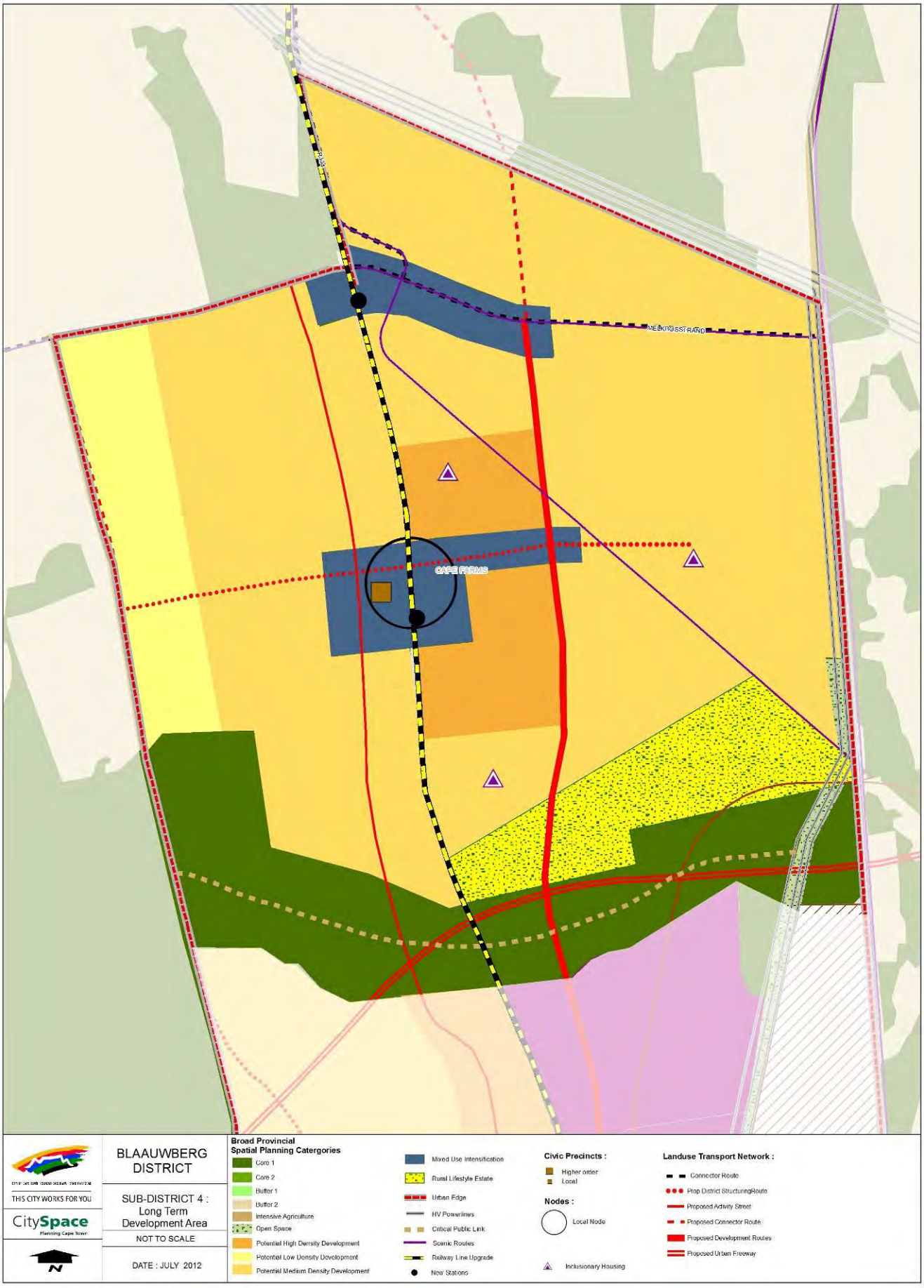


Figure 6-8: Blaauwberg sub-district 4: Long Term Development Area

6.2.5 Sub-district 5: West Coast land use guidelines

SUB-DISTRICT 5: WEST COAST - CHANGES IN LAND USE AND FORM		
Spatial Development Objectives	**Supporting Land use Guidelines**	**Existing frameworks**
a) Ensure development aligns with the safety requirements of the Koeberg Emergency Plan and relevant legislation applicable to the Koeberg Nuclear Power Station.	1. All urban development within the KNPS Precautionary Action Zone (PAZ) (area within a 5 km radius of the Koeberg nuclear reactors (X = -52727.4000, Y = -3727966.6500)) and Urgent Protective action planning Zone (UPZ) (area within a 5 km – 16km radius of the Koeberg nuclear reactors (X = -52727.4000, Y = -3727966.6500))[32] must conform to the following restrictions necessary to ensure the viability of the Koeberg Nuclear Emergency Plan: • No new development is permissible within the PAZ (as defined above) other than development that is directly related to the siting, construction, operation and decommissioning of the Koeberg Nuclear Power Station or that is as a result of the exercising of existing zoning rights. On this basis, no application for enhanced development rights (rezoning, subdivision, departure from land use, or Council's consent, including application for a guesthouse or second dwelling) that will increase the transient or permanent resident population, and that is not directly related to the siting, construction, operation and decommissioning of the Koeberg Nuclear Power Station, can be approved. Furthermore, the projected population within the PAZ must be evacuated within four hours from the time that an evacuation order is given, as demonstrated by means of a traffic evacuation model approved by Council and acceptable to the NNR. • New development within the UPZ (as defined above) may only be approved subject to demonstration that the proposed development will not compromise the adequacy of disaster management infrastructure required to ensure the effective implementation of the Koeberg Nuclear Emergency Plan (version approved by the National Nuclear Regulator (NNR)). Specifically, within the UPZ area, an evacuation time of 16 hours of the projected population, within any 67,5° sector to designated mass care centres (as appropriate), must be demonstrated by means of a traffic (evacuation) model approved by Council and acceptable to the NNR. The evacuation time must be measured from the time that the evacuation order is given. These development controls will be superseded by National 'Regulations on Development in the Formal Emergency Planning Zone of the KNPS to ensure effective implementation of the Koeberg Nuclear Emergency Plan' when approved.	• City of Cape Town, Koeberg Nuclear Emergency Plan: Traffic Evacuation Model (2006) • Department of Energy, draft Regulations on Development in the Formal Emergency Planning Zone of the Koeberg Nuclear Power Station to Ensure Effective Implementation of the Koeberg Nuclear Emergency Plan (2010)
b) Manage the rural interface with conservation areas to reinforce conservation proposals	1. Activities in the buffer 2 areas edging the BCA should reinforce the conservation initiative and may include activities such as environmental education, conservation tourism activities and agricultural use. 2. Links/connectivity needs to be ensured between the Koeberg Nature Reserve and the Witsands Aquifer Conservation Area.	• Blaauwberg Conservation Area Development and Management Plan (2000) • West Coast Biosphere Reserve report • Atlantis Water Scheme Environmental Management System

c) Maintain the rural and agricultural character of non-urban areas	1. Applications within the rural areas must be guided by the Western Cape Provincial Spatial Development Framework: Rural Land Use Planning & Management Guidelines. 2. Protect historical farmsteads that form part of the Koeberg farms cultural landscape.	• Western Cape Provincial Spatial Development Framework: Rural Land Use Planning & Management Guidelines (2009)
d) Ensure rural activities do not compromise environmentally sensitive areas	1. Applications within the rural areas must be guided by the Western Cape Provincial Spatial Development Framework: Rural Land Use Planning & Management Guidelines. 2. Rural activities should be informed by the contents of the EMF.	
e) Protect proposed future airport location	1. Manage surrounding land uses so that the possible accommodation of a future airport in this location is not compromised.	
f) Protect proposed future landfill site location	1. Manage surrounding land uses so that the possible accommodation of a future landfill site in the proposed location is not compromised, until a decision has been taken by the Department of Environmental Affairs and Development Planning on the preferred location for this facility.	

SUB-DISTRICT 5: WEST COAST - NEW DEVELOPMENT AREAS		
Spatial Development Objectives	**Supporting Land use Guidelines**	**Existing frameworks**
g) Ensure development aligns with the safety requirements of the Koeberg Emergency Plan and relevant legislation applicable to the Koeberg Nuclear Power Station.	1. All urban development within the KNPS Precautionary Action Zone (PAZ) (area within a 5 km radius of the Koeberg nuclear reactors (X = -52727.4000, Y = -3727966.6500)) and Urgent Protective action planning Zone (UPZ) (area within a 5 km – 16km radius of the Koeberg nuclear reactors (X = -52727.4000, Y = -3727966.6500))[32] must conform to the following restrictions necessary to ensure the viability of the Koeberg Nuclear Emergency Plan: • No new development is permissible within the PAZ (as defined above) other than development that is directly related to the siting, construction, operation and decommissioning of the Koeberg Nuclear Power Station or that is as a result of the exercising of existing zoning rights. On this basis, no application for enhanced development rights (rezoning, subdivision, departure from land use, or Council's consent, including application for a guesthouse or second dwelling) that will increase the transient or permanent resident population, and that is not directly related to the siting, construction, operation and decommissioning of the Koeberg Nuclear Power Station, can be approved. Furthermore, the projected population within the PAZ must be evacuated within four hours from the time that an evacuation order is given, as demonstrated by means of a traffic evacuation model approved by Council and acceptable to the NNR. • New development within the UPZ (as defined above) may only be approved subject to demonstration that the proposed development will not compromise the adequacy of disaster management infrastructure required to ensure the effective implementation of the Koeberg Nuclear Emergency Plan (version approved by the National Nuclear Regulator (NNR)). Specifically, within the UPZ area, an evacuation time of 16 hours of the projected population, within any 67,5° sector to designated mass care centres (as appropriate), must be demonstrated by means of a traffic (evacuation) model approved by Council and acceptable to the NNR. The evacuation time	• City of Cape Town, Koeberg Nuclear Emergency Plan: Traffic Evacuation Model (2006) • Department of Energy, draft Regulations on Development in the Formal Emergency Planning Zone of the Koeberg Nuclear Power Station to Ensure Effective Implementation of the Koeberg Nuclear Emergency Plan (2010)

	must be measured from the time that the evacuation order is given. These development controls will be superseded by National 'Regulations on Development in the Formal Emergency Planning Zone of the KNPS to ensure effective implementation of the Koeberg Nuclear Emergency Plan' when approved.	
MELKBOSSTRAND		
h) Reinforce existing commercial areas	1. Encourage commercial uses to locate in the following areas: • 6th avenue • 11th avenue • Birkenhead centre • Melkbos CBD • Beachfront from 6th avenue to 11th avenue • 711 centre in Van Riebeeckstrand	
i) Contain new development within the proposed urban edge of Melkbosstrand.	1. Promote development of vacant land parcels within the Melkbos CBD area including a range of housing opportunities and a mix of uses to reinforce the existing CBD. 2. Reinforce important ecological corridors as part of any redevelopment of the proposed land parcels.	• City of Cape Town, Melkbosstrand Urban Edge Study: Urban Edge Report (2001)
SILWERSTROOMSTRAND		
j) Recognise Silwerstroomstrand as a new development opportunity and give guidance to its possible development as a new coastal node consisting of two nodes.	1. Allow for the development of two distinct coastal nodes at Silwerstroomstrand and Springfontein. 2. Around the existing Silwerstroomstrand resort, allow for mixed use development, including commercial and tourism / recreational development, public facilities and a range of residential opportunities and densities to support development of a vibrant and permanent coastal node. 3. Allow for a secondary (lower order) nodal clustering of development at the Springfontein node. This could include permanent residential development of varying densities to compliment the mix of opportunities and provide further thresholds to envisaged development at the Silwerstroomstrand node. Development possibilities at the identified nodes should be sensitive to the natural environment and potential visual impact and take the proposed coastal edge, biodiversity informants and infrastructure capacity into account. Further refinement of the coastal and urban edge should be considered and informed by detailed planning taking local contextual informants into account. 4. Engineering and service alternatives that minimise impact on the environment should be considered. 5. Public access to the coastline should be ensured and encouraged with primary public access promoted at the Silwerstroomstand node. Public access along the coastline should be supported through the creation of structured walkways, which link the identified nodal areas. 6. Ensure an appropriate design that reflects and enhances the landscape character and west coast context and ensure a positive interface between the built environment and the surrounding landscape.	• Cape Town Sea Level Rise Risk Assessment project (2009/2010) • City of Cape Town, Coastal Zone Management Strategy (2003)
k) Investigate the opportunity for a possible boat launching facility.	1. The possible development of a boat launching facility should be informed by further detailed investigations and studies. If considered to be feasible, the facility should be publicly accessible.	
l) Ensure development	1. All urban development within the KNPS	• City of Cape Town, Koeberg

aligns with the safety requirements of the Koeberg Emergency Plan and relevant legislation applicable to the Koeberg Nuclear Power Station.	Precautionary Action Zone (PAZ) (area within a 5 km radius of the Koeberg nuclear reactors (X = -52727.4000, Y = -3727966.6500)) and Urgent Protective action planning Zone (UPZ) (area within a 5 km – 16km radius of the Koeberg nuclear reactors (X = -52727.4000, Y = -3727966.6500))32 must conform to the following restrictions necessary to ensure the viability of the Koeberg Nuclear Emergency Plan: • No new development is permissible within the PAZ (as defined above) other than development that is directly related to the siting, construction, operation and decommissioning of the Koeberg Nuclear Power Station or that is as a result of the exercising of existing zoning rights. On this basis, no application for enhanced development rights (rezoning, subdivision, departure from land use, or Council's consent, including application for a guesthouse or second dwelling) that will increase the transient or permanent resident population, and that is not directly related to the siting, construction, operation and decommissioning of the Koeberg Nuclear Power Station, can be approved. Furthermore, the projected population within the PAZ must be evacuated within four hours from the time that an evacuation order is given, as demonstrated by means of a traffic evacuation model approved by Council and acceptable to the NNR. • New development within the UPZ (as defined above) may only be approved subject to demonstration that the proposed development will not compromise the adequacy of disaster management infrastructure required to ensure the effective implementation of the Koeberg Nuclear Emergency Plan (version approved by the National Nuclear Regulator (NNR)). Specifically, within the UPZ area, an evacuation time of 16 hours of the projected population, within any 67,5° sector to designated mass care centres (as appropriate), must be demonstrated by means of a traffic (evacuation) model approved by Council and acceptable to the NNR. The evacuation time must be measured from the time that the evacuation order is given. These development controls will be superseded by National 'Regulations on Development in the Formal Emergency Planning Zone of the KNPS to ensure effective implementation of the Koeberg Nuclear Emergency Plan' when approved.	Nuclear Emergency Plan: Traffic Evacuation Model (2006) • Department of Energy, draft Regulations on Development in the Formal Emergency Planning Zone of the Koeberg Nuclear Power Station to Ensure Effective Implementation of the Koeberg Nuclear Emergency Plan (2010)

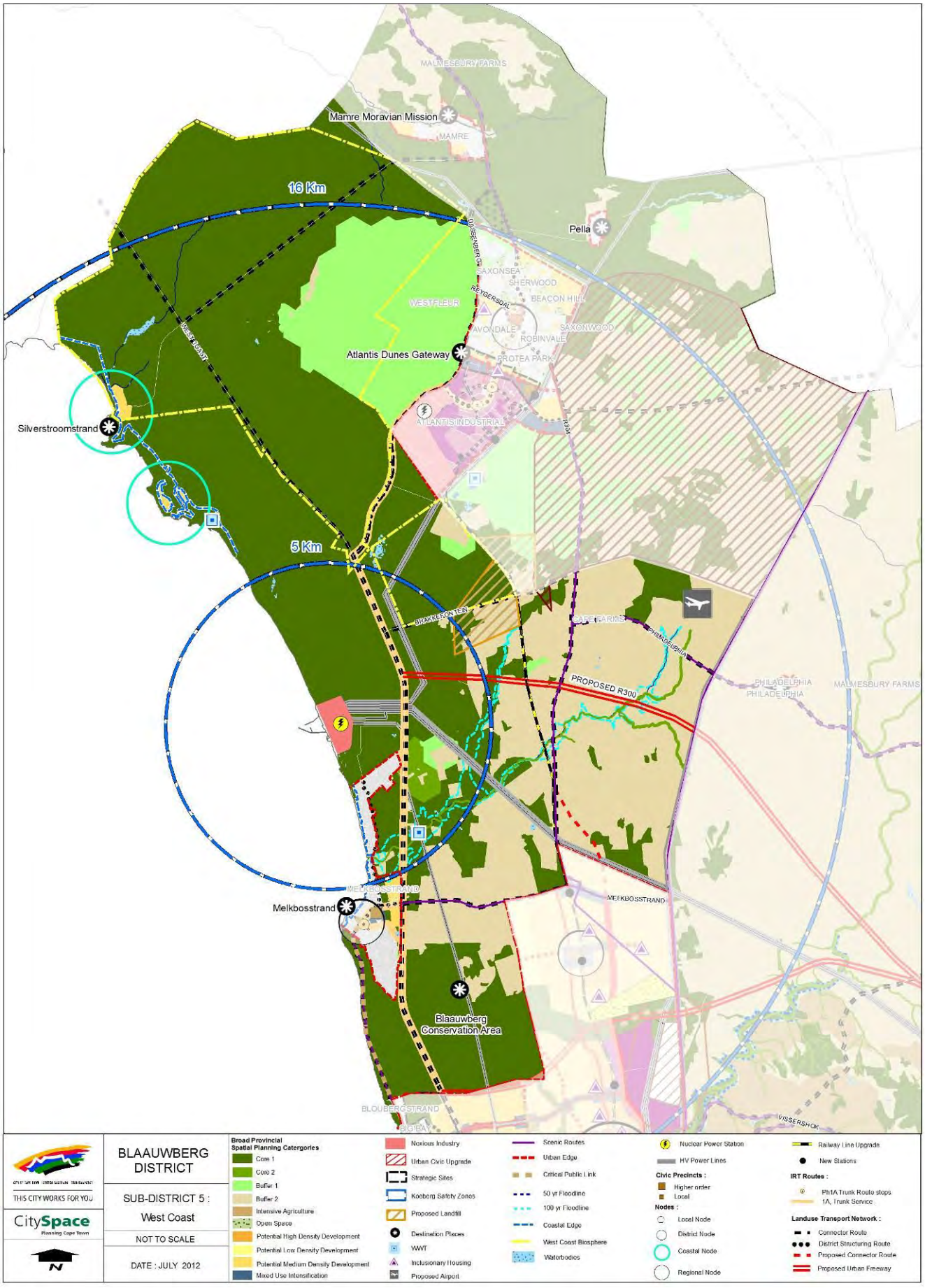


Figure 6-9: Blaauwberg sub-district 5: West Coast

6.2.6 Sub-district 6: Atlantis and Surrounds land use guidelines

SUB-DISTRICT 6: ATLANTIS AND SURROUNDS - CHANGES IN LAND USE AND FORM		
Spatial Development Objectives	**Supporting Land use Guidelines**	**Existing frameworks**
a) Ensure development aligns with the safety requirements of the Koeberg Emergency Plan and relevant legislation applicable to the Koeberg Nuclear Power Station.	1. All urban development within the KNPS Precautionary Action Zone (PAZ) (area within a 5 km radius of the Koeberg nuclear reactors (X = -52727.4000, Y = -3727966.6500)) and Urgent Protective action planning Zone (UPZ) (area within a 5 km – 16km radius of the Koeberg nuclear reactors (X = -52727.4000, Y = -3727966.6500))[32] must conform to the following restrictions necessary to ensure the viability of the Koeberg Nuclear Emergency Plan: • No new development is permissible within the PAZ (as defined above) other than development that is directly related to the siting, construction, operation and decommissioning of the Koeberg Nuclear Power Station or that is as a result of the exercising of existing zoning rights. On this basis, no application for enhanced development rights (rezoning, subdivision, departure from land use, or Council's consent, including application for a guesthouse or second dwelling) that will increase the transient or permanent resident population, and that is not directly related to the siting, construction, operation and decommissioning of the Koeberg Nuclear Power Station, can be approved. Furthermore, the projected population within the PAZ must be evacuated within four hours from the time that an evacuation order is given, as demonstrated by means of a traffic evacuation model approved by Council and acceptable to the NNR. • New development within the UPZ (as defined above) may only be approved subject to demonstration that the proposed development will not compromise the adequacy of disaster management infrastructure required to ensure the effective implementation of the Koeberg Nuclear Emergency Plan (version approved by the National Nuclear Regulator (NNR)). Specifically, within the UPZ area, an evacuation time of 16 hours of the projected population, within any 67,5° sector to designated mass care centres (as appropriate), must be demonstrated by means of a traffic (evacuation) model approved by Council and acceptable to the NNR. The evacuation time must be measured from the time that the evacuation order is given. These development controls will be superseded by National 'Regulations on Development in the Formal Emergency Planning Zone of the KNPS to ensure effective implementation of the Koeberg Nuclear Emergency Plan' when approved.	• City of Cape Town, Koeberg Nuclear Emergency Plan: Traffic Evacuation Model (2006) • Department of Energy, draft Regulations on Development in the Formal Emergency Planning Zone of the Koeberg Nuclear Power Station to Ensure Effective Implementation of the Koeberg Nuclear Emergency Plan (2010)
b) Reinforce Atlantis CBD as commercial and public facilities node.	1. The Atlantis CBD currently consists of low density development that includes mainly retail and public facilities. Intensification of the Atlantis CBD area through the promotion of mixed use and higher density development on vacant and underutilised land should be supported. This will help create a vibrant node and a necessary variation in the otherwise low density urban environment. It will also help support the proposed IRT station.	• City of Cape Town, Atlantis Town Regeneration Project (1999)

	2. Ensure NMT and landscaping upgrades are implemented as part of any redevelop to improve the public environment. 3. Ensure any redevelopment facilitates NMT access to IRT services.	
c) Maintain Klein Dassenberg Smallholdings	1. Klein Dassenberg smallholdings area to be maintained as smallholdings area. Assessment of applications to be guided by the approved Klein Dassenberg Smallholding Area Development Framework (2002)	• City of Cape Town, Klein Dassenberg Smallholding Area Development Framework (2002)
d) Mamre and Pella should remain distinctive rural settlements with limited growth.	1. Manage growth within the settlements of Mamre and Pella to contain sprawl and ensure distinctive character of the settlements is maintained.	• City of Cape Town, draft Urban Edge Plan: Atlantis, Mamre, Pella, Philadelphia and Klipheuwel (2008)
e) Protect/conserve built heritage resources in Mamre and Pella	1. Buildings older than 60 years subject to National Heritage Resources Act regulations	
f) Protect proposed future airport location	1. Manage surrounding land uses so that the possible accommodation of a future airport in this location is not compromised.	
g) Protect proposed future landfill site location	1. Manage surrounding land uses so that the possible accommodation of a future landfill site in the proposed location is not compromised, until a decision has been taken by the Department of Environmental Affairs and Development Planning on the preferred location for this facility.	

SUB-DISTRICT 6: ATLANTIS AND SURROUNDS - NEW DEVELOPMENT AREAS		
Spatial Development Objectives	**Supporting Land use Guidelines**	**Existing frameworks**
h) Ensure development aligns with the safety requirements of the Koeberg Emergency Plan and relevant legislation applicable to the Koeberg Nuclear Power Station.	1. All urban development within the KNPS Precautionary Action Zone (PAZ) (area within a 5 km radius of the Koeberg nuclear reactors (X = -52727.4000, Y = -3727966.6500)) and Urgent Protective action planning Zone (UPZ) (area within a 5 km – 16km radius of the Koeberg nuclear reactors (X = -52727.4000, Y = -3727966.6500))[32] must conform to the following restrictions necessary to ensure the viability of the Koeberg Nuclear Emergency Plan: • No new development is permissible within the PAZ (as defined above) other than development that is directly related to the siting, construction, operation and decommissioning of the Koeberg Nuclear Power Station or that is as a result of the exercising of existing zoning rights. On this basis, no application for enhanced development rights (rezoning, subdivision, departure from land use, or Council's consent, including application for a guesthouse or second dwelling) that will increase the transient or permanent resident population, and that is not directly related to the siting, construction, operation and decommissioning of the Koeberg Nuclear Power Station, can be approved. Furthermore, the projected population within the PAZ must be evacuated within four hours from the time that an evacuation order is given, as demonstrated by means of a traffic evacuation model approved by Council and acceptable to the NNR. • New development within the UPZ (as defined above) may only be approved subject to demonstration that the proposed development will not compromise the adequacy of disaster management infrastructure required to ensure the effective implementation of the Koeberg Nuclear Emergency Plan (version approved by the National	• City of Cape Town, Koeberg Nuclear Emergency Plan: Traffic Evacuation Model (2006) • Department of Energy, draft Regulations on Development in the Formal Emergency Planning Zone of the Koeberg Nuclear Power Station to Ensure Effective Implementation of the Koeberg Nuclear Emergency Plan (2010)

	Nuclear Regulator (NNR)). Specifically, within the UPZ area, an evacuation time of 16 hours of the projected population, within any 67,5° sector to designated mass care centres (as appropriate), must be demonstrated by means of a traffic (evacuation) model approved by Council and acceptable to the NNR. The evacuation time must be measured from the time that the evacuation order is given. These development controls will be superseded by National 'Regulations on Development in the Formal Emergency Planning Zone of the KNPS to ensure effective implementation of the Koeberg Nuclear Emergency Plan' when approved.	
ATLANTIS		
i) Unlock the buffer strip for redevelopment as a means of integrating the monofunctional residential and industrial areas as well as Witsand.	1. A range of uses is supported on the site including service industrial, mixed use, residential, and associated public facilities. The southern edge of the site should be of a service industrial nature and the northern edge of the site should be of a residential nature. 2. High intensity nodes should be encouraged in relation to public transport stations and interchanges. 3. An east-west route is proposed to connect Witsand to the broader site and trunk public transport services. 4. Additional north-south connector routes should be supported to improve connectivity to and through the site. 5. Public facilities should be clustered at the proposed rail station node.	• City of Cape Town, Atlantis Town Regeneration Project (1999) • City of Cape Town, draft Urban Edge Plan: Atlantis, Mamre, Pella, Philadelphia and Klipheuwel (2008) • City of Cape Town, Klein Dassenberg Smallholding Area Development Framework (2002)
j) Promote residential infill	1. Undeveloped residential land, owned by various organs of state within Atlantis should be released for development. 2. Avondale hospital site (located on the corner of Dassenberg Road and Reygersdal Drive) should be released for medium density residential development including a mixed use edge on Reygersdal Drive.	
k) Rationalise the open space system to unlock development opportunities and improve the urban environment	1. There is opportunity for the rationalisation of the Atlantis open space system to present further infill opportunities. This, however, requires more detailed study, and in particular urban design guidelines to guide how parts of the open space system could be released for development.	
l) Promote industrial infill	1. Publicly owned land within the industrial area should be released for development. As part of this process, opportunities for light industrial parks and incubator opportunities should be investigated.	
m) Accommodate limited mixed use development on the southern edge of Blombosch Road	1. Development on the edge of Blombosch Road should accommodate mixed use/ commercial land uses, which respond to the exposure that the route offers. 2. Developments should promote an active interface and permeable perimeter fencing on development edging Blombosch Road, including associated NMT upgrades. 3. Individual layout proposals should consider the broader movement system of this growth area and facilitate north/south and east/west movement between developments. 4. Opportunities to include entry level housing opportunities in developments should be investigated.	
n) Manage development on the edges of the R304 so as not to negatively impact on the Klein Dassenberg	1. Development on the edges of the R304 should be guided by the recommendations of the Klein Dassenberg Smallholding Area Development Framework (2002) 2. Development on the edges of the R304 should not	

smallholdings area.	compromise the integrity of the Klein Dassenberg smallholdings area and\or existing agricultural activities. 3. Developments should promote an active interface and permeable perimeter fencing on development edging the R304. 4. The R304 scenic route and historic tree line should be protected.	
MAMRE		
o) Promote residential infill	1. Residential infill areas are identified to accommodate growth within Mamre. These areas are suited to medium density residential development that is in keeping with the character of the town.	• City of Cape Town, draft Urban Edge Plan: Atlantis, Mamre, Pella, Philadelphia and Klipheuwel (2008)
p) Manage urban growth	2. Future amendment of the urban edge to accommodate urban growth should take into account the proposals contained in the Mamre Land Reform Process policy (2003)	• Mamre Land Reform Process: Land Use Opportunities and Options (2003)

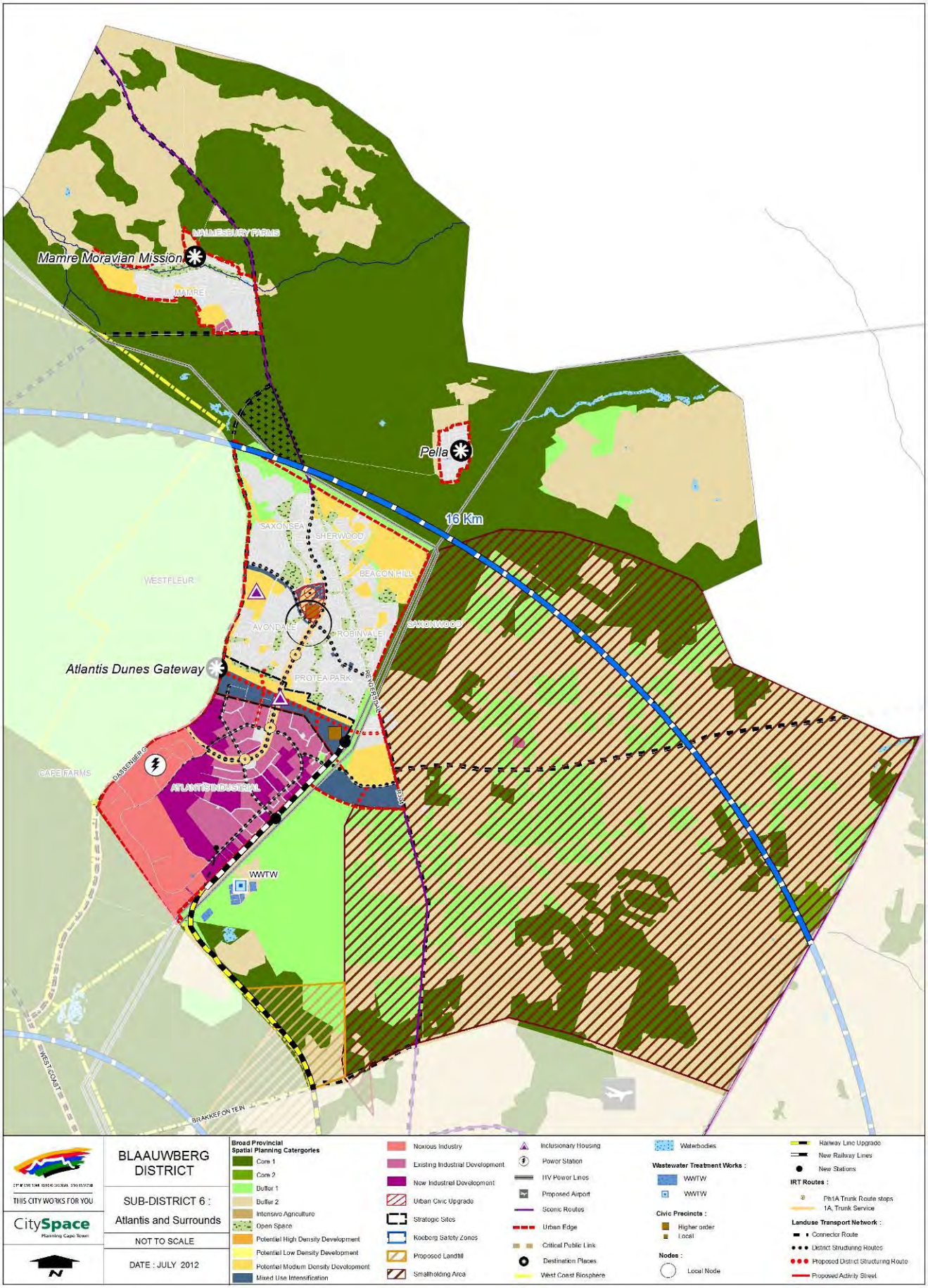


Figure 6-10: Blaauwberg sub-district 6: Atlantis and Surrounds

6.3 Local area planning priorities

While the district plan gives direction at a district scale, local area plans are required to provide a greater level of planning direction in strategic locations, aimed at implementing the plan. Several priority local planning and investment areas are identified in order to implement the plan. Inputs from the public engagement process have been an essential part of this process. These inputs have been balanced with the need to be strategic in focussing on projects with maximum impact and highest alignment with the spatial strategies of the CTSDF (2012) and the District SDP, and programmed with due regard for resources available to undertake projects.

Based on the technical review and inputs to date, several planning and investment focus areas have been identified including:

- preliminary local planning areas where further planning is required to guide local land use change or define capital investment interventions.
- Project/development facilitation projects where further work is needed to unlock strategic land for development.

It should be noted that capital investment will occur across the district on a range of public facilities, infrastructure and services (roads, bulk services etc.). The focus on action areas is thus not comprehensive, but strategic, focusing on areas where multi-sectoral intervention is needed to ensure high impact restructuring and upgrading within the district.

The local area planning priorities for the Blaauwberg district are detailed in the following table.

Table 6-2 Local area planning priorities

PLAN/PROJECT	DESCRIPTION	WHAT NEEDS TO HAPPEN	TIMEFRAME (S: 1-2yr, M: 2-5yr, M/L: 5+yr)
LOCAL AREA PLANNING INITIATIVE			
Milnerton south and Paarden Eiland local area spatial development framework	Local area spatial development framework to guide changes in land use – inclusive of service and sea level rise issues and integration with Ysterplaat	i. Prepare new spatial development framework	S:1 -2 yr
Tableview Beachfront development framework	There are a range of issues facing the Tableview beachfront that need to be addressed as part of a development framework for the area. These include coastal management, built environment pressures, traffic management, and public amenity issues.	ii. Prepare new development framework	S:1 -2 yr
Blaauwberg Road Management Strategy	The approved Blaauwberg Road Management Strategy (1999) is outdated and contains a number of unclear statements that lead to conflicts when assessing applications in the area. The policy is an important guide to the redevelopment of this activity route and should be reviewed and updated to give clear direction to development along this route.	ii. Update / review existing plan	S:1 -2 yr
Atlantis buffer strip and gateway development framework	The buffer strip is a proposed major new development opportunity within Atlantis that could have significant restructuring impacts for the town. A spatial framework is needed to guide the redevelopment of this site. In addition, facilitation work is needed to resolve ownership issues and unlock the land for redevelopment.	v. Prepare new spatial framework v. Development facilitation	S: 1 -2 yr
Silwerstroomstrand	Silwerstroomstrand is identified in the district plan as requiring further investigation to determine the extent of development possibilities at this coastal node, particularly in relation to biodiversity and sea level rise informants. This initial investigation would then need to inform a spatial framework for the area	• Investigate development options • Prepare spatial development framework	M: 2-5 yr
Bosmansdam Road / Montague Gardens land use policy	The existing draft policy for Bosmansdam Road needs to be reviewed and extended to include guidelines for the changing nature of uses in Montague Gardens.	vi. Update / review existing draft plan	M 2-5 yr

Rietvlei northern edge and Wood Drive recreational node frameworks	The northern edge of the Rietvlei requires upgrading to improve its use as a public open space. This needs to be guided by a landscaping framework. The proposed Wood Drive sports precinct will function as a regional recreation hub with associated facilities. A landscaping and urban design framework is necessary to guide how the recreation node is developed and integrated with the surrounding urban and conservation environments.	ii. Prepare landscaping framework ii. Prepare urban design framework x. Development facilitation	M: 2-5 yr
Sandown Road civic node precinct plan	The proposed Sandown Road district node will be an important civic precinct in the district accommodating a number of district scale public facilities and an intense mix of land uses. Guidance in terms of the form and function of this node should be developed in collaboration with land owners to ensure a positive urban environment.	x. Prepare precinct plan xi. Development facilitation	M 2-5 yr
PROJECT/DEVELOPMENT FACILITATION			
Potsdam / Killarney site	Initial prefeasibility work has been done on the redevelopment potential of the Potsdam Interchange site. Further work is required to resolve technical issues such as the proposed Koeberg Road extension alignment and title deed restrictions that limit use of the site, so that redevelopment options can be further investigated.	• Resolve road alignment • Remove title deed restrictions • Review future of the Killarney racetrack	S:1 -2 yr
Du Noon sports field urban design framework	The existing sports field in Du Noon is poorly maintained and being encroached on by a number of formal and informal uses. An urban design framework is necessary to rationalise the use of the field and improve its edge conditions to secure the field and improve its use	• Prepare urban design framework	S:1 -2 yr
Morningstar and Sonnekus (caravan park)	Land use guidelines are necessary within these areas to guide land use application assessments	• Prepare land use guidelines	M/L" 5 +yr
Erf 1117	Erf 1117 is a strategic piece of publicly owned land that holds the potential to resolve a number of public objectives within the district particularly in relation to public housing and public facility provision. Ongoing engagement is necessary to determine future use and ownership of the land.	• Development facilitation	M/L" 5 +yr

7. ANNEXURES

ANNEXURE A: List of withdrawn planning policy documents

Approved structure plans

Plans promulgated in terms of section 4(10) of the Land Use Planning Ordinance, and that impact on the Blaauwberg District, which are withdrawn include:

- Tableview North Structure Plan (1991)

Council approved policy plans

Policy plans approved by Council, and that impacted on the Blaauwberg District, which are withdrawn include:

- None

Spatial Policy	Study Area	Status	Approval Date	Purpose	Changes in Planning Context	Proposed Future Status of Plan
Table View North Structure Plan	North of Blaauwberg Road up to the BCA boundary, stretching from the coast to the N7	LUPO section 4(6) structure plan	15-Oct-91	Urban Structure plan in terms of LUPO. Intention was to guide development in the areas north and east of Table View.	* Formation of the Unicity. * Renegotiation of Koeberg restrictions dependant on the approval of proposed traffic evaluation model. * Gross Base densities proposed by PSDF (2009) * Development of the area has taken place	Downgraded to 4(10) structure plan through the approval of the CTSDF and then replaced by the District Plan

ANNEXURE B: Principles for assessing development proposals in "areas of potential impact" on selected natural environmental attributes

1. *Areas of potential impact should be addressed as soon as possible in the planning process and before significant resources have been allocated to a project*. This requires a cooperative and transparent approach to these areas. Consultation with key role players should be initiated and include the City's Environment & Heritage Management Branch, Biodiversity Management Branch, Spatial Planning, Catchment Stormwater and River Management Branch, and other key stakeholders such as Cape Nature.

2. *Proactively and timeously search for the best practicable alternative*: The application of this principle is dependent on the significance of the potential impact when viewed in the context of the broader strategic intent of the district plan. In many instances, trade-offs are required and the SDP has sought to inform where these might be appropriate. However, development in highly sensitive or significant natural environments is generally undesirable, and has, where possible, been avoided in the district plan. In the limited instances where this has not occurred, balance has been sought by, for instance, the planning of biodiversity corridors where highly sensitive natural environments are likely to be impacted. More detailed planning of these areas should consider alternatives and detailed design intervention to prevent or minimise potential impact (as per 3 and 4 below). The Biodiversity Management Branch in the Environmental Resource Management Department and/or the Catchment Stormwater and River Management Branch of the Roads and Stormwater Department, where relevant, should be consulted to provide advice.

3. *If an environmentally sensitive area has to be developed or transformed, investigate means to:*

    - *Maximise the retention of intact natural habitat and ecosystem connectivity*

    - *Avoid fragmentation of natural habitat and aim to maintain spatial components of ecological processes* (e.g. ecological corridors and vegetation boundaries)

    - *Minimise unavoidable impacts by reducing the project footprint and determining the least damaging layouts of the proposed development and its accompanying infrastructure* (e.g. by concentrating disturbance in degraded areas)

    - *Remedy habitat degradation and fragmentation through rehabilitation.* [5]

4. *In key areas (particularly where on site mitigation is limited or not possible) investigate the use of biodiversity offsets*[6] *as a mitigation measure.* This may involve making resources available to secure and manage an alternative piece of land of the same ecosystem type or conservation of a proportion of the property *in situ.* The Biodiversity Management Branch may provide advice in this regard, but DEA&DP are the decision-making authority.

5. *Areas of potential impact may be identified in the district plan which already have environmental authorisation in terms of applicable legislation. The identification of these areas is not intended to form grounds for review of such approvals.*

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[5] More information on the above may be obtained from the Fynbos Forum Ecosystem Guidelines for Environmental Assessment in the Western Cape – from which the above points were extracted. Other useful sources of information include the principles included in the National Environmental Management Act and the National Environmental Management: Biodiversity Act, the Provincial Spatial Development Framework (promoting densification), the Coastal Edge Policy, the Catchment Management policies on river buffers and developments in flood prone areas and the Department of Environmental Affairs and Development Planning's (DEADP) offset guideline. The DEADP guideline for involving biodiversity specialists in EA processes also provides useful information.

[6] Provincial Guideline on Biodiversity Offsets (revised draft, March 2007). Department of Environmental Affairs and Development Planning, Provincial Government of the Western Cape

Although most areas of potential impact on natural resources occur due to the presence of critical biodiversity areas and listed ecosystems which require conservation measures in terms of national legislation, consideration also has to be given to the potential loss or sterilisation of natural resources which currently – or in future – will have value as economic resources (e.g. strategic mineral resources or aquifer water to supplement the City's supply), or which provide an ecosystem service (e.g. water filtration and flood attenuation).

The principle to apply is that where there are potential impacts of development/land use proposals on key resources – efficiency, equity and sustainability criteria must be used to determine the best use for the greater good of the City's people and the environment. The assessment of impacts in terms of these criteria should include assessment of cumulative impacts at local, regional and national scales.

ANNEXURE C: Relevant legislation and policies per environmental impact management (EIM) zone

EIM ZONE	ENVIRONMENTAL ATTRIBUTES	POTENTIALLY APPLICABLE LEGISLATION / POLCY (note: list not exhaustive and should not preclude review)
Hydrological Zone	**Flood Risk Areas** • Flood risk area 1 (1:50 flood line) • Flood risk area 2 (1:100 flood line) • Flood risk area 3 **Rivers, Estuaries and Wetlands** • Rivers, wetlands and associated buffers **Aquifers** • Highly productive aquifers • Moderately productive aquifers	• National Water Act 36 of 1998. • CoCT's Floodplain and River Corridor Management Policy (May 2009). • Agricultural activities close to water bodies: conditions contained within the Care of Agricultural Resources Act 43 of 1983 pertaining to rivers and wetlands. • Rivers, wetlands and within estuaries: Chapter 4 of the National Environmental Management Integrated Coastal Management Act 24 of 2008 and the associated National Estuarine Management Protocol and Estuarine Management Plans.
Coastal Protection and Dune Zone	**Coastal Protection Areas** • Coastal Protection Zone • Coastal risk areas **Dune Areas** • Sensitive dune fields	• National Environmental Management: Integrated Coastal Management Act 24 of 2008. • Draft Integrated Coastal Management Bill, or Act as promulgated • Draft Delineation of the Proposed Coastal Protection Zone for the City of Cape Town: Draft Report 2009 • City of Cape Town Coastal Protection Zone Bylaw (in preparation 2010).
Conservation and Biodiversity Priority Zone	**Conservation and Biodiversity Areas** • Protected areas • Critical Biodiversity Area 1 • Critical Biodiversity Area 2 • Critical Ecological Support Areas • Other Ecological Support Areas • Other Natural Vegetation	• National Environmental Management Protected Areas Act 57 of 2003. • National Environmental Management Act 107 of 1998.

Cultural and Recreational Resources Zone	**Cultural and Heritage Areas** • Cultural landscapes • Potential archaeological sites • Other significant heritage resource areas • Grade 3 heritage sites • Scenic Routes **Public Open Spaces** • Structuring Open Spaces	• National Heritage Resources Act 25 of 1999. • A Heritage Overlay is being developed and will become part of the Integrated Zoning Scheme. Reference to the zoning schemes / CTZS is required. **Public open spaces:** • Outdoor Advertising and Signage By-Law, 2001. • Authorisation of the activities in these zones must be in compliance with the City of Cape Town By-Law Related to Streets, Public Places and the Prevention of Nuisances, 2004
Natural Economic Resources Zone	**High Potential Agricultural Areas** • High potential and unique agricultural land worthy of statutory and long-term protection • Agricultural area of significant value given existing, potential and emerging use • Other Agricultural areas • Smallholdings and agricultural areas **Mineral Extraction Areas** • Priority mineral resources	**High Potential Agricultural Areas** • Care of Agricultural Resources Act 43 of 1983. • Subdivision of Agricultural Land Act 70 of 1970. • Draft Sustainable Utilisation of Agricultural Resources Bill, 2003. **Mineral extraction areas** • Mineral and Petroleum Resources Development Act 28 of 2002. • Land Use Planning Ordinance (LUPO).
Urban Uses and Utilities Zone	**Nuclear and Landfill Exclusion Areas** • Nuclear Exclusion zones • Landfill sites and buffer zones **Industrial and Commercial Areas** • Industrial areas • Commercial areas **Infrastructure and Utilities Areas** • Infrastructure servitudes, including WWTWs	• Relevant air pollution guidelines, including the City of Cape Town's Air Pollution Control By-Law (2001). • National Environmental Management Air Quality Act 39 of 2004. • CCT Zoning Scheme Regulations

ANNEXURE D: Relationship between CTSDF & District plan spatial planning categories and the biodiversity network classification

Biodiversity network: critical biodiversity area mapping categories / CTSDF / District Plan Spatial Planning Category	Formal protected	Critical biodiversity areas (CBA 1 a-e and CBA 2)	CESA	Other natural vegetation	OESA
Core 1	▪	▪			
Core 2			▪		
Buffer 1				▪	
Buffer 2					▪

ANNEXURE E: Relationship between CTSDF and District Plan route designation, the National Department of Transport road classification system, the PSDF (2009), and City's hierarchical road network classification system

The relationship between the CTSDF (and district plan) route designation and the National Department of Transport (DoT) road classification system, the PSDF (2009) and the City's hierarchical road network classification system is described in Table C.1, providing a general indication of the relationship between different road classification systems and their land use functionality.

The route designation does not replace the City's hierarchical road network classification system, nor is it intended to run in parallel as a duplicate classification system. The City's hierarchical road network classification system will continue to determine road network planning, classification and the mobility and accessibility functions. The City's hierarchical road network classification system, together with the Road Access Guidelines (PGWC, 2001), will continue to manage competing demands between mobility and accessibility in the evaluation of development applications to change or enhance land use rights.

Table E.1: CTSDF route (and district plan) designation relationship with the National Department of Transport road classification system, the PSDF (2009), and the City's hierarchical road network classification system.

ROUTE DESIGNATION	ROAD CLASSIFICATION		
Cape Town Spatial Development Framework /	Department of Transport (DoT)	Provincial Spatial Development	City of Cape Town Road Network
ACTIVITY ROUTE	Predominantly Class 2 to 4 roads	Predominantly main roads	Predominantly secondary arterials
ACTIVITY STREET	Predominantly Class 2 to 4 roads	Predominantly main roads	Predominantly secondary arterials
DEVELOPMENT ROUTE	Predominantly Class 2 or 3 roads	Predominantly trunk roads	Predominantly primary arterials
CONNECTOR ROUTE	Predominantly Class 2 to 4 transport routes	Predominantly national roads, divisional roads	Predominantly expressways, primary and secondary arterials
URBAN FREEWAY	Class 1	National roads	Freeway

It is anticipated that the CTSDF route designation indicating land use functionality will encourage an appropriate level of development and more intense mixed land uses to locate on, or adjacent to, the accessibility grid. Opportunities along designated routes can also be linked to parallel streets and side roads in line with applicable policies, the relevant zoning scheme, District SDPs, and applicable local plans. This will contribute towards establishing the thresholds required for sustainable and cost effective public transport.

Routes exhibit different characters and do not represent a uniform mix and density of land uses along their length. It is for these reasons that the route designations are indicated as a conceptual designation on the Cape Town Spatial Development Framework (Map 6.1).

The process of land use intensification along designated routes must be evaluated at a more detailed local level of planning to inform land use management decision-making and the processing of development applications – to consider, for example, the nature of access roads, additional traffic impacts, parking requirements and the level of service (LOS) provided by public transport services. This is necessary to protect the mobility and operational integrity of road networks, and to ensure that land use intensification is informed by the operational capacity of particular routes and the public transport services by which they are supported.

MAMRE
Mamre Moravian Mission
Pella
DASSENBERG
ATLANTIS
REYGERSDAL
Atlantis Dunes Gateway
WEST COAST
Silverstroomstrand
16Km
FARMS
BRAKKEFONTEIN
5Km
PHILADELPHIA
PROPOSED R300
Melkbosstrand
MELKBOSSTRAND
Blaauwberg Conservation Area
Big Bay
BLOUBERG
TABLE VIEW
Marine Circle
BLAAUWBERG
Rietvlei Wetland Reserve
KOEBERG
MILNERTON
OMNIARAMA
Milnerton Lighthouse
Milnerton Lagoon
MARINE
SABLE
Zoar, Vlei
MAITLAND
OBSERVATORY

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Broad Provincial SPC's

- Core 1
- Core 2
- Buffer 1
- Buffer 2
- Intensive Agriculture
- Open Space
- Mixed Use Intensification
- New Urban Infill
- Urban Development
- New General Industrial Development
- General Industrial Development
- Noxious Industry
- Smallholding Area
- Cemetery
- Rural Lifestyle Estates
- Waterbodies
- Wastewater Treatment
- Destination Places
- Landfill
- Landfill Buffer
- Closed Landfill Site
- Proposed Landfill
- Coastal Edge
- Urban Edge
- Critical Public Link
- 50 yr Floodline
- 100 yr Floodline
- Railway Line Upgrade
- New Stations
- Railway line

Civic Precincts :

- Higher order
- Local
- Proposed Airport
- Ysterplaat Airport
- Height Restrictions
- Nuclear Power Station
- Power Station
- HV Powerlines

Nodes :

- Local Node
- District Node
- Coastal Node
- Regional Node

IRT Routes :

- Ph1A Trunk Route stops
- 1A, Trunk Service
- Scenic Routes
- Koeberg Safety Zones

Landuse Transport Network :

- Activity Route
- Activity Street
- Connector Route
- Development Routes
- District Structuring Routes
- Prop Activity Route
- Prop District StructuringRoute
- Proposed Activity Street
- Proposed Connector Route
- Proposed Development Routes
- Proposed Urban Freeway
- Urban Freeway