

Tygerberg

Integrated district spatial development framework
and environmental management framework

Vol. 2: Draft Technical Report



MAY
2022



CITY OF CAPE TOWN
ISIXEKO SASEKAPA
STAD KAAPSTAD

PREFACE WITH INSTRUCTIONS FOR COMMENTING ON THIS DOCUMENT

1. You are requested to comment on this document that contains the Integrated District Spatial Development Framework (DSDF) and Environmental Management Framework (EMF) for the **TYGERBERG PLANNING DISTRICT**.
2. The Integrated DSDF and EMF suite of documents comprise the following:
 - a. Volume 1: Baseline and Analysis Report;
 - b. Volume 2: Draft Technical Report(*containing the vision and spatial guidelines*)
 - c. Volume 3: Implementation Plan (*containing the prioritisation framework; projects and proposals for spatial restructuring and upgrading*), and
 - d. Volume 4: Technical Annexures
3. Also included for comment in the Integrated District SDF and EMF are the proposals in accordance with the National Environmental Management Act, 1998 for the delineation of the Urban Areas.
4. You may submit your comment within the prescribed period **ONLY**. Any comments received after the specified sixty-day period will be ignored.
5. Comments and queries may be submitted via the online commenting form on the following website link: www.capetown.gov.za/DSDF

Given that the officials are working from home we request that you do not send us letters via the South African Post Office.

6. Please remember that comments on this work is related to the long term vision for your district and the related guidelines and projects to help us be in a position to achieve that vision. This document does not deal directly with maintenance aspects such as pipe bursts, the provision of street lights, etc. but rather focusses on the major projects at a systems level required to enable such local access to services. This does not mean that the local maintenance aspects are not important and are not needed for achieving well-functioning environments. Those maintenance aspects are dealt with through the action plans of the respective line departments and as a result of their respective yearly maintenance programmes.

VOLUME 2 : SPATIAL DEVELOPMENT FRAMEWORK

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STRUCTURE OF THE INTEGRATED DISTRICT SPATIAL DEVELOPMENT FRAMEWORK (DSDF) AND ENVIRONMENTAL MANAGEMENT FRAMEWORK (EMF) SUITE OF DOCUMENTS

The Integrated DSDF and EMF suite of documents and the respective main subordinate categories are shown below.

- a. Volume 1: Baseline and Analysis Report**, comprising:
 - State of the population;
 - State of the environment;
 - State of the built environment;
 - State of the economy and property market;
 - Risks

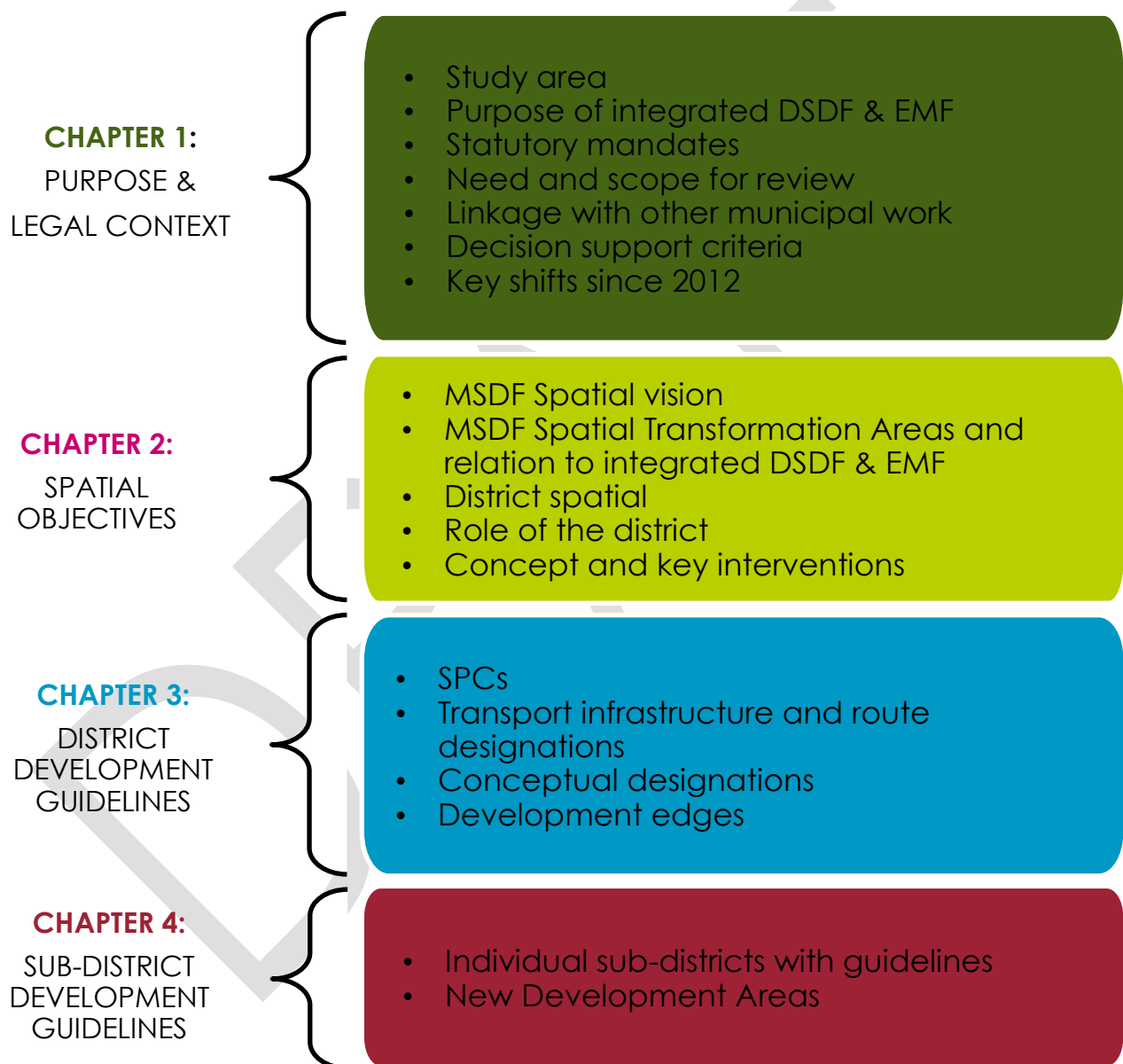
- b. Volume 2: Integrated DSDF and EMF (Spatial Policy and Guidelines)**, comprising:
 - Spatial vision, role of the district, spatial concept and key interventions
 - District development guidelines; and
 - Sub-district development guidelines

- c. Volume 3: Implementation Plan**, comprising:
 - Proposals of upgrading and restructuring;
 - Prioritisation framework;
 - Priorities for local area;
 - Policies to be reviewed; and
 - Proposed mechanisms and incentives; and
 - Monitoring and Evaluation Framework.

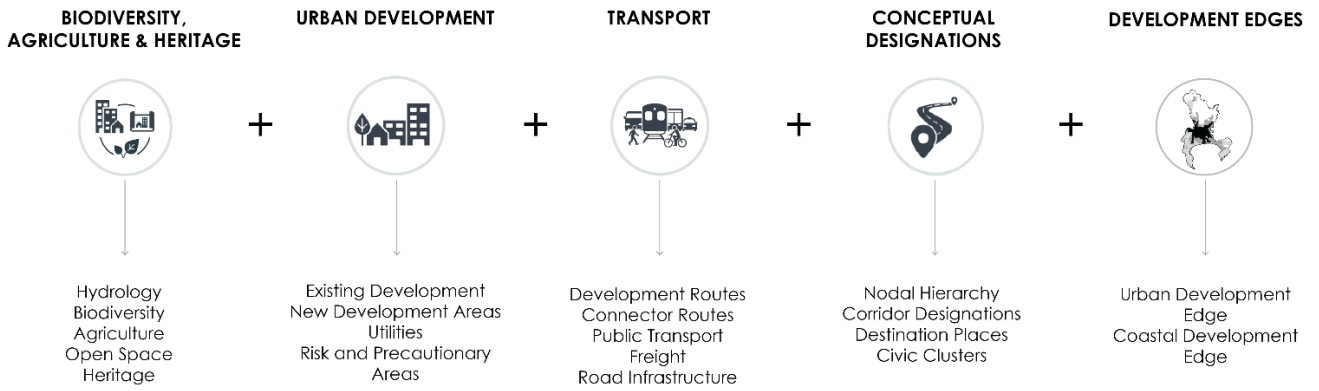
- d. Volume 4: Technical Annexures**

NAVIGATING THROUGH THE INTEGRATED DISTRICT SPATIAL DEVELOPMENT FRAMEWORK (DSDF) AND ENVIRONMENTAL MANAGEMENT FRAMEWORK (EMF)

The Integrated DSDF and EMF Volume 2 document is structured as follows:



The components of the district development guidelines of the Integrated DSDF and EMF document are shown below:



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REFERENCE GUIDE: SECTION BY SECTION CONTENTS OF THE INTEGRATED DISTRICT SPATIAL DEVELOPMENT FRAMEWORK (DSDF) AND ENVIRONMENTAL MANAGEMENT FRAMEWORK (EMF)

Section	Purpose and focus
1. INTRODUCTION	<ul style="list-style-type: none"> Outline of background and legislative status of SDF and EMF.
2. SPATIAL OBJECTIVES	<ul style="list-style-type: none"> Sets out the overall direction, the principles and strategies governing the guidelines and proposals.
2.1. Spatial Vision for 2030 and Beyond	<ul style="list-style-type: none"> The key structuring elements or spatial ideas for the structure and focus of interventions of the district
2.2. Spatial Transformation Areas (MSDF)	<ul style="list-style-type: none"> The four primary Spatial Transformation Areas (STAs) that set out the basis for growth management through public investment.
2.3. District spatial vision	<ul style="list-style-type: none"> Sets out the vision for the district
2.4. Role of the district	<ul style="list-style-type: none"> Explains the role of the district
2.5. Integrated district concept	<ul style="list-style-type: none"> Illustrates the main spatial ideas of the integrated SDF and EMF
2.6. Key Interventions	<ul style="list-style-type: none"> Briefly describes the key interventions required to achieve the spatial objectives as illustrated through the spatial vision and the spatial concept and based on the role of the district.
3. DISTRICT DEVELOPMENT GUIDELINES	<ul style="list-style-type: none"> Application of the spatial concepts and structuring elements, as identified in Chapter 2, 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 Chapter 4.
3.1. Spatial planning categories	<ul style="list-style-type: none"> This includes development guidelines at a broad district scale for the major land areas in the district (e.g. natural, agricultural and urban areas). The categories are aligned to those adopted by the CTMSDF. Provides development guidance in relation to areas which may present a risk or limits land use or activities in the district (e.g. flood prone areas, buffers associated with noxious uses). The section includes development guidelines for the New Development Areas which includes vacant and or under-utilised land identified for development for residential, industrial, commercial and community facility purposes.
3.2. Transport infrastructure and route designation	<ul style="list-style-type: none"> Provides direction to the desired positive functioning of land use / transport network to support the public transport network and the accessibility of social and economic opportunities in the district.
3.3. Conceptual designations	<ul style="list-style-type: none"> 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.
3.4. Urban development edges	<ul style="list-style-type: none"> Provides direction to urban growth in relation to the definition of development edges in the district.

4. SUB-DISTRICT DEVELOPMENT GUIDELINES	<ul style="list-style-type: none">• Supplements the SDF and EMF: 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.
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LOCATING THE ENVIRONMENTAL MANAGEMENT FRAMEWORK (EMF*) ELEMENTS: *(to ensure compliance with NEMA)*

Content elements	Guide to location of content in the district plan
<ul style="list-style-type: none"> • Identification of the area to which EMF applies • An indication of the conservation status of the area 	<ul style="list-style-type: none"> • Baseline information and analysis report
<ul style="list-style-type: none"> • A description of how information was captured; 	<ul style="list-style-type: none"> • Baseline information and analysis report
<ul style="list-style-type: none"> • Identification of information gaps 	<ul style="list-style-type: none"> • Baseline information and analysis report
<ul style="list-style-type: none"> • 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; 	<ul style="list-style-type: none"> • Baseline information and analysis report • SDF and EMF Report
<ul style="list-style-type: none"> • Development pressures and trends; opportunities and constraints 	<ul style="list-style-type: none"> • Baseline information and analysis report
<ul style="list-style-type: none"> • Description of the environmental (management) priorities in the area 	<ul style="list-style-type: none"> • SDF and EMF Report
<ul style="list-style-type: none"> • Information on activities that would have a significant impact on those attributes and those that would not • Information on activities that would be undesirable in the area or specific parts of the area 	<ul style="list-style-type: none"> • SDF and EMF Report
<ul style="list-style-type: none"> • Management proposals and guidelines 	<ul style="list-style-type: none"> • SDF and EMF Report
<ul style="list-style-type: none"> • The desired state of the environment 	<ul style="list-style-type: none"> • SDF and EMF Report
<ul style="list-style-type: none"> • Revision schedule for the environmental management framework 	<ul style="list-style-type: none"> • Integrated SDF and EMF Report
<ul style="list-style-type: none"> • A description of the public participation process including issues raised by I&APs 	<ul style="list-style-type: none"> • See Public Participation Report in Volume IV to follow

*The EMF is an integrated and indistinguishable component of the district SDF. For ease of reference, the table indicates where the EMF elements can be found in the suite of SDF and EMF documents.

1 INTRODUCTION AND BACKGROUND

This Integrated District Spatial Development Framework(DSDF) and Environmental Management Framework(EMF) is one of eight spatial plans developed for each of the planning districts of the City of Cape Town (CoCT), all of them informed by amongst others the city-wide Cape Town Municipal Spatial Development Framework (CTMSDF). The Tygerberg planning district boundary delineation is explained in Section 1.1.

The eight integrated DSDFs and EMFs are informed by amongst others the City of Cape Town Municipal Spatial Development Framework (MSDF). Whilst this plan is grounded, in a sense, on the current realities in the district and the vision of the MSDF, 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 building blocks), 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 reference guide summarises its contents.

1.1 Integrated DSDF and EMF study area

The Tygerberg integrated DSDF and EMF study area boundaries are based on the 2012 DSP and have not been amended.

The Tygerberg district boundaries are along Vanguard Drive/ N7 in the west, Richwood and the Tygerberg Hills in the north-west, the N1 National Road in the north, the R300, Bottelary Road, City of Cape Town/Stellenbosch municipal boundaries in the east, Polkadraai Road/R300 in the south-east and the N2 National Road to the south. The Tygerberg district has common boundaries with other City districts namely Table Bay, Blaauwberg, Northern, Khayelitsha/Mitchells Plain and Cape Flats. The district boundary is shown in the figure below.

Tygerberg district is centrally situated in the metropolitan area, covers approximately 18 965 ha (189 km²) and contains a broad spectrum of urban land uses. It comprises a number of well-established, older suburbs such as Goodwood, Elsies River, Bonteheuwel, Bishop Lavis, Parow, Bellville and Kuilsriver and newer suburbs such as Delft, Belhar, Bothasig, Panorama, Ridgewood, Platteklouf and Edgemoed. The district provides for a vast range of employment opportunities along the Voortrekker Corridor, Bellville CBD (which also accommodates the second largest PTI in the City), and the range of industrial areas such as Epping 2, Sacks Circle, Stikland, Parow Industria, as well as the CTIA as transport node with accompanying industrial/ mixed use areas.





 <p>CITY OF CAPE TOWN ISIXEKO SASEKAPA STAD KAAPSTAD</p>	<p>SPATIAL PLANNING & ENVIRONMENT</p> <p>Urban Integration - Urban Planning & Mechanisms</p> <p><small>Please Note: - Every effort has been made to ensure the accuracy of information in this report or the final publication. - The spatial data portrayed in this map is as current, accurate and complete as possible in the relevant departments responsible for the maintenance of these datasets. - The City of Cape Town accepts no responsibility for, and will not be liable for, any errors or omissions contained herein.</small></p>	<p>Locality Map</p> 	 <p><small>Transverse Mercator Projection, Central Meridian 19° East, WGS84 Ellipsoid using the multi-facetted 1:4 Datum</small></p>	<p>District Spatial Development Framework</p> <p>TYGERBERG DISTRICT</p> <p>Date : August 2019</p>
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Figure 1: Tygerberg district boundaries

1.2 Purpose of the integrated District SDF and EMF

The Integrated DSDF and EMF aims to respond to the question:

“How do we want the city to be structured and functioning in the future?”

The spatial vision, supported by the spatial development framework that includes the policy objectives and principles; provides spatial development guidelines and implementation actions (restructuring and upgrading proposals) and mechanisms that set out how to achieve this spatial vision given the challenges and opportunities that the district face.

Therefore, the integrated DSDF and EMF is a medium term plan (developed on a +/- 10 year planning frame) that will guide spatial development processes within the district that provides policy direction for the nature and form of development in each district and guides land use and environmental decisions – by means of a greater level of detail than the MSDF as reflected in Chapters 3 and 4.

The Integrated DSDF and EMF also inform strategic public and private investment initiatives as well as the development priorities for more detailed local area planning as is captured in Volume 3.

Given that the integrated DSDF and EMF integrates various policy instruments, i.e. the line departments of the municipality and sector departments of the provincial or national government, it serves as the single geographically defined (i.e. District) spatial vision for the built environment through applicable land use policy guidance and the identification of projects for implementation.

Overall intent of the integrated DSDF and EMF is to find ways to accommodate the backlog in services and accommodation and the future need to be accommodated in land use given the estimated future growth in population. This is to be done in a manner to ensure compliance with the principles of the relevant legislation, e.g. of the Spatial Planning and Land Use Management Act, 2013 (Act No. 16 of 2013 (“SPLUMA”).

The integrated DSDF and EMF attempts to find innovative ways to deal with historic challenges differently while balancing the need to promote green infrastructure, environmental sustainability and climate resilience approaches and principles. Therefore, the DSDF is integrated with the EMF and aims to achieve a single policy document for planning and environmental decisions making. It also proposes and initiated a process for achieving needed exclusions from environmental processes and for fast tracking the development process. These are discussed in more detail in the implementation plan.

The integrated DSDF and EMF strives to provide a greater focus on ways to enhance implementation and is a guiding tool for decision making; it does not take the role of the Development Management Scheme (DMS) (formerly Zoning Scheme); does not take away or confer rights; can be deviated from; and should be read in conjunction with other spatial policies like the Densification Policy and the Urban Design policy.

1.3 Statutory mandates to prepare and status of an Integrated District SDF and EMF

The District SDF, that provides greater level of detail, is a sub-plan of the MSDF and is provided for in the MPB-L. According to Section 11 (1) (Chapter 3 Part 3) of the MPB-L, the

District SDFs may be adopted and must/may provide at least elements listed under Appendix 3 of Annexure 2.

The components of the integrated DSDF and EMF (statutory policy sections) that would be used to evaluate the suitability of an application for development, i.e. consistency with policy, include:

Chapter 3: The Spatial Development Framework: District Development Guidelines; and
Chapter 4: Sub-district Development Guidelines.

Environmental Management Frameworks (EMFs) are prepared in accordance with the EMF Regulations promulgated on 18 June 2010 in terms of the National Environmental Management Act, No. 107 of 1998 (NEMA).

Lastly, the approval of the integrated DSDF and EMF includes an implementation plan that directs the prioritisation of private/public investment and execution of projects (generally by the public sector) to support the roll out of the districts' vision and can be found in Volume 3.

1.4 The need for and scope of the review

1.4.1 Current review of 2012 District Plans

The approval of the 2018 MSDF and the fact that the current District Plans (now called integrated DSDF and EMFs) are almost ten years old, and amongst others, gave rise to the need to review the 2012 District Spatial Plans to ensure alignment with the MSDF.

The grounds for the Integrated DSDF and EMF review are further to provide refinement and more detailed proposals, as guided by the legislative and national/provincial policy changes as well as City of Cape Town new/updated strategies and policies that were approved since 2012.

The Integrated DSDF and EMF review is also needed to respond to the City and the respective districts' and local areas' changing contexts and circumstances and the implications thereof; and to ensure that the policy context proposed appropriately responds to these. These changes could include aspects such as development trends, population changes and overarching external factors, e.g. macro-economic and other drivers.

Given that the EMF was approved along with the District Spatial Plans in 2012, the review of the District SDF will include a review of the EMF and will result in an Integrated DSDF and EMF. Furthermore, the updates/amendments received during the 2019/2020 and the 2021 public engagement processes have initiated a technical review of the 2018 MSDF in order to ensure alignment between the MSDF and Integrated DSDF and EMFs. The relationship between these plans is shown in Figure 2 below. These will be approved by Council as a suite of inter-related documents.

The detailed scope and overview of the drafting process of the integrated DSDF and EMF is included in Technical Annexure 2 located in Volume 4.



Figure 2: DSDF in relation to MSDF's function

1.4.2 Future review of the integrated DSDF and EMF

It is envisaged that the integrated DSDF and EMF 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 integrated DSDF and EMF that will require amendment or review as summarised below.

Table 1: Schedule for review of DSDF

Component of district plan	Scope of review	Period
Integrated District SDF and EMF	Comprehensive	10 years
Spatial development framework : district development guidelines	Limited, focussed on urban development edge line.	5 years (or annually to coincide with the annual IDP and CTMSDF technical reviews)
EMF (EM)	Limited to components that are potentially dynamic (e.g. biodiversity network)	5 year basis (or Annually)
Implementation plan for urban restructuring and upgrading	Comprehensive	Annually (if required)
Local area planning priorities	Comprehensive	5 year (may be updated more frequently as progress made with local area planning initiatives)

Where guidelines are linked to dynamic elements, e.g. coastal setback lines, floodlines, approved utility buffer setback lines, once these lines are updated or refined as per legislation it will be endorsed as part of the Annual Reviews of the Integrated SDF and EMF and be automatically included as part thereof.

1.5 Linkages to other municipal work

Figure 3 shows the inter-relationship between the Integrated DSDF and EMF, and other processes in the built environment domain at the City level.

The MSDF is an integral component of the City's Integrated Development Plan (IDP). Section 35 of the MSA states that the SDF attached to the council-approved IDP, serves as the principal strategic spatial planning instrument to guide and inform planning and development in the municipality. The MSDF provides overarching spatial direction for the integrated district SDFs and EMFs.

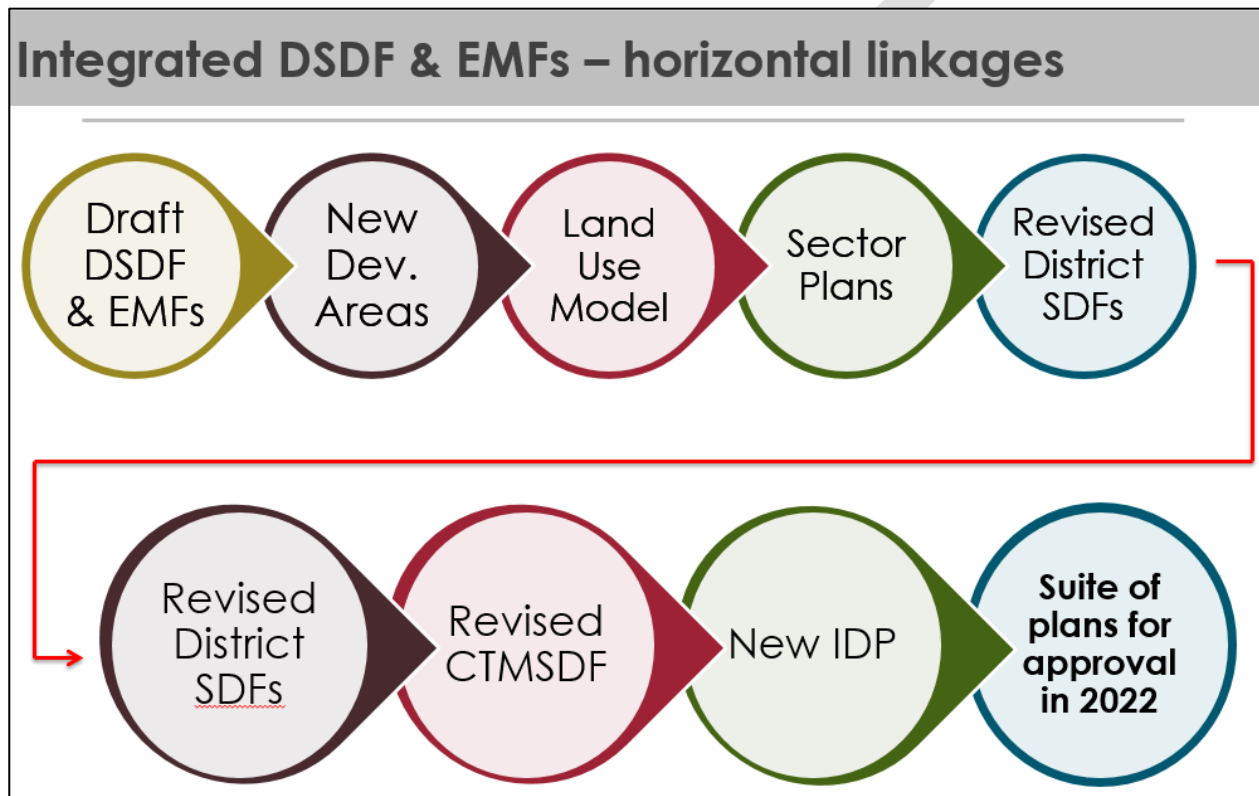


Figure 3: Relationship with other municipal planning instruments

The draft Integrated DSDF and EMF proposed New Development Areas considered to be suitable for residential, industrial and commercial development and related development. These areas were worked into a land use model that gave as an output yields of potential accommodation opportunities and related bulk for industrial, commercial and retail, distributed in space.

These yields of potential future development will then influence the sector plans, e.g. for, community facilities, housing infrastructure structure service, etc. Once these sector plans are completed, they will be subject to an alignment process with the Integrated District SDF and EMF, New Development Areas and Land Use Model to produce a development scenario for which the services are aligned with the proposed vision for the future of the city contained in the in the MSDF and eight integrated district SDFs and EMFs. This means that the sector plans need to provide the required services and facilities to accommodate the future growth of the city based on the vision contained in the MSDF and eight integrated

district SDFS and EMFs. Therefore, the vision in the MSDF and integrated District SDFs and EMFs is not based on the limitations of the current services infrastructure. However, this vision is based on the existing backlog and estimated unstoppable future growth (based on population growth and urbanisation) for which the capacity of services and facilities must be increased to address this need.

The integrated DSDF and EMF and the revised MSDF were aligned with the new IDP. The DSDF and EMF and the revised MSDF will be submitted for simultaneous approval to ensure alignment between these documents.

1.6 Decision support criteria

1.6.1 Amendments and deviations

The MPB-L section 99 (2), outlines the criteria for deciding an application. While the MSDF is the principle spatial policy tool for evaluating applications, the DSDF is one of the relevant considerations when deciding an application as outlined in MPB-L s99(2).

1.6.2 Consistency principle

The Integrated DSDF and EMF will be implemented in accordance with the consistency principle that applies to the plans and policies of different spheres of government. In terms of the consistency principle, lower-order spatial plans and policies must be consistent with higher-order spatial plans and policies.

Based on this principle, should the provisions of the integrated DSDF and EMF and any related lower order / local plan be deemed to be inconsistent with the MSDF, the MSDF will take precedence.

1.6.3 Considering the development guidelines for a site (assessing an application)

Assessing a development proposal (in an application) for policy consistency in relation to the Tygerberg integrated DSDF and EMF requires first a policy consistency assessment in relation to the (higher order) MSDF.

In the MSDF the following spatial designations and associated policy statements should be assessed for the site, i.e. its relationship to:

1. Precautionary Areas (Map 5a);
2. Biodiversity network and Marine Protected Areas (Map 5b);
3. Agricultural areas of significance and aquifers (Map 5c); and
4. Consolidated spatial plan concept (Map 5d).

When considering the consistency of proposed development of a site in relation to the integrated DSDF and EMF, consideration **must** be given to the following:

1. The DSDF map (Figure 13)
2. The relevant Sub-District maps which replicates the DSDF map but includes additional (more local area) detailed spatial designations; and
3. The district and sub-district development guidelines in Chapters 3 and 4.

Non-alignment with the spatial designations applicable to any particular site on either of the above maps and evaluated in terms of the spatial development guidelines applicable to that spatial designation or the sub-district guidelines, will trigger a policy consistency cautionary and the response and justifications as per section 16 of the MPBL.

Only if a site development proposal passes through the above without constraints (triggers or cautionaries) can it be considered consistent with the Integrated DSDF and EMF.

To assist with interpreting the nature and degree of alignment with policy and/or the spatial designations, consideration **should** also be given to the following:

- The two(2) Environmental Significance maps:
- i. Green Infrastructure and Biodiversity (Figure 10)
 - ii. Cultural and Heritage Resources (Figure 11)

In accordance with section 99(3) of the MPB-L, 2015, current practice in the assessment of applications also give consideration to the City's IDP and supporting strategies (e.g. Economic Growth and Social Development Strategies, Environmental Strategy), and approved planning policy, for example the Transit Oriented Development Strategic Framework and other impact considerations including economic, social, land use, heritage and services.

1.7 Meeting development and environmental objectives and key shifts since 2012

As an overarching departure point, the integrated DSDF and EMF aims to achieve spatial transformation by aiming to accommodate the backlogs related to past growth and the estimated future growth.

Some of the main departure points between the City's early 2015 Land use Modelling and the updated 2020 Land Use Model are indicated in the table below:

Table 2: Main departure point between 2015/17 and 2020 LUM

Residential departure points	<ul style="list-style-type: none"> • More low-income households will need to be accommodated with less government funding for housing provided • Sub-letting of land for income generation will become even more prevalent • Significant increase in the growth of informality – 1200Ha of new informal settlement areas assumed & new boarding house typologies included • Most new residential developments will likely be multi-storey
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	<ul style="list-style-type: none"> Residential in-fill and densification will continue in spite of intentions to target corridor densification along public transport corridors Residential intensification will continue in spite of diminished formal economic opportunities (people still need a place to stay)
Non-residential departure points	<ul style="list-style-type: none"> The inertia and limited relocation potential of non-residential land use is accepted New industrial floor area, by and large, takes place in existing industrial areas, with office development also following similar agglomeration trends in existing office dominant ECAMP zones Retail response is stronger to population thresholds, and will thus follow residential infill and intensification patterns Technological advancements will continue to negatively impact demand for office, retail and manufacturing space Greater demand for warehousing, co-work, and business process outsourcing (BPO) is envisaged A greater demand for mixed-use buildings due to a need for more sustainable, smart buildings that are occupied for longer parts of the day

Given the above needs (backlog and future growth), the current land use model projections show that the new development areas identified through the Integrated District SDFs and EMFs, as explained above, (all eight combined) can potentially accommodate more than 630 000 new housing opportunities, 1million m² retail and 3,6million m² industrial and 1,5million m² office development.

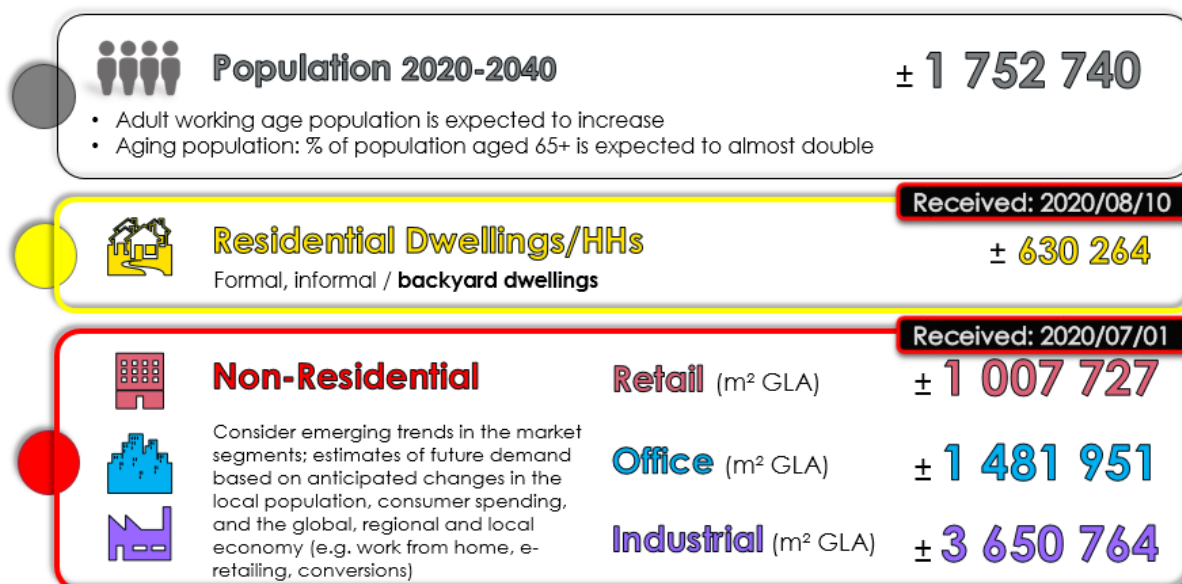


Figure 4: Projected additional land use quantum required for 20 years

To accommodate the future growth, the Integrated DSDF and EMF adopted the principle of balancing the demands for urban development and nature conservation by containing the proposed urban growth using a constraint on the lateral urban expansion by means of an urban development edge. This means that instead of growing the city laterally and increasing the city footprint, any future new development is proposed on vacant and

underutilised land within the current outer urban boundaries of the City. The above yields suggest that there is no need for expanding the urban footprint beyond the proposed urban development edge as the provided sites can, technically, adequately address the estimated need.

As a result, and to achieve higher level of efficiency and boost the sustainability, equity and spatial justice of the City, the integrated DSDF and EMF promotes improved access for the residents of the City. This means: (i) either taking new opportunities to where people are located, or because this is not always immediately adequately possible, (ii) to improve access to the public transport. These are underpinned by the overarching principles of contained in SPLUMA: spatial justice, spatial sustainability, spatial resilience, efficiency and good administration.

The above strategies of bringing opportunities to people through development and people to opportunities through public transit, work hand-in-hand and are not mutually exclusive in a well-functioning City. Both strategies are needed because of the inequitable structure of the City, most obviously observed in the disjuncture, as shown in Figure 5, between where the majority of the poor are located, on the periphery, in relation to where the major concentrations of opportunities (esp. economic opportunities) are, i.e. in the inner core areas of the City.

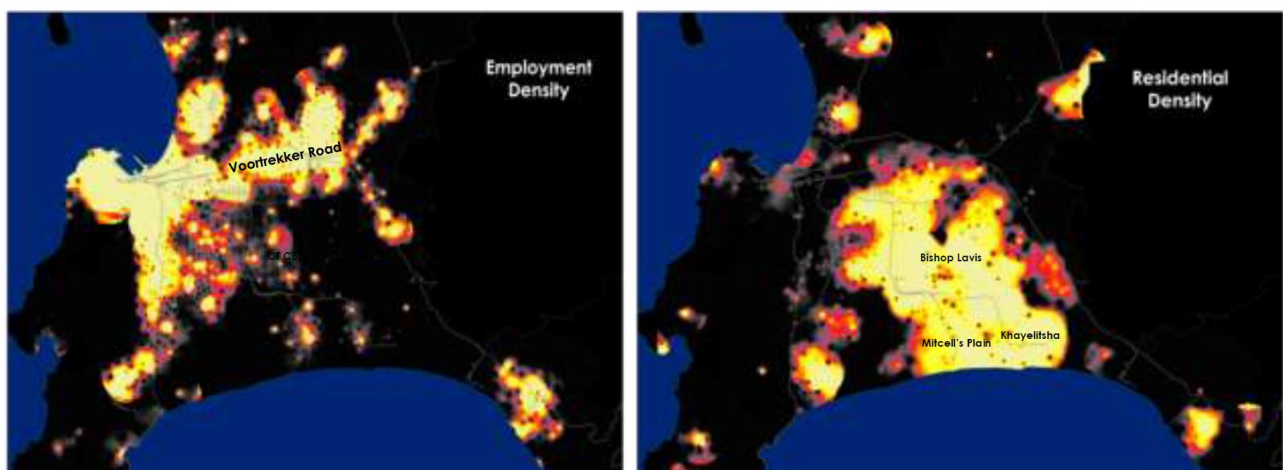


Figure 5: Employment density vs residential density

By locating new land use opportunities where the people are located the Integrated DSDF and EMF proposes to create a greater mix of land uses locally. This is advantageous to the future resilience of local areas, for example during the COVID 19 pandemic office workers made use of more services close to their homes because they were required to work from home.

Related to the above is also the approach of allowing higher densities in the most accessible locations, i.e. areas where most people frequent. These locations are generally along the major public transport routes and interchanges and close to economic opportunities as a first priority. This transit oriented development (TOD) approach is still being pursued. See Figure 6 relating to Transit Oriented Development.

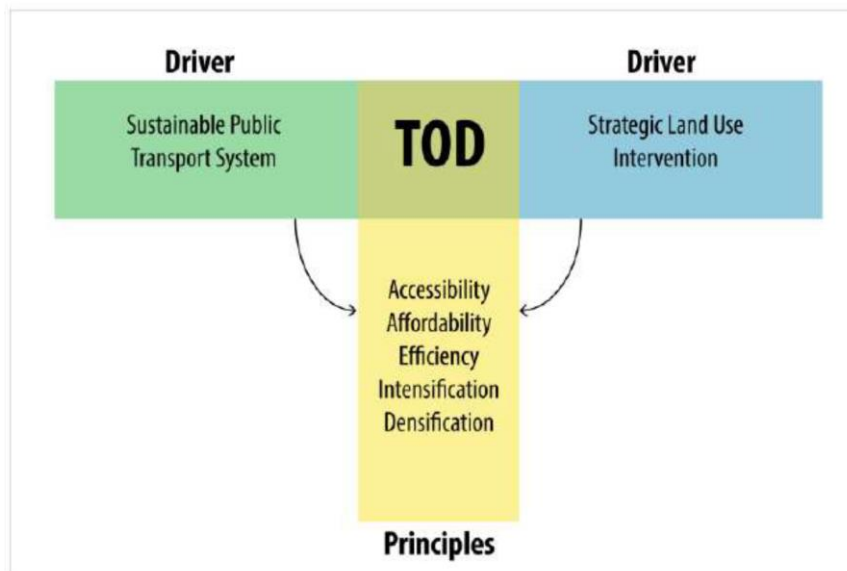


Figure 6: TOD principles adapted in the Cape Town TOD Strategic Framework

TOD has to some extent been compromised due as the TOD approach is premised on the availability of well-functioning public transport whilst we do not have a well-functioning public transport system, especially with the challenges on the PRASA rail service that moves the majority of commuters and challenges in sustainable bus and taxi services.

The above means that as an approach the spatial vision has included additional criteria for designating important nodes such as where there are areas of economic opportunity or areas of deprivation and backlog, or areas with extensive, well located state land.

Given the prevalence and the impact of Covid19, the integrated DSDFs and EMFs identifies areas to focus on economic recovery, i.e. How to speed up the resuscitation of the economy and how to spread that more widely through the City. Here the Development Focus Areas (DFAs) and the Urban Support Area (USAs), through a process of spatial targeting help to identify area in need or of opportunity for development. Various mechanisms for facilitating development, e.g. exclusions from processes or incentivising developments are investigated. The above spatial targeting is also used to help create a prioritisation framework for implementation, i.e. what areas are priorities for interventions.

The review of the 2012 District Plans aims to promote ease of use of the spatial vision in the integrated DSDF and EMFs for decision making. To achieve this, the full integration of the DSDF and the EMF has been pursued.

The integrated DSDF and EMF focusses on informality both in terms of the housing and economic sectors. An informal economy survey has been completed to help inform the proposals in the integrated DSDF and EMF. Ways to fast track land for housing development is also being investigated through the provision of amongst others overlay zones and temporary use of land for housing.

The integrated DSDF and EMF responds to the City IDP objectives as follows:

Table 3: Integrated DSDF and EMF response to IDP objectives

#	Objective	Integrated district SDF and EMF Response
1	Creating new jobs by making Cape Town the easiest place to do business in Africa.	Identified areas for economic development including appropriate facilitative policies and mechanisms
2	Make public transport work by fighting for control over railways and funding to expand the MyCiti bus service;	Supports the public transport operations by promoting TOD, favouring the location of new development and higher densities of development in in highly accessible areas, including public transport corridors and nodes.
3	Release state-owned land so the private sector to deliver more affordable housing.	Identifies land for development including state owned land promotes spatial justice though the identification of land in all areas and promoting the use of highly accessible first for urban for development.
4	Clean up Cape Town's public spaces, streets and waterways	Policies relating to the environmental elements promotes the protection of these sensitive elements including waterways. The TOD approach also promotes the creation of liveable environments, which presuppose well-functioning and managed local areas, including streets and public spaces.

Lastly, the integrated DSDF and EMF aims to facilitate the appropriate development in the appropriate locations. Therefore, the outcomes sought as a result of this Integrated DSDF and EMF are the appropriate mechanisms, allowed by the various legislation, to fast track appropriate development. These include the application of exclusions from having to comply with Environmental Impact Assessment (EIA) trigger processes through the use of environmental instruments to guide "compliant" developments; the designation of the environmental urban area; the designation of overlay zones with enhance development rights and various other incentives as unpacked more fully in the Implementation Plan (Volume 3) to be approved with the Integrated DSDF and EMF.

2 THE SPATIAL OBJECTIVES

The spatial objectives for the district are informed by the MSDF's: spatial vision; development strategies; and transformation agenda as well as the district's: spatial vision; role; integrated concept; and the key interventions identified to achieve the objectives.

2.1 MSDF Spatial vision 2030 and beyond

The MSDF sets out the overarching spatial vision formulated to support the City's spatial transformation objectives:

*"The City is intent on building – in partnership with the private and public sector – an inclusive, integrated, vibrant and healthy city. A resilient City that meets sustainability obligations and proactively responds to social, economic, climate and resource shocks and stresses. * A city that is committed to addressing spatial injustice, inequality and avoids the creation of new structural imbalances in the delivery of services, availability of economic and residential opportunities. Key to achieving this spatial transformation is ensuring an efficient public transport system and associated densification and diversification of land uses."*

A new spatial transformation agenda has emerged in the planning legislation and the City has recommitted to spatial transformation in the IDP. More specifically, the City is committed to 'employing a range of new generation urban growth management tools and processes' and considering 'the designation of priority areas, managed growth areas and protection areas with associated development parameters and procedural guidelines'.

The above are encapsulated in three spatial strategies that provide the spatial direction to achieve sustainable, equitable and managed growth as highlighted in Chapter 5 of the MSDF:

- Spatial Strategy 1: Building an Inclusive, Integrated, vibrant and healthy city
- Spatial Strategy 2: Manage urban growth and create a balance between urban development, food security and environmental protection
- Spatial Strategy 3: Plan for employment and improve access to economic opportunities

2.2 MSDF Spatial Transformation Areas

The basis for growth management through City investment is established in the MSDF via four primary Spatial Transformation Areas (STAs) namely:

1) Urban Inner Core (UIC)

- The UIC represents the priority development and investment focus for the City, where capital and operational infrastructure investment must be prioritised to support the intensification of land use and spatial transformation.
- The integrated DSDF and EMFs refined the UIC through identifying Development Focus Areas (DFA) which are targeted areas for urban restructuring that have the

highest potential spatial transformative impact where dedicated budget/planning/investment is, and should be prioritised to facilitate development. This does not imply that other areas cannot be identified as areas of development focus for the duration of the integrated DSDF and EMFs.

2) Incremental Growth and Consolidation Areas (IGA)

- These areas are where the City is committed to servicing existing communities, ensuring that backlog are eradicated while new developments are also permitted.

3) Discouraged Growth Areas (DGA)

- The integrated DSDF and EMFs refined the demarcation of the boundary between the IGA and DGA by introducing the urban development edge as the outer limit for urban development. Areas beyond the urban development edges are areas where new conventional urban development area are discouraged.

4) Critical Natural Areas (CNA)

- The integrated DSDF and EMFs translated the CNA to include all areas with protected and critical biodiversity status (predominantly outside the urban development edges) that should be protected from urban development. In instances where proposed urban development coincides with areas of biodiversity importance, it has been indicated on the DSDF maps.

The local application of the STAs identified at the metro scale has been contextualised through spatial concepts at district scale which translated into localised spatial designations and spatial planning categories (SPCs). The table below provides a snapshot of how the STAs relate to the SPCs (which is further unpacked in Chapters 3 & 4 of the Integrated DSDF and EMF).

Table 4: MSDF STAs and relation to SPCs in the integrated DSDF and EMF

SPATIAL TRANSFORMATION AREA(STA)		RELEVANT DSDF SPC / DESIGNATION
1. URBAN INNER CORE		
Principle	Emphasis/Desired outcome	
City and public sector are committed to coordinated, spatially targeted investment and development to spatially transform and integrate city form.	Diverse and dense land uses in association with current and future public transport infrastructure provision.	
2. INCREMENTAL GROWTH AND CONSOLIDATION AREAS		
Principle	Emphasis/Desired outcome	
City and public sector are committed to servicing existing	<ul style="list-style-type: none"> • Diverse and dense, where infrastructure allows; • Diversification of mono-use residential patterns 	
		<ul style="list-style-type: none"> • Rail & stations • Roads (Freeway/Express, connector, development) • Scenic routes • Airports & Harbours • Major Rivers & 1:50yr floodline • Waterbodies & Wetlands • Smallholdings • Existing urban dev • Mixed use intensification • Industrial • NDAs(densities and use) • Cemeteries • Landfill sites • WWTW
		CONCEPTUAL DESIGNATIONS
		<ul style="list-style-type: none"> • Higher (& lower) order dev corridor • Nodes (M; D; L; N)

communities. New development subject to MPB-L (2015) Ss 65	<ul style="list-style-type: none"> • Incremental intensification via subdivisions/2nd and 3rd dwellings and rezonings • Public sector investment in existing and future human settlements permitted • Maintenance of existing infrastructure and development according to infrastructure capacity and associated CAPEX/lifecycle costs. 	<ul style="list-style-type: none"> • Civic clusters (Reg; Comm; Neighb) • Destination place
3. DISCOURAGED GROWTH AREAS		
Principle	Emphasis/Desired outcome	<ul style="list-style-type: none"> • Urban development edge • Areas of Agricultural Significance
No investment from City and the public sector	<ul style="list-style-type: none"> • Development permitted in respect of existing agricultural/rural zoning. • The existence of soils with low agricultural potential is not sufficient reason to consider allocating urban development rights. 	<p>CONCEPTUAL DESIGNATIONS</p> <ul style="list-style-type: none"> • Destination place
4. CRITICAL NATURAL ASSETS		
Principle	Emphasis/Desired outcome	<ul style="list-style-type: none"> * Protected and Critical Biodiversity * Urban development edge
City and public sector are committed to servicing, protecting, enhancing and extending critical natural assets.	<ul style="list-style-type: none"> • Enhance and connect the CNA that support the city and the regional environment and ecology. • Status quo with land uses limited to agriculture and rural zone uses as per DMS. 	<p>CONCEPTUAL DESIGNATIONS</p> <ul style="list-style-type: none"> • Destination place

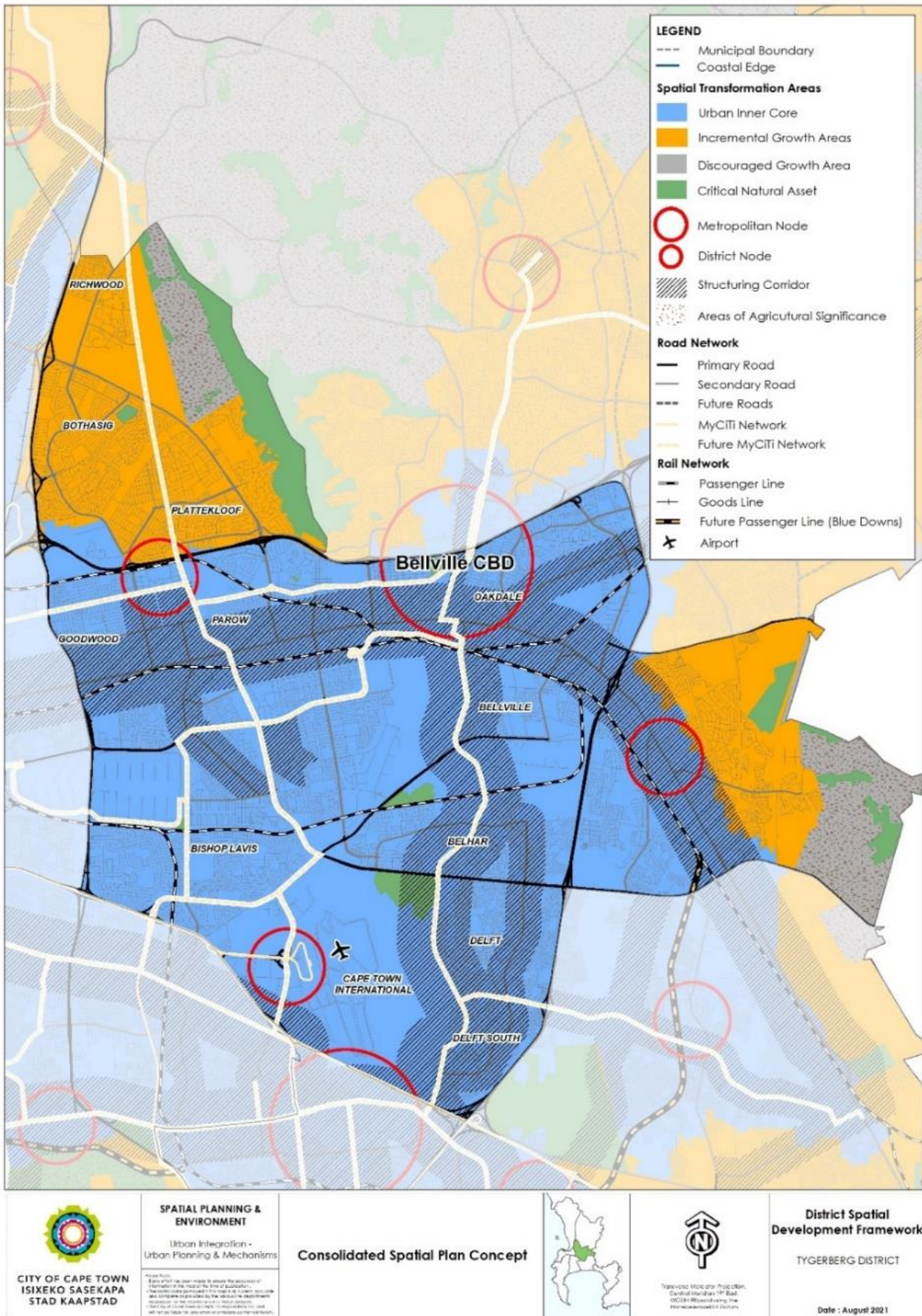


Figure 7: Consolidated Spatial Concept as extracted from MSDF

2.3 District spatial vision

The overall spatial vision for the Tygerberg district takes its cue from the MSDF spatial vision for the city as a whole, but focus on and responds to the more uniquely specific informants within the Tygerberg district. It has been informed by a number of vision elements and principles which are a result of the consultation process related to the formulation of the integrated District Spatial Development Framework(DSDF) and Environmental Management Framework(EMF).

The vision statement for the Tygerberg District is

'A district that is defined by an integrated approach to mixed use development including residential and commercial where targeted densification and intensification is focused in the core area along high accessibility routes and nodes such as Voortrekker Road and the Bellville PTI and in close proximity to industrial related land uses. A transport network that is highly accessible for public or road based modes that increase effective movement within the district and the broader city. The quality of the district is further enhanced by the availability of social services and an open space system, comprising of elements such as river corridors, open spaces of different extent and nature reserves. '

This vision of the desired future development of the district should drive what spatial development goals to strive for, what types of key spatial development related interventions (i.e. including in what areas) to pursue, and what the broad spatial structuring elements and over-arching driving (and supporting) spatial structure should be.

2.4 Role of the District

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:

a. Accommodating growth through targeted intensification

Voortrekker Road; 35th Avenue/Giel Basson and Robert Sobukwe/Durban Road has been identified as three major structuring corridors in the City. Urban nodes such as Bellville, Parow, Elsies and Kuilsriver are highly accessible areas in close proximity to various modes of public transport. Employment-generating activities, retail development, social facilities, public institutions and intensive mixed-use and residential development should be encouraged along key transport corridors, particularly nodes, development routes and streets. They reflect the targeted areas earmarked for the largest spectrum of land use diversity and densities in order to generate employment activities in close proximity to residential and supporting public facility developments. As a result, it has a significant role to play in accommodating City growth.

b. Conserving threatened habitats

The Tygerberg district's largest environmental asset is the Tygerberg Nature Reserve which should be protected and enhanced in terms of function and role. Other prominent environmental assets that should be protected include Bothasig NR, Cape Flats NR and Haasendal conservation area. The Symphony Way conservation area is in the process of being proclaimed as a Nature Reserve registered.

In addition, the protection and enhancement of the Elsiekraal and Kuilsriver systems should be promoted as it has multi-functional roles as natural assets as well as passive recreation spaces in the district. Furthermore, the cultural landscapes of Kuilsriver/Bottelary and Durbanville Hills should be protected as these are not considered in terms of spatial policy as areas of urban expansion. However, consideration should be given to partial infill along the M12 (portion of De Grendel farm) as this is proposed as a future BRT- route. The key is to strike a balance through a more integrated approach to mixed use development and conservation of the natural environment and also taking into consideration the impact of the adjacent risk industry of the PetroSA Tank Farm.

c. Providing a range of housing and job opportunities

The rapid increase in the population, which is anticipated to keep on increasing, makes it crucial that the provision of housing as well as economic opportunities is a priority in the district. Focus should be on the Voortrekker Road Corridor together with the industrial areas. Opportunities to strengthen the corridor as an area of economic activity as well as an area to intensify residential opportunity for the lower income bracket should be investigated and optimized, especially where spaces are underutilized. Further to this new development areas (open market) should also strive to make provision for a more diverse income groups.

Focus should be placed on reviving/redeveloping areas such as Elsie River industrial where economic activity has deteriorated over the past years to cater for a wider mix and range of economic activity. Opportunities for both formal and informal economic activity should be created.

d. Providing a multi-modal transport network

The district north of the N1 freeway is mostly private vehicle dominated whereas south of the N1 freeway communities are largely reliant on taxi's and Golden Arrow Bus Service(GABS). The re-establishment of the deteriorated rail system is critical in improving accessibility to and from the district by public transport. This is even more crucial due to the role that the Bellville CBD plays with regards to its metropolitan significant role in the broader City context. In this regard the Bellville PTI as well as the area surrounding it (including the area to the north of Voortrekker Road between Durban Road and the proposed extended Robert Sobukwe Road) offers huge opportunity to address not only the public transport needs, but also for higher density residential infill and mixed use development to cater for inter alia lower income groups as well as for commercial intensification. Congestion in especially areas such

as Kuils River (e.g. Bottelary Road, Amandel Lane and Zevenwacht Link Road) should also receive priority.

2.5 Integrated district concept and key interventions

The district concept as presented hereunder represents a synopsis of the strategic development strategies, as described and unpacked in Chapter 2.3 above, and the application thereof, at conceptual level. It provides some of the key interventions that need to be realised in order to achieve the desired end-state.

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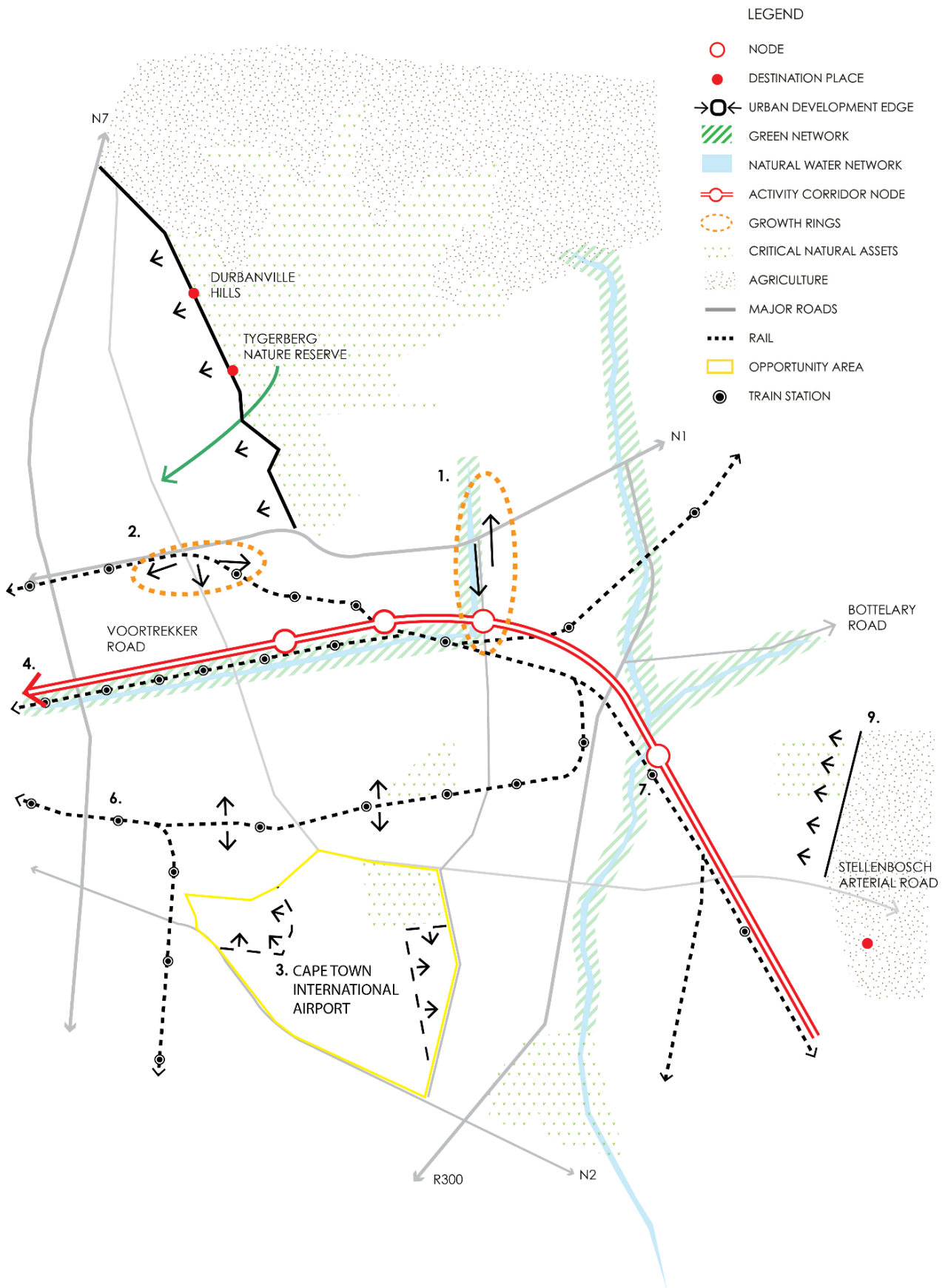


Figure 8: Integrated concept for Tygerberg district

Key interventions

The following key intervention/ actions are proposed to facilitate the achievement of the spatial objectives through the spatial vision, the role of the district and the spatial concept:

1. Broader Bellville CBD Precinct:
 - a. To optimize metropolitan function by redevelopment of PTI, unleashing development potential of surrounding properties and increase accessibility through inter alia extension of road linkages and NMT movement, intensification of land use to north.
 - b. Protection of river corridors and optimisation of recreational use thereof, where possible.
2. N1 City precinct optimization: Intensification of N1 City node by redevelopment at De Grendel station and Tygerdal solid waste drop- off facility as well as investigating the optimum future use of the Parow Golf Course and surrounds.
3. CTIA and surrounds: Infill and mixed use development inter alia the provision of new housing development to accommodate the relocation of informal settlements and accommodation of new commercial development and industrial expansion. Opportunity to strengthen the role and functionality of Cape Town International Airport.
4. Intensification along Voortrekker Road Corridor: Support redevelopment and intensification of mixed use along the corridor, inclusive of Tygerberg Hospital, Stikland Hospital.
5. Elsies River Industrial Area: Support redevelopment for mixed use development due to low economic growth performance of the industrial area.
6. Optimization at rail stations: Accessibility to all stations should be optimised e.g. Prioritisation at Parow Station of the upgrade of Station Road and redevelopment of underutilized parking areas inclusive of more affordable housing opportunities.
7. Intensification at Kuilsriver Station: Support infill development, development of Bypass Road.
8. Limited medium to higher density (different typologies) infill development north of Polkadraai Road.
9. Protection of the Zevenwacht agricultural areas and the linkages with the Bottelary Hills in adjacent Stellenbosch Municipality.



3 THE SPATIAL DEVELOPMENT FRAMEWORK (SDF): DISTRICT DEVELOPMENT GUIDELINES

The district spatial development framework plan essentially comprises the application of the spatial concepts and structuring elements discussed in Chapter 2 to the context of the Tygerberg district. The identification and active promotion of the spatial concepts and structuring elements are fundamental to responding to the 3 spatial strategies identified in Chapter 2, realising the appropriate medium to long term spatial structure and vision for the district. This is also reflected graphically in the progression from spatial concepts and structuring elements at citywide scale, to the spatial vision for the district, to the district spatial development framework plan (see figure 14). The purpose of this plan is to illustrate the application of the strategies from concept to reality in the spatial development plan.

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 relevant MSDP policies and actions and sub-district development guidelines (contained in Chapter 4 of this document).

The DSDP plan comprises 5 broad categories as indicated in figure 13 namely:

- **Spatial Planning Categories**
 - Biodiversity, Agriculture and Heritage Management
 - Watercourses, Flood risk areas, Wetlands, Waterbodies and Aquifers
 - Biodiversity and Structuring Open Spaces
 - Areas of Agricultural Significance and Smallholdings
 - Cultural and Heritage Resources
 - Urban development
 - Existing Urban Development
 - New Development Areas – Future Urban Development
 - Utility Service infrastructure installations and Networks
- **Transport infrastructure and route designations**
 - Freeways & Expressways
 - Rail
 - Development routes
 - Connector routes
 - Non- motorised transport (NMT)
 - Airports and other freight hubs
- **Conceptual designations**
 - Corridors
 - Development corridors
 - Green corridors
 - Urban nodes
 - Civic clusters
 - Destination places
- **Development edges**
 - Urban development edge

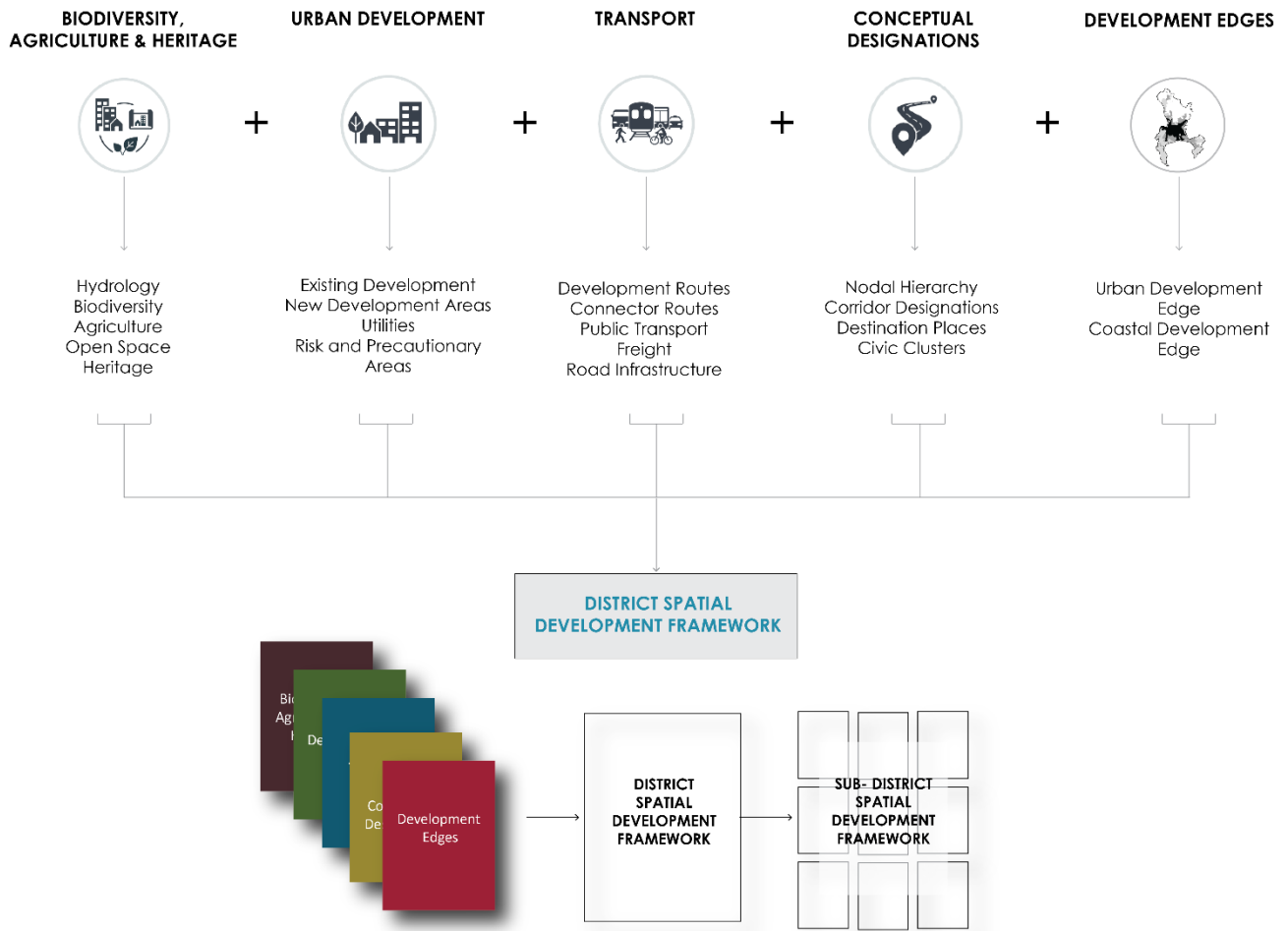


Figure 9: Broad categories comprised within the DSDF

3.1 Guidelines for Spatial Planning Categories(SPC)

The land use classification system adopted by the Tygerberg integrated DSD and EMF is consistent with the bioregional planning framework and broad spatial planning categories (SPCs) utilised by the MSD (2018). Additional categories included in the DSD commensurate with the greater level of planning detail, are included (e.g. urban development, utility service infrastructure). SPCs specify the inherent land use suitability of the city's environmental, cultural and urban landscapes for development.¹

Environmental Management Zones and SPCs specify the inherent land use suitability of the city's environmental, cultural, and urban landscapes for development. Figures 10 and 11 reflect the synthesis of environmental management considerations while the integrated EMF/SDF Figure 13 is informed by the location of Core biodiversity areas and structuring open spaces within these zones.

3.1.1 Biodiversity, Agriculture and Heritage Management

The Tygerberg district consist of many areas with varying levels of environmental characteristics and sensitivity. These include terrestrial and aquatic natural areas that include biodiversity, nature reserves and active and passive recreation areas i.e. parks, sports fields, cemeteries etcetera. These are ideally all interconnected and support interactions between social, economic and ecological activities.

The mentioned areas have been categorised in accordance with their similar environmental attributes known as Environmental Management Zones (EM). EM zones have been identified using the best available information at the time of report compilation.

These EM zones are intended to guide and inform planning and decisions regarding activities that require environmental authorisation and / or planning approval within these areas. They form a guide for land use decision making that can enhance the ecological services or protect conservation worthy assets.

In addition, the Green Infrastructure Network (GIN) is an integrated mapping project that combines the City's various environmental policies and strategies into a map that provides a score and background data for different greenfield sites in the City, providing a summary of relevant considerations for development of these sites. It is an informant layer and

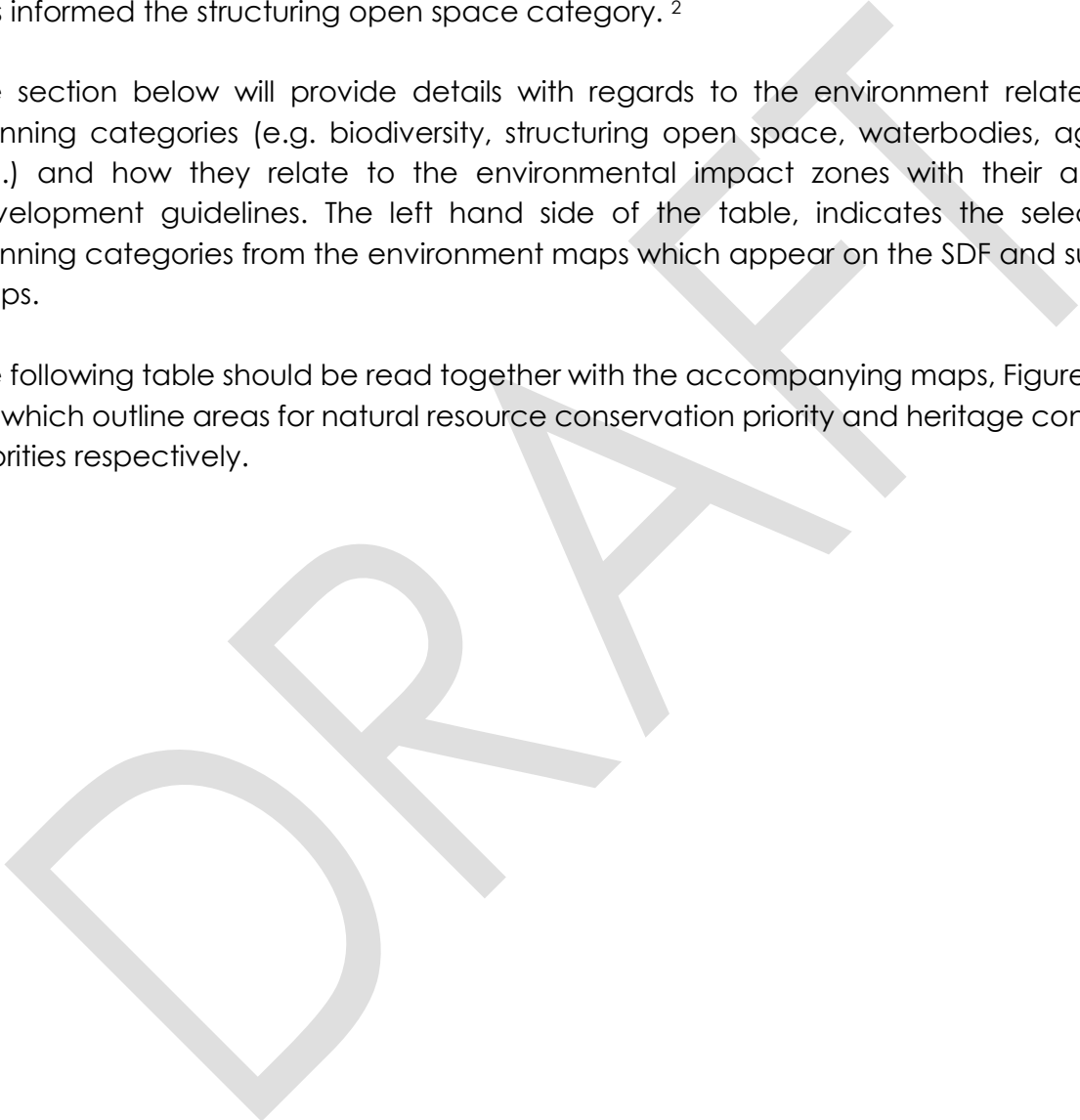
¹ Activities and land use designations are still subject to legislative requirements in terms of NEMA and other relevant legislation, as well as impact management norms and standards such as implementation of an Environmental Management Programme (EMP). The cultural heritage resources are additionally subject to the general protections detailed in the National Heritage Resources Act as well as being represented in a separate overlay zone i.e. the Heritage Protection Overlay Zone (HPOZ). The existing and proposed HPOZ together with individual formally protected heritage sites, must be considered in planning, development and land use management decisions.

Important note: 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.

provides a degree of guidance on to “**how**” development should respond to a site, as opposed to” whether **or not**” development should occur. It considers the principles of multi-functionality, connectivity and using nature to solve problems in the built environment. The complete list of attributes mapped as Green Infrastructure is explained in Annexure 4.1 and includes cultural landscapes, agricultural areas, rivers and floodplains, coastal areas, areas that assist in flood and stormwater management, groundwater infiltration as well as other natural assets. The full extent of the GIN is shown in Figure 10 and the mapping project has informed the structuring open space category. ²

The section below will provide details with regards to the environment related spatial planning categories (e.g. biodiversity, structuring open space, waterbodies, agriculture, etc.) and how they relate to the environmental impact zones with their applicable development guidelines. The left hand side of the table, indicates the select spatial planning categories from the environment maps which appear on the SDF and sub-district maps.

The following table should be read together with the accompanying maps, Figures³ 10 and 11, which outline areas for natural resource conservation priority and heritage conservation priorities respectively.



² The Details of the Mapping Project can be accessed online with assistance from the City's Environmental Management Department.

³ Finer scale mapping is available on City Map viewer.

Table 5: Development guidelines for management of environmental resources in relation to Environmental Management Zones

SPC, Components & district elements	Guidelines and Management priorities
<p>SPC: WATERCOURSES, FLOOD RISK AREAS, WETLANDS, WATERBODIES and AQUIFERS (ENVIRONMENTAL MANAGEMENT ZONE - HYDROLOGICAL ZONE Figure 10)</p>	
<p>Flood prone areas: Flood Risk Area 1 These constitute areas within the 1:50 floodline, i.e. where floods of this magnitude are equalled or exceeded on average once in 50 years.</p> <p>Flood Risk Area 2 These constitute areas within the 1:100 floodline, i.e. floods of this magnitude are equalled or exceeded on average once in 100 years.</p> <p>Flood Risk Area 3 These are areas prone to flooding. They are not necessarily associated with river or vlei systems, as flooding may originate from groundwater, collection of stormwater or runoff in low lying areas.</p> <p>Examples:</p> <ul style="list-style-type: none"> Sections along the Elsieskraal River (between Tygerberg Hospital and the Transnet Marshalling Yard) 	<ol style="list-style-type: none"> 1. Conservation, public open space and associated recreation are appropriate uses in these areas. 2. These areas can play a valuable role in the NMT network allow for NMT movement where practical Areas for permeable walkways and cycle tracks for NMT, can be considered in the design of green open spaces surrounding wetlands and river corridors to ensure good groundwater infiltration, safety and equitable access to promote the reconnection of people and nature, improving health and wellbeing. 3. Ensure connectivity of spaces is enhanced and not compromised by hard fencing or other structural barriers to movement 4. Urban Development is undesirable and at risk in the 1:50 year floodplain 5. Tourism related activities- such as campsites are possible in the 1: 100 year floodplain 6. Restrict building setback lines and maximise on-site water infiltration and permeability in relation to redevelopment initiatives in flood prone areas. 7. Although some agricultural activities may be permitted within the flood risk areas, the nature of the impacts and appropriate mitigation must be determined in the EIA process, and must be shown to be acceptable (i.e. they must not pollute water resources or increase flood risk). 8. No agricultural activities should be approved within the 1:2 year flood line. 9. Urban development within the 1:100 year flood plain should be subject to formal acknowledgement by the owner of acceptance of liability of flood risk, and is only permissible where there are existing rights. 10. Where facilities associated with sports fields, golf courses or picnic areas have been permitted in the 1:50 year zone, floor levels must be above the 1:50 year flood line. 11. Areas for passive and active recreation to be considered in development adjacent to water courses. 12. Landscaping must be approved by the City to ensure that this is done with appropriate trees and indigenous riverine plants and vegetation. Invasive alien species in or adjacent to a watercourse must be controlled in accordance with relevant legislation. 13. Perimeter fencing must be visually permeable from ground level and not adversely affect the free flow of water and movement of aquatic fauna, small wildlife or birds. 14. Direct informal settlement dwellers away from risk areas, including below the 1:100 floodline. 15. Increase infiltration capacity in river corridors and wetlands through water sensitive urban design practices and sustainable urban drainage systems such as permeable paving, sustainable water storage systems and appropriate landscaping.

<ul style="list-style-type: none"> Sections of the Kuils River Bottellary river <p>Rivers, Estuaries, Wetlands and their associated buffers</p> <p>Examples:</p> <ul style="list-style-type: none"> the wetlands areas around the Cape Town International Airport and the eastern border of the district Kuilsriver Elsieskraal river Bottellary river 	<p>16. Incorporate stormwater quality and quantity management into redevelopment proposals in line with the Management of Urban Stormwater Impacts Policy regarding treatment and management of water at source.</p> <p>17. In general, new buildings and developments overlooking rivers should be orientated towards the river, where possible, and the principles of water sensitive urban design should be applied.</p>
<p>Aquifers</p>	<ol style="list-style-type: none"> Redevelopment and new development should give preference to the use of permeable surfaces and consider vegetated infiltration zones where appropriate to protect and enhance water sensitivity and aquifer recharge capability of various land uses Aquifer re-charge areas and sole-source aquifers should be protected from potential sources of pollution.
<p>Other water source areas</p> <p>This includes springs, reservoirs, dams, well points, water storage facilities in developments.</p> <p>Examples:</p> <p>springs, reservoirs, dams, wellpoints, water storage facilities in developments.</p>	<ol style="list-style-type: none"> Protect water source areas and integrate into urban design. Promote the utilisation of localised water sources for maintenance of landscaped spaces. Encourage on site water storage integrated into design of new developments
<p>SPC: BIODIVERSITY AND STRUCTURING OPEN SPACES (ENVIRONMENTAL MANAGEMENT ZONE - CONSERVATION AND BIODIVERSITY ZONE (Full Extent together with GIN shown on Figure 10))</p>	
<p>Core Biodiversity</p> <p>(Appears on SDF and Sub-District Maps)</p> <p>Protected and Conserved areas Core 1</p>	<ol style="list-style-type: none"> Core areas are already protected as part of the TMNP Only conservation related activities /development in accordance with reserve management plans should be considered. Consolidate and link existing protected areas Support operational requirements of Biodiversity areas to ensure their ongoing utility in green infrastructure networks

<p>Examples:</p> <ul style="list-style-type: none"> • Tygerberg Nature Reserve • Symphony Way conservation area • Jack Muller Park conservation area • 	
<p>Critical Biodiversity Areas (Core 1 CBA 1a-2)</p>	<ol style="list-style-type: none"> 1. New development proposed inside of the urban development edge could potentially impact on areas of high biodiversity importance. Such development should be sensitive to biodiversity considerations affecting these areas by imposing environmental management programmes (that should include adequate botanical and faunal impact assessments) in relation to the proposed development or prohibiting development when and where appropriate. 2. Development should be sensitive to biodiversity considerations affecting Core areas by enforcing environmental management programmes in relation to development or prohibiting development when appropriate 3. Rehabilitate and maintain areas of sensitive natural vegetation and high biodiversity value. Where biodiversity remnants conflict with areas earmarked for development- i.e. "areas of coincidence", ensure adequate botanical and faunal impact assessments are undertaken timeously. 4. 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). 5. Where possible, all new utility infrastructure, services and structures should be located outside of these areas.
<p>Sites of Coincidence where core biodiversity and new development areas co-exist (see SDF Map and sub-district maps) NDA : sub-districts 1, 6, 7 & 8</p>	<ol style="list-style-type: none"> 1. Areas of coincidence are where there are compelling urban efficiency, social and economic reasons to pursue development and where core biodiversity may be impacted as a result. Where New Development Areas are proposed that impact Critical Biodiversity areas will not be considered inconsistent with the District Plan. 2. In such cases, development on the site will not be considered inconsistent with the District Plan. 3. These areas will be subject to the requirements of Environmental Authorisation. 4. Conservation and sound environmental management principles must be demonstrably considered in the development plans. 5. Developments in these areas must provide evidence of environmental studies and processes undertaken that validates an evidence base of the environmental assets and mitigation measures; 6. Where existing development approvals are in place, agreed environmental management and mitigation measures must be adhered to.
<p>Ecological Support Areas (Core 2) Examples:</p> <ul style="list-style-type: none"> • The Kuils River • The Bottelary River • Portions along the Elsieskraal River 	<ol style="list-style-type: none"> 1. Low impact activities may be considered. 2. Maintain and enhance/ promote linkages between these areas.
<p>Other Natural Areas (Buffer 1) Extensive agricultural areas that</p>	<ol style="list-style-type: none"> 1. Low impact activities may be appropriate.

<p>contribute to the rural and cultural landscape, some of which include historic farmsteads.</p> <p>Other Ecological Support Areas (Buffer 2)</p>	<ol style="list-style-type: none"> 2. Development (e.g. structures) in support of both tourism and biodiversity conservation in Agriculture and Core Areas should preferably be located in other natural areas and ecological support areas if logistically feasible. 3. 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 (e.g.in support of those activities specified above) should be managed through spot rezoning or consent uses and fragmentation of farm units should be discouraged.
<p>EIA requirements and Environmental Management considerations for all Biodiversity Conservation Categories</p> <ol style="list-style-type: none"> 1. New development 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 Environmental Management Department. 2. Issues to be considered: vegetation, connectivity and access, fire control and land management issues, pollution, invasive alien vegetation and faunal species. 3. Areas of high biodiversity importance outside the urban development edge should be regarded as "no-go" areas for development. 4. A management plan must be drawn up and implemented for all activities approved in this zone, in accordance with the City of Cape Town's specifications. 5. Protected areas should be regarded as "no-go" areas for any form of development and no further development of any kind in these areas should be allowed without a detailed assessment of the impacts and reference to the Bionet. 6. A variety of different types of critical vegetation are included within the CBA 1 zone. For planning purposes, reference must be made to a detailed biodiversity map and consultation with the City of Cape Town's Environmental Management Department must take place. 7. Identify opportunities to permit low impact sustainable development which contributes to a net increase in the protection of biodiversity and the establishment of functional biodiversity nodes and corridors. 8. Opportunities for sustainable, low impact community utilisation of biodiversity resources should be identified. 9. Note that unless the Biodiversity Network is secured elsewhere, other natural vegetation areas may become increasingly significant to fulfill biodiversity targets/ as biodiversity offset areas. 10. The urban development edge was developed with consideration for the protection of properties from Veldfire risk, where applicable. Change in development rights and new development proposals must consider the avoidance of risk from fire as recommended in the City's "Veldfire Related Planning Guidelines (2004)". 	

<p>Structuring open spaces</p> <p>Sports fields and other institutional open spaces</p> <p>Other Open Spaces</p> <p>Stormwater retention areas</p> <p>Examples:</p> <ul style="list-style-type: none"> • Jack Muller Park • De Grendel station precinct i.e. Jan Burger Sport complex and Parow Golf Course • Elsiekraal green belt (from Jack Muller to Elizabeth Park) • Kuilsriver corridor system 	<p>General Structuring Open Space Guidelines:</p> <ol style="list-style-type: none"> 1. 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. 2. Appropriate high or medium density development along open space interfaces could be considered to improve passive surveillance. 3. Safety and security should be considered in the upgrading, landscaping or development of open spaces. 4. Where contextually appropriate, consider commercial activities such as small cafes, kiosks and restaurants that will enhance the utilisation of public open space. 5. Where feasible, opportunities for low impact sustainable use of open spaces, by local communities should be considered (e.g. small scale urban agriculture) the role of the site in the green infrastructure network will inform the feasibility of these initiatives. 6. Consider the impact of development on social and cultural uses of open spaces, guided by the GIN. 7. Consider the green infrastructure and ecological function of open spaces by consulting the GIN mapping project. 8. Ensure that landscaping in new building projects is appropriate for local conditions and can sustain the impacts of weather events and climate change. 9. Promote urban cooling through plantings, retention of tree coverage and the surfacing of underground water. 10. Optimise the uses and functioning of public parks and the role they play in pedestrian networks across the district. 11. These guidelines are for consideration to improve the quality of development and open spaces, in general development related to the base zoning or existing approvals will not trigger a deviation from the DSDF. <p>Guidelines for specific categories of open Space</p> <p>Institutions, School sites and sports fields</p> <p>12. School sites and institutional sites have been identified in their entirety as part of structuring open space where they contain fields or other green spaces. General open space guidelines apply only to the greened areas. Development related to the growth and functioning of these institutions and spaces will not trigger a deviation from the DSDF. New development on fields should consider the community role of the space and the surrounding context. In dense urban contexts with few open spaces, the retention of open space on school fields is to be encouraged.</p> <p>Cultural Landscapes</p> <p>13. Developments in cultural landscapes to consider the visual impacts on the landscape and refer to the City's Cultural and Heritage Management Policy.</p> <p>Road and Rail Reserves</p> <p>14. Development for transport purposes will not trigger a deviation from the DSDF. When expanding or developing in road reserves identified in the Green Infrastructure Network, consider the connecting role of the reserve, particularly if it connects core biodiversity sites and whether some of these connective features can be maintained.</p> <p>Extensive open space in neighbourhoods with multiple vulnerabilities</p>
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	<p>15. Infill may be necessary or in process in many undefined open spaces, community involvement to encourage the utilisation or protection of a certain amount of open space is encouraged.</p> <p>16. Development plans for infill of open spaces should consider the retention of green corridors for NMT and biodiversity movement as well as the inclusion of landscaping that contributes to public health and recreation e.g. play parks, community garden space, shade.</p> <p>Cemeteries</p> <p>17. Promote the qualities of open space of cemeteries which add to the sense of place e.g. tree cover, views or other landscape elements.</p> <p>Agricultural areas</p> <p>18. Developments related to the functioning of agricultural areas will not require a deviation from the DSDF. For new development and rezonings, the open space qualities, cultural landscape qualities and general open space guidelines must be considered.</p> <p>19. Renewable Energy Infrastructure may be appropriate on extensive open space where the primary use is not recreational. This will generally be more appropriate in rural areas.</p>
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SPC: AREAS OF AGRICULTURAL SIGNIFICANCE AND SMALLHOLDINGS

(ENVIRONMENTAL MANAGEMENT ZONE – AGRICULTURE Figure 13)

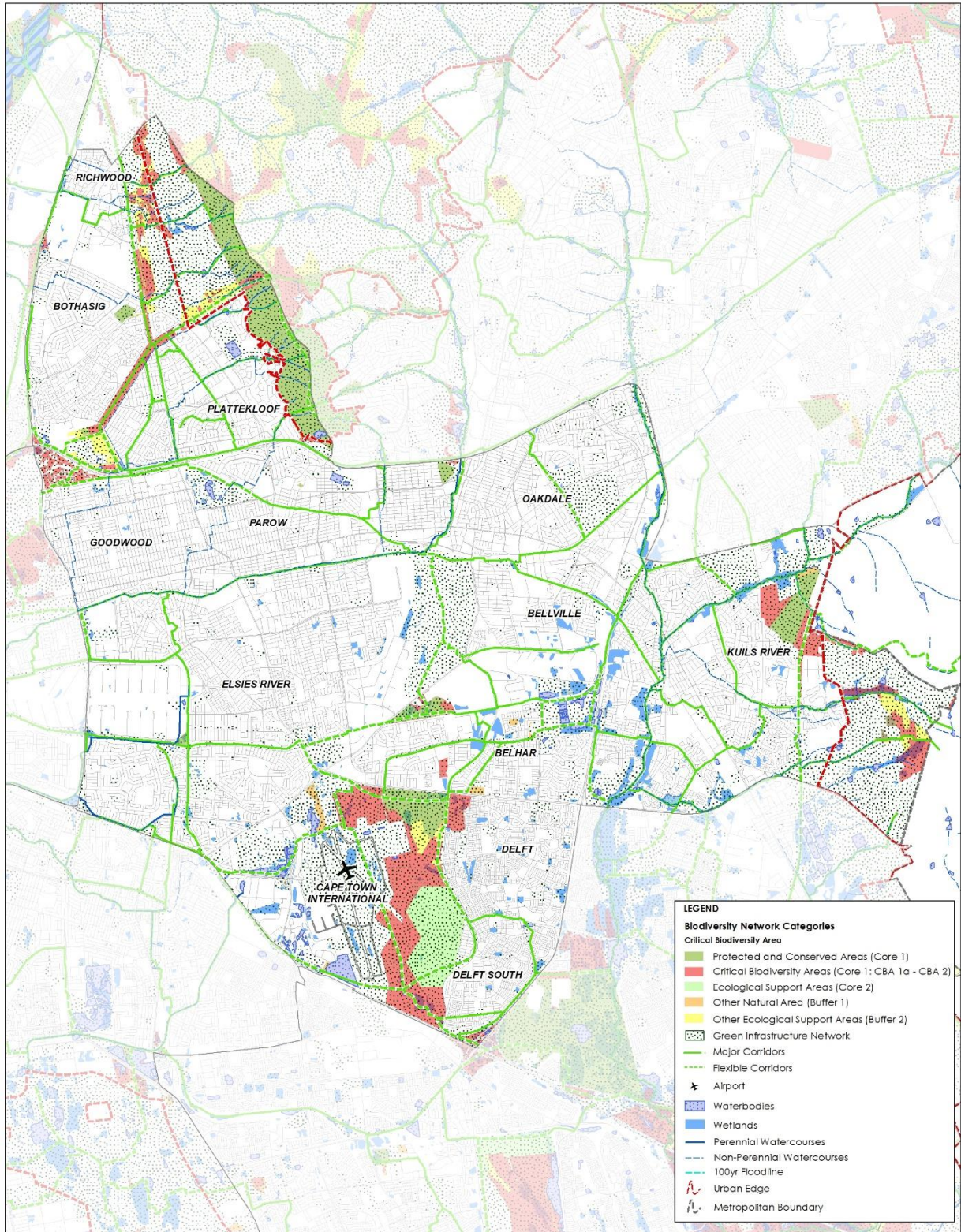
<p>Agricultural Areas of significance: high potential and unique agricultural land include areas that have been ploughed for orchards, vineyards, forestry plantations, annual crops, pastures and irrigations lands. Intensive agricultural land shall be protected against conversion to other land uses, particularly urban development, unless otherwise argued in the district plan.</p> <p>Examples:</p> <ul style="list-style-type: none"> • De Grendel • Kuilsriver(Zevenwacht) Farmlands 	<ol style="list-style-type: none"> 1. Preserve and utilise high potential agricultural land, particularly in the Kuilsriver (Zevenwacht) area. 2. Adhere to identified urban development edges around the periphery of high-value agricultural areas to prevent urban intrusion. 3. Encourage activities that reinforce primary agricultural use of these areas. 4. Limit non-agricultural uses to ancillary rural activities that do not detract from the primary agricultural use and character of the area, but contribute to local character and associated recreational and tourism potential. 5. Discourage the sub-division of agricultural land.
<p>Smallholdings Properties that came about primarily as a result of subdivision of former</p>	<ol style="list-style-type: none"> 1. Smallholdings outside of the urban development edge: Discourage the use of these properties for uses other than agricultural or related purposes to prevent the undermining of the predominantly rural character of these areas and potential decay of these areas as a result of establishment of undesirable uses such as industries including storage and

<p>agricultural farm land and that still predominantly present a rural character, however with property sizes that do not support extensive farming.</p> <ul style="list-style-type: none"> • Polkadraai 	<p>warehousing.</p> <p>2. Smallholdings inside the urban development edge: Encourage the redevelopment of these areas in a holistic and coherent manner in accordance with applicable approved development frameworks that are consistent with the proposals of the DSDF.</p>
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SPC: CULTURAL and HERITAGE RESOURCES and SCENIC ROUTES

(ENVIRONMENTAL MANAGEMENT ZONE - CULTURAL AND HERITAGE ZONE Figure 11)

<p>Provincial heritage sites</p> <p>Heritage Conservation Areas</p> <p>Palaeontological sites, Archaeological sites, Burial Sites.</p>	<ol style="list-style-type: none"> 1. Ensure heritage resources are conserved in their authentic state as far as practically possible to reflect their historic and cultural value. 2. Evaluate heritage resources in their broader contexts when making conservation related decisions. 3. Ensure a places character is protected and enhanced rather than just protecting individual sites. 4. Encourage investment in the adaptive reuse of historical sites, facilitate integration between the conservation and adaptive reuse of heritage buildings, and promote urban regeneration strategies. 5. Discourage the demolition or inappropriate alteration of historical sites where there is a possibility that these can be maintained or redeveloped. 6. Promote the retention and integration of heritage sites into a new development without undermining the viability or inclusive potential of the development. 7. Encourage appropriate and accurate interpretation of heritage resources and recognise and develop places of memory, particularly associated with the struggle against apartheid 8. Identify new areas for heritage protection overlay zones. 9. Ensure that alterations or changes are appropriate and do not derogate the heritage qualities of the places or area 10. Ensure that significant historical buildings and sites of memory are identified as heritage indicators and conserved, restored and celebrated in areas that have been earmarked for redevelopment.
<p>Scenic Routes</p> <p>E.g.:</p> <p>N1: Jakes Gerwel to Kuils River Road</p>	<ol style="list-style-type: none"> 1. Prioritise the upgrade of these routes and support implementation thereof. This should align broadly with the route's scenic quality value, degree of tourism use, and road surface & reserve upgrade necessity. 2. In general, development along scenic drives and routes should seek to retain views from the route and not negatively affect the character of the landscape through which it passes. 3. Any development along scenic drives and routes should include the addressing of landscaping improvements to the (public and private) areas abutting the road. Land use management decisions should be guided by the Scenic Drive Network Management Plan (Vol. 3, 2003) or subsequently approved management plans, e.g. transport designations. 4. Enhance the scenic experience, wherever possible, by removing moveable obstructions and provide suitable NMT infrastructure where appropriate. 5. Ensure that safe access to scenic drives and along scenic drives are enhanced.



LEGEND

Biodiversity Network Categories

Critical Biodiversity Area

- Protected and Conserved Areas (Core 1)
- Critical Biodiversity Areas (Core 1: CBA 1a - CBA 2)
- Ecological Support Areas (Core 2)
- Other Natural Area (Buffer 1)
- Other Ecological Support Areas (Buffer 2)

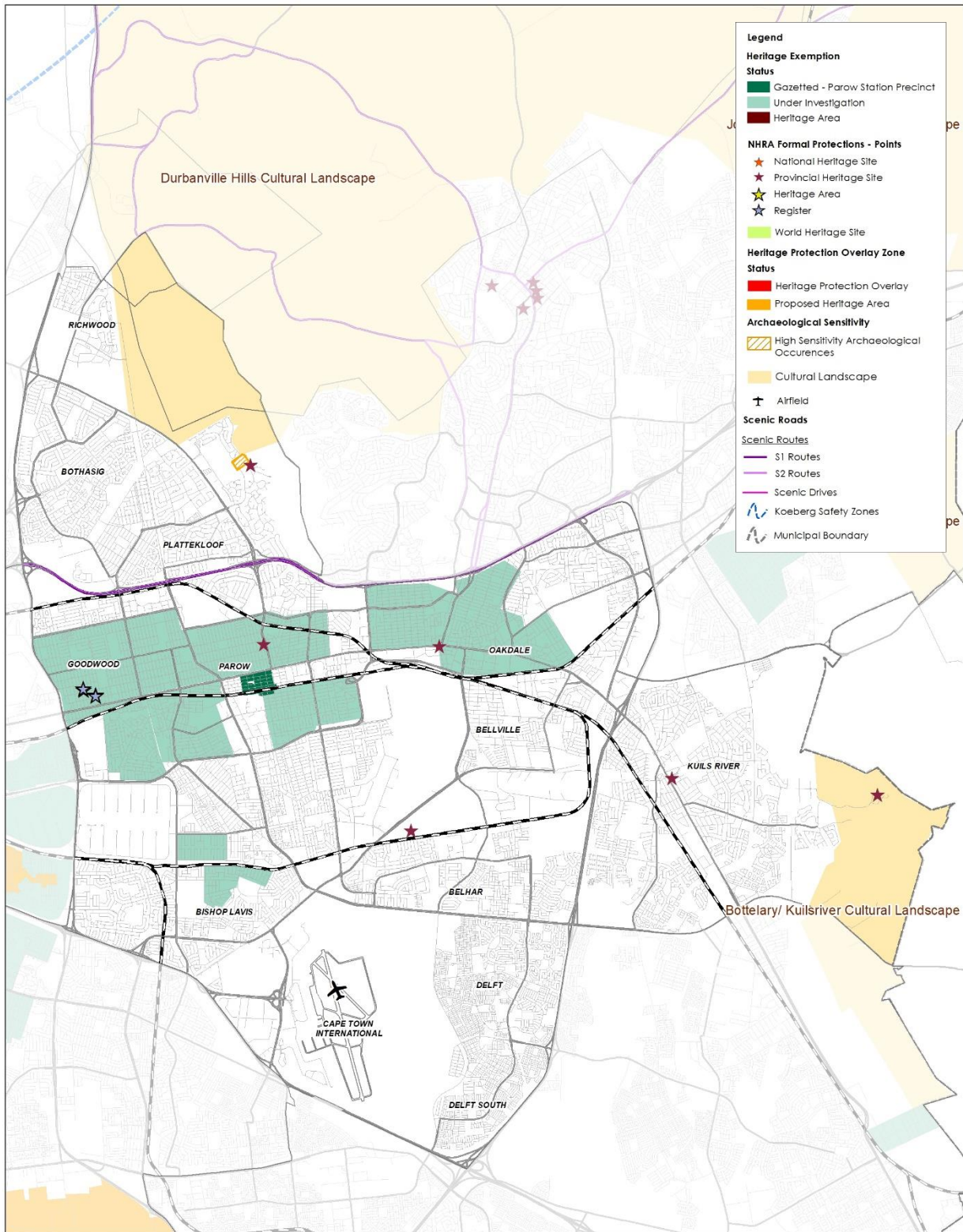
Green Infrastructure Network

- Major Corridors
- Flexible Corridors

- Airport
- Waterbodies
- Wetlands
- Perennial Watercourses
- Non-Perennial Watercourses
- 100yr Floodline
- Urban Edge
- Metropolitan Boundary

 <p>CITY OF CAPE TOWN ISIXEKO SASEKAPA STAD KAAPSTAD</p>	<p>SPATIAL PLANNING & ENVIRONMENT</p> <p>Spatial Planning & Design Urban Planning & Mechanisms</p> <p><small>Please Note: - Data provider has been made to ensure the accuracy of information in this report at the time of publication. - The spatial data contained in this report is a general overview and does not constitute any advice on the validity of the information, responsibility for the maintenance of these datasets. - The City of Cape Town accepts no responsibility for and will not be liable for any errors or omissions contained herein.</small></p>	<p>Green Infrastructure & Conservation Biodiversity</p>		 <p><small>Transverse Mercator Projection, Central Meridian 19° East, WGS84 Ellipsoid using the Hotelling's 1948 Datum</small></p>	<p>District Spatial Development Framework</p> <p>TYGERBERG DISTRICT</p> <p>Date: FEBRUARY 2022</p>
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Figure 10: Green infrastructure network and Biodiversity



 <p>CITY OF CAPE TOWN ISIXEKO SASEKAPA STAD KAAPSTAD</p>	<p>SPATIAL PLANNING & ENVIRONMENT</p> <p>Urban Integration - Urban Planning & Mechanisms</p> <p><small>Please Note: Every effort has been made to ensure the accuracy of information in this report at the time of publication. The spatial data portrayed in this map is as current as possible and is provided as a service to the user. The City of Cape Town does not accept any responsibility for, and will not be liable for, any errors or omissions contained herein.</small></p>	<p>Cultural & Heritage Resources</p>		 <p><small>Transverse Mercator Projection Central Meridian 17° East WGS84 Ellipsoid using The Hotchkiss/Hotchkiss Datum</small></p>	<p>District Spatial Development Framework</p> <p>TYGERBERG DISTRICT</p> <p>Date : FEBRUARY 2022</p>
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Figure 11: Cultural and Heritage Resources

3.1.2 Urban development

The Tygerberg district SDF proposes various types and forms of residential and non-residential development to support the functioning of a sustainable and integrated community. The Chapter below will unpack the district development guidelines for existing and new residential, non-residential and mixed land uses will include all buildings and infrastructure used for retail, offices, community facilities and related infrastructure necessary to provide for the proper functioning of urban areas. New Development Areas that are earmarked for different types and intensities of land uses will be indicated at sub-district level in Chapter 4.

3.1.2.1 EXISTING URBAN DEVELOPMENT

This includes established developed areas located within the existing urban footprint of the district. Guidelines focus on the further intensification, optimisation and appropriate redevelopment of existing land uses and upgrading/maintenance of associated infrastructure.

a) Residential development

The guidelines for residential development are consistent with the National Priority Human Settlements and Housing Development Areas (PHSHDAs), draft 2022 MSDF, City of Cape Town TOD Strategic Framework and Human Settlements Strategy (Draft August 2020), draft City of Cape Town Land Use Model (2020) and City of Cape Town Human Settlements Strategy (June 2021) (HSS) as key informants. The general guidelines align with the Human Settlements Strategy (HSS) objective to support diverse typologies in high-density areas (such as Social Housing Institutions and affordable housing delivered by the private sector) as well as service provision (iterative basic services and upgrading) where density is not achievable. The guidelines for residential development are categorised as follows:

- a) General: The general guidelines deal with all types of housing opportunities for low, medium, and high-income groups in both market (private) and subsidised (public) developments. The new development areas for this section refer to the sites identified (public and private) through the Land Use Model for residential, non-residential and mixed-use development and existing development areas refer to the underutilised buildings and pockets of land within the existing urban footprint.
- b) Fully and Partially Subsidised: Guidelines for fully and partially subsidised human settlements deal with all government-assisted housing projects within the various human settlements programmes, namely; Integrated Residential Development Programme (IRDP) (mixed tenure; BNG, FLISP, mixed-market for household incomes below R22,000), Community Residential Units (CRU), Social Housing and Upgrading of Informal Settlements Programme (UISP).
- c) Informal Settlements: Guidelines for Informal Settlements deal with all types of residential informality in the City, e.g. unlawfully occupied land and buildings (in

terms of the objectives of the Draft Unlawful Land Occupation (ULO) Framework, temporary relocation areas (TRAs) and Incremental Development Areas (IDAs) (City planned), City unapproved dwellings in the form of backyard units, main house extension and conversion, etc.

More detailed descriptions on each of the typologies can be found in Annexure 6.

b) Non-residential development

The district boasts a significant amount of developed commercial and industrial land. Areas with the highest agglomeration of industrial activities are Sacks Circle, Stikland, Epping 2, Parow, Airport and to a lesser degree south of Kuilsriver station area. The Elsiesriver industrial area has not been performing well over the last 10 years and have shown a change in land uses, having become more mixed in nature. Areas with the highest concentration of office, public service and retail include N1 City, Bellville and Kuilsriver CBD. Other areas with strong informal commercial economic markets include Delft Main Road, Parow Station Arcade and Bellville PTI.

c) Mixed Use

The MSDF recognises the complex underlying economic challenges that must be proactively and sustainably addressed through job generating economic growth at the heart of spatial priorities.

The Tygerberg integrated DSDF and EMF promotes land use intensification which implies a greater mix of residential and non-residential land uses (diversification) through the increased use of space, both vertically and horizontally (densification). This could include a combination of residential and non-residential uses or a combination non-residential uses (i.e. industrial and/or commercial and/or institutional). This can be achieved within existing areas or new developments with an increased number of residential dwelling units and/or gross leasable area. These should be encouraged in locations with good public transport access, concentrations of employment, commercial development and other amenities, or where such accessibility and concentration is planned.

The implementation of the above could be achieved through supporting investment in well-located nodes, reinforcing transit-oriented corridors and linking growing nodes with lagging nodes through connective infrastructure. The most cost-effective way of reducing the social and economic costs of the current inefficient urban form would be focussing development on inward growth.

The mixed-use intensification areas indicated on the DSDF maps should be read together with the guidelines for nodal and corridor designations.

3.1.2.2 NEW DEVELOPMENT AREAS - FUTURE URBAN DEVELOPMENT

A number of sites that are suited for future urban development have been identified through a technical investigative process for the City's 2040 Land Use Model in order to determine the required supply and quantum of residential and non-residential development to accommodate the projected future growth of population in Cape Town. These sites are referred to as New Development Areas (NDAs) or areas earmarked for future development.

The identification of NDAs included the selection of underdeveloped and partially developed land for new infill and brownfield development of various typologies and densities for residential as well as proposed non-residential uses with estimated GLA (m²). This included proposals to further intensify existing land uses along corridors and in nodes in the district. The combination of NDAs and areas where major intensification is proposed, will inform planning around the capital investment requirements discussed in the Urban Restructuring and Upgrading section found in Volume 3.

The following section describes the new areas for residential and non-residential development for the Tygerberg district. The selection of sites and development proposals (Figure 13 and Chapter 4) were based on their location potential and ability to support the strategic objectives and vision for the district described in Chapter 2 (Concept and Vision) of this report. It needs to be noted that in some instances, sites that have been identified, already have the required approvals in place for development, or the application process for development rights, has been initiated.

a) Residential Development

Table 6 below indicates the quantum of new formal residential opportunities in the Tygerberg District to accommodate the anticipated growth in population. However, it is anticipated that residential opportunities will also be accommodated in the form of additional formal dwellings (second and third dwellings) and informally by the private sector (backyard dwellings, boarding houses, micro-development etc.). To this end appropriate guidelines for these types of development in addition to NDAs for formal residential development are described in Chapter 3 and in more detail in Chapter 4 of the sub-district development guidelines, where applicable. Furthermore, the Land Use Model referred to above also includes projections for formal main dwelling units, additional formal dwelling units, informal dwellings and additional informal dwelling units, which was informed by a residential growth estimation – see Technical Annexure 11 in Volume 4 of the integrated DSDF and EMF.

Table 6: Estimated supply of formal residential opportunities

Typology	District
Main Formal Dwellings:	46 983

Source: Data from Land Use Model Estimates

A. Density Guidelines for New Residential Development

The following gross density targets or thresholds of development intensity are provided to provide direction for new development, however will be contextualised and specified (regarding minimum density targets) at the sub-district scale where applicable.

Table 7: Gross density targets and guidelines

Target	Guideline	Density
Target 1: Potential Low Density Development	Area proposed for new lower density development where the gross density could average 10- 45du/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.	10-45 du/ha
Target 2: Potential Medium Density Development	Areas proposed for new medium density development where the gross density should average 45-75du/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.	45-75 du/ha
Target 3: Potential High Density Development	Areas proposed for new higher density development where the gross density should average 75+ 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.	>75 du/ha

The thresholds are set in alignment with categories consistent with the City's TOD Strategic Framework and Comprehensive Land Use Model. The following considerations should be taken into account prior to applying the targets identified in Table 7 to development:

- Access to public transport system (existing or planned): Medium to high levels of densification should be aligned with existing/proposed public transport routes. This is essential for housing development targeted at lower-income earners, who are unable to afford the costs of private transport. It should not be an overriding consideration for middle and upper-income townhouse/group housing developments, as the residents are likely to make greater use of private transport.
- Land use integration: Preferably medium to high levels of densification should be located near places of employment, social services and community facilities.
- Land Use Compatibility: dense residential development should not be located near land uses that pose a safety or health risk to future residents (i.e. heavy or risk industrial uses)
- Access to Open Space: medium to high-density development should have access to urban open spaces (such as squares and promenades), recreational green spaces (parks and sports fields) and/or natural open space (nature reserves, beaches) to provide physical and psychological relief from higher-

density living environments.

- Infrastructure Capacity: densification should not be supported where water, wastewater and stormwater capacity are reaching points of absolute constraint, and the cost implications of rectifying the situation are too high for the private sector, or are not provided for in the City's capital budget or pipeline of projects.

b) Non-residential

General guidelines regarding the form and type of development are described in Chapter 3. More detailed guidelines on each site will be described in sub-district guidelines where applicable. New non-residential development includes:

- Commercial uses which includes retail, offices and/or hospitality industry
- Industrial which includes manufacturing, warehousing and logistics
- Public Services which includes social, community, education and health facilities

It can be seen that although many of the NDAs have a component of non-residential development, these are however in many instances mainly residential developments with a small component of non-residential. The largest contributors of non-residential within the district is the proposals around the Bellville PTI and the CTIA.

c) Mixed Use

➤ Mixed Use New Development Areas (NDAs)

Mixed Used NDAs include undeveloped (vacant) or partial-developed land targeted for new development with a combination of residential and non-residential uses or a combination non-residential uses (i.e. industrial and/or commercial and/or institutional and/or public service).

➤ Mixed Use Intensification Areas

These include developed or partially developed areas where further intensification and diversification of existing land uses is supported or where appropriate redevelopment to a mix of land uses is actively encouraged.

It should be noted that a mix of land use for both new development areas and intensification areas refers to an appropriate combination of either

- residential and non-residential uses or
- non-residential uses (i.e. industrial and/or commercial and/or institutional and/or public service).

More detail on the appropriate mix of land uses will be described in the sub-district guidelines to follow in Chapter 4.

3.1.2.3 Development guidelines

The table below will provide details with regards to the Urban Development spatial planning category and the guidelines pertaining to these.

Table 8: Urban development SPC

SPC : URBAN DEVELOPMENT – EXISTING and FUTURE(NDAs)	
Typologies & District elements	District Development Guidelines
Urban Development - General (All categories)	<ol style="list-style-type: none"> 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 (tables 5 and 7). 3. Support the incremental intensification 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. In this regard the provisions of the approved Densification Policy also apply. 4. Consider the existing character and heritage areas of significance (as may be reflected in detailed policies) as an informant to development proposals. 5. Encourage resource efficient design and promote carbon neutral buildings and precincts in alignment with the Urban Design Policy. 6. Promote an appropriate interface between mixed-use areas and adjacent spatial designations (such as low-density residential, agricultural, critical natural assets, public open spaces, etc.) through the use of sensitive design as informed by local level guidance and spatial development plans where applicable. 7. Encourage the provision of basic services, amenities and design considerations to support informal economic activity and to reduce negative externalities associated with unregulated business activity. This includes hard and soft landscaping, sufficiently wide pavements to accommodate trading space in high footfall areas, structures as context-appropriate, storage facilities, ablution facilities, waste collection/recycling, streetlights, water and electricity connections. This applies to all areas, but will be most relevant in high-volume pedestrian areas such as nodes, transport interchanges, civic precincts, destination places and other busy places. 8. Support the design of public space to create multi-functional internal public squares and linear spaces that can accommodate informal trading. These should be in areas demarcated for trading, in line with the provisions of the CoCT Informal Trading Bylaw. 9. Encourage the design of new developments and commercial centres to accommodate space for markets and less formal businesses in central and high footfall parts of the development.

	<ol style="list-style-type: none"> 10. Facilitate local economic development in townships by encouraging flexible land use rights along development routes and in nodes. This includes taking a flexible approach to home-based enterprises on residential zoned properties and developing overlay zones to specify the necessary rights where required. 11. Support flexibility of land use rights on residential properties along development routes to promote township home-based enterprises to facilitate local economic development. 12. Support urban agriculture uses on the following land: (i) underutilised public land within or on the outskirts of housing development (ii) housing development land which will not be used in the short term. Urban agriculture uses include allotment areas, community gardens and small-scale farming. 13. Support the establishment of urban agriculture in townships to grow township- based food markets.
RESIDENTIAL DEVELOPMENT	
Existing Residential Development	<ol style="list-style-type: none"> 1. Promote the regeneration and refurbishment of well-located underutilised buildings for affordable housing where appropriate; ensuring sufficient provision of supporting amenities in line with requirements for provision of associated social facilities and recreational spaces. 2. Residential units should be designed to support future economic activity (home occupation) as well as accommodate 2nd and 3rd dwellings on site, especially in state subsidized housing programs. 3. Encourage the provision of adequate service ratios needed to support incremental densification. 4. Support the incremental upgrading and formalisation of areas where informal units are widely prevalent.
New Development Areas	<p>General (all residential markets types)</p> <ol style="list-style-type: none"> 5. In general, support the development of new residential areas at higher densities than those which exist in the surrounding locations, but with due regard to appropriate transition to surrounding areas, inter alia, the principle of socio-economic gradient, interface with existing development areas, impact on the urban character, heritage and biodiversity value of areas of significance 6. Support the implementation of new development areas subject to infrastructure availability and in line with the requirements for provision of associated social facilities and recreational spaces. 7. Promote the development of affordable housing by the private sector through the implementation of the principle of inclusionary housing development (a principle to be unpacked in the Inclusionary Housing Policy that is underway) and through the implementation of the IRDP where applicable. 8. Ensure the development of socially sustainable communities where the immediate needs of the residents are met within approximately 800m from where they live or proximity to public transport. 9. Encourage development plans for new development and infill areas to set aside sites for POS, commercial and non-residential including supporting community uses within the new settlement.

10. When considering the scale and location of NDA's consider the location of the property within the urban network and the scale of development that could be developed by the private sector. Processes must be put in place to ensure that these sites are allocated or released to the market within a reasonable time frame to limit the risk of unlawful land occupation.

Subsidised and Partially Subsidised

11. Support the development of high density, affordable rental housing (social housing) within in the Urban Inner Core (MSDF 2018) as the City's priority and preferred Restructuring Zone.
12. Encourage and support Community Residential Units (CRUs) e.g. hostel redevelopment with increased infrastructure capacity and family appropriate sized units.
13. Encourage and support the delivery of affordable housing (GAP and/or Social Housing (or any other appropriate housing typology) within areas of focused public sector investment; NDA's, PSHSDAs, Restructuring Zones and Development Corridors and Urban Nodes, Development Focus Areas (DFAs) Urban Support Areas (USAs) and areas in need of local area planning (refer to Volume III; Implementation Plan).
14. To achieve maximum densities on limited land, promote and ensure new formal City provided housing structures comprises of, where possible, semi-detached single-storey (for the elderly and disabled), double storey units and/or 2-4 storey walk-ups with a positive interface with the character of the area.
15. State subsidised housing programmes should include innovative and alternative typologies and design to support the City's densification and sustainability targets.

Mixed-Market

16. Prioritise development that allows for area wide settlement planning, a range of housing typologies and prices, and mixed use developments, which promotes diversification of human settlement tenure (including market-driven, gap, social housing, and subsidised human settlements).
17. Promote and support high-density mixed residential typology options for the affordable (gap) market (inclusionary housing, FLISP, incremental housing, additional housing rental stock and social housing) in all areas of mixed-use intensification and diversification associated with identified urban nodes, development corridors and development focus areas. Promote incremental growth by supporting micro developers for the development of small-scale rental units (backyard dwellings) as an additional use within the SR2: Incremental Housing Zone (MBPL 2019). These unit plans should adhere to the City's menu of proto typical building plans (to be developed) and approved in terms of the National Building Regulations.
18. Prioritise affordable housing (both rental and ownership) in areas of economic potential in district/local nodes, civic precincts and development corridors that achieve maximum densities.
19. Promote and prioritise development of appropriately diversified densities of affordable housing on State/City owned land.
20. Promote the development of affordable housing by the private sector through the implementation of the principle of inclusionary housing development.
21. Mixed-market developments should promote integration through the use of tenure blind design.

<p>Informal Settlements (and TRAs) E.g.:</p> <ul style="list-style-type: none"> • Blikkiesdorp 	<ol style="list-style-type: none"> 22. Support the incremental upgrading and formalization of existing informal settlements that are identified as appropriate to remain as urban areas according to the criteria for categorisation of informal settlements (see Annexure 6). 23. Support development application for the provision of basic infrastructure services in informal settlements (electricity, water & sanitation and accessibility routes). Informal settlement upgrading must account for greater service ratios allowing for increased taps and sanitation sites in a re-blocking project (as confirmed by the COVID-19 pandemic). 24. Support the City's commitment towards addressing emergency housing need and the mitigation of unlawful land occupation by prioritising development on land identified in the City's vacant land register. 25. Prevent expansion of informal settlements into identified precautionary areas (e.g. flood prone and veldfire risk areas), sensitive environmental areas such as high visual impact areas or biodiversity network areas (usually identified by the urban development edge in this district), or high value agricultural and heritage areas. 26. Support and prioritise the relocation of informal settlement situated in areas of high environmental and high health risk, and ensure that the alternative site meets the health and safety requirements of a sustainable human settlements. 27. To create sustainable human settlements, support the re-blocking process from the outset to include; access to connecting roads and access for emergency services, walking routes and NMT, well-lit public spaces (POS) and social facility areas, and the use of green infrastructure to support climate change adaptation. 28. Support in-situ upgrading of informal settlements where possible and deliver urban house typologies to achieve higher densities to minimise relocations. 29. Support the City's goals to transform informal settlements by promoting micro-developers. 30. Support suitable temporary land uses where informal settlements have been relocated to prevent resettlement of informal dwellers.
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NON-RESIDENTIAL DEVELOPMENT

<p>Industrial: Existing and New Development Areas E.g.:</p> <ul style="list-style-type: none"> • Sacks Circle • Parow • Stikland • Elsie's Station • Airport Industria • Epping 2 • Kuilsriver Industria • King Air Industria 	<ol style="list-style-type: none"> 1. General industrial areas should be supported in industrial designated areas and allowances should be as per the Municipal Planning By-Law. 2. Support the prioritisation of public- private sector investment in identified growth areas within the industrial nodes, ports and primary freight infrastructure 3. Provide incentives to encourage appropriate industrial development close to areas of socio-economic need. 4. Due to particular requirements for road and waste infrastructure associated with industrial zoned land, these (industrial areas) should generally be reserved to optimise this infrastructure and mitigate potential negative impacts. 5. Allowance could be made for limited forms of non-industrial activity that are ancillary to the permitted uses. The allowances should not compromise the general use of the areas zoned for Industry purposes. 6. Where proposed new industrial areas are surrounded by dense residential development, consideration has to be given to the social, health and safety impacts of proposed industries. 7. Facilitate industrial and other commercial development around the airport to take advantage of the competitive advantage and economic, freight and logistical benefits related to the airport. 8. Allowances should be permitted, where a greater mix of business activities, can be tolerated and where the mix of activities does
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	<p>not negatively impact on the competitive advantage of the industrial activities in the area. These areas include sections of Voortrekker Corridor between Voortrekker Road and the Railway line.</p> <ol style="list-style-type: none"> 9. No further residential development and related development should be considered within close proximity to CISCO in Kuilsriver, 10. No activity or use which includes the on- site storage (or management) of hazardous substances shall be permitted without an approved risk management and prevention plan that has been submitted to, and approved by Council. 11. Promote an appropriate interface between light industrial areas and adjacent residential development through the use of sensitive design and informed by local level guidance and spatial development plans where applicable. <p>Risk Industry</p> <ol style="list-style-type: none"> 12. No inappropriate urban development (i.e. residential, community services and retail) should be permitted within or in close proximity to heavy/ noxious industrial zones, solid waste disposal and wastewater treatment sites and transfer sites 13. Existing developments in the above areas may require mitigation measures and limits on the further enhancement of development rights. 14. These areas should be reserved for noxious trade, and risk activities. Consent for other uses outside of this zoning should be discouraged and / or take into account the potential negative impacts.
MIXED USE	
<p>Mixed Use Intensification Areas and Mixed Use New Development Areas</p> <p>E.g.:</p> <ul style="list-style-type: none"> • Voortrekker Road Corridor • Durban Road corridor <ul style="list-style-type: none"> • Bellville • Kuilsriver • Delft 	<ol style="list-style-type: none"> 1. Generally, support high-density mixed residential typologies, subject to any local guidelines, bulk services and transport infrastructure availability. 2. Encourage greater land use intensification of an appropriate combination of land uses including Office & Retail; Business & Commercial; Institutional & Social facilities and High density residential development along identified development corridors, urban nodes, stations and transport interchanges, especially where opportunities for commercial and other employment-generating land uses exist. 3. Promote an appropriate interface between these mixed-use areas and adjacent other spatial designations (such as low-density residential, agricultural, critical natural assets, public open spaces, etc.) through the use of sensitive design and informed by local level plans and guidance, where applicable.

3.1.3 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 uses 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 and form).

Table 9: Utility service infrastructure installations and networks SPC

Precautionary areas and utility service infrastructure installations	District elements	District development guidelines
Noise Exclusion zones	<ul style="list-style-type: none"> • CTIA noise cones (2025 ultimate scenario) • Airport obstacle limitation surfaces (AOLS) 	<ol style="list-style-type: none"> 1. Residential uses are not recommended below the 65 dBA noise contour zone of the CTIA (or any other airport) planned primary runway, which is to be re-aligned, as well as the planned secondary runway. No new residential developments should be encouraged within the affected areas without noise mitigation measures in place. Noise zones indicated, are not fixed and are subject to future refinement. 2. Non-residential (industrial and commercial) uses may be accommodated above the 65dBA noise contour, provided that mitigating measures against the noise pollution are put in place. 3. The AOLS limit building heights of developments located in proximity to the airport flight paths. These developments are subject to comment from the South African Civil Aviation Authority.
Risk Installations e.g. Landfill sites and tank farms	<ul style="list-style-type: none"> • Bellville South • De Grendel • PetroSA Tank Farm 	<ol style="list-style-type: none"> 4. Environmental conditions related to these installations should be monitored to assess the need for appropriate buffer areas around risk activities/installations.
Waste Water Treatment Works (WWTW)	<ul style="list-style-type: none"> • Potsdam WWTW • Bellville WWTW 	<ol style="list-style-type: none"> 1. Support the re-use of water with the highest potential, in areas close to WWTW. 2. No permanent activities or structure to be approved within the prescribed (as per EIA approval) buffer area around WWTW except, for the designated infrastructure and bulk services activities/structures.
Cemeteries	<p>Cemeteries in the district are found in:</p> <ul style="list-style-type: none"> • Stikland(Strand Str) • Belhar(Robert Sobukwe Rd) • Delft (Symphony Way) • Kuilsriver(Van Riebeeck Rd) 	<ol style="list-style-type: none"> 1. Support the continued use of cemeteries, for this purpose. 2. Identify and support the establishment of other interment options to supplement or compliment the traditional in-ground burial. Promote combining these with other activities, e.g. parks and gardens in order to promote its safe usage. 3. Prioritise the identification of additional cemetery development in the short-medium term, in addition to cater for urban growth in the district. This should take cognisance of the health regulations in this regard.

Broadband /IT/WiFi cabling	<p>All areas – but primarily the following:</p> <ul style="list-style-type: none"> • All nodes • All development corridors 	<ol style="list-style-type: none"> 1. In all development, support the continued roll-out of the City's Broadband Project by, expanding the City's optic fibre infrastructure. 2. The above needs to also look at including future free provision of broadband fibre into each and every business area and nodes (as part of transport infrastructure investment). In support of the City's CTOD (Comprehensive Transport Orientated Development) objective, this should be prioritised to business areas in the peripheral city and areas furthest from primary urban opportunity areas.
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3.2 Guidelines for transport infrastructure and route designations

The relationship between land use and accessibility is a fundamental informant to urban development. Higher levels of urban intensity generally support higher levels of urban opportunities, and also urban efficiencies. In turn, areas of highest accessibility to urban opportunities should be those of highest urban intensity.

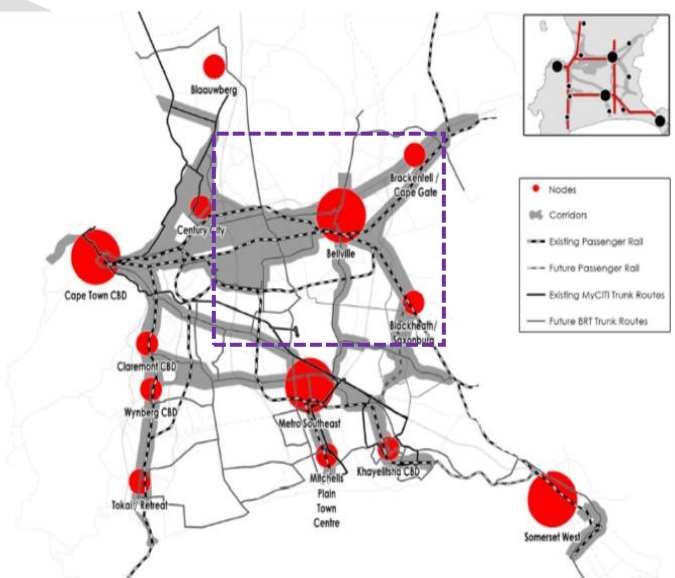
Transport infrastructure is key to supporting accessibility to opportunities, but are also dependent on sufficient development thresholds for efficiency, and is therefore central to the relationship between land use and accessibility.

Key overall objectives in relation to movement and development are:

- Making a more 'walkable city'.
- Ensuring all roads, except freeways, are as much for people as they are for vehicles.
- Reducing average household transport costs.
- Reducing the city's overall carbon footprint.
- Optimising development and movement opportunities.

In alignment with the CTMSDF, the Tygerberg District SDF utilises a transport route designation relating to desired land use functionality. This comprises a mix of mobility and accessibility infrastructure based on:

- non-motorised transport (NMT) within and between neighbourhoods.
- high frequency and volume public-transport-orientated mobility along development routes and railways made cost-effective by high intensity development thresholds,
- higher mobility connectors linking more peripheral urban areas and nodes, and
- high mobility freeways linking from within the district to other parts of the city and neighbouring towns and regions.



Note:

- These route designations do not replace the City's Hierarchical Road Network Classification system, nor is it intended to run in parallel as a duplicate classification system. The primary objective of this spatial planning route designation is to guide the appropriate land use and form along different types of routes.
- Road-based public transport services and routes (e.g. BRT and taxis) are not designated on the SDF maps.* However, public transport, and its frequency and capacity, should align closely with development corridors (and the associated development routes) as well as other important routes (e.g. main connectors).

* Public transport routes are mapped in the Integrated Public Transport Network Plan (IPTN).

Table 10: Transport designations

SDF Route Categories	District Elements	District-Wide Development Guidelines
General	All routes	<ol style="list-style-type: none"> Promote public transport and NMT by supporting the development of safer streets throughout the district, but especially along key routes serving schools, colleges and community facilities, as a means to reduce peak-hour traffic congestion and improve urban living. This should include ensuring improved surveillance from adjacent buildings (re- building setbacks, height, orientation, and visually permeable property boundaries), pedestrian-friendly focused road intersections, 'drop and ride' areas, safety officers along key routes at peak periods along key routes, and creativeness with street trading / restaurant street seating, etc with regard to the design and construction materials.
Freeways & Expressways	Freeways <ul style="list-style-type: none"> • N1 • N7 • N2 • R300 	<ol style="list-style-type: none"> The mobility role of these routes should not be compromised. In response to the attractiveness of freeway access, especially for freight movement, intensification of existing commercial and light/service industrial development near freeway interchanges should be supported. The development guidelines for existing proclaimed /approved scenic routes should be considered generally for application along all freeways / expressways in the district. Support creative development solutions that assist with the promotion of long-haul metro public transport along freeways and expressways (e.g. optimising excess parking at shopping malls, sports stadia, etc., as park & ride facilities; integrating with local public transport and NMT).
Rail	E.g.: <ul style="list-style-type: none"> • Monte Vista line • Bellville-Strand line • Bellville-Kraaifontein line (through Stikland) • Lavistown line • Khayelitsha – Mitchells Plain line (through Netreg station) <u>Future potential railway lines:</u> Blue Downs line;	<ol style="list-style-type: none"> Ensure existing passenger rail lines for public transport right of way are retained, and also retain the opportunity for new rail links that are planned. This includes the Blue Downs link between Kuilsriver to Khayelitsha. Support medium and high density residential densification within $\pm 400m$ of all stations (including rail stations within residential areas), where and as appropriate. Furthermore, should a station be located within a nodal area, medium and high density residential densification within $\pm 800m$ should be supported. Encourage high intensity mixed use development (residential and commercial) around all stations and within urban nodes such as Bellville, Elsies, Parow and Kuilsriver, subject to other development guidelines as per the related sections. Ensure that all new development around stations results in improved NMT and safety and security of streets and public areas. Retain opportunities for park and ride (including shared parking opportunities) linked to commercial centres, stations, etc., subject to local assessments and transport planning. Encourage management partnerships for daytime public commuter parking and after-hours private local residential parking top-up capacity. Adopt a precautionary approach with regard to the enhancement of development rights within station areas that are subject to visual impact conditions (heritage HPOZs). Support development above railway lines, where appropriate (e.g. at stations), to reduce barrier effects, integrate areas, and leverage economic development and promote development intensification opportunity.

	Cape Town-Airport rail line	
<p>Development Routes</p> <p>(The term 'Development Route' refers to the actual road or street and directly abutting / adjacent urban properties)</p> <p>(see section 3.3.1: Development Corridors for guidelines for areas further away from the development route)</p>	<p>Higher order (within identified MSDF corridors and with IRT Trunk routes)</p> <ul style="list-style-type: none"> • Voortrekker / Strand/ Van Riebeeck Road • Durban Road <p>Lower order (high frequency public transport routes)</p> <ul style="list-style-type: none"> • Delft Main Rd /Belhar Rd • Hugo Str/Halt Rd/Elsies River Halt Road • Vasco Boulevard • Old Paarl Rd • Connaught Road 	<ol style="list-style-type: none"> 1. Support the functioning of these routes as 'spines' of their respective development corridors through encouraging high development intensification and densification and high-frequency high-volume public transport. 2. In general, highest intensification of land uses should occur directly adjacent to or in closest proximity to the routes (e.g. first block). This must, however, consider the nature of access roads, additional traffic impacts, and parking requirements, and be subject to other policy guidelines where relevant. 3. Areas between urban nodes, civic clusters, development corridors or (the extent of) existing commercial areas should generally be restricted to residential development only. 4. Ensure on-going alignment between relevant departments in ensuring the appropriate location of major public transport stations/stops along these development routes, and the consistency of design guidelines for incorporation into road reserve development and adjacent property development proposals. 5. Any future redevelopment of these roads, associated pavement areas, and land uses fronting these, should take place with the planned IRT, other public transport, and NMT infrastructure improvements in mind, and especially at BRT and taxi stations and stops. 6. Civic upgrades, landscaping and NMT provision should be a key consideration and be made as and where appropriate to ensure quality streetscapes. Special focus should be on creating high quality attraction areas at strategic locations (e.g. around PTIs, at public squares, encouraging private re-development to create semi-public parts of their sites for eateries/coffee shops etc). 7. In general, development should front onto these roads, and active street interfaces should be encouraged and large extents of blank wall avoided by encouraging visually permeable property boundaries, pedestrian-friendly/focused active streets. 8. Where open spaces intersect with these roads, the former should be retained and enhanced in order to develop the 'green' network, and provide open space relief in intensively developed areas. 9. Mitigation of the impact of the road's mobility function (including design efforts to slow traffic) may be appropriate at high intensity, mixed use nodal areas where frequent pedestrian movement across the street is necessary. Therefore, provide / allow for road access in urban nodal areas according to development needs rather than road classification requirements. Routes through residential areas between these nodes should generally be mobility orientated, with appropriate street and pavement design and adjacent development and landscaping, and adherence to the boundary walls and fences policy, etc. to ensure NMT safety and security. 10. Ensure the enhancement and protection of scenic qualities and heritage resources along these routes where necessary, especially where these have been recognised and protected through policy and legislation. 11. Reinforce the functioning of these roads as public transport routes through encouraging future highest order facilities along high order routes, and local community service provision along lower order routes.

		<p>12. Direct access onto these streets from abutting properties is generally supported, but should be consolidated where possible and appropriate.</p> <p>13. Direct access perpendicular parking across the erf frontage should not be permitted along these routes.</p>
Connector routes	<ul style="list-style-type: none"> • Giel Basson (north of N1)/Jan Van Riebeeck/35th Avenue/Stellenbosch Arterial • Mike Pienaar Road • Plattekloof Road • Robert Sobukwe Road • La Belle Road • Avonwood/Francois Van Zyl Drive • Frans Conradie Drive • Vahalla Avenue • Symphony Way • De La Rey Road • The future Okavango Bypass Route • Bottelary Road • Polkadraai Road • Amandel • Saxdowne Road • Langverwacht / Zevenzicht Link Road 	<ol style="list-style-type: none"> 1. These routes should continue to perform primarily a mobility function. Direct access onto these routes from abutting properties should not be encouraged. Instead, limited access, with a focus on high access nodal points, should be permitted, and where necessary service roads should be developed. 2. Where appropriate, intensification of development should be promoted to support line haul public transport, but this should be concentrated at identified nodal points. Furthermore, these should be limited between and especially in areas not close to development corridor main roads. The process of land use intensification along these routes must consider the nature of access roads, additional traffic impacts, and parking requirements. 3. The mix of predominantly residential function and character but interspersed with small mixed use areas, as well as a mix of mobility and activity functions should remain and generally be contained in their current forms. 4. 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 and fences policy. 5. The role of these routes as significant community service public transport routes should be reinforced through civic upgrades, landscaping and NMT provision should be made as and where appropriate to ensure quality streetscapes. 6. Development along connector routes which are also indicated as scenic routes, should take related guidelines into account (see scenic routes section below). 7. In support of the City's CTOD (Comprehensive Transport Orientated Development), the objective should be to consider non-residential development in identified business areas (nodes and civic clusters where appropriate), in peripheral under-served areas of the district furthest from primary urban opportunity areas (e.g. Delft; Kalkfontein) in order to reduce congestion (and improve bi-directional flow) on key connector routes. 8. Appropriate lower order roads linking neighbourhoods and opportunity areas (such as parks and commercial areas) should be identified for prioritised NMT treatment. 9. For development guidance along connector routes which are also approved scenic routes refer to related guidelines in the environment section 3.1.1.

NMT routes	Higher order NMT (‘destination’ closed streets, promenades, cycle routes that are high attracters from across the metro)	<ol style="list-style-type: none"> 1. Any nearby development should contribute to the enhancement of these routes (including associated management) where possible. Support public (and/or private) investment of these metro attraction routes as key recreation and tourism destinations. 2. Plan for and implement/facilitate links between these routes and adjacent / access roads, public transport and parking to support pedestrian access to and utilisation along the NMT routes.
	Lower order NMT District-attractor walkways –around major parks High (sub-metro) attractor cycle routes E.g.: Edgemead Drive Elsieskraal green belt	<ol style="list-style-type: none"> 3. All transport routes should aim to be NMT-friendly (with a zero death objective), and the roadways themselves, as well as adjacent pavements (or road reserve areas), property parking areas and associated pedestrian access areas should be planned and developed to this end. 4. Plan for increasing micro-mobility, including more pedestrian, more bicycle and motorised bicycle trips etc., to support greater localisation (less need for longer intra and inter-district trips) and walkability associated with more integrated urban development and reducing the city’s overall carbon footprint. 5. Planned NMT links should be steadily formalised/upgraded to provide for, not only safer movement but, an enhanced NMT experience and better quality urban environments. Development and management partnerships should be encouraged where possible. 6. Particular focus should be on improved pathways around (or along) district public open space areas (as significant amenity attractions), including Jan Burger Park. Again, development and management partnerships, should be encouraged where possible. 7. A key focus in areas with significant development informality must be on ensuring that planned NMT routes are not encroached upon. 8. Realising uninterrupted public access along river corridors and green belts should be a core long term objective. This can be supported whenever river corridor upgrades are undertaken (e.g. de-canalisation) or where in critical areas trade-offs with private landowners to secure land in public ownership can occur.
Airports & other freight hubs <i>(include only where relevant)</i>	Airports / Aerodromes CTIA	<ol style="list-style-type: none"> 1. Encourage and support the development of the airport as the centre as an ‘aero-hub’. Under-utilised land areas and facilities are central to this, where leasing or sharing arrangements etc. are possible, should be promoted and encouraged.
	Freight Break-of-Bulk & Major Storage (e.g. Belcon, etc.)	<ol style="list-style-type: none"> 2. Adopt a precautionary approach to the alienation of land associated with freight rail routes in major junctions / break of bulk areas in the city. 3. Encourage development of inter-dependent associated economic activities and the maximisation of economic opportunity within and in immediate proximity around these areas as appropriate. Ensure a major focus on safe economic precincts to attract property and business sectors.

		4. Ensure major storage, break of bulk etc. facilities do not negatively impact on traffic, air quality and surrounding development areas, especially in high visual impact areas.
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3.3 Guidelines related to 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.

3.3.1 Corridors

3.3.1.1 Development corridors

Development corridors are broadly defined as urban areas of higher-intensity (i.e. denser and more diverse) development (than elsewhere in the city generally) extending outwards on either side of development routes. The intensity of development is (should be) generally highest close to the development route and decreases in intensity with distance away from it. Development corridors thus function as integrated 'land use – movement' systems to maximise economic and social opportunity and access, and facilitate greater walkability and ease of movement for private and public transport users.

Higher order development corridors (as identified in the MSDF) generally link the largest urban nodes and include not only high frequency but high volume public transport, as well as other parallel / supporting transport routes (including rail, connectors and freeways).

By comparison the distinguishing feature of lower order development corridors is that (while they are higher intensity urban extents, with high frequency public transport, along development routes) they are not associated with a high volume public transport system or with other parallel / supporting transport routes (such as rail, connectors or freeways).

Table 11: Development Corridor guidelines

Designation: Development Corridors (see route designations section for Development Route)	
District Elements	District-Wide Development Guidelines
<p>Higher order Examples:</p> <ul style="list-style-type: none"> Voortrekker/ Strand/ Van Riebeeck (Kuilsvier) Symphony Way(mobility) <p>Lower order Examples:</p> <ul style="list-style-type: none"> Hugo Street/ Halt Road & Elsie's River Halt Road Old Paarl Road 	<p>NOTE 1: Refer to section 3.3.2 for land use intensification (density and diversity) guidelines applicable to Urban Nodes which is also applicable to those nodes within development corridors.</p> <ol style="list-style-type: none"> Support higher intensity development within development corridors than in surrounding urban areas. In general, the highest concentration of land use intensification should occur in nodal areas and adjacent to development routes (i.e. properties abutting the corridor spine). Where a residential component is proposed, Medium – High densities should be supported within the primary corridor area (i.e. within 400m of the development route/+_5 min walk). However, where a different approach is required due to the local context more detail will be included in the relevant sub-district guidelines.

<ul style="list-style-type: none"> • Vasco Boulevard (partially) • Delft Main/ Belhar Road Connaught Road 	<ol style="list-style-type: none"> 3. Medium-density residential development should be promoted within the secondary corridor area (i.e between 400–800 m of the development route/ ±10 min walk). However, these are not definitive extents and should be considered a guide dependent on local area circumstances. 4. Ensure appropriate interfaces are created where proposed residential development is at odds with existing development in the area (e.g. where more than three-storey development is being considered on properties adjacent to / within existing single storey residential areas – irrespective of the existing zoning). Site circumstances, including shadow effects, development gradient (between proposed and adjacent existing building heights), location (at interface with higher order road vs embedded within residential area), etc. must be considered to determine the appropriateness of proposed development.
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3.3.1.2 Green Corridors

Green corridors provide a range of services to the built and natural environments. They improve biodiversity, enabling species dispersal, limiting animal and plant population isolation due to habitat fragmentation, and increasing habitat for species. Green corridors can assist with climate change adaptation, by reducing the urban heat island effect, improving urban ventilation, assisting in flood prevention and enabling water infiltration. They have a positive effect on human health, and improve liveability in the city, by providing spaces for recreation, social engagement and community connection.

Two green corridor concepts are presented. 'Major Green Corridors' are represented by a thick solid green line. Solid line corridors indicate connections through existing open green spaces and conserved areas. 'Flexible Green Corridors' indicate a where a link can be created (through new development/ redevelopment)/maintained through various options.

Corridors identified are notional and their specific alignment may be defined through local area planning.

Table 122: Green corridor guidelines

Green Corridors	Development Guidelines
<p>Green Corridors- Major Green Corridors Solid line corridors follow existing open green corridor opportunities and conserved areas as well as non-motorised transport links that provide access to open space amenity areas in character areas.</p>	<ol style="list-style-type: none"> 1. Encourage new development to promote opportunities for linkages between identified structuring open spaces in developed areas through e.g. buildings facing onto green spaces, pedestrian or NMT walkways, location of stormwater channels etcetera. 2. Enhance the green infrastructure provisions of linkages between open spaces through developing connections through public space. 3. Landscaping of developments should consider the enhancement of corridors, and the suitable vegetation types should be considered with endemic vegetation preferred in corridors linking biodiversity areas. 4. Promote the development of NMT networks to align with

<p>(sub-district maps)</p> <p>Examples:</p> <ul style="list-style-type: none"> • Link between the Kuilsriver & Bottelary river systems and the urban areas • Link between urban areas and Tygerberg Nature Reserve 	<p>green corridors to create multi-functional spaces.</p> <ol style="list-style-type: none"> 5. Where applicable, encourage restoration of canalized river segments and promote landscaping on canal edges. 6. Protect tree lined corridors and expand planting to support the movement of species where opportunities arise
<p>Flexible Green Corridors</p> <p>These are connections that represent options for potential linkages and are conceptual in nature. These connections can become major corridors over time as their delineation is clarified.</p>	<ol style="list-style-type: none"> 1. In redevelopments along flexible corridors landscaping and protection of smaller green space assets should be encouraged. 2. Encourage the integration of green corridors into NMT improvement opportunities. 3. Identify land that could be made available for the establishment of corridors e.g along riverine environments and parks.

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3.3.2 Urban nodes

Nodes can be defined as a **clustering of higher intensity** (i.e. diversity and density) land uses that are located and **concentrated** at points of maximum accessibility (either through public and/or private transport), exposure, convenience and opportunity. The role and function that a node fulfils in terms of its local/district/metropolitan context would determine the designation in terms of its hierarchy/scale.

Emerging nodes would refer to the above definition of concentration points that are still in the process of being developed. Development guidelines should support the growth of such nodes.

In cases where different land uses with similar functions are clustered (or in close proximity) e.g. civic facilities including parks, education, health, government services, etcetera it would be classified as a civic cluster.

Table 133: Nodal designations

Designation	Development Guidelines
<p>General</p>	<p>NOTE 1: Refer to section 3.3.1 for land use intensification (density and diversity) guidelines applicable to development corridors which are also applicable to those corridors co-incident with urban nodes.</p> <ol style="list-style-type: none"> 1. Encourage mixed land use intensification in nodal areas with level of intensity guided by the scale of the node as indicated below. 2. Encourage residential intensification and clustering of public services dependant on the scale and local context of the node. 3. Support the development or upgrading of social facilities to be multi-functional to ensure space are being utilised optimally. 4. Support the development of NMT to improve accessibility between nodal areas, public transport routes and public facilities /services. 5. The design of areas in and around PTIs and demarcated informal trading areas should improve opportunities for commercialisation (formal and informal). 6. Support the provision of park and ride facilities (including shared parking opportunities) at stations such as De Grendel and Monte Vista, subject to local needs assessments. 7. Support redevelopment and conversion of areas with underutilised infrastructure to capitalise on existing infrastructure and attract investment. <p>NOTE 2: Land use intensification targets including densities and radii extents for all nodes are considered to be a guideline, and their application should be locally contextualised at the sub-district scale with due consideration given to the guidelines listed below.</p>
<p>Metropolitan node Examples: Bellville</p>	<ol style="list-style-type: none"> 1. Encourage mixed land use intensification within a radius of approximately 2,5km as a guideline - refer to NOTE 2 above 2. Encourage a mix of commercial, high density residential with a range of housing typologies including affordable housing, public facilities of higher order (Level 1 civic cluster – refer to Figure 12) and recreation spaces. 3. An average gross density of 75du/ha with a minimum height of 5 storeys should be targeted for new developments which could occur through varying net densities across the area.

	<ol style="list-style-type: none"> 4. Encourage the conversion of functionally obsolete building stock to affordable housing.
<p>District node Examples: N1 City Kuilsriver</p>	<ol style="list-style-type: none"> 1. Encourage mixed land use intensification within a radius of approximately 2km as a guideline - refer to NOTE 2 above. 2. Encourage a mix of land uses including office, retail, medium to high density residential with a range of housing typologies including affordable housing and Levels 2 and 3 civic clusters (refer to Figure 12) community and recreational facilities. 3. An average gross density of 45du/ha and above with a minimum height of 3 - 4 storeys should be targeted for new developments which could occur through varying net densities across the area.
<p>Local node Examples: Delft Belhar/Unibell Parow Station Elsies Station</p>	<ol style="list-style-type: none"> 1. Encourage mixed land use intensification within a radius of approximately 800m as a guideline - refer to NOTE 2 above. 2. Encourage a mix of retail, local offices such as medical surgeries, estate agents, low /medium density residential and Levels 3 – 5 civic clusters (refer to Figure 12) community facilities. 3. Support the integration of medium density residential typologies on vacant and underutilised land in close proximity to public transport access points(NDAs). 4. An average gross density of between 10 - 45du/ha should be targeted for new developments which could occur through varying net densities across the area. 5. Promote micro-enterprises on residential properties at high accessibility nodes and along local development routes which is serviced by public transport such as Delft Main and Hindle Roads.
<p>Neighbourhood node <i>(these would only be indicated at sub-district scale)</i> Examples: Ravensmead Sarepta</p>	<ol style="list-style-type: none"> 1. Encourage a mix of land uses including local shops and services such as medical surgeries and hair salons within a radius of approximately 400m as a guideline - refer to NOTE 2 above. 2. Promote the development/strengthening of Levels 4&5 civic clusters (refer to Figure 12) community facilities in these nodes. Where existing civic clusters are established opportunities for land use intensification should be explored. 3. Encourage a change in land use rights on residential properties at high accessibility points to accommodate micro-enterprises. 4. Promote incremental densification through subdivision of larger properties.

3.3.3 Civic clusters

Civic clusters occur where two or more public facilities or amenities are intentionally co-located within close proximity of one another, usually at points of high accessibility or along the primary structuring routes through the area. These civic clusters serve people living in the area surrounding the node which is referred to as a service catchment. A service catchment varies from a few km for lower order facilities to hundreds of kilometres for higher order facilities depending on the services located at each civic cluster.

The Community Services and Health Infrastructure Plan advocates for the principles of clustering and co-location of facilities and the promotion of integrated precincts. This means that the City concentrates its funding and resources within civic clusters in order to leverage investment and resources, optimize space and facility use, address vandalism and promote safety within civic clusters and support greater efficiency in terms of operation and management. The Infrastructure Plan also advocates for the consolidation and optimization of resources and existing facilities and in order to realize benefits of reduced operation and maintenance costs resources are utilized efficiently and effectively.

A detailed study, led by the Council for Scientific and Industrial Research (CSIR), was undertaken to review the social facility baseline and sufficiency for 2020 and estimate the anticipated facility requirements for 2040. Based on this study a hierarchy of social service nodes (5 levels in total) was developed in accordance with Figure 12 below.

The ranking of these nodes was based on the intensity of the differential role of each node in the city, service catchment population size, range & type of facilities available and an equitable spatial spread of civic clusters at different levels across the city that is required to support efficient and a spatially just distribution of different facility types at acceptable distances. All nodes should be serviced with basic facilities. As the node level moves up from Level 5 (lowest order) to Level 1 (highest), additional facility types are added at each level. Higher level nodes should provide a full range of higher and lower order services but lower nodes only provide lower order services.

A modelling exercise was undertaken and identified civic clusters/nodes indicating both areas of need in order of priority (ranking) at district level and at metro wide scale. This included the type of facilities required in order to meet the needs of the population in 2020 and 2040 taking into account sector specific assumptions, guidelines and standards for facility provision. The details of the prioritisation framework including the ranking and facility development priorities will be further unpacked in Volume 3.

For the purposes of the integrated DSDF and EMF the hierarchy of civic clusters as identified through the forward planning (2040) for community facilities and service points will be incorporated as indicated in Figure 12 and associated with the guidelines in the table below. The civic clusters in the DSDF will be categorised in 3 levels namely regional, community and neighbourhood in order to ensure that the level of services provided are integrated at the appropriate scale. Further details pertaining to the methodology and

classification specifically relating to the study referenced can be obtained in Technical Annexure 8 in Volume 4.

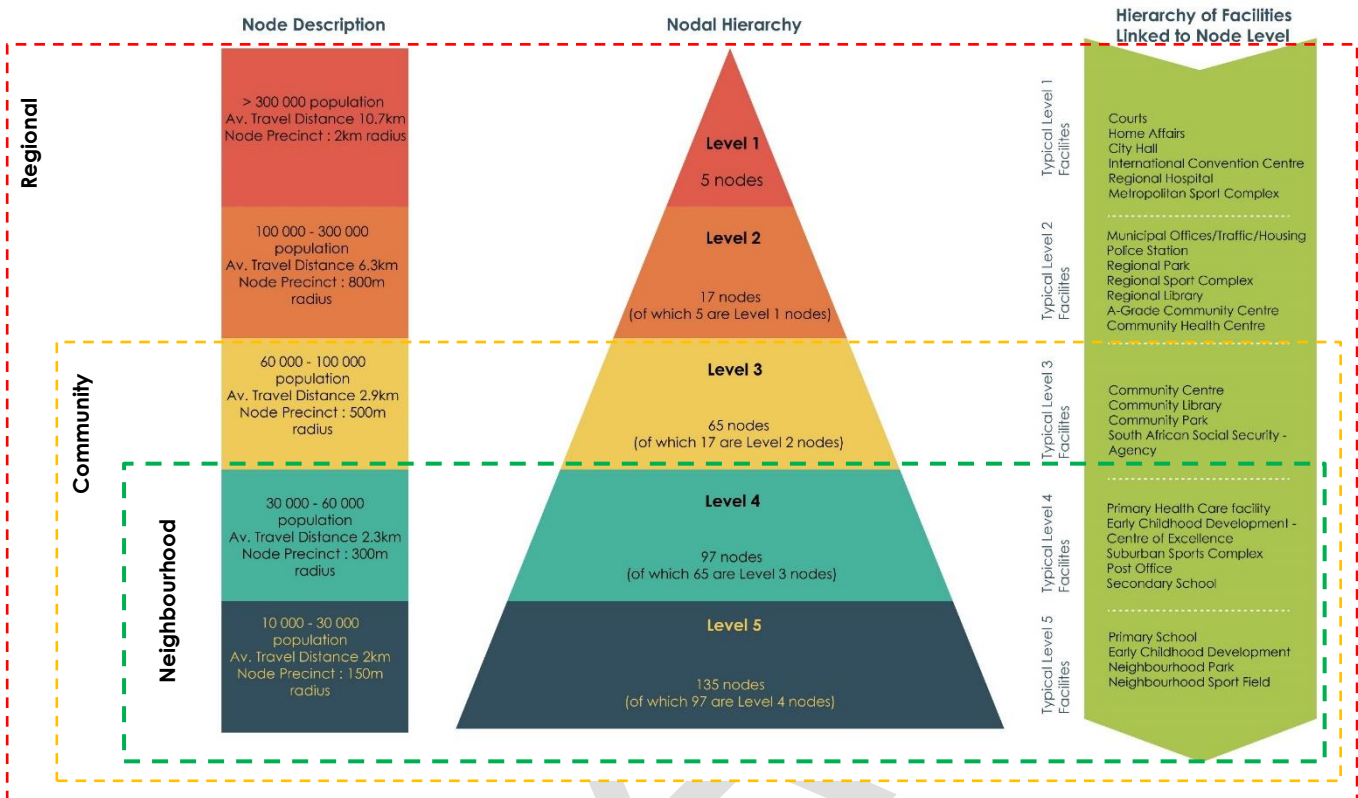


Figure 12: Civic clusters as integrated into DSDF

Table 144: Civic cluster guidelines

Designation	Development Guidelines
General	<ol style="list-style-type: none"> 1. Encourage the optimal use of existing social facilities and clustering to improve access especially for non-motorised transport. 2. Promote the development of multi-functional facilities that could be shared and use space optimally.
Regional civic clusters	<ol style="list-style-type: none"> 3. Include middle and higher order facilities such as home affairs offices, regional sport facilities, district hospitals, municipal offices as well as national and provincial facilities. 4. Promote well established multi-functional clusters in close proximity to public transport and highly accessible locations. 5. Serve a catchment area larger than the immediate district with travel distances up to 15km. 6. The precinct radius ranges between 800m – 2km as a guideline
Community civic clusters	<ol style="list-style-type: none"> 7. Include facilities such as community parks, community centres and libraries which could be clustered with small scale commercial activities. 8. Approximate catchment area of up to 5km. 9. A precinct radius of approximately 500m as a guideline
Neighbourhood civic clusters (sub-district maps)	<ol style="list-style-type: none"> 10. Include localised facilities such as primary health care, schools/ECDs and neighbourhood parks. 11. Approximate catchment area of up to 3km located within walking distance of the communities served. 12. The precinct radius ranges between 150m - 300m as a guideline

3.3.4 Destination places

These are significant landmarks or locations classified as natural, heritage, cultural or coastal destination places. These could form part of the urban nodes as indicated above where it is clustered with a mix of other land uses or can be a landmark on its own.

Table 155: Destination places guidelines

Designation	Development Guidelines
<p>Examples:</p> <ul style="list-style-type: none"> • Tygerberg Nature Reserve(nature), • Cape Flats Conservation Area 	<ol style="list-style-type: none"> 1. Prioritise place making interventions that enhance destinations. 2. Support the protection and enhancement of recreational and tourism opportunities at high visitor attractor destination places. 3. Encourage appropriate development in areas surrounding the destination place and ensure that interfaces are treated sensitively in terms of the City's Urban Design Policy. 4. Support private and public sector investment for the redevelopment and upgrading of identified public open space areas (upgrading landscaping, litter bins, ablution facilities). 5. Promote synergies between the various economic sectors and tourism. Where feasible links can be made between creative industries and tourism, nature and tourism, food/beverage and tourism, etc. through correct zoning, allowing land use activities like restaurants spilling out on the pavement, allow commercial pop-ups and so forth; increasing the scope of land use rights to ensure universal accessible access and infrastructure along routes where synergistic clusters may encourage visitors. 6. Maintain and improve the levels of public accessibility to these areas. Promote and support creating access through public transport and non-motorised transport route to increase the level of accessibility to the destination places. 7. Ensure maintenance of green streetscapes and corridors that link from the Tygerberg Nature Reserve through to the urban context of the district.

3.4 Guidelines for development edges

3.4.1 Urban Development Edge

- The urban development edge is critical to the protection of key peri-urban scenic, biodiversity, and agricultural areas as well as ensuring a more compact, efficient city, and growing the city's recreation and tourism economy.
- The area outside the urban development edge is central to the tourism and recreation economy. with potential for wider economic diversification and growth associated with the unique physical attributes within the municipal and wider city-region area. It is also increasingly important to ensuring reasonable amenity access for the inhabitants of a growing metropolitan city to a large natural and rural peri-urban area and potential non-urban activities therein.
- *However, the medium and long-term integrity of the urban development edge is dependent on the timeous development of identified 'urban infill' New Development Areas (NDAs) as well as appropriate land use intensification of the urban area.*

Aligned with the broad guidance of the MSDF, the Tygerberg District SDF delineates a detailed urban development edge and provides detailed associated development guidelines.

Table 166: Urban development edge guidelines

Elements / Areas	Development Guidelines
All areas beyond the urban development edge.	<ol style="list-style-type: none"> 1. Land beyond the urban development edge should not be considered in general for any urban development normally associated with, and which should be accommodated within, city development. However, application can still be made for uses not accommodated under the Agricultural or Rural zoning in the MPBL, but site- specific circumstances will need to be motivated and argued. Note that financial distress or soils of low agricultural potential will, inter alia, not serve as motivation. Refer to Table 4.2 (section relating to Spatial Planning Category: Discouraged Growth Areas) in the MSDF, clarifying the principles, informants and guidelines relating to development in the Discouraged Growth Areas. 2. In these areas support non-urban development and activities supportive of the recreational and/or tourism economy. However, limit the scale of such development, and restrict any sub-division, to maintain and consolidate the long-term integrity of these areas. Ensure any development is of limited visual impact from all significant roads, neighbours, and wider cultural landscape, with location, scale, form and screening key in this regard.
Urban development inside the urban- development edge abutting natural, agricultural, and rural areas / cultural landscapes.	<ol style="list-style-type: none"> 3. Ensure urban development at the urban development edge interface results in a positive interface (re- building orientation and form, surveillance, boundary wall/fence etc.) with due regard for local considerations (e.g. fauna management, fire-risk, visual impact, slope).
Possible future urban development areas outside the urban development edge.	<ol style="list-style-type: none"> 4. The only possible exceptions to guidelines 1-3 above are: <ul style="list-style-type: none"> • planned future large-scale utilities (which includes renewable energy utilities such as solar farms) which cannot be accommodated inside the urban development edge.

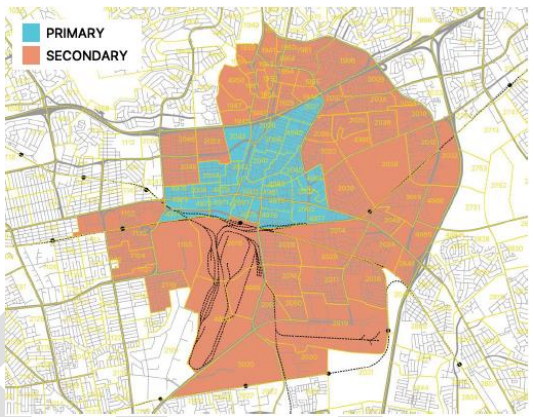
3.4.2 Development Focus Areas

The Urban Inner Core was framed by the conceptual designation of high order nodes and land use intensification corridors and underpinned by the IPTN trunk routes (rail and MyCiti). The delineation of the Urban Inner Core will remain as a backdrop (shading) as the long term goal should continue to focus on achieving the aforesaid objectives. However, for the timeframe of the District Plans and in particular at this scale of planning, the spatial designation of the UIC planning will be narrowed down to areas of 'development focus', i.e. Development Focus Areas (priority) with highest level of accessibility and highest transformative impact, where dedicated funding for planning investigations and or infrastructure capacity and budget is required to facilitate development. This does not imply that other areas cannot be identified as areas of development focus for the duration of the District Plans.

[All the areas referred to above should be prioritised for dedicated planning investigation and or infrastructure capacity and budget in order to enable the appropriate type and form of development proposed in the relevant District Spatial Development Frameworks]. Note that in certain instances the focus may only be on planning investigations in order to determine and or test options/ potential for future development, and should not be construed as giving rise to implementation without due process being followed.

Table 177: Development Focus Areas

Development Focus Area	Site characteristics & Development opportunity	Development Guidelines
1. CTIA and surrounds	CTIA offers opportunity for infill industrial and or mixed use development on the northern boundary, land to be cleared from informal settlements of Malawi Camp & Freedom Farm, as well as towards Symphony Way, west of the proposed residential infill development along Symphony Way	<ol style="list-style-type: none"> 1. Provision should be made as part of development west of Symphony Way precinct for portion of small scale industrial hives to provide access to opportunities for local economic development. 2. Support the development of the second runway and infill industrial/mixed use development within the airport precinct.
2. Broader Bellville CBD Precinct	<p>The Bellville CBD should be regarded as the area stretching from Bellville PTI, to Tyger Valley in the north, inclusive of the US Business School, so-called Galleria and Transnet property, as well as the Elsieskraal Open Space system, Hardekraaltjie, and area along Voortrekker Road to the east to Bellville Civic Centre.</p> <p>The area forms the core of potential in the district for intensification, redevelopment</p>	<ol style="list-style-type: none"> 3. The guidelines provided in the Bellville CBD Catalytic Precinct Project should form the base for consideration of development applications and upgrades to the core area.

	<p>and upgrade. The Bellville CBD Catalytic Precinct Project (draft 2020) forms the base for the redevelopment of the Bellville PTI and immediate surrounds, and provides guidance to the future role and function of inter alia Durban Road (south of N1) as well as the extension of Robert Sobukwe Road as future BRT-trunk route.</p>	<p>4. Further precinct planning is required for the area to the north of Voortrekker Road to address redevelopment between Durban Road and the extended Robert Sobukwe Road as BRT-trunk route, accessibility, potential bulk, interfaces, preferred land use mix.</p> 
<p>3. Parow Station Precinct (area bounded by Tygervallei Street in west, Picton Street in east, Voortrekker Road and De Kock Street, south of rail station)</p>	<p>The area around the Parow station poses potential for upgrade as it is surrounded by underutilized parking areas (7 City owned sites identified, HIA exemption obtained, draft development opportunities developed for more affordable housing), but also poses upgrade challenges along the Station Street Arcade, where urban management is inter alia required.</p>	<ol style="list-style-type: none"> 1. For the 7 City- owned parking areas, draft development frameworks have been developed that provide a guideline for bulk potential for more affordable housing infill. 2. For the Station Street Arcade, a precinct plan is required in order to address urban management issues, informal trading area upgrade, as well as issues such as street lighting, etc. in order to support redevelopment opportunities along the arcade.
<p>4. Elsie's River Industrial area, bounded by Voortrekker Road, Halt Road, Epping Avenue and Jan van Riebeeck Avenue.</p>	<p>The industrial area's economic performance over the last years has deteriorated, and due to the location around the Elsie's River station offers opportunity for redevelopment for mixed- use</p>	<ol style="list-style-type: none"> 1. Support the re-development for mixed land uses including residential, commercial and service industrial uses. 2. Encourage the inclusion of more affordable and higher density residential above the ground floor. Ensure that provision is made for recreation space in such instances. Appropriate interfaces to be introduced between existing industrial development and new housing developments to provide for sufficient mitigation to alleviate potential conflict between land uses. 3. No development of noxious industries to be allowed.

5. De Grendel station precinct	The area around the N1 City centre(including the areas from the Parow Golf Course up to and including Tygerdal solid waste drop-off site) is located in close proximity to 2 rail stations and offers opportunity for mixed use development intensification.	1. Support a pre- feasibility investigation to consider and test all options for intensification/ optimisation of land use.
6. Kuilsriver station precinct	The area around the Kuilsriver station poses potential for upgrade/redevelopment as it is surrounded by a number of vacant and underutilised portions of land of which many are in ownership of the City.	<ol style="list-style-type: none"> 1. Support mixed land uses including residential, commercial, community facilities and light industrial uses. 2. Encourage the provision of a range of housing typologies and higher densities.

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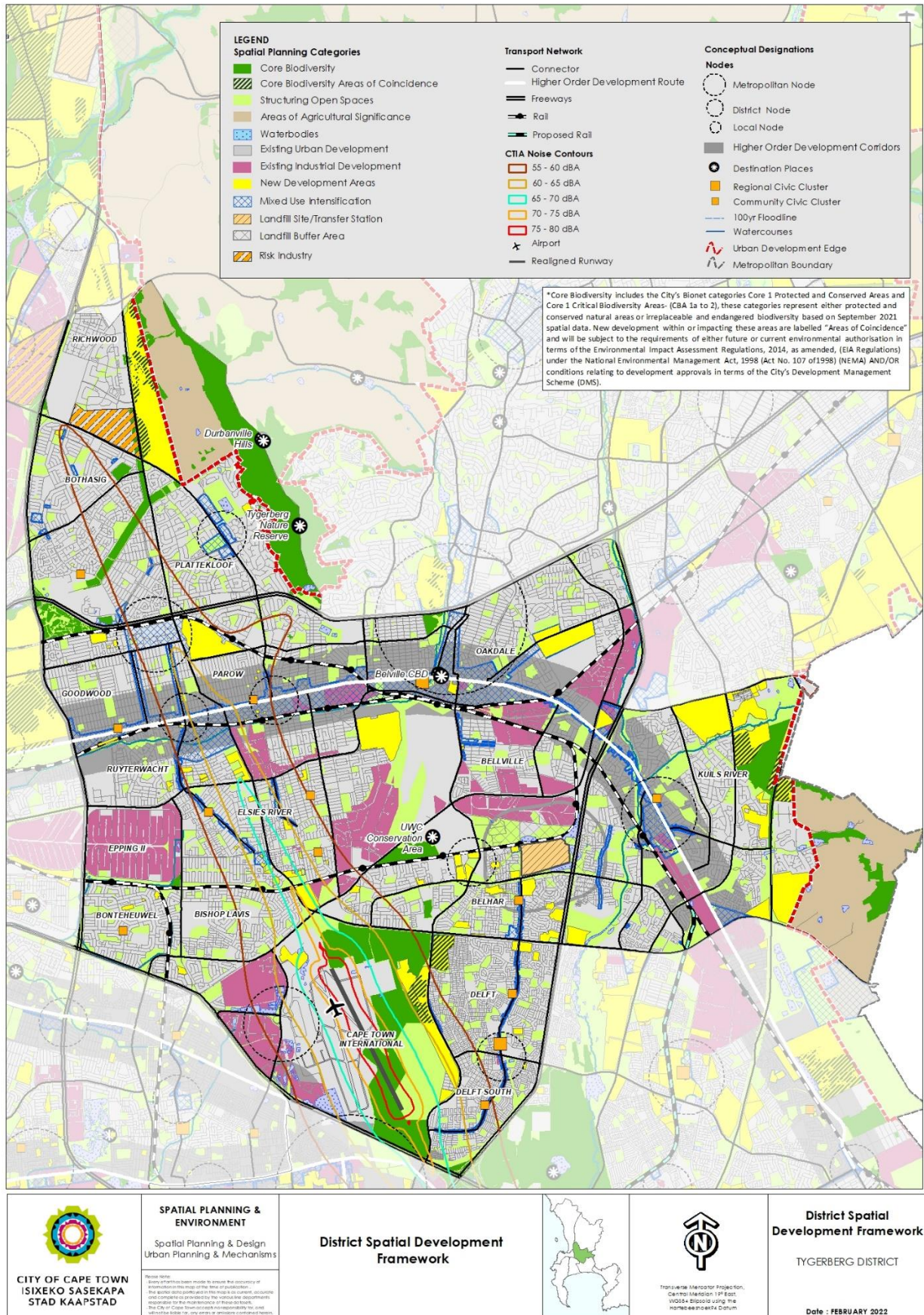


Figure 13: Tygerberg DSDF Plan

4 SUB-DISTRICT DEVELOPMENT GUIDELINES

As indicated in Chapter 1 the purpose of the district plan is to provide broad guidance for land use, and environmental, decision-making across the district. However, the desired spatial vision may vary in relation to the particular needs across the district. Thus, land use guidance in support of achieving this variable vision needs to be reflective of local area character, and development capacity and desirability.

Therefore the purpose of this section is to provide guidance for land use decision-making on a more localised scale, hereafter referred to as "sub-districts".

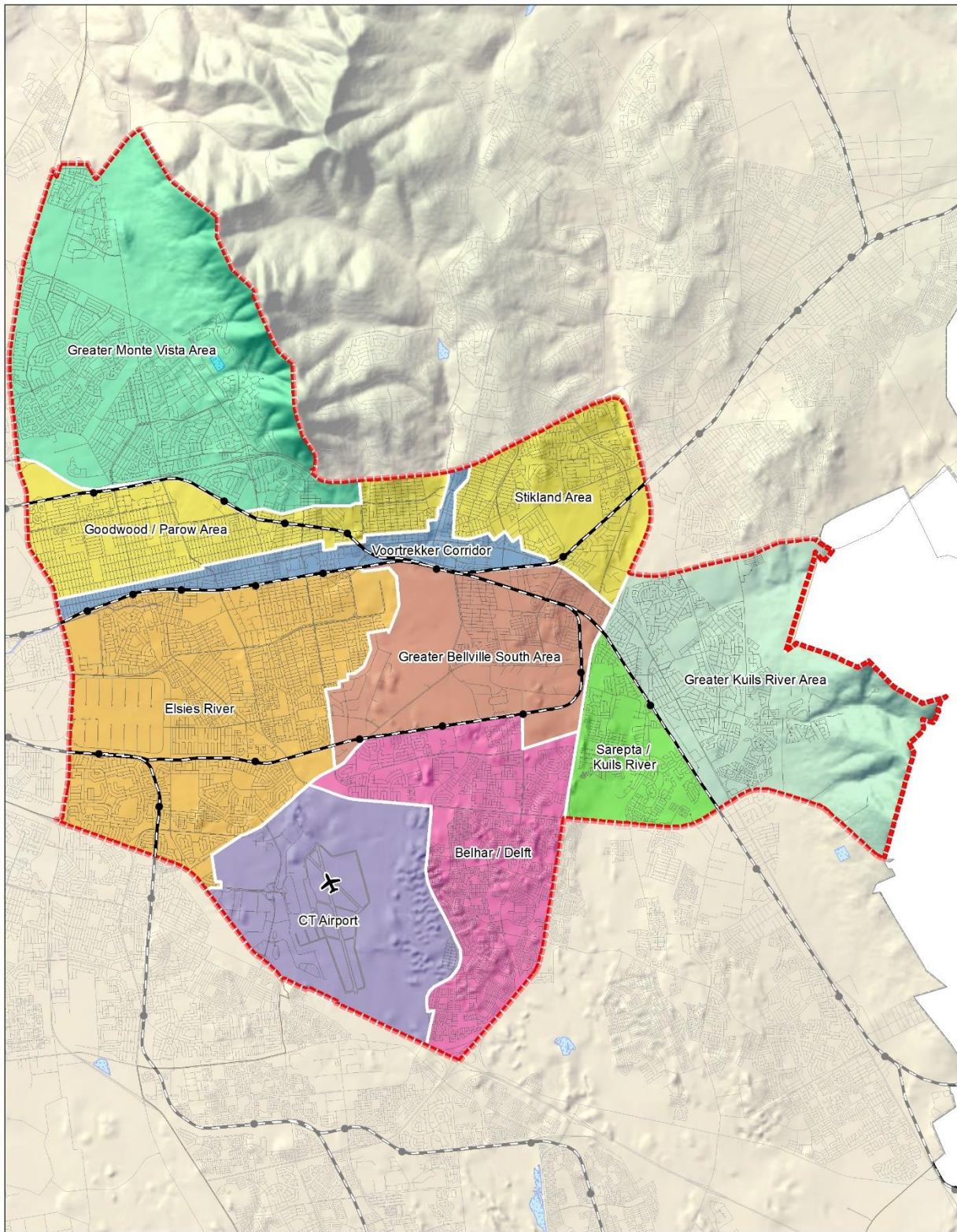
Note as a general rule:

- In instances where application is made for the amendment of a Site Development Plan or Master Plan (framework plan in package of plans approach), such amendment should be informed by the guidelines in the district and sub-district plans.
- All development applications need to consider the principles and content of the approved Urban Design Policy as well as any other applicable local spatial development frameworks, policies or directives.

Sub-districts

The Tygerberg District comprises 9 sub-districts (see figure 14). These are:

1. Richwood, Burgundy Estate, De Grendel, Bothasig, Plattekloof, Edgemead, Monte Vista, Parow North;
2. Goodwood, Parow West, Parow East, Boston, Bellville Central & East, Stikland;
3. Voortrekker Road / Durban Road (south of the N1) Development Corridor;
4. Greater Elsie's River, Ruyterwacht, Parow Valley, Ravensmead, Epping 2, Bonteheuwel, Bishop Lavis, Malawi Camp;
5. Bellville South, Greenlands, Transnet Marshalling Yard, Parow-, Sacks Circle – and Saxon Industria, UWC & CPUT, Bellville Solid Waste;
6. Greater Belhar and Delft;
7. Cape Town International Airport precinct and Boquinar Industria;
8. Greater Kuils River, Bottelary and Polkadraai smallholdings, Zevenwacht, Stellenbosch Farms; and
9. Sarepta, Stellendale, Highbury, Kalkfontein smallholdings, Kuils River system






 <p>CITY OF CAPE TOWN ISIXEKO SASEKAPA STAD KAAPSTAD</p>	<p>SPATIAL PLANNING & ENVIRONMENT</p> <p>Urban Integration - Urban Planning & Mechanisms</p> <p><small>Please Note: - Some errors have been made to ensure the accuracy of information in this report at the time of publication. - The spatial data contained in this report is a current snapshot and complete as provided by the various role departments responsible for the maintenance of these datasets. - The City of Cape Town accepts no responsibility for, and will not be liable for, any errors or omissions contained herein.</small></p>	<p>Tygerberg Subdistrict Areas</p>		 <p><small>Transverse Mercator Projection, Central Meridian 17° East, WGS84 Ellipsoid using the Hotelling-Helmert 74 Datum</small></p>	<p>District Spatial Development Framework</p> <p>TYGERBERG DISTRICT</p> <p>Date : August 2020</p>
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Figure 14: Sub-districts in Tygerberg

4.1 Sub-district- district 1: Richwood, Burgundy Estate, De Grendel, Bothasig, Platteklouf, Edgemead, Monte Vista, Parow North

This sub-district is bounded by the N7 freeway to the West; the N1 freeway/Monte Vista rail line/Frans Conradie Drive to the South; Mike Pienaar Boulevard / The Tygerberg Hills ridgeline to the East; and Tygerberg Road to the North. It is characterised by established suburban areas, predominantly of single residential character with local business clusters including neighbourhood shopping centres at various locations of high accessibility (such as Shoprite Centre, Edgemead Centre, Platteklouf village, Richmond corner, Bothasig Centre, De Grendel Centre, The Village Centre and Panorama mixed use node).The area also includes the emerging retail/light industrial mixed use area at N7/Platteklouf Road intersection (Richmond) as well as protected natural areas namely Tygerberg and Bothasig Fynbos Nature Reserves.

Table 18: Sub-district 1 development guidelines

Sub- district 1: Richwood, Burgundy Estate, De Grendel, Bothasig, Platteklouf, Edgemead, Monte Vista, Parow North	
Local objectives	Suggested response / Guidelines / Policy statements
<ul style="list-style-type: none"> Discourage the conversion of high potential agricultural land for urban land use, unless otherwise specified in Section 3 as well as in the New Development Areas hereunder Encourage tourist related uses which can support the agricultural industry Facilitate incremental densification that will promote a denser urban form without detracting from the character of the residential areas Protect core residential areas from business creep that may change the character of the areas Facilitate appropriate development along the urban footprint edge and future public transport route(M12) to reinforce and enhance the urban – rural interface 	<ul style="list-style-type: none"> Encourage small business development by supporting changes to Local Business 1 along local activity streets such as Monte Vista Boulevard, Edgemead Drive, Vryburger Road and De Grendel Avenue, subject to compliance with access requirements and utility service capacity. Local business precincts along these routes should be re-enforced through mixed use development. In instances where the use of a dwelling changes from residential to another use, or where the primary use of the dwelling is no longer residential, street interfaces should be treated in a manner that would not detract from the character of the area. Create an appropriate interface with the Tygerberg Nature Reserve by ensuring that new development is undertaken in a manner that encourages features such as roads to act as a buffer between development and the nature reserve as opposed to the rear of residential properties. Ensure that vehicular access for firefighting and maintenance purposes is available. Any departures from especially rear building lines within the established area of Platteklouf where properties abutting the nature reserve must be considered with caution to minimize the risk to properties with regards to veld fires. Ensure maintenance of green streetscapes and corridors that link from the Tygerberg Nature Reserve through the urban context of the sub-district. Ensure adherence to design guidelines, EIA's and TIA's for approved development applications where applicable and ensure management of basket of rights.

<ul style="list-style-type: none"> • Protect conservation areas such as Tygerberg Nature Reserve and ensure an appropriate interface. • Ensure retention of rural /agricultural character on farmlands. 	<ul style="list-style-type: none"> • Development along Tygerberg Valley Road (e.g. Richmond Park) should avoid the creation of sterile interfaces onto the streetscape. <p>De Grendel Farm</p> <ul style="list-style-type: none"> • A portion of the De Grendel farm property, presents an opportunity for land use intensification. Proposals should include medium density mixed land uses inclusive of employment generating opportunities and different housing typologies whereof a portion should be for affordable housing. • A development framework should be developed for the area inclusive of the delineation of the urban development edge on the north-eastern side.
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Sub-district 1: New Development Areas

Bothasig residential infill sites (Map reference 1 on Figure 15)

New medium density residential development is proposed for the undeveloped Erf 23205, owned by the City of Cape Town and zoned Open Space 2. It is important that new developments are designed to have a positive interface with the existing urban fabric, the existing residential developments and public open space.

De Grendel Farm (Map reference 2 on Figure 15)

De Grendel farm is located along the future BRT route, M12, and presents an opportunity for land use intensification as the M12/IRT infrastructure increases the level of accessibility to the area.

The extent of development to be considered, will be determined by the applicable planning processes inclusive of specialist studies such as EIA, TIA, HIA, bulk service capacities etc. It should further be noted that the buffer area of the PetroSA Tank Farm may also impact the extent of residential development that can be considered. Any development application would be subject to approval in terms of Act 70 of 1970 (Subdivision of Agricultural Land).

Plattekloof (Map reference 3 on Figure 15)

Erf 20907 located between Meyboom and Olienhout Streets, which is vacant and zoned for General Residential purposes, is proposed for infill of low/medium density residential development. Any development of the site should be sensitive towards the open space system which is located to the south, thus a positive interface with the open space system should be established.

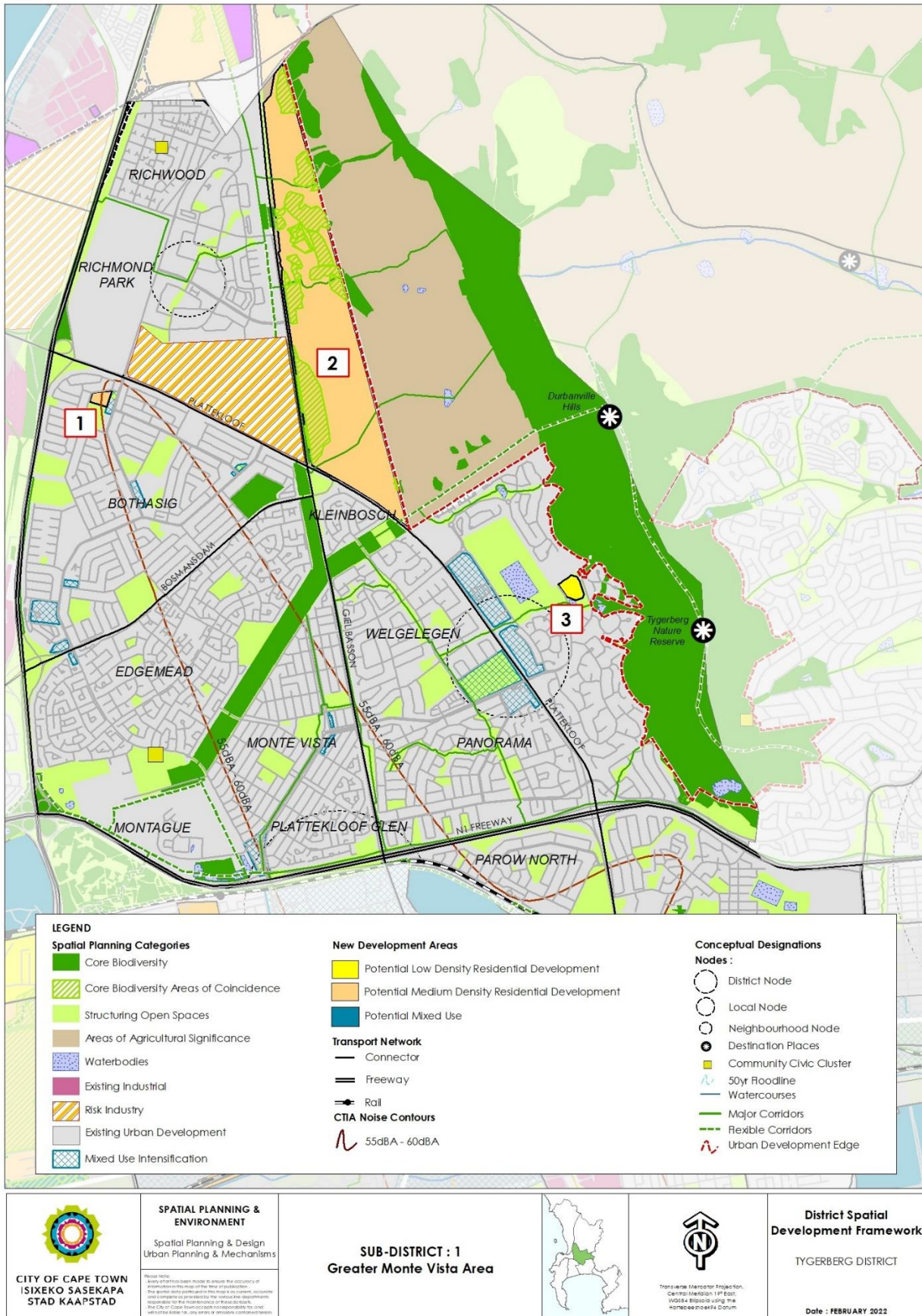


Figure 15: Sub-district 1 DSDF Plan

4.2 Sub-district 2: Goodwood, Parow West, Parow East, Boston, Bellville Central and East, Stikland (excluding Voortrekker Road corridor)

Sub-district 2 is bounded by the N7 to the West, Monte Vista rail line, Frans Conradie Drive, Mike Pienaar Boulevard, and the N1 to the North; the R300 to the East; and the transitional area between Voortrekker Road activity corridor and residential areas immediately north. The sub-district is characterised by transition areas between Voortrekker Road activity corridor and suburban areas, predominantly residential development with greater diversity of residential typologies, and pressure for land use intensification along Voortrekker Road.

Table 19 : Sub-district 2 development guidelines

Sub-district 2: Goodwood, Parow West, Parow East, Boston, Bellville Central & East, Stikland	
Local objectives	Suggested response / Guidelines / Policy statements
<ul style="list-style-type: none"> • Facilitate land use intensification (density and diversity) along high accessibility routes and in close proximity to public transport • Facilitate densification that will promote a denser urban form without detracting from the character of the residential areas • Protect core residential areas from business creep that will change the character of the areas • Maintain and improve the quality of existing open space systems and the interfaces. 	<p>De Grendel Station precinct (inclusive of Tygerdal solid waste drop-off site, N1 City and Parow Golf Course site)</p> <ul style="list-style-type: none"> • Support land use intensification within the precinct at the commercial node as well as through development of the Tygerdal solid waste drop-off site and surrounds. Support the pre-feasibility study for the Parow Golf Course and surrounds in order to identify and test future development options. • Higher density residential development with more affordable housing at the Tygerdal solid waste drop-off site with the opportunity for localised business located closer to the station. A gross density of 60du/ha can be considered for the site. Consideration should also be given to NMT between the site and the employment opportunities at the N1 City centre. • Support the consolidation of the eastern precinct of the golf course (AJAX/Vasco soccer clubs) together with the Jan Burger Sports Complex north of De Grendel station and promote it as a sporting and recreation hub. <p>Goodwood, Boston, Parow,</p> <ul style="list-style-type: none"> • Encourage redevelopment for mixed land uses and high density residential development along high accessibility streets such as Vasco Boulevard, Hugo Street and McIntyre Road. • Mobility structuring routes such as Milton Road and Frans Conradie should remain residential except at certain nodal intersections where appropriately scaled activities can be permitted in a manner that does not undermine the mobility function of the route. The desirability of such nodal developments will further be reliant on functionality, design and its potential impact on the public environment.

- Other local structuring routes where business conversions have already taken place (e.g. Boston and Lincoln Streets in Boston) should be actively managed so that these land use changes do not adversely impact on the residential character of the area
- Small scale densification can be considered.
- Medical and related uses may be considered along Broadway Street (between Voortrekker Road and Frans Conradie) dependant on access management, parking requirements etcetera.
- In instances where the use of a dwelling changes from residential to another use, or where the primary use of the dwelling is no longer residential, street interfaces should be treated sensitively in order to remain complimentary to the residential environment.
- The Jack Muller Park should be activated around its edges with low intensity complementary land uses in order to stimulate additional recreational activity within the park. The existing buildings related to park operations could possibly accommodate additional activities, such as restaurants, children's play equipment and other amenity facilities. Any proposed complimentary land uses should take into consideration the biodiversity agreement of the Jack Muller Conservation Area.
- The Elsieskraal River system to the west of Durban Road is to be reinforced as a high quality public recreation area, providing relief from the urbanised environment of the Bellville CBD.

Stikland

- High density mixed use development (excluding industrial) to be considered for the Stikland Hospital site along Old Paarl Road. A range of housing typologies should be provided including more affordable housing.
- Encourage redevelopment for mixed land uses and high density residential development along high accessibility streets such as De La Haye and Old Paarl Road.
- The re-development of high density residential development should be restricted to properties situated on Vermeer Street and De La Haye Street in the De La Haye Area (portion between Old Paarl Rd and Vermeer Street, outskirts of the De La Haye Area in close proximity to the the railway line and the Stikland Hospital grounds). Appropriate interfaces should be ensured especially with adjoining single residential development. The redevelopment of properties outside of the above mentioned areas for general residential purposes should be selectively considered. The form and structure of such developments must also blend in with the character of the surrounding area.

- Structuring routes such as Maree and Barnard Streets should remain residential except at certain nodal intersections where appropriate neighbourhood scale activities are permitted.
- Support incremental densification in the form of subdivision of larger erven.
- In instances where the use of a dwelling changes from residential to another use, or where the primary use of the dwelling is no longer residential, street interfaces should be treated sensitively in order to remain complimentary to the residential environment.
- Any development between the R300 and existing development to the west should be done in a manner which is sensitive to of the Kuils River Corridor and does not undermine the integrity thereof.

Sub-district 2: New Development Areas

Tygerdal solid waste drop-off site (Map reference 4 on Figure 16)

The Tygerdal utilities and refuse drop-off site situated directly adjacent to the Monte Vista railway station, measures approximately 7,14Ha in extent. It is proposed that the site be redeveloped to accommodate medium-to-high density residential development. The transit-oriented development potential of the site in relation to its proximity to the Monte Vista station and future BRT route along Frans Conradie should be optimised. Below illustrates possible development scenario for



optimal use of the site and capitalising on the site's location advantage in relation to public and private transport, economic and social facilities.

Stikland Hospital (Map reference 5 on Figure 16)

The Stikland Psychiatric Hospital is situated on a ±140 ha precinct under the ownership and management of the Provincial Government Western Cape (PGWC: Health Department). The precinct comprises of two distinct land portions, separated by Old Paarl Road. The precinct provides an opportunity for extensive urban restructuring and development for mixed use development in the form of commercial / office /residential development. It is important that new developments are designed to integrate and have

a positive interface with the existing urban fabric, i.e. the existing residential developments and public open space.

The following factors impact on the development potential of the Hospital precinct:

- The precinct of ±140ha provides a significant opportunity for redevelopment and infill through the rationalisation of the existing footprint of hospital buildings.
- The precinct is considered to be under-utilised due to the highly dispersed pattern of existing hospital buildings.
- Many buildings require renovation and utility services require substantial upgrading. Development will require extensive investment in utility services and road access.
- Stikland Hospital abuts Old Paarl Road, which connects directly with Voortrekker Road, La Belle Road and the R300 Freeway. Stikland Station is situated within walking distance.

PGWC has indicated intent to develop the site and has conducted an assessment of bulk service infrastructure provision with regard to various development proposals. The following is proposed as appropriate for the site should development be realised in future:

- Consolidation and redevelopment of the psychiatric hospital into a smaller, more manageable and less extensive area. Redevelopment/consolidation of current hospital buildings may occur in vacant portions of the precinct north of Old Paarl Road and/or in parts of the precinct south of Old Paarl Road (preferably the area along the Kraaifontein railway line);
- Mixed use development in the form of commercial / office / residential development along portions abutting Old Paarl Road;
- Residential components should include a range of housing typologies including more affordable and inclusionary housing;
- Medium to high density residential development on portions of the precinct which are available for development. Portions of land which front onto De La Haye Road should be considered for residential development, thereby creating a development link from Old Paarl Road to Stikland Station.

La Belle Triangle Mixed Use Precinct (Map reference 6 on Figure 16)

The La Belle Triangle precinct (erf 13601) is located at the intersection of La Belle Road and Voortrekker Street / Strand Road. This land provides an opportunity for mixed use development in the form of service industrial, commercial and office development.

Although the site can potentially accommodate residential development, this would not be an ideal location given the locational benefits available for business intensification. It should be noted that the existing access road from La Belle Road is not a formalised access road. With the redevelopment of the site a new access road will need to be constructed at the mid-point between the Bottelary intersection onto La Belle Road, and the Voortrekker Road/Strand Street intersection. Existing access at Ampere Street into the

adjacent industrial area will need to be closed and access be taken from the new access road.

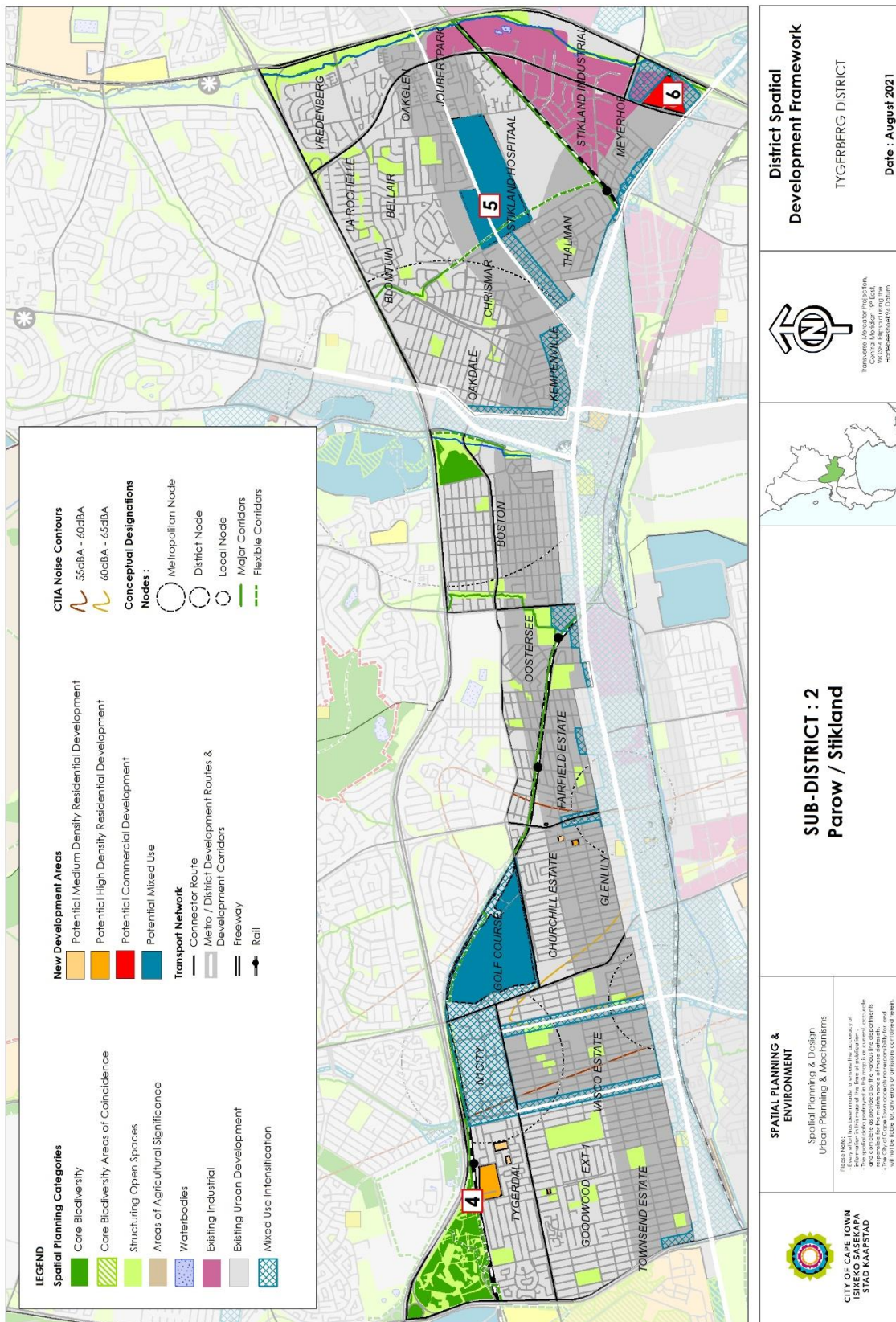


Figure 16: Sub-district 2 DSDF plan

4.3 Sub-district 3: Voortrekker Road / Durban Road (south of the N1) Development Corridor

Sub-district 3 is formed by the transitional edge between the Voortrekker Road Corridor (VRC) and the suburban areas to the north, the Bellville-Cape Town and Bellville-Strand rail lines to the south. The Durban Road activity corridor south of the N1 linking to Voortrekker Road is included and is bound by the Jack Muller District Park/Elsieskraal River system to the west and the Durban Road (Robert Sobukwe) re-alignment servitude to the east. The sub-district is characterised by areas of high density, high intensity mixed use activity to be re-enforced as the economic 'backbone' of the city. General issues experienced within the sub district include a general lack of architectural, urban design and land use guidance regarding development along Voortrekker Road, and conflict between commercial and residential land uses abutting the corridor area.

Table 20: Sub-district 3 development guidelines

Sub- district 3: Voortrekker Road / Durban Road(south of the N1) Development Corridor (Including Bellville CBD)	
Local objectives	Suggested response / Guidelines / Policy statements
<ul style="list-style-type: none"> • Facilitate land use intensification (density and diversity) along high accessibility routes and in close proximity to public transport. The Bellville CBD Catalytic Precinct Project, should be taken as the guideline for determining building heights, land use and densities, once approved. • Ensure the establishment of a mix of land uses including commercial, community, residential and recreation in the corridor area • Maintain and improve the quality of existing open space systems and the interfaces. • Support the upliftment and renewal of the area through public investment where possible. 	<ul style="list-style-type: none"> • Promote high intensity development with mixed land use intensification including higher density residential development along Voortrekker and Durban Roads and between Voortrekker road and the Bellville railway line. • Promote the development of a mix of high density commercial and residential uses in areas around railway stations. • Promote the provision of a range of housing typologies inclusive of more affordable housing in order to increase opportunities closer to public transport and economic opportunities. • Optimise use of land closer to public transport interchange and access points. • Promote the provision of minimum on-site parking in high intensity developments where the sites are located in close proximity to public parking areas with low-to moderate utilisation levels and within zero-rated public transport zones. • Encourage appropriate street interfaces along Voortrekker and Durban roads to activate the streetscapes. • Support and initiate opportunities for general upgrading and renewal of the corridor area, especially in semi-industrial areas north of the railway, such as in Elsie's River and Parow East. • Where general residential development abuts single residential development, the design of the building, it's footprint and height should be considered in such a

manner not to negatively impact on the adjacent residential fabric.

- Pursue heritage exemptions in areas between Voortrekker Road and the Bellville Railway, where non-significant buildings with heritage protection status stifles densification potential.

Bellville CBD

- The vision for Bellville CBD is to over the long term develop it as a high intensity, integrated nodal area that provides a wide range of opportunities and services that support the PTI, tertiary education, medical facilities and other uses.
- The extension of the future BRT- trunk route of Robert Sobukwe Road link with Durban road south of the N1 is likely to have a major impact on land along this part of the corridor. The area between the existing Durban Road and the proposed realignment is proposed as a mixed use intensification area. The intensity and scale of redevelopment is envisaged to be similar to that which is located along Durban Road north of the N1 freeway (Edward Street). The total bulk for redevelopment and access management is still to be determined. Therefore, for the interim, each application for intensification/ redevelopment will need to be considered on its own merits.
- Promote the establishment of high density general residential development in the Belgravia area between Voortrekker Rd, Old Paarl Rd and Link Street as well as between Voortrekker Road and 2nd Avenue/Maree street to act as a buffer between the high density, mixed use development directly adjacent to the spine and single residential development
- The Belrail Residential Estate to the east of Robert Sobukwe Road represents a strategic redevelopment opportunity for residential densification (high density) within close proximity to the Bellville CBD and transport interchange. Limited mixed use activity should be permitted on the ground floors of residential buildings in more accessible locations, such as along Reed Street.
- Erf 26364(Paint City site - c/o Charl Malan Road and Belrail Road) provides an opportunity to provide high density mixed use development inclusive of high density affordable residential opportunities within the Bellville CBD.
- The Hardekraaltjie site should be protected for the provision of public facilities, in order to serve the expected future increase in residential activity in the corridor.

Elsieskraal green belt

- Maintain and improve the opportunities for recreation created along the open space system between the adjacent parks along the Elsiekraal River such as Jack Muller Park (to the north) and Elizabeth Park (to the south). Reconnecting the open spaces in this belt will aim to facilitate the integration of natural systems with the surrounding urban environment.
- Promote the development of the open space system linking Jack Muller Park and Elizabeth Park through provision of appropriate recreation activities.
- Encourage NMT along this route which could also serve as an alternative to the primary activity spine along Durban Road.
- Support appropriate economic retail activities such as restaurants, dedicated market spaces, etc. that would activate the space and create more passive surveillance at appropriate locations.

Parow

- Promote the establishment of high density general residential development through re-development between Voortrekker Rd and 1st Avenue/Williams Street to act as a buffer between the high density, mixed use development directly adjacent to the spine and single residential development to the north.
- Seven city owned properties around Parow station have been identified and provides an opportunity for the provision of more affordable housing in the form of social housing. Buildings to be a minimum of 3 storeys, with some form of on-site recreation and opportunities for urban greening on the edges and corners to be encouraged. Opportunities to use ground floor space for ancillary uses should be explored.
- Support the formalization of informal trading spaces along Station Street Arcade in order to enhance the streetscape and support urban management.
- Encourage appropriate development inclusive of adequate provision of pedestrian movement routes that would strengthen a potential linkage between Station Arcade and the Parow Market.

Elsies Industria

- Support the re-development for mixed land uses, inclusive of more affordable and higher density residential, commercial and service industrial uses. Further investigation is required to identify specific areas for residential development in order to prevent negative impact that industrial operations may have on such residential development.

	<ul style="list-style-type: none"> • Promote the development of smaller service industries. • No noxious industries should be considered. • Service industrial use, which will not negatively impact on nearby residential developments, should also be promoted. • Ensure the provision of recreation space where the development includes a residential component. <p>Goodwood</p> <ul style="list-style-type: none"> • Promote the establishment of high density general residential development through re-development between Voortrekker Rd and Dingle Street to act as a buffer between the high density, mixed use development directly adjacent to the spine and single residential development.
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Sub-district 3: New development areas

Social housing opportunities

The Parow Prioritised Local Areas (PLA) Social Housing Program identified precincts where public land has been targeted for the delivery of social housing. Three of these precincts namely Elsie's, Parow - and Tygerberg stations are located within this sub-district. All the sites within these precincts are located within an approximate radius of 500m of a rail station.

The sections below will highlight the properties that have been identified for further investigation to be developed as part of the above mentioned program in the short - medium term.

1. Elsie's station

Four sites have been identified in the precinct surrounding Elsie's River station which could yield around 2200 units at an average gross density of 540du/ha across the precinct.

- Erf 40077 – the site is partially developed with an unfinished residential structure, which could be fast tracked for development. The site abuts the Elim Night Shelter (City owned property) and the inclusion thereof as part of a cluster provides an opportunity for a transitional/social housing development.
- Erf 40076 – the site has been cleared and is appropriately zoned for fast tracking development of social housing.
- Erven 8563Re,8565,13756-13758,19139 – partially developed site in ownership of PRASA and zoned General Business 4. Engagements with PRASA to be prioritised to realise the development potential. Located within 500m of two rail stations (Elsie's River & Vasco) and situated on Voortrekker road development route. Provides an opportunity for mixed use development with commercial on 1st – 3rd floors and high density affordable residential above ground floor. Development should ensure an active street interface along Voortrekker Road.
- Erven 8610, 8611, 8612, 8614 – the site provides an opportunity for high density residential development even though limited if developed on its own. Further

investigations in order to purchase additional properties /link with development of the PRASA owned properties north of the railway line as described above.

2. Parow station

Five sites have been identified in the precinct surrounding Parow station which could yield around 940 units at an average gross density of 760du/ha across the precinct.

- Erf 9549 - the site provides an opportunity for high density residential development
- Erven 9445, 9444Re, 9448Re, 9458,9446Re, 9447,9449 – Provides an opportunity for mixed use development with commercial on ground floor and high density residential above ground floor.
- Erven 9505, 9510, 9515, 9514, 9512, 9513Re, 9511Re - the site provides an opportunity for high density residential development
- Erven 9494Re, 9496, 9493Re, 9495 – Provides an opportunity for mixed use development
- Erven 9877, 9878 - the site provides an opportunity for high density residential development

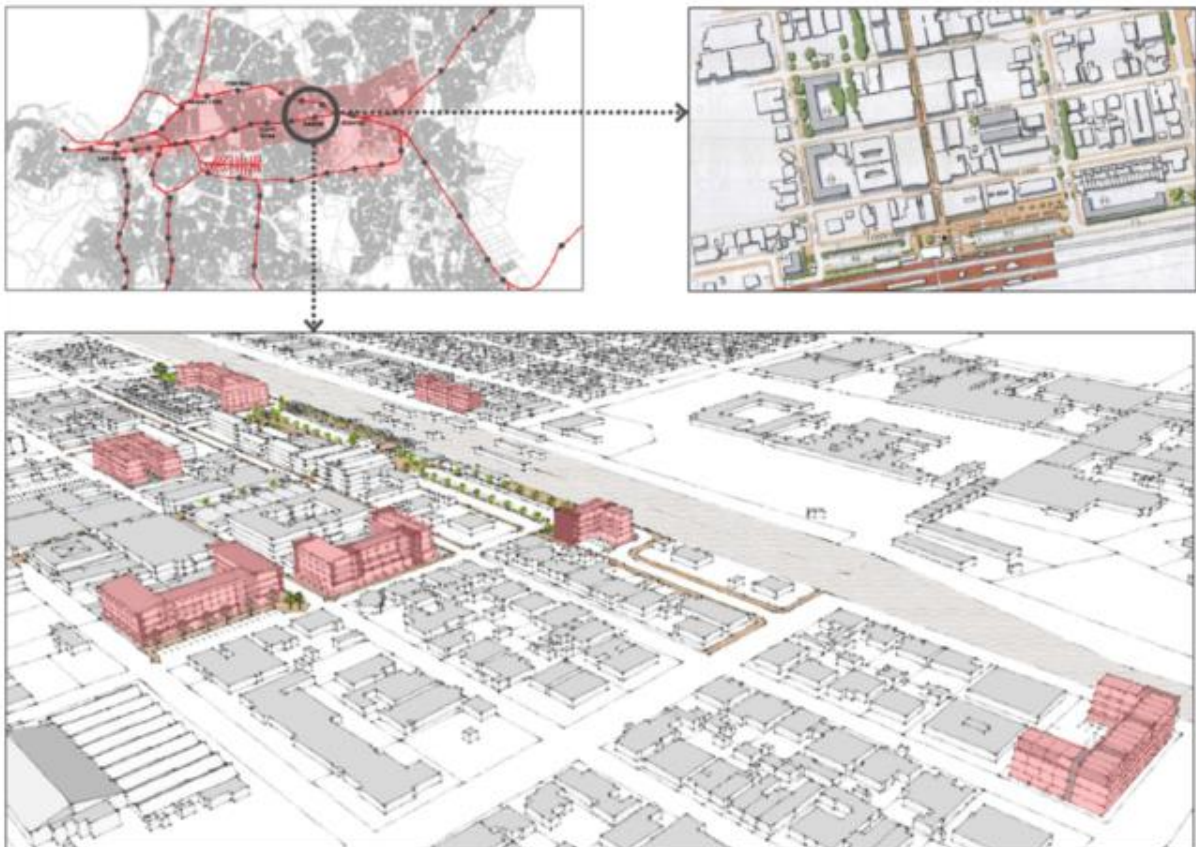


Figure 17: Vision for social housing possibilities around Parow station

3. Tygerberg station

Two sites have been identified in the precinct surrounding Tygerberg station which could yield around 690 units at an average gross density of 590du/ha across the precinct.

- Erf 7720Re, 7721, 7722, 7732 – Provides an opportunity for mixed use development with commercial on ground floor and high density residential above ground floor.

- Erven 22550, 14272Re – Provides an opportunity for high density residential development

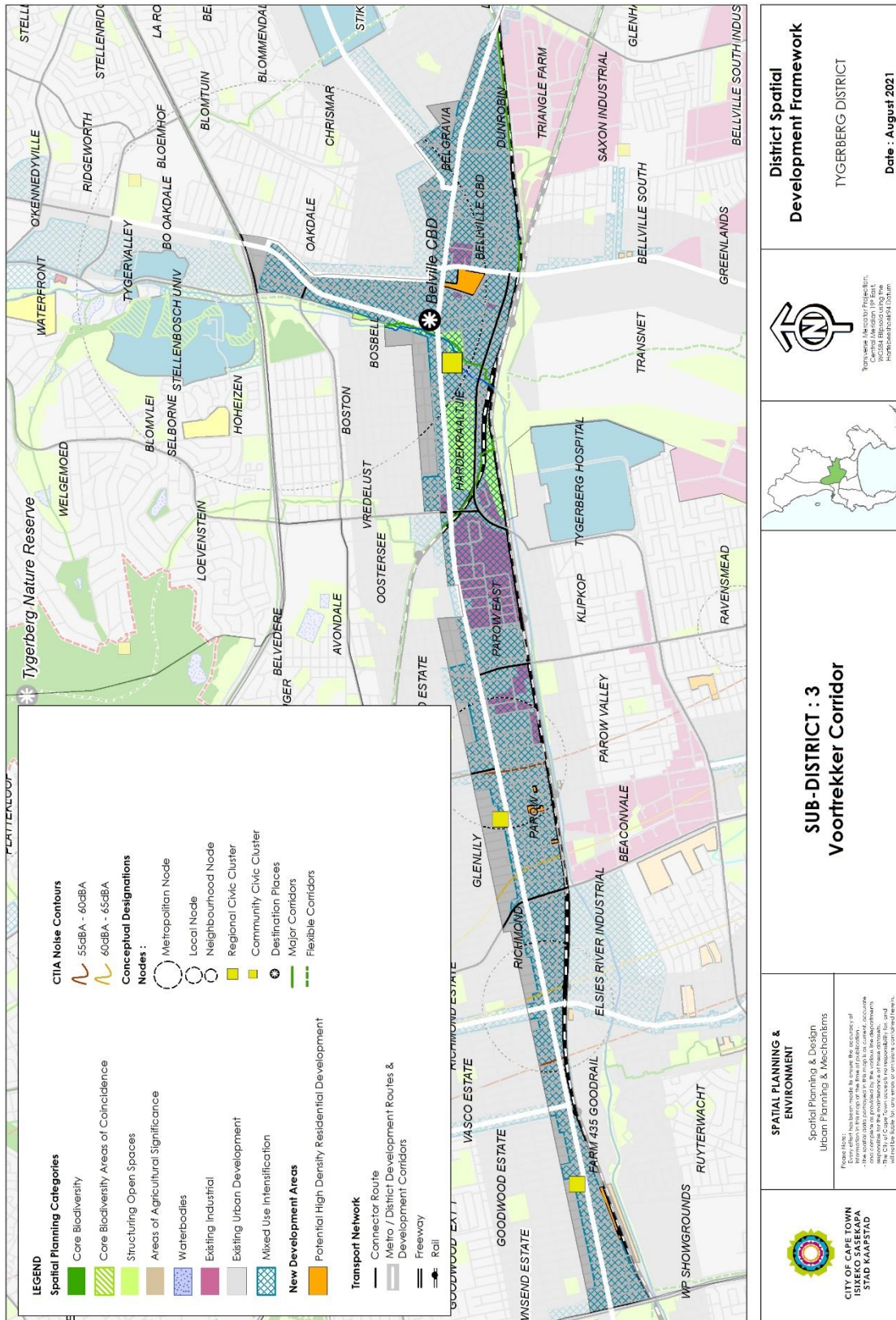


Figure 18: Sub-district 3 DSD Plan

4.4 Sub-district 4: Greater Elsie River, Ruyterwacht, Parow Valley, Ravensmead, Epping 2, Bonteheuwel, Bishop Lavis, Malawi Camp

Sub-district 4 is bounded by Jakes Gerwel Drive to the west, the Bellville railway line to the north, the eastern boundary of the Tygerberg Hospital, Ravensmead and De La Rey Road to the east, and Robert Sobukwe Road and the N2 freeway to the south (and includes the suburb of Monte Video). The sub-district comprises a mix of residential suburbs, industrial areas and high intensity mixed use areas; medium to high density residential areas with greater diversity of residential typologies, a large proportion of Council rental housing stock, and a significant amount of backyard second dwellings. Most of the sub-district experiences a poor quality urban environment.

Table 21: Sub-district 4 development guidelines

Sub-district 4: Greater Elsie River, Ruyterwacht, Parow Valley, Ravensmead, Epping 2, Bonteheuwel, Bishop Lavis, Malawi Camp	
Local objectives	Suggested response / Guidelines / Policy statements
<ul style="list-style-type: none"> Facilitate land use intensification (density and diversity) along high accessibility routes and in close proximity to public transport. Encourage land use transformation where appropriate and feasible in derelict industrial areas that will be a catalyst for urban regeneration (e.g. in proximity of Elsie River Station) Facilitate safer pedestrian access across railway lines and high order mobility routes Promote opportunities for business activities in close proximity to public transport routes, transport interchange precincts and services. Identify opportunities for establishment and support of SMMEs. Reinforce industrial activities in industrial areas to promote 	<ul style="list-style-type: none"> Promote high intensity development with mixed land use intensification including higher density residential development in areas surrounding the railway stations Facilitate opportunities for commercial and higher density development along high order routes and public transport routes (e.g. Along Jan Van Riebeeck Road/35th Avenue and Halt Road) dependant on access management. Enhance pedestrian movement routes between the public transport interchanges such as Parow, Elsie and Vasco stations and places of employment. Promote the development of appropriately located vacant land in closer proximity to public transport access points for higher density residential development, which may include an element of commercial development. The opportunity for local business development at the corner of Valhalla Drive and Angela Street should be pursued. Any prospective developments would benefit from pedestrian movement to and from Netreg Station. Encourage local business development along local streets displaying existing local business energy or the potential to accommodate local business development, where business activity can be reinforced, such as Owen Road, Halt Road, Connaught Road, Epping Avenue and Market Street. This type of activity usually occurs where access and direct erf frontages are allowed. Ensure appropriate interfaces of commercial activities with residential areas. Encourage incremental densification through the subdivision of larger properties. Facilitate upgrade of public facilities in local civic precincts such as Salberau (Lower Halt Road), Bonteheuwel CBD, Leonsdale local node, Adriaanse, Bishop Lavis and Uitsig

<p>employment within the district.</p> <ul style="list-style-type: none"> • Support the upliftment and renewal of the area through public investment where possible. • Maintain and improve the quality of existing open space systems and the interfaces. 	<p>local nodes. Encourage the development of small scale mixed land uses in these precincts.</p> <ul style="list-style-type: none"> • Support the development of small scale ECDs that would serve the local residents on residential properties. These should not detract from the residential character and street interfaces of the areas. The streetscape should be treated sensitively in order to remain complimentary to the residential environment. • Promote the development of multi-functional public facilities in order to optimise use of space and enhance safety and management thereof. Cognisance should be taken of the priority need identified to facilitate the provision of Neighbourhood Parks, Secondary School and Sportgrounds to accommodate future growth in this sub-district. • Ensure appropriate interfaces with places of amenity such as the proposed Riverton Road district park in Ruyterwacht. • Investigate opportunities for increased usage of the Epping 2 railway sidings. This is dependent on the future of rail-based freight transport at a citywide scale. However, the drive to improve freight rail operations seems to be gaining momentum. Until such time as a clearer direction is resolved in this regard, applications for closure of rail sidings should be considered with caution, and short term leases should be considered rather than the sale of portions of the rail sidings. • Applications for commercial uses including legal taverns/shebeens should be considered along local activity streets and other structuring routes. Where embedded in residential areas, careful consideration should be given to whether the use is appropriate especially with regard to impacts on surrounding uses (e.g. crèches and other education facilities, churches, etc.) as well as on site considerations • Assist with the identification of solutions for accommodation of the horse and cart industry. • Lobby for formalised pedestrian access across the Sarepta railway line between Matroosfontein and Bishop Lavis.
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Sub-district 4: New development areas

Jan Van Riebeeck Drive / 35th Avenue, Elsie's River (Map reference 7 on Figure 19)

The vacant sites comprising Erven 36600 – 36601, 36603 – 36604, 39820, 15237, 11217 and 11218 is proposed for new higher density mixed market residential development. The location of these undeveloped properties along Jan Van Riebeeck Drive / 35th Avenue provides proposed development with high level of accessibility to public transport. High density affordable residential development along this future IRT trunk route would have significant locational benefits of minimising travelling and employment opportunities closer to residential development.

Erf 19787 is an undeveloped Public Open Space abutting 35th Avenue, which is a high order mobility route. The location along 35th Avenue provides the proposed development with a high level of accessibility to public transport along this future IRT trunk

route. This would have significant locational benefits of minimising travelling and employment opportunities closer to residential development and due to limited size provides opportunities for publicly assisted medium to higher density housing. It is important that with any development of the site, that adequate open space be developed to serve the high density residential properties on the western edge. Pedestrian desire lines should also be retained as far as is possible.

Portions of Erf 12792 is an undeveloped Open Space site, and is proposed for mixed use development. Parts of the site are also prone to seasonal stormwater inundation. Access to the site from 35th Avenue is a constraint, except for the possibility of a left-in-left-out access. Access will therefore need to be taken from Connaught Road.

Although residential development is discouraged due to the site being located within the 65dBa airport noise contour, the site is listed as being a site identified for GAP housing in terms of the City of Cape Town's Housing pipeline. However, non-residential mixed uses would be preferable given this constraint. The site is therefore proposed for mixed use development in the form of service industrial / commercial / office development. Development is restricted to non-residential uses due to airport noise regulations (land within the 65dba noise contour).

Modderdam Triangle (Mixed Use Development) (Map reference 8 on Figure 19)

It should be noted that a large portion of the site (comprising of inter alia portions of erven 178031 and 113420, Cape Town) comprises of an old solid waste dump site as well as some wetland areas. A detailed geo- technical study will be required to determine the extent of land available for development. Mixed use development is proposed on the developable land located south of the rail line and between 35th Avenue and Robert Sobukwe Road. This land provides an opportunity for mixed use development in the form of service industrial / warehousing / commercial / office development. Development is restricted to non-residential uses due to the noise regulations (land within the 65dba noise contour of the existing airport runway).

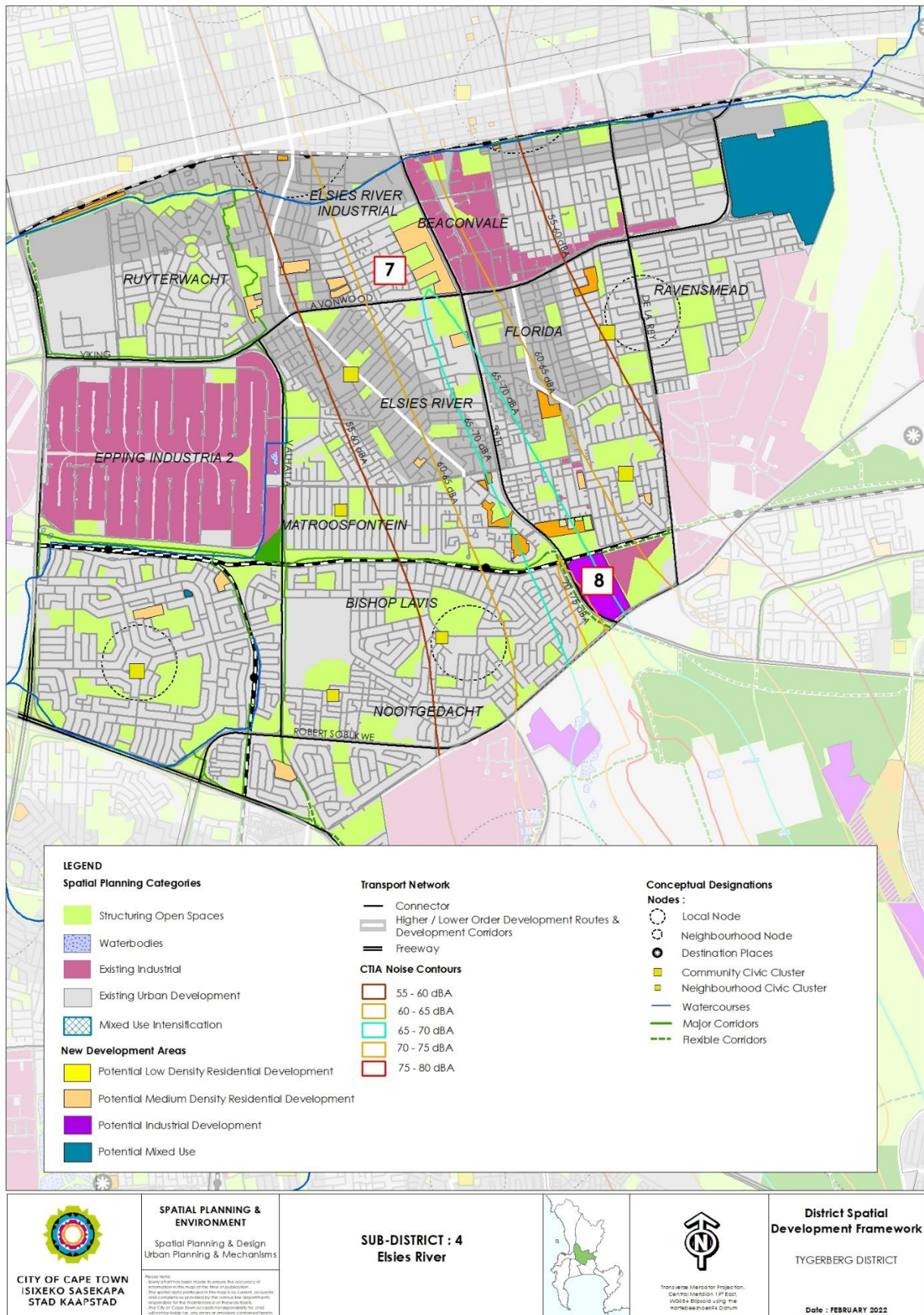


Figure 19: Sub-district 4 DSDF Plan

4.5 Sub-district 5: Bellville South, Greenlands, Transnet Marshalling Yard, Parow-, Sacks Circle – and Saxon Industria, UWC & CPUT, Bellville Solid Waste

Sub-district 5 is bound by the Bellville railway line and Strand Road to the north; R300 freeway to the east; Bellville landfill, the Sarepta railway line and Robert Sobukwe Road to the south; and De La Ray Road, Parow Industria and the Transnet Marshalling Yard to the west. The sub-district comprises of predominantly industrial areas with significant freight movement oriented around the Transnet marshalling yard. A small established contingent of single residential households exists. The UWC and CPUT tertiary education hub is located within this sub-district and is a major generator of movement within the Tygerberg District. Typical issues within the subdistrict include conflict between residential and industrial uses, decay of industrial areas and the establishment of non-industrial uses within industrial areas.

Table 22: Sub-district 5 development guidelines

Sub-district 5: Bellville South, Greenlands, Transnet Marshalling Yard, Parow-, Sacks Circle – and Saxon Industria, UWC & CPUT, Bellville Solid Waste	
Local objectives	Suggested response / Guidelines / Policy statements
<ul style="list-style-type: none"> • Promote opportunities for business activities in close proximity to public transport routes, transport interchange precincts and services. • Identify opportunities for establishment and support of SMMEs. • Reinforce industrial activities in industrial areas to promote employment within the district. • Ensure development of quality environments. Ensure maintenance of appropriate interfaces with residential and other developments. • Support incremental densification and home occupations. 	<p>Industrial</p> <ul style="list-style-type: none"> • Ensure that, where possible, the development of portions of the Transnet Marshalling Yard produces a positive interface along appropriate sections abutting Robert Sobukwe Road. • Investigate opportunities for increased usage of the Sacks Circle railway sidings. This is dependent on the future of rail-based freight transport at a citywide scale (especially the Transnet Marshalling Yard). • Facilitate development of industries, and ensure that the abutting residential communities are not negatively impacted. Ensure appropriate interfaces with residential areas by considering lower impact uses on the fringes between industrial and residential areas. • Facilitate the selective establishment of non-industrial related opportunities within these areas that are necessary to ensure availability of services to workers and industrialists without compromising the functioning of the area as an industrial estate. <p>Residential & Commercial</p> <ul style="list-style-type: none"> • Support the development of medium to high density residential development where appropriate. • Support appropriate land use intensification initiatives along Robert Sobukwe and Kasselsvlei Roads. • Encourage incremental densification through subdivision of larger properties. Higher density and more affordable housing typologies should be encouraged in the area.

	<ul style="list-style-type: none"> • Support the development of small scale ECDs that would serve the local residents on residential properties. These should not detract from the residential character and street interfaces of the areas. The streetscape should be treated sensitively in order to remain complimentary to the residential environment. • Promote the development of multi-functional public facilities in order to optimise use of space and enhance safety and management thereof. • Encourage appropriate levels of land use intensification along activity streets such as Kasselsvlei Road displaying existing local business energy or the potential to accommodate local business development, where business activity can be reinforced. • Ensure appropriate interfaces of commercial activities with residential areas. • Mixed use development should be encouraged on properties fronting onto Modderdam Service Road between the Bellville-Strand line and Modderdam Road (east-west road).
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**Not a New Development Area – information for contextualisation
Transnet Marshalling Yard (The Belcon Site)**

The following contextual information is provided in relation to the Belcon Site:

- The precinct has a position of high accessibility at the convergence of a number of significant routes, including the Voortrekker Road corridor, Robert Sobukwe Road, Symphony Way and the Cape Town-Bellville and Monte Vista rail lines. The Belcon site derives considerable exposure and accessibility from its location. However, increasing competition for road space between freight transport vehicles and commuter traffic in the vicinity of the Belcon site is increasing the danger of choking access to and from the site for freight movement.
- Currently the precinct acts as a substantial 'mono-functional' buffer. The precinct forms a constraint to the southern extension of the Bellville CBD and spatially reinforces the barrier effect of the rail line by preventing access to and from the south of Bellville Station. It further hampers the development potential for east-west integration between Ravensmead and Bellville South including the redevelopment of the Tygerberg Hospital site.
- The surrounding local and regional context includes important regional community facilities such as Tygerberg Hospital, the University of the Western Cape (UWC) and the Cape Peninsula University of Technology (CPUT).
- The UWC propose / envisage the development of a science park on the precinct, thus forging a development link towards Bellville Station and Tygerberg Hospital.
- The Elsieskraal River drains along the northern portion of the site.

Should it be established that the relocation of Transnet's Belcon freight operations is a viable option in the long term, the site would provide significant opportunity for

redevelopment and restructuring of the built environment in the Bellville South Area. However, the possibility exists for limited portions of the precinct to be released for development within the short to medium term. It is anticipated that development opportunities would be limited to the areas abutting Robert Sobukwe Road.

Should portions of the precinct become available for (re)development, suitable development opportunities can be regarded as a combination of the below mentioned proposals:

- Transit oriented development which supports the proposed IRT system along Symphony Way- Robert Sobukwe Road would reinforce the functionality of the Bellville CBD metropolitan node;
- Establishing mixed use affordable medium to high density residential and commercial development incorporating service industrial / commercial / office uses and regional public facilities;
- Investing in institutional development to support the UWC. Complimentary land uses to UWC include the development of a precinct for student accommodation, sports facilities, environmental conservation and education
- Maintain structured open space, supporting a continuous link from the Elsieskraal River system to the Cape Flats Nature Reserve at UWC.

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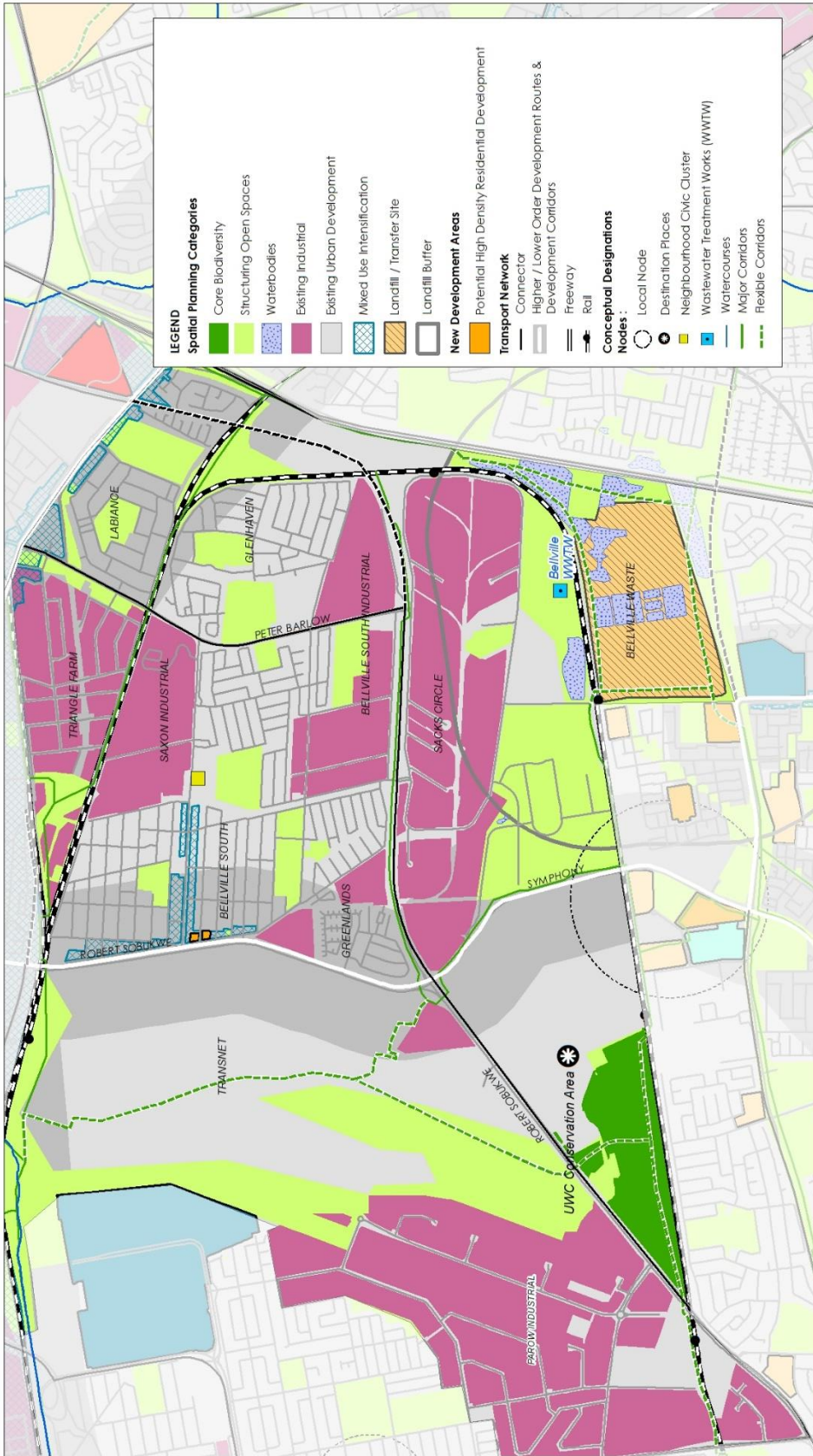





Figure 20: Sub-district 5 DSDF Plan

 <p>CITY OF CAPE TOWN ISIXEKO SASEKAPA STAD KAAPSTAD</p>	<p>SPATIAL PLANNING & ENVIRONMENT</p> <p>Spatial Planning & Design Urban Planning & Mechanisms</p> <p><small>Notes: This plan is a strategic plan and does not replace the need for detailed planning and design. It is intended to provide a framework for the development of the sub-district and to guide the implementation of the plan. The City of Cape Town accepts no responsibility for and is not liable for any errors or omissions contained herein.</small></p>		<p>SUB-DISTRICT : 5</p> <p>Greater Bellville South Area</p>	 <p><small>Theresa Maseko City Manager Cape Town Metropolitan Municipality Waterloo Road, Cape Town</small></p>	<p>District Spatial Development Framework</p> <p>TYGERBERG DISTRICT</p> <p>Date : FEBRUARY 2022</p>
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4.6 Sub-district 6: Greater Belhar and Delft

Sub-district 6 is bounded by Robert Sobukwe Road, the Sarepta railway line and the Bellville Landfill Site to the north; the R300 freeway to the east; the N2 freeway to the south; and Symphony Way, Stellenbosch Arterial to the west. The sub-district comprises predominantly residential development including medium density development in the original part of Belhar, increasing in density moving towards Delft South with growing accommodation of 'backyard' structures. Delft has also been identified as one of the top 10 areas in need of community facilities within the city. Increased business activity has occurred along Belhar Drive between Stellenbosch Arterial and Erica Drive, with the potential for additional commercial activity to be developed around the Unibell Station precinct.

Table 23: Sub-district 6 development guidelines

Sub-district 6: Greater Belhar and Delft	
Local objectives	Suggested response / Guidelines / Policy statements
<ul style="list-style-type: none"> • Promote opportunities for business activities and higher density residential development in close proximity to public transport routes, transport interchange precincts and services. • Increase the development and economic potential of the area by facilitating increased connectivity and integration with surrounding areas. • Identify opportunities for establishment and support of SMMEs including informal trading. • Facilitate opportunities for densification in a manner that will benefit and uplift the area. • Ensure development of quality environments. 	<ul style="list-style-type: none"> • Promote mixed land uses and higher density residential development in high accessibility nodes such as Unibell station, Delft Main/Hindle Road and Belhar Drive/Stellenbosch Arterial intersection. • Promote the extension of Erica Drive across the R300 Freeway into Sarepta to facilitate integration between communities. • Facilitate opportunities for densification especially around Unibell Station as well as along routes of public transport, such as Erica Drive, Symphony Way, Belhar Drive, Delft Main Road and Hindle Road where access is possible. • Any development within the buffer area of the Bellville/Belhar landfill site should consult City Environmental Health in order to ensure that the potential impacts are mitigated and to determine the appropriate type of development. • Densification of the area in general can be achieved through subdivision of larger properties and construction of second (and third) dwelling units. • Support the development of vacant city-owned/ Provincial land for infill development. • Encourage local business development along local activity streets displaying existing local business energy or the potential to accommodate local business development such as Erica Drive, Symphony Way, Belhar Drive, Delft Main Road and Hindle Road, where access and direct erf frontages are allowed. • Create and promote opportunities for the establishment of SMMEs within appropriate areas that will uplift the area. Where feasible, Council-owned vacant land

	<p>located along Delft Main Road should be investigated for development of informal trade areas such as markets and related trade uses.</p> <ul style="list-style-type: none"> • Informal trade activity located along the sidewalks of Delft Main Road should not encroach upon pedestrian movement. • Facilitate upgrade of public facilities in local civic clusters such as Delft and Belhar local nodes. • Promote the development of multi-functional public facilities where possible in order to optimise use of space and enhance safety and management thereof. Cognisance should be taken of the priority need identified to facilitate the provision of the following facilities to accommodate future growth in this sub-district: <ul style="list-style-type: none"> - Belhar: Neighbourhood Parks & Secondary School - Delft: Neighbourhood Parks, Sportgrounds & Schools • Applications for commercial uses including legal taverns/shebeens should be considered along local activity streets and other structuring routes. Where embedded in residential areas, careful consideration should be given to whether the use is appropriate especially with regard to impacts on surrounding uses (e.g. crèches and other education facilities, churches, etc.) as well as on site considerations • Assist with the identification of solutions for accommodation of the horse and cart industry. • Land disposals (city property). Care should be taken not to dispose of property, where potential purchasers (be it for church or commercial purposes) will develop only a fraction of the property.
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Sub-district 6: New development areas

Unibell Station Mixed Use Node (Map reference 9 on Figure 21)

Mixed use development is proposed on the undeveloped land located south and east of Unibell Station. This precinct offers significant opportunity for transit-oriented development in close proximity to Unibell Station local transport interchange to be developed around the station precinct. Mixed use development in the form of commercial / office / community / residential (medium and high density) development is encouraged. The sites also provide opportunities for student accommodation for the students attending the UWC and CPUT universities north of the railway line.

Available state-owned land should be investigated for GAP and social housing. Care should be taken that provision is being made for adequate non-motorised movement to and from the station. Adequate provision for public facilities should be made and open space should also be incorporated where large portions of the sites are proposed for high density housing development.

Belhar Area residential infill sites (Map reference 10 on Figure 21)

Erf 27040 is public open space, which hasn't been developed. The site was identified for sports field development. However, the Symphony Way Sports Complex is considered sufficient to accommodate the sporting demands of the area and surrounds. To this end, the development of medium to high density housing with a mixed use edge fronting onto Belhar Main Road to reinforce activity street development along Belhar Main Road is proposed for the site.

Erven 22118Re is an undeveloped open space site. Its location within an established residential suburb in close proximity to a future IRT trunk route (Symphony Way) as well as along the Belhar Main Road increase its accessibility in terms of public transport. It is proposed for medium to high density housing development, which could partially address the housing need within the Belhar community for different forms of housing provision.

Erf 27661 is a vacant surplus school site and has been reserved for human settlement development. The site is proposed for development of medium density infill housing.

Delft Area (Map reference 10 on Figure 21)

Mixed use development is proposed on the undeveloped land located south of Stellenbosch Arterial and adjacent to Delft Main Road. This land provides an opportunity for mixed use development in the form of service industrial / commercial / office / residential development. Erven 3493 and 3494, located to the east of Delft Main Road, comprise of a commercial site and a school site. Erf 4465, located to the west of Delft Main Road, is zoned as Limited Use and is still vacant. The above properties represent the main access point and gateway into Delft. High density residential development with some form of commercial and community activities on the ground floor should be supported. Development should encourage an active street interface on Delft Main Road.

Erven 4902, 1981 & 7202 are vacant sites and proposed for medium to high density residential development mixed with community facilities, where possible. Properties located along Delft Main Road should support the development of small scale home enterprises that could activate the street interface.

Erf 24019 (**Map reference 12 on Figure 21**) is located in a position of high accessibility at the intersection of Stellenbosch Arterial and Symphony Way. A record of decision (ROD) was issued in support of the proclamation of the site as a protected area. The ROD was issued with the proviso that the City of Cape Town was to proclaim the area as a protected area and determine a management mechanism for the protection of the site. However, this has not happened resulting in the site losing biodiversity integrity due to illegal dumping and squatting, among other things. A new Environmental Authorisation was issued with biodiversity offset receptor site called Vesuvius Way Conservation Area on Erf 21199 and 21200 Strandfontein in mitigation for the loss of Erf 24019. The site is identified for high density residential development. Some commercial development may also be considered in more exposed and accessible locations on the site.

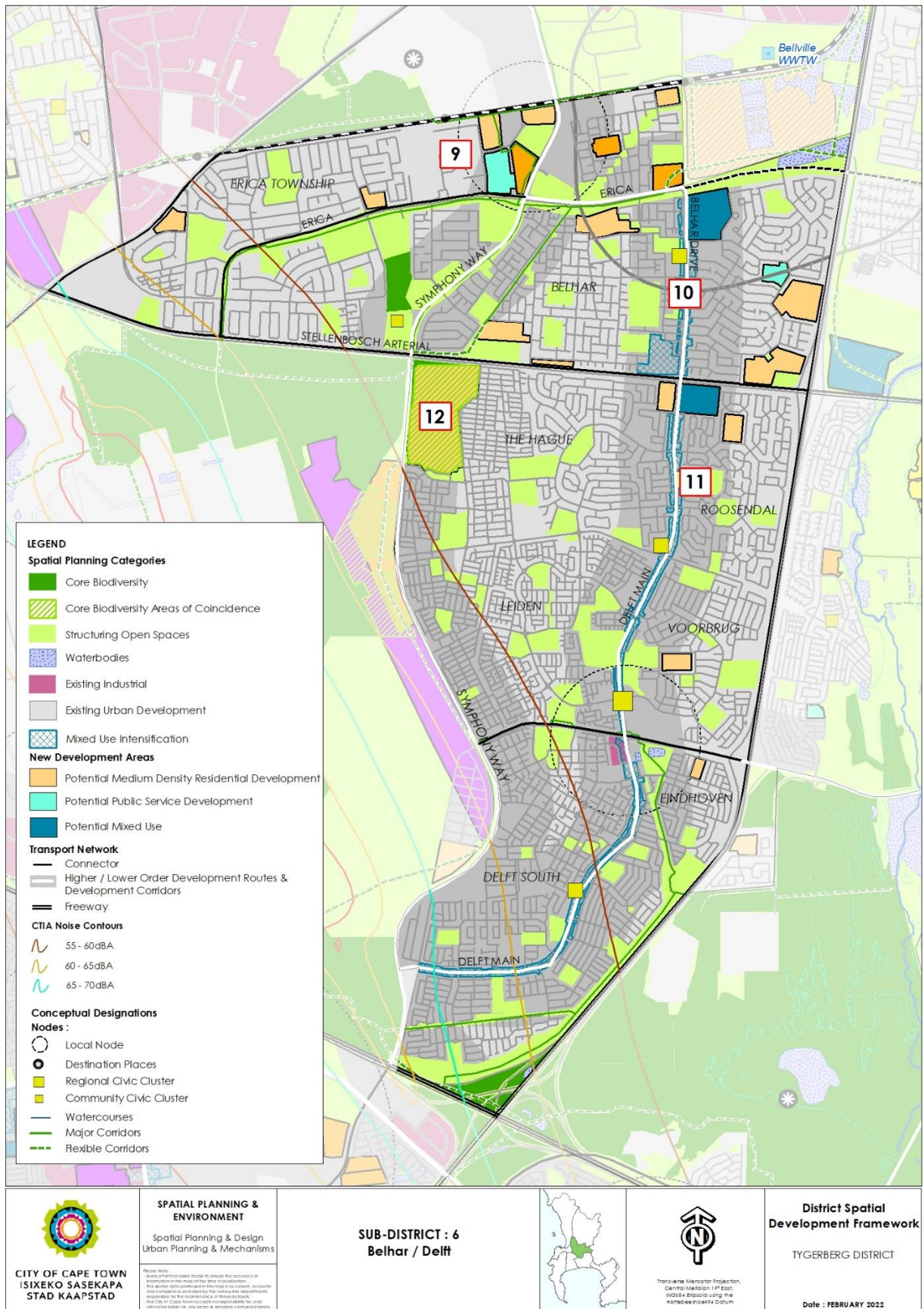


Figure 21: Sub-district 6 DSDP Plan

4.7 Sub-district 7: Cape Town International Airport Precinct and Boquinar Industria

Sub-district 7 is bounded by Modderdam Road and Stellenbosch Arterial to the north; Symphony Way to the east; the N2 freeway to the south; and the Airport Approach Road and the western boundary of King Air Industria to the west. Large scale investment in Airport infrastructure has resulted in increased desirability to locate industrial activity within this precinct. Demand for land for housing to resettle inhabitants of informal settlements within the 65 decibel airport noise contour of the existing airport runway is an immediate issue.

Table 24: Sub-district 7 development guidelines

Sub-district 7: Cape Town International Airport and Boquinar Industria	
Local objectives	Suggested response / Guidelines / Policy statements
<ul style="list-style-type: none"> Identify alternative housing opportunities for Informal Settlements and support initiatives to improve access of communities to basic services including engineering services, health services and education. Reinforce the location of the airport as a major economic generator within the city. Ensure the long term sustainability of the Cape Town International Airport in terms of impact on surrounding community and infrastructure. Promote economic development around exposed locations on the accessibility grid. Ensure the retention of unique environmental assets that exist on land around the airport (northern boundary). Facilitate increased connectivity and integration with surrounding areas. 	<ul style="list-style-type: none"> Facilitate the development for infill industrial and/or mixed use development on the northern and eastern boundary of CTIA. Encourage the development of small scale industrial hives west of Symphony Way to provide access to economic opportunities and employment to the local residents. Facilitate and encourage the relocation of residents of Freedom Farm and Malawi Camp informal settlement to an area suitable for human habitation. Encourage the relocation of the Blikkiesdorp Temporary Residential Area (TRA) as a substantial portion of the settlement is located within the 65 decibel noise contour of the re-aligned airport runway. Ensure adherence of development to the noise restrictions applicable to the airport and that future extensions to the airport recognize potential impact on the surrounding residential community. Ensure that development proposals take cognisance of unique environmental assets including Symphony Way Conservation Area that exist within the area, taking care to provide open space linkages through portions earmarked for development. Prioritise the realignment of Borchard's Quarry Road with New Eisleben Road over the N2 freeway.

Sub-district 7: New development areas

Development is proposed on the undeveloped land surrounding the CTIA owned by the Airports Company of South Africa (ACSA). ACSA is pursuing commercial development on land not required for aviation purposes.

Symphony Way Corridor (Map reference 13 on Figure 22)

Symphony Way has been identified as a development corridor creating a north-south link. This corridor has primarily a mobility function with opportunities for land use intensification at appropriate locations along the route.

This linear strip of land provides an opportunity for high density residential development and industrial development in the form of service industrial/warehousing/commercial development or aviation related development on the undeveloped land located on the eastern airport extent and west of Symphony Way (Figure 22). According to the Department of Environmental Affairs and Development Planning: Noise Pollution Department, the 65bda airport noise contour is the limit where residential use can be permitted (SANS code 10103:2003).

Furthermore, it is understood that the subject properties, are/were owned by the National Housing Board, and is/was to be transferred to ACSA on condition that the land be utilised for aviation and related purposes. Therefore, should land be developed for industrial or other uses that are not related to the aviation function, the issue regarding the mentioned condition will need to be resolved, if not resolved to date. Furthermore, any new development should have a positive interface with Symphony Way (and not backing onto it), should provide for pedestrian access, and should also strive to incorporate opportunities for smaller enterprises.

Airport North-east Precinct (Map reference 13 on Figure 22)

The Airport north-east precinct is proposed to accommodate substantial mixed use and industrial development on the ACSA-owned land (precinct 2) including portions of the land being set aside for residential development to accommodate the relocation of the residents of Freedom Farm. In addition, various City-owned land parcels located along Stellenbosch Arterial and Symphony Way are also available to accommodate mixed use development (potentially some residential development). The development of this precinct will reinforce the role and purpose of these routes, which in its current state, sterilises a large section of Stellenbosch Arterial.

CTIA Northern Mixed Use node (Map reference 14 on Figure 22)

New mixed use (industrial and commercial) development is proposed on the undeveloped land located east of the Borchard's Quarry / Robert Sobukwe Road intersection and the undeveloped land located south of Stellenbosch Arterial. This land provides an opportunity for mixed use development in the form of service industrial / warehousing / commercial development. ACSA proposes this site as a cargo and logistics node, making use of its central location within the city. Pick n' Pay and Massmart have located their Western Cape distribution centres within this node. Development rights are

in place to provide approximately 80 000m² of GLA within this node, some of which has already been taken up.

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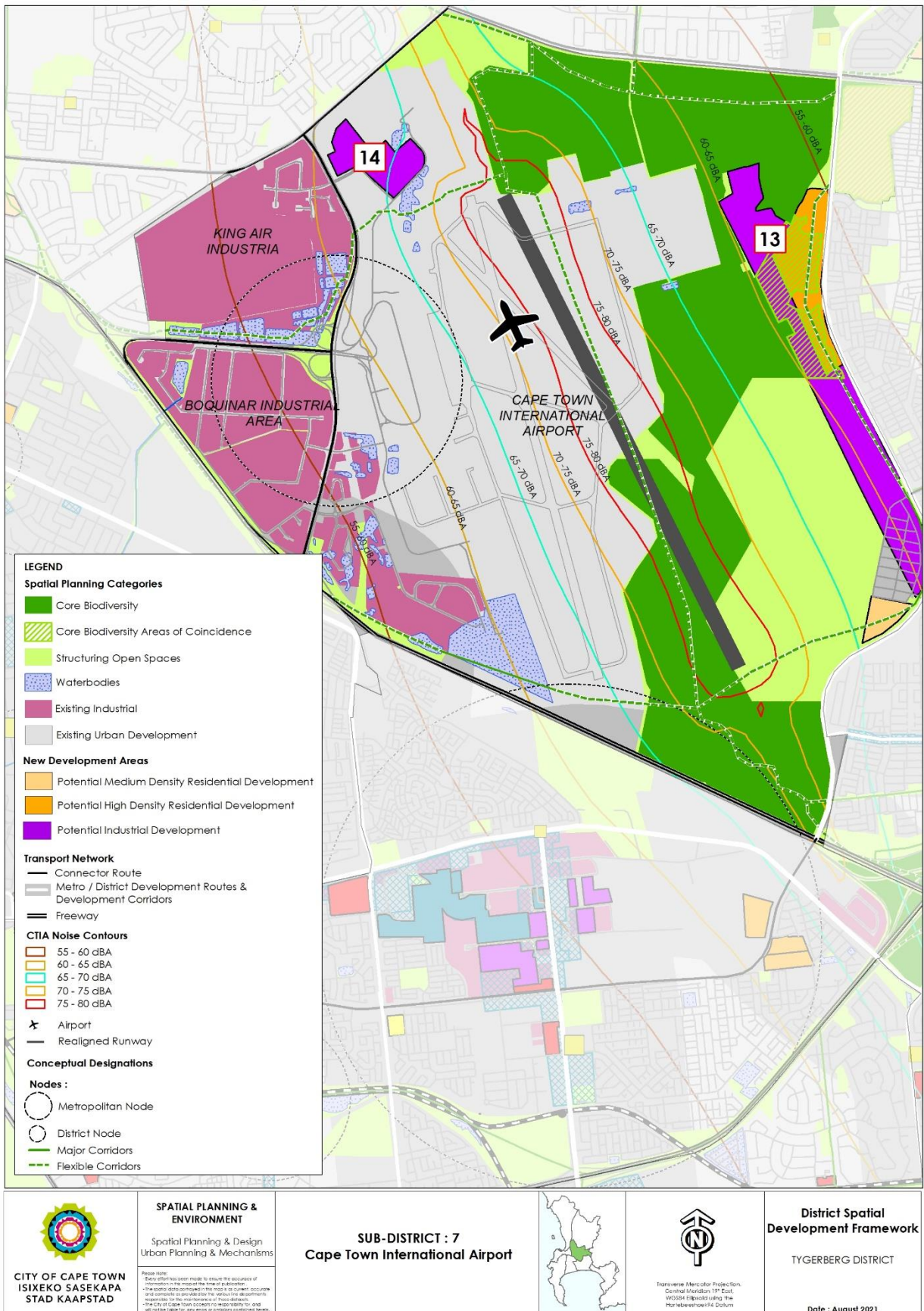


Figure 22: Sub-district 7 DSDF Plan

4.8 Sub-district 8: Greater Kuils River, Bottelary and Polkadraai smallholdings, Zevenwacht, Stellenbosch Farms

Sub-district 8 is bound by Bottelary Road to the north; the City of Cape Town jurisdictional boundary to the east; Polkadraai Road to the south; and the Strand railway line and the R300 freeway to the west. The area is largely suburban in character, abutting the Stellenbosch Farms, but increasing in density and diversity in residential typology in certain areas towards Van Riebeeck Road. Large scale new development is envisaged in this area. Issues typically experienced within the area include lack of integrated planning and development leading to cellular/internalised development, as well as inappropriate development interfaces with open spaces.

Table 25: Sub-district 8 development guidelines

Sub-district 8: Greater Kuilsriver, Bottelary and Polkadraai smallholdings, Zevenwacht, Stellenbosch Farms	
Local objectives	Suggested response / Guidelines / Policy statements
<ul style="list-style-type: none"> • Promote opportunities for business activities and higher density residential development in close proximity to public transport routes, transport interchange precincts and services. • Increase the development and economic potential of the area by facilitating increased connectivity and integration with surrounding areas. • Facilitate opportunities for densification in a manner that will not detract from the character of the area. • Encourage creation / provision of tourist attractions into high and medium potential agricultural areas. • Ensure appropriate interfaces between the urban and rural hinterlands. 	<ul style="list-style-type: none"> • Promote high intensity development with mixed land use intensification including higher density residential development along high accessibility routes such as Van Riebeeck Road, the area south of New Nooiensfontein Road between Van Riebeeck Road and the Strand railway line as well as around stations such as Kuilsriver station. In this instance offices and medical surgeries at an appropriate scale should be supported along Lang Street. • Several vacant land parcels owned by the City of Cape Town as well as other institutions exist within proximity of Kuilsriver Station on either side of the rail line. Therefore, the development potential of these land parcels should be investigated in more detailed local area planning for the Kuilsriver CBD and environs. Care should be taken to dispose of the land parcels earmarked for the proposed bypass-route north of the station. • Support the development of spaces for informal trade activity located along the sidewalks of Van Riebeeck Road in a manner that it does not encroach upon pedestrian movement. • No noxious industrial uses to be permitted in the Kuilsriver industrial area. Any development east of Kuilsriver Industria should firstly consult City Environmental Health in order to ensure that the potential impacts are mitigated through e.g. determining of appropriate buffer zones in accordance with noise and dust impact assessments prior to any development proposal being developed.

- Facilitate upgrade of public facilities in local civic precincts such as Kuilsriver node.
- Promote the development of multi-functional public facilities where possible in order to optimise use of space and enhance safety and management thereof. Cognisance should be taken of the priority need identified to facilitate the provision of Primary School and Community Park to accommodate future growth in this sub-district.
- Lower intensity mixed use development such as offices and medical surgeries at appropriate scale should be supported along portions of Langverwacht Road at locations where direct access to abutting properties are provided.
- Promote the provision of a range of housing typologies including more affordable housing closer to public transport and economic opportunities.
- Residential densities ranging between 25 - 75 du/ha(gross) and building heights between 4 to 5 storeys could be supported
- Support incremental densification in the established residential areas through subdivision of larger properties or group housing where appropriate.
- In instances where the use of a dwelling changes from residential to another use, or where the primary use of the dwelling is no longer residential, street interfaces should be treated sensitively in order to remain complimentary to the residential environment.
- Develop locally appropriate interface guidelines with reserves (Kuils and Bottelary Rivers) and overhead power lines and servitudes into new developments as well as interface of new developments with rural areas.

Polkadraai and smallholdings east and west of Zevenzicht Link Road

- Potential for higher density infill development, as well as employment creating land uses along the link road
- Encourage the development of a range of housing typologies
- A development framework will have to be done for the total site east of the link road to ensure planning are done in an integrated manner being cognizant of the bigger picture. Development applications will still be subject to Act 70 of 1970, and the input from Provincial Department of Agriculture will be vital in considering applications.
- Create an appropriate interface between urban development with the Stellenbosch/Kuilsriver farmlands to discourage further urban invasion, to ensure appropriate architectural character and to improve fire maintenance and safety.

Sub-district 8: New development areas

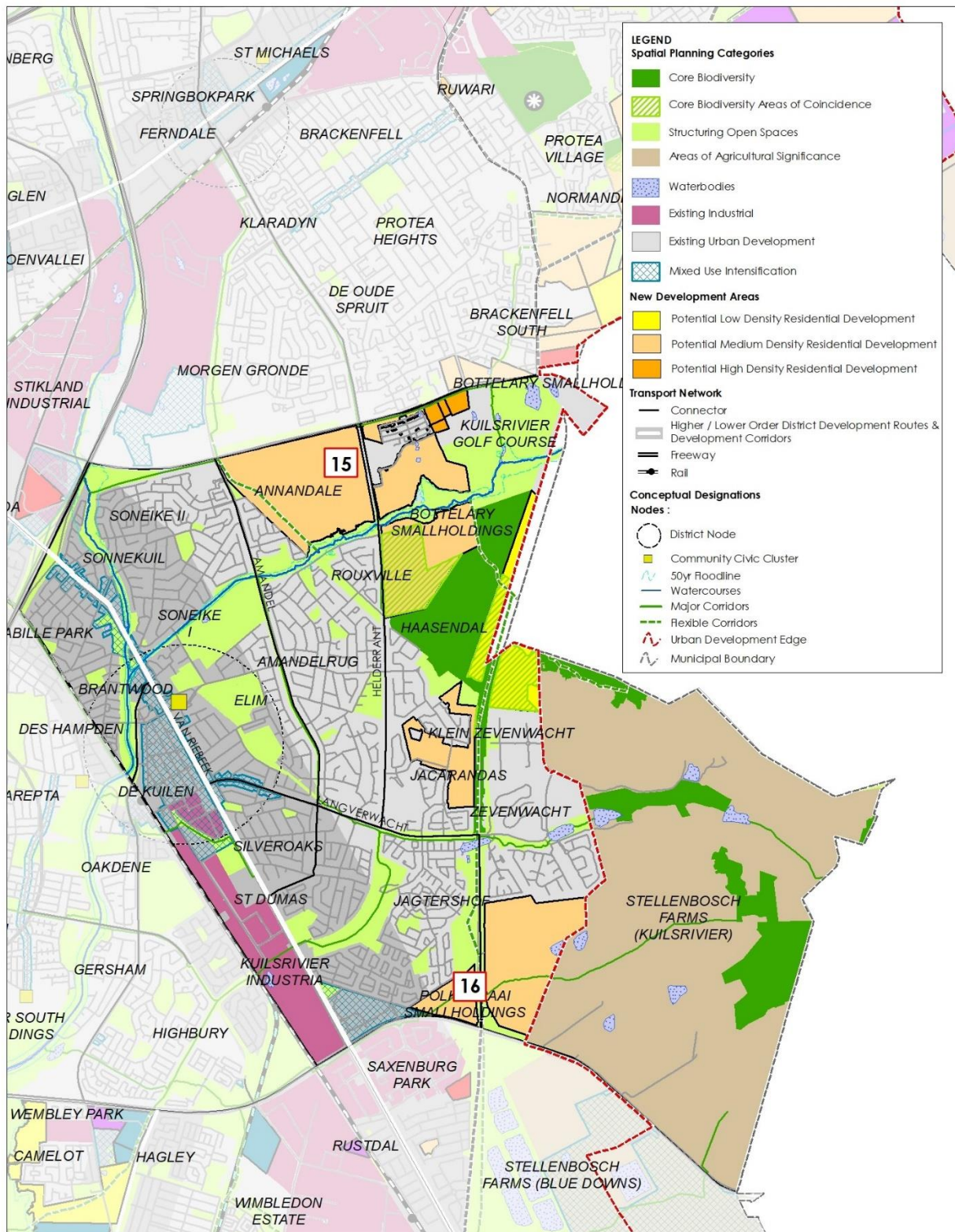
Annandale/Haasendal (Map reference 15 on Figure 23)

The undeveloped Bottelary smallholdings as well as the remainder of Annandale located to the south offers opportunity for medium to higher density residential development. Affordable housing opportunities should also be pursued in this area to promote mixing of income groups. Locally appropriate and sensitive interfaces to be included in design along the river corridor and the inclusion of recreational facilities such as mountain bike tracks and pedestrian walkways to be included. The linkages to the Haasendal Conservation Area and the Bottelary Hills in Stellenbosch Municipality should be retained as important faunal corridors.

Care should be taken that the flood plain area of the Bottelary River is preserved, enhanced in quality, and incorporated into any detailed planning of the area as a feature of development.

Polkadraai Smallholdings Area/ Horticultural smallholdings (Map reference 16 on Figure 23)

The smallholdings (c/o Polkadraai Road and Okavango Bypass) accommodating some vegetable and other farming activities, may in future be considered for medium density residential development (different typologies). Mixed use inclusive of commercial along Zevenzicht Link Road should be included. It is essential that broad local planning of the area be undertaken to prevent the area, which consists of multiple owners, from developing on a cellular basis.






 <p>CITY OF CAPE TOWN ISIXEKO SASEKAPA STAD KAAPSTAD</p>	<p>SPATIAL PLANNING & ENVIRONMENT</p> <p>Spatial Planning & Design Urban Planning & Mechanisms</p> <p><small>Please Note: Every effort has been made to ensure the accuracy of information on this map and the information contained therein. The Council does not accept any liability for errors or omissions, and does not warrant the accuracy of the information. The City of Cape Town is not responsible for any third-party information or any errors or omissions contained herein.</small></p>	<p>SUB-DISTRICT : 8 Greater Kuils River Area</p>		 <p>Transverse Mercator Projection, Central Meridian 18° East, WGS84 Spheroid using the Hotine Oblique Datum</p>	<p>District Spatial Development Framework</p> <p>TYGERBERG DISTRICT</p> <p>Date : August 2021</p>
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Figure 23: Sub-district 8 DSDF Plan

4.9 Sub-district 9: Sarepta, Stellendale, Highbury, Kalkfontein smallholdings, Kuils River system

Sub-district 9 is bounded by the Strand railway line to the east, Stellenbosch Arterial to the south, and the R300 freeway to the west. The area is largely suburban in character, but contains a diverse range of housing typologies and comprises a range of income groups in older established areas, newly developed/developing areas, as well as publicly assisted housing areas and informal settlements. Typical issues experienced within the area include a lack of appropriate integration with surrounding areas due to the barrier effects of mobility routes and railways, as well as service delivery and quality public open space.

Table 26: Sub-district 9 development guidelines

Sub-district 9: Sarepta, Stellendale, Highbury, Kalkfontein smallholdings, Kuils River system	
Local objectives	Suggested response / Guidelines / Policy statements
<ul style="list-style-type: none"> Promote opportunities for business activities and higher density residential development in close proximity to public transport routes, transport interchange precincts and services. Increase the development and economic potential of the area by facilitating increased connectivity and integration with surrounding areas. Identify opportunities for establishment and support of SMMEs including informal trading. Facilitate opportunities for densification in a manner that will benefit and uplift the area. Ensure development of quality environments that would promote the general upliftment of the area. Facilitate opportunities to enhance the quality of the urban environment by improving the quality of open space and natural structuring elements. 	<ul style="list-style-type: none"> Create and promote opportunities for establishment of SMMEs within appropriate areas (e.g. around Kuilsriver Station). Facilitate commercial development in demarcated areas where commercial activities can be established (i.e. around Kuilsriver Station, sections along New Nooiensfontein Road where access is permitted). Assist with the identification of solutions for accommodation of the horse and cart industry. Several vacant land parcels owned by the City of Cape Town as well as other institutions exist within proximity of Kuilsriver Station on either side of the rail line. Therefore, the development potential of these land parcels should be investigated in more detailed local area planning for the Kuilsriver CBD and environs. Avoid disposing of land parcels earmarked for the proposed bypass road reserve. Promote high density residential development on appropriately located vacant land parcels in close proximity to public transport and economic opportunities. Such development should be undertaken in a manner that does not detract from the character of the area and that will consider the maintenance of an appropriate interface between the development and especially single residential uses within the area. Promote the provision of a range of housing typologies closer to public transport and economic opportunities. Prioritise the completion of Saxdown Road link through Highbury to increase connectivity to surrounding areas. Promote the extension of Erica Drive (Belhar Road) across the R300 Freeway into Sarepta to facilitate integration between communities.

- Promote mixed use development along Reuter Road through Sarepta and Kalkfontein to improve economic opportunities. The extension of Reuter Road in Kalkfontein across the Kuils River to link up with Highbury Road intersection should be encouraged.
- The land parcel located on the corner of Stellenbosch Arterial and R300 freeway provides an opportunity for mixed use development in the form of service industrial, commercial and some residential development. Any proposals should be sensitive towards the interface with the Kuilsriver as well as interfaces between residential and non-residential land uses.
- Encourage incremental densification in the established residential areas through subdivision of larger.
- In instances where the use of a dwelling changes from residential to another use, or where the primary use of the dwelling is no longer residential, street interfaces should be treated sensitively in order to remain complimentary to the residential environment.
- Promote the upgrade/development of public facilities to be multi-functional where possible in order to optimise use of space and enhance safety and management thereof.
- Investigate the unlocking of the landlocked triangular shaped land between the Strand railway line, the Stellenbosch Arterial and the future Blue Downs railway line, as well as appropriate land uses (such as light industrial) on portions not affected by environmental features/wetlands.

Kuilsriver green belt

- Support and initiate opportunities for general upgrading and renewal of the Kuils River corridor area to serve as a high quality natural amenity for surrounding communities.
- Support the development of recreation and community facilities along the Kuils River Corridor through identifying key focal points along its course for public investment such as the area around the Sarepta neighbourhood civic cluster, the western river bank at Kalkfontein, and the 1:100 yr floodplain at Highbury.
- Encourage complementary uses that will promote a more active edge along the Kuils River. The existing informal soccer fields in the Kalkfontein area should be formalised and upgraded as part of the Kalkfontein Phase 3 housing project.
- Develop locally appropriate interface guidelines with the Kuilsriver system into new developments and encourage the use of these as recreation spaces.

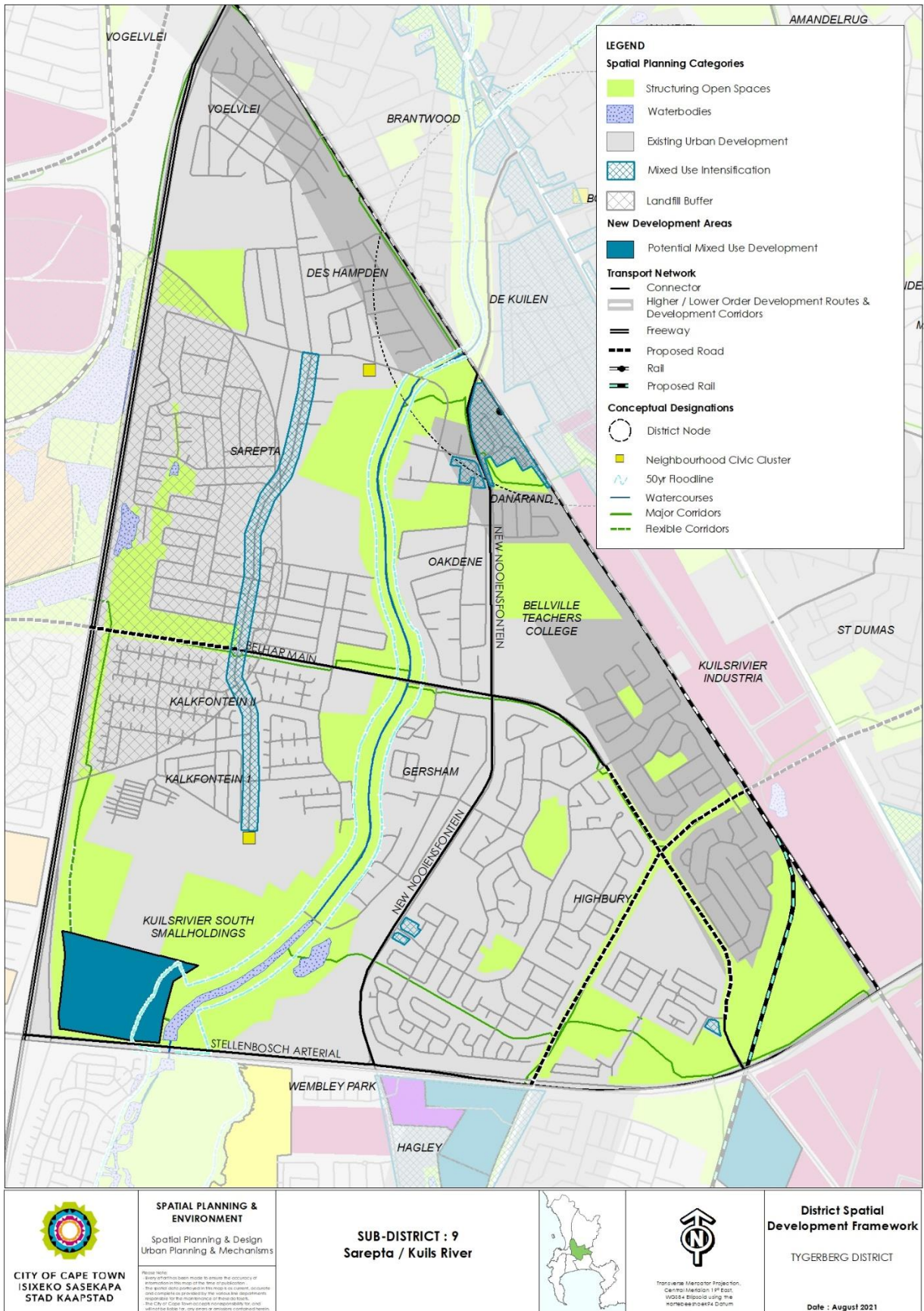


Figure 24: Sub-district 9 DSDF Plan