

An aerial photograph of a township in Stellenbosch, South Africa. The image shows a dense cluster of small, rectangular buildings with corrugated metal roofs, typical of informal settlements. A large, irregularly shaped pond is situated in the center of the township. To the right of the pond, there are large, rectangular agricultural fields, some of which appear to be planted with crops. The overall scene depicts a mix of urban and rural land use.

Stellenbosch Municipality

Spatial Development Framework

Draft for Consultation

February 2019



Contact

Spatial Planning, Heritage and Environment
Stellenbosch Municipality
Bernabé de la Bat

email:

Bernabe.DeLaBat@ Stellenbosch.gov.za

call:

+27 21 808 8652

visit:

Plein Street
Stellenbosch



Professional Team

Built Environment Partnership

robink@bepsa.co.za / stephenb@
bepsa.co.za / chadg@bepsa.
co.za / jeremy@infinityenv.co.za

GAPP Architects and Urban Designers

barbara@ctn.gapp.net / bobby@
ctn.gapp.net / janine@ctn.gapp.
net / lize@lizemalan.co.za

Transport Futures

richard@transportfutures.co.za



architects/urban designers



Glossary of Abbreviations

ATC -	Adam Tas Corridor	LHOA -	Lynedoch Home Owners' Association	SMME(s) -	Small and Medium Enterprise (Enterprises)
BNG -	Breaking New Ground (national subsidised housing strategy)	LSDF (s) -	Local Spatial Development Framework (Frameworks)	SOE(s) -	State Owned Enterprise (Enterprises)
BTT -	Boschendal Treasury Trust	LSU -	Large Stock Unit	SPCs -	Spatial Planning Categories
CBA -	Critical Biodiversity Area	LUMS -	Land Use Management System	SPLUMA -	Spatial Planning and Land Use Management Act
CBD -	Central Business District	LUPA -	(Western Cape) Land Use Planning Act	SSU -	Small Stock Unit
CCT -	City of Cape Town	Mayco -	Mayoral Committee	TB -	Tuberculosis
CEF -	Capital Expenditure Framework	MIG -	Municipal Infrastructure Grant (national grant funds for infrastructure)	UDS -	Urban Development Strategy
CPI -	Consumer Price Index	MSA -	Municipal Systems Act, 32 of 2000	US -	University of Stellenbosch
CWDM -	Cape Winelands District Municipality	MSDF -	Municipal Spatial Development Framework	UNESCO -	United Nations Educational, Scientific and Cultural Organisation
DEADP -	Department of Environmental Affairs and Development Planning	MTREF -	Medium Term Revenue and Expenditure Framework	WCG -	Western Cape Government
DM -	Drakenstein Municipality	NEMA -	National Environmental Management Act	V & AW -	Victoria and Alfred Waterfront
DOCG -	Department of Cooperative Governance	NGP -	New Growth Path	Wesgro -	Western Cape Tourism, Trade and Investment Promotion Agency
DTPW -	Department of Transport and Public Works	NDP -	National Development Plan		
FLISP -	Finance Linked Individual Subsidy Programme (a national government housing programme)	NMT -	Non-motorized transport		
GAP -	Government assisted housing in the affordability "gap" for home owners earning between R3 501 and R18 000 per month	PSTD -	Provincial Spatial Development Framework		
GCM -	Greater Cape Metro	PSTP -	Provincial Sustainable Transport Program		
GDP -	Gross Domestic Produce	RSIF -	Regional Spatial Implementation Framework		
HA -	Hectare	RAP -	Rural Area Plan		
HIV -	Human Immunodeficiency Virus	SANBI -	South African National Biodiversity Institute		
ICM -	Intermediate City Municipality	SEMF -	Strategic Environment Management Framework		
IDP -	Integrated Development Plan	SDF(s) -	Spatial Development Framework (Frameworks)		
ISC -	Integrated Steering Committee	SM -	Stellenbosch Municipality		
IZS -	Integrated Zoning Scheme				
IUDG -	Integrated Urban Development Grant				
LDC -	Lynedoch Development Company				

Content

1. Introduction 13

1.1. Subject Matter and Role of the SDF	14
1.2. Users of the SDF	14
1.3. Background to the 2019 MSDF	14
1.4. Process in Preparing the MSDF	16
1.5. Structure of the MSDF	17

2. Legislative and Policy Context 19

2.1. Legislative Requirements for MSDFs 19

2.1.1. Municipal Systems Act	19
2.1.2. Spatial Planning and Land Use Management Act	19
2.1.3. National Environmental Management Act	21
2.1.4. The Western Cape Government Land Use Planning Act	21

2.2. Policy Context for SDFs 21

2.2.1. The National Development Plan 2030	21
2.2.2. Integrated Urban Development Framework	22
2.2.3. The WCG Provincial Spatial Development Framework	23
2.2.4. The Greater Cape Metro Regional Spatial Implementation Framework	25

2.2.5. SM Integrated Development Plan	26
---------------------------------------	----

2.3. Policy implications 27

3. Status Quo, Issues, Challenges and Opportunities 29

3.1. Biophysical Environment 29

3.1.1. Attributes	29
-------------------	----

3.2. Socio-Economic Context 32

3.2.1. Attributes	32
-------------------	----

3.3. Built Environment Context 36

3.3.1. Attributes	36
-------------------	----

3.4. Institutional Context 40

3.5. Synthesis of Status Quo 42

3.6. Land Budget Considerations 45

3.6.1. Projected housing and land demand	45
--	----

3.6.2. Allocation of demand across the municipal area	46
---	----

4. Vision and Concept 49

4.1. Introduction 49

4.1.1. Vision	49
---------------	----

4.1.2. Key Considerations	49
---------------------------	----

4.2. Concept 50

5. Plans and Settlement Proposals 59

5.1. Introduction 59

5.2. The Stellenbosch Municipal Area as a Whole 60

5.3. Stellenbosch Town 65

5.4. Klapmuts 69

5.5. Franschhoek 73

5.6. Small Settlements in the Franschhoek Valley 76

5.6.1. La Motte	76
-----------------	----

5.6.2. Wemmershoek	77
--------------------	----

5.7. Small Settlements in the Dwars River Valley 80

5.7.1. Groot Drakenstein	80
--------------------------	----

5.7.2. Pniel, Lanquedoc, Johannesdal, and Kylemore	81
--	----

5.8. Jonkershoek 84

5.9. Small Settlements along the R30485

5.9.1. Muldersvlei Crossroads	85
-------------------------------	----

5.9.2. Koelenhof	85
------------------	----

5.10. Small Settlements along Baden Powell Drive 89

5.10.1. Vlottenburg	89
---------------------	----

5.10.2. Spier	90
---------------	----

5.10.3. Lynedoch	90
5.11. Raithby	93
6. Implementation Framework	97
6.1. Introduction	97
6.2. Proposed Settlement Hierarchy	97
6.3. Priority Development Areas and Trends	97
6.4. Policy Framework	99
6.5. Guidelines, Studies and Information Supporting the Policies	104
6.6. Implications for Sector Planning and Specific Development Themes	105
6.6.1. Environmental and rural area management	105
6.6.2. Movement	107
6.6.2.1 <i>The relationship between spatial and transport planning</i>	107
6.6.2.2 <i>Traditional practice</i>	107
6.6.2.3 <i>Required shifts</i>	107
6.6.2.4 <i>A conceptual public transport network supporting the MSDF</i>	108
6.6.2.5 <i>The design of routes</i>	109
6.6.2.6 <i>Transport within settlements</i>	109
6.6.3. Housing	112
6.6.4. Local economic development	112

6.7. Land Use Management Guidelines and Regulations	113
6.8. Implications for Inter-Municipal Planning	113
6.8.1. General inter-municipal planning issues	113
6.8.2. Place-specific inter-municipal planning issues	114
6.9. Catalytic Initiatives	117
6.9.1. Adam Tas Corridor	117
6.9.2. Development of Klapmuts	120
6.9.3. Alternative rail stock along the Baden Powell Drive-Adam Tas-R304 corridor	121
6.10. Further Planning Work	121
6.10.1. Future settlement along the Baden Powell Drive-Adam Tas-R304 corridor	121
6.10.2. Other local planning initiatives	121
6.11. Institutional Arrangements	122
6.11.1. Inter-municipal planning	122
6.11.2. Private sector joint planning	122
6.12. Checklists in Support of Decision-Making	123
6.13. A Municipal Leadership and Advocacy Agenda related to Spatial Development	128

7. Capital Expenditure Framework	131
7.1. Introduction	131
8. Monitoring and Review	133
8.1. Monitoring	133
8.2. Review of the MSDF	133
List of Documents Reviewed	134
Appendices	136
A. Policy Framework	137
B. Public Input on MSDF Concept Received During Area-Based Public Participation Sessions	142
C. Spatial Planning Categories, Associated SEMF Policy and WCG Guidelines	143
D. Thematic Guidelines Drawn From “Western Cape Land Use Planning: Rural Guidelines” which may be applicable to different SPCs	149
E. Norms / Guidelines for the Size of Agricultural Holdings	155

List of Tables, Diagrams and Figures

Table 1.SPLUMA Principles	20	Table 21.	Plan Elements and Proposals for	71	Table 44.	A municipal leadership and advocacy agenda from the perspective of spatial planning and land use management	129
Table 2.The PSDF Spatial Agenda	23	Table 22.	Plan Elements and Proposals for	74	Table 45.	Conventions, Resolutions or Declarations	137
Table 3.The key PSDF Transitions	24	Table 23.	Plan Elements and Proposals for La Motte - Wemmershoek	78	Table 46.	Conventions, Resolutions or Declarations (cont.)	138
Table 4.IDP Strategic Focus Areas and the MSDF	26	Table 24.	Plan Elements and Proposals for Dwars River Valley Settlements	82	Table 47.	Policies	139
Table 5.Policy Implications	27	Table 25.	Plan Elements and Proposals for Koelenhof - Muldersvlei	87	Table 48.	Policies (cont.)	140
Table 6.Stellenbosch's Biophysical context - key attributes summarised	30	Table 26.	Plan Elements and Proposals for Vloottenburg - Spier - Lynedoch	91	Table 49.	Policies (cont.)	141
Table 7.Stellenbosch's Biophysical context - issues and implications	31	Table 27.	Plan Elements and Proposals for Raithby	94	Table 50.	SPCs for Stellenbosch Municipality and associated land use policy and guidelines	143
Table 8.Stellenbosch's Socio-Economic context - key attributes summarised	32	Table 28.	Proposed Settlement Hierarchy	98	Table 51.	SPCs for Stellenbosch Municipality and associated land use policy and guidelines (cont.)	144
Table 9.Stellenbosch's Socio-Economic context - key attributes summarised (cont.)	33	Table 29.	Proposed MSDF Policies	100	Table 52.	SPCs for Stellenbosch Municipality and associated land use policy and guidelines (cont.)	145
Table 10. Stellenbosch's Socio-Economic context - issues and implications	35	Table 30.	Proposed MSDF Policies (cont.)	101	Table 53.	SPCs for Stellenbosch Municipality and associated land use policy and guidelines (cont.)	146
Table 11. Stellenbosch's Built Environment context - key attributes summarised	36	Table 31.	Proposed MSDF Policies (cont.)	102	Table 54.	SPCs for Stellenbosch Municipality and associated land use policy and guidelines (cont.)	147
Table 12. Stellenbosch's Built Environment context - key attributes summarised (cont.)	37	Table 32.	Proposed MSDF Policies (cont.)	103	Table 55.	SPCs for Stellenbosch Municipality and associated land use policy and guidelines (cont.)	148
Table 12. Stellenbosch's Built Environment context - issues and implications	39	Table 33.	Supportive Guidelines	104	Table 56.	Thematic land use guidelines for rural areas	149
Table 13. Stellenbosch's Institutional context - key attributes summarised	40	Table 34.	Desired public transport routes	108	Table 57.	Thematic land use guidelines for rural areas (cont.)	150
Table 14. Stellenbosch's Institutional context - issues and implications	41	Table 35.	Potential public transport nodes	110	Table 58.	Thematic land use guidelines for rural areas (cont.)	151
Table 15. The historic land take-up in nodes	46	Table 36.	Possible park and ride locations	110	Table 59.	Thematic land use guidelines for rural areas (cont.)	152
Table 16. Land demand for housing per node	47	Table 37.	Place-specific inter-municipal planning issues	114	Table 60.	Thematic land use guidelines for rural areas (cont.)	153
Table 17. Land availability	47	Table 38.	Place-specific inter-municipal planning issues (cont.)	115	Table 61.	Thematic land use guidelines for rural areas (cont.)	154
Table 18. Plan Elements and Proposals for the SM as a whole	62	Table 39.	Place-specific inter-municipal planning issues (cont.)	116	Table 62.	Norms/ guidelines for the size of agricultural holdings	155
Table 19. Plan Elements and Proposals for the SM as a whole (cont.)	63	Table 40.	Checklists	124			
Table 20. Plan Elements and Proposals for Stellenbosch Town	67	Table 41.	Checklists (cont.)	125			
		Table 42.	Checklists (cont.)	126			
		Table 43.	Checklists (cont.)	127			

Figure 1. The location of SM within the Western Cape and Cape Winelands District	13	Figure 19. Concept 2 - Respect and grow our cultural heritage	52	Figure 39. Land use precincts and the spatial concept for the mixed use precinct (Jonkershoek SDF approved by Council in 2015)	84
Figure 2. The 2013 Approved Stellenbosch SDF diagram illustrating hierarchy of settlement, linkages and investment priorities	15	Figure 20. Concept 3 - Direct growth to areas of lesser natural and cultural significance as well as movement opportunity	53	Figure 40. Koelenhof Spatial Development Framework Revision and Urban Edge Determination - Final Draft 2007	85
Figure 3. The SDF Process (from DRDLR's PLUMA Guidelines, 2014)	16	Figure 21. Concept 4 - Clarify and respect the different roles and functions of settlements	54	Figure 41. Koelenhof - Muldersvlei Concept	86
Figure 4. The National Development Plan Vision for 2030	22	Figure 22. Concept 5 - Clarify and respect the roles and functions of different elements of movement structure	55	Figure 42. Koelenhof Muldersvlei Plan	88
Figure 5. Consolidated PSDF Framework 2014	24	Figure 23. Concept 6 - Ensure balanced, sustainable communities	56	Figure 43. Alternative 1 and 2 from Vredenheim Engineering Services Report (Aurecon, 8 June 2017)	89
Figure 6. Composite GCM RSIF 2017 (DEA&DP 2017)	25	Figure 24. Consolidated Concept	57	Figure 44. Vloottenburg - Spier - Lynedoch Concept	90
Figure 8. Land capability (Cape Farm Mapper)	29	Figure 25. Consolidated Concept for the SM area	61	Figure 45. Spier - Vloottenburg - Lynedoch Plan	92
Figure 7. Scenic landscape elements and conserved landscaped/biophysical areas	29	Figure 26. Municipal Spatial Framework for the SM area	64	Figure 46. Raithby Concept	93
Figure 9. Rural landscape activities	29	Figure 27. Stellenbosch Town Concept	66	Figure 47. Raithby Plan	95
Figure 10. The impact of the recent severe drought conditions in the Western Cape on grape yields is high, with poor yield years coinciding with moderate or severe drought periods for the wine industry.	31	Figure 28. Stellenbosch Town Plan	68	Figure 48. A conceptual approach to align transport planning with the MSDF	107
Figure 11. Water quality and habitat diversity in the Plankenbrug River have been reduced by stormwater and wastewater discharges from Kayamandi and Stellenbosch. This river has been identified as a high risk area for human health by the 2005 State of the Rivers Report	31	Figure 29. Klapmuts Concept	70	Figure 49. A conceptual public transport network for SM	109
Figure 12. Racial distribution in Stellenbosch (dotmap. adrianfrith.com)	34	Figure 30. Klapmuts Plan	72	Figure 50. Future Development of Arterial Road Transport Corridors in and around Stellenbosch (Transport Futures, 2018)	111
Figure 13. Percentage of workforce employed	34	Figure 31. Franschoek Concept	73	Figure 51. Future recommended road designs - cross sections for public transport ad NMT (Transport Futures, 2018)	111
Figure 14. Access to Health Facilities	34	Figure 32. Franschoek Plan	75	Figure 52. Adam Tas Corridor Concept	119
Figure 15. Access to Schools	34	Figure 33. Extract from a planning motivation report for the "Proposed Integrated Residential Development Proposals; Portions of Farms 1158/1, 1653 And 1139 La Motte, Franschoek" (CK Rumboll & Partners)	76		
Figure 16. Housing and development trends, by passes and gated communities	38	Figure 34. Wemmershoek - La Motte Concept	77		
Figure 17. Current development pressures on the periphery of settlements in the SM	43	Figure 35. La Motte - Wemmershoek Plan	79		
Figure 18. Concept 1 - maintain and grow our natural assets	51	Figure 36. Boschendal Site Development Plan by Philip Briel Architects, From Boschendal Village: Planning Report for NEMA Basic Assessment Report Version 1.9 - June 2017	80		
		Figure 37. Dwars River Valley Concept	81		
		Figure 38. Dwars River Valley Plan	83	Diagram 1. Investment focus of the public and private sectors	44

Preamble

Stellenbosch and an appropriate approach to spatial development and management

Spatial development frameworks are mostly technical documents. In terms of the legislation and procedures governing their preparation, they have to address a host of matters, all of which are not of equal importance to all stakeholders. The framework may not resolve all the issues discussed to the same extent; some matters need time to be investigated further, while others are reasonably firm. In its elaboration to meet requirements, spatial frameworks can become dull, hiding the core message.

We present the critical underlying narrative here and argue that adhering to it, through numerous individual actions and decisions – across sectors of society – is at the core of managing development and land use in Stellenbosch better, at the heart of a better future for all.

The narrative ...

“Stellenbosch is a special place; all of it ... its various settlements, its nature areas, farms, education institutions, its innovative corporations, small businesses, its places to visit, its places to live, its festivals, its history ... its people.

In terms of its space – activities in space, landscapes, urban places, streets, and buildings – Stellenbosch continue to impress and bring opportunity, joy, and contentment; in different ways, to visitors and residents alike. Many would love to live here, work here, or visit more often.

Stellenbosch has been judged as a place of high opportunity. Numerous factors combine to a recognition that this place can contribute more to growing societal needs, in its region, and our country. If one lives here, the chances are that you can make a good livelihood. Stellenbosch is truly a rich place.

Stellenbosch is harsh on some. Many who live here do not have adequate shelter, or the opportunity to work. Others feel that the time has come to depart from farms, to give up farming. Many study here, but cannot enjoy university life to the full because there is limited residential opportunity for students. Then again, many struggle in traffic every day, on congested roads, wasting time and money for fuel, even if privileged enough to own a private vehicle. Stellenbosch is not that easy on people anymore. Its challenges increasingly impact on all, albeit in different ways.

Citizens respond to challenges differently. Many owners of agricultural land have indicated a desire to develop their land for other, predominantly urban activities. These thoughts already involve a large land area, comparable to the size of Stellenbosch town. Others, tired of waiting for a housing opportunity here or elsewhere – and government support – invade land, staking a claim, the right to a place to live, on virgin land, even if the land is not deemed desirable for development because of its agricultural or environmental value, is prone to risk, or allocated to someone else. Some, with the necessary material means, elect to close themselves off, to obtain a place to live in gated communities, secure from perceived or real threat to body and property.

Stellenbosch grows, both naturally, and because more people are attracted here. Those drawn include the poor, better off, and large corporations. Stellenbosch has a special quality of accommodating hope, good opportunities, and a better life; the perception is that your needs can be met faster, your children can get access to a school promptly, or, your journey to work will be less cumbersome.

However, Stellenbosch grows on top of unfinished business. It grows on top of ways of a past that had not been fixed, the separation of people, the focus on some as opposed to all; needs not met, exclusion. It also grows on top of limited public resources. While the municipality and other spheres of government collect and allocate funds for service delivery, it is not enough to address backlogs, fix the mistakes of the past, prepare for unexpected crisis (for example, in the form of fires), or meet anticipated future needs.

As Stellenbosch grows, things get worse. In terms of how we manage development and space, we know what direction to take. We know that we should adopt a precautionary approach to nature and agricultural land, we know that we should contain and compact settlements, we know that we should provide more choice in shelter and housing opportunity, and that we should focus on public and non-motorised transport. This knowledge is also embedded in policy, from global conventions to national, provincial and local frameworks, including the Stellenbosch Municipal Integrated Development Plan, the legal plan which directs the municipal budget and resource allocation.

The issue is that we have not implemented what we believe the appropriate policy direction is well. We should ask why. We can answer that achieving in terms of new policy is not easy. It requires new ways of living and doing. Higher densities, leaving the car, more interaction between groups of society sharing public space, more partnership in unlocking development opportunity, and so on.

Even if difficult, it is a matter of now or never. We cannot behave and live like before. We cannot afford to lose more nature and agricultural land, develop at low densities, and prioritise building roads for private cars more than public transport. If we do that, the system will fail. Material wealth will not assist.

Despite difficulties, it appears as if our approach is shifting. Land previously occupied by manufacturing enterprises in critical locations in Stellenbosch have slowly become available for re-use. The potential of Klipmuts to accommodate enterprises requiring large landholdings and dependent on good intra- and inter-regional logistic networks is acknowledged. Landowners realise that overcoming the resource constraints, infrastructure constraints, and the cross-subsidisation required for more inclusive development – the extent of energy needed – necessitates joint work, joint planning, and implementation of a scale and nature not yet experienced in Stellenbosch. Corporations realise that they have broader responsibility – not only in contributing to good causes concerning nature, education, or the arts, but in actively constructing better living environments. We realise that we have to enact partnerships to make our towns better.

We also have the benefit of history. In times past, we have, as Stellenbosch, changed our destiny, did things for the better. Starting with an individual idea, a thought, often through an individual, great things were done. With such ideas and actions the town established a university, saved historic buildings and places, launched cultural celebrations with broad reach, safeguarded unique nature areas, provided families with homes, begun corporations with global reach. When a fire destroyed homes, they were rebuilt promptly with collective energy and purpose. When children needed schooling, and government could not provide, some established schools.

Often, these initiatives started outside of government, albeit assisted by the government. They were started by those who thought beyond current challenges, without necessarily being able to project outcomes over time in full. They just understood that one step might lead to another. Not all the technical detail was resolved, not everything understood in its entirety. They merely acted in terms of core principles. As matters unfolded and new challenges emerged, the principles guided them.

The new Municipal Spatial Development Framework recognises that the spatial decisions and actions of many make what settlements are. It asks us to understand that plans cannot do everything, predict everything. It asks all to consider action with a few core beliefs, principles, or concepts, geared towards the common good. Specifically, it asks us to consider seven principles:

1. First, maintain and grow the assets of Stellenbosch Municipality's natural environment and farming areas. Humanity depends on nature for physical and spiritual sustenance, livelihoods, and survival. Ecosystems provide numerous benefits or ecosystem services that underpin economic development and support human well-being. They include provisioning services such as food, freshwater, and fuel as well as an array of regulating services such as water purification, pollination, and climate regulation. Healthy ecosystems are a prerequisite to sustaining economic development and mitigating and adapting to climate change. The plan provides for activities enabling access to nature and for diversifying farm income in a manner which does not detract from the functionality and integrity of nature and farming areas and landscapes.

2. Second, respect and grow our cultural heritage, the legacy of physical artefacts and intangible attributes of society inherited from past generations maintained in the present and preserved for the benefit of future generations. Cultural heritage underpins aspects of the economy and differentiates places. Culture is a dynamic construct; forever emerging in response to new challenges, new interactions and opportunity, and new interpretations. Spatially, we must organise Stellenbosch in a manner which also sets the stage for new expressions of culture.

3. Third, within developable areas – areas not set aside for limited development owing to its natural or cultural significance – allow future opportunity to build on existing infrastructure investment, on the opportunity inherent in these systems when reconfigured, augmented or expanded. Infrastructure represents significant public investment over generations, not readily replicated over the short term. It represents substantial assets for enabling individual and communal development opportunity of different kinds. From a spatial perspective, movement systems are particularly significant. Elements of the movement system, and how they interconnect, have a fundamental impact on accessibility, and therefore economic and social opportunity. Specifically important is places of intersection between movement systems – places which focus human energy, where movement flows merge – and where people on foot can readily engage with public transport.

4. Fourth, clarify and respect the different roles and potentials of existing settlements. All settlements are not the same. Some are large, supported by significant economic and social infrastructure, offer a range of opportunity, and can accommodate growth and change. Others are small and the chance to provide for growth or change is minimal. Generally, the potential of settlements to help change and growth relates directly to their relationship with natural assets, cultural assets, and infrastructure. We must accommodate change and growth where existing assets will be impacted on the least or lend itself to generating new opportunity.

5. Fifth, address human needs – for housing, infrastructure, and facilities – clearly in terms of the constraints and opportunity related to natural assets, cultural assets, infrastructure, and the role of settlements. We must meet human need in areas where the assets of nature are not degraded, where cultural assets can be best respected and expanded, and where current infrastructure and settlement agglomeration offers the greatest opportunity. Generally, we can help human need in two ways. The first is through infill and redevelopment of existing settled areas. The second is through new green-field development. We need to focus on both while restricting the spatial footprint of settlements outside existing urban areas as far as possible.

6. Sixth, pursue balanced communities. All settlements should be balanced. That means they should provide for all groups, and dependent on size, a range of services and opportunities for residents. It also says they should provide for walking and cycling, not only cars.

7. Finally, focus energy on a few catalytic areas that offer extensive opportunity and address present risk. Planning cannot attempt to treat all areas equally. Some areas offer more opportunity for more people than others. We need to focus on the areas and actions where a significant number of people will benefit, where we will meet their needs. There is also a need to focus on areas of 'deep' need, notwithstanding location, where limited opportunity poses a risk to livelihoods. Some informal settlements and poorer areas may not be located to offer the best chance for inhabitants, yet services need to be provided and maintained here. However, significant new development should not occur in these places, exacerbating undesirable impacts or further limiting the opportunity for people to pursue sustainable livelihoods.

Spatial plans are 'partial' frameworks for action. They deal with space. Command of space is not enough to develop or manage a settlement in the interest of all. Each spatial principle, each concept, requires parallel actions in other sectors, including how we form institutions for execution, how we transport people, how we fund things, where we focus resources, and so on.

The spatial principles must help us to think through these implications, action by action, decision by decision."



Part 1.

Introduction

1. Introduction

Stellenbosch Municipality (SM) is located in the heart of the Cape Winelands, a highly valued cultural landscape with globally important natural habitats. The municipality is bounded to the east and south by the Drakenstein, Wemmershoek and Limietberg mountain ranges. The Hottentots Holland range (i.e. Stellenbosch, Jonkershoek and Simonsberg Mountains) and the Bottelary Hills form the backdrop to the town of Stellenbosch itself. These mountains, and the fertile agricultural valleys which they shelter, are key elements contributing to the sense of place of the municipal area. Significant portions of the municipality fall within globally recognised biosphere areas with large tracts of land designated as public and private conservation areas.

The greater part of the municipal area comprises fertile soils, constituting some of the country's highest yielding agricultural land (in terms of income and employment generation). The region's extensive agricultural areas, particularly those under vineyards and orchards, also attribute scenic value and character to the region, valued by both local inhabitants and visitors. Nature, scenic value, and agriculture add significantly to the value of the area as one of South Africa's premier tourist destinations.

The municipality is home to some 174 000 people. A significant proportion of the municipal population is poor, and reliant on the informal sector for livelihoods. Yet, SM is also home to some of the country's strongest corporations with global footprints, most esteemed education institutions, cultural facilities, and places of historic value.

Politically, SM forms part of the Cape Winelands District Municipality (CWD) of the Western Cape Province of South Africa. The municipality adjoins the City of Cape Town (CCT) to the west and south and the Breede Valley, Drakenstein and Theewaterskloof Municipalities to the east and north. Functionally, SM forms part of the Greater

Cape Town metropolitan area. SM covers a geographical area of approximately 830km².

The main settlements in SM are the historic towns of Stellenbosch and Franschhoek, and Klapmuts. There are also a number of smaller villages, including Jamestown (contiguous with Stellenbosch town), Pniel, Johannesdal, Lanquedoc, Lynedoch, and Raithby. New nodes are emerging around agricultural service centres, for example, Koelenhof and Vlottenburg.

As SM is sought after for the opportunity and quality of living it offers, much of the municipal area is constantly under pressure for development; in the form of various types of residential development, and commercial development ranging from shopping malls, to tourist and visitors facilities in the rural areas surrounding towns. Building on the existing highly-valued institutions, the education sector is also seeking further development opportunity. The SM Municipal Spatial Development Framework will play a key role in managing these pressures.



Figure 1. The location of SM within the Western Cape and Cape Winelands District

1.1. Subject Matter and Role of the SDF

Spatial Development Frameworks (SDFs) are public policy statements that seek to influence the overall spatial distribution of current and future land use within a municipality or other described region to give effect to the vision, goals and objectives of the municipal Integrated Development Plan (IDP) or related business plans of government. The (MSDF) covers the jurisdictional area of the municipality.

In the case of SM, the MSDF must answer the following questions: "How is Stellenbosch going to develop over the next ten to thirty years? What kind of development will take place, where will it take place, and who will be responsible for what aspect of the development?"

This focus is important. Future growth, expansion and innovation cannot be allowed to unfold in haphazard ways as this is likely to result in expensive outward low density sprawl of housing and commercial areas and the related destruction of valuable ecosystem and agricultural resources. This kind of development is also likely to exacerbate spatial divisions and exclude citizens with lesser materials resources from opportunity to live in proximity to work, commercial opportunity, and social facilities.

Ad hoc development removes the certainty that everyone needs to make long-term investment decisions, including municipal leadership – planning for associated infrastructure – and key players like the property developers, financial investors, development planners, municipal officials dealing with associated approval processes, and ordinary households.

In more detail, the MSDF aims to:

- Enable a vision for the future of the municipal area based on evidence, local distinctiveness, and community derived objectives.
- Translate this vision into a set of policies, priorities, programmes, and land allocations

together with the public sector resources to deliver them.

- Create a framework for private investment and regeneration that promotes economic, environmental, and social well-being.
- Coordinate and deliver the public-sector components of this vision with other agencies and processes to ensure implementation.

1.2. Users of the SDF

The MSDF for SM targets two broad user categories. The first is the government sector, across spheres from national to local government, including State Owned Enterprises (SOEs). While the MSDF is informed by the spatial direction stated in national, provincial, and district level policy, it also sets out the municipality's spatial agenda for government departments across spheres of government to consider and follow. Most importantly, the MSDF outlines the municipality's spatial agenda to its own service departments, ensuring that their sector plans, programmes, and projects are grounded in a sound and common spatial logic.

The second user category is the private and community sector, comprising business enterprises, non-government organisations, institutions, and private citizens. While the private sector operates with relative freedom spatially – making spatial decisions within the framework of land ownership, zoning, and associated regulations and processes – the MSDF gives an indication of where and how the municipality intends to channel public investment, influence, and other resources at its disposal. This includes where infrastructure and public facility investment will be prioritised, where private sector partnerships will be sought in development, and how the municipality will view applications for land use change.

1.3. Background to the 2019 MSDF

Over the last decade, the SM has completed a considerable volume of studies, policy documents, and plans, specifically related to spatial planning, as well as studies, policy documents, and plans that should inform or be informed by the MSDF (for example comprehensive plans like the IDP covering all the activities of the municipality, or sector specific work related to economic development, transport, the environment, housing, and so on). Some of these studies, policy documents, and plans cover the whole municipal area, while others focus on specific parts of the area.

Starting in 2008, and culminating in an approved MSDF and the "Shaping Stellenbosch" initiative, broad consensus has been achieved on the desired future direction and form of development. Some of the country's most accomplished professionals were involved in this work, considerable time and money was spent, and citizens bought in. In 2013, SM approved a MSDF and settlement hierarchy for the whole Stellenbosch municipal area. An updated version of this document was approved on 31 May 2017.

Since approval of the MSDF in 2013 and 2017, MSDF related work has focused on:

- The development of scenarios of land demand to inform the development of a preferred 20-year growth strategy, development path, and nodal development concepts for SM. This work culminated in status quo and draft Urban Development Strategy (UDS) documents during 2017.
- An analysis and synthesis of the rural areas of Stellenbosch Municipality with a view to prepare a Rural Area Plan (RAP).
- Draft heritage surveys and inventories of large-scale landscape areas in the rural domain of the municipality informing proposed heritage areas (complementing previous inventory work completed for urban areas).

- Area-based planning investigations for parts of the municipality, notably Stellenbosch town, Klapmuts, the area north of Kayamandi, and Paradyskloof.

In parallel to MSDF work, considerable progress has been made, in collaboration with the Western Cape Government through application of the Provincial Sustainable Transport Programme (PSTP), with developing a strategy for sustainable transport planning, infrastructure provision, and management in Stellenbosch.

In preparing the current MSDF, previous studies, policy documents, and plans have been considered.

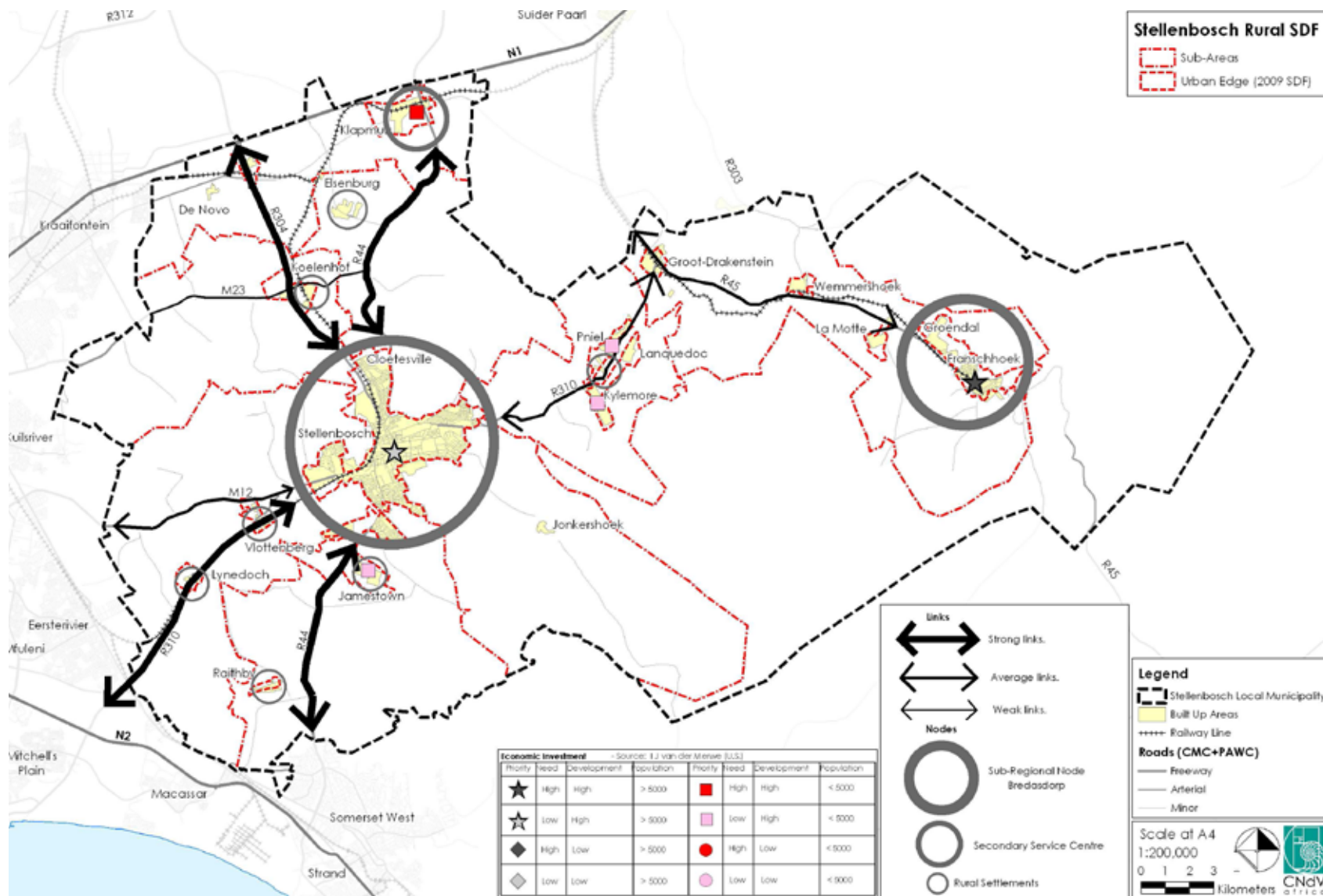


Figure 2. The 2013 Approved Stellenbosch SDF diagram illustrating hierarchy of settlement, linkages and investment priorities

1.4. Process in Preparing the MSDF

Figure 3 illustrates the process for preparing an MSDF in general terms. Broadly, it involves three phases. While the first phase is predominantly analytical, setting out the “status quo” in relation to spatial matters concerning the study area, the second and third phases are more creative, encompassing the preparation of the definitive guidelines reflecting policy choices.

The first phase includes a review of higher level plans and policy across spheres of government and sectors, an analysis of the challenges and opportunities in terms of four themes (bio-physical, socio-economic, built environment, and institutional), and the perspectives of citizens and interest groups on issues facing their communities and the municipality as a whole. This phase culminates in a synthesis of key challenges, opportunities, and spatial implications to be addressed in the MSDF.

The analysis phase is followed by preparing a spatial concept for the future spatial development and management of the MSDF area (based on a vision related to the synthesis of key challenges and key opportunities). The concept is then elaborated into a fully-fledged MSDF plan or plans indicating where various activities should occur in space and in what form. The third broad phase comprises preparation of an implementation framework, including detailed plans, programmes, guidelines, projects and actions, across services and sectors of society. The implementation framework also aligns government capital investment and budgeting processes moving forward from a spatial perspective.

The SM's current work on the MSDF – and the specific investigations in support of the SDF listed in section ... and undertaken since approval of the 2013 and 2017 MSDFs – have taken place with the inputs and oversight of an Integrated Steering Committee (ISC), as prescribed in the Land Use Planning Act (LUPA), and comprising

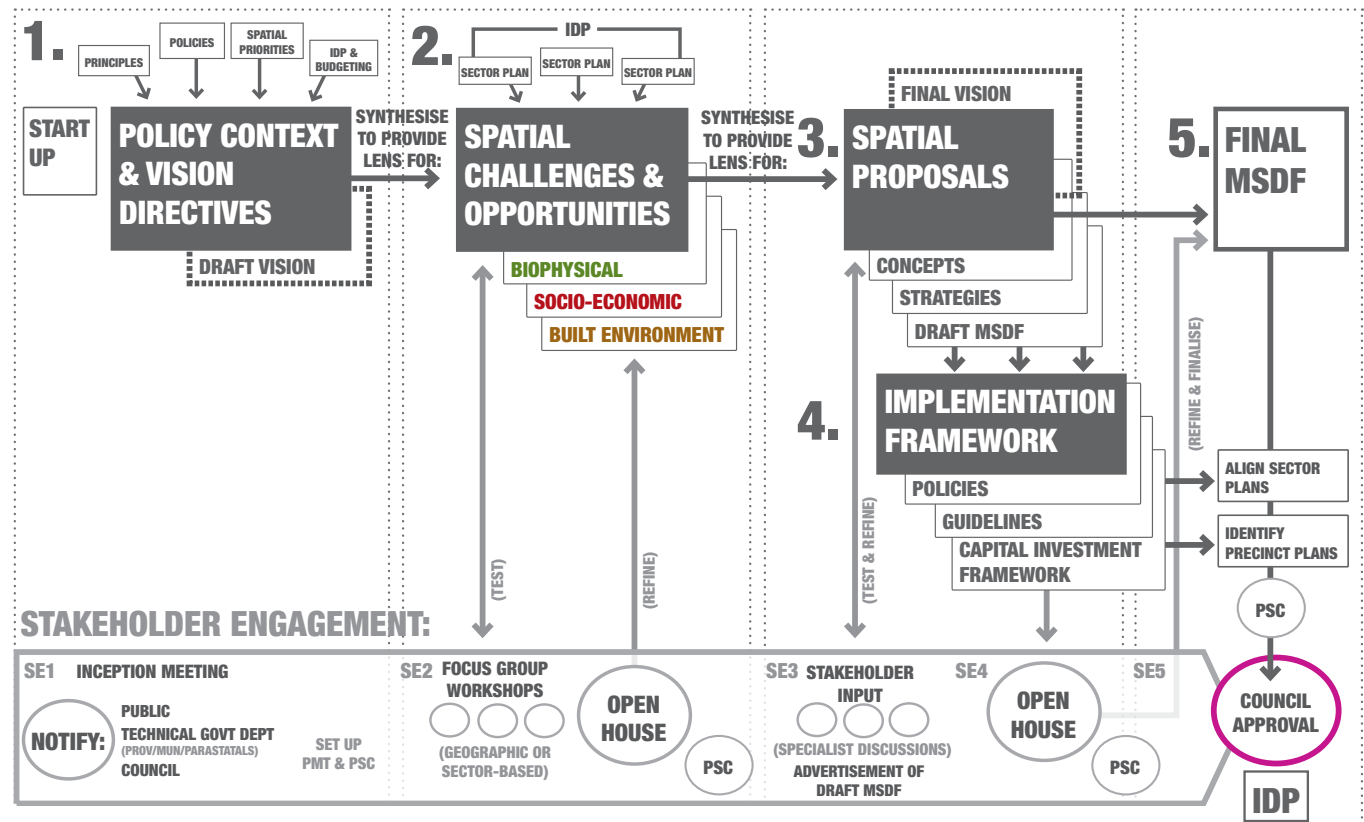


Figure 3. The SDF Process (from DRDLR's PLUMA Guidelines, 2014)

representatives across spheres of government and sectors.

During November of 2018 a series area based public meetings were held throughout the municipal area, where the background and spatial concept for the SDF was presented. Inputs received during these meetings are included as Appendix 1. Further, it should be noted that the approved MSDF, as well as specific sector

documents and area studies listed in before and used as inputs to the current MSDF, sought inputs from various organisations and individuals as part of public participation processes undertaken during various stages of preparing these studies.¹

¹ For example, the “Shaping Stellenbosch” initiative involved a facilitated process of engagement between directors of key municipal departments and members of the Mayoral Committee (MAYCO), consultations with all ward councillors, meetings with ward committees and 72 formal engagements with various groups, and four major workshops that were attended by a wide cross-section of organisations. By August 2014, a total of over 200 ideas were submitted from around 108 stakeholders to a dedicated web-site.

1.5. Structure of the MSDF

The 2019 SM MSDF is set out in the following parts:

Part 1: Introduction.

Part 2: Legislative and Policy Context

Part 3: Status Quo, Challenges and Opportunities.

Part 4: Vision and Concept.

Part 5: Plans and Settlement Proposals.

Part 6: Implementation Framework.

Part 7: Capital Expenditure Framework.

Part 8: Monitoring and Review .

Appendices of status quo and guideline related information.



Part 2.

Legislative and Policy Context

2. Legislative and Policy Context

The sections below outline key legislative and policy informants of the MSDF.

2.1. Legislative Requirements for MSDFs

2.1.1. Municipal Systems Act

The Municipal Systems Act, 32 of 2000 (MSA) first introduced the concept of a MSDF as a component of the mandatory IDP that every municipality must adopt to govern its allocation of resources. Chapter 5 of the Act deals with integrated development planning and provides the legislative framework for the compilation and adoption of IDPs by municipalities. Within the chapter, section 26(e) specifically requires an SDF as a mandatory component of the municipal IDP. In 2001 the Minister for Provincial and Local Government issued the Local Government: Municipal Planning and Performance Management Regulations. Within these regulations, Regulation 2(4) prescribes the minimum requirements for a MSDF.

2.1.2. Spatial Planning and Land Use Management Act

With the enactment of the Spatial Planning and Land Use Management Act 16 of 2013 (SPLUMA), a new planning regime was introduced in South Africa. It replaced disparate apartheid era laws with a coherent legislative system as the foundation for all spatial planning and land use management activities in South Africa. It seeks to promote consistency and uniformity in procedures and decision-making. Other objectives include addressing historical spatial imbalances and the integration of the principles of sustainable development into land use and planning regulatory tools and legislative instruments.

In broad terms, SPLUMA differentiates between two components of the planning system:

- SDFs
- The Land Use Management System (LUMS)

As indicated above, SDFs are guiding and informing documents that indicate the desired spatial form of an area and define strategies and policies to achieve this. They inform and guide the LUMS, which includes town planning or zoning schemes, allocating development rights, and the procedures and processes for maintaining the maintenance of or changes in development rights.

SDFs can be prepared for different spatial domains, for example, the country, a province or region, municipal area (MSDF), or part of a municipal area. Plans for parts of a municipal area are referred to as Local Spatial Development Framework (LSDFs) or Precinct Plans. In terms of SPLUMA, a MSDF covers a longer time horizon (i.e. five years or longer) than spatial plans, and sets out strategies for achieving specific objectives over the medium to longer term. SDFs are not rigid or prescriptive plans that predetermine or try to deal with all eventualities, or sets out complete land use and development parameters for every land portion or cadastral entity. They should, however, contain sufficient clarity and direction to provide guidance to land use management decisions while still allowing some flexibility and discretion. MSDFs need to distinguish between critical non-negotiables and fixes, and what can be left to more detailed studies. They should be based on normative principles including performance principles that form the basis of monitoring and evaluation of impacts.

Chapter 2 of SPLUMA sets out the development principles that must guide the preparation, adoption and implementation of any SDF, policy or by-law concerning spatial planning and the development or use of land. These principles, outlined in more detail in Table 1, include the redress of spatial injustices and the integration of socio-economic and environmental considerations

in land use management to balance current development needs with those of the future generations in a transformative manner. SPLUMA reinforces and unifies the National Development Plan (NDP) in respect of using spatial planning mechanisms to eliminate poverty and inequality while creating conditions for inclusive growth by seeking to foster a high-employment economy that delivers on social and spatial cohesion.

Chapter 4 of SPLUMA provides requirements for the preparation of SDFs, which includes stipulations regarding the process of preparing a SDF and the contents of an SDF. All spheres of government must prepare SDFs that establish a clear vision for spatial development, based on a thorough inventory and analysis and underpinned by national spatial planning principles and local long-term development goals and plans. Sub-section 12(2) of SPLUMA requires that all three spheres must participate in each other's processes of spatial planning and land use management and each sphere must be guided by its own SDF when taking decisions relating to land use and development.

Section 12 (1) of sets out general provisions which are applicable to the preparation of all scales of SDFs. These provisions require that all SDFs must:

- Interpret and represent the spatial development vision of the responsible sphere of government and competent authority.
- Be informed by a long-term spatial development vision.
- Represent the integration and trade-off of all relevant sector policies and plans.
- Guide planning and development decisions across all sectors of government.
- Guide a provincial department or municipality in taking any decision or exercising any discretion in terms of the Act or any other

law relating to spatial planning and land use management systems.

- Contribute to a coherent, planned approach to spatial development in the national, provincial and municipal spheres.
- Provide clear and accessible information to the public and private sector and provide direction for investment purposes.
- Include previously disadvantaged areas, areas under traditional leadership, rural areas, informal settlements, slums and land holdings of state-owned enterprises and government agencies and address their inclusion and integration into the spatial, economic, social and environmental objectives of the relevant sphere.
- Address historical spatial imbalances in development.
- Identify the long-term risks of particular spatial patterns of growth and development and the policies and strategies necessary to mitigate those risks.
- Provide direction for strategic developments, infrastructure investment, promote efficient, sustainable and planned investments by all sectors.

SDFs should include:

- A report on and an analysis of existing land use patterns.
- A framework for desired land use patterns.

Existing and future land use plans, programmes and projects relative to key sectors of the economy.

Mechanisms for identifying strategically located vacant or under-utilised land and for providing access to and the use of such land.

The time frames for the preparation of a MSDP overlaps with that of the municipal IDP. At the municipal level, IDPs, which include budget projections, financial and sector plans, are set

Table 1. SPLUMA Principles

Principle	Meaning
SPATIAL JUSTICE:	<ul style="list-style-type: none"> • Past spatial and other development imbalances must be redressed through improved access to and use of land. • SDFs (and associated policies) must address the inclusion of persons and areas that were previously excluded, with an emphasis on informal settlements, and areas characterised by widespread poverty and deprivation. • Spatial planning mechanisms, including land use schemes, must incorporate provisions that enable redress in access to land by disadvantaged communities and persons. • Land use management systems must include all areas of a municipality and specifically include provisions that are flexible and appropriate for the management of disadvantaged areas and informal settlements. • Land development procedures must include provisions that accommodate access to secure tenure and the incremental upgrading of informal areas. • In considering an application, a Municipal Planning Tribunal may not be impeded or restricted in the exercise of its discretion solely because the value of land or property is affected by the outcome of the application.
SPATIAL EFFICIENCY:	<ul style="list-style-type: none"> • Land development must optimise the use of existing resources and infrastructure. • Decision-making procedures must be designed to minimise negative financial, social, economic or environmental impacts. • Development application procedures must be efficient, streamlined, and timeframes adhered to by all parties.
SPATIAL SUSTAINABILITY:	<ul style="list-style-type: none"> • Only land development that is within the fiscal, institutional and administrative means of government may be promoted. • Special consideration must be given to the protection of prime and unique agricultural land. • Land use issues must be dealt consistently in accordance with environmental management instruments. • Land use management and planning must promote and stimulate the effective and equitable functioning of land markets. • Current and future costs to all parties must be considered when providing infrastructure and social services for land developments. • Land development should only be promoted in locations that are sustainable, limit urban sprawl, and result in communities that are viable.
SPATIAL RESILIENCE:	<ul style="list-style-type: none"> • Spatial plans, policies and land use management systems must be flexible to ensure sustainable livelihoods in communities most likely to suffer the impacts of economic and environmental shocks.
GOOD ADMINISTRATION:	<ul style="list-style-type: none"> • All spheres of government must ensure an integrated approach to land use and land development. • All government departments must provide their sector inputs and comply with any other prescribed requirements during the preparation or amendment of SDFs. • The requirements of any law relating to land development and land use must be met timeously. • The preparation and amendment of spatial plans, policies, land use schemes as well as procedures for development applications, must include transparent processes of public participation that afford all parties the opportunity to provide inputs on matters affecting them. • Policies, legislation and procedures must be clearly set out in a manner which informs and empowers the public.

every five years correlating with political terms of office in local government. MSDFs should be subject to a major review every five years, with less comprehensive reviews annually.²

In support of SPLUMA, the Department of Rural Development and Land Reform prepared detailed process and content “Guidelines for the Development of Provincial, Regional and Municipal Spatial Development Frameworks and Precinct Plans”. The SM follows these guidelines in its work on the MSDF.

2.1.3. National Environmental Management Act

Similar to SPLUMA, the National Environmental Management Act, Act 107 of 1998 (NEMA), is identified as “framework legislation”, intended to define overarching and generally applicable principles to guide related legislation as well as all activities integral to environmental management. Its broad purpose is to provide for co-operative environmental governance by establishing principles for decision-making on matters effecting the environment, institutions that will promote co-operative governance and procedures for coordinating environmental functions exercised by organs of the state, provide for certain aspects of the administration and enforcement of other environmental management laws, and related matters.

NEMA is critical in so far as the issues of environmental sustainability, resilience to climate change, and wise use of the natural resource base, are key to the current and future socio-economic wellbeing of residents in the municipal area. This is especially so because of the fact

that sectors such as agriculture and tourism, which all rely to a great extent on the natural assets of the area, remain of great importance to the local economy and are likely to do so in future. In this regard, the National Environmental Management Principles are important and are to be applied in

² This does prevent the SDF from preparing a longer term spatial development vision, projecting ten to twenty years into the future.

tandem with the development principles set out in SPLUMA. It is also notable that both SPLUMA and NEMA provide for an integrated and coordinated approach towards managing land use and land development processes. This approach is based on co-operative governance and envisages the utilization of spatial planning and environmental management “instruments” such as SDFs and environmental management frameworks to align the imperatives of enabling development whilst ensuring that biodiversity and other critical elements of the natural environment are adequately protected to ensure sustainability.

2.1.4. The Western Cape Government Land Use Planning Act

The Western Cape Government (WCG), through the Land Use Planning Act 3 of 2014 (LUPA), has adopted its own legislation to consolidate the legal requirements that relates to spatial planning and public investment in the Western Cape. There is some overlap between SPLUMA and LUPA with regard to aspects such as the content and process of preparing and adopting a MSDF. In terms of LUPA, a MSDF must:

- Comply with other applicable legislation.
- Promote predictability in the utilisation of land.
- Address development priorities.
- Where relevant, provide for specific spatial focus areas, including towns, other nodes, sensitive areas, or areas experiencing specific development pressure.
- Consist of a report and maps covering the whole municipal area, reflecting municipal planning and the following structuring elements:
 - Transportation routes.
 - Open space systems and ecological corridors.
 - Proposed major projects of organs of state with substantial spatial implications.

- Outer limits to lateral expansion.
- Densification of urban areas.

LUPA also sets out the minimum institutional arrangements for preparing SDFs, enabling participation across spheres of government and sectors.

2.2. Policy Context for SDFs

Numerous policy frameworks focus the work of government holistically, the spatial arrangement of activities or specific sectors. These are explored fully in the SM IDP. In the sections below, only key spatial policy informants are summarised, namely the National Development Plan (NDP), the national Integrated Urban Development Framework (IUDF), the WCG’s Provincial Spatial Development Framework (PSDF), the Greater Cape Metro (GCM) Regional Spatial Implementation Framework (RSIF), and the SM IDP. A fuller set of applicable policy is attached in table form as Appendix A.

2.2.1. The National Development Plan 2030

The National Development Plan 2030 (NDP), developed by the National Planning Commission and adopted in 2012, serves as the strategic framework guiding and structuring the country’s development imperatives and is supported by the New Growth Path (NGP) and other national strategies. In principle, the NDP is underpinned by, and seeks to advance, a paradigm of development that sees the role of government as enabling by creating the conditions, opportunities and capabilities conducive to sustainable and inclusive economic growth. The NDP sets out the pillars through which to cultivate and expand a robust, entrepreneurial and innovative economy that will address South Africa’s primary challenge of significantly rolling back poverty and inequality by 2030.

The legacy of apartheid spatial settlement patterns that hinder inclusivity and access to economic opportunities, as well as the poor location and

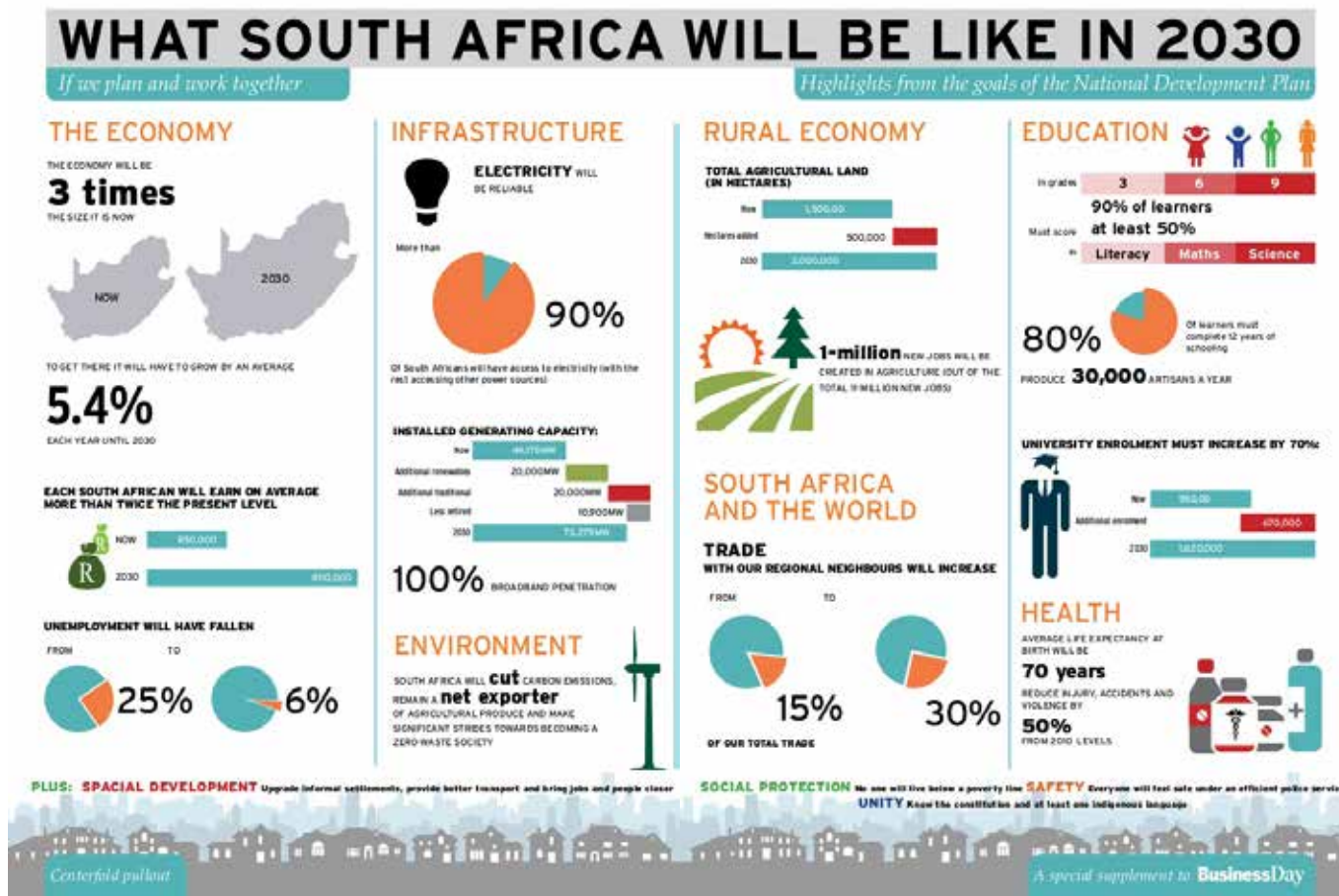


Figure 4. The National Development Plan Vision for 2030

under-maintenance of major infrastructure, are two of the nine identified core challenges facing the country's development. Aimed at facilitating a virtuous cycle of expanding opportunity for all, the NDP proposes a program of action that includes the spatial transformation of South Africa's towns, cities and rural settlements given the "enormous social, environmental and financial costs imposed by spatial divides".

Of particular relevance for the SM MSDF are the recommendations set out in Chapter 8: Transforming Human Settlements and the National

Space Economy, including the upgrading of all informal settlements on suitable, well-located land; increasing urban densities to support public transport and reduce sprawl; promoting mixed housing strategies and compact urban development in close proximity to services and livelihood opportunities; and investing in public transport infrastructure and systems (with a special focus on commuter rail) to ensure more affordable, safe, reliable and coordinated public transport.

2.2.2. Integrated Urban Development Framework

The Integrated Urban Development Framework (IUDF), approved by National Cabinet in 2016, aims to steer urban growth nationally towards a sustainable model of compact, connected and coordinated towns and cities. The IUDF provides a roadmap to implement the NDP's vision for spatial transformation, creating liveable, inclusive and resilient towns and cities while reversing apartheid spatial legacy. To achieve this transformative vision, four overall strategic goals are introduced:

- Spatial integration; to forge new spatial forms in settlement, transport, social and economic areas.
- Inclusion and access; to ensure people have access to social and economic services, opportunities and choices.
- Growth; to harness urban dynamism for inclusive, sustainable economic growth and development.
- Governance; to enhance the capacity of the state and its citizens to work together to achieve spatial and social integration.

These strategic goals inform the priority objectives of nine policy levers, premised on the understanding that integrated urban planning forms the basis for achieving integrated urban development, which follows a special sequence of urban policy actions. Integrated transport needs to inform targeted investments into integrated human settlements, underpinned by integrated infrastructure network systems and efficient land governance. The IUDF states that, taken all together, these levers can trigger economic diversification, inclusion and empowered communities, if supported by effective governance and financial reform.

2.2.3. The WCG Provincial Spatial Development Framework

The WCG's Provincial Spatial Development Framework (PSDF) sets out to:

- Address the lingering spatial inequalities that persist because of apartheid's legacy – inequalities that contribute both to current challenges (lack of jobs and skills, education and poverty, and unsustainable settlement patterns and resource use) and to future challenges (climate change, municipal fiscal stress, food insecurity, and water deficits).
- Provide a shared spatial development vision for both the public and private sectors and to guide to all sectoral considerations about space and place.
- Direct the location and form of public investment and to influence other investment decisions by establishing a coherent and logical spatial investment framework.

The spatial agenda advocated by the PSDF is summarised in Table 2.

The PSDF sets out the key strategic spatial transitions required to achieve a more sustainable use of provincial assets, the opening-up of opportunities in the space-economy and the development of integrated and sustainable settlements. These are summarised in Table 3.

The PSDF includes a composite map which graphically portrays the Western Cape's spatial agenda. In line with the Provincial spatial policies, the map shows what land use activities are suitable in different landscapes and highlights where efforts should be focused to grow the Provincial economy. For the agglomeration of urban activity, the Cape Metro functional region, which includes the SM, as well as the emerging regional centres of the Greater Saldanha functional region and the George/ Mossel Bay functional region, is prioritised.

Table 2. The PSDF Spatial Agenda

Focus	What it Involves
GROWING THE WESTERN CAPE ECONOMY IN PARTNERSHIP WITH THE PRIVATE SECTOR, NON-GOVERNMENTAL AND COMMUNITY BASED ORGANISATIONS	<ul style="list-style-type: none"> • Targeting public investment into the main driver of the Provincial economy (i.e. the Cape Metro functional region, the emerging Saldanha Bay/ Vredenburg and George/ Mossel Bay regional industrial centres, and the Overstrand and Southern Cape leisure and tourism regions). • Managing urban growth pressures to ensure more efficient, equitable and sustainable spatial performance. • Aligning, and coordinating public investments and leveraging private sector and community investment to restructure dysfunctional human settlements. • Supporting municipalities in managing urban informality, making urban land markets work for the poor, broadening access to accommodation options, and improving living conditions. • Promoting an urban rather than suburban approach to settlement development (i.e. diversification, integration and intensification of land uses). • Boosting land reform and rural development, securing the agricultural economy and the vulnerability of farm workers, and diversifying rural livelihood and income earning opportunities.
USING INFRASTRUCTURE INVESTMENT AS PRIMARY LEVER TO BRING ABOUT THE REQUIRED URBAN AND RURAL SPATIAL TRANSITIONS	<ul style="list-style-type: none"> • Aligning infrastructure, transport and spatial planning, the prioritisation of investment and on the ground delivery. • Using public transport and ICT networks to connect markets and communities. • Transitioning to sustainable technologies, as set out in the WCIF. • Maintaining existing infrastructure.
IMPROVING OVERSIGHT OF THE SUSTAINABLE USE OF THE WESTERN CAPE'S SPATIAL ASSETS	<ul style="list-style-type: none"> • Safeguarding the biodiversity network and functionality of ecosystem services, a prerequisite for a sustainable future. • Prudent use of the Western Cape's precious land, water and agricultural resources, all of which underpin the regional economy. • Safeguarding and celebrating the Western Cape's unique cultural, scenic and coastal resources, on which the tourism economy depends. • Understanding the spatial implications of known risks (e.g. climate change and its economic impact, sea level rise associated with extreme climatic events) and introducing risk mitigation and/or adaptation measures.

Table 3. The key PSDF Transitions

PSDF THEME	FROM	TO
Resources and Assets (Bio-Physical Environment)	Mainly curative interventions	More preventative interventions
	Resource consumptive living	Sustainable living technologies
	Reactive protection of natural, scenic and agricultural resources	Proactive management of resources as social, economic and environmental assets
Opportunities in the Space Economy (Socio-Economic Environment)	Fragmented planning and management of economic infrastructure	Spatially aligned infrastructure planning, prioritisation and investment
	Limited economic opportunities	Variety of livelihood and income opportunities
	Unbalanced rural and urban space economies	Balanced urban and rural space economies built around green and information technologies
Integrated and Sustainable Settlements (Built Environment)	Suburban approaches to settlement	Urban approaches to settlement
	Emphasis on 'greenfields' development and low density sprawl	Emphasis on 'brownfields' development
	Low density sprawl	Increased densities in appropriate locations aligned with resources and space-economy
	Segregated land use activities	Integration of complementary land uses
	Car dependent neighbourhoods and private mobility focus	Public transport orientation and walkable neighbourhoods
	Poor quality public spaces	High quality public spaces
	Fragmented, isolated and inefficient community facilities	Integrated, clustered and well located community facilities
	Focus on private property rights and developer led growth	Balancing private and public property rights and increased public direction on growth
	Exclusionary land markets and top-down delivery	Inclusionary land markets and partnerships with beneficiaries in delivery
	Limited tenure options and standardised housing types	Diverse tenure options and wider range of housing typologies
	Delivering finished houses through large contracts and public finance and with standard levels of service	Progressive housing improvements and incremental development through public, private and community finance with differentiated levels of service

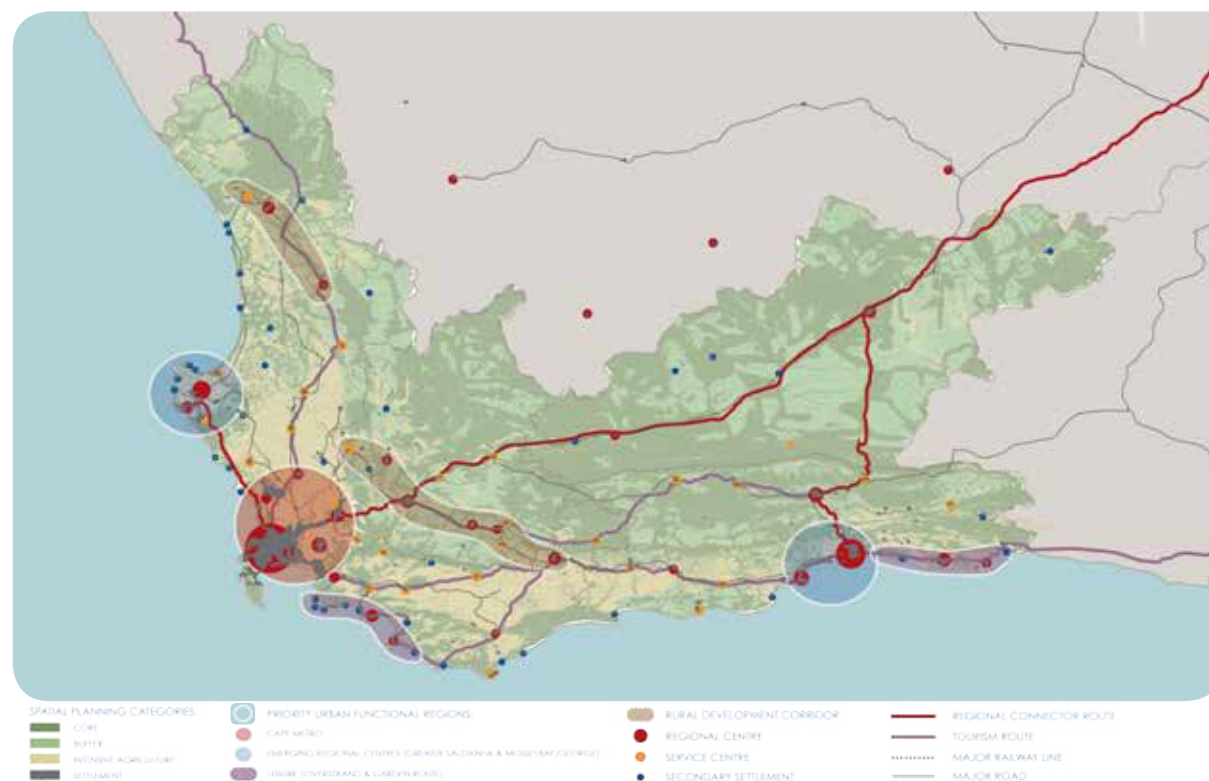


Figure 5. Consolidated PSDF Framework 2014

2.2.4. The Greater Cape Metro Regional Spatial Implementation Framework

The Greater Cape Metro (GCM) Regional Spatial Implementation Framework (RSIF), completed under the guidance of the WCG in 2017, aims to build consensus between the spheres of government and state-owned companies on what spatial outcomes the GCM should strive for, where in space these should take place, and how they should be configured. The GCM covers the municipal jurisdictions of Cape Town, Saldanha Bay, Swartland, Drakenstein, Stellenbosch, Breede Valley, Theewaterskloof, and Overstrand.

The regional settlement concept proposed by the GCM RSIF is built on the following key tenets:

- Containing settlement footprints by curtailing the further development of peripheral dormitory housing projects.
- Targeting built environment investments within regional centres, specifically in nodes of high accessibility and economic opportunity.
- Targeting these locations for public and private residential investment, especially rental housing, to allow for maximum mobility between centres within the affordable housing sector.
- Using infrastructure assets (specifically key movement routes) as “drivers” of economic development and job creation.
- Promoting regeneration and urban upgrading within strategic economic centres as well as high-population townships across the functional region.
- Shifting to more urban forms of development within town centres including higher densities and urban format social facilities.
- Connecting these nodes within an efficient and flexible regional public transport and freight network.
- Maintaining valuable agricultural and nature assets.

In terms of role and function, Paarl and Wellington is designated as the Northern Winelands service, administrative, tertiary education, agri-processing and distribution, and tourist centre, with very high or high growth potential. Stellenbosch is designated as the Southern Winelands service, administrative, tertiary education and research, and agri-processing centre, as well as home to multi-national enterprise headquarters, a key tourism destination, and focus for technology industry, with very high growth potential.

In relation to Klappmuts, the RSIF recognises that:

- Existing infrastructure in the area (i.e. the N1, R101, R44 and the Paarl-Bellville railway line and station), which dictate the location of certain transport, modal change or break-of-bulk land uses.
- Klappmuts is a significant new regional economic node within metropolitan area and spatial target for developing a “consolidated platform for export of processed agri-food products (e.g. inland packaging and “containerisation port”) and “an inter-municipal growth management priority”.

Figure 6 illustrates the GCM RSIF in plan form.

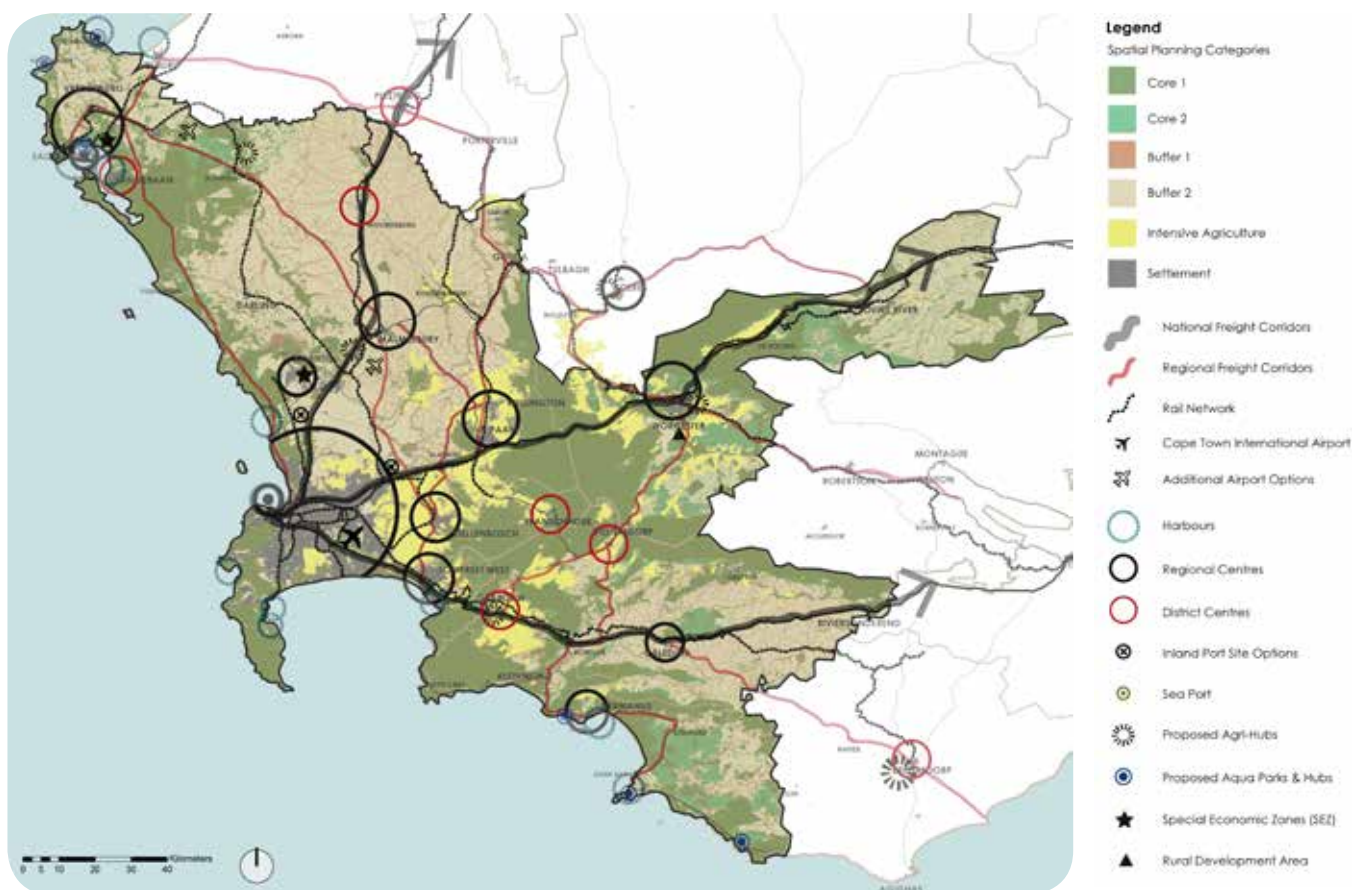


Figure 6. Composite GCM RSIF 2017 (DEA&DP 2017)

2.2.5. SM Integrated Development Plan

The SM Integrated Development Plan 2017-2022 (IDP) is aimed at coordinating the efforts of various municipal departments in achieving the vision for the municipality as a “valley of opportunity and innovation”. Efforts to achieve this vision are channeled into five specific focus areas:

- Valley of possibility – aimed at attracting investment, growing the economy and employment.
- Green and sustainable valley – aimed at ensuring that the asset base of the municipality is protected and enhanced.
- Safe Valley – aimed at ensuring that its residents are and feel safe.
- Dignified living – aimed at improving conditions for residents through access to education and economic opportunities.
- Good governance – aimed at ensuring that municipality is managed efficiently and effectively to the benefit of all stakeholders .

Budget expenditure is closely linked to these focus areas and achieving these outcomes. Table 4 illustrates how the MSDF will contribute, in terms of its focus and contribution, to achieving the aims articulated for each strategic focus area.

Table 4. IDP Strategic Focus Areas and the MSDF

IDP STRATEGIC FOCUS AREA	RELATED CONCERNS OF THE SDF	SDF STRATEGIC DIRECTION
Valley of possibility	The way settlements, nature and agricultural areas are spatially developed and managed to enhance individual and collective livelihood opportunities and enterprise development, and overcome inequity and exclusion.	<ul style="list-style-type: none"> • Containment of settlements to protect nature/ agricultural areas and enable public and non-motorized transport and movement. • A focus on public and non-motorized transport and movement.
Green and sustainable valley	The way settlements, nature and agricultural areas are spatially developed and managed to maintain and enhance natural resources and ensure future balance between human settlement and its use of natural resources and opportunity.	<ul style="list-style-type: none"> • Protection of nature areas, agricultural areas, and river corridors.
Safe valley	The way settlements, nature and agricultural areas are spatially developed and managed to ensure individual and collective safety in living, in movement, at work, institutions, and play.	<ul style="list-style-type: none"> • Denser settlements with diverse activity to ensure surveillance.
Dignified living	The way settlements, nature and agricultural areas are spatially developed and managed to ensure equal access to shelter, facilities and services, notwithstanding material wealth, age, gender, or physical ability.	<ul style="list-style-type: none"> • A specific focus on the needs of “ordinary” citizens, experiencing limited access to opportunity because of restricted available material resources.
Good governance and compliance	The way settlements, nature and agricultural areas are spatially developed and managed to ensure individual and collective participation – based on accessible information and open processes – in matters related to spatial planning and land use management.	<ul style="list-style-type: none"> • Presenting information, including opportunities and choices in a manner that assists its internalization by all.

2.3. Policy implications

The table below sets out key policy imperatives for the MSDF in summary form, drawn from higher level policy directives and organised in relation to broad themes of enquiry identified in the SPLUMA guidelines.

Table 5. Policy Implications

THEME	SUB-THEME	IMPLICATIONS FOR THE SM SDF	
Biophysical Environment	Biodiversity and ecosystem services Water Soils and mineral resources Resource consumption and disposal Landscape and scenic assets	<ul style="list-style-type: none"> Protection and extension of Critical Biodiversity Areas, protected, and vulnerable areas. Precautionary approach to climate change and sea level rise. Responsible water use. Protection of water resources. Protection of valuable soils for agriculture. 	<ul style="list-style-type: none"> Protection of mineral resources for possible extraction. Energy efficiency and change to alternative fuels. Waste minimization and recycling. Retaining the essential character and intactness of wilderness areas.
Socio-Economic Environment	Regional and municipal economic infrastructure Rural space-economy Settlement space-economy	<ul style="list-style-type: none"> Developing and maintaining infrastructure as a basis for economic development and growth The protection of agricultural land, enablement of its use and expansion of agricultural output. Focus on undeveloped and underdeveloped land in proximity to existing concentrations of activity and people and as far as possible within the existing footprint of settlements. The protection and expansion of tourism assets. The expansion of entrepreneurial opportunity (also for emergent entrepreneurs). 	<ul style="list-style-type: none"> Focus resources in those areas that have both high or very high growth potential, as well as high to very high social need. Better linkages between informal settlements/ poorer areas and centres of commercial/ public activity. A richer mix of activities in or proximate to informal settlements (including employment opportunity). The protection and expansion of tourism assets. The expansion of entrepreneurial opportunity (also for emergent entrepreneurs).
Built Environment	Sense of place and settlement patterns Accessibility Land use and density Facilities and social services Informality, housing delivery, inclusion and urban land markets	<ul style="list-style-type: none"> The protection of places and buildings of heritage/ cultural value (while ensuring reasonable public access, also as a means of economic development). A focus on public transport to ensure user convenience and less dependence on private vehicles (there is a recognition that many citizens will never afford a private vehicle and that the use of private vehicles has significant societal costs). Compact, denser development. Pedestrian friendly development. 	<ul style="list-style-type: none"> A focus on improving and expanding existing facilities (schools, libraries, and so on) to be more accessible and offer improved services. The significance of well-located and managed public facilities as a platform for growth, youth development, increased wellness, safety, and overcoming social ills. The clustering of public facilities to enable user convenience and efficient management. The upgrading of informal settlements. Housing typologies which meet the different needs of households and income groups.
Governance	Way of work	<ul style="list-style-type: none"> A more coordinated and integrated approach in government planning, budgeting and delivery. Partnering with civil society and the private sector to achieve agreed outcomes (as reflected in the IDP and associated frameworks/ plans). 	<ul style="list-style-type: none"> Active engagement with communities in the planning, resourcing, prioritization, and execution of programmes and projects.



Part 3.

Status Quo, Issues, Challenges and Opportunities

3. Status Quo, Issues, Challenges and Opportunities

The sections below outline the status quo in SM in relation to the themes identified in the SPLUMA guidelines, and identifies specific challenges and opportunities informing the MSDF.

3.1. Biophysical Environment

3.1.1. Attributes

The attributes of the biophysical environment listed below have been summarised from the draft Stellenbosch Environmental Management Framework 2018 (SEMF) as well as the draft SM Rural Area Plan (RAP) dated June 2018. These reports can be referenced for further detailed information.

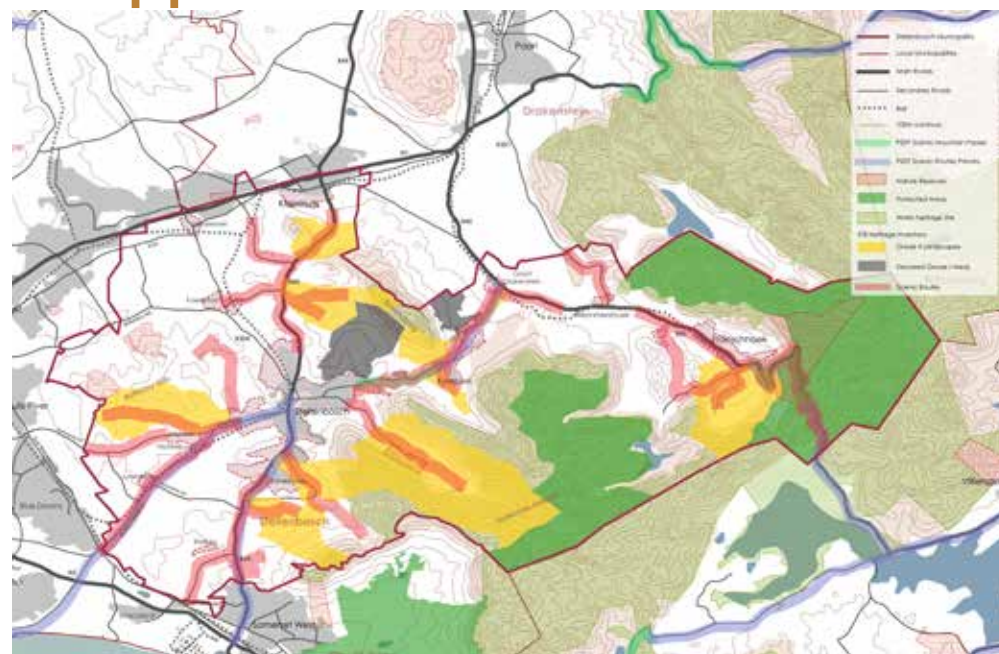


Figure 7. Scenic landscape elements and conserved lands/biophysical areas

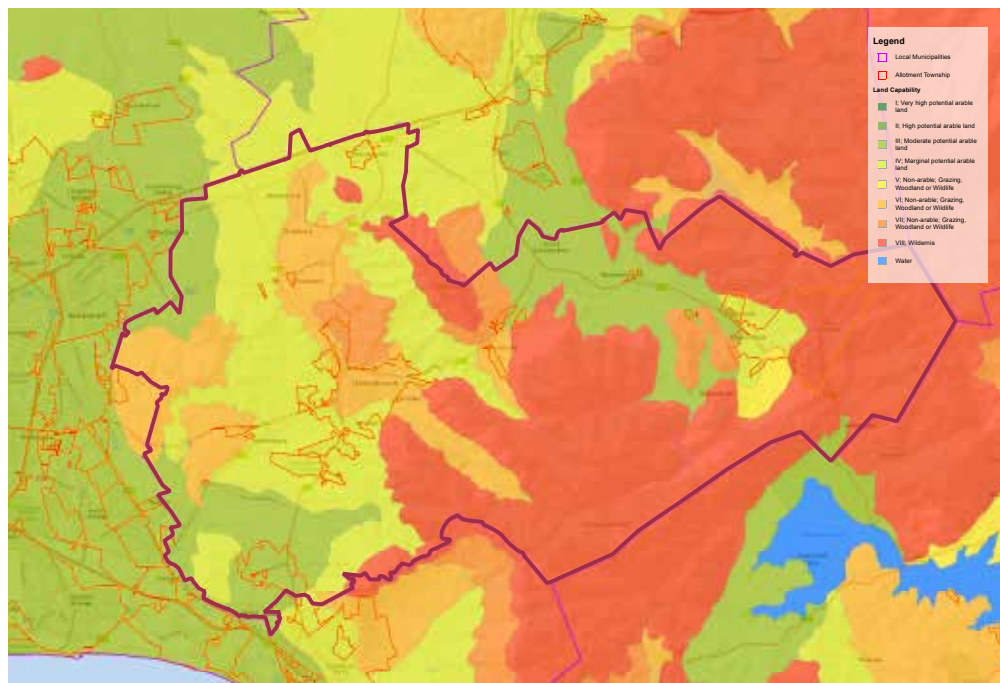


Figure 8. Land capacity (Cape Farm Mapper)

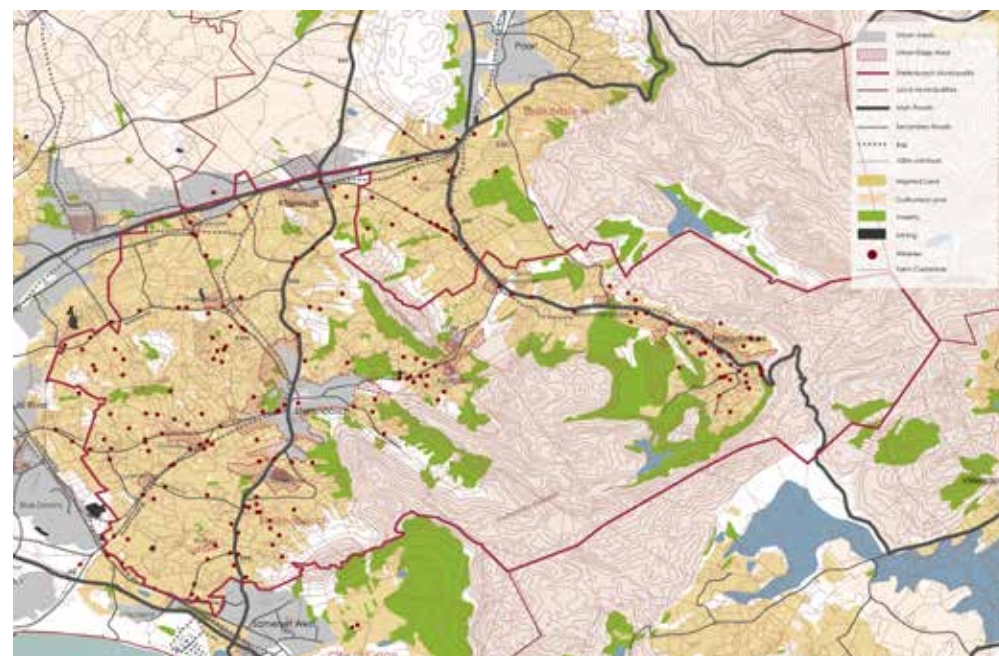


Figure 9. Rural landscape activities

Table 6. Stellenbosch's Biophysical context - key attributes summarised

THEME	ATTRIBUTES	
Nature and Scenic Areas	<ul style="list-style-type: none"> Significant portions of SM fall within globally recognized biosphere areas and designated public and private conservation areas. Eleven public conservation areas cover some 28 741ha or 34,6% of the municipal area, with a further 3 000ha managed as private conservation areas. 	<ul style="list-style-type: none"> The SM's landscape consisting of a series of valleys on a base of rolling hills to the west culminating in steep and dramatic mountain backdrops to the east and south-east, highly valued for its scenic beauty and sense of place. This landscape, which comprises the natural and human-made, has been assessed and graded in terms of its heritage significance and some of the landscape units identified, e.g. the Idas Valley has been classified as a Grade I area, i.e. of national importance (Stellenbosch Heritage Inventory, 2018).
Water Resources	<ul style="list-style-type: none"> A large portion of the mountainous south east of the SM is defined as a Strategic Water Source Area (SWSA). (SWSAs supply a disproportionate amount of mean annual runoff to a geographical region of interest. They form the ecological infrastructure on which most of built infrastructure for water services depends. Investing in SWSAs is also an important mechanism for long-term adaptation to the effects on climate change on water provision growth and development.) The Eerste River and Franschhoek River are the two important river systems in the municipal area, providing a source of water, recreation, contributing to the sense of place and assisting with storm water drainage. The Franschhoek River flows into the Upper Berg River system. 	<ul style="list-style-type: none"> The upper sections of the Eerste and the Berg Rivers are relatively pristine while most of the rivers located in the intensively cultivated and built-up areas of Stellenbosch, Franschhoek, Pniel and Klapmuts are largely modified and degraded. As an example, the Plankenbrug River is highly polluted owing to uncontrolled discharge of pollutants from settlements and agriculture along its course.
Flora	<ul style="list-style-type: none"> SM falls within the Cape Floral Kingdom, internationally recognised as one of the six floral kingdoms of the world (occupying 0,06% of the earth's surface). The Cape Floral Kingdom is the only floral kingdom contained within a single country and characterised by its exceptional richness in plant species and its endemism. Critical and vulnerable habitats are mostly found in the mountainous south-eastern parts of the municipality, where large tracts of land are already formally protected. However, within the municipal area nearly all the remaining vegetation is Critically Endangered or Vulnerable. 	<ul style="list-style-type: none"> This area is the habitat of Mountain Fynbos, considered less threatened. This area is also included in the Cape Floral Region Protected Areas World Heritage Site (part of the World Heritage List of UNESCO and the Cape Winelands Biosphere Reserve). The Simonsberg and parts of the Bottelary hills have also been identified as CBAs, with the latter containing the last remnants of Sand Plain and Renosterveld Fynbos, which naturally occur to the west of the municipal area, but have been virtually obliterated by agriculture.
Fauna	<ul style="list-style-type: none"> Most of the wildlife of the SM is confined to the mountainous nature area to the south-east, with the fauna consisting of endemic invertebrates, fish, amphibians and reptiles, birds, and mammals. 	<ul style="list-style-type: none"> Certain indigenous fish species (including the Witvis and Berg River Redfin), which occur in this system, are critically endangered.
Agriculture	<ul style="list-style-type: none"> The greater part of the municipality comprises high to medium potential soils, capable of efficient agricultural production, and constitutes some of the country's highest yielding agricultural land (in terms of income and employment generation). The deeper soils, located around Stellenbosch town, Franschhoek and along major routes, are potentially the best soils for arable agriculture. These are also the areas likely to face the most pressure for urban development. There are approximately 23 000ha of land under cultivation comprising approximately 3 000ha of dryland crops, (mainly vineyards and orchards) and approximately 19 000ha of land under irrigation. Approximately 16 000ha are under vineyards, with approximately 4700ha of land used for grazing (mainly cattle and horses). The irrigated vineyards and orchard blocks mostly found in the western parts of the municipality and in the Dwars River and Franschhoek valleys, represent a significant investment in agricultural infrastructure and productivity. 	<ul style="list-style-type: none"> The total extent of land under cultivation varies marginally over time depending on market, climatic, and business cycle conditions. In recent years there appears to have been a slight reduction in land under vineyards in favour of grazing. Between 2000 and 2015 approximately 214ha of agricultural land was lost to development and, in addition, approximately 60ha of agricultural land inside the urban edge was left uncultivated by 2015. The region's extensive agricultural areas, particularly those under vineyards and orchards, also attribute scenic value and character to the region, which is valued by both the local inhabitants and visitors. This is a significant contributor to the value of the area as one of South Africa's premier tourist destinations and there is a strong interdependence between tourism and the wine industry in Stellenbosch.
Municipally Owned Agricultural Land	<ul style="list-style-type: none"> The SM currently owns ±86 agricultural units comprised 1 680ha in total, of which 76 are encumbered by long term lease agreements. Of these land units, 432ha have water rights. Of the 76 land parcels currently under lease agreements, six individuals are currently leasing four or more units, totaling 500ha, whilst a further eight individuals are leasing more than one unit, totaling 234ha. 	<ul style="list-style-type: none"> 99% of the rented farm land owned by the SM is located to the south-west of Stellenbosch in the Spier corridor. 60% of this land is rented by two large role-players. Most of the contracts came to an end in 2007 (when it was decided to categorise the farms into lease categories for short-term, medium, and long-term, depending on when the Municipality anticipate that they will need the land). The existing income from land rental is small compared to the total municipal budget (only about R2m per annum) or other income sources.

Table 7. Stellenbosch's Biophysical context - issues and implications

KEY ISSUES	SDF IMPLICATIONS
<ul style="list-style-type: none"> Biodiversity and related ecological services essential to human existence are threatened by the fragmentation of eco-systems, transformation and degradation of land. The most highly modified and polluted sections of rivers in the municipal area are those that run through agricultural and urban areas, where natural buffer areas have been eroded and rivers are impacted by agricultural run-off, over-extraction, storm water and waste water discharge, and the reduced flow resulting from climate change. High potential agricultural land is lost to other land uses, including urban development. The impact of climate change on the natural resource base and agriculture is still unclear, but it is likely to impact on the quality of life and economic base of the municipal area. 	<ul style="list-style-type: none"> <i>The outward growth of settlements should be restricted to prevent the consumption of valuable agricultural and natural environments and associated economic benefits.</i> <i>The efficient use of centrally located land within existing urban areas is critical to prevent the erosion of agricultural and natural assets.</i> <i>The upgrading of existing poorer settlements is essential to prevent the degradation of natural assets.</i> <i>New building and settlement expansion should be limited to already disturbed areas of lowest environmental and agricultural value.</i> <i>New development should consider the impacts of climate change, for example through ensuring sufficient and appropriate landscaping that assists in lowering temperatures. In addition, the creation of attractive urban public spaces and places, where extreme heat is mitigated, will be important for both local residents and the tourism industry.</i>



Figure 10. The impact of the recent severe drought conditions in the Western Cape on grape yields is high, with poor yield years coinciding with moderate or severe drought periods for the wine industry.



Figure 11. Water quality and habitat diversity in the Plankenbrug River have been reduced by stormwater and wastewater discharges from Kayamandi and Stellenbosch. This river has been identified as a high risk area for human health by the 2005 State of the Rivers Report

3.2. Socio-Economic Context

The information presented below is a summary of the status quo investigations prepared as part of the Stellenbosch Urban Development Strategy (UDS) in 2017, the 2017-2022 IDP for Stellenbosch (dated May 2018), the Socio-economic Profile for the Stellenbosch Municipality, published by the WCG in 2017, and the Municipal Economic Review and Outlook published by the WCG Provincial Treasury during 2018.

3.2.1. Attributes

Table 8. Stellenbosch's Socio-Economic context - key attributes summarised

THEME	ATTRIBUTES	
Population	<ul style="list-style-type: none"> SM, despite its relatively smaller land area, has the second largest population in the CWDM, estimated at 176 523 in 2018. The population is expected to reach 190 680 by 2023 (a 8% growth rate off the 2018 base estimate). The municipality's population gender breakdown is relatively evenly split between male and female. SM's population is strongly concentrated within the 20-24 and 25-29 age categories. 	<ul style="list-style-type: none"> In 2011, there were 43 420 households within the municipality. This increased to 52 374 in 2016. The Black African grouping constituted 20,4% of the total population in 2001, 28% in 2011, and considering the projected population, could contribute about 34,1% to the total population in 2021 and 38,3% in 2031. The Coloured grouping contributed 57,5% to the total population in 2001 which decreases, if measured for the same three intervals above, to 52,2%, 48,4% and 45,7% respectively.
Urbanisation	<ul style="list-style-type: none"> In 2001, 67,5% of the total population in the municipal area lived within the urban areas. This percentage increased to 72,1% in 2011 and an estimated 74,2% in 2016. The percentage share of the total population living in urban areas could increase further to 76% by 2021 and to 79% by 2031. In 2021 and 2031, the Black African and Coloured groupings will together comprise more than 80% of the total population, as well as the population residing in urban areas. 	<ul style="list-style-type: none"> It is estimated that 91% of the people living in the urban areas of the municipality in 2031 will reside in Stellenbosch town, Klapmuts or Franschhoek. Almost 59% of the labour force residing in the municipal area lives in Stellenbosch town and Franschhoek.
Integration and Inequality	<ul style="list-style-type: none"> The degree of racial segregation in SM is very high (just below that of Overstrand Municipality, which has the highest value of all local municipalities in South Africa). 	<ul style="list-style-type: none"> The SM had a GINI coefficient of 6,2 in 2016, which is higher than that of the Cape Winelands District and the Western Cape Province as a whole.
Education	<ul style="list-style-type: none"> The literacy rate in SM was recorded at 84,9% in 2011 which was higher than the average literacy rates of the CWDM (81,7%) and the rest of South Africa (80,9%). However, it was lower than that of the Western Cape Province (87,2%). The learner-teacher ratio within SM remained below 30 learners per teacher between 2012 and 2014 but deteriorated to 33 learners per teacher in 2015. Factors influencing the learner teacher ratio include the ability of schools to employ more educators when needed and the ability to collect fees. The drop-out rate for learners within SM that enrolled from Grade 10 in 2014 to Grade 12 in 2016 was 23%. These high levels of high school drop-outs are influenced by a wide array of 	<ul style="list-style-type: none"> socio-economic factors including teenage pregnancies, availability of no-fee schools, indigent households and unemployment. SM had 39 schools in 2016, accommodating 26 085 learners at the start of 2016. The total number of learners appears to have stabilised since 2014. Given a challenging economic context, schools have been reporting an increase in parents being unable to pay their school fees. The proportion of no-fee schools have dropped somewhat between 2015 and 2016, to 64,1%.
Poverty	<ul style="list-style-type: none"> Approximately 53,1% of households in SM fall within the low income bracket, of which 20,4% have no income. Less than 50% of households fall within the middle to higher income categories, split between 35,6% in middle income group and 11,5% in the higher income group. 	<ul style="list-style-type: none"> The number of indigent citizens in SM increased between 2014 and 2015. The intensity of poverty, i.e. the proportion of poor people that are below the poverty line within the municipal area, decreased from 42,1% in 2011 to 39,8% in 2016.

Table 9. Stellenbosch's Socio-Economic context - key attributes summarised (cont.)

THEME	ATTRIBUTES	
Health	<ul style="list-style-type: none"> SM has a mother-to-child HIV transmission rate of 2,6%, higher than the 1,7% District and the 1,4% Provincial rate. The TB patient load had a slight decrease in 2015/ 16. The number of malnourished children under five years in the CWDM in 2015 was 1,4 per 100 000 children. SM's rate currently at 0,4. The District's neonatal mortality rate of 6,5 is higher than the Province's 2019 target of 6,0 per 1000 live births. Stellenbosch's rate at 2,2 is lower than the District rate and the Provincial target and has improved from the 2014 rate of 4,0. In the CWDM, 15,0% of babies born were underweight. At 9,0%, Stellenbosch's rate is lower than that of the District and the Province (14,5%). 	<ul style="list-style-type: none"> SM has a zero maternal mortality ratio. In comparison, the District recorded 46,5 per 100 000 live births. The Province has a maternal mortality ratio target of 65 by 2019. In 2015, the delivery rate to women under 18 years in the District was 6,1%. At 4,3%, Stellenbosch's rate is lower than that of the District. SM's termination of pregnancy rate of 0,4 per 1 000 live births is lower than the District's rate. Overall almost all of the indicators for child and maternal health have improved in the last year which indicates that Stellenbosch is making progress towards reaching its health targets.
Water	<ul style="list-style-type: none"> With the average annual household growth rate exceeding the municipality's ability to provide piped water to households, the proportion of households with access to water declined from 99,1% in 2011 to 98,5% in 2016. 	<ul style="list-style-type: none"> Approximately 39% of water supply infrastructure is in poor condition with backlogs in maintenance requiring R325m to address. SM allocated R203m to the capital budget to address the backlog and provide for future development.
Electricity	<ul style="list-style-type: none"> 2,8% of households make use of sources of energy other than electricity. Access to electricity for lighting purposes improved by 17,9% from 40 352 households in 2011 to 47 594 households in 2016. 	<ul style="list-style-type: none"> The proportion of households with access to electricity services decreased from 92,9% in 2011 to 90,9% in 2016.
Sanitation	<ul style="list-style-type: none"> A total of 988 households (1,9% of total households) within SM still make use of sanitation services other than flushed and chemical toilets (i.e. pit latrines, ecological toilets, bucket toilets, or none). About 43,4% of the sanitation infrastructure is in a poor or very poor condition, with an estimated R283,4m required to maintain sewer reticulation assets. 	<ul style="list-style-type: none"> Despite the maintenance backlog, SM made significant progress in improving access to sanitation, increasing the proportion of households with access to sanitation from 91,7% in 2011 to 98,1% in 2016.
Refuse	<ul style="list-style-type: none"> The majority of household in SM has their refuse removed by local authorities at least weekly (71,0%). 	<ul style="list-style-type: none"> However, this service provision dropped from 87% in 2011.
Housing	<ul style="list-style-type: none"> The majority of households in SM currently reside in formal dwellings (65,1%) whilst 34,9% of the households resided either in informal (17 829), traditional (366), and "other" (107) dwellings in 2016. The annual average household growth rate between 2011 and 2016 was 0,9% or 1 791 households per annum. 	<ul style="list-style-type: none"> With only an additional 1 447 formal dwellings recorded over this period, the number of households informally housed has increased faster than the provision of formal dwellings. The proportion of formal households declined from 75,1% to 65,1% over this period. SM is unable to cope with rate of household growth, with the percentage of formal households declining from 75,1% to 65,1% from 2011 to 2016.
Crime	<ul style="list-style-type: none"> The murder rate within SM remained unchanged at 45 reported cases per 100 000 people between 2015 and 2016. Drug-related crimes within SM increased sharply by 20,9% from 1 195 reported cases per 100 000 people in 2015 to 1 444 cases in 2016. 	<ul style="list-style-type: none"> The number of residential burglaries cases within SM increased by 6,9% from 1 037 in 2015 to 1 108 in 2016.
Economy	<ul style="list-style-type: none"> It is understood that Stellenbosch is the secondary municipality or "town" with the most JSE listed corporations in South Africa and the highest concentration of "dollar millionaires". SM's economy grew at an annual average rate of 1,7% between 2013 and 2017. Employment growth remains fairly moderate, averaging 2,2% per annum since 2005. The majority (30,7% or 23 064 workers) of the employed workforce SM operate within the informal sector, which has grown by 9,0% per annum on average since 2005. The semi-skilled sector (which employs 23 392 workers or 24% of the municipality's workforce) experienced marginal growth of 1,3% per annum over the past decade. The skilled sector employs some 13 030 workers, and grew at a rate of 1,2% annum since 2005. Overall, SM's unemployment rate increased to approximately 11% in 2017. Commercial services (encompass the wholesale and retail trade, catering and accommodation, transport, storage and communication and finance, insurance, real estate and business services industries) comprised 52,3% of the municipality's GDP in 2016. This sector employed 45,2% of the municipality's workforce. Agriculture, forestry and fishing sector will see retraction due to the severe impact of water restrictions. The decline in output from agriculture will influence the manufacturing sector, which will also contract until the impact of the water restrictions is overcome. 	<ul style="list-style-type: none"> The tertiary sector is likely to see faster growth, but the government sector is not expected to show growth. The general government and community, social and personal services sector comprised 17,4% of the municipality's overall GDP in 2016. This sector employs 24,3% of the municipality's workforce and its employment growth over the period 2005-2015 averaged 3,0% per annum. Wholesale and retail, catering, and accommodation comprised of 20% of SM's overall GDP, and employed 24,4% (largest contributor) of the workforce in 2016. Economic decline in this sector will have an impact on its contribution to the employment. The manufacturing sector comprised 17,1% of the municipality's GDP in 2016. The sector has experienced contraction of 0,2% per annum on average over the period 2005-2015. The largest sub-sector contributor being that of food, beverages and tobacco (40%), petroleum products (13,3%) and wood, paper, publishing and printing (12,8%). This sector accommodated 10,3% of the workforce. The agricultural sector comprised 6% of SM's GDP in 2015. The sector grew by 1,4% for the period 2005-2015. Employment picked up significantly after the recession and grew at a rate of 3,1% per annum on average since 2010. On net employment, 2 976 jobs have been lost since 2005 and not all of the jobs lost prior to and during the recession have been recovered. Despite contributing only 6% to GDP, the agriculture sector contributes 14,7% (3rd largest) to the municipality's employment, with its contribution to work generation outweighing its comparative economic contribution. Economic decline in this sector will therefore have a significant impact on the overall contribution to employment. The construction sector comprised 5,5% of the SM's GDP in 2016. The sector grew by 2,5% over the period 2010-2015 and employed 5,1% of the workforce.

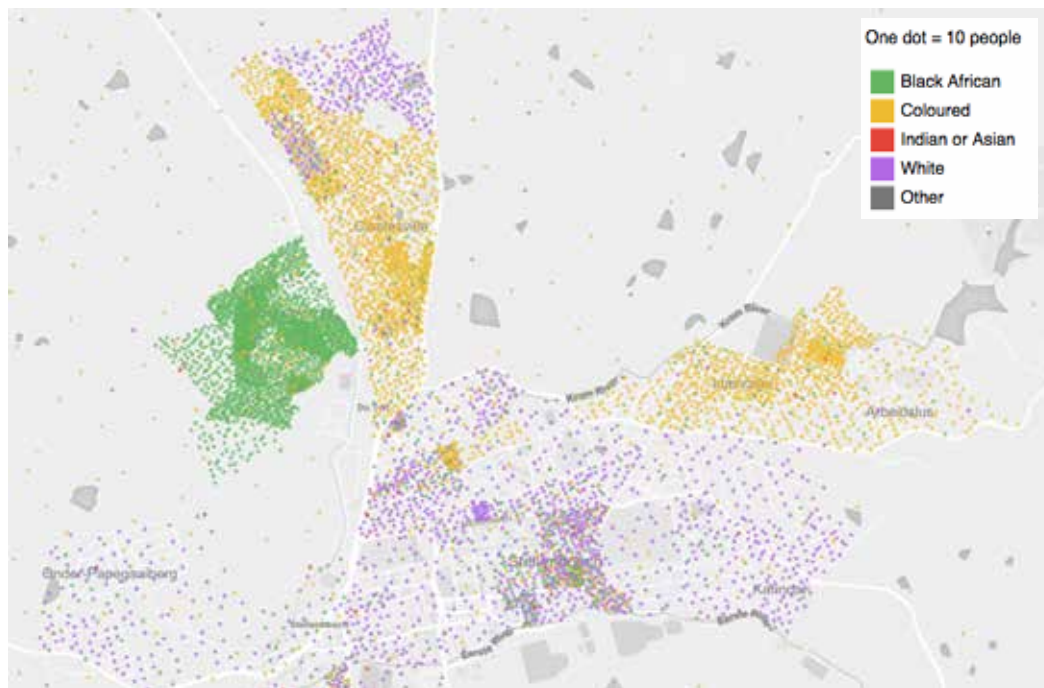


Figure 12. Racial distribution in Stellenbosch (dotmap.adrianfrith.com)

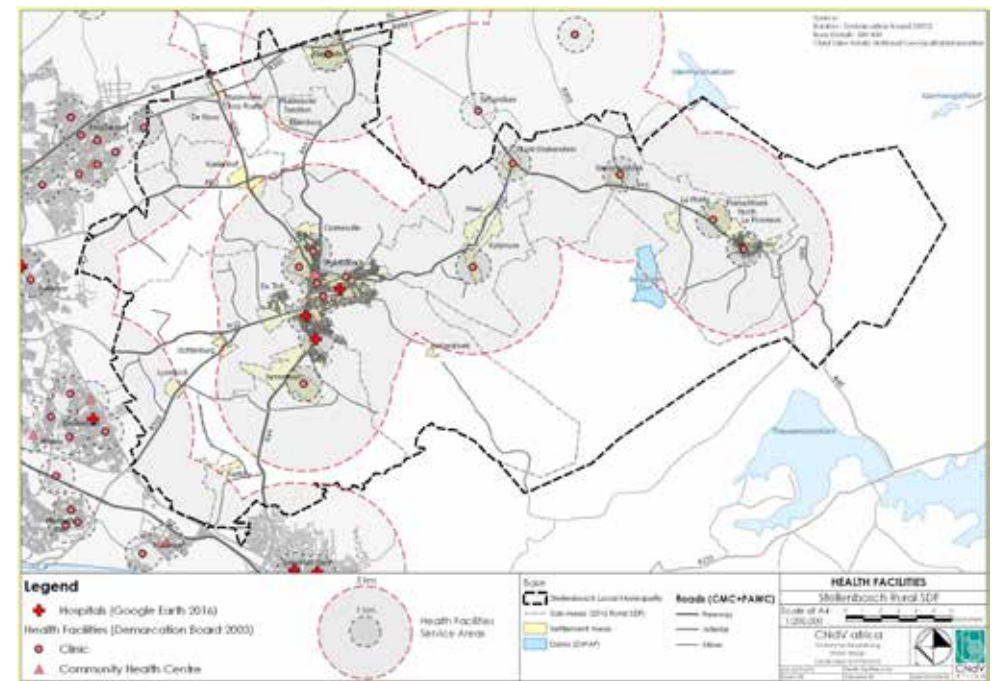


Figure 14. Access to Health Facilities

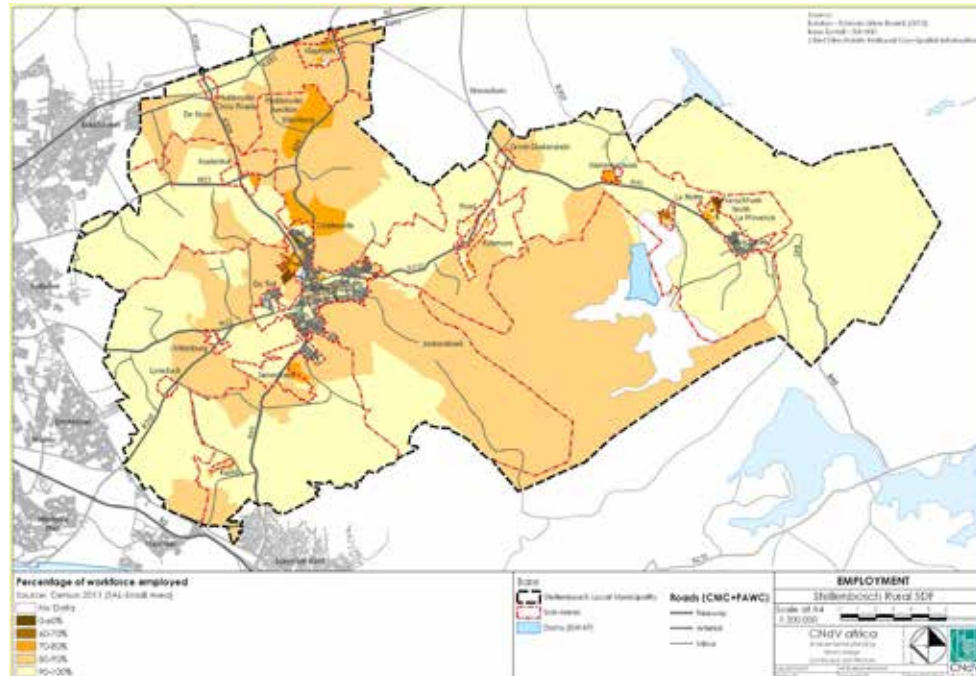


Figure 13. Percentage of workforce employed

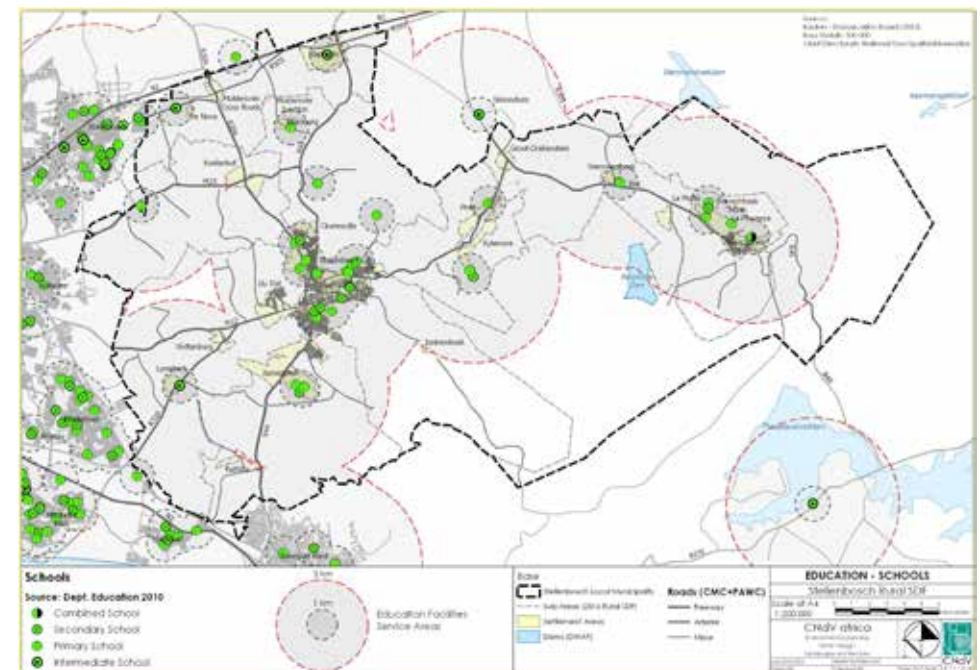


Figure 15. Access to Schools

Table 10. Stellenbosch's Socio-Economic context - issues and implications

KEY ISSUE	SDF IMPLICATIONS
<ul style="list-style-type: none"> • SM will continue to grow, without the economy necessarily being fully geared to provide work opportunities or generate funds to provide needed services. • A growing youthful population, large student population, and seasonal influx of labour could potentially increase the municipality's dependency ratio and a smaller base from which local authorities can collect revenue for basic services. • Continued inequality is likely to lead to incidents of social unrest and instability. • Increased assistance to public facilities will be required – especially schools – given limited household means. • Crime rates remain high. • Significant upgrading and extension of basic services to poorer citizens will remain a priority. • The growth in the informal sector as the only means to ensure livelihoods to poorer citizens is expected to continue. • Economic sectors accommodating unskilled workers (especially manufacturing and agriculture) show slow growth. • SM's inability to provide essential services (e.g. refuse removal) lead to dumping, environmental degradation and/ or the health-related problems. 	<ul style="list-style-type: none"> • <i>High levels of poverty and indigence imply an increased burden on municipal financial resources to provide in community needs.</i> • <i>An urban structure and form which minimises household costs (e.g. for travel), and maximises entrepreneurial opportunity and thresholds supportive of small businesses is critical.</i> • <i>Given the backlog in the maintenance of infrastructure and servicing existing residents, SM is challenged in meeting the current demand for services. With the infrastructure budget declining in future periods, an urban structure and form which minimises municipal servicing and maintenance cost is critical.</i> • <i>Albeit the contribution of agriculture to GDP is relatively low, it is very significant in relation to supporting tourism and employment.</i>

3.3. Built Environment Context

The challenges faces the built environment of the SM have been documented in a variety of sector plans prepared by the municipality, including a Water Master Plan (2011) and (2017), a Stormwater Masterplan (2013), a Sewer Master Plan (2017), a Comprehensive Integrated Transport Plan 2016-2020

(2016), an Electrical Infrastructure Master Plan (2015) as well as area-specific plans such as the Klappmuts Special Area Development Plan (2017); and the draft UDS (dated 2017), and draft Stellenbosch Municipality Rural Area Plan (2017), the RAP and previous MSDFs. The table below provides a summary of the issues and challenges of relevance to the MSDf.

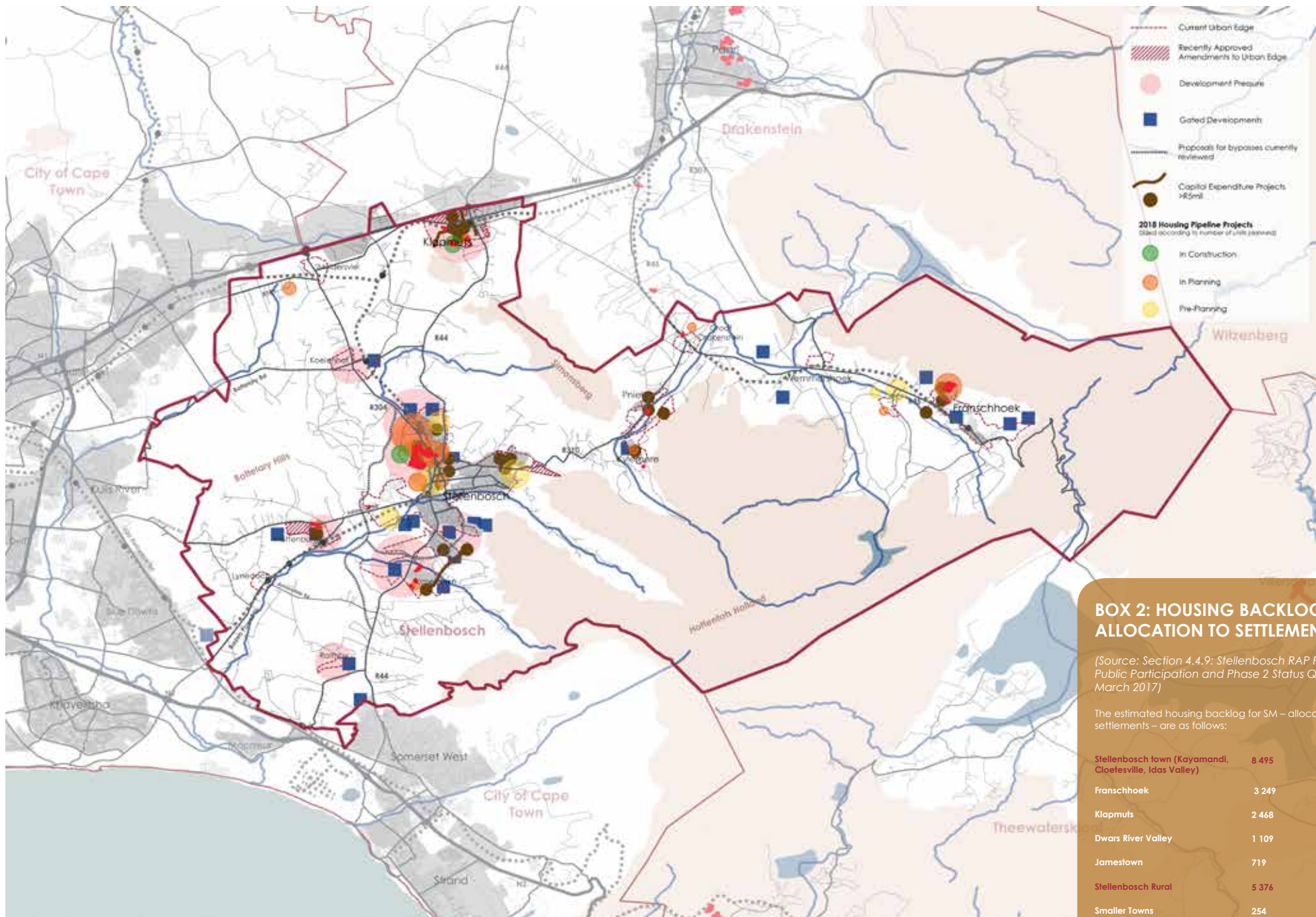
3.3.1. Attributes

Table 11. Stellenbosch's Built Environment context - key attributes summarised

THEME	ATTRIBUTES	
Settlement Pattern and Role	<ul style="list-style-type: none"> Stellenbosch town remains the most significant settlement within SM, followed by Klappmuts, Franschhoek, and a number of smaller dispersed settlements. 	
Rural Settlement	<ul style="list-style-type: none"> There is a backlog of over 3 000 housing opportunities in rural areas. 	
Historic Built Assets	<ul style="list-style-type: none"> SM has a rich asset of historic places and buildings, in large part saved through the intervention of Historiese Huis in the past. 	<ul style="list-style-type: none"> There appears significant disused historical industrial buildings which in time could be repurposed for alternative uses while recognising industrial and labour history.
Land Use and Density	<ul style="list-style-type: none"> Dwelling densities have increased in Stellenbosch town, Klappmuts and Franschhoek but are still significantly lower than the targeted density set in planning policy and studies of 25 du/ha. In 2015 the average density in Stellenbosch was 8,17 dwelling units per hectare, with Franschhoek only slightly higher at 10,22 units and Klappmuts falling between these two at 9,94 (densities vary significantly between neighbourhoods within settlements). In the municipal area, the split in housing typology between 1996 and 2015 is: dwelling houses (74%), flats (17%), other residential buildings (6%), and townhouses (3%). 	<ul style="list-style-type: none"> The office development market in the municipal area has been relatively flat over recent years compared to the highs of 2005-2010. The retail property development market in the municipal area is highly sporadic in nature with several spikes in building activity interspersed with short- to medium-term troughs. Trends in the industrial property development market in the municipal area are hard to discern, with some years showing a substantial spike in building activity compared to previous years and other years showing very little (or no) building activity.
Facilities and Social Services	<ul style="list-style-type: none"> There appears to be an adequate number of facilities within reach of the majority of households to meet the educational and health care needs of SM, but challenges relate to operational and household affordability as well as the capacity of these facilities (e.g. overcrowded schools in poorer neighbourhoods) 	
Regional Infrastructure	<ul style="list-style-type: none"> Plans to upgrade various regional mobility routes (R44, R310 and R304) are likely to improve regional mobility. However, the impact of these at a local level are likely to be minimal without targeted interventions to resolve local congestion. 	<ul style="list-style-type: none"> Regional water supply remains constrained; however, recent rains and major augmentation schemes being implemented by national and provincial departments are likely to improve the security of supply over the medium term.
Municipal Infrastructure	<ul style="list-style-type: none"> According to the Water Services Development Plan (2011), much of the key water supply infrastructure in SM is in disrepair. About 38.6% of the water supply infrastructure is in a poor or very poor condition. The bulk of the backlog is made up of the water reticulation pipeline assets. SM is highly dependent on the CCT for water security, with most of the towns making up SM having a supplementary supply from the City. In the light of the projected growth of Stellenbosch, this is not viewed as a sustainable situation. About 43.4% of the sanitation infrastructure is in a poor or very poor condition. The bulk of the backlog consists of the sewer reticulation assets and the Stellenbosch waste-water treatment works. The Devon Valley landfill site has a remaining life of less than two years. 	<ul style="list-style-type: none"> Besides having insufficient capacity to supply the future growth needs for Stellenbosch, Franschhoek, Dwarsriver, Klappmuts and Raithby, SM's significant challenges are the augmentation of existing water sources, the replacement and upgrading of old infrastructure, the provision of sustainable basic services to informal settlements and to ensure the provision of basic services to rural communities located on farms. According to the Electrical Infrastructure Master Plan (2015), the overall condition of the existing infrastructure is good given the age of the equipment. On the whole the electrical network is fairly robust, and should support future developments, provided timeous upgrades are implemented as outlined in the Master Plan. Stormwater infrastructure is generally insufficient. Incremental upgrades should be implemented; however, a detailed review of the Stormwater Master Plan is required, as the current plans are inadequate in terms of providing clear direction as to the interventions required or further investigations to be undertaken.
Service Related Protests	<ul style="list-style-type: none"> Service related protests and land invasions occur intermittently. 	
Municipal Land Ownership	<ul style="list-style-type: none"> A total of 40.4% or 33 544ha of the land in SM is owned by either government or Municipality. The rest of the land, approximately 50 316ha, is privately owned. 	<ul style="list-style-type: none"> The SM owns 4 219.4ha of urban and rural land spread out in fragments across the entire municipal area. The tradability of this land, is by choice, low as the Municipality prefers long-term lease agreements as contractual arrangements with third parties rather than selling outright. Arguably, this is one of the reasons why house prices are so high in Stellenbosch town. The supply side is artificially constrained.

Table 12. Stellenbosch's Built Environment context - key attributes summarised (cont.)

THEME	ATTRIBUTES	
Housing and Shelter	<ul style="list-style-type: none"> The percentage of households in formal housing has decreased from 75,1% in 2011 to 65,1%, illustrating the difficulty keeping pace with housing demand of the growing number of lower income households. The current housing demand waiting list comprise some 15 780 applicants (Western Cape Housing Demand Database extract for Stellenbosch, May 2018). The middle to high income housing demand was projected to be 1 850 units in 2016 (Urban Econ's Stellenbosch Market Assessment, 2016). The student accommodation demand was recorded as 4 200 beds in 2016 (Urban Econ's Stellenbosch Market Assessment, 2016). Cloetesville, Idas Valley, Kayamandi, and Jamestown; all within a 5km of radius of Central Stellenbosch make up 45% (7 035) of the SM's total BNG housing need. Neither Idas Valley, Cloetesville, nor Kayamandi, have extensive land options to accommodate the current demand. 	<ul style="list-style-type: none"> 74% (11 615) of the applicants has been on the waiting list for longer than 10 years, 24% (3 818) of which are currently on the waiting list for more than 20 years. Cloetesville (84%), and Idas Valley (88%) have the highest proportion of applicants on the waiting list for 10 years or more. Given the current profile of those on the waiting list for less than 10 years, it is evident that housing demand will be driven by applicants from Klappmuts and Kayamandi. Those older than 40 years and on the waiting list for more than 10 years make up 8 390 (53%) of all applicants. More than 50% of Kylemore/ Pniel, Jamestown, Idas Valley and Franschhoek's housing demand have applicants that are older than 40 years and have been on the waiting list for more than 10 years. The rate of housing delivery during the current MTREF period (466 units) and post the current MTREF period (8166) is not meeting demand. The housing backlog will thus increase, as well as the number of informally housed households.
LUM Trends	<ul style="list-style-type: none"> Almost 70% of all recently submitted strategic land-development applications had a peripheral location (i.e. contributing to urban sprawl with associated costs), and even more (89%) of these applications were greenfields developments. 	<ul style="list-style-type: none"> A very high number (55%) of all land-development applications submitted to SM between 2007 and 2015, were for (or included) a permanent departure. This is evidence of a changing pattern in the use of land that is not yet accommodated in zoning schemes. Only about 25% of all land-development applications submitted to SM pertains to rural land.
Large Land User Trends	<ul style="list-style-type: none"> Distell – owner and user of the Adam Tas and Bergkelder land holdings – intends to relocate its operations to a centralized facility in Klappmuts (north of the N1). 	
Property Market	<ul style="list-style-type: none"> Considering all house-price bands in the urban areas, the mean and median values increased significantly in almost all areas between 2012 and 2016. The value increase of full-title and sectional-title properties combined in the urban areas was 47%, which equals an annual compound growth of 10%. Between 2008 and 2017, nominal full-title property rentals in Stellenbosch town showed growth of roughly 8,1% per annum while sectional-title property rentals grew by about 10,5% per annum. 	<ul style="list-style-type: none"> Over the same period, building costs (as measured by the CPI) showed growth of roughly 6% p.a. This implies that over the past eight years residential rentals in Stellenbosch were able to grow in real terms.
Movement and Access	<ul style="list-style-type: none"> The current modal split in SM is as follows: light vehicles: 87%; minibus taxis: 7,5%; bus: 4,5%; heavy vehicles: 1,5% (rail information is not available in the RMP). Approximately 12% of all traffic within the SM are buses and mini-bus taxis (low compared to CCT with approximately 36% public transport usage). The RMP found that the present road network – particularly provincial roads – fails to cope with the longer-term growth needs of the Stellenbosch area and some roads, particularly in the historic town area, may in future operate at capacity during peak periods (unless modal shift changes). The RMP found that the following road sections function beyond capacity: <ul style="list-style-type: none"> The R304 before its intersection with the R44. The R44 (south) between Paradyskloof and the Van Reede intersection. Bird Street between the R44 and Du Toit Street. Merriman and Cluver Streets between Bird Street and Helshoogte Road. Dorp Street between the R44 and Piet Retief Street. Adam Tas Road between its junction with the R44 and Merriman Street.Piet Retief Street. Van Reede and Vrede Streets between the R44 and Piet Retief Street. Access roads found to be under severe pressure are: <ul style="list-style-type: none"> The Welgevonden access road. Lang Street into Cloetesville. Rustenburg Road into Idas Valley. The Techno Park access road. 60% of SM's households do not have access to a car, and are dependent on unsupported informal public transport or travel on foot. 	<ul style="list-style-type: none"> Only 1 200 persons were recorded entering Stellenbosch between 07:15hrs and 08:15hrs. This is the equivalent to just 20 buses each carrying 60 passengers. 70% of all trips entering Stellenbosch town are by private car. There is worsening peak period congestion, with average traffic speeds pushed down to 13km/h (below cycling speed) and a throughput per lane of only 600 persons per hour due to the very low vehicle occupancies. Local (<5km) peak period person trips within the town of Stellenbosch total twice the number of longer distance (>5km) passenger commute trips. Approximately 80% of the workforce employed in the municipal area live in the town of Stellenbosch and make trips of less than 5km in distance. 95% of all NMT trips within the Stellenbosch town are made by low income residents. Over 80% of all local trips by choice-user are made by car. A bypass tying in with the R44 in the vicinity of the Annandale Road in the south and with the R304 in the vicinity of the Welgevonden Road intersection in the north is under investigation. The route is envisaged as a dual carriageway, over a distance of ±14 km, with no direct property access and grade separated intersections (interchanges). However, this proposal appears to have no official status. Scheduled passenger trains in the Stellenbosch area run over a total rail line distance of 18 km, and trains stop at seven stations in the municipal area (Lynedoch, Spier, Vlothenburg, Stellenbosch town, Koelenhof, Muldersvlei and Klappmuts). Franschhoek, La Motte and Wemmershoek are alongside the Franschhoek line which is no longer in operation). Public bus services are limited. There are 28 scholar bus contracts within the Municipality, transporting up to 4 263 scholars. According to the Transport Register there are 43 routes operated by mini-bus taxis. Currently, 114 mini-bus taxis have been surveyed and 157 operating licences have been issued. The majority of routes are operating at above 75% service capacity.



BOX 2: HOUSING BACKLOG ALLOCATION TO SETTLEMENTS

(Source: Section 4.4.9: Stellenbosch RAP Phase 1 Public Participation and Phase 2 Status Quo Report, March 2017)

The estimated housing backlog for SM – allocated to settlements – are as follows:

Stellenbosch town (Kayamandi, Cloetesville, Idas Valley)	8 495
Franschhoek	3 249
Klapmuts	2 468
Dwars River Valley	1 109
Jamestown	719
Stellenbosch Rural	5 376
Smaller Towns	254

TOTAL: 22 671

Figure 16. Housing and development trends, by passes and gated communities

Table 12. Stellenbosch's Built Environment context - issues and implications

KEY ISSUES	SDF IMPLICATIONS
<ul style="list-style-type: none"> • Many households do not have access to water within their dwellings. • Much of the key water supply infrastructure in the SM area is in disrepair. • Much of the sanitation infrastructure in the SM area is in a poor or very poor condition. • Relatively low density development predominates in the area. • Most new development reinforces a pattern of low overall densities and seek peripheral locations. • Existing industrial/ manufacturing operations and land holding in the centre of Stellenbosch town impede large scale restructuring of the settlement. • There is a significant backlog in housing for the poor. • There appears to be significant demand for student housing and affordable housing for employed, lower and middle income groups. • The rate of current housing delivery for the poor and lower income groups is significantly lower than that required to address backlogs and demand meaningfully. • It is expected that a significant proportion of housing backlogs for farm workers – and future need for farm worker housing – will have to be met in urban areas. • Property prices and rentals in SM have shown significant growth (of a higher percentage than the increase in cost of building). • Many poor areas appear to have a high incidence of overcrowding. • Many movement trip needs in SM remain unsatisfied or are undertaken with great hardship. For these captive populations, access to ever more dispersed activity is increasingly difficult. • Virtually all available funding is allocated to providing general road infrastructure rather than the development of transport systems and approaches that serve the most effective and sustainable movement of people and goods. 	<ul style="list-style-type: none"> • <i>Available municipal capital funding is required for backlogs and maintenance, i.e. there are virtually no funds to investment in support of new development and improvements to address existing problems with infrastructure (e.g. limited provision for NMT).</i> • <i>The current service and housing delivery model is ineffective in addressing the municipality's housing demand and growth. Housing demand and the associated land demand for the currently delivery model shows that the municipality does not have access to adequate land to serve the current and projected housing demand.</i> • <i>Given the limited income of a large proportion of the population, a settlement structure and form prioritizing walking and public and NMT, should be pursued.</i> • <i>Given low levels of road space utilization in terms of vehicle occupancy, there appears no basis for capacity increases to infrastructure accommodating general traffic.</i> • <i>The proposed bypass is likely to stimulate further settlement sprawl and "lock-out" projects aimed at restructuring Stellenbosch town.</i> • <i>Stellenbosch town has high potential volume of NMT users should the environment be more encouraging of NMT modes, particularly cycling.</i> • <i>The relocation of large industrial land users from Stellenbosch town (to Klapmuts) presents significant opportunity to restructure Stellenbosch town.</i>

3.4. Institutional Context

Information regarding the institutional issues that have a bearing on spatial planning and development has been extracted from the IDP and the 2018 Medium Term Revenue and Expenditure Framework (MTREF) of the municipality.

Table 13. Stellenbosch's Institutional context - key attributes summarised

THEME	ATTRIBUTES	
Staff Resources	<ul style="list-style-type: none"> Few municipal staff resources are available for dedicated future planning (across sectors) or driving larger, transformative, and catalytic programmes and projects. There appears to be limited capacity for planning and managing public and NMT programmes and projects. 	<ul style="list-style-type: none"> Inter-municipal and municipal-provincial institutional arrangements for addressing joint planning challenges appears weak and intermittent.
Sector Integration	<ul style="list-style-type: none"> There appears to be poor integration between spatial and transport planning. 	<ul style="list-style-type: none"> Transport planning focus and expenditure remain focused on roads and accommodating private vehicular transport.
Partnerships	<ul style="list-style-type: none"> Albeit many partnerships between communities and organisations (including the municipality) exists to assist community based initiatives, address specific community needs, and environmental issues, there appears no high-level public-private partnership that will fundamentally "shape" major challenges facing the municipality (including infrastructure, transport demand management, and housing). 	
Operating and Capital Budget	<ul style="list-style-type: none"> The operating income (including grants and subsidies) of the SM increased by 12,38% from 2012/ 13 to 2014/ 15 or 6,01% on average per annum over the period. Operating expenditure increased by 17,43% over the period or 8,36% per annum. Grants and subsidies received do not exceed the operating income generated by SM from its own activities, and the reliance on grants and subsidies will probably decrease further should the emerging trend continue. Rates income per capita increased from R1 213,15 in 2012/ 13 to R1 408,79 in 2014/ 15 (16,13% over the period). Over the period, the rates income increased from R203,7m to R249,7m or by 22,49%, while the population increased by 5,48%. The increase in the population figures and the increase in the rates income per capita may suggest that a larger number of the population is contributing to an increasing rates base, but also reflects on the above average increase in property values in the large parts of the municipal area. The municipality spent 90% of its capital expenditure budget in the 2014/ 15 financial year, while capital spending in 2013/ 14 was 92% of the budget. Most of the capital budget was spent on infrastructure and housing. 	<ul style="list-style-type: none"> MIG expenditure increased from 2012/ 13 to 2013/ 14 at a faster rate than operating income and operating expenditure. From 2012/ 13 to 2013/ 14, operating expenditure grew at 17,43% while MIG expenditure increased by 60,98%, with operating income that increased at 12,38%. From 2013/ 14 to 2014/ 15, MIG expenditure increased at a higher rate (28,78%) than operating expenditure (9,8%). Operating income decreased by 2,07%. SM experienced a general increase in outstanding consumer debt between 2012/ 13 and 2014/ 15 across all sectors, with the largest increase that accrued to rates. SM's MTREF capital budget increased by approximately 13% to R2 244 370 898 for 2018/ 19. Of this, R1 716 330 147 (76%) is allocated to the operating budget and R528 040 751 (24%) to capital investment. Allocations from National government for the 2017-2021 MTREF will total R160m, of which the bulk is MIG funding, with R70m from the PGWC, mostly allocated towards housing development. Infrastructure expenditure over the MTREF 2018-2021 period totals R1,1bn, and makes up 82% of the total capital expenditure allocation of R1,35bn. SM has borrowed R340m (25% of the total infrastructure budget) to fund their priority infrastructure needs. For the capital budget over the MTREF period 2018-2021, borrowings total 30% (R160m) in 2018/ 19, 21% (R100m) in 2019/ 20 and 23% (R80m) in 2020/ 21.
Asset Management	<ul style="list-style-type: none"> The SM appears to have no processes or procedures for proactively using municipal land assets as a resource to address identified developmental needs. 	
Planned Government Spending	<ul style="list-style-type: none"> Given the worsening fiscal outlook, National and Provincial Government grant allocations towards the capital expenditure reduces over the MTREF period, from the peak of R91m in 2018/ 19 to R58m and R68m in the following years. 	<ul style="list-style-type: none"> Provincial government funding allocated to SM in the 2017/ 18 financial year was largely focused on road infrastructure maintenance and upgrades (R90m) with lesser amounts spent on the upgrade of the Stellenbosch Hospital (R14m) and the PC Petersen Primary School (R15m).

Table 14. Stellenbosch's Institutional context - issues and implications

KEY ISSUES	SDF IMPLICATIONS
<ul style="list-style-type: none"> • SM has a severe lack of institutional capacity and virtually no funding for the management of transport issues. As a result, sustainable transport approaches have been extensively overlooked. • Integration between transport and spatial planning has never been achieved in Stellenbosch. • Given the extent and development potential inherent in the very large municipal land resource, current management arrangements for this resource appears inadequate. • With government's contribution towards capital expenditure declining and with SM needing to borrow 25% of their capital expenditure spend over the MTREF 2018-2021, SM is under increasing pressure to fund capital expenditure from their own reserves. • SM cannot maintain the current rate of infrastructure spend post MTREF period. The decreasing loan contribution amount and SM's replacements reserves towards 2021 leads to a significant decrease in the total capital budget and investment in infrastructure 2021. • SM's ability to fund to fund infrastructure from their own reserves primarily relies on the ability in achieving 96% collection rates for services. Mounting consumer pressures in paying the increasing costs of service makes the likelihood of achieving the projected collection rates questionable, thus putting SM in a financially vulnerable position to fund capital expenditure projects. 	<ul style="list-style-type: none"> • <i>Given budget constraints and existing maintenance backlog, SM's future capital budget should prioritise critical infrastructure projects and addressing backlog within the current urban footprint in lieu of future growth prospects.</i> • <i>Development and densification efforts will need to be focused on where the capital and operational expenditure is concentrated.</i> • <i>Further expansion of SM's current built footprint will dissipate the SM's ability to maximise the use and productivity of existing infrastructure and further extend the SM's future liability in needing to attend to the building and maintenance of new infrastructure.</i> • <i>SM should seek to maximise their return on infrastructure assets by increasing the number of people serviced by existing infrastructure assets and by decreasing the number of indigent households that need to be served by newly constructed infrastructure (as they are unable to achieve a return on the assets while it increases their future maintenance burden).</i>

3.5. Synthesis of Status Quo

There are a number of concerns and observations related to Stellenbosch's existing mode of settlement development and management. These are summarized below under the themes used for analysing the status quo.

Bio-physical

- The degradation of key ecological assets and loss of productive agricultural land has not been arrested. For example, there is no indication that the condition of the river systems in the municipal area has improved significantly since problems first manifested. In addition, significant amounts of agricultural land have been lost to development over the past decade.
- Climate change is likely to have a significant impact on the natural resource base of the municipal area, which will include a reduction in water, increased temperatures, increased fire risks, and increased incidences of extreme weather events. This, in turn, will impact on agricultural production, scenic landscapes, the livability of urban areas and the ability to provide basic services such as water and sewerage treatment.
- Considerable progress has been made at provincial and local levels to prepare guidelines enabling ancillary activities in nature and agriculture areas, providing increased access to nature and diversified farm income.

Socio-economic

- The population of the SM is likely to continue to grow above the average provincial rate, and urbanisation is likely to increase, with the main settlements having to absorb the bulk of this growth.

- The ability of the economy to absorb growth, particularly with regard to job creation, is a concern. Indications are that the growth in indigent households, who traditionally are employed in unskilled and semi-skilled jobs, is disproportionate to employment growth, which has been slow in these categories (e.g. agriculture).
- The informal sector will continue to provide livelihoods to a significant proportion of residents, but the prevailing settlement structure and form does not recognize the needs of marginal entrepreneurs.
- A growing youthful population, large student population, and seasonal influx of labour is likely to increase the municipality's dependency ratio, in addition to a smaller base from which the municipality can collect revenue to provide services and opportunities that will improve the lives of the especially the poor.
- Inequality in the municipal area, and particularly the historic towns such as Stellenbosch and Franschhoek, remains significant. Although inequality is generally accepted to be unsustainable and is likely to lead to social unrest and instability, current development patterns are simply not addressing this issue.
- Crime rates remain high. The market response – focused on providing security for those who can afford it (e.g. through gated development) – is like to exacerbate inequality and segregation.
- The upgrading and provision of basic services and housing will remain the focus of the SM and other government agencies for the foreseeable future, thus foregoing investment in other areas that would likely have more socio-economic spin-offs and result in improved place-making.
- The SM's inability to provide essential services (e.g. refuse removal) leads to dumping,

environmental degradation and resulting health-related problems.

Built environment

- Infrastructure backlogs – specifically in poor areas – and essential municipal infrastructure requires significant investment and maintenance. This applies to all basic services (electricity, water supply, wastewater management and solid waste disposal).
- The need for housing and shelter – both for the lower income groups and those with employment – has not been adequately met. The existing “housing pipeline” will not meet the need for those requiring state assistance, and little is built which is affordable to ordinary workers. A pattern of intermittent land invasions and associated “responsive” basic infrastructure provision, as well as daily inward commuting of ordinary workers and students, is likely to continue.
- Property and land is inordinately expensive in SM (particularly in Stellenbosch town and Franschhoek), locking out both the poor and lower/ middle income workers from the property market. Without significant intervention in the property market, this situation is likely to worsen.
- Inequality in SM is particularly evident in the structure of settlements, with low density development accommodating the wealthy, while the poor is accommodated in high density, poor quality peripheral areas. Significant numbers of people live in informal shelters. Many new developments reinforce a pattern of low overall densities and are located in peripheral areas, entrenching dependency on private transport, amongst other inefficiencies.
- New high density development mostly focus on the student market, and target groups using private vehicles.



Figure 17. Current development pressures on the periphery of settlements in the SM

- The numerous heritage resources located within the settlements of SM are assets of immense value. Many of these (e.g. parts of the Rhenish complex in Stellenbosch), are underutilized, and have the potential to become vehicles for innovative development that can contribute to creating a more inclusive economy.
- The existing industrial/ manufacturing operations and land holdings in the centre of Stellenbosch town impede large scale restructuring of the settlement.
- The planned move of Distell – occupying large tracts of strategic land in Stellenbosch town – to Klapmuts presents very significant opportunities for the future development of Stellenbosch, Klapmuts, and the broader regional space economy. If not rigorously managed as a shared initiative between the public and private sectors, the opportunity may be lost. SM should focus maximum effort on utilizing the opportunity presented to address the needs of the town.
- Transport planning practice within Provincial government has maintained a “regional mobility lens” with the bulk of planning effort and funding allocated to road infrastructure rehabilitation and expansions that provide for and respond to demand side growth, largely attributed to unconstrained low occupancy private vehicles at the cost of local mobility. Too little focus is placed on progressively improving the efficiency of use of existing road space through shifting modes and altering travel patterns.
- This regional mobility approach and “roads for growth” focus has very high financial, economic, social and environmental costs, is unsustainable and is exclusionary to most the population, i.e. those who do not have access to private transport. Furthermore, a regional “lens” which attempts to accommodate private vehicles growth has adverse

consequences for managing transport at the finer, localised level where trips concentrate.

- Currently the provision of public transport, non-motorised modes and travel demand management programmes are generally considered as local municipal functions, and not a core responsibility or competency of the Province. The municipality has a severe lack of institutional capacity and virtually no funding for the management of transport issues. As a result, sustainable transport approaches have been extensively overlooked in favour of traditional engineering solutions.

Institutional

- The municipal budget is relatively small considering the depth, range, and variability of citizen needs, specifically in relation to the needs of poorer citizens.
- While current funds are allocated to addressing critical issues – specifically related to infrastructure augmentation and maintenance – it appears that the municipality does not have the resources to fundamentally reverse backlogs or negative trends in shelter or infrastructure needs.
- The diagram below illustrates the focus of public and private sector investment in the SM. The municipality largely focuses on meeting

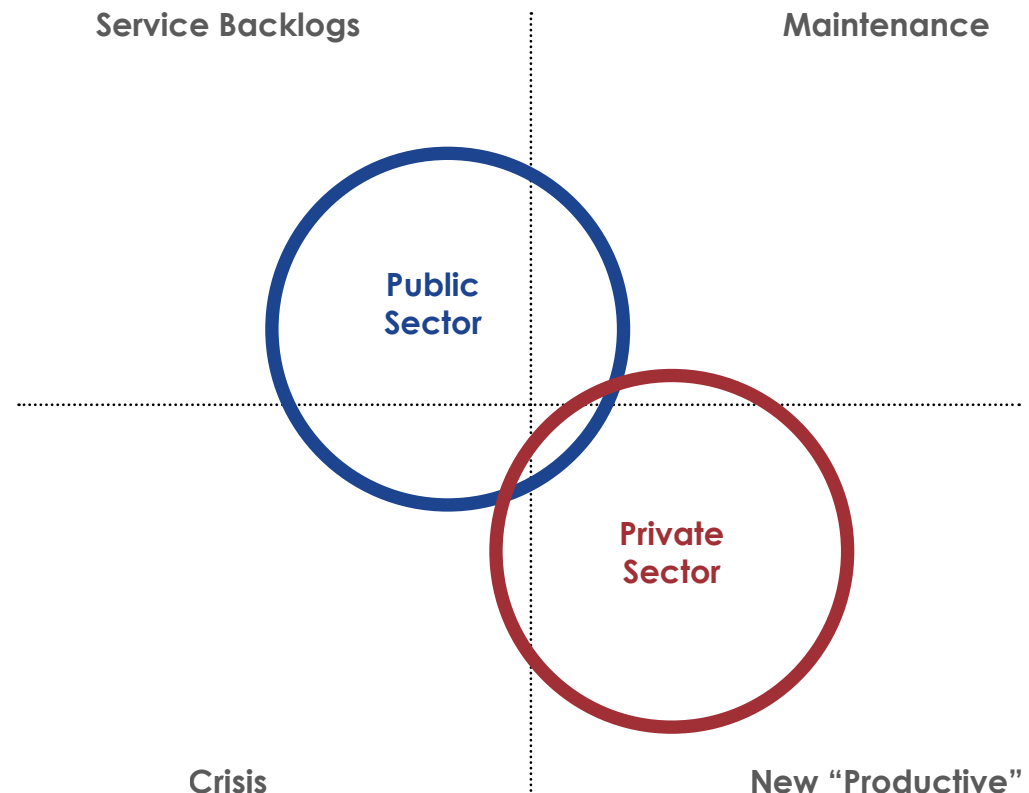


Diagram 1. Investment focus of the public and private sectors

service backlogs, its ability to respond to crisis, and asset maintenance. There is little scope in the budget for new “productive” investment that will result in significant economic growth to benefit the whole community. By contrast, the private sector largely funds new assets for a select group. Private sector investment is not structured to contribute to the long term maintenance of common assets or addressing the developmental needs of the municipal area.

- Although rates income is expected to grow, this additional income will be largely required to maintain the existing infrastructure and services.
- The municipality has significant land assets, and although some programs have been put in place to support small farmers, the bulk of its land holdings has not been meaningfully employed as a resource to address citizen needs.
- Significant partnering between the municipality and the corporate sector (which has considerable material and human resources) in relation to addressing needs – and restructuring the settlement – has not occurred.
- The municipality has undertaken an inordinate amount of planning studies, both overarching in nature and sector specific. Collectively, these comprise a huge volume of analysis and guidelines for future management, difficult to comprehend and “make sense of”. It appears that there is significant disjuncture between the extent of policy and process guidelines available and what could be logically managed by the municipality in day-to-day decision-making. Considerable duplication appears between plans – each “discovering” the municipality anew – as opposed to focusing on a particular functional area or focus in a manner which supports others.
- Despite the principles and proposals put forward by these plans to address the skewed

pattern of development in most of the settlements in the SM, particularly Stellenbosch, there has been hardly any change in the structure of these settlements since the transition to democracy. Most developments follow a “business-as-usual” pattern.

- Sector planning remains fragmented, especially in relation to spatial and transport planning, where the drive to augment and extend road space appear in contradiction to the public and NMT focus required by spatial planning for the municipality.
- Current planning initiatives have not addressed the economic generative opportunity associated with Klapmuts, its relationship with settlement opportunity for people close to work, and the associated opportunity to restructure Stellenbosch town as manufacturing concerns leave town in search of locations which better meet current business strategy and plans.

3.6. Land Budget Considerations

Determining the future demand for housing, other forms of development and the associated infrastructure requirements form part of the requirements for the preparation of an MSDF as set out in SPLUMA. An understanding of the housing need in particular has to be translated into land requirements with a view to understanding the land need and distribution thereof across the municipal area.

Determining the demand for housing and services is based on the current demand (i.e. backlog) and the demand that will be generated through growth. Land requirements are then informed by a realistic projection of the density of development required to accommodate the demand. An understanding of the land requirements is also informed by the type of housing demand. In this regard it is traditional to distinguish between the demand for affordable housing (indigent) and housing taken up by the open market (non-indigent) as the form of housing provision for these

markets may vary. The land demand as calculated is then measured against available land. In the current policy context, available land includes all land that is potentially developable within urban areas and within the urban edges determined by previous spatial planning exercises, for the various settlements earmarked to accommodate growth. In the SM context it is argued that affordable housing, for which there is a considerable land demand, will be accommodated in the main urban centres of Stellenbosch, Franschhoek and Klapmuts where housing beneficiaries will have access to socio-economic opportunities. The findings presented in this section are largely based on the work done for the 2018 SM UDS.

3.6.1. Projected housing and land demand

Housing for indigent

- Estimated need for houses, municipality-wide, in the “give-away” bracket in 2016: **11 618³**
- Estimated unfulfilled need of houses by 2036, assuming that no houses for the indigent will be built between 2016 and 2036: **17 847**
- However, if the current rate of delivery persists only **7 805** units would have been added by 2036, thus still resulting in a significant backlog.

Housing for the non-indigent <80 m²

- Estimated need, municipality-wide in 2016: **15 042** (this includes a variety of unit types aimed at various markets, such as GAP housing, flats and townhouses, and stand-alone units)
- If no supply is added by 2036: **23 106**

These unit numbers have been translated into land demand, based on various scenarios set on in the UDS, ranging from a projection of the current pattern of fairly low density development, to higher densities based on certain economic forecasts.

3 The most recent figures contained in the Western Cape Department of Human Settlements Demand Database, May 2018, shows a housing demand of 15 780 units in this bracket.

According to these figures, the 5 year forecast for land demand for housing in the middle of the road scenario (or "consensus scenario") is projected at 228ha by 2021. By 2036 the land demand for housing would range from 1 339ha, based on current patterns, to 741ha in a low growth scenario. The total gross land demand, also making provision for other land uses that will result from growth such as commercial, industrial and infrastructure, is estimated to be 270ha by 2021 and 996ha by 2036 in the middle of road/ consensus development scenario.

3.6.2. Allocation of demand across the municipal area

The UDS allocates land demand to nodes based on historic land take up and an "adjusted nodal location". The historic land take-up in nodes is given in Table 15.

The UDS adjusted nodal allocation (away from historic trends) is based on:

- Market preference for a certain land-use in a specific location (based on market trends).
- The positioning strategies and a "normalized" situation with respect to infrastructure and the stock of developable land (it ignores backlogs and surpluses in infrastructure provision and availability of developable stock).

Based on this work, which includes a nuanced understanding of the role of the various settlements in the SM and their respective projected growth rates, the overall demand for land for indigent housing within a five and ten year forecast period has been projected as indicated in Table 16.

The table indicates that the largest demand for housing is, as to be expected, in the town of Stellenbosch, which already accommodates 70% of the urban population of the SM. Franschhoek and Klapmuts together only accommodate 20% of the SM urban population, with the remainder spread throughout the smaller villages and hamlets. The ratio for the proposed allocation of indigent housing

Table 15. The historic land take-up in nodes

HISTORIC GROSS LAND TAKE-UP BY NODE 2000 - 2015 (ALL LAND USES)		
Town / Settlement	Land Take-Up (ha)	Percentage Share (rounded to 10)
Stellenbosch (Town)	271	60%
Franschhoek	82	20%
Klapmuts	56	10%
Other	72	10%
TOTAL	481	100%

is thus a 7:2:1 spread between Stellenbosch, Franschhoek and Klapmuts.

Table 17 indicates land currently available within the urban edge as indicated in the UDS strategy. This includes strategic landholdings such as the Distell land along the Adam Tas corridor will possibly become available for development in future.

It is evident that there is more than enough land to accommodate the indigent housing need. Although it is obvious that the market demand for development (for housing, commercial and industrial demand) also requires consideration in the MSDF, it is argued that providing housing opportunities (in whichever form) for the indigent is critical, whereas the municipality can exercise its discretion when considering market driven applications and thus have more control over the supply-side. In any case, it is evident that there is also sufficient opportunity for market driven development, if considered that the current ratio of built-up versus vacant land in the towns of Stellenbosch, Klapmuts and Franschhoek is 5.4:3.5 (built-up/ vacant) within the urban edge.

In addition, current densities remain below 10 du/ha for these settlements, and although they have been increasing somewhat in recent years, densities are still significantly lower than the targeted density of 25 du/ha set in higher level planning policies and studies. Thus, provision should also be made for redevelopment and densification as a means to accommodate market demand.

In conclusion, it is clear that the future development demand could be met in an effective and inclusive manner within the current urban edge of these three towns.

Table 16. Land demand for housing per node

Settlement	% of municipal/ urban population	Indigent housing need (2021)	Land need in ha (number of units x 120m ² erven)	Indigent housing need (2026)	Land need in ha (number of units x 120m ² erven)
Stellenbosch (Town)	51/ 70	8 357 (based on 2,6% annual growth)	100	9 363 (based on a 2,3% annual growth)	112
Klapmuts	5/ 7	1 208 (based on 3,6% annual growth)	14	1 420 (based on 3,3% annual growth)	17
Franschhoek	9,5/ 13	4 370 (based on 4,6% annual growth)	52	5 394 (based on 4,3% annual growth)	65
Dwarsrivier (Pniël, Johannesdal)	5,9/ 8,2				
Dwarsrivier (Kylemore, Lanquedoc)					
La Motte	1/ 1,4				
Groot Drakenstein	0,8/ 1				
Wemmershoek	0,5/ 0,7				
Koelenhof	0,2/ 0,26				
Muldersvlei	0,04/ 0,06				
Vloffenburg	0,08/ 1				
Raithby	0,5/ 0,8				
Lynedoch	0,1/ 0,14				

Table 17. Land availability

LAND	STELLENBOSCH	FRANSCHHOEK	KLAPMUTS
Currently available (UDS 2018)	633ha	131ha	146ha
2021 requirement for indigent housing	100	52	14
2026 requirement – cumulative for indigent housing	112	65	17



Part 4. Vision and Concept

4. Vision and Concept

4.1. Introduction

This section outlines a vision, key considerations, and spatial concept for the spatial planning and land use management of SM.

4.1.1. Vision

In line with the SM's vision as the "Valley of Opportunity and Innovation" (as contained in the IDP), the vision for spatial development and management is described as follows:

"We envisage a municipal area even more special than it is today; a place of natural beauty, rich in the way it preserves and exposes elements of history and culture, its produce from the land, the quality of its institutions, and the mindfulness and innovations of its people.

It is a future Stellenbosch municipal area that remains familiar; it has retained what differentiates the municipality from other places, its landscapes, historic buildings and settlement patterns, and the specialness of its institutions. It is resilient; it has adapted to the needs of today without losing what is special from the past. It is inclusive; it has accommodated the needs of citizens from all walks of life without fear. It is diverse and therefore productive. In adapting to new needs, and accommodating new people, it has become the stage for new expressions of culture, new businesses, and new ways of doing.

In form, it comprises a set of compact settlements, large and small, surrounded by natural and productive landscapes, and linked by means of public transport. Internally, settlements are relatively dense, cyclable and

walkable. Each portrays a unique character, closely linked to its surrounding landscape, the reach and extent of its public institutions, and the capacity and opportunity of its infrastructure. Each provides for a range of citizens from all walks of life, with significant choice in place of residence."

4.1.2. Key Considerations

Working towards this vision, a number of considerations are key:

First, maintain and grow the assets of the Stellenbosch Municipality's natural environment and farming areas. Humanity depends on nature for physical and spiritual sustenance, livelihoods, and survival. Ecosystems provide numerous benefits or ecosystem services that underpin economic development and support human well-being. They include provisioning services such as food, freshwater, and fuel as well as an array of regulating services such as water purification, pollination, and climate regulation. Healthy ecosystems are a prerequisite to sustaining economic development and mitigating and adapting to climate change. The plan provides for activities enabling access to nature and for diversifying farm income in a manner which does not detract from the functionality and integrity of nature and farming areas and landscapes.

Second, respect and grow our cultural heritage, the legacy of physical artefacts and intangible attributes of society inherited from past generations maintained in the present and preserved for the benefit of future generations. Cultural heritage underpins aspects of the economy and differentiates places. Culture is a dynamic construct; forever emerging in response to new challenges, new interactions and opportunity, and new interpretations. Spatially, we must organise

Stellenbosch in a manner which also sets the stage for new expressions of culture.

Third, within developable areas – areas not set aside for limited development owing to its natural or cultural significance – allow future opportunity to build on existing infrastructure investment, on the opportunity inherent in these systems when reconfigured, augmented or expanded.

Infrastructure represents significant public investment over generations, not readily replicated over the short term. It represents substantial assets for enabling individual and communal development opportunity of different kinds. From a spatial perspective, movement systems are particularly significant. Elements of the movement system, and how they interconnect, have a fundamental impact on accessibility, and therefore economic and social opportunity. Specifically important is places of intersection between movement systems – places which focus human energy, where movement flows merge – and where people on foot can readily engage with public transport.

Fourth, clarify and respect the different roles and potentials of existing settlements. All settlements are not the same. Some are large, supported by significant economic and social infrastructure, offer a range of opportunity, and can accommodate growth and change. Others are small and the chance to provide for growth or change is minimal. Generally, the potential of settlements to help change and growth relates directly to their relationship with natural assets, cultural assets, and infrastructure. We must accommodate change and growth where existing assets will be impacted on the least or lend itself to generating new opportunity.

Fifth, address human needs – for housing, infrastructure, and facilities – clearly in terms of the constraints and opportunity related to

natural assets, cultural assets, infrastructure, and the role of settlements. We must meet human need in areas where the assets of nature are not degraded, where cultural assets can be best respected and expanded, and where current infrastructure and settlement agglomeration offers the greatest opportunity. Generally, we can help human need in two ways. The first is through infill and redevelopment of existing settled areas. The second is through new green-field development. We need to focus on both while restricting the spatial footprint of settlements outside existing urban areas as far as possible.

Sixth, pursue balanced communities. All settlements should be balanced. That means they should provide for all groups, and dependent on size, a range of services and opportunities for residents. It also says they should provide for walking and cycling, not only cars.

Finally, focus energy on a few catalytic areas that offer extensive opportunity and address present risk. Planning cannot attempt to treat all areas equally. Some areas offer more opportunity for more people than others. We need to focus on the areas and actions where a significant number of people will benefit, where we will meet their needs. There is also a need to focus on areas of 'deep' need, notwithstanding location, where limited opportunity poses a risk to livelihoods. Some informal settlements and poorer areas may not be located to offer the best chance for inhabitants, yet services need to be provided and maintained here. However, significant new development should not occur in these places, exacerbating undesirable impacts or further limiting the opportunity for people to pursue sustainable livelihoods.

4.2. Concept

The concept for spatial development and management of SM comprises seven key tenets:

1: Maintain and grow our natural assets

Critical biodiversity areas, valuable land areas (including agricultural land), land affecting the maintenance of water resources, and so on, cannot be built upon extensively, it cannot be the focus for significantly accommodating existing or future settlement need spatially.

2: Respect and grow our cultural heritage

The areas and spaces – built and unbuilt – that embody the cultural heritage and opportunity of SM needs to be preserved and exposed further. Some areas and spaces need to be maintained intact, others provide the opportunity for new activity, in turn exposing and enabling new expressions of culture.

3: Direct growth to areas of lesser natural and cultural significance as well as movement opportunity

Within areas of lesser natural and cultural significance, the focus should be on areas where different modes of transport intersect, specifically places where people on foot – or using non-motorised transport – can readily engage with public transport.

4: Clarify and respect the different roles and functions of settlements

The role and potentials of different settlements in Stellenbosch require clarification. In broad terms, the role of a settlement is determined by its relationship to natural and cultural assets and the capacity of existing infrastructure to accommodate change and growth.

5: Clarify and respect the roles and functions of different elements of movement structure

Ensure a balanced approach to transport in SM, appropriately serving regional mobility needs and local level accessibility improvements, aligned with the spatial concept.

6: Ensure balanced, sustainable communities

Ensure that all settlements are balanced and sustainable, providing for different groups, maintaining minimal development footprints, walkability, and so on.

7: Focus collective energy on critical lead projects

Harness available energy and resources to focus on a few catalytic areas that offer extensive opportunity fastest and address present risk.

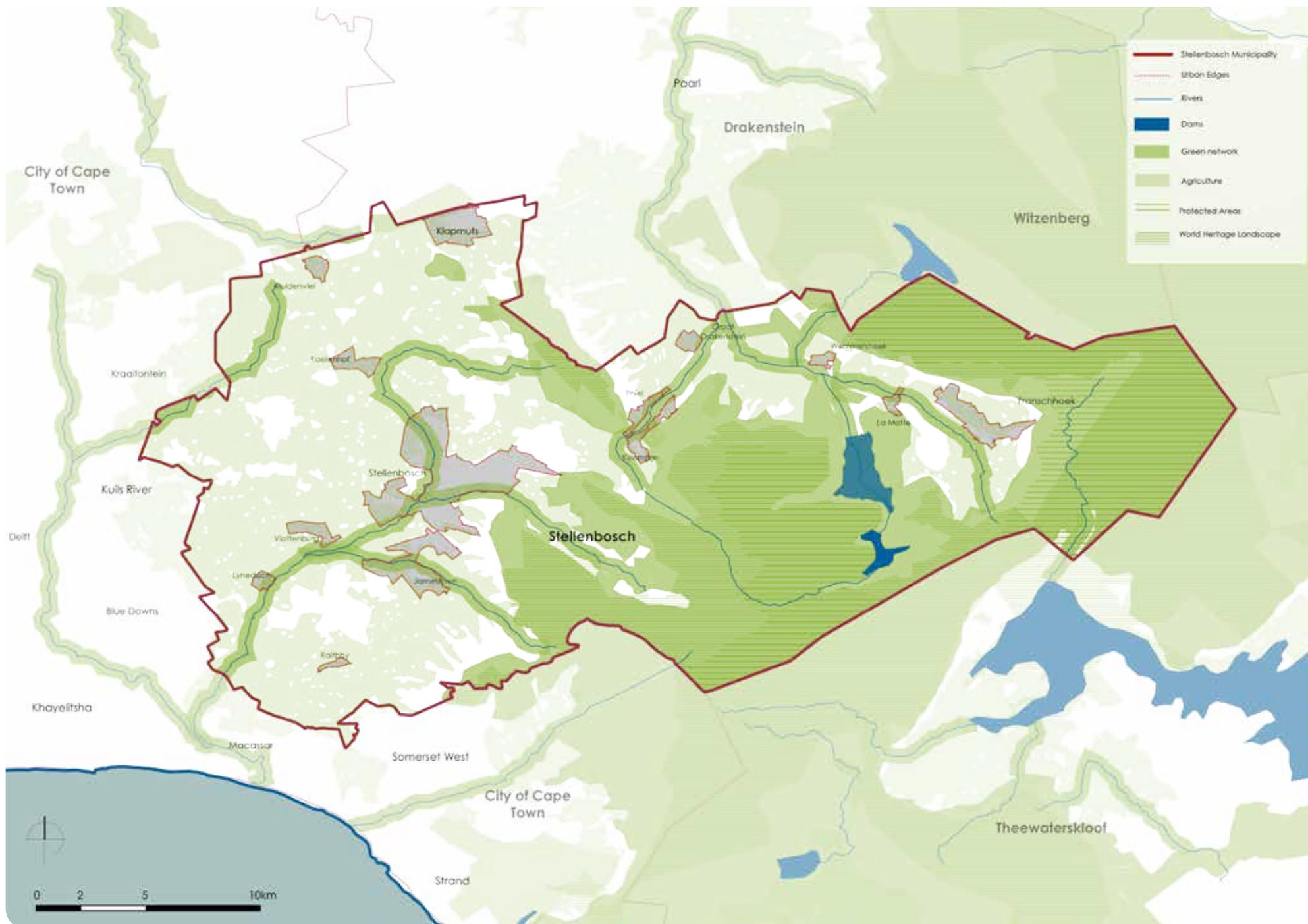


Figure 18. Concept 1 - maintain and grow our natural assets



Figure 19. Concept 2 - Respect and grow our cultural heritage

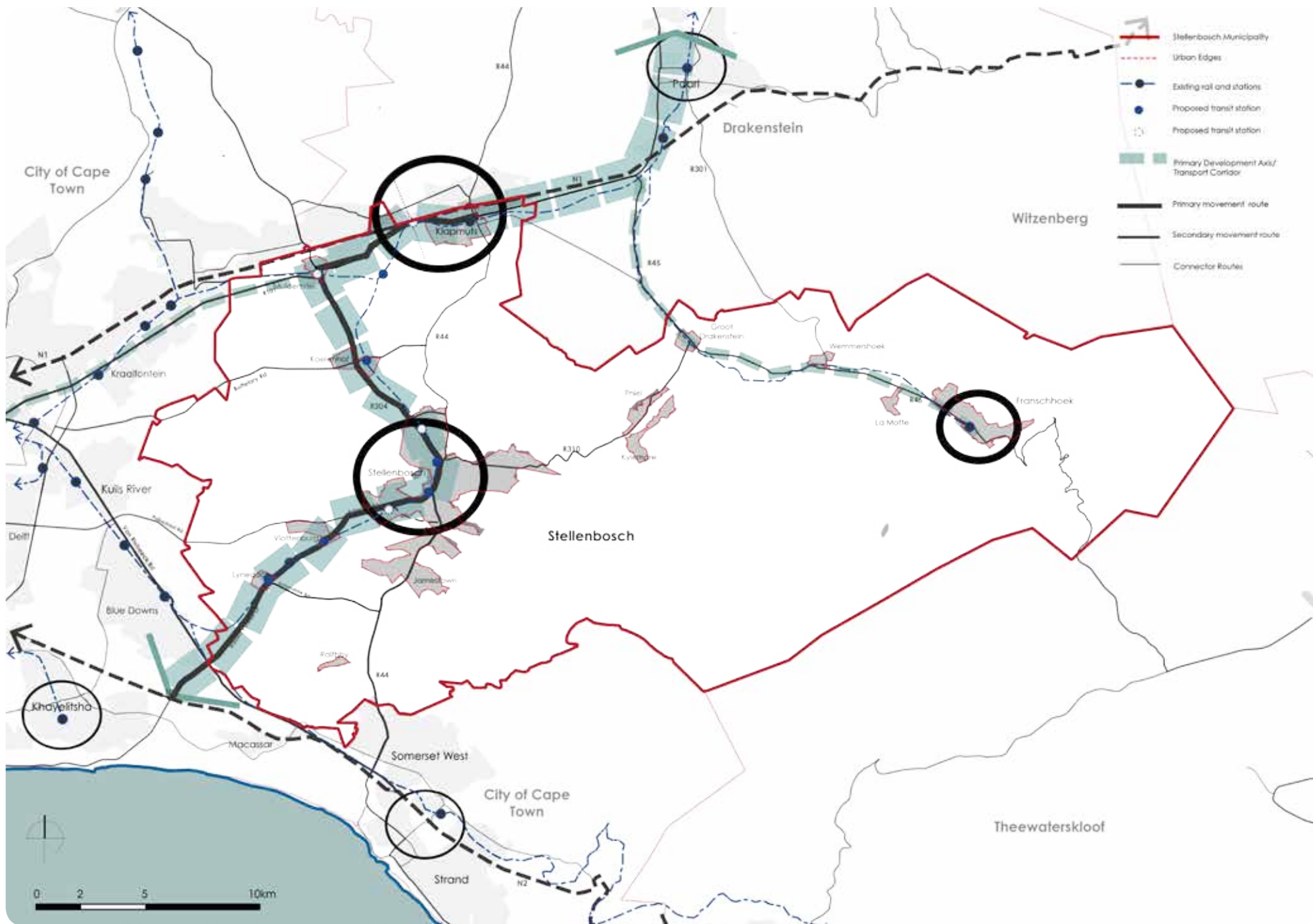


Figure 20. Concept 3 - Direct growth to areas of lesser natural and cultural significance as well as movement opportunity

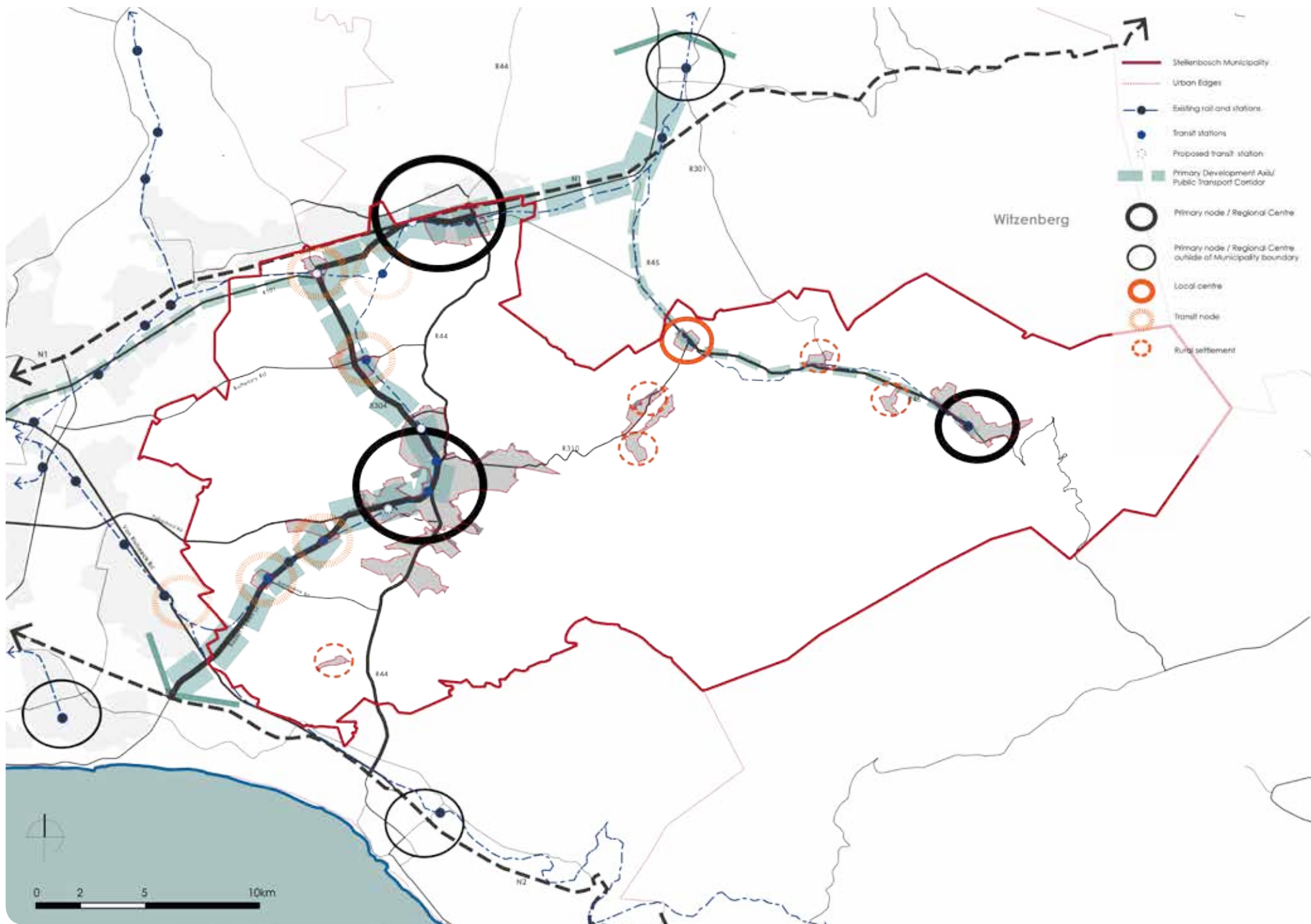


Figure 21. Concept 4 - Clarify and respect the different roles and functions of settlements

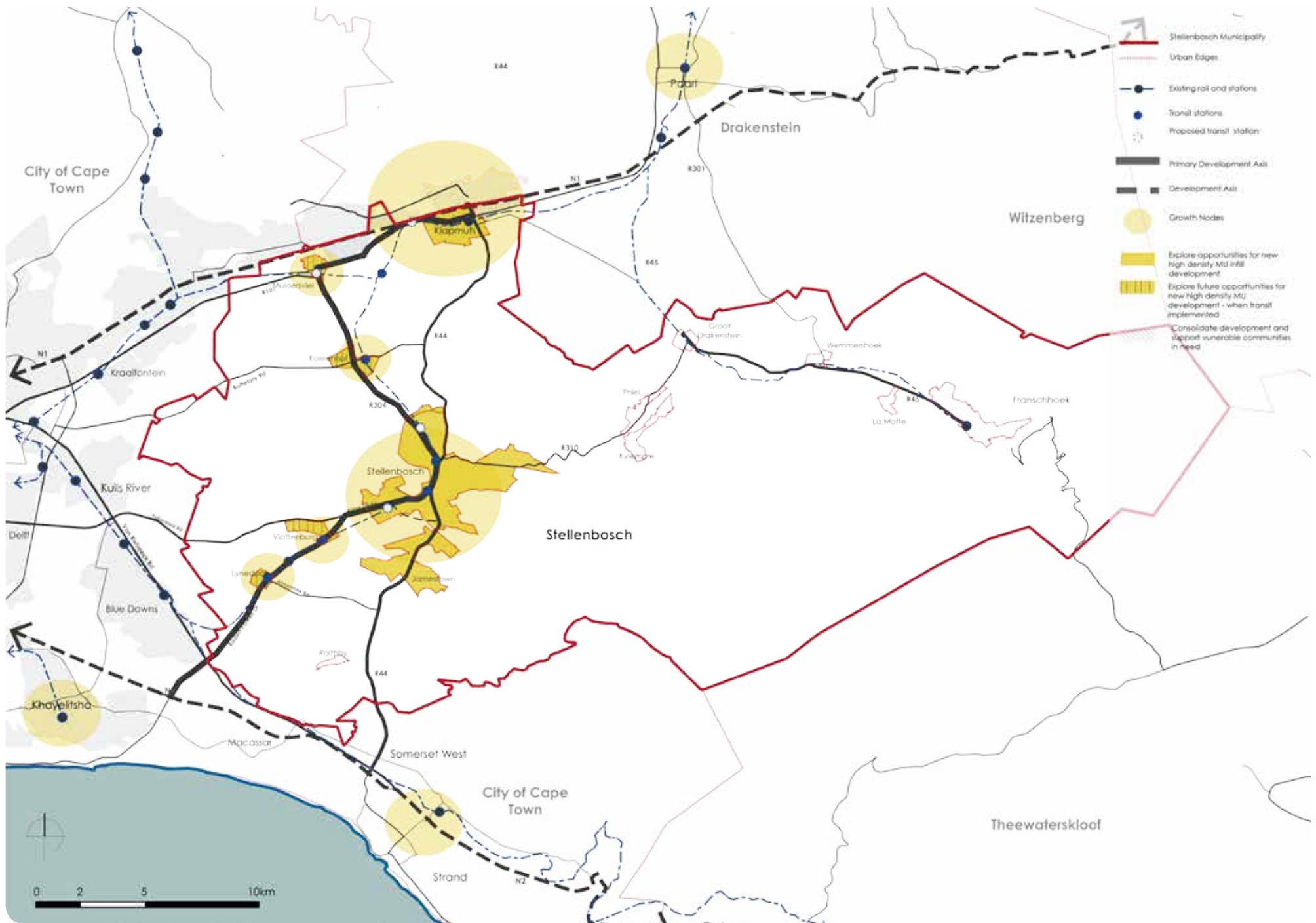


Figure 23. Concept 6 - Ensure balanced, sustainable communities

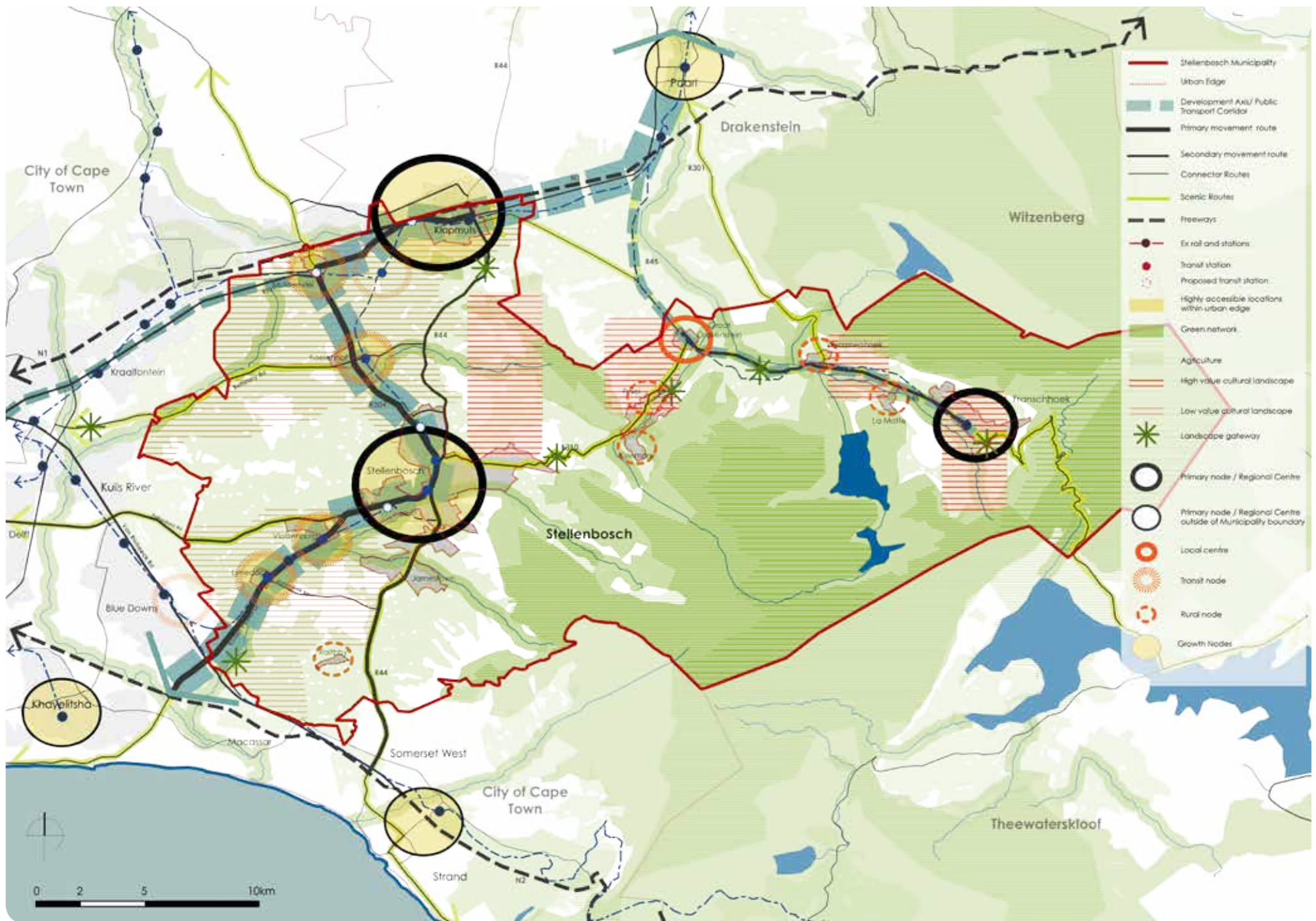


Figure 24. Consolidated Concept



Part 5.

Plans and Settlement Proposals

5. Plans and Settlement Proposals

5.1. Introduction

The sections below outline plans and written proposals for:

1. The SM area as a whole.
2. Major towns (including Stellenbosch, Klapmuts, and Franschhoek).
3. Small settlements in the Franschhoek Valley (including La Motte and Wemmershoek).
4. Small settlements in the Dwars River Valley (including Groot Drakenstein, Pniel, Lanquedoc, Johannesdal, and Kylemore).
5. Small settlements along the R304 (including Muldersvlei and Koelenhof).
6. Small settlements along Baden Powell Drive (including Vloffenburg, Lynedoch, and Spier).
7. Raithby.

It is important to remember that the plans constitute one type of planning instrument. Not all of the MSDF objectives or intent can be readily illustrated two-dimensionally on a plan. Therefore, the plans are accompanied by a table describing plan elements and associated proposals. The plans should be read with the written information contained in the tables accompanying the plans as well as the policies and guidelines contained in the MSDF.

Each settlement plan is introduced by a concept plan, an illustration of the core ideas related to spatial management and development of the settlement.

As indicated elsewhere in this document, spatial plans and proposals can seldomly be fully implemented without supportive actions in other functional areas or sectors. For example, and specifically in Stellenbosch town, it is doubtful whether the desired form of compact, diverse, inclusive, and walkable settlements will be achieved without parallel supportive initiatives to manage the unimpeded use of private vehicles. For this reason, the plan tables also include – where important – related non-spatial proposals.

Broadly – and aligned to the SPLUMA MSDF guidelines – the settlement plans entails three types of actions or initiatives:

- Protective actions – things to be protected and maintained to achieve the vision and spatial concept.
- Change actions – things that need to be changed, transformed, or enhanced to achieve the vision and spatial concept.
- New development actions – new development or initiatives to be undertaken to achieve the vision and spatial concept.

Under these broad types of actions, strategic focus areas and settlement elements are dealt with; for example, protective actions will broadly relate to protecting elements of nature, agriculture, scenic landscapes, historically and culturally significant precincts and places, and so on.

All of the settlements in SM are not the same. For example, they differ in population, range of activities, the extent to which they contribute to livelihood potential in the area as a whole, and the nature and extent of resources required to unlock potential. For this reason, not all plans and settlement proposals are developed to the same level of detail. The emphasis is on the larger ones, those who contribute – today and potentially in future – to the lives of the majority of people.

With the above in mind, the plans for the smaller settlements are grouped, especially where they are located in proximity to each other.

It is also the SM's intent to develop more detailed LSDFs or Precinct Plans for each of the settlements following adoption of the MSDF.

5.2. The Stellenbosch Municipal Area as a Whole

The overall plan indicates a municipal area largely set aside as protected and managed areas of nature and high value agricultural land. These areas of nature and agriculture are critical in delivering various ecological and economic services and opportunity. Significant change in use and land development is not envisaged in the nature and agricultural areas. Only non-consumptive activities are permitted (for example, passive outdoor recreation and tourism, traditional ceremonies, research and environmental education) in core nature areas. In agricultural areas, associated building structures are permitted, as well as dwelling units to support rural tourism, and ancillary rural activities that serves to diversify farm income. However, these should not undermine the sustainability of agricultural production, and adhere to the guidelines contained in the SEMF and “Western Cape Land Use Planning: Rural Guidelines”.

A hierarchy of settlements, large and small – each with distinctive characteristics and potentials – and linked through a system of routes, is set in this landscape. Both open areas of nature and agriculture and parts of settlements and the routes that connect them, carry strong historic and cultural values, and contribute significantly to the tourism economy.

While all settlements continually undergo change and require change to improve livelihood opportunity and convenience for existing residents, not all are envisaged to accommodate significant growth. Those envisaged to accommodate both larger scale change and significant growth are situated on the Baden Powell Drive-Adam Tas-R304 corridor. Further, given the railway running on this corridor, the opportunity for settlement closely related to public transport exists here. The corridor is in not proposed as a continuous development strip. Rather it is to comprise contained, walkable settlements surrounded by nature and agriculture,

linked via different transport modes, with the rail line as backbone.

The largest of these settlements, where significant development over the short to medium term is foreseen, are the towns of Stellenbosch and Klapmuts. The potential of Klapmuts for economic development and associated housing is particularly significant, located as it is on the metropolitan area's major freight route. Over the longer term, the Muldersvlei/ Koelenhof and Vloffenburg/ Lynedoch areas can potentially develop into significant settlements. Although considerably smaller than Stellenbosch and Klapmuts, these expanded settlements are nevertheless envisaged as balanced, inclusive communities. Over the longer term, these expanded settlements are foreseen to fulfill a role in containing the sprawl of Stellenbosch town, threatening valuable nature and agricultural areas. Importantly, they should not grow significantly unless parallel public transport arrangements can be provided.

The remainder of settlements are not proposed for major growth, primarily because they are not associated with movement routes and other opportunity than can support substantial livelihood opportunity for all community groups. The focus in these settlements should be on on-going improvements to livelihood opportunity for residents, and the management of services and places. The largest of these settlements is Franschhoek, a significant tourism destination.

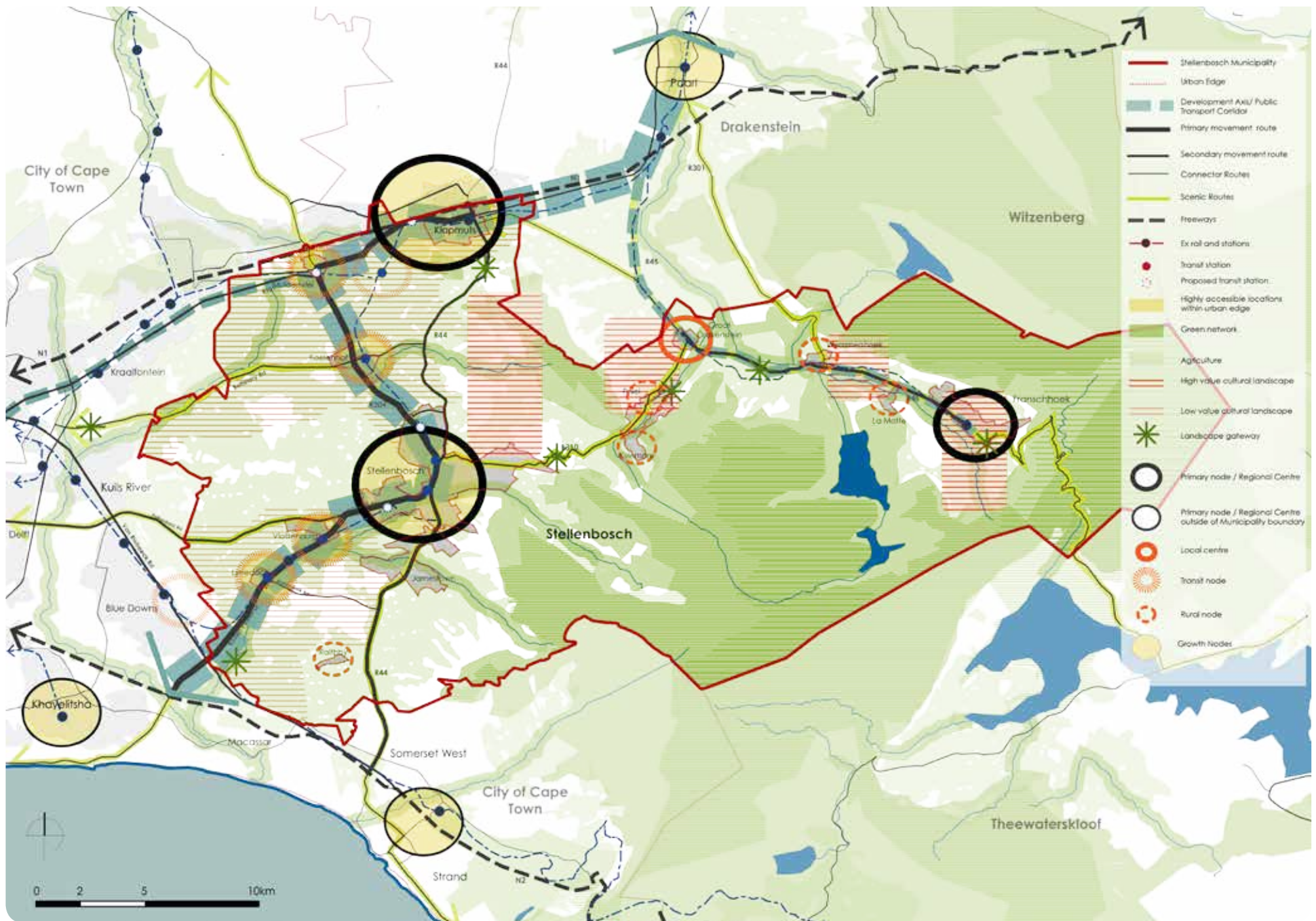


Figure 25. Consolidated Concept for the SM area

Table 18. Plan Elements and Proposals for the SM as a whole

TYPE OF ACTION	SDF ELEMENT	SPATIAL PROPOSALS	RELATED NON SPATIAL PROPOSALS
Protective Actions	Critical biodiversity and nature areas.	<ul style="list-style-type: none"> Work to extend, integrate, restore, and protect a system of protected areas that transect the municipality and includes low-to-high elevation, terrestrial, freshwater, wetlands, rivers, and other ecosystem types, as well as the full range of climate, soil, and geological conditions. Maintain Core (and to an extent Buffer) areas largely as "no-go" areas from a development perspective, only permitting non-consumptive activities (for example, passive outdoor recreation and tourism, traditional ceremonies, research and environmental education). Where value-adding development is required (for example for temporary accommodation), preference should be given to currently disturbed areas as development footprints. 	<ul style="list-style-type: none"> Provide active support for Stewardship Programmes, Land-care Programmes, and the establishment of Conservancies and Special Management which protects and expands biodiversity and nature areas. Implement institutional/ management actions contained in the SEMF.
	Water courses	<ul style="list-style-type: none"> Improve public continuity, access, and space along all river corridors (including the Kromrivier, Plankenbrug, Eerste River, and Blaauklippen River). No development should be permitted on river banks below the 1:100 flood-lines. 	<ul style="list-style-type: none"> Work to clean polluted rivers (particularly the Plankenbrug).
	Agricultural land	<ul style="list-style-type: none"> High potential agricultural land must be excluded from non-agricultural development. Subdivision of agricultural land or changes in land-use must not lead to the creation of uneconomical or sub-economical agricultural units. Building structures associated with agriculture, dwelling units to support rural tourism, and ancillary rural activities that serves to diversify farm income, are permitted and should adhere to the guidelines contained in the SEMF and "Western Cape Land Use Planning: Rural Guidelines". Actively engage the CCT and DM related to land use applications which threaten agricultural land located on the border with these municipalities. 	<ul style="list-style-type: none"> Support the expansion and diversification of sustainable agriculture production and food security.
	Urban edge	<ul style="list-style-type: none"> Prohibit the ad-hoc further outward expansion of urban settlements through maintaining relatively tight urban edges. 	
	Scenic landscapes, scenic routes, and special places of arrival	<ul style="list-style-type: none"> Protect critical scenic routes and landscapes (as identified in surveys). Maintain a clear distinction between urban development and nature/ agricultural areas at the entrances to settlements. 	
	Historically and culturally significant precincts and places	<ul style="list-style-type: none"> Maintain the integrity of historically and culturally significant precincts and places (as indicated in completed surveys). Work to grow the extent of historically and culturally significant precincts and places in daily use and accessible to the public (through appropriate re-design and use of disused places). 	<ul style="list-style-type: none"> Consider the transfer of government owned historically and culturally significant precincts and places to entities geared to manage them sustainably. Actively support community involvement in cultural and tourism activities celebrating history and culture.
	Settlement hierarchy	<ul style="list-style-type: none"> Maintain the existing hierarchy of larger urban towns and small rural settlements (with Stellenbosch and Klapmuts prioritised for further development over the short to medium term). 	

Table 19. Plan Elements and Proposals for the SM as a whole (cont.)

TYPE OF ACTION	SDF ELEMENT	SPATIAL PROPOSALS	RELATED NON SPATIAL PROPOSALS
Change Actions	Informal settlements to be upgraded	<ul style="list-style-type: none"> Progressively upgrade existing informal settlements, focusing on basic services and community facilities. Actively support development in areas between informal settlements and established areas. 	<ul style="list-style-type: none"> Utilise government land assets to enable integration between informal settlements and established areas.
	Areas for residential densification and infill	<ul style="list-style-type: none"> Actively support residential densification and infill development within urban areas (with due consideration to the valued qualities of specific areas). 	<ul style="list-style-type: none"> Utilise government land assets to enable residential densification and infill development.
	Areas for mixed land use and improved economic opportunity	<ul style="list-style-type: none"> Actively support the regional locational advantages of Klapmuts to support economic development, job creation, and associated housing. Actively support mixed land use in settlement centres. Ensure adequate provision for small and emerging entrepreneurs at good locations in all settlements. Actively improve public space in town centres (specifically Stellenbosch and Franschhoek). 	<ul style="list-style-type: none"> Support private sector led institutional arrangements assist with urban management in town centres.
	Improved access and mobility	<ul style="list-style-type: none"> Distinguish between the roles fulfilled by different routes and ensure that design changes and management measures applicable to routes support these roles. Promote public and NMT (e.g. through densification, the re-design of existing routes, and development of new routes). 	<ul style="list-style-type: none"> Ensure that the design of all roads provide for appropriate NMT movement. Pro-actively, and in partnership with key corporations/ institutions, introduce transport demand management measures favouring public transport and NMT.
	Community/ Institutional use	<ul style="list-style-type: none"> Cluster community facilities together with commercial, transport, informal sector and other activities so as to maximise convenience, safety and socio-economic potential. Institutional buildings (accommodating community activities, educational and health services, and entrepreneurial development and skills training) should be located at points of highest access in urban settlements. 	
	Improved landscaping and public amenity	<ul style="list-style-type: none"> Retain and expand University of Stellenbosch functions and other large education institutions within Stellenbosch town as far as possible (unless there are place-specific reasons for favoring an alternative location). 	<ul style="list-style-type: none"> Actively involve local communities in the development and management of public amenities.
New Development Actions	Significant new mixed use development	<ul style="list-style-type: none"> Actively support the Adam Tas Corridor within Stellenbosch town for new mixed use development. 	<ul style="list-style-type: none"> Support private sector led institutional arrangements to enable joint planning and redevelopment. Support redevelopment by making available government land assets.
	Significant new industrial development	<ul style="list-style-type: none"> Actively support the development of Klapmuts North for industries and employment generating enterprises related to manufacturing, logistics, and warehousing. 	<ul style="list-style-type: none"> Support private sector led institutional arrangements to enable joint planning and development.
	Significant new residential development	<ul style="list-style-type: none"> Explore the feasibility and pre-conditions of Muldersvlei/ Koelenhof and Vlothenburg/ Lynedoch to be developed as more significant, inclusive settlements over the longer term (subject to the availability of public transport). 	<ul style="list-style-type: none"> Support private sector led institutional arrangements to enable joint planning and development.
	Significant change to access and mobility provision	<ul style="list-style-type: none"> Explore the feasibility of changing/ complementing the rail vehicle type currently using the railway along the Baden Powell Drive-Adam Tas-R304 corridor to a lighter railcar/ tram type system, providing a more frequent, flexible service better integrated into the urban realm. Alternatively, a regular bus service should be explored serving the same route. 	<ul style="list-style-type: none"> Support private sector led institutional arrangements to enable joint planning and unlocking of the opportunity.

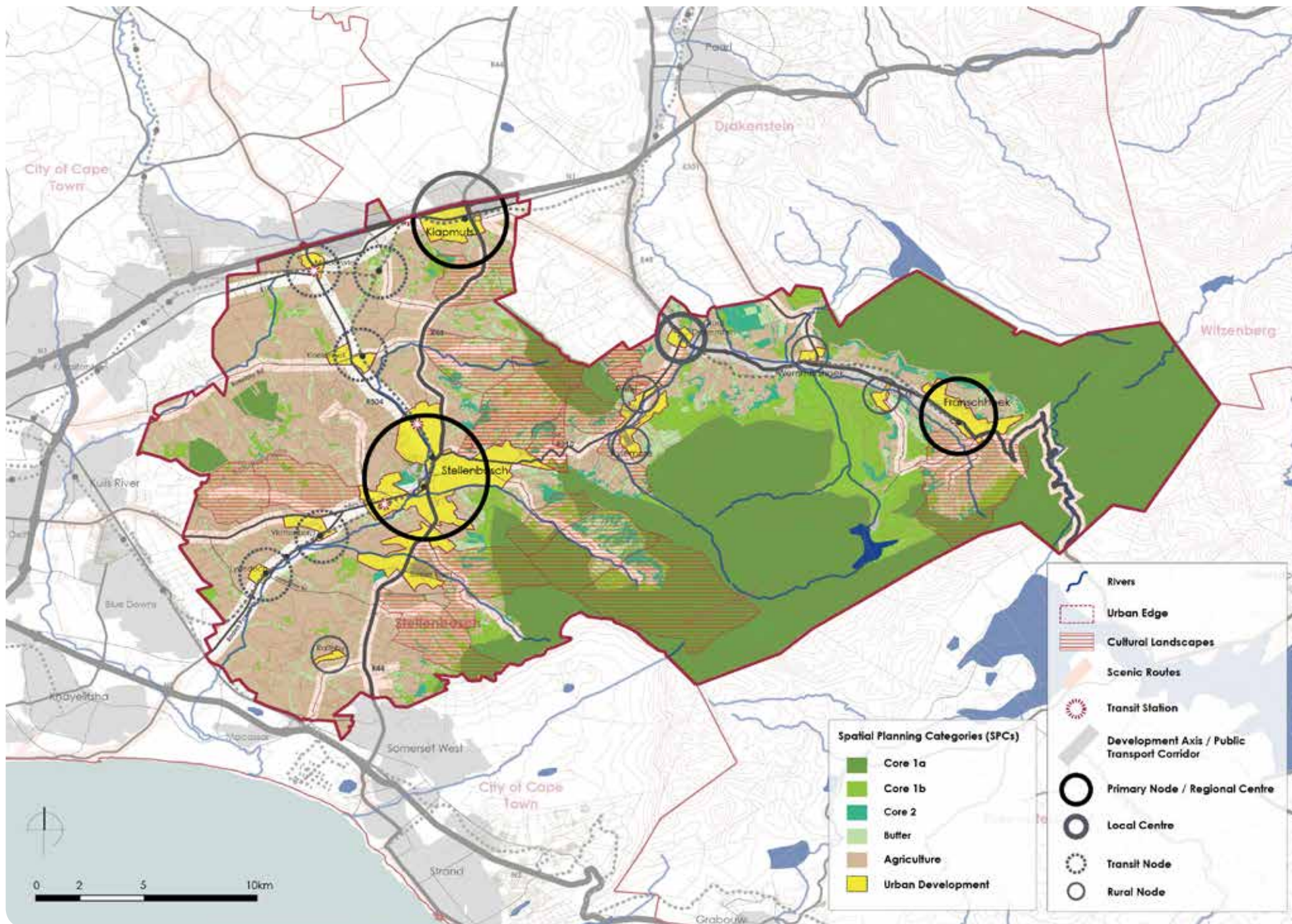


Figure 26. Municipal Spatial Framework for the SM area

5.3. Stellenbosch Town

Stellenbosch town will remain the major settlement within the municipality; a significant centre comprising extensive education, commercial and government services with a reach both locally and beyond the borders of the municipality, tourism attractions, places of residence, and associated community facilities.

Retaining what is special in Stellenbosch town requires change. The town has grown significantly as a place of study, work, and tourism, while perhaps inadequately providing residential opportunity for all groups, and certainly lacking adequate provision of public transport and NMT options. Managing residential growth of the town, through providing more inclusive housing at higher densities than the norm, is vital. This can and must bring significant reductions in commuting by private vehicles to and within Stellenbosch town, and provide the preconditions for sustainable public transport and NMT to and within the town.

The most significant redevelopment opportunity within Stellenbosch town is the Adam Tas Corridor, stretching from the Droë Dyke and the Old Sawmill sites in the west along Adam Tas Road and the railway line, to Kayamandi, the R304, and Cloetesville in the north. Large industrial spaces – currently disused or to be vacated over time – exist here. Redevelopment offers the opportunity to accommodate many more residents within Stellenbosch town, without a negative impact on agricultural land, nature areas, historically significant precincts, or “choice” lower density residential areas. In many ways, the Adam Tas Corridor represents the key to protect and enhance what is special within Stellenbosch town, as well as the relationship between the town and surrounding nature and agricultural areas.

Conceptually, the Adam Tas Corridor is the focus of new town building, west of the old Stellenbosch town and central business district (CBD). The “seam” between the new and old districts comprises Die Braak and Rhenish complex, which can form the

public heart of Stellenbosch town. The CBD or town centre in itself can be improved, focused on public space and increased pedestrianism. A recent focus on the installation of public art could be used as catalyst for further public space improvements.

Other infill opportunities also exist in Stellenbosch town, specifically in Cloetesville, Idas Valley, Stellenbosch Central, along the edges of Paradyskloof, and Jamestown. There are also opportunities to change the nature of existing places to become more “balanced” as local districts. The Techno Park, for example, can benefit from housing development for people who work there.

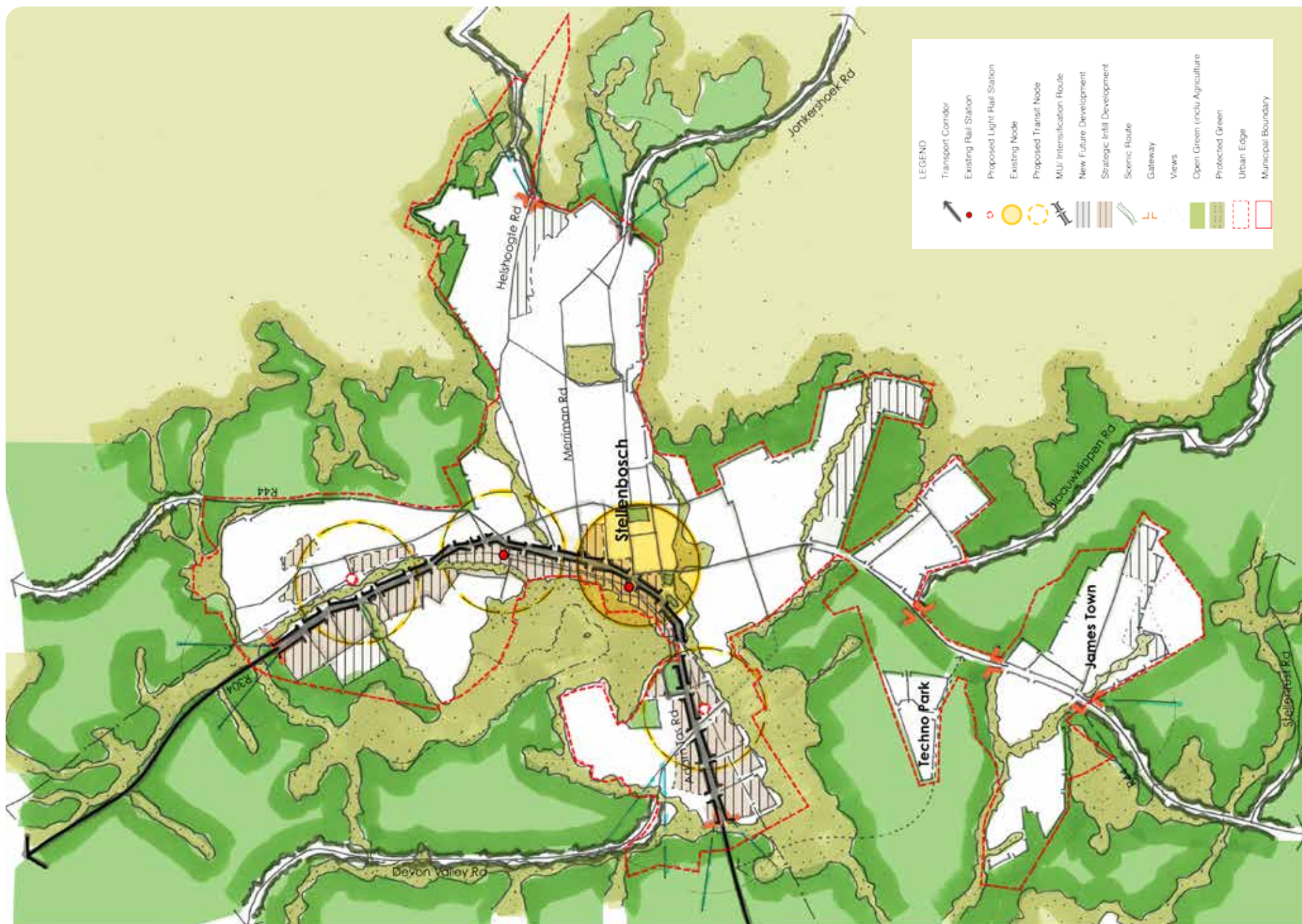
Kayamandi has been under new pressure for outward expansion, specifically from new residents moving to Stellenbosch from elsewhere (within and outside the metropolitan region). This pressure, arguably, hinders efforts to upgrade and transform area. New residents, through land invasion, increase pressure on municipal and other resources which could be utilized for upgrading. Ideally, Kayamandi should not be extended beyond the northern reach of Cloetesville (with Welgevonden Boulevard as the northern edge) and its reach to the east should be minimized (in other words, a band of development along the R304 should be promoted).

The inclusivity of infill housing opportunity – referring to the extent to which the housing provides for different income and demographic groups – whether as part of the Adam Tas Corridor or elsewhere within Stellenbosch town – is critical. Unless more opportunity is provided for both ordinary people working in Stellenbosch, and students, it will be difficult to impact on the number of people commuting to and from Stellenbosch town in private vehicles on a daily basis.

Further development of Stellenbosch town as a balanced, inclusive settlement, with sustainable public and NMT options available, will require significant partnership between major institutions across sectors. For example, most of the Adam Tas Corridor is in private ownership, and a purely

commercial approach to redevelopment of the land may not be in the best interest of the town. Further, it would appear that much of the traffic congestion in Stellenbosch town relate to the university, whether it is students commuting from other areas in the metropolitan areas, or students living within the town using cars for short trips. A key prerequisite for implementation of the spatial proposals for Stellenbosch town is therefore establishing the institutional arrangements for joint planning and implementation towards common objectives, beyond those of individual institutional or corporate interests.

Also significant for the balanced development of Stellenbosch town, and retaining a compact town surrounded by nature and agriculture, is the development of the Baden Powell Drive-Adam Tas Road-R304 transit and development corridor, enabling public transport to and from Stellenbosch town, and alternative settlement opportunity, proximate to, but outside of Stellenbosch town. Critical will be the feasibility of changing the rail vehicle type currently using the railway along the Baden Powell Drive-Adam Tas-R304 corridor to a lighter railcar/ tram type system, providing a more frequent, flexible service better integrated into the urban realm. Alternatively, a regular bus service should be explored serving the same route.



STELLENBOSCH CONCEPT

Figure 27. Stellenbosch Town Concept

Table 20. Plan Elements and Proposals for Stellenbosch Town

TYPE OF ACTION	SDF ELEMENT	SPATIAL PROPOSALS	RELATED NON SPATIAL PROPOSALS
Protective Actions	CBA's, ESA's, Protected areas	<ul style="list-style-type: none"> Maintain and improve the nature areas surrounding Stellenbosch town. Work to increasingly connect and integrate nature areas, also with the urban green areas, to form an integrated green web or framework across the town and its hinterland area. 	<ul style="list-style-type: none"> Implement management actions contained in the SEMF.
	Water courses	<ul style="list-style-type: none"> Improve public continuity, access, and space along the Kromrivier, Plankenbrug, Eerste River, and Blaauklippen River corridors. 	<ul style="list-style-type: none"> Improve water quality in the Plankenbrug River (through infrastructure improvements in Kayamandi).
	Agricultural land	<ul style="list-style-type: none"> Retain and improve the relationship between Stellenbosch town and surrounding agricultural land. 	
	Urban edge	<ul style="list-style-type: none"> As a general principle, contain the footprint of Stellenbosch town as far as possible within the existing urban edge (while enabling logical, small extensions). 	
	Scenic landscapes, scenic routes, special places	<ul style="list-style-type: none"> Retain the strong sense of transition between agriculture and human settlement at the entrances to the town. 	
	Historically and culturally significant precincts and places	<ul style="list-style-type: none"> Maintain the integrity of historically and culturally significant precincts and places (as indicated in completed surveys). Improve public space and movement routes within historically and culturally significant precincts, with a focus on pedestrianism. Work to grow the extent of historically and culturally significant precincts and places in daily use and accessible to the public (through appropriate re-design and use of specifically disused industrial buildings along the Adam Tas Corridor). Define and hold the northern and eastern edges of Kayamandi. Support land use change along George Blake Road to enable the integration of Kayamandi with the Adam Tas Corridor and Stellenbosch central area. 	<ul style="list-style-type: none"> Utilise government land assets to enable integration between informal settlements and established areas.
Change Actions	Informal settlements to be upgraded		
	Areas for residential densification and infill	<ul style="list-style-type: none"> Pro-actively support higher density infill residential opportunity in the town centre, areas immediately surrounding it, and along major routes (with consideration of historic areas and structures). 	<ul style="list-style-type: none"> Utilise government land assets to enable residential densification and infill development.
	Areas for mixed land use and improved economic opportunity	<ul style="list-style-type: none"> Retain and actively support mixed use redevelopment and building within the town centre and surrounding areas, comprising living space above active street fronts. Actively support pedestrianism and improved public space within the old town centre 	<ul style="list-style-type: none"> Support private sector led institutional arrangements assist with urban management in the town centre.
	Improved access and mobility	<ul style="list-style-type: none"> Pro-actively improve conditions for walking and NMT within Stellenbosch town. Improve access to the Techo Park, specifically from the north-west. 	<ul style="list-style-type: none"> Pro-actively, and in partnership with key corporations/ institutions, introduce transport mode demand measurements favouring public and NMT. Ensure that the design of all roads within and surrounding the town provides for appropriate NMT movement.
	Community/ Institutional use	<ul style="list-style-type: none"> Cluster community facilities together with commercial, transport, informal sector and other activities so as to maximise convenience, safety and socio-economic potential. Retain, as far as is possible, University and other educational uses within Stellenbosch town. 	<ul style="list-style-type: none"> Actively support the shared use of community facilities.
	Improved landscaping and public amenity	<ul style="list-style-type: none"> As far as possible, focus investment in parks, open space, and social facilities accessible by public and NMT, in this way also increasing the surveillance of these facilities. 	<ul style="list-style-type: none"> Actively involve local communities in the development and management of public amenities.
New Development Actions	Significant new mixed use development	<ul style="list-style-type: none"> Develop the Adam Tas Corridor as a mixed-use, high density urban district, with strong internal and external public and NMT connections. 	<ul style="list-style-type: none"> Support private sector led institutional arrangements to enable joint planning and redevelopment. Support redevelopment by making available government land assets.
	Significant new residential development	<ul style="list-style-type: none"> Support inclusive infill development on vacant public land within Cloeteville, Idas Valley, Central Stellenbosch, and Jamestown. Support infill development on private land within Stellenbosch town in a manner which serves to compact the town, expand residential opportunity, and rationalize the edges between built and unbuilt areas. Support the further development of Techo Park as a balanced community, emphasizing residential opportunity. 	
	Significant change to access and mobility provision	<ul style="list-style-type: none"> Explore the feasibility of changing/ complementing the rail vehicle type currently using the railway along the Baden Powell Drive-Adam Tas-R304 corridor to a lighter railcar/ tram type system, providing a more frequent, flexible service better integrated into the urban realm. Alternatively, a regular bus service should be explored serving the same route. Alternatively, a regular bus service should be explored serving the same route. 	<ul style="list-style-type: none"> Support private sector led institutional arrangements to enable joint planning and unlocking of the opportunity.

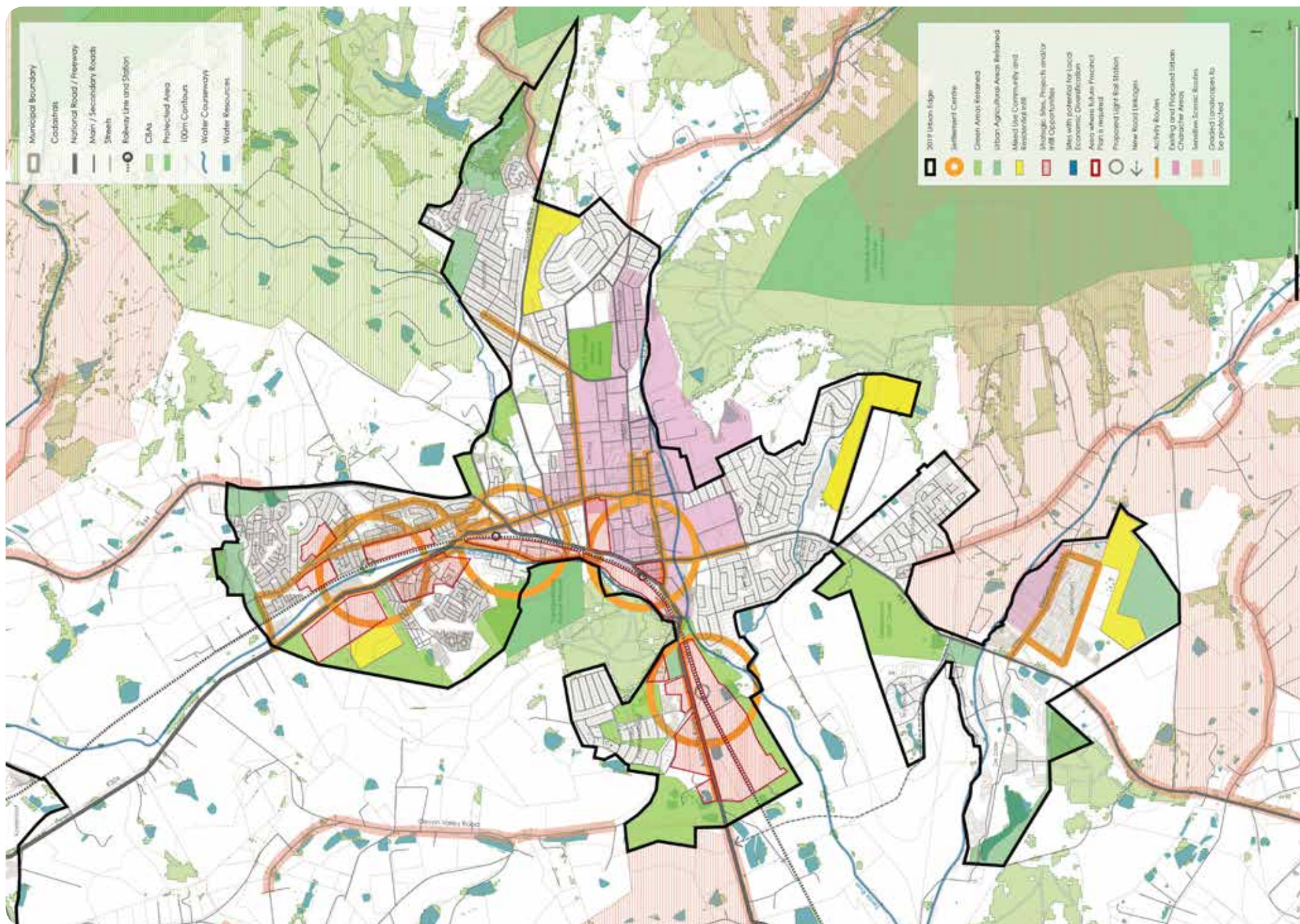


Figure 28. Stellenbosch Town Plan

5.4. Klapmuts

Located as it is on the N1 transport corridor – which carries 93% of metropolitan bound freight traffic – Klapmuts is a potentially significant centre for economic activity and residence within the metropolitan region and SM (as identified in the GCM RSIF). To date, the settlement is characterized by residential use and limited commercial and work-related activity. Public sector resource constraints have prevented the infrastructure investment required to enable and unlock the full potential of the area for private sector economic development as envisaged in the GCM RSIF.

The decision by Distell to relocate to and consolidate many of its operations in Klapmuts is critical to commence more balanced development of the settlement. Distell proposes to develop a beverage production, bottling, warehousing and distribution facility on Paarl Farm 736/RE, located north of the N1, consolidating certain existing cellars, processing plants, and distribution centres in the Greater Cape Town area. The farm measures some 200 ha in extent. The beverage production, bottling, warehousing and distribution facility will take up approximately 53 ha.

The project proposal includes commercial and mixed-use development on the remainder of the site which is not environmentally sensitive to provide opportunities both for Distell's suppliers to co-locate, and for other business development in the Klapmuts North area. The site does not have municipal services, and the proposed development will therefore require the installation of bulk service infrastructure, including water, wastewater treatment, stormwater, electricity, and internal roads.

A number of issues require specific care in managing the development of Klapmuts over the short to medium term. The first is speculative applications for land use change on the back of the proposed Distell development. Already, a draft local plan prepared by DM has indicated very extensive development east of Farm 736/RE. Distell

will not fund the extensive infrastructure required to unlock development here, and arguably, land use change to the east of Farm 736/RE could detract from the opportunity inherent in Farm 736/RE. The second is the linkages between Klapmuts north and south, specifically along Groenfontein Road and a possible NMT crossing over the N1 linking residential areas south of the N1 directly with Farm 736/RE. Without these linkages, residents to the south of the N1 will not be able to benefit from the opportunity enabled north of the N1. The third is speculative higher income residential development in the Klapmuts area, based on the area's regional vehicular accessibility. Higher income development is not a problem in and of itself, but ideally it should not be in the form of low density gated communities.

Most importantly, the N1 corridor – including adjacent land also serviced by the old Main Road and railway – stretching from the CCT through Klapmuts towards Paarl, requires urgent joint planning. Much potential to generate economic opportunity exists here, but careful planning and decisions are required in relation to where to start, what areas to prioritise for development, and what to protect as nature and agriculture.

KLAPMUTS CONCEPT



Figure 29. Klapmuts Concept

Table 21. Plan Elements and Proposals for Klapmuts

TYPE OF ACTION	SDF ELEMENT	SPATIAL PROPOSALS	RELATED NON SPATIAL PROPOSALS
Protective Actions	CBA's, ESA's, Protected areas	<ul style="list-style-type: none"> Maintain and improve the nature areas surrounding Klapmuts. Work to increasingly connect and integrate nature areas, also with the urban green areas, to form an integrated green web or framework across the municipal area. 	<ul style="list-style-type: none"> Implement management actions contained in the EMF.
	Water courses	<ul style="list-style-type: none"> Improve public continuity, access, and space along the stream corridors. 	
	Agricultural land	<ul style="list-style-type: none"> Retain and improve the relationship between Klapmuts and surrounding agricultural land. 	
	Urban edge	<ul style="list-style-type: none"> As a general principle, contain the footprint of Klapmuts as far as possible within the existing urban edge. 	
	Scenic landscapes, scenic routes, special places	<ul style="list-style-type: none"> Retain the strong sense of transition between agriculture and human settlement at the entrances to the town. 	
	Historically and culturally significant precincts and places	<ul style="list-style-type: none"> Maintain the integrity of historically and culturally significant precincts and places (as indicated in completed surveys). 	
Change Actions	Informal settlements to be upgraded	<ul style="list-style-type: none"> Prioritise informal settlements for upgrading and service provision. 	<ul style="list-style-type: none"> Utilise government land assets to enable integration between informal settlements and established areas.
	Areas for residential densification and infill	<ul style="list-style-type: none"> Pro-actively support higher density infill residential opportunity in Klapmuts South. 	<ul style="list-style-type: none"> Utilise government land assets to enable residential densification and infill development.
	Areas for mixed land use and improved economic opportunity	<ul style="list-style-type: none"> Retain and actively support mixed use redevelopment and building within the town centre and surrounding areas, comprising living space above active street fronts. 	<ul style="list-style-type: none"> Assist development opportunity for small/ emerging entrepreneurs.
	Improved access and mobility	<ul style="list-style-type: none"> Pro-actively improve conditions for walking and NMT within Klapmuts. Prioritise NMT connections between Klapmuts North and South (in parallel with the development of Farm 736/RE). 	<ul style="list-style-type: none"> Pro-actively, and in partnership with key corporations/ institutions, introduce transport mode demand measurements favouring public and NMT. Ensure that the design of all roads within and surrounding the town provides for appropriate NMT movement.
	Community/ Institutional use	<ul style="list-style-type: none"> Cluster community facilities together with commercial, transport, informal sector and other activities so as to maximise convenience, safety and socio-economic potential. 	<ul style="list-style-type: none"> Actively support the shared use of community facilities.
	Improved landscaping and public amenity	<ul style="list-style-type: none"> As far as possible, focus investment in parks, open space, and social facilities accessible by public and NMT, in this way also increasing the surveillance of these facilities. 	<ul style="list-style-type: none"> Actively involve local communities in the development and management of public amenities.
New Development Actions	Significant new mixed use development	<ul style="list-style-type: none"> Support the development of Farm 736/RE in Klapmuts North to unlock the development potential of Klapmuts (with an emphasis on job creation). 	<ul style="list-style-type: none"> Support private sector led institutional arrangements to enable joint planning and development.
	Significant new residential development	<ul style="list-style-type: none"> Ensure that housing in Klapmuts South provides for a range of income groups. 	
	Significant change to access and mobility provision	<ul style="list-style-type: none"> Improve linkages between Klapmuts North and South, specifically along Groenfonten Road and a possible NMT crossing over the N1. Explore the feasibility of changing/ complementing the rail vehicle type currently using the railway along the Baden Powell Drive-Adam Tas-R304 corridor to a lighter railcar/ tram type system, providing a more frequent, flexible service better integrated into the urban realm. Alternatively, a regular bus service should be explored serving the same route. 	<ul style="list-style-type: none"> Support private sector led institutional arrangements to enable joint planning and unlocking of the opportunity.

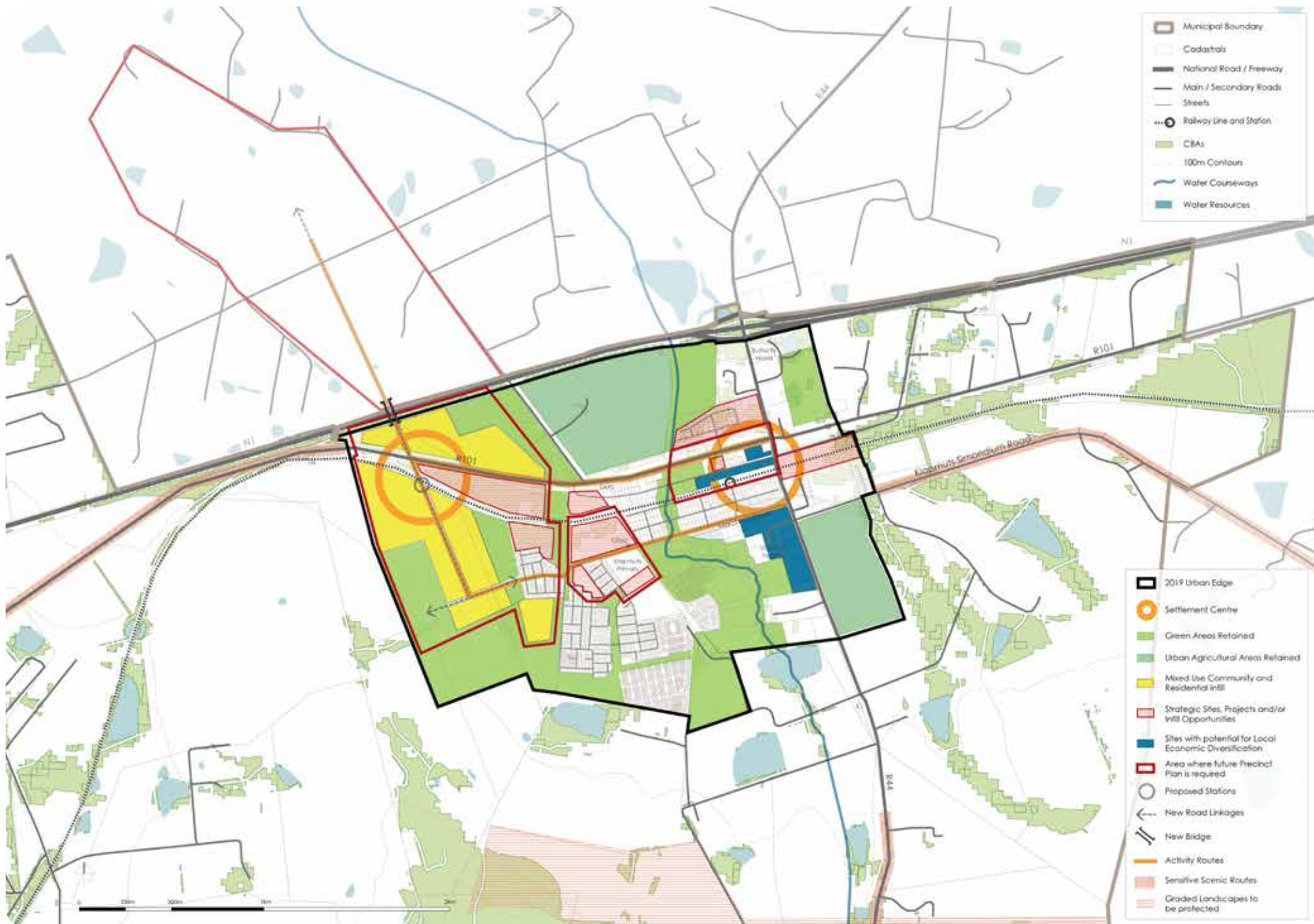


Figure 30. Klapmuts Plan

5.5. Franschhoek

Traditionally, in spatial planning for SM, Franschhoek is regarded as the second most significant settlement in the municipality, after Stellenbosch town. In terms of the current work, and as motivated elsewhere in this report, the municipal settlement hierarchy requires revisiting in terms of the proposed concept for spatial planning and management of the area. In terms of the concept, the focus for major development is on areas least sensitive in terms of nature and cultural assets, and where available infrastructure, and specifically movement networks, can support growth. In focus, this means Stellenbosch town and Klapmuts.

Franschhoek is viewed as having less livelihood potential (as confirmed by the WCG's Growth Potential of Towns study). This does not imply that no growth should be entertained. There is opportunity, but the focus should be on improving living conditions for existing residents as opposed to significant new growth.

The historic development of the settlement has resulted in the partitioning of urban space in Franschhoek. In broad terms, people live in two separate geographic entities, namely Groendal/Langrug and Franschhoek "town". In terms of socio-economic, demographic and built-environment conditions, there are vast differences between the two areas. The area between the north-west and south-west is not fully developed but within the urban edge. Potential for infill development exists here. There is also opportunity to reinforce mixed use development further along Main Road to the north-west, enabling convenience and entrepreneurship opportunity for residents living in this part of the settlement. Significant opportunity exists for improved NMT linkages between the north-west and south-west along Main Road.

FRANSCHHOEK CONCEPT



Figure 31. Franschhoek Concept

Table 22. Plan Elements and Proposals for Franschhoek

TYPE OF ACTION	SDF ELEMENT	SPATIAL PROPOSALS	RELATED NON SPATIAL PROPOSALS
Protective Actions	CBA's, ESA's, Protected areas	<ul style="list-style-type: none"> Maintain and improve the nature areas surrounding Franschhoek. Work to increasingly connect and integrate nature areas, also with the urban green areas, to form an integrated green web or framework across the municipal area. 	<ul style="list-style-type: none"> Implement management actions contained in the EMF.
	Water courses	<ul style="list-style-type: none"> Improve public continuity, access, and space along the stream corridors. 	
	Agricultural land	<ul style="list-style-type: none"> Retain and improve the relationship between Franschhoek and surrounding agricultural land. 	
	Urban edge	<ul style="list-style-type: none"> As a general principle, contain the footprint of Franschhoek as far as possible within the existing urban edge. 	
	Scenic landscapes, scenic routes, special places	<ul style="list-style-type: none"> Retain the strong sense of transition between agriculture and human settlement at the entrances to the town. 	
	Historically and culturally significant precincts and places	<ul style="list-style-type: none"> Maintain the integrity of historically and culturally significant precincts and places (as indicated in completed surveys). 	
Change Actions	Informal settlements to be upgraded	<ul style="list-style-type: none"> Prioritise informal settlements for upgrading and service provision. 	<ul style="list-style-type: none"> Utilise government land assets to enable integration between informal settlements and established areas.
	Areas for residential densification and infill	<ul style="list-style-type: none"> Focus infill development on the largely undeveloped part within the urban edge (between the north-western and south-eastern parts of the settlement). Ensure that residential development provides for a range of housing types and income groups. Ensure that future development is woven into the urban fabric of the existing town. 	<ul style="list-style-type: none"> Utilise government land assets to enable residential densification and infill development.
	Areas for mixed land use and improved economic opportunity	<ul style="list-style-type: none"> Focus new mixed use development as far as possible along Main Road. Actively support pedestrianism and improved public space within the old town centre. 	<ul style="list-style-type: none"> Assist development opportunity for small/ emerging entrepreneurs. Support private sector led institutional arrangements assist with urban management in the town centre.
	Improved access and mobility	<ul style="list-style-type: none"> Pro-actively improve conditions for walking and NMT within Franschhoek. Explore improved movement linkages between the north-western and south-eastern parts of the settlement. 	<ul style="list-style-type: none"> Ensure that the design of all roads within and surrounding the town provides for appropriate NMT movement.
	Community/ Institutional use	<ul style="list-style-type: none"> Cluster community facilities together with commercial, transport, informal sector and other activities so as to maximise convenience, safety and socio-economic potential. 	<ul style="list-style-type: none"> Actively support the shared use of community facilities.
	Improved landscaping and public amenity	<ul style="list-style-type: none"> As far as possible, focus investment in parks, open space, and social facilities accessible by public and NMT, in this way also increasing the surveillance of these facilities. 	<ul style="list-style-type: none"> Actively involve local communities in the development and management of public amenities.
New Development Actions	Significant new mixed use development		
	Significant new residential development		
	Significant change to access and mobility provision		

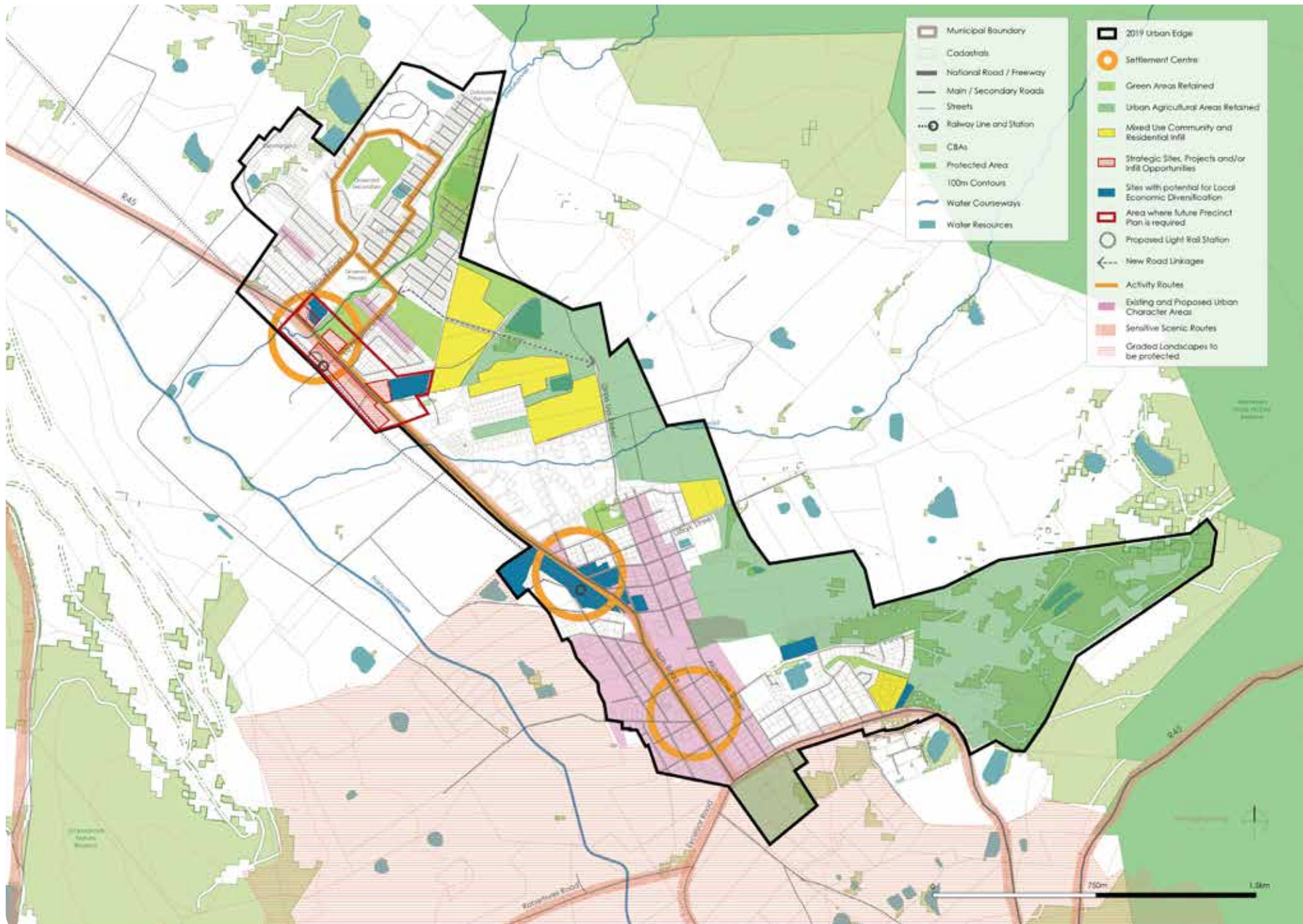


Figure 32. Franschhoek Plan

5.6. Small Settlements in the Franschhoek Valley

5.6.1. La Motte

La Motte is a former forestry village situated on the Roberstviei Road, some 5km west of Franschhoek. It serves as a place of living for workers mostly engaged in agricultural work on surrounding farms. Situated in a valley 1km off the R45, it does not have a significant commercial component supported by passing trade.

Originally built to house forestry workers, the village is made up of the initial forestry worker dwellings and a range of community facilities. During the construction phase of the Berg River Water Scheme, some 80 new houses were built adjacent to the existing settlement to temporarily house construction workers (these houses are progressively transferred to identified beneficiaries on the municipal housing list).

Given the need for affordable housing in the Franschhoek valley, and following recommendations of the previous MSDF, studies were completed in 2017 to support the development of affordable housing on three portions of state-owned land adjacent and proximate to the village, namely Farms 1653 ($\pm 5,09$ ha); 1339 ($\pm 11,42$ ha); and 1158/1 ($\pm 5,23$ ha). Provision was made for 16 residential units and three business units on Farm 1653, 329 residential units on Farm 1339, and 106 residential units on Farm 1158. Rezoning from agricultural use to subdivisional area was to follow the initial studies.

Given its location off the R45, La Motte is arguably not ideally located for significant growth (and certainly not for growth beyond the investigations currently in hand).



Figure 33. Extract from a planning motivation report for the “Proposed Integrated Residential Development Proposals; Portions of Farms 1158/1, 1653 And 1139 La Motte, Franschhoek” (CK Rumboll & Partners)

5.6.2. Wemmershoek

Wemmershoek is a former forestry village situated at the intersection of the R45 and R303, the rail line, and the confluence of the Berg and Franschhoek Rivers, some 6km west of Franschhoek. It serves as a place of living for workers mostly engaged in agricultural work on surrounding farms. It does not have a significant commercial component supported by passing trade.

Given its location, Wemmershoek offers real potential as a contained place of living and work. Much of this, however, relates to possible future maximisation and re-use of the sawmill site. In the absence of sustainable local work opportunities, it will remain a place of residence for people commuting elsewhere for work.

As indicated in the previous MSDF, there is an opportunity to extend the village east of the R301. Ideally, this opportunity should not be explored unless in parallel with significant local employment generating land uses.

WEMMERSHOEK - LA MOTTE CONCEPT



Figure 34. Wemmershoek - La Motte Concept

Table 23. Plan Elements and Proposals for La Motte - Wemmershoek

TYPE OF ACTION	SDF ELEMENT	SPATIAL PROPOSALS	RELATED NON SPATIAL PROPOSALS
Protective Actions	CBA's, ESA's, Protected areas	<ul style="list-style-type: none"> Maintain and improve the nature areas surrounding La Motte and Wemmershoek. Work to increasingly connect and integrate nature areas, also with urban green areas, to form an integrated green web or framework across the municipal area. 	<ul style="list-style-type: none"> Implement management actions contained in the EMF.
	Water courses	<ul style="list-style-type: none"> Improve public continuity, access, and space along the stream corridors. 	
	Agricultural land	<ul style="list-style-type: none"> Retain and improve the relationship between La Motte, Wemmershoek, and surrounding agricultural land. 	
	Urban edge	<ul style="list-style-type: none"> As a general principle, contain the footprint of La Motte and Wemmershoek as far as possible within the existing urban edges. 	
	Scenic landscapes, scenic routes, special places	<ul style="list-style-type: none"> Retain the strong sense of transition between agriculture and human settlement at the entrances to the settlements. 	
	Historically and culturally significant precincts and places	<ul style="list-style-type: none"> Maintain the integrity of historically and culturally significant precincts and places (as indicated in completed surveys). 	
Change Actions	Informal settlements to be upgraded	<ul style="list-style-type: none"> Accommodate inhabitants of informal structures in planning for the settlements. 	
	Areas for residential densification and infill	<ul style="list-style-type: none"> Consider underutilised open space within the settlements for infill development. 	<ul style="list-style-type: none"> Utilise government land assets to enable residential densification and infill development.
	Areas for mixed land use and improved economic opportunity	<ul style="list-style-type: none"> Focus new mixed use development on in La Motte on Farm 1653. Focus new mixed use development in Wemmershoek on the sawmill site. 	<ul style="list-style-type: none"> Assist development opportunity for small/ emerging entrepreneurs.
	Improved access and mobility	<ul style="list-style-type: none"> Pro-actively improve conditions for walking and NMT between La Motte, Wemmershoek, the R45, and Franschoek. 	<ul style="list-style-type: none"> Ensure that the design of all roads within and surrounding the settlements provides for appropriate NMT movement.
	Community/ Institutional use	<ul style="list-style-type: none"> Cluster community facilities together with commercial, transport, informal sector and other activities so as to maximise convenience, safety and socio-economic potential. 	<ul style="list-style-type: none"> Actively support the shared use of community facilities.
	Improved landscaping and public amenity	<ul style="list-style-type: none"> As far as possible, focus investment in parks, open space, and social facilities accessible by public and NMT, in this way also increasing the surveillance of these facilities. 	<ul style="list-style-type: none"> Actively involve local communities in the development and management of public amenities.
New Development Actions	Significant new mixed use development		
	Significant new residential development		
	Significant change to access and mobility provision		

IN PROCESS

Figure 35. La Motte - Wemmershoek Plan

5.7. Small Settlements in the Dwars River Valley

The Dwars River Valley comprises the small towns of Groot Drakenstein, Pniel, Lanquedoc, Johannesdal, and Kylemore, situated west and east of the R310 Helshoogte Road which links Stellenbosch town with the R45 at Groot Drakenstein. The area is a wine and culinary destination, with an array of experiences and attractions, and has become an important part of the Stellenbosch Wine Route.

5.7.1. Groot Drakenstein

Groot Drakenstein is located at the intersection of the R310 to Stellenbosch and the R45 between Franschhoek and the N2. The area comprise industrial land uses (a pallet factory, canning factory, and food preparation factory), vacant industrial land, office use, community facilities (police station and clinic), agriculture, dwelling houses, rail station and sheds, and vacant and uncultivated land.

The previous MSDF identified the area as a location for development of a structured village node. Since then, significant planning work has been undertaken to determine how best to develop the village, considering its historic, socio-economic, environmental, and servicing context.

In relation to land south of the R45, several development proposals have been generated over the last 15 years for the Boschendal landholding, through various planning processes. This comprised extensive development proposals which saw significant portions of the farm being proposed for various extensive residential developments, a retirement village, equestrian estate and other residential estate "villages". In 2012 new shareholders invested in the farm and reviewed this previous development approach. The proposals which were at that stage being advertised for comment were then withdrawn from the statutory processes.

Current planning provides for a rural "Cape Village" with distinct and authentic rural settlement qualities of some 25ha, including 475 dwelling units, 100 guest units, 5 500m² retail space, 9 000m² general commercial use, a new clinic, and an early childhood development and aftercare centre with a capacity for 120 children.

Residential development will comprise a mix of housing types ranging from freestanding dwelling houses on single erven (at nett densities of $\pm 4-11$ du/ha) to more compact row houses (± 25 du/ha) to apartments (± 86 du/ha). The overall gross density for residential development is 17, 85 dwelling units/ha and the development will comprise a maximum of 475 dwelling units.

The mixed-use business area of the village is centred on a "high street" where the public can access it any time of the day. An important feature at the heart of this high street is the farmer's market which will provide small entrepreneurs, surrounding farmers, home crafters, artists and small local businesses the opportunity to access a regular, local market. It is intended for the buildings in this precinct to be mixed-use in nature, with retail and business at ground floor levels and residential apartments or general business use at upper levels. It is the intention to ensure a mixed offering of commercial, shopping, restaurants and convenience goods which will serve the residents, visitors and surrounding communities. It is important to note that it is not the intention of this



Figure 36. Boschendal Site Development Plan by Philip Briel Architects, From Boschendal Village: Planning Report for NEMA Basic Assessment Report Version 1.9 - June 2017

development to contain a shopping centre. The GLA proposed is sufficiently limited and designed on a publicly accessible high street concept, to ensure it takes the form of a local business node.

It proposed to relocate the existing clinic in the area to a more centrally located position in the new village. The early childhood development and aftercare centre will serve both the residents of the village surrounding villages.

Environmental authorisation for the proposed development was granted in March 2018.

Meerlust, a small community north of the R45, is a previous forestry worker community. In 2017, SM affirmed a commitment to take over the management of Meerlust until such time as the property (Portion 1 of the Farm Meerlust No 1006) is transferred to the Municipality. It was also agreed that the Council take over the Groot Drakenstein / Meerlust Rural Housing Project from Cape Winelands District Municipality, seek a Power of Attorney from the National Department of Public Works in order to proceed with the planning and implementation of the Groot Drakenstein / Meerlust Rural Housing Project, initiate a call for development proposals from prospective developers, and conclude an agreement with the successful bidder for the planning and implementation of the project.

5.7.2. Pniel, Lanquedoc, Johannesdal, and Kylemore

Pniel, Lanquedoc, Johannesdal, and Kylemore remain relatively distinct, with small scale farms within the urban edge of each. Agricultural trade and labor continue to feature strongly in these settlements, both in land use, and the well-being of people. Settlements contain numerous places of historic significance and the density of development is relatively low. Undeveloped land within the urban edge occur south of Pniel and in a corridor between Lanquedoc and Kylemore (these areas were defined as future development areas in the previous MSDF).

To ensure that the Boschendal Village development benefits residents in the Dwars Rivier Valley, an agreement was confirmed that 5% value of the initial sale of properties and 0.5% of all subsequent sales will be transferred to the Boschendal Treasury Trust (BTT) to ensure that development needs of Dwars Rivier are met through this opportunity.

DWARS RIVER VALLEY CONCEPT

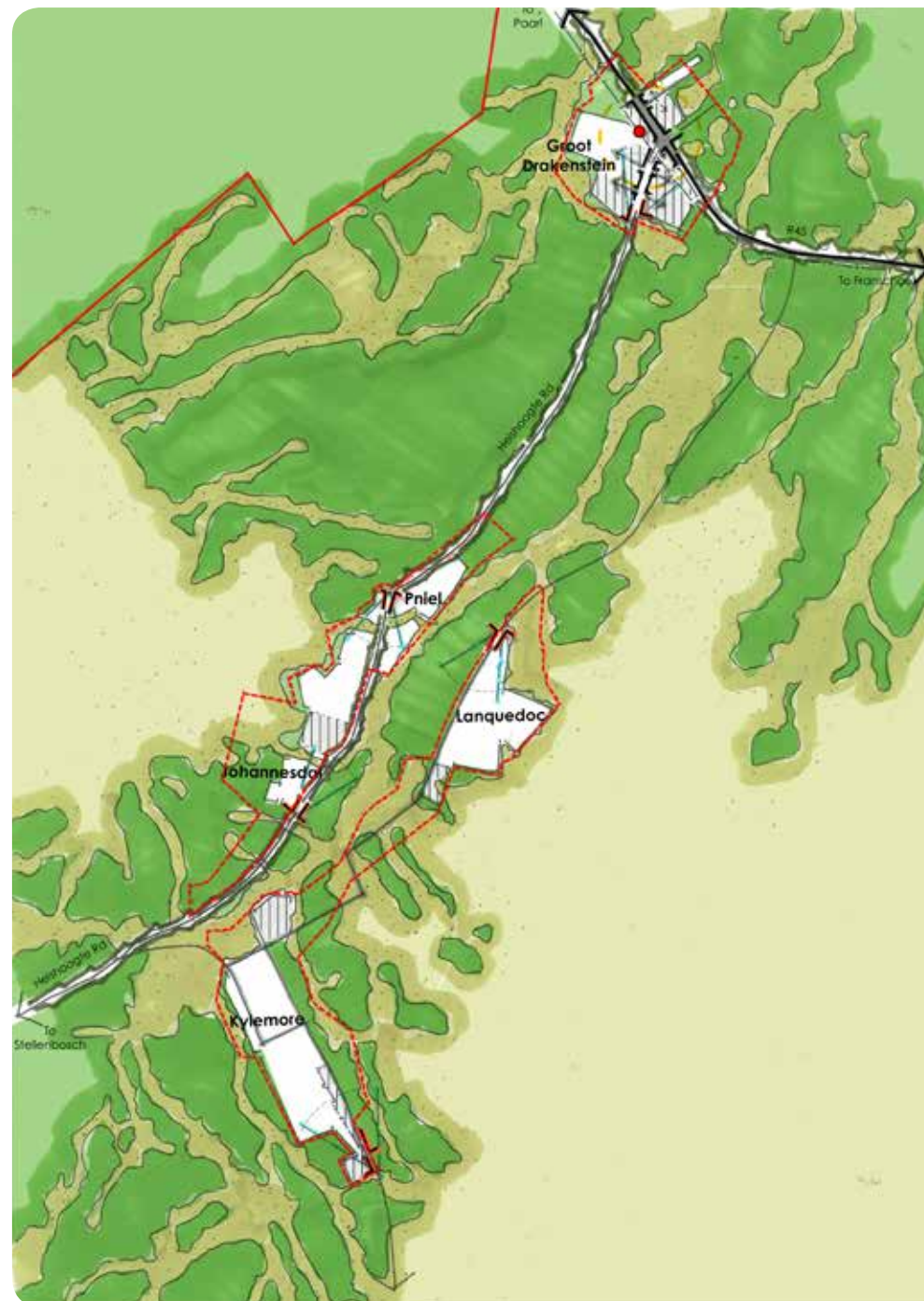


Figure 37. Dwars River Valley Concept

Table 24. Plan Elements and Proposals for Dwars River Valley Settlements

TYPE OF ACTION	SDF ELEMENT	SPATIAL PROPOSALS	RELATED NON SPATIAL PROPOSALS
Protective Actions	CBA's, ESA's, Protected areas	<ul style="list-style-type: none"> Maintain and improve the nature areas surrounding settlements of the Dwars River Valley. Work to increasingly connect and integrate nature areas, also with urban green areas, to form an integrated green web or framework across the municipal area. 	<ul style="list-style-type: none"> Implement management actions contained in the EMF.
	Water courses	<ul style="list-style-type: none"> Improve public continuity, access, and space along the stream corridors. 	<ul style="list-style-type: none"> Ensure that river rehabilitation activities takes place.
	Agricultural land	<ul style="list-style-type: none"> Retain and improve the relationship between settlements of the Dwars River Valley and surrounding agricultural land. 	<ul style="list-style-type: none"> Protect small scale agricultural opportunity and initiatives to transfer associated skills to the youth.
	Urban edge	<ul style="list-style-type: none"> As a general principle, contain the footprint of settlements of the Dwars River Valley within existing urban edges. 	
	Scenic landscapes, scenic routes, special places	<ul style="list-style-type: none"> Retain the strong sense of transition between agriculture and human settlement at the entrances to the settlements. 	
	Historically and culturally significant precincts and places	<ul style="list-style-type: none"> Maintain the integrity of historically and culturally significant precincts and places (as indicated in completed surveys). 	
Change Actions	Informal settlements to be upgraded	<ul style="list-style-type: none"> Accommodate inhabitants of informal structures in planning for the settlements. 	
	Areas for residential densification and infill	<ul style="list-style-type: none"> Ensure that residential development provides for a range of housing types and income groups. Ensure that future development is woven into the urban fabric of existing settlements. Consider underutilised open space within the settlements for infill development that will enhance socio-economic potential of those who currently reside in these towns. 	<ul style="list-style-type: none"> Utilise government land assets to enable residential densification and infill development.
	Areas for mixed land use and improved economic opportunity	<ul style="list-style-type: none"> Focus addressing service needs in cluster developments, in this way improving mixed use and enhancing economic opportunities. Focus key protects on current mixed-use developments, while ensure future pockets of growth are integrated into the current and new developments. 	<ul style="list-style-type: none"> Assist development opportunity for small/ emerging entrepreneurs.
	Improved access and mobility	<ul style="list-style-type: none"> Pro-actively improve conditions for walking and NMT within and between settlements of the Dwars River Valley. 	<ul style="list-style-type: none"> Ensure that the design of all roads within and surrounding settlements provides for appropriate NMT movement.
	Community/ Institutional use	<ul style="list-style-type: none"> Cluster community facilities together with commercial, transport, informal sector and other activities so as to maximise convenience, safety and socio-economic potential. 	<ul style="list-style-type: none"> Actively support the shared use of community facilities.
	Improved landscaping and public amenity	<ul style="list-style-type: none"> As far as possible, focus investment in parks, open space, and social facilities accessible by public and NMT, in this way also increasing the surveillance of these facilities. 	<ul style="list-style-type: none"> Actively involve local communities in the development and management of public amenities.
New Development Actions	Significant new mixed use development		
	Significant new residential development		
	Significant change to access and mobility provision		

IN PROCESS

Figure 38. Dwars River Valley Plan

5.8. Jonkershoek

The Jonkershoek Valley is a unique area characterized by intensive agriculture and natural beauty, currently experiencing a broad range of development pressures. In 2015, a LSDF was approved by Council for a 61.8km² part of the valley bounded by the residential areas of Rozendal and Karindal, a line joining the peaks of Stellenboschberg to the south-west, the peaks of Jonkershoekberg to the north-east, and the cadastral boundary of the Farm Jonkershoek 385 to the southeast.

The LSDF divides the Jonkershoek Valley into four distinctive parts:

1. An agricultural precinct comprising farms and smallholdings in the lower valley.
2. A mixed use precinct of state/ parastatal facilities and housing in the central valley.

3. A forestry precinct comprising the upper valley catchment and forestry area.
4. A conservation and natural vegetation precinct comprising the Jonkershoek Nature Reserve in the upper valley.

While the LSDF contains proposals for all four areas, the focus is on the mixed use precinct. The intent here is to formalize development in two nodes, preventing the loss of green space between or outside the nodes. A non-urbanised appearance of the nodes is promoted, with the settlement not replicating urban functions normally located in Stellenbosch town.

The mixed used precinct is separated into:

- A southern sub-precinct accommodating uses related to research and innovation, forestry, conservation management and eco-, recreation and educational tourism.

Accommodation for eco-tourist purposes is restricted to temporary stay.

- A northern-sub precinct accommodating two nodes as “settlements” or “hamlets” comprising of existing residential buildings and infrastructure, together with limited residential infill (some 50 units), providing accommodation to any person who may have a right to settle in the Jonkershoek Valley as well as persons renting residual existing housing stock. The total estimated population who qualify to reside in the mixed use precinct is estimated at ±445 (123 households).

It was proposed to establish a trust to secure and manage the rights of those currently residing in the Jonkershoek Valley. This requires the integration and co-ordination of planning and development initiatives of Stellenbosch Municipality, Cape Pine (Pty) Ltd, CapeNature, and various provincial and state departments.

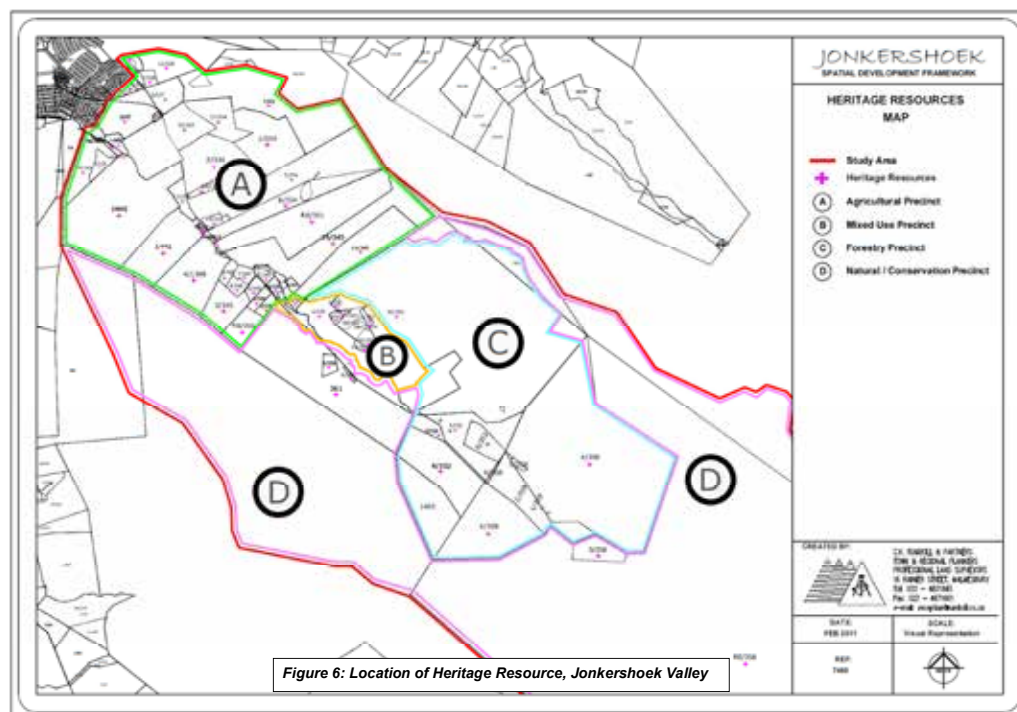


Figure 6: Location of Heritage Resource, Jonkershoek Valley

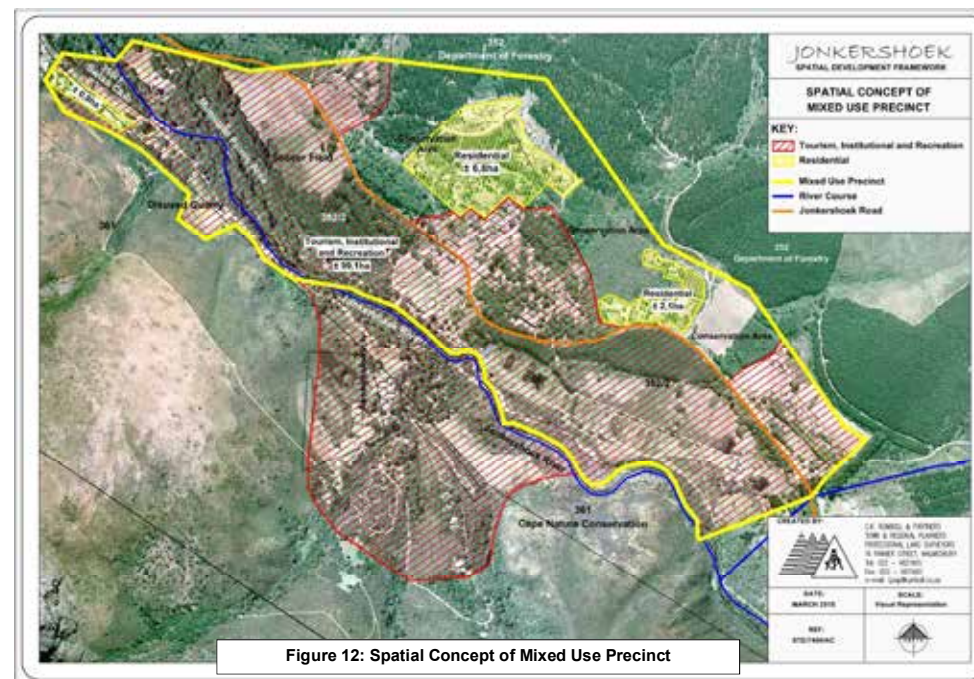


Figure 12: Spatial Concept of Mixed Use Precinct

Figure 39. Land use precincts and the spatial concept for the mixed use precinct (Jonkershoek SDF approved by Council in 2015)

As Jonkershoek is not defined as a “complete” settlement, no detailed plan description deemed necessary. The proposals contained in the 2015 document, aimed at preserving what is special in the valley and providing accommodation to any person who may have a right to settle in the Jonkershoek Valley as well as persons renting residual existing housing stock, remain valid.

5.9. Small Settlements along the R304

5.9.1. Muldersvlei Crossroads

Given its location in relation to regional routes, Muldersvlei Crossroads appears to have the potential for further formal settlement development. Ideally, it should be planned as part of a broader initiative related to the N1 corridor stretching from CCT to DM, including Klapmuts.

To be completed

5.9.2. Koelenhof

Koelenhof is located at the intersection of the R304 and M23, some 4km north of Stellenbosch town. The R304 provides access to the N1, and the M23 to Cape Town/ Kraaifontein in the west and the R44 (which leads to Klapmuts) in the east. The railway line (parallel to the R304) runs through the area.

A LSDF was prepared for Koelenhof in 2007. The LSDF proposed that the role of Koelenhof be that of a mainly agricultural hamlet with limited residential and industrial uses (to help its residents and some

from Stellenbosch). The area within the urban edge of Koelenhof comprises some 196ha.

Land identified for housing includes 22,4ha of subsidy housing (approximately 560 units), 32,2ha for GAP housing (approximately 800 units), and 30,5ha for market related housing (approximately 765 units). An area of 22,6ha is provided for industrial development, 29,6ha for mixed use development, and 13,1ha for institutional uses. Relatively little of this development allocation has been taken up.

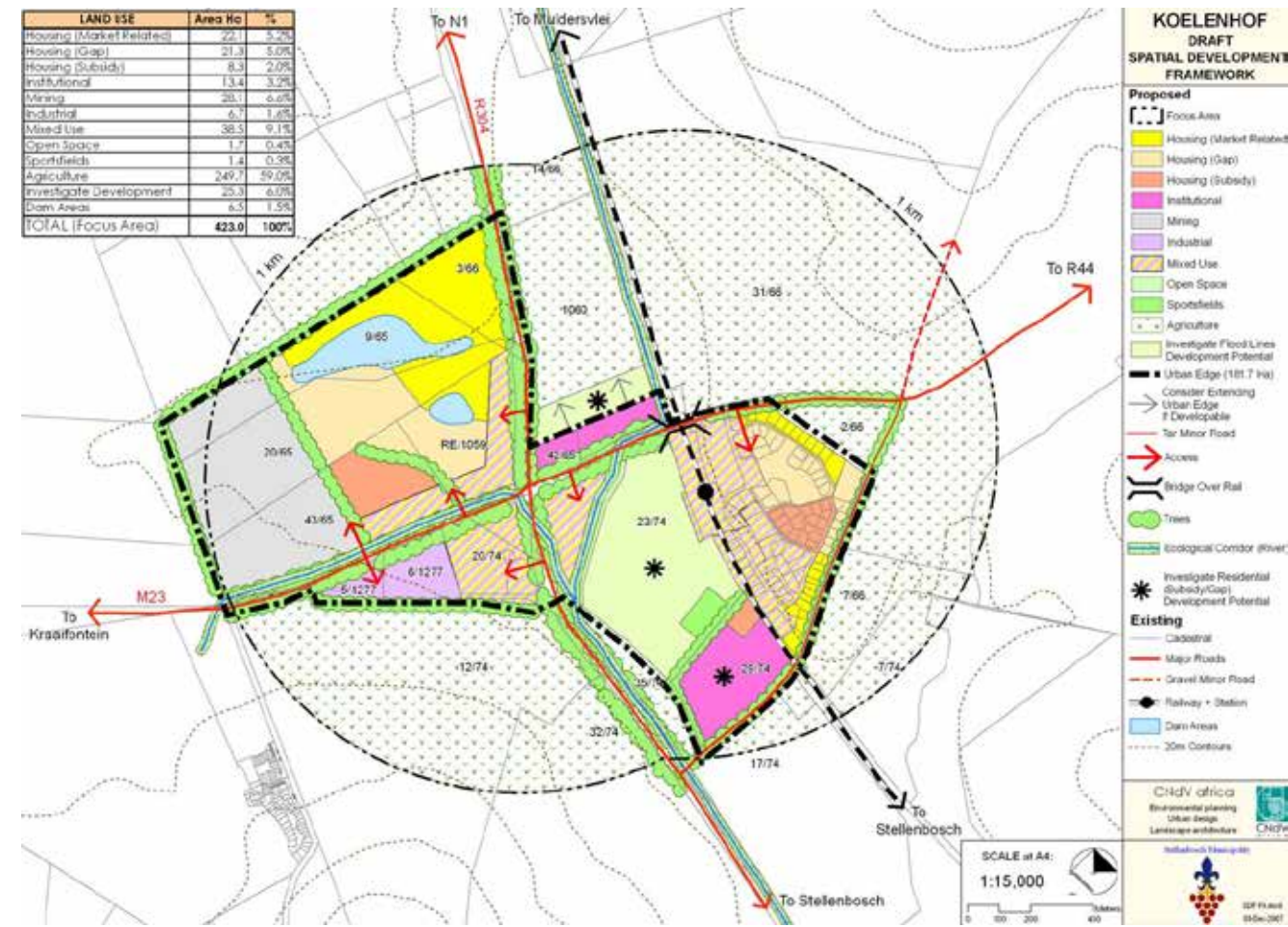


Figure 40. Koelenhof Spatial Development Framework Revision and Urban Edge Determination - Final Draft 2007

KOELENHOF - MULDERSVLEI CONCEPT



Figure 41. Koelenhof - Muldersvlei Concept

Table 25. Plan Elements and Proposals for Koelenhof - Muldersvlei

TYPE OF ACTION	SDF ELEMENT	SPATIAL PROPOSALS	RELATED NON SPATIAL PROPOSALS
Protective Actions	CBA's, ESA's, Protected areas	<ul style="list-style-type: none"> Maintain and improve the nature areas surrounding small settlements along the R304. Work to increasingly connect and integrate nature areas, also with the urban green areas, to form an integrated green web or framework across the municipal area. 	<ul style="list-style-type: none"> Implement management actions contained in the EMF.
	Water courses	<ul style="list-style-type: none"> Improve public continuity, access, and space along stream corridors. 	
	Agricultural land	<ul style="list-style-type: none"> Retain and improve the relationship between small settlements along the R304 and surrounding agricultural land. 	
	Urban edge	<ul style="list-style-type: none"> As a general principle, contain the footprints of small settlements along the R304 as far as possible within the existing urban edge. 	
	Scenic landscapes, scenic routes, special places	<ul style="list-style-type: none"> Retain the strong sense of transition between agriculture and human settlement at the entrances to small settlements along the R304. 	
	Historically and culturally significant precincts and places	<ul style="list-style-type: none"> Maintain the integrity of historically and culturally significant precincts and places (as indicated in completed surveys). 	
Change Actions	Informal settlements to be upgraded	<ul style="list-style-type: none"> Accommodate inhabitants of informal structures in planning for the settlements. 	
	Areas for residential densification and infill	<ul style="list-style-type: none"> Ensure that residential development provides for a range of housing types and income groups. Ensure that future development is woven into the urban fabric of existing settlements. Consider underutilised open space within the settlements for infill development that will enhance socio-economic potential of those who currently reside in these towns. 	<ul style="list-style-type: none"> Utilise government land assets to enable residential densification and infill development.
	Areas for mixed land use and improved economic opportunity	<ul style="list-style-type: none"> Focus addressing service needs in cluster developments, in this way improving mixed use and enhancing economic opportunities. 	
	Improved access and mobility	<ul style="list-style-type: none"> Pro-actively improve conditions for walking and NMT within and between small settlements along the R304. 	<ul style="list-style-type: none"> Ensure that the design of all roads within and surrounding settlements provides for appropriate NMT movement.
	Community/ Institutional use	<ul style="list-style-type: none"> Cluster community facilities together with commercial, transport, informal sector and other activities so as to maximise convenience, safety and socio-economic potential. 	<ul style="list-style-type: none"> Actively support the shared use of community facilities.
	Improved landscaping and public amenity	<ul style="list-style-type: none"> As far as possible, focus investment in parks, open space, and social facilities accessible by public and NMT, in this way also increasing the surveillance of these facilities. 	<ul style="list-style-type: none"> Actively involve local communities in the development and management of public amenities.
New Development Actions	Significant new mixed use development	<ul style="list-style-type: none"> Over the longer term, Muldersvlei and Koelenhof along the R304 corridor could possibly accommodate more growth, and be established as inclusive settlements offering a range of opportunities. However, these settlements are not prioritized for development at this stage. Explore the feasibility of changing/ complementing the rail vehicle type currently using the railway along the Baden Powell Drive-Adam Tas-R304 corridor to a lighter railcar/ tram type system, providing a more frequent, flexible service better integrated into the urban realm. Alternatively, a regular bus service should be explored serving the same route. 	<ul style="list-style-type: none"> Support private sector led institutional arrangements to enable joint planning and development.
	Significant new residential development		
	Significant change to access and mobility provision		

IN PROCESS

Figure 42. Koelenhof Muldersvlei Plan

5.10. Small Settlements along Baden Powell Drive

5.10.1. Vlottenburg

Vlottenburg is located approximately five km west of Stellenbosch town. Starting off as a processing node with Van Ryn Brandy Cellar and the Vlottenburg Winery, it steadily grew as a small residential node for a variety of income groups.

The previous MSDF identified the area as a location for development of a structured village node. The development consortium's preferred village layout of some 77ha includes 375 single residential units,

90 townhouses, 343 walkup apartments, 97 mixed use flats/ apartments a retail centre of 5 000m², hotel school, medical centre, mixed use buildings, hotel and conference facility, education facilities (including a private school), sports fields and private open space. A revised layout was prepared (and incorporated in the final EIA report) in response to comments received on the draft EIA report regarding the scale of the proposed development, and a proposal to amend the urban edge of Vlottenburg.

The revised layout comprises a smaller overall development footprint (52ha), includes most of the

preferred layout, but with fewer single residential units, more mixed use flats/ apartments, and excludes the 5 000m² shops/ business premise, private school and the community sports field and clubhouse.

In principle, it is believed that a structured village could be supported at Vlottenburg. It should, however, be inclusive in the opportunity provided, including a full range of housing types and local services. Critically, it should not proceed unless a more frequent, flexible public transport service can be provided along the Baden Powell-Adam Tas corridor.

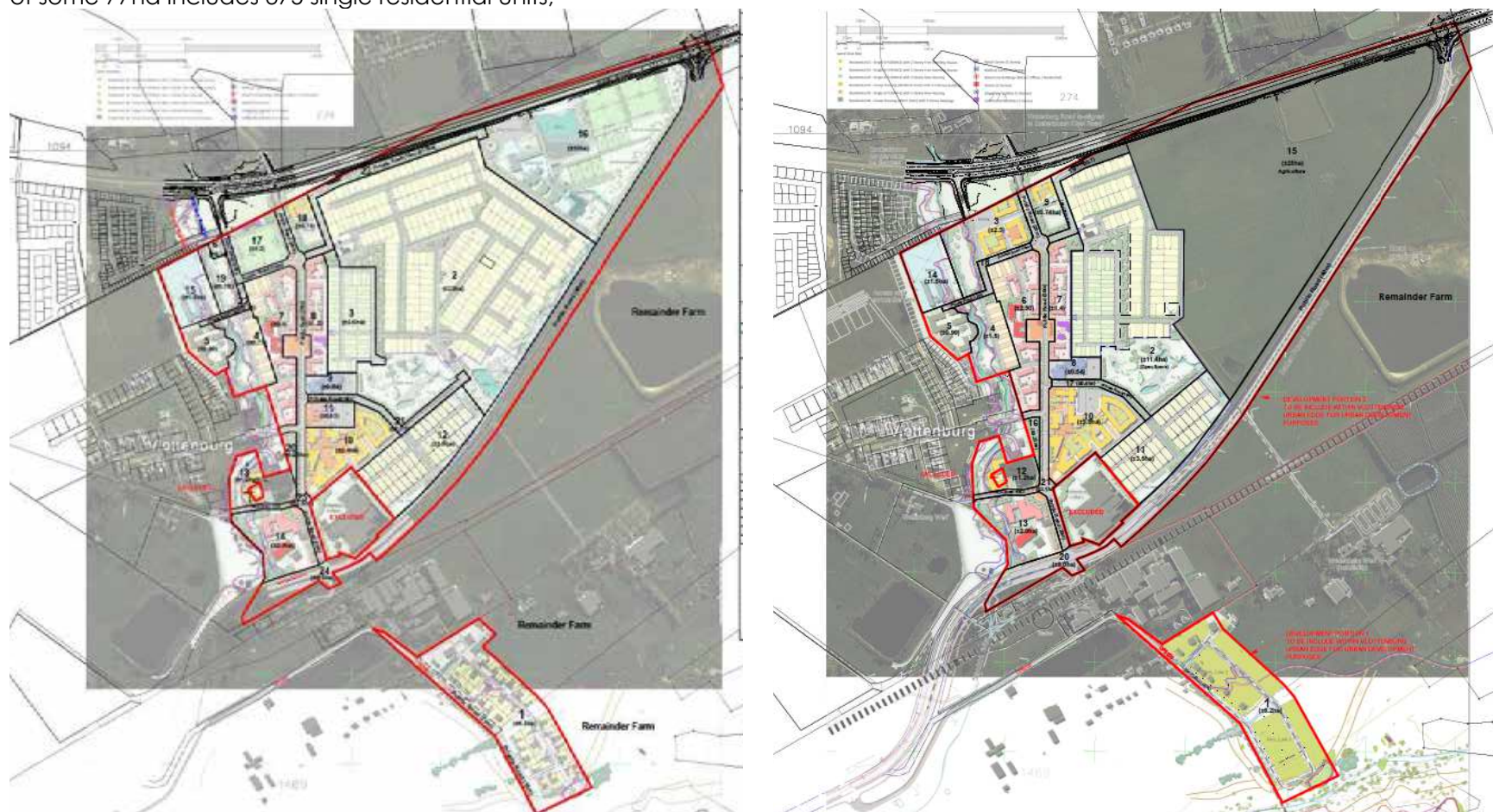


Figure 43. Alternative 1 and 2 from Vredenheim Engineering Services Report (Aurecon, 8 June 2017)

5.10.2. Spier

The village at Spier, abutting the R310, is part of the 620ha historic Spier Farm. Housing a 150-room hotel, conference centre, restaurants, and winery, the village component has become a centre for the arts, recreation, and tourist destination. Sustainability is of key importance to the entire farm operation, and active programs are in place to maintain the environment and associated communities.

5.10.3. Lynedoch

Lynedoch is a unique settlement – named Lynedoch Eco Village – situated halfway between Khayalitsha and Stellenbosch on the R310 and at the intersection of the R310 and Annandale Road. The village is home to the Sustainability Institute, which offers a number of degree and other education and training programmes in partnership with the University of Stellenbosch and other organisations, a number of schools, guest facility, and residences.

Development commenced almost 20 years ago, managed by a non-profit company called the Lynedoch Development Company (LDC). International and local development aid funders and local banks assisted to fund the development. Technical and institutional arrangements and procedures for the development of the village were structured to meet ecological, social and economic sustainability. The Lynedoch Home Owners Association (LHOA) was established to take primary responsibility for service delivery.

Achieving social inclusivity remains a key aim. The Constitution of the LHOA imposes on all home owners severe restrictions on resale by making it compulsory that any seller of any property must first offer the property to the LHOA and only then offer it to a third party at a price that is not lower than the price proposed to the LHOA.

Further growth of the Sustainability Institute and its partners' education focus and offer, through expanded and new programmes, and further accommodation for students and staff within a compact, pedestrian oriented, child friendly community, appears appropriate.

VLOTTENBURG - SPIER - LYNEDOCH CONCEPT



Figure 44. Vloottenburg - Spier - Lynedoch Concept

Table 26. Plan Elements and Proposals for Vloffenburg - Spier - Lynedoch

TYPE OF ACTION	SDF ELEMENT	SPATIAL PROPOSALS	RELATED NON SPATIAL PROPOSALS
Protective Actions	CBA's, ESA's, Protected areas	<ul style="list-style-type: none"> Maintain and improve the nature areas surrounding small settlements along Baden Powell Drive. Work to increasingly connect and integrate nature areas, also with the urban green areas, to form an integrated green web or framework across the municipal area. 	<ul style="list-style-type: none"> Implement management actions contained in the EMF.
	Water courses	<ul style="list-style-type: none"> Improve public continuity, access, and space along the stream corridors. 	
	Agricultural land	<ul style="list-style-type: none"> Retain and improve the relationship between small settlements along Baden Powell Drive and surrounding agricultural land. 	
	Urban edge	<ul style="list-style-type: none"> As a general principle, contain the footprint of small settlements along Baden Powell Drive as far as possible within the existing urban edge. 	
	Scenic landscapes, scenic routes, special places	<ul style="list-style-type: none"> Retain the strong sense of transition between agriculture and human settlement at the entrances to the small settlements along Baden Powell Drive. 	
	Historically and culturally significant precincts and places	<ul style="list-style-type: none"> Maintain the integrity of historically and culturally significant precincts and places (as indicated in completed surveys). 	
Change Actions	Informal settlements to be upgraded	<ul style="list-style-type: none"> Prioritise informal settlements for upgrading and service provision. 	
	Areas for residential densification and infill	<ul style="list-style-type: none"> Focus infill development on undeveloped land within the urban edge. 	
	Areas for mixed land use and improved economic opportunity	<ul style="list-style-type: none"> Maintain the scale of mixed used and economic opportunity areas to reflect the current role of settlements. 	
	Improved access and mobility	<ul style="list-style-type: none"> Pro-actively improve conditions for walking and NMT within and between small settlements along Baden Powell Drive. 	<ul style="list-style-type: none"> Ensure that the design of all roads within and surrounding the settlements provides for appropriate NMT movement.
	Community/ Institutional use	<ul style="list-style-type: none"> Cluster community facilities together with commercial, transport, informal sector and other activities so as to maximise convenience, safety and socio-economic potential. Maintain Lynedoch as a focus for education and training (with various focus areas and "levels" of education). 	<ul style="list-style-type: none"> Actively support the shared use of community facilities.
	Improved landscaping and public amenity	<ul style="list-style-type: none"> As far as possible, focus investment in parks, open space, and social facilities accessible by public and NMT, in this way also increasing the surveillance of these facilities. 	<ul style="list-style-type: none"> Actively involve local communities in the development and management of public amenities.
New Development Actions	Significant new mixed use development	<ul style="list-style-type: none"> Over the longer term, Vloffenburg, Spier, and Lynedoch along the Baden Powell-Adam Tas-R304 corridor could possibly accommodate more growth, and be established as inclusive settlements offering a range of opportunities. However, these settlements are not prioritized for development at this stage. Explore the feasibility of changing/ complementing the rail vehicle type currently using the railway along the Baden Powell Drive-Adam Tas-R304 corridor to a lighter railcar/ tram type system, providing a more frequent, flexible service better integrated into the urban realm. Alternatively, a regular bus service should be explored serving the same route. 	<ul style="list-style-type: none"> Support private sector led institutional arrangements to enable joint planning and development.
	Significant new residential development		
	Significant change to access and mobility provision		

IN PROCESS

Figure 45. Spier - Vlottenburg - Lynedoch Plan

5.11. Raithby

Raithby is a small rural settlement, situated in the heart of the agricultural area roughly defined by the R310, R44, Old Main Road to the west, Main Road through Firgrove, and Helderberg Village to the south. Access to the village is via Raithby Road, which intersects with Winery Road, in turn providing access to Old Main Road and the R44 (some 1,25km from the village).

Raithby is regarded as the settlement within the Municipality that most strongly retains its characteristic 19th century Mission Town structure and pattern. Raithby Road runs parallel to the river course, with long, narrow “water erf” plots still occupying the space between them. Houses are set hard up against Raithby Road (and Hendricks Street, which encircles the commonage) and their back gardens are open, cultivated areas leading down to the stream. A steep rise beyond the stream course creates a green, cultivated and agricultural backdrop against which the garden allotments are viewed. The two key institutional buildings are located above Raithby Road: the Methodist Church and the school. These are set against the gentle rise of the hill beyond. Between these buildings and the houses is the commonage, which is an open area where the community can literally, and spatially, “come together”.

The Municipal Zoning Scheme contains an overlay zoned, framed to protect the historical significance of the remaining water erven and environs.

Since 2009, a single development entity has assembled some 650ha of farm land to the east and south of Raithby (up to the CCT waterworks facility and Helderberg Village) with a stated view to strengthen agriculture, the tourism and hospitality industry, and engineering services, and enable mixed use development. Clearly, there is intent to undertake significant development into the future.

However, there appears no justification for significant change to current municipal spatial planning in response to the land acquisition initiative. The focus of the MSDF is to retain the unique characteristics of the settlement.

RAITHBY CONCEPT

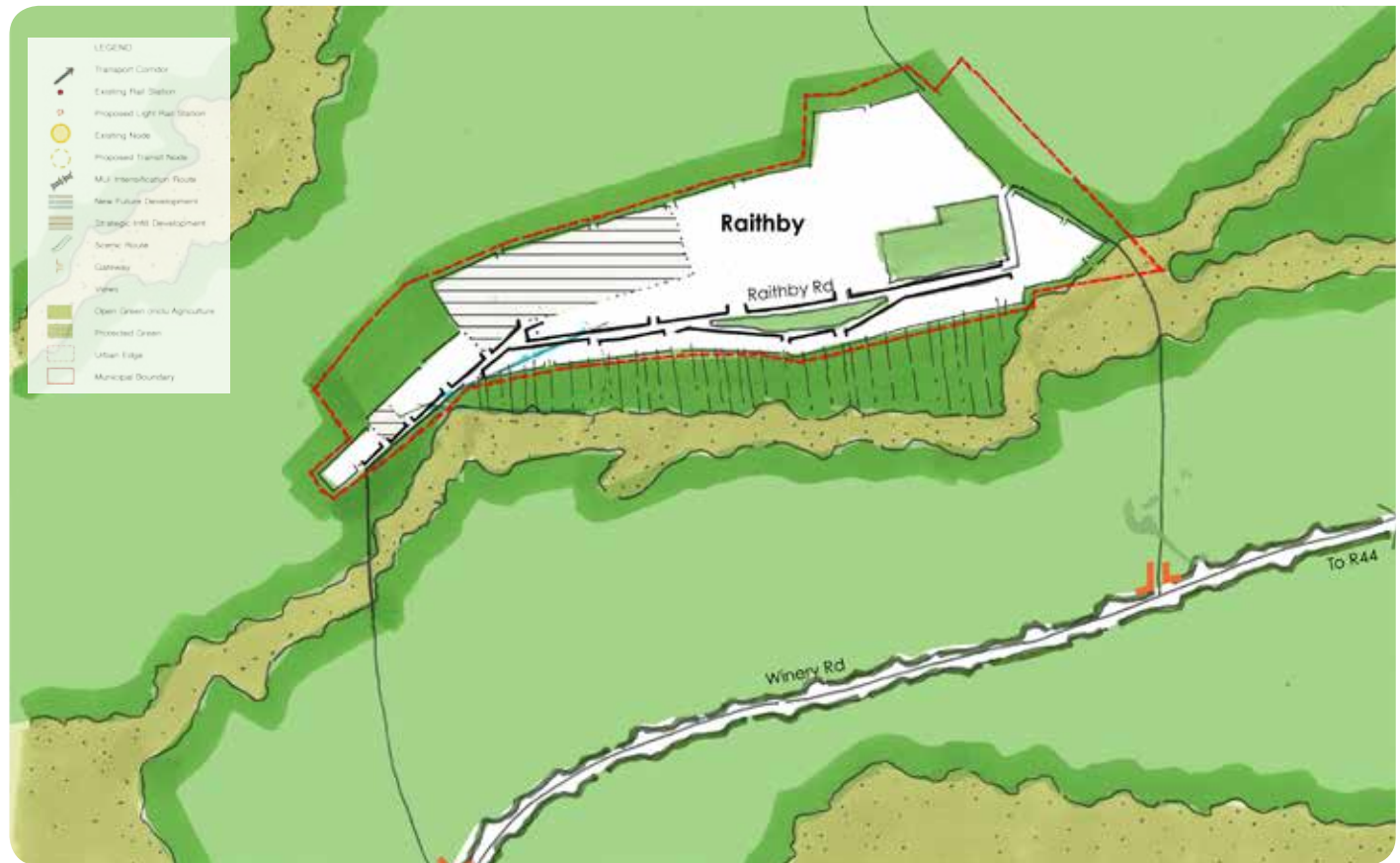


Figure 46. Raithby Concept

Table 27. Plan Elements and Proposals for Raithby

TYPE OF ACTION	SDF ELEMENT	SPATIAL PROPOSALS	RELATED NON SPATIAL PROPOSALS
Protective Actions	CBA's, ESA's, Protected areas	<ul style="list-style-type: none"> Maintain and improve the nature areas surrounding Raithby. Work to increasingly connect and integrate nature areas, also with settlement green areas, to form an integrated green web or framework across the area. 	<ul style="list-style-type: none"> Implement management actions contained in the EMF.
	Water courses	<ul style="list-style-type: none"> Retain and improve the relationship between Raithby and surrounding agricultural land. 	
	Agricultural land	<ul style="list-style-type: none"> As a general principle, contain the footprint of Raithby as far as possible within the existing urban edge. 	
	Urban edge	<ul style="list-style-type: none"> Retain the strong sense of transition between agriculture and human settlement at the entrances to the Raithby. 	
	Scenic landscapes, scenic routes, special places	<ul style="list-style-type: none"> Maintain the integrity of historically and culturally significant precincts and places (as indicated in completed surveys). 	<ul style="list-style-type: none"> Actively support local community initiatives to celebrate/ expose locally significant historically and culturally significant precincts and places.
	Historically and culturally significant precincts and places	<ul style="list-style-type: none"> Maintain the Cape Mission Village structure, form, and character of Raithby. 	
Change Actions	Informal settlements to be upgraded		
	Areas for residential densification and infill	<ul style="list-style-type: none"> Focus infill development on undeveloped land within the urban edge of Raithby. 	
	Areas for mixed land use and improved economic opportunity		
	Improved access and mobility	<ul style="list-style-type: none"> Pro-actively improve conditions for walking and NMT within Raithby. 	<ul style="list-style-type: none"> Ensure that the design of all roads within and surrounding the settlement provides for appropriate NMT movement.
	Community/ Institutional use	<ul style="list-style-type: none"> Cluster community facilities together with commercial, transport, informal sector and other activities so as to maximise convenience, safety and socio-economic potential. 	<ul style="list-style-type: none"> Actively support the shared use of community facilities.
	Improved landscaping and public amenity	<ul style="list-style-type: none"> As far as possible, focus investment in parks, open space, and social facilities accessible by public and NMT, in this way also increasing the surveillance of these facilities. 	<ul style="list-style-type: none"> Actively involve local communities in the development and management of public amenities.
New Development Actions	Significant new mixed use development	<ul style="list-style-type: none"> No significant new development is envisaged in Raithby village. 	
	Significant new residential development		
	Significant change to access and mobility provision		

IN PROCESS

Figure 47. Raithby Plan



Part 6.

Implementation Framework

6. Implementation Framework

6.1. Introduction

The SPLUMA guidelines require, as part of the MSDF, a high-level Implementation Framework setting out the required measures that will support adoption of the SDF proposals while aligning the capital investment and budgeting process moving forward. The MSDF Implementation Framework comprises the following sections:

- A proposed settlement hierarchy.
- Priority development areas and themes.
- A policy framework (linked to strategies).
- Guidelines, studies, and information supporting the policies.
- Implications for sector planning and specific development themes, including:
 - Movement.
 - Housing.
 - Local economic development.
- Implications for inter-municipal planning
- Land use management and regulations.
- Catalytic initiatives.
- Further planning work.
- Institutional arrangements.
- Checklists in support of decision-making.
- A municipal leadership and advocacy agenda related to spatial development and management.

6.2. Proposed Settlement Hierarchy

The proposed settlement hierarchy for SM, supporting the spatial plan and proposals for the settlement as a whole, is outlined in Table 28.

6.3. Priority Development Areas and Trends

In terms of the MSDF concept, prioritisation of development – at a broad level – are of two types. The first is spatial and targeted at significant future growth in specific places. The second is sectoral or thematic, focused on the kind of development to be prioritised.

Spatial areas for priority development over the MSDF planning period are:

- Stellenbosch town.
- Klapmuts.

As argued elsewhere in this document, it is here, by virtue of settlement location in relation to broader regional networks and existing opportunity within settlements, that the needs of most people can be met, in a compact settlement form while protecting the municipality's nature and agricultural assets.

Over the longer term, Muldersvlei/ Koelenhof and Vlothenburg/ Lynedoch along the Baden Powell-Adam Tas-R304 could possibly accommodate more growth, and be established as inclusive settlements offering a range of opportunities. However, much work needs to be done to ensure the appropriate make-up of these settlements (including each providing opportunity for a range of income groups) and integration with the corridor in terms of public transport. They are therefore not prioritised for significant development over the MSDF period. Should significant development be enabled in these areas now, it is likely to be focused on private vehicular use and higher income groups (in gated developments), and will in all probability reduce the potential of initiatives to transform Stellenbosch town and Klapmuts.

The focus on Stellenbosch town and Klapmuts does not exclude all development focus in Franschhoek and the smaller settlements. Rather, it is argued that these settlements should not accommodate significant growth as the pre-conditions for accommodating such growth does not exist to the same extent as in Stellenbosch town and Klapmuts. What should be emphasized in Franschhoek and smaller settlements is improving conditions for existing residents and natural growth within a context of retaining what is uniquely special in each (from the perspective of history, settlement structure and form, relationship with nature and agriculture, and so on).

In terms of sectoral or thematic focus, the spatial development priority in all settlements should be to:

- Upgrade the servicing and transformation of informal settlements.
- Provide housing for lower income groups in accessible locations (specifically through infill of vacant and underutilised land or redevelopment of existing building footprints).
- Expand and improve public and NMT routes.
- Improve public and community facilities and places (e.g. through clustering, framing them with infill development to improve edges and surveillance, prioritisation for landscaping, and so on).
- Expand the recognition, restoration, and exposure of historically and culturally significant precincts and places (both in the form and use of precincts and places).

Table 28. Proposed Settlement Hierarchy

SETTLEMENT	ROLE	DEVELOPMENT AND LAND USE MANAGEMENT FOCUS
PRIMARY SETTLEMENTS		
Stellenbosch Town	<ul style="list-style-type: none"> A significant centre comprising extensive education, commercial and government services with a reach both locally and beyond the borders of the municipality, tourism attractions, places of residence, and associated community facilities. 	<ul style="list-style-type: none"> Broadening of residential opportunity for lower income groups, students, and the lower to middle housing market segments. Upgrade of informal settlements. Retention of University functions in town. Enablement of the Adam Tas Corridor. Sensitive residential infill and compaction. Drive to established "balanced" precincts (e.g. Techno Park). Public transport development, travel demand management, parking controls, and NMT improvements.
Klapmuts	<ul style="list-style-type: none"> Focus for economic development (utilizing a favorable location for manufacturing, logistics, and warehousing enterprises) and associated residential opportunity. 	<ul style="list-style-type: none"> Support for development of RE/Farm 736 as a lever to economic development utilising a favorable location for manufacturing, logistics, and warehousing enterprises. Balanced housing provision in Klapmuts South, focused on those who can benefit from employment provision through unlocking Klapmuts North. Establishing the Klapmuts town centre. NMT improvements.
Franschhoek	<ul style="list-style-type: none"> Secondary service centre, significant tourist destination, and place of residence. 	<ul style="list-style-type: none"> Upgrade of informal settlements NMT improvements. Sensitive infill within urban edge providing inclusive housing and extended commercial opportunity (also for small and emerging entrepreneurs). Retention of historic character.
SECONDARY SETTLEMENTS		
La Motte	<ul style="list-style-type: none"> Contained rural settlement. 	<ul style="list-style-type: none"> Diversification of existing activities to curtail the need for movement. Sensitive location of diversified uses closer to the R45. Limited further housing development.
Wemmershoek	<ul style="list-style-type: none"> Contained rural settlement. 	<ul style="list-style-type: none"> Possible extension of residential opportunity linked to re-use of saw-mill site and local employment opportunity.
Groot Drakenstein	<ul style="list-style-type: none"> Contained historic rural settlements. 	<ul style="list-style-type: none"> Accommodation of sensitive private and public sector initiatives offering expanded livelihood (including tourism) and residential opportunity.
Dwars River Valley	<ul style="list-style-type: none"> Contained historic rural settlements. 	<ul style="list-style-type: none"> Accommodation of sensitive private and public sector initiatives offering expanded livelihood (including tourism) and residential opportunity.
Jonkershoek	<ul style="list-style-type: none"> Contained, but dispersed collection of institutional, recreational and residential uses. 	<ul style="list-style-type: none"> Rationalisation and containment of existing occupation rights.
Muldersvlei	<ul style="list-style-type: none"> Contained rural settlement. 	<ul style="list-style-type: none"> Potential future consolidated, inclusive settlement linked to rail/ bus.
Koelenhof	<ul style="list-style-type: none"> Contained rural settlement. 	<ul style="list-style-type: none"> Potential future consolidated, inclusive settlement linked to rail/ bus.
Vlottenburg	<ul style="list-style-type: none"> Contained rural settlement. 	<ul style="list-style-type: none"> Potential future consolidated, inclusive settlement linked to rail/ bus.
Lynedoch	<ul style="list-style-type: none"> Contained village and institutional cluster. 	<ul style="list-style-type: none"> Gradual expansion of unique development model based focused on sustainable living and education.
Spier	<ul style="list-style-type: none"> Contained tourism and cultural centre. 	<ul style="list-style-type: none"> Containment and limited expansion of existing offering.
Raithby	<ul style="list-style-type: none"> Contained historic rural settlement. 	<ul style="list-style-type: none"> Protection of unique historic settlement structure and form.

6.4. Policy Framework

Table 29 below sets out specific spatial policies to support the MSDF concept and settlement plans. In using the policy framework, it is important to note that one specific policy or guideline should not be highlighted or used exclusively to support a specific initiative. Rather, each policy supports the other; each “frames” the other. Thus, initiatives or proposals should be evaluated in terms of the policy framework as a whole.

Further, the successful implementation of spatial policy and guidelines is often dependent on related, supportive, non-spatial policy. This implies policy alignment across municipal functional areas and services.

The table also includes specific work guidelines which begins to frame work to be undertaken – or continued – in support of proposed policies.

Table 29. Proposed MSDF Policies

	STRATEGY	SPATIAL POLICY	NON-SPATIAL, SUPPORTIVE POLICY	WORK GUIDELINES
1	Maintain and grow the assets of SM's natural environment.	<ul style="list-style-type: none"> As far as is possible, protect and expand priority conservation areas, establish ecological linkages, and preserve high-potential agricultural land within the municipality. Resist the subdivision of viable agricultural land unless it forms part of a new balanced, integrated, and inclusive settlement supportive of the MSDF objectives, an agri-village in line with provincial policy for the settlement of farm workers, or the formalisation of the "urban" component of existing forestry settlements (for example Jonkershoek and La Motte). Support compatible and sustainable rural activities outside the urban edge (including tourism) if these activities are of a nature and form appropriate in a rural context, generate positive socio-economic returns, and do not compromise the environment, agricultural sustainability, or the ability of the municipality to deliver on its mandate. 	<ul style="list-style-type: none"> Proactively maintain and upgrade municipal infrastructure services to limit/ mitigate risk to ecological services. Support initiatives to protect water resources, rehabilitate degraded aquatic systems, retrofit or implement water demand management systems, and mainstream water conservation. Support energy diversification and energy efficiency initiatives to enable a transition to a low carbon, sustainable energy future. Support initiatives to extend public access to nature assets without compromising the integrity of nature areas or ecological services. Support initiatives by the private sector to extend environmental stewardship. Assist in initiatives to diversify, strengthen, and open up new opportunities and jobs in the rural economy, including the identification of strategically located land for land reform purposes. Support initiatives to utilise municipally-owned agricultural land for small scale agriculture, forge partnerships with non-governmental or public benefit organisations to assume management responsibilities for commonages, and provide basic agricultural services to commonages. 	<ul style="list-style-type: none"> Prepare and implement management plans for municipal nature reserves and other ecological assets. Prepare and implement invasive species control plans for municipal properties. Prepare and implement initiatives for the rehabilitation of rivers and wetlands in urban areas. Develop resource efficient strategies for all municipal services and land and building development (e.g. compulsory green energy installations in building development, grey water circulation, sustainable urban drainage, etc.). Utilise and contribute to municipal and provincial mapping and planning initiatives that inform land use decision-making supportive of ecological integrity, securing natural resources, and protecting agricultural land of high value. Delineate and manage urban edges and watercourse setbacks in a manner which diverts urban growth pressures away from important natural and agricultural assets. Apply biodiversity offsets in cases where development in areas of endangered and irreplaceable biodiversity cannot be avoided. Actively engage with adjoining municipalities and provincial government to ensure that the integrity of SM's natural environment is maintained (specifically in relation to land use management in adjoining municipal areas).
2	Respect, preserve and grow the cultural heritage of SM.	<ul style="list-style-type: none"> Preserve significant cultural and historic assets within the municipality and grow the opportunity for new or emerging forms of cultural expression through expanding the use of existing cultural assets or supporting new uses for areas or structures of historic value. As far as is possible, protect cultural landscape assets – including undeveloped ridge lines, view corridors, scenic routes, and vistas – from development. Support alternative uses for historic structures and places which will enable its preservation (subject to adherence to general MSDF strategy and policies). 	<ul style="list-style-type: none"> Support the transfer of municipal assets of cultural and historic value to organisations geared to manage these assets sustainably in the interest of the broader community. Manage heritage places and structures in terms of the recommendations of municipal heritage studies. 	<ul style="list-style-type: none"> Maintain and utilise municipal and inter-governmental evaluation and mapping initiatives to inform land use decision-making supportive of cultural integrity, and securing historic places and structures. Actively engage – on a continuous basis – with adjoining municipalities and provincial government to ensure that the integrity of SM's heritage is maintained (specifically in relation to land use management in adjoining municipal areas).
3	<p>Direct significant growth or new development in SM to areas:</p> <ul style="list-style-type: none"> Not identified as of the most critical natural or cultural significance. Where the most opportunity exist in existing infrastructure investment, whether reconfigured, augmented, or expanded. 	<ul style="list-style-type: none"> Prioritise the targeted settlements on the Baden Powell-Adam Tas-R304 corridor for growth/ new development. Over the MSDF period, focus on Stellenbosch town and Klipmuts to accommodate significant new growth. 	<ul style="list-style-type: none"> Align the policy and planning of all municipal services to support accommodating significant growth and new development as proposed in specific areas. Progressively utilise the municipality's significant asset of land as a resource to direct major growth or new development to areas not identified as of the most critical natural or cultural significance. Allocate municipal funds for land acquisition in areas identified as most suitable for growth or new development (specifically for development as lower income housing). 	<ul style="list-style-type: none"> Together with the WCG, undertake inter-service investigations to determine the exact location, size, nature, and form of new settlement areas to accommodate new growth. Develop specific framework planning, land use management, infrastructure, financial, and urban design provisions and directives to ensure the optimal development of identified settlement areas to accommodate new growth.

Table 30. Proposed MSDF Policies (cont.)

	STRATEGY	SPATIAL POLICY	NON-SPATIAL, SUPPORTIVE POLICY	WORK GUIDELINES
4	Clarify and respect the different roles and potentials of settlements in SM and maintain the identity of each.	<ul style="list-style-type: none"> • Ensure that each settlement – large and small – remains a distinct entity, surrounded by natural open space and agricultural land. • Maintain a clear hierarchy of settlements which (in general terms) focus new growth and development in larger settlements to: • Minimise associated impacts on the environment, agricultural land, and natural resources. • Maximise livelihood opportunity through building on the availability of existing public facilities, and commercial opportunity. • Maximise the sustainability of new facilities and commercial opportunity. • Enable the provision of infrastructure in the most efficient and cost effective way. • Minimise the need for inter-settlement movement. • Maximise opportunity for and use of non-motorised and public transport. • Minimise growth in smaller settlements where opportunity is limited while improving access to local services and facilities (required daily). • Maintain and enhance the unique historic, cultural, and settlement characteristics of different settlements. 	<ul style="list-style-type: none"> • Align the policy and planning of all municipal services to support the proposed settlement hierarchy and development/ management approach. • Reinforce the role of Stellenbosch town as a regional service and tourism centre focused on higher order educational, health, government, and commercial uses, as well as unique historic assets. • Reinforce the role of Klapmuts as a potential regional logistics/ warehousing/ manufacturing hub – with associated residential opportunity – based on its location at the intersection of the N1 and regional north/ south movement routes. • Maintain Franschhoek as a centre for tourism and culture with limited growth potential. 	<ul style="list-style-type: none"> • Support the re-location of land extensive manufacturing, logistics, and warehousing enterprises from Stellenbosch town to Klapmuts. • Maintain the nature and form of small rural settlements while enabling small changes towards improving livelihood opportunity.
5	Ensure a balance approach to transport in SM, that appropriately serves regional mobility needs and local level accessibility improvements.	<ul style="list-style-type: none"> • Actively promote compact, dense, mixed use development which reduces car dependence and enables and promotes use of public and NMT. 	<ul style="list-style-type: none"> • Shift municipal resources to include a greater focus on non-motorised, shared vehicle travel, and public transport solutions. • Establish measures to ensure that there is inter-service agreement on the settlement hierarchy, settlement roles, and associated function, modes of transport to be carried, and development/ management approach to be followed in relation to different sections of the municipal movement network. • Work with provincial and national government to affirm the proposed categorisation of movement forms, and associated infrastructure and management needs in Stellenbosch. • Proactively seek management of travel demand among key stakeholders in SM, in a manner that significantly higher passenger volumes is gradually achieved from existing transport infrastructure. • Proactively allocate resources to improve NMT in the municipal area. • Strengthen the role played by rail based public transport, including advocating for a new, lighter, frequent rail service on the Eerste River/ Klapmuts rail line as backbone of transport movement along the Baden Powell-Adam Tas-R304 corridor. 	<ul style="list-style-type: none"> • Assess future transport development/ improvements in relation to impact on the complete settlement system. • Guard against needed/ required vehicular routes of necessity resulting in development of undeveloped land traversed by the route.

Table 31. Proposed MSDF Policies (cont.)

	STRATEGY	SPATIAL POLICY	NON-SPATIAL, SUPPORTIVE POLICY	WORK GUIDELINES
6	Develop all settlements as balanced, inclusive, appropriately serviced, communities, negotiable through NMT and exhibiting a positive relationship with surrounding nature and agricultural land.	<ul style="list-style-type: none"> Work towards and maintain – for each settlement in the municipality – a compact form and structure to achieve better efficiency in service delivery and resource use, the viability of public and NMT, and facilitate inclusion, integration, and entrepreneurship development. Adopt a conservative view towards the extension of existing urban edges over the MSDF period. Actively support infill development and the adaptive re-use of existing structures. Support increased densities in new, infill, and redevelopment projects. Rationalise space standards – especially of social facilities – and release surplus land for other uses, specifically housing. 	<ul style="list-style-type: none"> Proactively drive transport demand management programmes (specifically in and around Stellenbosch town) to curtail private vehicle use. Shift more transport resources to the development and operation of effective public transport services and comprehensive provision of NMT. 	<ul style="list-style-type: none"> Review the delineation of restructuring zones to support the MSDF objectives Support development which emphasizes public transport/ NMT as opposed to private vehicular use. Integrate spatial planning, transport planning (emphasising public and NMT), and social facilities planning. Move away from self-reinforcing conditions for development in terms of car parking minimum standards, and ensure the active participation and collaboration between land owner, developer, and municipality towards the provision of alternatives to car use. Actively engage – on a continuous basis – with adjoining municipalities and provincial government to ensure that the integrity of SM's settlements as contained, balanced communities is maintained (specifically in relation to land use management in adjoining municipal areas).
		<ul style="list-style-type: none"> Support the general upgrading and transformation of existing informal settlements. 	<ul style="list-style-type: none"> Prioritise basic residential services for poor households, specifically in informal settlements, backyard dwellings, and a minimum level of basic services to marginalized rural settlements. Resist existing informal settlements being the only viable settlement option for poor households by supporting the identification and servicing of alternative areas for settlement. Ensure that asset management best practice is followed to maintain existing infrastructure investment and prevent greater replacement cost in future. Reinforce basic service delivery with good quality urban management to support household and economic asset development. 	<ul style="list-style-type: none"> Put in place an inter-governmental portfolio of land (existing and earmarked for purchase), an agreed land preparation programme, and a release strategy, for publicly assisted, lower income housing (including the BNG, FLISP, social/ rental, and GAP markets). Identify alternative settlement locations for poor households, over and above existing informal settlements. To assist the municipality in housing provision, support initiatives to house farm workers on farms (in a manner which secures tenure).
		<ul style="list-style-type: none"> Expand housing opportunity for a broader range of groups – including lower income groups and students – particularly in settlements forming part of the Baden Powell-Adam Tas-R304 corridor. 	<ul style="list-style-type: none"> The planning of infrastructure and social facilities should accommodate the likelihood of back-yarding and its contribution to livelihood strategies. 	<ul style="list-style-type: none"> Develop an inclusionary housing policy and guidelines. Prioritise infill housing opportunity on public land for the BNG, FLISP, social/ rental, and GAP markets. Where possible, proactively plan for back-yarding opportunity in lower income housing projects. Actively support the development of student housing in Stellenbosch town.
		<ul style="list-style-type: none"> Provide and maintain a system of accessible social facilities, integrated with public space and public and NMT routes. 	<ul style="list-style-type: none"> Reinforce social facilities with good quality urban management to ensure service excellence and sustainability. Focus on fewer but better social facilities. 	<ul style="list-style-type: none"> Cluster social facilities. Locate facilities in association with public space and public and NMT routes.
		<ul style="list-style-type: none"> Provide and maintain an urban open space/ public space system integrated with public transport/ NMT, social facilities, and linked to natural assets (e.g. river corridors). 	<ul style="list-style-type: none"> Prioritise open/ public space development in poor and denser neighbourhoods of the municipality. Reinforce open/ public space with good quality urban management to ensure use and safety. 	<ul style="list-style-type: none"> Ensure that the edges between building development and open spaces promote activity and passive surveillance.
		<ul style="list-style-type: none"> Ensure work and commercial opportunity accessible through public and NMT to all communities and providing opportunities for emerging and small entrepreneurs. 		<ul style="list-style-type: none"> Avoid large retail malls and office parks in peripheral locations reliant on private vehicular access and which detract from the viability of established commercial and work areas, and lock out small entrepreneurs.

Table 32. Proposed MSDF Policies (cont.)

	STRATEGY	SPATIAL POLICY	NON-SPATIAL, SUPPORTIVE POLICY	WORK GUIDELINES
7	Actively seek conditions to enable the private and community sectors to align their resources and initiatives with the MSDF principles and proposals.	<ul style="list-style-type: none"> Conscious of public resource constraints, actively seek and support private and community sector partnership to expand livelihood opportunities, settlement opportunity for ordinary citizens, and the national imperative to expand participation in the economy. 	<ul style="list-style-type: none"> Develop an incentives package to support private and community sector partnerships in achieving the MSDF principles and proposals. 	<ul style="list-style-type: none"> Enable private and community sector participation by making known the Municipality's spatial principles and intent in user friendly communiques and guidelines. Require private land owners in key areas to plan and coordinate development collectively (beyond individual property boundaries and interests) in order to ensure appropriate infrastructure arrangements, the provision of inclusionary housing, public facilities, and so on.
8	Focus major development energy in SM on a few catalytic development areas that offer extensive, inclusive opportunity.	<ul style="list-style-type: none"> Focus major development effort in SM on: Unlocking development in Klapmuts North. The Adam Tas Corridor (in Stellenbosch town). 	<ul style="list-style-type: none"> Clearly communicate municipal objectives and principles – across functional areas and services – for development and urban management in catalytic areas. Seek land owner, provincial government, and national government support to develop catalytic areas in the best public interest. Support the establishment of institutional arrangements solely dedicated to enable development of catalytic areas and proceed with work to detail the broader plan and activity programme. Align municipal infrastructure and social services planning to support development in catalytic areas. Use municipal and government owned land assets to support development in catalytic areas. 	<ul style="list-style-type: none"> Ensure that catalytic areas be developed as inclusive, appropriately serviced communities, negotiable through NMT and exhibiting a positive relationship with surrounding nature and agricultural land. Prepare land use management measures to enable development in catalytic areas. Define catalytic areas as "restructuring" or other special-measure areas to enable benefit from national and provincial support and incentives.

6.5. Guidelines, Studies and Information Supporting the Policies

SM, in partnership with other organisations, has completed a number of investigations and surveys to gather information in support of decision-making. For example, extensive work has been done to gather, categorise, and understand information related to historically and culturally significant precincts and places, scenic landscapes and routes, areas of environmental significance, and special places of arrival.

This work is available to assist in decision-making, whether by the municipality, the private sector (in framing development proposals), or members of the public (in responding to development proposals). It represents detail findings of a level not portrayed in the MSDf. In this way, the work forms part of the MSDf implementation framework, and should be actively employed in decision-making. An on-going task for the municipality and its partners is to extend, refine, and integrate the different information resources on an on-going basis.

Similarly, the provincial and national government spheres have completed guidelines and studies which could be used to support the strategies and policies contained in the MSDf. Key guideline documents, studies, and information is listed in Table 33.

Table 33. Supportive Guidelines

	STRATEGY	SPECIFIC PUBLISHED GUIDELINES AND DIRECTIVES
1	Maintain and grow the assets of Stellenbosch Municipality's natural environment.	<ul style="list-style-type: none"> Formally protected areas, critical biodiversity areas and ecological support areas are detailed in the Western Cape Biodiversity Spatial Plan (2017) and associated handbook. Guidelines for the assessment of land use proposals that affect natural areas are contained in Guidelines for Environmental Assessment in the Western Cape. Guidelines for applying biodiversity offsets are contained in the Western Cape Guideline on Biodiversity Offsets (2015) and National Wetland Offset Guidelines. Formal protection mechanisms that can be used for areas of endangered and irreplaceable biodiversity, include: <ul style="list-style-type: none"> Private land: Stewardship Contract Nature Reserves, Biodiversity Agreements, and/ or Protected Environments. Municipal Land: Nature Reserve and/ or municipal Biodiversity Agreement. Guidelines for managing nature, rural and agricultural areas are contained in the Western Cape Land Use Planning: Rural Guidelines (2018). Norms and guidelines for farm size is contained in the Western Cape Land Use Planning: Rural Guidelines (2018).
2	Respect, preserve and grow the cultural heritage of Stellenbosch Municipality.	<ul style="list-style-type: none"> Heritage resources in Stellenbosch Municipality are outlined in a series of reports under the title Draft Revised Heritage Inventory of the Tangible Heritage Resources In the Stellenbosch Municipality (2018).
3	Direct significant growth or new development in SM to areas: <ul style="list-style-type: none"> Not identified as of the most critical natural or cultural significance. Where the most opportunity exist in existing infrastructure investment, whether reconfigured, augmented, or expanded. 	<ul style="list-style-type: none"> Heritage resources studies identified above.
4	Clarify and respect the different roles and potentials of settlements in SM and maintain the identity of each.	<ul style="list-style-type: none"> A study determined the growth potential and socio-economic needs of settlements in the Western Cape outside of the Cape Town metropolitan area using quantitative data is described in Western Cape Government: Growth Potential Study (2014).
5	Ensure a balance approach to transport in SM, that appropriately serves regional mobility needs and local level accessibility improvements.	<ul style="list-style-type: none"> An approach and work programme is contained in Towards A Sustainable Transport Strategy for Stellenbosch Municipality: Reflections on the Current Situation, a Vision for the Future and a Way Forward for Alignment and Adoption (Summary Report December 2017).
6	Develop all settlements as balanced, inclusive, appropriately serviced, communities, negotiable through NMT and exhibiting a positive relationship with surrounding nature and agricultural land.	<ul style="list-style-type: none"> Guidelines for the upgrading of informal settlements are contained in Towards Incremental Informal Settlement Upgrading: Supporting municipalities in identifying contextually appropriate options (https://www.westerncape.gov.za/assets/departments/human-settlements/docs/issp/western-cape_issp_design_and_tenure_options_2016.pdf) Guidelines for the development of human settlements are contained in Guidelines for Human Settlement Planning and Design Volume 1, prepared by the CSIR (https://www.csir.co.za/sites/default/files/Documents/Red_bookvol1.pdf) Guidelines and standards for social facilities are contained in Development Parameters: A Quick Reference for the Provision of Facilities within Settlements of the Western Cape (https://www.westerncape.gov.za/eadp/files/atoms/files/Development%20Parameters%20Booklet%20-%2010%20feb%202014.pdf.)
7	Actively seek conditions to enable the private and community sectors to align their resources and initiatives with the MSDf principles and proposals.	<ul style="list-style-type: none"> The existing proposal for defining Restructuring zones in Stellenbosch town is motivated and illustrated in Stellenbosch: Defining Restructuring Zone for Social Housing (2016).
8	Focus major development energy in SM on a few catalytic development areas that offer extensive, inclusive opportunity.	

6.6. Implications for Sector Planning and Specific Development Themes

6.6.1. Environmental and rural area management

Large parts of SM comprise unique and critical biodiversity and agricultural areas which provide life-supporting ecosystem services. These areas also have qualities and are used for activities critical to sustaining key economic sectors including food and wine production and tourism. The imperatives of resource conservation, biodiversity, and heritage protection may conflict spatially with the need to develop and sustain economic activity and poverty alleviation.

Environmental management frameworks are one tool intended to guide land use decision-making. An environmental management framework is an analysis of biophysical and socioeconomic attributes of an area, and an identification of where specific land uses should be practiced based on those attributes.

In recognition of the intrinsic value of its nature and land assets, SM has developed broad Spatial Planning Categories (SPCs) – outlined in the draft Strategic Environment Management Framework (SEMF) – as a broad guide to land use planning and management in the municipal area. These categories, and associated guidelines, are aligned to international, national and provincial development objectives.

The SEMF (and its SPCs) does not create – or remove – land use rights. Rather, the SEMF is a key decision support tool for any organ of state making decisions that affect the use of land and other resources. It provides the decision-maker with information on the environmental assets and resources likely to be affected by a given land use and sets out associated principles and guidelines. It functions at both the level of policy (what should occur) and as best-available-information (what

is). The relevant organs of state – including the SM as well as provincial and national environmental authorities – must take account of and apply relevant provisions of the SEMF, when making spatial planning and land use decisions. This requirement is given legal emphasis in both SPLUMA (section 7(b)(3)) and the National Environmental Management Act (section 24O (1)(b)(v)).

The SPCs are spatially illustrated in Diagram ... What they comprise as outlined in the SEMF are outlined in the table attached as Appendix 3. The table also contains key policies associated with each category as contained in the SEMF and guidelines contained in the “Western Cape Land Use Planning: Rural Guidelines”.

The table attached as Appendix 4 contains thematic guidelines drawn from “Western Cape Land Use Planning: Rural Guidelines” which may be applicable to different SPCs. Appendix 5 contains norms and guidelines for the size of agricultural holdings as contained in the “Western Cape Land Use Planning: Rural Guidelines”.

As is often the case with work undertaken between different spheres of government – and at different times – the SEMF categories and those contained in the WCG guidelines do not align seamlessly. The table nevertheless attempts to achieve alignment in applicable guidelines. Further, as the SEMF contains many guidelines addressing non-spatial aspects of urban and environmental management – and the current emphasis is the MSDP – the table extracts those guidelines with a specific spatial emphasis.

The categories indicated in bold red are indicated on the SEMF composite SPC map (Diagram ...).

Insert Map: SEMF SPCs map

6.6.2. Movement

6.6.2.1 The relationship between spatial and transport planning

While spatial planning is concerned with the efficient organisation of land use and activities in space the challenge for transport planning is to provide the effective connections between land-uses in order that activities can be reached, and needs fulfilled. Transport planning and spatial development planning therefore are mutually dependent and must be fully interwoven within strategy in order to effect integrated and progressive development outcomes. SM's MSDF and transport plans must not be regarded as separate, independent undertakings but rather be detailed through coordination and advance through implementation in parallel.

Achieving the range of objectives set out in the MSDF is dependent upon comprehensive adjustments to current transport and mobility patterns. Likewise for the shifts in transport and accessibility to come about relies upon close adherence to spatial development principles.

In this section, the conceptual basis and the framework for the essential mobility and transport shifts that will facilitate spatial development outcomes are presented.

6.6.2.2 Traditional practice

Arguably, traditional spatial and transport planning follows a cycle of continuous outward development, serviced primarily through private vehicular mobility. This leads to a vicious cycle of loss of nature and agricultural land, inability to make public transport work, loss of opportunity for those who cannot afford vehicles, congestion on roads, provision of further road capacity, and further sprawl. Progressive cities pursue higher densities, a mix of uses, and public and NMT transport; a virtuous cycle focused on inclusive and sustainable urban settlement and transport management emphasising the importance of

people and place over motor vehicle led planning and development.

6.6.2.3 Required shifts

Transport in SM (comprising both passenger and freight trips) is on a path of continued increase for the foreseeable future. To align with both broader transport policy objectives this growth must be rigorously managed such that resulting transport patterns do not undermine broader spatial and development goals. At this stage, unconstrained movement by private vehicle has now resulted in road corridors operating beyond capacity during peak periods as well as through the day and so roads are unable to fulfil their intended function as effective movement spines, and prevent the effective serving of the adjacent land uses. The spatial development response, if the system doesn't change, is a continuing pattern of new development shifting outwards to and beyond the urban edge, resulting in ever lower density and loss

of green and agricultural assets, responses which are the exact opposite of the desired spatial policy.

Figure 48 illustrates a conceptual approach to align transport planning with the MSDF. The graph shows passenger trips steadily increasing into the future. With no intervention on current trends this implies that total vehicle trips will increase at a slightly higher rate due to steadily increasing levels of car ownership and no improvement to public transport or other transport alternatives. The green line indicates the intervention scenario with total vehicle trips, showing a levelling off, a maximum point, followed by a steady decline. This represents the target, to be achieved through both managing the supply of transport and the demand for trip-making, such that total vehicle trips undertaken reduce levels back to current levels and continue to decline into the future. The interventions required to achieve this central objective are outlined in the following sections.

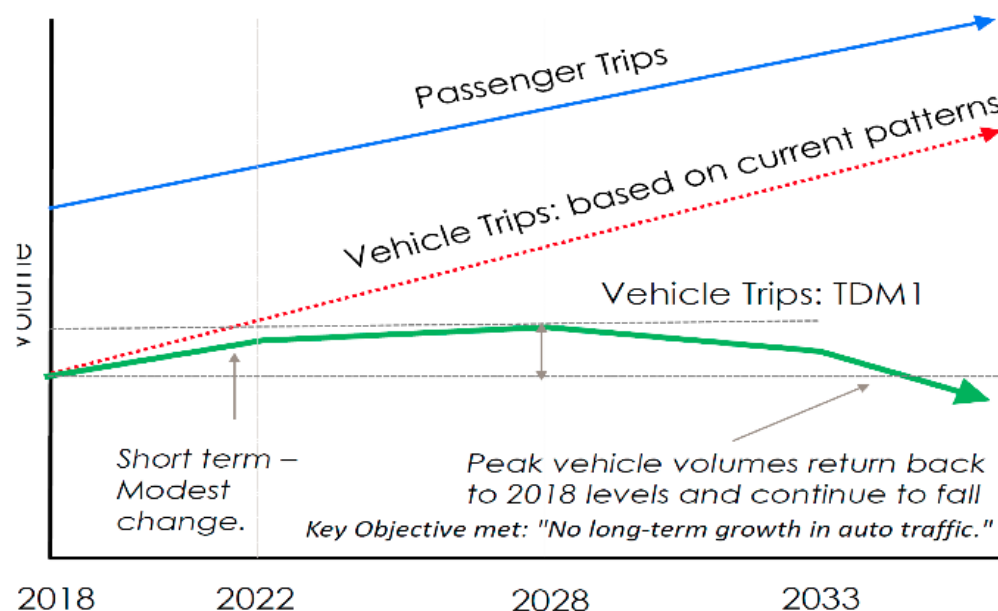


Figure 48. A conceptual approach to align transport planning with the MSDF

Achieving change in transport patterns requires a combination of interventions including:

- e. Changes in mode of travel (of a given trip) includes moving:
 - From low occupancy motor vehicles to shared, higher occupancy vehicles and onto public transport.
 - From motor vehicle to non-motorised (cycling and walking) transport.
- f. Changes in transport demand in terms of the trip itself:
 - Undertake the trip at a different time, (e.g. move outside of peak travel).
 - Reduce the trip frequency.
 - Change trip origin or destination (implies land use change).

For the transport specific strategies to manage travel demands we concentrate on (A), providing a choice of alternative modes of travel to enable shifts to occur. We need to work to a situation where future growth is enabled by the introduction of shared transport options, formal public transport and for the shorter journeys provision for safe cycling and walking.

Improved and expanded public transport is essential for the future development of Stellenbosch. Current road based public transport offered by the minibus taxi industry provides an informal, unscheduled service used by lower income households who have no access to a car. Necessary improvements include:

- Minimum service levels and increased service availability through the day
- Improved reliability, safety and passenger comfort
- Financial support offering a level of fare relief.

To reverse the trend of ongoing growth in commuters by private transport, and to accommodate further commuting growth and

support spatial development requirements of Stellenbosch improved quality of public transport and an expanded network of services are vital. This migration to formal public transport and a full network will require a combination of:

- Corporate/ business park services.
- University contracted services.
- The emergence of shuttle and scheduled public transport routes as new services partially achieved through the progressive upgrading of MTB routes and operations.
- Park-and-ride operations.
- New services plus progressive upgrading of MTB routes and operations.
- Improved commuter rail.
- Local light rail service option.

6.6.2.4 A conceptual public transport network supporting the MSDP

Figure 49 illustrates a concept of a future public transport network for SM, including:

- An intensified passenger service on the rail corridor.
- Formal scheduled bus routes and indicative main stops.
- Park and ride routes with indicative main transfer park and ride stations.

Ultimately the required transport outcomes include running scheduled formal public transport services along all main arterials routes between main commuting origins and destinations as illustrated in Table 34 below.

Table 34. Desired public transport routes

SECTOR	ROUTE	CONNECTING SETTLEMENTS	MODE
R310 / Adam Tas / R304 Development Corridor	R310	Eerste River, Lyndoch, Vloffenburg to Stellenbosch	Road and rail
	R304	Koelenhof to Stellenbosch	Road and rail
	R304	Durbanville and Brackenfell to Stellenbosch	Road and rail
North	R44	Paarl and Klapmuts to Stellenbosch	Road and rail
West	M11/ Adam Tas	Bellville and Kuils River to Stellenbosch	Road and rail
South	R44	Strand and Somerset West to Stellenbosch	Road
East	R310	Franschhoek and Pniel to Stellenbosch	Road

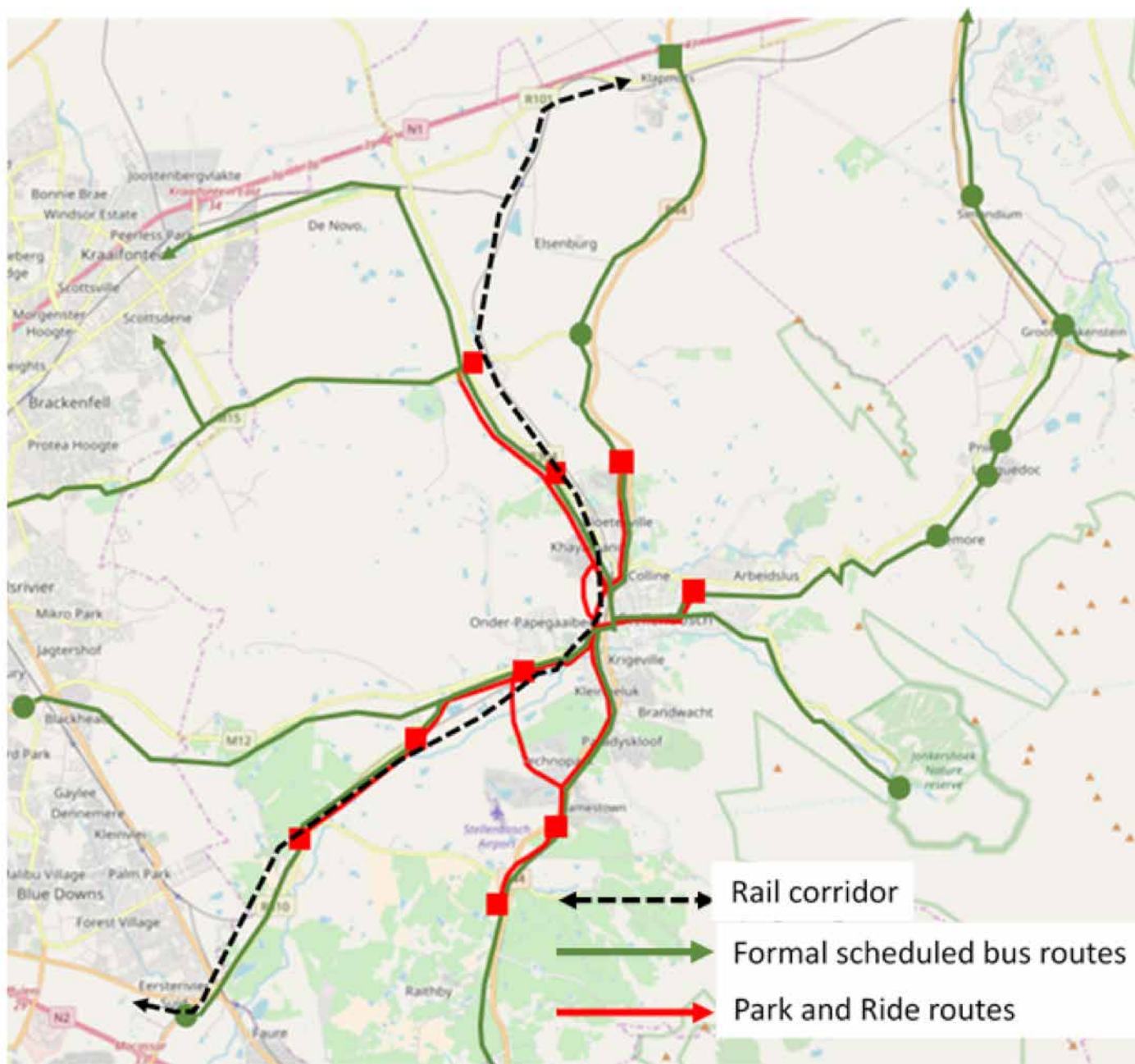


Figure 49. A conceptual public transport network for SM

Potential public transport nodes along main arterial routes into Stellenbosch are shown in Table 35 and potential park and ride locations in Table 36 (targeted settlement nodes are highlighted, and nodes on the rail corridor are shaded).

The future public transport network will develop steadily over time and can only advance successfully through a well-structured and integrated process involving many role players. Park and ride sites along arterial routes are a top priority for development, allowing current private car commuters the option of driving to these nodes from where demand thresholds will enable a combination of public shuttle services and corporate chartered services to operate between central Stellenbosch and other main employment nodes. Park and ride sites along the Adam Tas Corridor will generate activity and so provide the base thresholds for some retail, commerce and other service developments which in turn support planned settlement growth at the nodes. Other park and rides will be sited along routes where development along the corridor must be prevented. Here, careful placement and land-use control must be heeded such that mobility benefits are achieved without compromising the spatial development plans.

6.6.2.5 The design of routes

Given the dependence of citizens on NMT, and the need to shift more people to public and NMT, it is critical that the design of roads – whether new connections or improvements and enhancements to existing routes, consider NMT needs. Arguably, if included in the design of projects upfront, the provision of NMT facilities will not add significantly to project cost. Similarly, road design should provide for future regular public transport services (as opposed to private vehicular use only).

6.6.2.6 Transport within settlements

Within all settlements transport for NMT should be expanded, recognizing the reality that the majority of citizens do not have access to provide vehicles.

Table 35. Potential public transport nodes

R310 / ADAM TAS	R44 SOUTH	R310 to R45	R44	R304
Eerste River	Somerset West	Franschhoek	Klapmuts	Joostenberg
Lyndoch	Winery Road	Pniel	Elsenberg	Koelenhof
Vloffenburg	Annandale Road	Kylemore	Kromme Rhee	Nuutgevonden
Droë Dyke/ Oude Libertas	Jamestown	Idas Valley	Welgevonden	Kayamandi Bridge
Central Station	Techno Park		Cloetesville	
Plankenbrug	Mediclinic			

Table 36. Possible park and ride locations

R310 / ADAM TAS	R44 SOUTH	R310 to R45	R44	R304
Lyndoch	Annandale Road	Kylemore	Welgevonden	Koelenhof
Vloffenburg	Jamestown	Idas Valley		Nuutgevonden
Droë Dyke/ Oude Libertas	Techno Park			



























































No.	Road	Road Name	Current Provision			Extend Provision for..				Future Corridor Development	
										Transport	Land Use Activity
1-2	R44	Strand Road								Road based formalised public transport priority route.	Limit / prevent new development. Scenic Route
3-7	R310	Baden Powell								Rail and road high capacity primary public transport priority route	Encourage compact, mixed use, redevelopment and contained growth at the specific nodes
8-10	M12	Polkadraai Rd								Road based formalised public transport and P&R priority route.	Mobility Route. Limit / prevent new development.
11	M23	Bottelary Rd								Road based formalised public transport priority route.	Compact, mixed use, redevelopment and contained growth at Koelenhof & Devenvale.
12-14	R304	Malmesbury Rd								Road based formalised public transport and P&R priority route.	Encourage compact, mixed use, redevelopment and contained growth at Koelenhof node & R304-R101 node (Sandringham & Joosetenburg)
15-17	R44	Klapmuts Rd								Road based formalised public transport and P&R priority route.	Limit / prevent new development. Scenic route. Focus compact, mixed use development at Klapmuts
18-20	R310	Banhoek Rd								Road based formalised public transport route.	Scenic Route. Consolidate development at specific nodes
21		Kromme Rhee Rd								Rail and road public transport & P&R linking route	Encourage compact, mixed use, redevelopment and contained growth at Koelenhof only.
22		Annandale Rd								Road based linking route	Mobility route. Limit / prevent new development. Scenic Route
23-24	R45	Paarl-Franschoek								Road based public transport priority route.	Mobility route. Limit / prevent new development. Scenic Route
25-27	R301	Wemmeshoek Rd								Road based public transport priority route.	Mobility route. Limit / prevent new development

Figure 50. Future Development of Arterial Road Transport Corridors in and around Stellenbosch (Transport Futures, 2018)

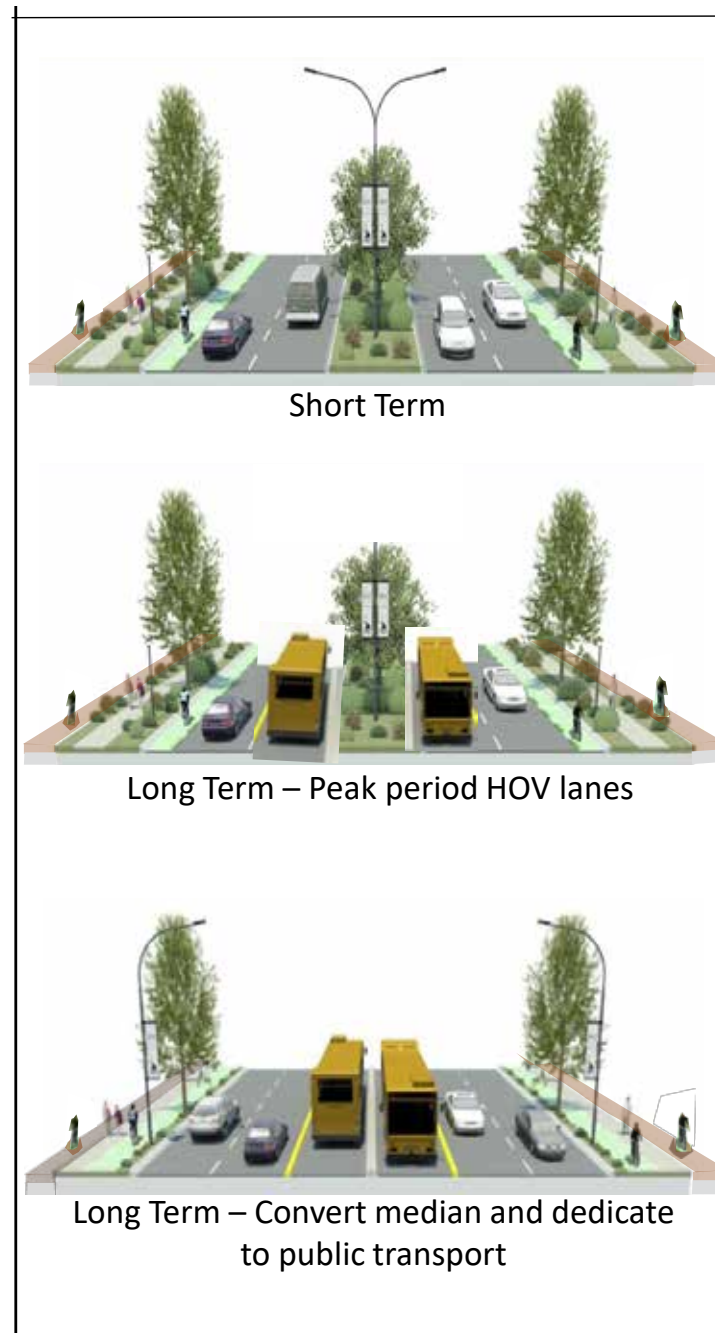


Figure 51. Future recommended road designs - cross sections for public transport and NMT (Transport Futures, 2018)

6.6.3. Housing

In broad terms, the MSDF has the following implications for housing planning and delivery:

- Stellenbosch town and Klapmuts should be the focus for accommodating significant new growth over the short to medium term. It is in these towns where livelihood opportunities can be best assured and where people can best be accommodated without resulting in significant movement of residents in search of work and other opportunities.
- The housing focus in other settlements should primarily be to improve conditions for existing citizens, specifically those in informal settlements, backyard structures, and those lacking security of tenure.
- Over the longer term, it is believed that some settlements along the Baden-Powell-Adam Tas-R304 corridor can support larger populations, particularly the broader Muldersvlei/ Koelenhof and Vloffenburg/ Spier/ Lynedoch areas. A critical pre-condition for larger inclusive settlements in these areas is the establishment of a quality, frequent public transport service (in time possibly rail-based) serving the corridor and all settlements along it.
- A critical pre-condition for larger inclusive settlements in these areas is the establishment of a quality, frequent public transport service (in time possibly rail-based) serving the corridor and all settlements along it.
- In all settlements housing development should focus – while considering the unique character and nature of existing areas – on densification, infill opportunity (also rationalizing and improving edge conditions to roads, open spaces, and community facilities), and the re-use of disused precincts, in this way maximizing the use of available land resources, minimizing pressure for the lateral expansion of settlements, enabling efficient service provision, and the

viability of undertaking trips by local public transport, cycling and walking.

- All housing projects should – as far as possible – focus on a range of typologies, enabling access for a range of income groups.
- All housing projects should consider the availability of social facilities and the daily retail needs (e.g. for purchasing food stuffs) of residents, enabling less dependence on the need to move other than by walking and cycling to satisfy everyday needs.
- As far as possible, sufficient accommodation should be provided associated with education institutions in Stellenbosch town to enable all those who wish to reside in proximity to their institutions, at a reasonable cost, the opportunity to do so.
- Farmers should be actively supported to provide agri-worker housing (following the guidelines contained in “Western Cape Land Use Planning: Rural Guidelines”).
- Gated residential development is not favored. Public components of development should remain public, enabling integration of neighbourhoods and through movement. Security to private components of developments could be provided through other means than the fencing and access control of large development blocks or areas neighbourhoods.

6.6.4. Local economic development

In broad terms, the MSDF has the following implications for local economic development:

- A precautionary approach to the municipality's assets of nature, agricultural land, scenic landscapes and routes, and historically and culturally significant precincts and places, which underlies critical livelihood processes, including a strong tourism economy.

- Stellenbosch town and Klapmuts should be the focus for significant commercial and industrial use, with gradual relocation of larger industrial enterprises to Klapmuts (benefitting from its regional freight and logistics locational advantages).
- Franschhoek maintaining a focus on commercial uses serving local residents and the tourism economy.
- Small rural settlements should contain commercial activities meeting the daily needs of residents and work spaces enabling livelihood opportunity.
- The location, planning, and design of commercial and office developments to compliment and assist in improving the economic performance, usability, attractiveness and experiential quality of existing town centres. “In centre” and “edge of centre” developments are the recommended location for new large scale commercial/ retail developments, having the least negative and most positive impacts to the town centre and town as a whole (as indicated in evidence gathered in support of developing the PSDF).
- Active support for non-residential development integrating fragmented parts of settlements and specifically integrating and offering access and opportunity to poorer settlements.
- Rural place-bound businesses (including farm stalls and farm shops, restaurants and venue facilities) of appropriate location and scale to complement farming operations, and not compromise the environment, agricultural sustainability, and the scenic, heritage and cultural landscape (following the guidelines contained in “Western Cape Land Use Planning: Rural Guidelines”).
- Rural place-bound agricultural industry related to the processing of locally sourced (i.e. from own and/or surrounding farms) products, and not compromise the environment, agricultural

sustainability, and the scenic, heritage and cultural landscape (following the guidelines contained in "Western Cape Land Use Planning: Rural Guidelines").

- Support for various forms of leisure and tourism activities across the rural landscape, of appropriate location, scale, and form not to compromise the environment, agricultural sustainability, and the scenic, heritage and cultural landscape (following the guidelines contained in "Western Cape Land Use Planning: Rural Guidelines").

6.7. Land Use Management Guidelines and Regulations

SM has prepared a draft Integrated Zoning Scheme (IZS) to standardize, review and address the main shortcomings of the current zoning schemes of earlier administrations. These older schemes are the Stellenbosch, Franschhoek, Kayamandi, and Rural Area zoning schemes. Each regulated land in different ways.

The draft IZS was approved by Council during October 2017 to enable a second round of public participation. Additional comments and inputs received from interested and affected parties will be reviewed and the edited IZS will be submitted to Council for adoption during 2019.

The MSDF and IZS are aligned in that both planning instruments pursue the same objectives. For example, the IZS provides for:

- A Natural Environment Zone, aimed at protecting assets of nature while conditionally providing for other associated uses, including access routes, sports activities, and tourist facilities and accommodation, which ensures enjoyment of these areas for leisure and recreation.
- An Agricultural and Rural Zone, aimed at protecting productive agricultural land while also enabling the diversification of farm income and provision of services to agri-workers.

- Overlay zones recognizing the unique characteristics of the Stellenbosch, Franschhoek, Jonkershoek Valley, Dwars River Valley, and Ida's Valley historical areas, scenic routes across the Municipal area, and specific local economic areas.
- The densification of traditional residential areas through second dwellings, guest establishments and provisions for home-based work.

Some of the major interventions proposed in the MSDF may require additions to the IZS. For example, development of the Adam Tas Corridor may be assisted through an overlay zone, outlining land use parameters and processes specific to the development area. This, however, will be clarified as the project specifications are finalised (anticipated during the 2019/ 20 business year).

6.8. Implications for Inter-Municipal Planning

The sections below summarises general and place-specific issues related to spatial planning and land use management impacting on SM within the context of neighbouring municipalities.

6.8.1. General inter-municipal planning issues

It would appear that municipalities adjoining the CCT are experiencing (as a result of a combination of factors related to land availability and price, traffic congestion, and lifestyle demand), increased demand for:

- The location of corporate headquarters and centralised, large, space extensive warehousing/ logistic complexes proximate to major inter regional routes.
- Lifestyle residential "estates", proximate to nature.
- Low income settlement opportunity in less "competitive" locations with easier access to social facilities, work, and lower travel cost.

These demands manifest in increased stress on the adjoining municipalities' ability to curtail the sprawl of settlements and protect agricultural land, and to meet "own" demands for lower income settlement opportunity and associated social facilities. Importantly also, it requires an inter-municipal view of the role of the N1 corridor in the metropolitan space-economy.

The issue of low income settlement opportunity is particularly significant. As indicated in the CCT MSDF, the City has to deliver some 35 000 housing opportunities each year – over 20 years – to meet the current backlog. Actual delivery is far lower, and, as a result, the MSDF notes a transition from formal, market-led housing supply, to informal solutions. There is no doubt that the demand for housing of residents and workers in the CCT's, is beginning to "spill-over" to adjoining settlements and municipalities, where land invasions are occurring for the first time.

In some ways it would appear that municipalities adjoining the CCT are now confronted with significant challenges not experienced before, and directly related to the CCT. Arguably, municipalities adjoining the CCT are not resourced to manage these pressures on their own.

The existing institutional response to these challenges – contained in municipal policy documents – is primarily that it is a spatial issue, to be addressed by collaborative planning forums between municipalities.

As indicated in the CCT MSDF, "Cape Town functions within a regional spatial structure, where the settlements, transport network, agricultural resources and natural systems all interact in a system supporting the economy, services and food security." The same applies to adjoining municipalities. It is doubtful whether spatial planning, or collaborative forums comprising planners from the relevant municipalities, will succeed in managing the pressures associated with the current settlement "system". Increasingly, the argument could be made for a metropolitan-

wide planning authority dealing with inter-municipal planning issues, and the associated resourcing required.

6.8.2. Place-specific inter-municipal planning issues

The table below summarises key place-specific inter-municipal planning issues. As a basis, the issues and comments as contained in the Cape Town MSDf are listed, expanded upon with comments from the perspective of the Stellenbosch MSDf.

Table 37. Place-specific inter-municipal planning issues

URBAN GROWTH ISSUE	MANAGEMENT REQUIREMENT (AS STATED IN THE CAPE TOWN SDF)	STELLENBOSCH MSDf VIEW
DE NOVO		
Uncertainty regarding the future function and development of provincial land located off Old Paarl Road (R101) in the SM area, directly abutting the CCT-SM boundary east of Bloekombos. Historically the land was farmed but it is subject to escalating urban development pressures.	<ul style="list-style-type: none"> There is increasing urban growth pressure in the north-eastern metro-corridor. As the Du Novo land is in close proximity to the Paarl-Cape Town commuter railway line, the R101 and N1, it is subject to escalating development pressure. In making a decision on its future, consideration needs to be given to its past use for intensive agriculture, especially as favourable soil types and access to the Stellenbosch (Theewaterskloof) Irrigation Scheme underscore its agricultural significance. Its location abutting the CCT-SM boundary, and in close proximity to the Bloekombos settlement, necessitates that the two municipalities collaborate in assessing the optimum and sustainable use of the De Novo land. 	<ul style="list-style-type: none"> From the perspective of the Stellenbosch MSDf, there is no doubt that there will be increasing pressure for development along the whole of the N1 corridor, including the old Main Road, from the CCT boundary through to DM (including Ben Bernard). Ideally, this corridor requires a inter-municipal planning intervention, together with the WCG. The initiative should identify areas to be prioritized for development, areas to be left for agriculture and the continuity of natural systems, phasing, and so on. SM is of the view that, over the short to medium term, Klapmuts should be prioritized.
KLAPMUTS		
Both Stellenbosch and Drakenstein municipalities have identified Klapmuts as a prospective sub-regional urban node along the N1. Residential and industrial development opportunities have been identified north and south of the N1, and the area has also been identified as having potential to serve as a regional freight logistics hub.	<p>To take develop proposals forward the following needs to be considered:</p> <ul style="list-style-type: none"> Existing infrastructure (i.e. N1, R101, R44 and the Paarl-Bellville railway line and station) which dictate the location of certain transport, modal change or break-of-bulk land uses. The existing development footprint of Klapmuts as well as potential development land parcels including land north of the N1 and the N1-R101- railway line corridor east of Klapmuts, the latter extending up to Paarl South Industria and including a proposed green logistics hub. Potential for an inland port and agri-processing, packaging and dispatch platform. Avoiding daily movement across the N1 between place of work and residence or social facilities. Achieving an appropriate metro gateway. A collaborative sub-regional growth management spatial framework between the Stellenbosch and Drakenstein municipalities in order to avoid unsustainable "twin developments". 	<p>The SM MSDf supports development of Klapmuts (north and south) as a significant area of economic opportunity – located on the metropolitan area's major freight route – and place of settlement proximate to work opportunity. The Distell led development of Farm 736/RE is supported, unlocking work opportunity for a significant community in an area of lesser agricultural opportunity and nature/cultural value. Key considerations into the future include:</p> <ul style="list-style-type: none"> Realistic assumptions about the extent of future land use categories and take-up rates. Careful consideration of land use change east of Farm 736/RE. NMT integration of the north and south across the N1. Careful consideration of high-end, gated residential development capitalising on the private vehicular accessibility of Klapmuts. <p>The area stretching from Klapmuts to Paarl, situated between the N1 and Old Paarl Road – including Ben Bernard – appears to have significant metropolitan-wide potential for enterprises depending on good freight access. Its future should also be the subject of inter-municipal planning.</p>

Table 38. Place-specific inter-municipal planning issues (cont.)

URBAN GROWTH ISSUE	MANAGEMENT REQUIREMENT (AS STATED IN THE CAPE TOWN SDF)	STELLENBOSCH MSDF VIEW
SIMONDIUM / GROOT DRAKENSTEIN		
The threat of ribbon-development along the DR45 between Simondium and Groot Drakenstein impacts on both the scenic tourism route and significant heritage and agricultural working landscapes.	<p>The close proximity of Simondium and Groot Drakenstein either side of the Drakenstein and Stellenbosch municipal boundary requires co-ordination of their respective municipal urban development programmes in order to ensure:</p> <ul style="list-style-type: none"> Limiting ribbon development along the R45 and a restricting settlement footprint along such route. Containing growth of the settlements through infill, densification and strict management urban edges. Appropriate development abutting the R45. Appropriate usage of underdeveloped tracts of land between the two settlements (e.g. the Bien Donne provincial land) in order to retain/ reinforce the natural, heritage and agricultural working landscapes. 	<ul style="list-style-type: none"> From the perspective of the Stellenbosch MSDF, the areas towards Franschhoek – and including smaller settlements – offer less livelihood opportunity than the Baden Powell-Adam Tas-R304 corridor and contain high value nature, culture and agricultural assets. It is not the appropriate focus for accommodating significant new growth. The Paarl/ Franschhoek corridor is progressively occupied by those who can – for now – bridge space in private vehicles, in the process displacing agricultural land. Further mono-functional, gated residential development in the area should be resisted, and livelihood and settlement conditions in existing settlements be improved without enabling significant new growth. A specific concern to SM is that the extent and nature of development in the southern parts of DM will increase pressure for state assisted housing in and around Franschhoek as little affordable housing is provided as part of the new developments along the R45.
ZEVENWACHT / BOTTELARY HILLS		
There is a threat to the visual amenity of the Bottelary Hills within the eastern visual envelope of the metro area.	<ul style="list-style-type: none"> Increased demand for residential development extending northwards from Polkadraai Road (M12) to Bottelary Road (M23) including Zevendal, Zevenwacht, Klein Zevenwacht and Haasendal, given the following: <ul style="list-style-type: none"> Metropolitan access via the Stellenbosch Arterial/ Polkadraai Road (M12), as well as east-west linkages (e.g. Saxdowns Road). Up-slope localities (e.g. Langverwacht Road) enjoying panoramic views of the Peninsula. Close proximity to world-renowned vineyards and wineries (Zevenwacht, Hazendal). Such urban growth is eroding the visual amenity of the Bottelary Hills, impacting on the agricultural working landscape and prompting demand for developments within adjacent areas in the Stellenbosch municipal area enjoying similar locational advantages. Accordingly, cross-boundary urban growth management collaboration is required between the CCT and Stellenbosch Municipality to ensure that the visual, natural and agricultural integrity of the Bottelary Hills is maintained. 	<p>Given the location of the area, and access, pressure for development is expected. The CCT should hold its urban edge, while there appears to be significant infill (lower income) housing opportunity east of Van Riebeeck Road between Polkadraai Road and Baden Powell Road.</p>

Table 39. Place-specific inter-municipal planning issues (cont.)

URBAN GROWTH ISSUE	MANAGEMENT REQUIREMENT (AS STATED IN THE CAPE TOWN SDF)	STELLENBOSCH MSDF VIEW
FAURE		
There is a development threat to “winelands” in the Faure Hills.	<ul style="list-style-type: none"> Residential development within the CCT municipal boundary between Faure and Firgrove including Croydon Vineyard Estate, Croydon Olive Estate, Kelderhof Country Estate, and Sitari Fields, is prompting demand for similar residential developments to the north of the CCT municipal boundary and urban edge within the Faure Hills. The location of such demand within the Stellenbosch municipal area is motivated by developers given the following: <ul style="list-style-type: none"> Convenient linkages to bulk services within the downslope CCT developments. Access to potable water given the nearby Faure water-works and reservoir. Being highly accessible given the proximity of the N2 and R102. Panoramic views of False Bay and the Peninsula. Being within a viticulture area with access to renowned wineries (e.g. Vergenoegd) and within close proximity to Dreamworld. Such development outside the CCT urban edge will impact directly on the “winelands” within the SM area. Accordingly, a collaborative urban edge/ municipal boundary assessment undertaken by CCT and SM is required to soften the CCT urban edge, especially where such edge coincides with the municipal boundary and directly abuts vineyards. This would serve to lessen the threat to the adjacent viticulture areas and address the misperception of developers regarding extending the urban edge within the Faure Hills to benefit from its locational advantages. 	<ul style="list-style-type: none"> Further encroachment of agricultural land should be resisted. Arguably, however, it is development supported by the CCT that has led to significant pressure on agriculture and nature areas within SM.
HELDERBERG HILLS		
Settlement model roll-out threatens to agricultural working and heritage landscapes between Stellenbosch and Helderberg.	<ul style="list-style-type: none"> Settlement types, their roll-out and management within the Stellenbosch-Helderberg rural interface area demonstrates the following settlement policy disparities: <ul style="list-style-type: none"> A CCT settlement policy underpinned by strict settlement growth management (i.e. containment) and limited non-agricultural and new settlement development in its rural area. A SM settlement policy focussing on “inter-connected nodes” with existing rural and urban settlement transformation through densification and extension. The roll-out of the “inter-connected node” settlement model within the Stellenbosch-Helderberg interface rural area raises concern in the following respects: <ul style="list-style-type: none"> Various urban settlement forms, architectural styles and land use components not compatible with the existing heritage and agricultural working landscape (e.g. James Town/ De Zalze node). Promotion of ribbon development along the R44 (e.g. James Town/ De Zalze node). Development or extension of inter-connected nodes in close proximity to the CCT urban edge (e.g. Raithby, De Wynlanden Estate) with such developments prompting similar development demand outside the CCT urban edge. Ensuring the integrity of heritage and agricultural working landscapes that comprise the Stellenbosch-Helderberg rural interface requires a CCT-SM collaborative planning forum to achieve synergy between the disparate settlement policies. 	<p>The concept of “inter-connected” nodes contained in the previous Stellenbosch MSDF is mis-represented by the CCT. The concept acknowledges the existence of existing settlements – including Raithby – but does not necessarily imply its further development. This notion is re-affirmed in the new MSDF. In many ways, the CCT, through allowing land use change, created extreme pressure on agricultural land within the jurisdiction of SM.</p>

6.9. Catalytic Initiatives

6.9.1. Adam Tas Corridor

The most strategically located land in Stellenbosch town comprises large industrial spaces, including land previously occupied by Cape Sawmills and Distell facilities. A significant proportion of these have been vacated or will be vacated in the foreseeable future in response to changes in the operating context of manufacturing enterprises. Thoughtful redevelopment of these spaces – at scale – can contribute meaningfully to meeting existing challenges and MSDF objectives.

In simple terms, the concept is to launch the restructuring of Stellenbosch town through redevelopment of the Adam Tas Corridor, the area stretching along the R310 and R44 along the foot of Papegaaiberg from the disused Cape Sawmills site in the west to Kayamandi and Cloetesville in the north.

It forms the western edge to the town but is not well integrated with the rest of Stellenbosch, largely because of the barrier/ severance effect of the R44 and the railway line. Much of the area has a manufacturing use history. It includes the disused sawmill site, the government owned Droë Dyke area, Distell's Adam Tas facility, Oude Libertas, various Remgro property assets, Bosman's Crossing, the rail station, Bergkelder complex, Van der Stel sports complex, the George Blake Road area, and parts of Kayamandi and Cloetesville. Underutilised and disused land in the area measures more than 150ha.

Conceptually, a linear new district within Stellenbosch is envisaged adjacent to and straddling (in places) Adam Tas Road, the R44, and railway line. Overall, development should be mixed, high density and favour access by pedestrians and cyclists.

A central movement system (with an emphasis on public transport and NMT) forms the spine of the area, and is linked to adjacent districts south

and west of the corridor. The corridor retains west-east and north-south vehicular movement (both destined for Stellenbosch town and through movement) as well as the rail line. Remote parking facilities will form part of the corridor concept, with passengers transferring via public transport, cycling and walking to reach destinations within the town of Stellenbosch. The R44 and rail line specifically could be bridged in parts to enable integration across the corridor to access adjacent areas.

The corridor is not envisaged as homogenous along its length, with uses and built form responding to existing conditions and its relationship with surrounding areas. Conceptually, three areas could be defined, each linked through a sub-district.

- The southern district comprises the disused sawmill site, Droë Dyke, and the Adam Tas complex. It can accommodate a mix of high density residential and commercial uses, as well as public facilities (including sports fields).
- The central district is the largest, including Bosman's Crossing, the Bergkelder, and the Van der Stel Sports complex. Here, development should be the most intense, comprising a mix of commercial, institutional, and high density residential use. The "seam" between this district and west Stellenbosch is Die Braak and Rhenish complex. The southern and central districts are linked through Oude Libertas. Oude Libertas remains a public place, although some infill development (comprising additional public/ educational facilities) is possible.
- The northern district focuses on the southern parts of Kayamandi. The central and northern districts are linked through George Blake Road. This area effectively becomes the "main street" of Kayamandi, a focus for commercial, institutional, and high density residential use integrated with the rest of the corridor and western Stellenbosch town.

Along the corridor as a whole – depending on local conditions – significant re-use of existing

buildings is envisaged. This is seen as a fundamental prerequisite for diversity, in built character and activity (as reuse offers the opportunity for great variety of spaces). Aspects of the industrial use history of the area should remain visible. A range of housing types, in the form of apartments should be provided, accommodating different income groups and family types.

Redevelopment in terms of the concept offers the opportunity to:

- Grow Stellenbosch town – and accommodate existing demand – in a manner which prevents sprawl, and create conditions for efficient, creative living and working.
- Stimulate and act as a catalyst for the development of improved public transport and NMT
- Rethink and reconstruct infrastructure, and particularly the movement system, including the possible partial grade separation of east-west and north-south movement systems, in turn, integrating the east and west of town and releasing land for development.
- Integrate Kayamandi and Stellenbosch town seamlessly.
- Shift new development focus to the west of town, with Die Braak and Rhenish complex forming the center and seam between the new west and east of Stellenbosch town.
- Accommodate the parking of vehicles on the edge of town whilst the corridor provides for and promotes a greater focus on pedestrianism and cycling into the core town.
- Accommodate uses which meet urgent needs, specifically higher density housing and university expansion, also assisting in establishing a compact, less sprawling town, public transport, and pedestrianism.
- Increases land value east of the R44 and in the area between Kayamandi and the Bergkelder complex.

Existing manufacturing enterprises can gradually relocate to the north, closer to the N1 logistics corridor (as planned by Distell for their operations).

A spatial plan for the corridor is needed. This plan should spell out – in broad terms – what activities should ideally happen where (and in what form), where to start, and what infrastructure is anticipated by when. However, a spatial plan is not enough. The preparation of the plan has to be situated within a broader surround of development and transport objectives, institutional arrangements and agreements, and parallel professional work streams.

Institutional arrangements are critical. It would include broad agreement between land owners and the municipality to pursue the corridor development, the objectives to be sought, how to resource the work, and associated processes. It would appear that the private sector is best situated to lead the initiative. Land owners – unlike the municipality – have the resources to undertake planning.

Parallel work streams should explore:

- Economic modelling of development options.
- Corridor access and mobility planning and scenario modelling.
- How ordinary citizens with limited material wealth can benefit from the development.
- The nature of efficient, “smart” infrastructure to support living, services, and business.

Critically, development of the corridor needs to be supported by broader strategies impacting on Stellenbosch town as a whole. These include:

- Focusing University functions on the town (as opposed to decentralisation).
- Private vehicle demand management (specifically to curtail the use of private vehicles for short trips within the town).

Critical also, both for the Adam Tas Corridor and the broader Baden Powell-Adam Tas-R304

development corridor is to explore the feasibility of introducing alternative rail stock along the Eerste River-Stellenbosch-Muldersvlei-Klapmuts rail line. The aim should be to have a more frequent passenger service along the corridor, and connected larger and smaller settlements. Lighter rail stock – possibly in the form of a “tram” system also offers the advantage of safe at grade crossing of the rail line and other modes of transport, in turn, enabling “lighter” infrastructure support for settlement development and concomitant cost savings.

At the time of submission of the MSDF, considerable progress has been made by and owners, the municipality, WCG, and the University, to prepare for joint planning of the Adam Tas Corridor.

The Adam Tas Corridor is a significant opportunity, similar in potential scope and impact over generations to the establishment of the university, the Rupert-initiated drive to save and sustain historic precincts and places, and the declaration of core nature areas for preservation. It is a very large project, some five times the extent of the successful Victoria & Alfred Waterfront (V & AW) in Cape Town. It involves more stakeholders and land owners than the V & AW did, and similarly challenging obstacles. It will require sustained, committed work over a prolonged period of time, trade-offs, and a departure of current norms.

Given the scope and complexity of the project, the immediate focus is to understand what it will take to achieve mindful redevelopment of the corridor. Its feasibility, dependencies, and risks need to be fully understood with a view to making recommendations to land owners and other parties involved as to how to proceed in the most responsible way.



Figure 52. Adam Tas Corridor Concept

6.9.2. Development of Klapmuts

The Greater Cape Metro Regional Spatial Implementation Framework (RSIF) contains very specific policy directives related to Klapmuts, aimed at addressing pressing sub-regional and local space economy issues. Key policy objectives include:

- Using infrastructure assets (e.g. key movement routes) as “drivers” of economic development and job creation.
- Recognition that existing infrastructure in the area (i.e. N1, R101, R44 and the Paarl-Bellville railway line and station) dictate the location of certain transport, modal change or break-of-bulk land uses.
- Recognition of the Klapmuts area as a significant new regional economic node within metropolitan area and spatial target for developing a “consolidated platform for export of processed agri-food products (e.g. inland packaging and containerisation port)” and “an inter-municipal growth management priority”.
- The consolidation of and support for existing and emerging regional economic nodes as they offer the best prospects to generate jobs and stimulate innovation.
- The clustering of economic infrastructure and facilities along public transport routes.
- Maintaining valuable agricultural and nature assets.
- Providing work opportunity in proximity to living areas.

There is no doubt that Klapmuts is a potentially significant centre for economic activity and residence within the metropolitan region and SM, located as it is on the N1 transport corridor which carries 93% of metropolitan freight traffic. To date, the settlement is characterized by residential use and limited commercial and work-related activity. Public sector resource constraints have prevented the infrastructure investment required to enable

and unlock the full potential of the area for private sector economic development as envisaged in the GCM RSIF.

The decision by Distell Limited to relocate to and consolidate its operations in Klapmuts is critical to commence more balanced development of the settlement. Distell Limited proposes to develop a beverage production, bottling, warehousing and distribution facility on Paarl Farm 736/RE, located north of the N1, consolidating certain existing cellars, processing plants, and distribution centres in the Greater Cape Town area. The farm measures some 200 ha in extent. The beverage production, bottling, warehousing and distribution facility will take up approximately 53 ha.

The project proposal includes commercial and mixed-use development on the remainder of the site which is not environmentally sensitive to provide opportunities both for Distell's suppliers to co-locate, and for other business development in the Klapmuts North area. The site does not have municipal services, and the proposed development will therefore require the installation of bulk service infrastructure, including water, wastewater treatment, stormwater, electricity, and internal roads.

A number of issues require specific care in managing the development of Klapmuts over the short to medium term.

- The first is speculative applications for land use change on the back of the proposed Distell development. Already, a draft local plan prepared by DM has indicated very extensive development east of Farm 736/RE. Distell will not fund the extensive infrastructure required to unlock development here, and arguably, land use change to the east of Farm 736/RE could detract from the opportunity inherent in Farm 736/RE.
- The second is the linkages between Klapmuts north and south, specifically along Groenfontein Road and a possible NMT crossing

over the N1 linking residential areas south of the N1 directly with Farm 736/RE. Without these linkages, residents to the south of the N1 will not be able to benefit from the opportunity enabled north of the N1.

- The third is speculative higher income residential development in the Klapmuts area, based on the area's regional vehicular accessibility. Higher income development is not a problem in and of itself, but ideally it should not be in the form of low density gated communities.

Given that management of Klapmuts is split between DM and SM (respectively responsible for the area north and south of the N1), special arrangements will be required to ensure that the settlement as a whole develops responsibly, in a manner which ensures thoughtful prioritization, infrastructure investment, and opportunity for a range of income groups.

Arguably, recent LSDF planning work commissioned by DM for the area east of Farm 736/RE begins to illustrate the problem of insufficient coordinated planning. The LSDF envisages a very significant extent of development for Klapmuts North. Specifically, in terms of a 20-year growth trajectory, Commercial Office development of 912 354m² is envisaged, Commercial Retail development of 187 839m², and General Light Industrial Development of 370 120m². A number of issues emerge:

Firstly, the realism of these land use projections within the context of the regional economy is questioned. To illustrate:

- Considering the envisaged Commercial Office allocation, it is noted that Cape Town CBD currently has some 940 000m² of office space, Sandton in Gauteng is larger at over 1,2m m² of Commercial Office space, Midrand at some 640 000m², and Century City (some 20 years in the making) at some 340 000m².
- In relation to Commercial Retail space, it is noted that more of this use is envisaged for

Klapmuts North than Century City's current 140 000m².

- While 370 120m² is provided for General Light Industrial Development, the proposed Distell distribution centre alone will comprise 125 000m², and many new logistic centres recently completed in the Kraaifontein/ Brackenfell area range in size between 45 000m² and 120 000m². The master plan prepared as part of the acquisition process of Farm 736/RE foresee significantly more light industrial floor area than the 370 120m² indicated in the LSDF.

Secondly, these land use allocations need to be viewed against the policy context, which sees Klapmuts as a regional freight/ logistics hub – with a focus on job creation – and establishing a balanced community. It would appear that the LSDF over-emphasises commercial office and retail development, “exploiting” the areas’ access to regional vehicular routes, and private vehicular access, at the expense of job creation at scale – and establishing a regional light industrial hub – serving an existing poorer community in proximity to a freight movement corridor.

Thirdly, it is maintained that the infrastructure service requirements – and affordability – of the projected land use allocations are understated. For example, it is known that any development north of the N1 over and above the proposed Distell distribution centre of 125 000m² will involve very costly reconfiguration and augmentation of intersections with the N1. It would be irresponsible to create expectations around land use without these associated requirements being resolved to a fair degree of detail.

Finally, Farm 736/RE is remarkably unique; comprising some of the least valuable agricultural land within the Paarl/ Stellenbosch area. It would appear that the LSDF, given the development process for Farm 736/RE, assumes that adjacent land to the east, of higher agricultural value, should also be developed.

6.9.3. Alternative rail stock along the Baden Powell Drive-Adam Tas-R304 corridor

As indicated above, it is critical, both for the Adam Tas Corridor and the broader Baden Powell-Adam Tas-R304 development corridor to explore the feasibility of introducing alternative rail stock along the Eerste River-Stellenbosch-Muldersvlei-Klapmuts rail line. The aim should be to have a more frequent passenger service along the corridor, connecting larger and smaller settlements. Lighter rail stock – possibly in the form of a “tram” system offers the advantage of safe at grade crossing of the rail line and other modes of transport, in turn, enabling “lighter” infrastructure support for settlement development and concomitant cost savings. Alternatively, the viability of a regular bus service along this route should be explored.

As argued elsewhere in this document, Stellenbosch town and Klapmuts should be the focus for significant settlement growth. It is here, by virtue of settlement location in relation to broader regional networks and existing opportunity within settlements, that the needs of most people can be met, in a compact settlement form while protecting the Municipality's nature and agricultural assets.

Over the longer term, Muldersvlei/ Koelenhof and Vloottenburg along the Baden Powell-Adam Tas-R304 corridor could possibly accommodate more growth, and be established as inclusive settlements offering a range of opportunities. However, much work needs to be done to ensure the appropriate make-up of these settlements (including each providing opportunity for a range of income groups) and integration with the corridor in terms of public transport. Critical is investigating the feasibility of alternative rail stock along the Baden Powell-Adam Tas-R304 corridor.

The smaller settlements are therefore not prioritised for significant development over the MSDF period. Should significant development be enabled in these areas now, it is likely to be focused on private

vehicular use and higher income groups, and will in all probability reduce the potential of initiatives to transform Stellenbosch town and Klapmuts.

6.10. Further Planning Work

6.10.1. Future settlement along the Baden Powell Drive-Adam Tas-R304 corridor

As indicated above, over the longer term, Muldersvlei/ Koelenhof and Vloottenburg along the Baden Powell-Adam Tas-R304 corridor could possibly accommodate more growth, and be established as inclusive settlements offering a range of opportunities. However, these settlements are not prioritised for development at this stage. Critical pre-conditions for significant development include:

- The measures required to ensure that settlements provide for a range of housing types and income groups (in a balanced manner).
- Establishing regular public transport services between settlements, including services between the expanded smaller settlements and Stellenbosch town.
- Understanding to what extent settlements can provide local employment, in this way minimizing the need for transport to other settlements.

6.10.2. Other local planning initiatives

Ideally, each of the settlements in SM should have a LSDF, applying the principles of the MSDF in more detail. The priority for LSDFs should be determined by the position and role of settlements in the SM settlement hierarchy.

6.11. Institutional Arrangements

The SM has dedicated staff resources for spatial planning, land use management, and environmental management organized as the Planning and Economic Development Directorate). Work occurs within the framework set by annually approved Service Delivery and Budget Implementation Plans (aligned with the IDP), decision-making processes and procedures set by Council, and a suite of legislation and regulations guiding spatial planning, land use management, and environmental management (including SPLUMA, LUPA, and the National Environmental Management Act).

The Planning and Economic Development Directorate will facilitate implementation of the MSDF in terms of institutional alignment, including:

- The extent to which the main argument and strategies of the MSDF are incorporated into Annual Reports, annual IDP Reviews, future municipal IDPs, and so on.
- The annual review of the MSDF as part of the IDP review process.
- The extent to which the main argument and strategies of the MSDF inform sector planning and resource allocation.
- The extent to which the main argument and strategies of the MSDF inform land use management decision-making.
- Alignment with and progress in implementing the municipality's Human Settlement Plan and Comprehensive Integrated Transport Plan.
- The mutual responsiveness of the MSDF and national, provincial and regional plans, programmes and actions (including the extent to which MSDF implementation can benefit from national and provincial programmes and funding).

Over and above institutional arrangements in place, it appears that two aspects require specific focus in support of the MSDF.

6.11.1. Inter-municipal planning

The first relates to inter-municipal planning. As indicated elsewhere in the MSDF, SM (and other adjoining municipalities) appears to experience increasing challenges related to development pressure in Cape Town. This pressure is of different kinds. The first is pressure on the agricultural edges of Stellenbosch through residential expansion within Cape Town. The second is migration to SM (whether in the form of corporate decentralization, or both higher and lower income home seekers), leading to pressure on available resources, service capacity, and land within and around the settlements of SM. While municipal planners do liaise on matters of common concern, there appears to be a need for greater high-level agreement on spatial planning for “both sides” of municipal boundaries. The spatial implications of pressure related to migration to SM could be managed locally, should there be agreement to redevelop existing settlement footprints rather than enabling further green-fields development (as a general rule). However, the municipality's increased resource needs to accommodate new growth – a non-spatial issue – should be acknowledged and addressed.

6.11.2. Private sector joint planning

The second relates to joint planning and action resourced by the private sector, increasingly needed for a number of reasons:

- The municipal human and financial resource base is simply too small to achieve the vision of the MSDF or implement associated strategies and plans.
- Many matters critical to implementing the MSDF fall outside the direct control or core business of the municipality. For example, the Municipality does not necessarily own the land associated with projects critical to achieve MSDF objectives.

- It is increasingly evident that individual land owners are finding it difficult to develop – to make the most of what they have – individually. Specifically, the transport and movement implications of individual proposals require strong and dedicated integration.
- Individual land owners do not necessarily control the extent of land required to undertake inclusive development, focusing on opportunity for a range of income groups. Inclusive development often requires cross-subsidisation, in turn, enabled by larger land parcels and development yields.
- The municipality's focus is often – and understandably so – on the “immediate”, or shorter-term challenges. Much what is needed to implement the MSDF or catalytic projects requires a longer-term view, a committed focus on one challenge, and cushioning from the daily and considerable demands of municipal management.

Partnerships are needed, with different agencies and individuals working in concert with the municipality to implement agreed objectives. Further, partnerships are required between individual corporations and owners of land. The Adam Tas corridor is a prime example: making the most of the disused sawmill site, Bergkelder complex, Van der Stel complex, Die Braak and Rhenish complex – in a manner which contributes to agreed objectives for developing Stellenbosch town – is only possible if various land owners, the municipality, University, and investors work together, including undertaking joint planning, the “pooling” of land resources, sharing of professional costs, infrastructure investment, and so on. The municipality simply do not have the resources – and is overburdened with varied demands in different locations – to lead the work and investment involved.

6.12. Checklists in Support of Decision-Making

To further assist in aligning day-to-day land use and building development management decision-making and detailed planning – public and private – with the MSDF, it is proposed that a “checklist” of questions be employed.

If the initiators of development proposals, applicants, officials, and decision-makers all, in general terms, address the same questions in the conceptualisation, assessment, and decision-making related to proposals, a common, shared “culture” could be established where key tenets of the SDF is considered and followed on a continuous basis.

Although focused on the location, nature, and form of activities in space, the checklist incorporates questions addressing issues beyond space, including matters of resource management, finance, institutional sustainability, and so on.

It is not envisaged that the checklist be followed slavishly in considering every development proposal. Yet, its use is important in ensuring that relevant issues be addressed and discussed to enable decision-making in line with the MSDF and broader provincial and national planning policy. If, in assessing a proposal or project, posing a question results in a negative answer, the proposal probably requires very careful consideration, further work, or change.

The checklist should not be viewed as static. Rather, it should be reviewed periodically and in parallel with the MSDF review – perhaps under the leadership of the Municipal Planning Tribunal and with input from all stakeholders – to reflect the municipal spatial planning agenda and challenges.

It is proposed that the questions – together with the SPLUMA principles, and the key SDF strategies and policies – are packaged in an easy-to-use and accessible form to facilitate wide usage.

Table 40. Checklists

CHECKLIST QUESTION OR ISSUE	YES	NO
BIOPHYSICAL RESOURCES		
Is the proposal located in or does it impact on a formally protected area, Critical Biodiversity Area, or Ecological Support Area?		
Can associated impacts be managed without diminishing the integrity of the formally protected area, Critical Biodiversity Area, or Ecological Support Area?		
Does the proposal protect, maintain, or enhance the sustainability of existing ecological systems and services?		
Will the proposal result in a loss of agricultural land or impede the viable use of agricultural land?		
Does the proposal assist to diversify agriculture, enable broader access to agricultural opportunity, and increase food security?		
Is the proposal located within, on, or outside the proposed urban edge?		
If on the edge of a settlement or green space, does the proposal assist in defining and protecting that edge better and more appropriately than at present?		
Is the proposal situated within a river or wetland setback, or a flood line?		
Does the project enable enhanced and appropriate public access to natural resources, amenity, and recreational opportunity?		
Has the project considered recycling, rainwater collection, and alternative energy generation?		
SCENIC LANDSCAPES, SCENIC ROUTES AND SPECIAL PLACE OF ARRIVAL		
Does the proposal impact on a scenic landscape, scenic routes, or special place of arrival?		
Can associated impacts be managed and minimised without diminishing the integrity of the scenic landscape, scenic routes, or special place of arrival?		
HISTORICALLY OR CULTURALLY SIGNIFICANT PRECINCTS OR PLACES		
Does the proposal impact on a historic or culturally significant precinct, place, or structure?		
Has the proposal considered the re-use of an existing precinct, place, or structure to ensure preserving or exposing its historical or cultural significance?		
Does the proposal enable the inclusive expression and celebration of culture, old and new?		
SETTLEMENT ROLE AND HIERARCHY		
Does the proposal fit the proposed role of the settlement outlined in the MSDF, its position in the settlement hierarchy, and associated development/ management approach?		
MOVEMENT INFRASTRUCTURE		
Does the nature and alignment of the route accord with the provisions of the MSDF?		
Is the proposed new route structurally significant in that it improves connectivity between different areas?		
Does the route fill an important gap in the movement network?		
Does the route promote public and NMT transport?		
Has the costs and benefits of the route been fully assessed?		
Has the design of the route or road infrastructure considered other associated benefits, including the development of small market spaces and infrastructure for emerging entrepreneurs?		

Table 41. Checklists (cont.)

CHECKLIST QUESTION OR ISSUE	YES	NO
NATURE AND FORM OF DEVELOPMENT		
Does the proposal promote compact, dense, mixed use development which makes the best use of land, reduces car dependence, and enables public and NMT?		
Has the proposal considered how it responds to and is integrated with public transport/ NMT and social facilities planning?		
Is the proposal enterprising and transformative in that it is likely to stimulate desirable change within its broader precinct and context?		
Does the proposal expand housing opportunity for a broader range of groups, including lower income groups and students?		
Will the proposal "lock-out" desirable development and opportunity elsewhere by virtue of its location and scale (and through that attracting development energy in a direction not supported by the MSDF)?		
Does the project support inclusion, including providing a range of housing types and/ or opportunity for small/ emerging entrepreneurs.		
Has the proposal made the best use of existing structures on its site?		
UPGRADING AND INTEGRATION OF SETTLEMENTS		
Does the project contribute to the upgrading of an informal settlement or affordable housing area?		
Does the project assist to integrate informal settlements and affordable housing areas with existing centres of commercial activity and employment?		
Does the project significantly increase the size of an existing informal settlement area?		
GOVERNMENT / PUBLICLY ASSISTED HOUSING		
Does the proposal enable residential infill, densification, and a compact settlement structure?		
Is the project located in an area where the value of assets is likely to increase (in that way assisting to curtail the proportion of indigent citizens)?		
Is the scale of the project appropriate in terms of not creating clusters of poverty?		
Are there adequate social and economic opportunities associated with the project?		
Is the project closely integrated with surrounding areas?		
Is the ratio between net and gross densities appropriate?		
Does the project promote appropriate choice in terms of unit, type, size, progressive completion, price, and tenure?		
Does the proposed erf sizes, units, and type enable changes to the unit which respond to new household needs?		
Is the housing provided used creatively to define public space?		
SOCIAL FACILITIES		
Is the proposed location appropriate for the order or scale of social facility proposed?		
Has the proposal considered the upgrading or enhancement of existing social facilities as opposed to building a new one?		
Does the project promote the clustering of social facilities in a manner which enhances user convenience, sharing, and efficient, cost effective facility management?		
Has the proposal considered the possibility of high-density housing as an integral part of the project?		
Does the facility help to define public space and is the frontage onto the street active?		
Has recycling, rainwater collection, and solar energy mechanisms been considered to minimise the long term operational costs of the facility?		

Table 42. Checklists (cont.)

CHECKLIST QUESTION OR ISSUE	YES	NO
PUBLIC SPACE		
Is the space associated with high pedestrian flows?		
Do surrounding activities enhance the use of the space (at all hours)?		
Are the edges of the space well defined?		
Is the scale of the space adequate for its potential functions?		
Is the space comfortable in terms of a human scale?		
Are the materials to be used robust enough to accommodate heavy public use?		
COMMERCIAL DEVELOPMENT		
Is the project located in a recognised business centre or in a manner which would serve to integrate an informal settlement or affordable housing area with existing centres of activity?		
Is the project easily accessible by public/ NMT?		
Does the project significantly enhance convenience and non-motorised access in hitherto unserved areas?		
Does the project place unreasonable strain on existing parking and movement routes?		
Does the project promote balance in land use in local areas?		
Does the project promote open and fair market competition and provide opportunity for smaller enterprises?		
Does the project contribute to the public spatial environment and promote a pleasant and safe pedestrian environment (for example, no dead frontages)?		
INFRASTRUCTURE SERVICES		
Does the infrastructure project or investment contribute to secure Stellenbosch Municipality's regional and local space economy?		
Is the proposed infrastructure project encouraging human settlement in the desired direction?		
Does the project or investment improve or extend an existing service rather than being a stand-alone initiative?		
Is the capacity of the service appropriate in terms of future activities and potential activities as outlined in the MSDF?		
Are the potential barrier effects and negative impacts on surrounding uses of the service/ infrastructure minimised?		
Was the use of alternative technologies considered?		
Is creative use made of waste and by products?		

Table 43. Checklists (cont.)

CHECKLIST QUESTION OR ISSUE	YES	NO
CATALYTIC PROJECTS		
Is the project part of a larger catalytic project identified in the MSDF?		
Does the project support the aims, objectives, and development programme of the catalytic project?		
Does the project carry the full support of the institution responsible for managing the catalytic project?		
INSTITUTIONAL ARRANGEMENTS		
Has the project considered partnerships – between different land owners, or land owners and a community or the public sector – to maximise its broader benefits, whether in the livelihood opportunity it offers, making the best use of resources of land, or shared infrastructure provision?		
Has the municipality discussed possible partnerships aimed at maximising the benefits of the project with the project initiator?		
Does the project justify specific institutional arrangements to ensure its implementation and sustainability?		
Has the required institutional arrangements been agreed to and formalised?		
Will the project result in institutional and/ or funding pressure on the municipality?		
Can the municipality accommodate the institutional and/ or funding pressure associated with the project, now and into the future?		

6.13. A Municipal Leadership and Advocacy Agenda related to Spatial Development

In terms of the Constitution and associated legislation, local government in South Africa has far-reaching obligations and responsibilities. Key is to direct – within the context of national and provincial policy – the provision of services, promotion of a safe and healthy environment, and promotion social and economic development, in a manner which is sustainable. Determining and managing the direction, nature, and form of spatial development within the municipality, is a key function.

Elected representatives carry significant authority in relation to decision-making. Their task is a difficult one. While acting upon the technical work and inputs of officials, elected representatives are often required to deal with and mediate between different needs and requests on a daily basis, whether emanating from a specific sector (e.g. one functional area struggling from a lack of resources to fulfill its services), a community, individual citizen, or the corporate sector.

Arguably, they are also not expected – or have the time – to fully comprehend the technical detail embodied in the work of officials. They should, however, lead at the level of principle, and direct, inspire, and monitor accordingly.

What can a municipal leadership and advocacy agenda look like? What should be foremost on the mind of leadership? What should they be particularly vigilant about, advocate for, and monitor in every initiative? Table 44 below begins to outline such an agenda from the perspective of spatial planning and land use management.

Table 44. A municipal leadership and advocacy agenda from the perspective of spatial planning and land use management

	ISSUE	SPECIFIC CONCERNS RELATED TO THE ISSUE
1	The critical role of the environment in providing ecological services, key to the economy and sustainability of life in general.	<ul style="list-style-type: none"> Activities, development, or ways of providing services which detract from the functioning of the natural environment or places.
2	The critical role of agricultural land – whatever its current use – in providing food security.	<ul style="list-style-type: none"> Activities, development, or ways of providing services which detracts from the current or future use of land for food production or related use.
3	The critical role of historic and cultural assets in the municipal economy.	<ul style="list-style-type: none"> The loss of built or unbuilt cultural places and activities. Inadequate exposure of neglected cultural practices. Inadequate places and opportunity for practicing new forms of cultural expression.
4	The critical need to enable the gradual upgrading of informal settlements.	<ul style="list-style-type: none"> Inadequate forward planning for settlement and the resultant on-going accommodation of new residents in areas already limited in resources and opportunity.
5	The relationship between settlement form (e.g. its density, mix of uses, and extent to which it provides opportunity for different groups) and common-day challenges such as the prospect of all to find sustainable, dignified, livelihoods, traffic congestion, safety, and so on.	<ul style="list-style-type: none"> The relationship between development density and municipal servicing costs. The relationship between development density and the viability of public/ NMT. The relationship between a focus on higher income, "exclusive" development and the need for people to travel from afar to work/ study in Stellenbosch town. The relationship between development density, inclusive and mixed activity, and entrepreneurship opportunity, mutual learning, and innovation. The relationship between 24/ 7 activity and safety.
6	The critical role of social facilities and public space in the lives of ordinary citizens.	<ul style="list-style-type: none"> The developmental role of social facilities and public space. The relationship between the clustering, exposure, and sharing of social facilities (and associated public space), and the quality and sustainability of social service delivery.
7	The critical role of NMT modes to access opportunity, specifically for ordinary citizens.	<ul style="list-style-type: none"> The very high costs of transport infrastructure as compared to other forms of municipal infrastructure services. The relatively small proportion of the population serviced by private vehicles and concomitant cost on the environment.
8	The long-terms resource impacts of spatial decisions today on the sustainability of government, communities and enterprises.	<ul style="list-style-type: none"> The long-term costs of urban sprawl and the outward growth of settlements in relation to environmental sustainability, agricultural potential, and the municipal infrastructure maintenance budget.
9	The limitations of municipal resources, and therefore the need to work with the private and community sectors to meet collective objectives.	<ul style="list-style-type: none"> The extent of private and community sector development energy available, and its possible contribution to address challenges if closer aligned to the municipal development agenda.
10	The interrelationship between settlements, and need to work with adjoining municipalities and overarching government structures.	<ul style="list-style-type: none"> The resource constraints of Stellenbosch Municipality, and its preparedness to accommodate impacts related to development pressure in adjoining municipalities.



Part 7.

Capital Expenditure Framework

7. Capital Expenditure Framework

7.1. Introduction

SPLUMA requires that MSDFs “determine a capital expenditure framework for the municipality’s development programmes, depicted spatially”. SPLUMA does not provide further detail on what this Capital Expenditure Framework (CEF) should include and there is currently no specification for a SPLUMA-compliant CEF. The intention appears to more effectively link the Municipality’s spatial development strategies to one of the primary means with which to implement these strategies, namely the Municipality’s budget and the budgets of other government stakeholders. By providing more specific guidance on what investments should be made where, in what order of priority, alignment between the Municipality’s strategies, plans and policies and development on the ground is better maintained and the risk that budget allocations undermine or contradict the MSDF are mitigated.

The Capital Expenditure Framework (CEF) has become a key tool supporting government’s initiatives to achieve national settlement development and management objectives. The Integrated Urban Development Framework (IUDF), approved by Cabinet in 2016, sets out the national policy framework for transforming and restructuring South Africa’s urban spaces, guided by the vision of creating “livable, safe, resource efficient cities and towns that are socially integrated, economically inclusive and globally competitive”. In addition the IUDF proposes an urban growth model premised on compact and connected cities and towns. With the acceptance of the IUDF as policy, the emphasis has now shifted to implementation.

The IUDF is coordinated by the Department of Cooperative Governance (DOCG), which has set up the institutional arrangements for the coordination of activities across government departments and agencies, under the overall management of an IUDF Working Group on which

partner organizations such as National Treasury, organized local government and the World Bank are represented. Within the IUDF, the Intermediate City Municipality Programme (ICM), which includes 39 municipalities, is intended to provide support for the cities in the middle size and density range of the continuum. Stellenbosch Municipality is part of the ICM.

The purpose of the ICMs support strategy is to help translate IUDF policy into practical programmes of action in the ICMs. In so doing the initiative aims to give impetus to achieve the main IUDF goals, which are forging new integrated forms of spatial development; ensuring that people have access to social economic services, opportunities and choices; harnessing urban dynamism to achieve inclusive and sustainable growth; and enhancing the governance capacity of the state and citizens in ICMs.

One element of the implementation of the IUDF is the introduction of a consolidated infrastructure grant and all 39 ICMs are all eligible for the Integrated Urban Development Grant (IUDG) from 2019/ 20. The business plan for the IUDG is a three-year capital programme that is aligned with a long-term CEF. There are a number of key intentions in introducing the CEF as the basis for monitoring the IUDG:

- To ensure that priorities identified in the spatial development framework are translated into capital programmes.
- To promote long-term infrastructure planning.
- To promote infrastructure planning that is better integrated across sectors and spheres and within space.
- To promote a more integrated approach to planning within municipalities that brings together technical, financial and planning expertise.

The DCOG recently prepared a “Guide to preparing a Capital Expenditure Framework (Draft Document)” to provide ICMs with guidance with regard to what a CEF is, what it should include for the purposes of the IUDG, and how to go about a CEF. The Guide defines a CEF as “a consolidated, high-level view of infrastructure investment needs in a municipality over the long term (10 years) that considers not only infrastructure needs but also how these needs can be financed and what impact the required investment in infrastructure will have on the financial viability of the municipality going forward.”

Stellenbosch Municipality started preparing its first CEF late in 2018, in parallel with the MSDF review.

To be completed (awaiting documentation from SM)



Part 8.

Monitoring and Review

8. Monitoring and Review

8.1. Monitoring

Towards the introduction of a planning performance, monitoring and evaluation system for the MSDF, a set of SMART (Specific, Measurable, Achievable, Relevant, Timebound) performance indicators need to be developed and applied. These should measure progress on delivering on the Municipal spatial agenda, including its substantive, spatial objectives⁴. In this regard, the Municipal Performance Management System (linked to the IDP) is important. It is proposed that the Planning and Economic Development Directorate develop MSDF specific monitoring indicators during the 2019/ 20 business year for inclusion in the Municipal Performance Management System at the beginning of the 2020/ 21 business year.

Ideally, initial performance indicators should be limited to what is manageable by the administration while meaningfully tracking the achievement of stated spatial development objectives. Such criteria could include:

- The overall share of new development applications in the settlements identified for growth as compared to smaller settlements.
- Tracking the number of applications providing for increased density in settlements.
- Tracking the number of applications which entails "inclusive" development, specifically providing a range of housing types accommodating different income groups.
- The extent of agricultural land lost through redevelopment for alternative uses.
- The number of joint planning proposals initiated by landowners (with a view to integrate service improvements and agreed settlement benefits, specifically inclusive development).

⁴ Current planning related monitoring and performance indicators contained in the corporate SDBIP are limited to the timeous review of the MSDF in line with the IDP and the percentage of land-use applications submitted to the Municipal Planning Tribunal within the prescribed legislated period and within a maximum of 120 days.

8.2. Review of the MSDF

Processes, including public participation processes, associated with the review of an MSDF are prescribed by SPLUMA, the MSA (and associated regulations), LUPA, the Municipal Planning By-law and associated policies or regulations.

The purpose of the MSDF is to provide a medium to long term vision and associated strategies, policies, guidelines, implementation measures, and associated instruments to attain this vision progressively over time. As development – whether it be headed by the public sector or the private sector – takes multiple years to be achieved, it is not appropriate that the MSDF is substantially reviewed annually. A major review of the MSDF should therefore occur every five years. Improvements, amendments, and refinements to the MSDF can occur annually.

Five-year and annual reviews are to be aligned with the IDP and budget planning and approval process.

List of Documents Reviewed

Baumann, Nicolas, Winter, Sarah, Dewar, David and Louw, Piet (2014). Boschendal Heritage Impact Scoping Report: An In-Principle Review of the Case and the Identification of Composite Heritage Indicators

DAFF, 2014: Agricultural Policy Action Plan, Department of Agriculture, Forestry and Fisheries, 2014

Department of Cooperative Government and Traditional Affairs, 2016, Integrated Urban Development Framework: A New Deal for South African Cities and Towns

DEA&DP, 2016: Feasibility Study for Alternative and Sustainable Infrastructure for Settlements: Phase 4: Concept, Integration and Optimisation Report

DRDLR, 2015: AGRI-PARK, Your agri-park; Your future, 2015

Green Cape. 2014. Water as a Constraint on Economic Development. 2014-2015 Research Project Progress Report. March 2015.

Kururi-Sebina G, 2016, South Africa's cities must include everyone, Op-Ed article in 8 July 2016 Daily Maverick

PWC, 2014, Western Cape Population Projections: 2011 – 2040

South African Cities Network, 2016, State of South African Cities Report: 2016, SACN, Johannesburg

Stellenbosch LM. 2016. 2016/17 Integrated Development Plan, Revision 4. Presented at the 41st Council Meeting, 25 May 2016

Transport for Cape Town (TCT), 2015, Draft Freight Management Strategy

WCG: DoA, 2016: Western Cape Climate Change Response Framework and Implementation Plan for the Agricultural Sector (SmartAgri Plan), 2016

WCG, 2015: Project Khulisa. Western Cape Government: Economic Cluster, 2015

WCG, 2010: Western Cape Sustainable Water Management Plan, 2010

WCG, 2015, Provincial Strategic Plan: 2014 -2019

WCG: Provincial Treasury, 2015, Provincial Economic Review and Outlook: 2015

WCG Provincial Treasury, 2015, Municipal Economic Review and Outlook: 2015

WCG Department of Transport and Public Works, 2016, Draft Provincial Land Transport Framework

WCG Department of Human Settlements, 2016, Western Cape Human Settlements Framework: Discussion Document, March 2016

WCG Department of Environmental Affairs and Development Planning, 2016, Feasibility Study For Alternative And Sustainable Infrastructure For Settlements

Winter, Sarah and Oberholzer, Bernard (2013). Heritage and Scenic Heritage Study (2013). Prepared as input into the Provincial Spatial Development Framework

TO BE COMPLETED

Appendices

A. Policy Framework

This section provides an overview of international conventions and national and provincial policies that inform the formulation of the Stellenbosch MSDF and was reviewed in its preparation process.

A review of high level, international “conventions”, resolutions, or declarations – statements of intent or commitment often agreed to at international level with a view to inclusion in national policy frameworks and inform member country “behavior” – related to the management and preservation of heritage resources, an important theme in developing a MSDF for SM, is included.

Table 45. Conventions, Resolutions or Declarations

CONVENTIONS, RESOLUTIONS, OR DECLARATIONS	FOCUS	IMPLICATIONS
Johannesburg World Summit on Sustainable Development (2002). ¹	<p>The Summit recognised cultural diversity as the fourth pillar of sustainable development, alongside the economic, social and environment pillars.</p> <p>Peace, security, stability and respect for human rights and fundamental freedoms, including the right to development, as well as respect for cultural diversity, are essential for achieving sustainable development and ensuring that sustainable development benefits all.</p>	The celebration of cultural diversity will require the creation of variety of development opportunities with in the Municipal area and particularly its settlements. Such opportunities should include provision for different forms of cultural expression.
Québec Declaration on the preservation of the Spirit of Place (adopted by the ICOMOS General Assembly, October 2008). ²	<p>The declaration recognizing that the spirit of place is made up of tangible (sites, buildings, landscapes, routes, objects) as well as intangible elements (memories, narratives, written documents, festivals, commemorations, rituals, traditional knowledge, values, textures, colors, odors, etc.), which all significantly contribute to making place and to giving it spirit.</p> <p>It is argued that spirit of place is a continuously reconstructed process, which responds to the needs for change and continuity of communities, and can vary in time and from one culture to another according to their practices of memory, and that a place can have several spirits and be shared by different groups.</p>	Heritage resource management has in the past focused on the legacy of the colonial history, but the creation of truly integrated and equitable communities in the Municipality will require a broader view of heritage resources, which should include the recognition of intangible resources and cultural diversity.
United Nations General Assembly Resolution 65/166 on Culture and Development (adopted in 2011).	The resolution recognised that culture – of which heritage forms a part – is an essential component of human development, providing for economic growth and ownership of development processes.	Ensure that the management of heritage resource also optimizes its contribution to economic growth.

1. <http://www.un-documents.net/aconf199-20.pdf>

2. https://www.icomos.org/images/DOCUMENTS/Charters/GA16_Quebec_Declaration_Final_EN.pdf

Table 46. Conventions, Resolutions or Declarations (cont.)

CONVENTIONS, RESOLUTIONS, OR DECLARATIONS	FOCUS	IMPLICATIONS
The Paris Declaration on heritage as a driver of development (adopted in Paris, UNESCO headquarters, December 2011). ³	The Declaration committed to integrate heritage in the context of sustainable development and to demonstrate that it plays a part in social cohesion, well-being, creativity and economic appeal, and is a factor in promoting understanding between communities.	The management and use of heritage resources in the municipal area should be aimed at creating opportunities for social interaction, rather than a just a narrow focus on preservation.
The “Valletta Principles” towards the Safeguarding and Management of Historic Cities, Towns and Urban Areas (adopted by the ICOMOS General Assembly, April 2010). ⁴	<p>Towns and urban areas are currently called to undertake the role of organizer for the economy and to evolve into centers of economic activity, innovation and culture. Connecting protection to economic and social development, within the context of sustainability, and adaptation of historical towns and urban areas to modern life is a key task. The challenge is to increase competitiveness without detracting from main qualities, including identity, integrity, and authenticity, which are the basic elements for their being designated cultural heritage and strict prerequisites for their preservation.</p> <p>Key principles are:</p> <ul style="list-style-type: none"> • All interventions in historic towns and urban areas must respect and refer to their tangible and intangible cultural values. • Every intervention in historic towns and urban areas must aim to improve the quality of life of the residents and the quality of the environment. • The safeguarding of historic towns must include, as a mandatory condition, the preservation of fundamental spatial, environmental, social, cultural and economic balances. This requires actions that allow the urban structure to retain the original residents and to welcome new arrivals (either as residents or as users of the historic town), as well as to aid development, without causing congestion. • Within the context of urban conservation planning, the cultural diversity of the different communities that have inhabited historic towns over the course of time must be respected and valued. • When it is necessary to construct new buildings or to adapt existing ones, contemporary architecture must be coherent with the existing spatial layout in historic towns as in the rest of the urban environment. • A historic town should encourage the creation of transport with a light footprint. 	Appropriate development in the municipal settlements, which respects historic development patterns and cultural diversity, should inter alia ensure that further congestion is avoided, and create opportunities for socio-economic diversity.
Delhi Declaration on Heritage and Democracy Adopted by the ICOMOS General Assembly, December 2017). ⁵	<p>The concept of heritage has widened considerably from monuments, groups of buildings and sites to include larger and more complex areas, landscapes, settings, and their intangible dimensions, reflecting a more diverse approach. Heritage belongs to all people; men, women, and children; indigenous peoples; ethnic groups; people of different belief systems; and minority groups. It is evident in places ancient to modern; rural and urban; the small, every-day and utilitarian; as well as the monumental and elite. It includes value systems, beliefs, traditions and lifestyles, together with uses, customs, practices and traditional knowledge. There are associations and meanings; records, related places and objects. This is a more people-centred approach.</p> <p>Key principles are:</p> <ul style="list-style-type: none"> • Conserving significance, integrity and authenticity must be fully considered in the management of heritage resources. • Mutual understanding and tolerance of diverse cultural expressions add to quality of life and social cohesion. Heritage resources provide an opportunity for learning, impartial interaction and active engagement, and have the potential to reinforce diverse community bonds and reduce conflicts. • The culture and dynamics of heritage and heritage places are primary resources for attracting creative industries, businesses, inhabitants and visitors, and foster economic growth and prosperity. 	The large variety of heritage resources of the SM, ranging from individual buildings to landscapes, should be used to attract economic growth and spreading prosperity to its inhabitants.

3. https://www.icomos.org/images/DOCUMENTS/Charters/GA2011_Declaration_de_Paris_EN_20120109.pdf

4. <http://civvi.icomos.org/sites/default/files/Valletta%20Principles%20Book%20in%20%20languages.pdf>

5. https://www.icomos.org/images/DOCUMENTS/Charters/GA2017_Delhi-Declaration_20180117_EN.pdf

Table 47. Policies

POLICY	FOCUS	IMPLICATIONS
National		
National Development Plan 2030 ⁶	<p>The National Development Plan 2030 (NDP) sets out an integrated strategy for accelerating growth, eliminating poverty and reducing inequality by 2030.</p> <p>The following aspects of the NDP fall within the competencies of local government:</p> <ul style="list-style-type: none"> The transformation of human settlements and the national space economy with targets that include more people living closer to their places of work; better quality public transport; and more jobs in proximity to townships. Actions to be taken include desisting from further housing development in marginal places, increasing urban densities and improving the location of housing, improving public transport, incentivising economic opportunities in highly populated townships and engaging the private sector in the gap housing market. Building an inclusive rural economy by inter alia improving infrastructure and service delivery, and investing in social services and tourism. Investment in economic infrastructure including the roll out of fibre- optic networks in municipalities. Improving education and training, through inter alia a focus on expanding early childhood development (ECD) and further education and training (FET) facilities. Building of safer communities and although not explicitly noted in the NDP, actions should include improving safety through sound urban design and investment in the public realm. Building environmental sustainability and resilience with a strong focus on protecting the natural environment and enhancing resilience of people and the environment to climate change. Actions include an equitable transition to a low- carbon economy (which would inter alia imply making settlements more efficient) and regulating land use to ensure conservation and restoration of protected areas. (National Planning Commission, 2012). 	<p>The strong focus on action in the NDP is an indication that planning at the local government level should go beyond the preparation of a spatial plan, but actively pursue investment in strategic services and locations to grow the local economy and address inequality.</p>
National Infrastructure Plan (2012)	<ul style="list-style-type: none"> The NIP intends to transform South Africa's economic landscape while simultaneously creating significant numbers of new jobs, and to strengthen the delivery of basic services. The Cabinet-established Presidential Infrastructure Coordinating Committee (PICC) identified 18 strategic integrated projects (SIPs) to give effect to the plan. SIP 7 of the NIP entails the "Integrated urban space and public transport programme". The intent with SIP 7 is to coordinate the planning and implementation of public transport, human settlement, economic and social infrastructure and location decisions into sustainable urban settlements connected by densified transport corridors. A key concern related to integrating urban space is the upgrading and formalisation of existing informal settlements. 	<p>The Stellenbosch SDF is the ideal vehicle to coordinate the planning and implementation of investment that realize the vision of integrated settlements structured around densified transport corridors.</p>
Urban Network Strategy (2013)	<ul style="list-style-type: none"> The Urban Network Strategy (UNS) is the spatial approach adopted by the National Treasury to maximise the impact of public investment – through coordinated public intervention in defined spatial locations – on the spatial structure and form of cities. The Urban Network is based on the recognition that urban areas are structured by a primary network and secondary networks. At the primary network level (or city scale), the strategy proposes the identification of a limited number of significant urban nodes that include both traditional centres of economic activity (such as the existing CBD) and new "urban hubs" located within each township or cluster of townships. It also emphasizes the importance of connectivity between nodes, through the provision of rapid and cost effective public transport on the primary network and the delineation of activity corridors for future densification and infill development adjacent to the public transport routes. At the secondary network level, the strategy proposes strengthening connectivity between smaller township centres and identified urban hubs. 	<p>The systems thinking that underpins the strategy should inform the SDF at the level of the municipal are, i.e. considering the role of settlements, as well as the level of the individual settlements, so as to improve access to economic opportunities and support economic growth through clustering and densification.</p>

6. <https://www.google.com/search?client=safari&rls=en&q=national+development+plan+chapter+8&ie=UTF-8&oe=UTF-8>

Table 48. Policies (cont.)

POLICY	FOCUS	IMPLICATIONS
National		
National Public Transport Strategy (NPTS), 2007	<ul style="list-style-type: none"> The NPTS provides guidance to all three spheres of government on dealing with the public transport challenges in an integrated, aligned, coordinated manner. The NPTS has two key thrusts: accelerated modal upgrading, which seeks to provide for new, more efficient, universally accessible, and safe public transport vehicles and skilled operators; and integrated rapid public transport networks (IRPTN), which seeks to develop and optimise integrated public transport solutions. 	The SDF will have to include the identification and implementation of public transport networks and systems as a critical component of sustainable and integrated settlement development.
Regional		
The Western Cape Government's strategic and policy framework 2014-2019	<ul style="list-style-type: none"> The framework identifies five strategic goals: create opportunities for growth and jobs, improve education outcomes and opportunities for youth development, increase wellness, safety and tackle social ills, enable a resilient, sustainable, quality and inclusive environment living environment, and embed good governance and integrated service delivery through partnerships and spatial alignment. Key focus areas include providing more reliable and affordable public transport with better coordination across municipalities and between different modes of transport, increasing investment in public transport and resolving existing public transport policy issues includes attracting private sector investment, extending bus services, refurbishing commuter trains, and well-located land release. 	In addition to the directives for spatial planning set out in this policy, the focus on partnerships and the role of government in realizing sustainable development (e.g. release of well-located public land) should inform the implementation plan for the SDF.
Project Khulisa	<ul style="list-style-type: none"> Project Khulisa is the economic strategy of the Western Cape Government. The strategy focuses on productive and enabling sectors that contribute to the region's competitive advantage and/or having the potential to be catalytic in growing the economy. The three priority sectors identified are: agri-processing, tourism, and oil and gas services. 	The agri-processing and tourism sectors are important sectors in the local economy and the SDF should include strategies to promote these sectors to grow and to be mutually supportive.
Western Cape Infrastructure Framework (WCIF), 2013	<ul style="list-style-type: none"> The WCIF aims to align the planning, delivery and management of infrastructure provided by all stakeholders (national, provincial and local governments, parastatals and the private sector) for the period to 2040. The WCIF prioritises "infrastructure-led growth" as a driver of growth and employment in the region. A major concern is the financial gap for municipal providers of infrastructure: municipalities have a central role to play in providing socially important services and creating a platform for economic development, but their limited access to capital is a major constraint. The WCIF emphasizes that public and social services facility allocations must be aligned with infrastructure investment plans, growth areas and future development projects, and not planned in isolation. 	The focus on infrastructure investment of the WCIF is another pointer to the importance of an implementation driven SDF to achieve spatial transformation.
Western Cape Green Economy Strategic Framework ("Green is Smart"), 2013	<ul style="list-style-type: none"> The "Green is Smart" Strategic Framework positions the Western Cape as the leading green economic hub in Africa. The framework outlines the risks to the Province posed by climate change, as well as the economic opportunity presented by a paradigm shift in infrastructure provision. The framework focuses on six strategic objectives: become the lowest carbon Province, increase usage of low-carbon mobility, a diversified, climate-resilient agricultural sector and expanded value chain, a market leader in resilient, livable and smart built environment, high growth of green industries and services, and secure ecosystem infrastructure. 	This framework points to the importance of understanding the impacts of climate change on physical development and the local economy and also of ensuring the SDF is action-orientated, i.e. results in the implementation of strategies that will build resilience and facilitate economic growth in the face of environmental and resource challenges.
OneCape 2040	<ul style="list-style-type: none"> OneCape 2040 aims to direct a transition to a more inclusive society, through economic and social development, resulting in a more resilient economy. OneCape2040 seeks transition in several key areas to realise the vision of the Western Cape becoming a highly skilled, innovation-driven, resource-efficient, connected, high-opportunity and collaborative society. Key transitions focus on "cultural", where communities should be socially inclusive; and "settlement" where neighbourhoods and towns should be quality environments, highly accessible in terms of public services and opportunities. The spatial focus is "connection" and "concentration". 	This strategy provides some content to the Stellenbosch Municipality's goal to attract and foster innovation as a driver of economic growth, through its focus on creating conducive environments.

Table 49. Policies (cont.)

POLICY	FOCUS	IMPLICATIONS
Regional		
Provincial Spatial Development Framework, Public Draft for comment, October 2013 ⁷	<ul style="list-style-type: none"> The PSDF sets out to put in place a coherent framework for the province's urban and rural areas that gives spatial expression to the national (i.e. NDP) and provincial development agendas and communicates government's spatial development intentions to the private sector and civil society. The PSDF is driven by three major themes, namely growing the economy, using infrastructure investment to effect change, and ensuring the sustainable use of the provincial resource base. The policies and strategies that flow from these themes focus on strategic investment in the space economy, settlement restructuring and the protecting the natural and cultural resource base. 	Alignment of the Stellenbosch SDF with this plan is not only a legal requirement but a strategic imperative to ensure that the Municipality optimises provincial support for its development agenda. The key focus areas are all of particular relevance to the Stellenbosch Municipality and its network of settlements.
Growth Potential of Towns Study (GPS), 2013.	<ul style="list-style-type: none"> The primary objective of the GPS was to determine the growth potential of settlements outside the City of Cape Town in terms of potential future economic, population and physical growth. The analysis of growth potential is based on two fundamental and related concepts: inherent preconditions for growth and innovation potential. Five thematic indexes formed the basis for modelling the growth preconditions and innovation potential within each settlement and municipality. 	This study should underpin the identification of a clear settlement network, where the roles and resultant development imperatives for each settlement is clearly articulated as an important structuring element of the MSDF.

7. https://www.westerncape.gov.za/eadp/sites/default/files/western-cape-provincial-spatial-developmemnt-framework-draft-for-comment_4.pdf

B. Public Input on MSDF Concept Received During Area-Based Public Participation Sessions

IN PROCESS

C. Spatial Planning Categories, Associated SEMF Policy and WCG Guidelines

Table 50. SPCs for Stellenbosch Municipality and associated land use policy and guidelines

SPC	SUB-CATEGORY	CATEGORY DESCRIPTION IN SEMF	KEY GUIDELINES FOR SPCs:	KEY POLICY FOR SPCs :
			Western Cape Land Use Planning: Rural Guidelines	SEMF
CORE ⁸	A.a.	Statutory Protected Areas	<p>Areas designated in terms of legislation for biodiversity conservation purposes and defined categories of outdoor recreation and non-consumptive resource use. Conservation purposes are purposes normally or reasonably associated with the use of land for the protection of the natural and/ or built environment, including the protection of the physical, ecological, cultural and historical characteristics of land against undesirable change.</p> <p>In terms of the SEMF A.a areas include Wilderness Areas, Special Nature Reserves, National Parks, Nature Reserves, Protected Environments (all declared in terms of NEMPA 57 of 2003), Forest Wilderness Areas / Forest Nature Reserves (in terms of Section 8[1] of National Forests Act 84 of 1998), World Heritage Sites (declared in terms of the World Heritage Convention Act 49 of 1999), and Mountain Catchment Areas (declared in terms of the Mountain Catchment Areas Act 63 of 1970).</p> <ul style="list-style-type: none"> Essentially Core areas are "no-go" areas from a development perspective, and should, as far as possible, remain undisturbed by human impact. Subject to stringent controls, biodiversity compatible land uses that could be accommodated include non-consumptive low impact eco-tourism activities and harvesting of natural resources (e.g. wild flowers for medicinal, culinary or commercial use), subject to a EMP demonstrating the sustainability of harvesting. No large-scale eco-tourism developments should be permitted. Land consolidation should be encouraged and subdivision prohibited. Wherever possible, structures associated with activities in Core areas should preferably be located in neighbouring Buffer areas. Structures in Core areas should be placed through fine-scale environmental sensitivity mapping, preferably be located on currently disturbed footprints, be temporary in nature, and adhere to environmentally sensitive and sustainable construction principles. Any form of mining or prospecting, extensive or intensive grazing that results in species diversity loss, the conversion of natural habitat for intensive agriculture or plantation forestry, expansion of existing settlements or residential, commercial or industrial infrastructure, and linear infrastructure of any kind that will cause significant loss of habitat and/ or disruption to the connectivity of ecological corridors, should not be permitted. 	<ul style="list-style-type: none"> SPC A.a areas are irreplaceable and should be protected from change/ restored to their former level of ecological functioning. Only non-consumptive activities are permitted (for example, passive outdoor recreation and tourism, traditional ceremonies, research and environmental education). Land use and activities which interferes with the natural conditions in mountain catchment areas should be resisted. Municipal management should focus on the extension, integration and protection of a system of protected areas that transect the Municipality and includes low-to-high elevation, terrestrial, freshwater, wetlands, rivers, and other ecosystem types, as well as the full range of climate, soil, and geological conditions.

8. While the SEMF only identifies Core areas, the "Western Cape Land Use Planning: Rural Guidelines" distinguishes between Core 1 and Core 2 SPCs. Essentially, Core 2 areas are in a degraded condition and should be rehabilitated. Acceptable land uses in Core 2 areas are those that are least harmful to biodiversity and include compatible and low impact conservation land uses as per Core 1 areas, whilst allowing for a limited increase in scale of development in less sensitive areas (provided ecological processes are not disrupted), to be informed by environmental sensitivity mapping, transformation thresholds and an assessment of cumulative impacts.

Table 51. SPCs for Stellenbosch Municipality and associated land use policy and guidelines (cont.)

SPC	SUB-CATEGORY		CATEGORY DESCRIPTION IN SEMF	KEY GUIDELINES FOR SPCs:	KEY POLICY FOR SPCs : SEMF
				Western Cape Land Use Planning: Rural Guidelines	
BUFFER	B.a.	Non-statutory conservation areas	SPC B comprises conservation-worthy habitats or habitat units which should, ideally, be rehabilitated to improve its quality. Land is predominantly privately owned and managed for conservation purposes in terms of the legislation applicable to the current zoning of such land and not in terms of dedicated conservation legislation. of the natural landscape and/or to promote biodiversity conservation. It includes Contractual Conservation Areas and Private Conservation Areas.	<ul style="list-style-type: none"> Compatible uses include conservation activities as per Core 1 and 2 areas including sustainable consumptive or non-consumptive uses, forestry and timber plantations, extensive agriculture comprising game and livestock farming (subject to lower impact and precautionary practices), and limited/ small scale "value-adding" through intensified tourism (e.g. resort or recreational facilities) or consumptive uses (e.g. hunting).⁹ Development should target existing farm precincts and disturbed areas, with the employment of existing structures and footprints to accommodate development. Extensive developments (e.g. caravan and camping sites) should be restricted to sites of limited visual exposure and sites not prominent in the landscape. Development should reinforce farm precincts and reflect similar vernacular in terms of scale, form and design. In the absence of existing farmsteads, development should reflect compact and unobtrusive nodes, conforming to local vernacular in terms of scale, form and design. Development should maintain the dominance of the natural and agricultural landscapes and features, maintain and enhance natural continuities of green spaces, riverine corridors and movement, avoiding fragmentation, and protect conservation-worthy places and heritage areas. 	<ul style="list-style-type: none"> Only activities that have an acceptable ecological footprint are permitted in SPC B. Where applications are made for development in SPC B, the onus is on the applicant to prove the desirability and sustainability of the proposed development and to suggest an appropriate quid pro quo. A quid pro quo could be in the form of setting aside and rezoning an appropriate portion of conservation-worthy land for permanent conservation purposes (such portion could be considered for re-designation to SPC A). Tourism-related development outside the urban edge must be nodal, and restricted to less sensitive areas. No development is permitted on river banks that are susceptible to flooding and below the 1:100 year flood-line. Active municipal support for Stewardship Programmes, Land-care Programmes, and the establishment of Conservancies and Special Management Areas.
	B.b.	Ecological corridors	Linkages between natural habitats or ecosystems that contribute to the connectivity of the latter and the maintenance of associated natural processes. It includes Freshwater Ecosystem Priority Areas (FEPA) designated in terms of National Freshwater Ecosystem Priority Areas Project, rivers or riverbeds (in terms of NEMA), Critical Biodiversity Areas and High Biodiversity Areas, and Other Natural Areas (including Ecological Support Areas).		
	B.c.	Urban Green Areas	Municipal open spaces that form in integral part of the urban structure. It includes Public Parks and Landscaped Areas.		

9. While the SEMF only identifies Buffer areas, the "Western Cape Land Use Planning: Rural Guidelines" distinguishes between Buffer 1 and Buffer 2 SPCs. Buffer 2 areas refers to other natural areas, located in a context where extensive and/ or intensive agriculture is the dominant land use. Activities and uses directly relating to the primary agricultural enterprise are permitted, including farm buildings and activities associated with the primary agricultural activity, including a homestead, agricultural buildings, and agri-worker housing. One additional non-alienable dwelling unit per 10 ha to a maximum of 5 per agricultural unit is permitted, and "value adding" uses, including a restaurant and venue facility, farmstall and farm store, home occupation, local product processing (e.g. cheese-making), and tourist and recreational facilities (e.g. hiking trail, 4x4 routes). No fragmentation of farm cadastral units is permitted, with spot zoning and consent uses employed to accommodate non-agricultural uses. Buffer 2 areas within the "fringe" of settlements can accommodate uses not suitable within the urban edge, including those with space extensive requirements (e.g. regional sports and recreation facilities, tourist facilities) and nuisance and buffer requirements (e.g. waste water treatment plants, cemeteries, solid waste disposal sites, airports, feedlots, quarries and mines, truck stops) while taking into consideration environmental sensitivities. As with Buffer 1 areas, development should, as far as possible, be located within or peripheral to the farmstead precinct, not result in excessive expansion and encroachment of building development and land use into the farm area, respect landscape features, existing access arrangements, and not be located in visually exposed areas.

Table 52. SPCs for Stellenbosch Municipality and associated land use policy and guidelines (cont.)

SPC	SUB-CATEGORY	CATEGORY DESCRIPTION IN SEMF	KEY GUIDELINES FOR SPCs: Western Cape Land Use Planning: Rural Guidelines	KEY POLICY FOR SPCs : SEMF
AGRICULTURAL	C.a. Extensive Agricultural Areas	Agricultural areas covered with natural vegetation, used for extensive agricultural enterprises (e.g. indigenous plant harvesting, extensive stock farming, game-farming, eco-tourism). It includes bona-fide game farms and extensive stock farms.	<ul style="list-style-type: none"> Activities and uses directly related to the primary agricultural enterprise are permitted, including farm buildings and associated structures (e.g. one homestead, barns, agri-worker housing, etc.), as well as additional dwelling units to support rural tourism opportunities and to diversify farm income, comprising 1 additional non-alienable dwelling unit per 10ha, up to a maximum of 5 per farm. Ancillary rural activities of appropriate scale that do not detract from farming production, that diversify farm income, and add value to locally produced products (e.g. restaurant and function venue facility, farmstall and farm store, home occupation, local product processing, and rural recreational facilities. Large scale resorts, and tourist and recreation facilities, should not be accommodated within Agriculture SPCs as they detract from the functionality and integrity of productive landscapes. The location of agricultural activities will be dictated by local on-farm agro-climatic conditions (e.g. soils, slope, etc.), but wetlands, floodplains and important vegetation remnants should be kept in a natural state. Ancillary activities should be located within or peripheral to the farmstead precinct (preferably in re-used or replaced farm buildings and disturbed areas), not on good or moderate soils, and linked to existing farm road access and the services network. Facilities for ancillary on-farm activities should be in scale with and reinforce the farmstead precinct, enhance the historic built fabric and respect conservation-worthy places. Fragmentation of farm cadastral unit should be prevented, and consent uses and spot zoning employed for managing ancillary on-farm activities. 	<ul style="list-style-type: none"> High potential agricultural land must be excluded from non-agricultural development and must be appropriately used in accordance with sustainable agriculture principles. Subdivision of agricultural land or changes in land-use must not lead to the creation of uneconomical or sub-economical agricultural units. Support the expansion and diversification of sustainable agriculture production and food security. Any non-agricultural development on a SPC C area is subject to an appropriate environmental off-set or quid pro quo. Such off-set could be in the form of designated SPC B land being formally designated as SPC A. The rezoning of low-potential agricultural land as a mechanism to promote sustainable economic development could be considered. The aim is to unlock the latent capital vested in non-agricultural uses. The outcomes of such development could include providing landowners with opportunities to establish on farm tourism-related facilities and amenities and other enterprises supportive of IDP objectives, cross-subsidising lower-income housing and amenities in SPC D.d and D.f areas, and facilitating the establishment and management of SPC A and B areas (i.e. core conservation areas, buffer areas, ecological corridors and rehabilitation areas). Expand and optimise the use of commonages. Support opportunities for urban agriculture (in an around towns/ settlements).
	C.b. Intensive Agricultural Areas	Agricultural areas used for intensive agricultural practices (e.g. crop cultivation, vineyards, intensive stock farming on pastures). It includes cultivated areas and plantations and woodlots.		

Table 53. SPCs for Stellenbosch Municipality and associated land use policy and guidelines (cont.)

SPC	SUB-CATEGORY	CATEGORY DESCRIPTION IN SEMF	KEY GUIDELINES FOR SPCs: Western Cape Land Use Planning: Rural Guidelines	KEY POLICY FOR SPCs : SEMF
URBAN RELATED	D.a. Main towns	Towns accommodating Category A Municipalities (i.e. metropolitan areas) and the seat (capital town) of Category C Municipalities (District Municipalities).	<ul style="list-style-type: none"> Wherever possible existing settlements should be used to accommodate non-agricultural activities and facilities. The edges to settlements should be defined in a manner that allows for suitable for the expansion of existing settlements. Visual impact considerations should be taken into account, especially within settlement gateways. Settlement encroachment into agricultural areas, scenic landscapes and biodiversity priority areas (especially between settlements, and along coastal edges and river corridors), should be prevented. Where new settlements need to be established, consideration needs to be given to environmental impact (e.g. waste management), agricultural impact, visual impact (especially on the rural landscape, historical settlement patterns and form, and natural landscape and topographical form. New buildings and structures should conform to the massing, form, height and material use in existing settlements. When accommodating development in existing settlements the following principles should be followed: <ul style="list-style-type: none"> Retain the compact form of smaller settlements. Maintain and enhance public spaces. Reinforce the close relationship of settlements to the regional route structure. Integrate new development into the settlement structure. Respect socio-historical and cultural places. Respond to and enhance an economically, socially and spatially meaningful settlement hierarchy that takes into account the role, character and location of settlements in relation to one another while preserving the structural hierarchy of towns, villages, hamlets and farmsteads in relation to historical settlement patterns. 	<ul style="list-style-type: none"> As a general rule, non-agricultural development may not be permitted outside the urban edge except for bona-fide holiday/tourism accommodation, bona fide agri-industry development, agri-settlements, and social facilities and infrastructure necessary for rural development (this guideline is subject to the principle that each proposed land development area should be judged on its own merits and no particular use of land, such as residential, commercial, conservation, industrial, community facility, mining, agricultural or public use, should in advance or in general be regarded as being less important or desirable than any other land-use). Prohibit further outward expansion of urban settlements that results in urban sprawl. Use publicly-owned land and premises to spatially integrate urban areas and to give access for second economy operators into first economy spaces. Use walking distance as the primary measure of accessibility. Promote sustainable urban activities and public and NMT. Densify urban settlements, especially along main transport routes, and nodal interchanges. Restructure road networks to promote economic activity in appropriate locations. Cluster community facilities together with commercial, transport, informal sector and other activities so as to maximise their convenience, safety and social economic potential. Institutional buildings that (accommodating community activities, educational and health services, and entrepreneurial development and skills training) should be located at points of highest access in urban settlements. Development within natural areas must blend in or harmonise with the biophysical characteristics of the environment. Buildings for tourism-related developments should be in harmony with the surrounding landscape and local vernacular. Landscaping must be undertaken simultaneously with construction.
	D.b. Local towns	Towns accommodating the seat (capital town) of Category B Municipalities (Local Municipalities).		
	D.c. Rural settlements	Smaller towns and rural settlements that fall under the jurisdiction of Category B Municipalities (i.e. towns and rural settlements forming part of a Local Municipality).		
	D.e. Tribal authority settlements	Formal and informal residential areas under the ownership of tribal authorities.		
	D.f. Communal settlements	Settlements that have been planned, classified and subdivided in terms of the former Rural Areas Act 9 of 1987 and which, in terms of the Transformation of Certain Rural Areas Act 94 of 1998, can be transferred to a legal entity of the community's choice.		
	D.g. Institutional areas	Areas designated for schools, colleges, churches and mosques and other institutional purposes.		
	D.h. Authority areas	Areas designated for governmental purposes and other official uses (e.g. municipal offices, offices of parastatals).		
	D.i. Residential areas	Areas designated for residential purposes (e.g. single title erven, group housing, estates, GAP housing, and residential smallholdings).		
	D.j. Business areas	Areas designated for activities associated with retail and service industries (e.g. shops, restaurants, professional offices).		
	D.k. Service related business	Areas designated for other business activities associated with service trade industries (e.g. laundrettes and light manufacturing industries; and industries associated with motor vehicle sales and repairs).		

Table 54. SPCs for Stellenbosch Municipality and associated land use policy and guidelines (cont.)

SPC	SUB-CATEGORY	CATEGORY DESCRIPTION IN SEMF	KEY GUIDELINES FOR SPCs: Western Cape Land Use Planning: Rural Guidelines	KEY POLICY FOR SPCs : SEMF
URBAN RELATED	D.k. Special business	Areas designated for special business activities associated with casinos and gambling houses and areas identified for adult entertainment.	<ul style="list-style-type: none"> Wherever possible existing settlements should be used to accommodate non-agricultural activities and facilities. The edges to settlements should be defined in a manner that allows for suitable for the expansion of existing settlements. Visual impact considerations should be taken into account, especially within settlement gateways. Settlement encroachment into agricultural areas, scenic landscapes and biodiversity priority areas (especially between settlements, and along coastal edges and river corridors), should be prevented. Where new settlements need to be established, consideration needs to be given to environmental impact (e.g. waste management), agricultural impact, visual impact (especially on the rural landscape, historical settlement patterns and form, and natural landscape and topographical form. New buildings and structures should conform to the massing, form, height and material use in existing settlements. When accommodating development in existing settlements the following principles should be followed: <ul style="list-style-type: none"> Retain the compact form of smaller settlements. Maintain and enhance public spaces. Reinforce the close relationship of settlements to the regional route structure. Integrate new development into the settlement structure. Respect socio-historical and cultural places. Respond to and enhance an economically, socially and spatially meaningful settlement hierarchy that takes into account the role, character and location of settlements in relation to one another while preserving the structural hierarchy of towns, villages, hamlets and farmsteads in relation to historical settlement patterns. 	<ul style="list-style-type: none"> As a general rule, non-agricultural development may not be permitted outside the urban edge except for bona-fide holiday/tourism accommodation, bona fide agri-industry development, agri-settlements, and social facilities and infrastructure necessary for rural development (this guideline is subject to the principle that each proposed land development area should be judged on its own merits and no particular use of land, such as residential, commercial, conservation, industrial, community facility, mining, agricultural or public use, should in advance or in general be regarded as being less important or desirable than any other land-use). Prohibit further outward expansion of urban settlements that results in urban sprawl. Use publicly-owned land and premises to spatially integrate urban areas and to give access for second economy operators into first economy spaces. Use walking distance as the primary measure of accessibility. Promote sustainable urban activities and public and NMT. Densify urban settlements, especially along main transport routes, and nodal interchanges. Restructure road networks to promote economic activity in appropriate locations. Cluster community facilities together with commercial, transport, informal sector and other activities so as to maximise their convenience, safety and social economic potential. Institutional buildings that (accommodating community activities, educational and health services, and entrepreneurial development and skills training) should be located at points of highest access in urban settlements. Development within natural areas must blend in or harmonise with the biophysical characteristics of the environment. Buildings for tourism-related developments should be in harmony with the surrounding landscape and local vernacular. Landscaping must be undertaken simultaneously with construction.
	D.l. SMME incubators	Areas designated for SMMEs and associated infrastructure and services focused on community-based service trade and retail.		
	D.m. Mixed use development areas	Areas designated for innovative combinations of land-use (e.g. residential/ light business; light industry/ light business).		
	D.n. Cemeteries	Cemeteries and formal burial parks, excluding crematoriums.		
	D.o. Sports fields and infrastructure	Dedicated sports fields together with the associated infrastructure, parking areas, and services.		
	D.p. Airport and infrastructure	Area designated as airport together with the infrastructure and services associated with the airport and its activities.		
	D.q. Resorts and tourism related areas	Tourism-related nodes and amenities that form part of a designated hospitality corridor.		
	D.r. Farmsteads and outbuildings	Main farmsteads, including on-farm infrastructure required for farm logistics (e.g. houses, sheds, packing facilities).		

Table 55. SPCs for Stellenbosch Municipality and associated land use policy and guidelines (cont.)

SPC	SUB-CATEGORY	CATEGORY DESCRIPTION IN SEMF	KEY GUIDELINES FOR SPCs: Western Cape Land Use Planning: Rural Guidelines	KEY POLICY FOR SPCs : SEMF
INDUSTRIAL AREAS	E.a. Agricultural industry	Agriculture-related industrial development (e.g. silos, wine cellars, packing facilities, excluding abattoirs).		<ul style="list-style-type: none"> Industrial development must be clustered in close proximity to the product source, in close proximity to major transport linkages and bulk infrastructure. Actively promote the clustering of industrial activity.
	E.b. Industrial development zone	Dedicated industrial estate ideally linked to an international, or national, port that leverages fixed direct investments in value-added and export-orientated manufacturing industries.		
	E.c. Light industry	Areas designated for light industrial activities associated with the service industry (e.g. repair of motor vehicles) including warehouses and service stations.		
	E.e. Heavy industry	Areas designated for robust industrial activities (e.g. chemical works, brewery, processing of hides, abattoirs, stone crushing, crematoriums).		
	E.f. Extractive industry	Settlements and infrastructure associated with multiple consumptive resource extraction (e.g. mining).		
SURFACE INFRASTRUCTURE AND BUILDINGS	F.a. National roads	National roads proclaimed in terms of the National Roads Act 7 of 1998.		<ul style="list-style-type: none"> Bridge geographic distances affordably, foster reliability and safety, so that all citizens can access previously inaccessible economic opportunities, social spaces and services. Support economic development by allowing the transport of goods from points of production to where they are consumed (this will also facilitate regional and international trade). Promote a low-carbon economy by offering transport alternatives that minimise environmental harm. Urban development must comply with the principles of Transport Orientated Development (TOD).
	F.b. Main roads	Provincial and regional roads proclaimed in terms of the Roads Ordinance 19 of 1976.		
	F.c. Minor roads	Regional and local roads proclaimed in terms of the Roads Ordinance 19 of 1976.		
	F.e. Public streets	Public streets and parking areas within main town and rural settlements.		
	F.f. Heavy vehicle overnight facilities	Areas designated for heavy vehicle parking and overnight facilities.		
	F.g. Railway lines	Railway lines and associated infrastructure.		
	F.h. Power lines	Power lines and associated sub-stations and infrastructure.		
	F.i. Renewable energy structures	Any part of the infrastructure of a telecommunication network for radio/ wireless communication including, voice, data and video telecommunications.		
	F.j. Dams and reservoirs	Major dams and reservoirs.		
	F.k. Canals	Constructed permanent waterways (e.g. irrigation canals, stormwater trenches).		
	F.l. Sewerage plants and refuse areas	Areas designated as municipal and private sewerage treatment plants and refuse areas.		
	F.m. Science and technology structures	Any areas associated with the science and technology sector, with specific reference to the SKA and the designated astronomy reserve.		

D. Thematic Guidelines Drawn From “Western Cape Land Use Planning: Rural Guidelines” which may be applicable to different SPCs

Table 56. Thematic land use guidelines for rural areas

THEME	APPLICABLE SPCs	GUIDELINES
Rural land use change		<ul style="list-style-type: none"> Decisions on rural development applications should be based on the PSDF principles of spatial justice, sustainability and resilience, spatial efficiency, accessibility, and quality and livability. Good quality and carefully sited development should be encouraged in existing settlements. Accessibility should be a key consideration in all development decisions. New building development should be strictly controlled regarding scale and dimension, height, colour, roof profile, etc. No development should be permitted below the 1:100 flood line. Priority should be given to the re-use of previously developed sites in preference to greenfield sites. All development in rural areas should be in keeping and in scale with its location, and be sensitive to the character of the rural landscape and local distinctiveness. Only activities that are appropriate in a rural context, generate positive socio-economic returns, and do not compromise the environment or ability of the municipality to deliver on its mandate is supported. The cumulative effect of all ancillary and non-agricultural land uses should not detract from the rural character of the landscape and the primary agricultural activities. Development in the rural area should not: <ul style="list-style-type: none"> Have a significant negative impact on biodiversity. Lead to the loss or alienation of agricultural land or has a cumulative impact there upon. Compromise existing or potential farming activities. Compromise the current and future possible use of mineral resources. Be inconsistent with the cultural and scenic landscape within which it is situated. Involve extensions to the municipality's reticulation networks. Impose real costs or risks to the municipality delivering on their mandate. Infringe on the authenticity of the rural landscape.
Conservation		<ul style="list-style-type: none"> The key principle is to formally protect priority conservation areas, establish ecological linkages across the rural landscape, and mainstream a conservation ethic into all rural activities (through established mechanisms applicable to public and private land). Buildings and infrastructure associated with conservation should be limited to structures such as environmental or tourist facilities, tourist accommodation, utility services and in the case of privately owned conservation areas one homestead. Not more than one homestead should be permitted irrespective whether the conservation area is owned by entities of multiple ownership. Avoid establishing facilities with a large workers' residential component in conservation areas. Accommodation on proclaimed nature reserves should be limited to tourist accommodation providing opportunities for tourists and visitors to experience the Western Cape's unique biodiversity.

Table 57. Thematic land use guidelines for rural areas (cont.)

THEME	APPLICABLE SPCs	GUIDELINES
Agriculture	Agriculture, Buffer 1, and Buffer 2 SPCs	<ul style="list-style-type: none"> The key principle is to promote consolidation of farming landscapes and prevent their fragmentation; provide for land and agrarian reform; improve the viability of farming by facilitating diversification of the farm economy; promote enterprise opportunities within the food system and promote sustainable farming practises. Within the Agriculture SPC areas could be reserved for small-scale farming and emerging farmer establishment that are in close proximity to towns and villages, and along rural movement routes. A minimum agricultural holding size of 8000m² is recommended for small-scale agricultural properties and such properties should include an independent water source and be linked to a land reform project. Farm buildings and associated structures (e.g. one homestead, barns, agri-worker housing, etc.) should be clustered within the farmstead precinct. Buildings accommodating ancillary on-farm activities (e.g. guest house) should be located within the farmstead precinct, preferably using existing structures. Where new buildings are erected these should be on previously disturbed footprints within or adjacent to the farm werf and not on cultivated land. Ancillary on-farm activities should not detract from the functionality and integrity of farming practices and landscapes and be of an appropriate scale and form. Camp sites of multiple free standing or linked structures of a temporary nature may include caravans and tents, but excludes mobile homes (plettenberg homes or ship containers) and are conventionally seen as being part of resort developments, but can also be permitted on agricultural land, dependant on scale. Camping establishments should be restricted to a low impact scale and intensity in keeping with the context of the area and its surrounding character. Additional dwelling units should be restricted to 1 unit per 10ha, to a maximum of 5 units; 175m² maximum floor area including garaging and building height of 1 storey (6.5m). Additional dwelling units should be non-alienable, whether individual erf, sectional title, share block or other. Only activities that are appropriate in a rural context, generate positive socio-economic returns, and do not compromise the environment or ability of the municipality to deliver on its mandate should be accommodated. The long term impact on the municipality (resources and financial), agricultural activities, production and sustainability, risk and finances, and the scenic, heritage and cultural landscape should be considered when decisions are taken. Large scale resorts and tourist and recreation facilities that detract from the functionality and integrity of productive farming landscapes should not be allowed.

Table 58. Thematic land use guidelines for rural areas (cont.)

THEME	APPLICABLE SPCs	GUIDELINES
Rural Accommodation		<p>Tourist accommodation:</p> <ul style="list-style-type: none"> Recognising the prospects of tourism to diversify and strengthen the rural economy, the provision of a variety of short term tourism accommodation across the rural landscape that is in keeping with the local character is supported. Large scale tourist accommodation should preferably be provided in or adjacent to existing towns and rural settlements. Tourist accommodation in the rural landscape could be allowed if, of an appropriate scale and form, appropriate to the SPC. Tourist accommodation situated outside of the urban edge should be clustered in visually discreet nodes, preferably make use of existing buildings or new buildings on disturbed footprints, located within or peripheral to the farmstead, reinforce rural landscape qualities, and cater exclusively for the temporary accommodation for in transit visitors. Whilst it is preferable that they be located within the farmstead, dispersed rental units should be on existing farm roads, in visually unobtrusive locations, and be self-sufficient in terms of servicing. Additional dwelling units should be restricted to 1 unit per 10ha, to a maximum of 5 units; 175m² maximum floor area including garaging and building height of 1 storey (6,5m). Additional dwelling units should be non-alienable, whether individual erf, sectional title, share block or other. Camp sites of multiple free standing or linked structures of a temporary nature may include caravans and tents, but excludes mobile homes (plettenberg homes or ship containers) and are conventionally seen as being part of resort developments, but can also be permitted on agricultural land, dependent on scale. Camping establishments should be restricted to a low impact scale and intensity in keeping with the context of the area and its surrounding character. A resort development should be closely associated with a resource which clearly advantaged and distinguished the site, in terms of its amenity value, from surrounding properties. Resorts may not be located within productive agricultural landscapes, but must be situated adjacent to a rural feature or resource (e.g. dam, river) that offers a variety of leisure and recreation opportunities (e.g. hiking, mountain biking, water based activities), and is well connected to regional routes. Rezoning to resort zone should not be entertained for properties of which the size is less than 50 ha. Only in exceptional circumstances should more than 50 units be allowed. Subdividing and alienating individual units in rural resort developments is not be allowed. The resort development itself may not be subdivided and alienated from the original farm (whether individual erf, sectional title, share block or other). Rural resorts should be compact and clustered in nodes and a range of accommodation types is encouraged. The building height of any new resort unit should be restricted to that of a single storey (6,5m). The maximum floor area of a resort unit should be limited to 120m², including garaging. <p>Smallholdings:</p> <ul style="list-style-type: none"> New smallholding developments should not be permitted in the rural landscape. New smallholdings can be established on suitable land inside the urban edge. <p>Agri-worker housing:</p> <ul style="list-style-type: none"> Agri-worker dwellings are regarded as part of the normal farm operations based on the extent of the bona fide agricultural activities on the land unit and applicable in all rural SPCs. Units should be non-alienable, whether individual erf, sectional title, share block or other. The building height of agri-worker dwelling units should be restricted to that of a single storey (6,5m) with a maximum floor area of 175 m². The placement of the dwelling units should not undermine the sustainable utilisation of agricultural resources. Where possible agri-workers' dwelling units should be clustered and located in close proximity to rural movement routes, existing services and housing stock where-ever possible. The number of units must reasonably be connected to the bona-fide primary farming and agricultural activities on the land unit. Ideally accommodation should be provided on the land unit where production is taking place with the most units on the larger property if more than one property is involved. Where the employer farms on more than one cadastral unit, consideration should be given to the location of the facilities in relation to the main farmstead.

Table 59. Thematic land use guidelines for rural areas (cont.)

THEME	APPLICABLE SPCs	GUIDELINES
Tourist and Recreational Facilities	All SPCs	<ul style="list-style-type: none"> Whilst tourist and recreation facilities should be accommodated across the rural landscape, the nature and scale of the facility provided needs to be closely aligned with the environmental characteristics of the local context. The development should have no adverse effects on society, natural systems and agricultural resources. Rural tourism and recreation facilities and activities should not compromise farm production, and be placed to reinforce the farmstead precinct. Existing structures or disturbed footprints should preferably be used, and adequate provision made for access and parking. A large-scale recreational facility which includes a residential component (e.g. golf courses, polo fields, horse racing) should be located on the urban edge, with such residential component located inside the edge.
Rural Business	All SPCs	<ul style="list-style-type: none"> Appropriate rural businesses could be accommodated in all SPCs (e.g. curio-shop appropriate in a National Park) but with restrictions and subject to site attributes. Place-bound businesses (appropriate land uses ancillary to agriculture) include farm stalls and farm shops, restaurants and venue facilities (e.g. conferences and weddings) businesses should preferably be located on the farm to consolidate the farmstead precinct, and complement the farm's operations. Restaurants and venue facilities should be located within the farmstead precinct and be of appropriate scale and vernacular design, generate positive socio-economic returns and do not compromise the environment, agricultural sustainability, and the scenic, heritage and cultural landscape. A farm shop should be limited to selling of daily requisites to agri-workers and employees of the farm and farm stalls to selling products produced and processed on the farm to tourists and travellers. Each should be limited to a maximum floor space of 100m² including storage facilities. Restaurant and venue facilities to be limited to a maximum floor space of 500m² and to be of a scale compatible with the farmstead precinct and/or surrounding rural context.
Industry in Rural Areas	Buffer 2, Agriculture and Settlement SPCs.	<ul style="list-style-type: none"> All non-place-bound industry (land uses not ancillary to agriculture e.g. transport contractors, dairy depots, fabricating pallets, bottling and canning plants, abattoirs and builder's yards) should be located within urban areas. Extractive industry (i.e. quarrying and mining) and secondary beneficiation (e.g. cement block production, concrete batch plants, pre-mix asphalt plants) have to take place at the mineral or material source. If the mine will result in an impact on biodiversity a biodiversity offset must be implemented. All place-bound agricultural industry related to the processing of locally sourced (i.e. from own and/or surrounding farms) products, should be located within the farmstead precinct in the agricultural area. Industry in rural areas should not adversely affect the agricultural potential of the property. Agricultural industry should be subservient or related to the dominant agricultural use of the property and/ or surrounding farms. All industries should exclude any permanent on-site accommodation for workers or labourers. The subdivision of agricultural land to accommodate industrial activities should be discouraged and only used as a last resort so as not to fragment the agricultural landscape.

Table 60. Thematic land use guidelines for rural areas (cont.)

THEME	APPLICABLE SPCs	GUIDELINES
Community facilities and institutions	Buffer 2, Agriculture and Settlement SPCs.	<ul style="list-style-type: none"> Community facilities and institutions should preferably be located in the Settlement, Buffer 2, and Agriculture SPCs. Where-ever practical, community facilities should be located in settlements. Location within the rural landscape may be required in exceptional circumstances when travel distances are too far or rural population concentrations justifies the location of community facilities in rural areas. In extensive agricultural areas, it is preferable to locate rural community facilities and institutions in Buffer 2 SPCs, and along regional accessible roads. In instances where community facilities are justified "on-farm", existing farm structures or existing footprints should be utilised, with local vernacular informing the scale, form and use of materials. Facilities to be located on disturbed areas and areas of low agricultural potential. The nodal clustering of community facilities in service points should be promoted, with these points accommodating both mobile services and fixed community facilities (e.g. health, pension payments). The subdivision of agricultural land to accommodate community facilities or institutions should be discouraged and lease agreements are preferred. Wherever possible new community facilities should be located in settlements and not in isolated locations. Only activities that are appropriate in a rural context, generate positive socio-economic returns, and do not compromise the environment or ability of the municipality to deliver on its mandate should be accommodated. The long term impact on the municipality (resources and financial), agricultural activities, production and sustainability, risk and finances; and the scenic, heritage and cultural landscape should be considered when decisions are taken. Any new buildings in the rural area to be informed by local vernacular regarding scale, form and building materials and should include appropriate buffers, and landscaping and screening to reduce their visual impact on the rural landscape.
Infrastructure Installations	Buffer 2, Settlement	<ul style="list-style-type: none"> Infrastructure installations and facilities should preferably be located in the Settlement and Buffer 2 SPCs. Where locations inside urban areas are impractical, then extensive agricultural areas peripheral to settlements are preferable. Where possible installations should be located on previously disturbed terrain, or land of low biodiversity or agricultural value. Within the Agricultural SPC only essential installations should be accommodated. No bulk infrastructure installation or facility, its foot print, service area, supporting infrastructure or access routes in any form or for any purpose will be allowed on high potential or unique agricultural lands, will be allowed on areas currently being cultivated or areas that have been cultivated in the last ten years, should intervene with or impact negatively on exiting or planned production areas as well as agricultural infrastructure, should result in the degradation of the natural resource base of the rural areas, be located within a CBA or ESA. Installations, facilities or supporting infrastructure should, where possible, not be established on slopes of more than 12%. No subdivision of agricultural land will be allowed to accommodate the establishment of any installation, facility or supporting infrastructure or access routes in any form or for any purpose unless the application adheres to the norms and standards for approval of the sub-division of agricultural land. Any installation, facilities and associated infrastructure, including buildings, power lines, cables and roads which has reached the end of its productive life or has been abandoned, must be removed. Avoid establishing installations with a large workers' residential component in remote rural locations. Installations should include appropriate buffers, and landscaping and screening to reduce their visual impact on the rural landscape. Construction access, setbacks, height, lighting, signage, and advertising associated with the installation should be as prescribed in the Western Cape Land Use Planning: Rural Guidelines.

Table 61. Thematic land use guidelines for rural areas (cont.)

THEME	APPLICABLE SPCs	GUIDELINES
Urban Development		<ul style="list-style-type: none"> • Low density sprawl into the rural landscape should be limited to the minimum. • Smart growth principles such as integration and urban restructuring should be promoted. • Layout options of new settlements should be clustered in layout. • In all cases the provision of housing and associated services to rural communities should preferably take place in existing settlements, thereby improving their sustainability. • No new settlement should be permitted in the rural landscape except agri-villages as defined in the Province of the Western Cape: Policy for the Settlement of Farm Workers, September 2000 (PN414/2000, No. 5572), or the formalisation of the "urban" component of existing missionary, forestry and conservation settlements. • The establishment of new agri-village settlements can only be justified in exceptional circumstances (i.e. when there are compelling reasons not to use existing towns, villages, and hamlets). • The option of "off-the-farm" settlement of agri-workers in agri-villages should only be considered when this is the preferred option of target beneficiaries, and existing settlements are too far away to commute to.
Sustainable Agriculture		<ul style="list-style-type: none"> • Land with potential must be conserved for agriculture and the practice thereof.¹⁰ • Norms/ guidelines for the size of agricultural holdings will be as determined through a consultative process with organised agriculture, the various trade organisations and the Department of Agriculture Western Cape (reflected in Box ...).

10. Criteria for high potential agricultural land are described in Report Number GW/A/2002/21 for the National Department of Agriculture by the ARC-Institute for Soil, Climate and Water, dated June 2004.

E. Norms / Guidelines for the Size of Agricultural Holdings

Table 62. Norms/ guidelines for the size of agricultural holdings

	FARMING ENTERPRISE	SIZE/ QUANTITY	IRRIGATION WATER	COMMENT
1	Grain (rotational practices are not included in the calculation and should therefore be taken into consideration).	<ul style="list-style-type: none"> 1 200 tonnes 		<ul style="list-style-type: none"> Based on long-term yield e.g. 1 200 units divided by 3 tonnes/ha = 400ha
2	Livestock: extensive beef cattle, milk (grazing)	<ul style="list-style-type: none"> 1 200 Small Stock Units (SSU) 200 Large Stock Units (LSU) 60 cows (lactating) 		<ul style="list-style-type: none"> Based on carrying capacity e.g. 1 200 SSU x 10ha = 12 000ha
3	Deciduous fruits	<ul style="list-style-type: none"> 40ha 	<ul style="list-style-type: none"> 40ha @ 7 500m³/ha 	<ul style="list-style-type: none"> Arable land
4	Citrus	<ul style="list-style-type: none"> 40ha 	<ul style="list-style-type: none"> 40ha @ 7 500m³/ha 	<ul style="list-style-type: none"> Arable land
5	Vineyards	<ul style="list-style-type: none"> 40ha 	<ul style="list-style-type: none"> 40ha @ 7 500m³/ha 	<ul style="list-style-type: none"> Arable land
6	Dryland vineyards	<ul style="list-style-type: none"> 80ha 		<ul style="list-style-type: none"> Suitable climate and soil potential
7	Export table grapes	<ul style="list-style-type: none"> 30ha 	<ul style="list-style-type: none"> 30ha @ 7 500m³/ha 	<ul style="list-style-type: none"> Arable land
8	Combination of the above	<ul style="list-style-type: none"> On merit, comparable to the above sizes 		