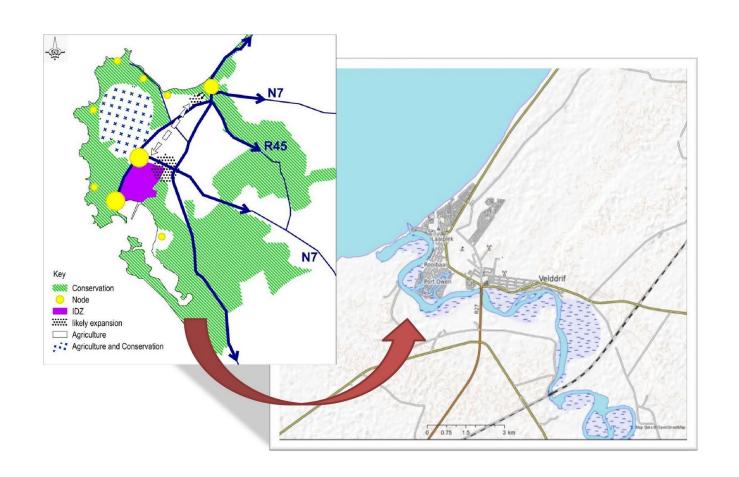
## PROPOSED AD HOC AMENDMENT OF BERGRIVIER SPATIAL DEVELOPMENT FRAMEWORK: STATUS QUO AND PROPOSALS, 2012 – 2017

## **Final Draft**



**COMPILED BY:** 

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## **LIST OF ABBREVIATIONS:**

BM Bergrivier Municipality

BRE Berg River Estuary

BSDF Bergrivier Spatial Development Framework: 2012 – 2017

GPS Growth Potential Study, 2014

GAADD Gross annual average daily demand

IDP Survey, 2017 Municipal Survey, 2017, IDP Needs and Customer

Satisfaction Survey

IDP Integrated Development Plan

LUPA Western Cape Land Use Planning Act, 2014 (Act 3 of

2014)

mcm/a million cubic metre per annum

MSA Local Government Municipal Systems Act, 2000 (Act 32 of

2000)

PGWC Provincial Government Western Cape

SDF Spatial Development Framework

SPLUMA Spatial Planning and Land Use Management Act, 2013

(Act 16 of 2013)

VLPP Velddrif and Laaiplek Precinct Plan

VL Velddrif, Laaiplek, Noordhoek, Port Owen (Wards 6 & 7)

WC West Coast

WCPSDF Western Cape Provincial Spatial Development Framework

WCSDF West Coast Spatial Development Framework

IGSC Inter-governmental Steering Committee

Note that when an abbreviation is used at the end (or start) of a paragraph it implies that the content was taken from the specific document represented by the abbreviation.

## **Executive Summary**

Several land use applications were submitted for consideration to Bergrivier Municipality (BM) to develop the southern bank of the Berg River at Velddrif. None of these land use applications were consistent with the Bergrivier Spatial Development Framework, 2012 – 2017 (BSDF). Hence, BM was asked to amend the BSDF with particular reference to Velddrif, Laaiplek, Noordhoek and Port Owen (Ward 6 & 7) in accordance with the Municipal Systems Act 2000 (Act 32 of 2000) (MSA), to allow for opportunity to consider such applications.

The amendment of the BSDF will be done in accordance with the Integrated Development Plan (IDP) amendment timelines. The steps to enable such an amendment are set out in the BM Bylaw relating to Land Use Planning, 2018.

A Spatial Development Framework (SDF) document consists of two components. The two components are:

a) A Status Quo: Analyses the municipal and regional space i.e. the biophysical, socio-economic and built environments and sector activities for which the SDF is written. The analysis for each environment is summarised according to its Strengths, Weaknesses, Opportunities and Threats (SWOT). From the analysis a vision is proposed.

b) A Spatial Development Framework: Provides proposals and guidelines after spatial principles and tools were applied to generate concepts, obtain the buy-in from adjacent municipalities, other government departments, politicians and the public, and provides an implementation plan and budget.

## **Detailed Status Quo Analysis: Challenges and Opportunities**

The <u>biophysical environment</u> represents the natural capital base on which the socio-economic and built environment perform. The natural assets e.g. coast, river and estuary, climate, sandy beaches, birds and veld flowers are the tourist attractions and assets contributing strongly to VL's sense of place and economy based on the appreciation and abstraction of natural resources. To this end, several laws and policies protect the estuary, coast and wide-open spaces VL is associated with. They contribute to mitigating climate change, a real threat. Climate change will cause rainfall and temperatures to change resulting in extreme heat, rise in sea levels and floods or drought. Hence, habitat connectivity and water use from the river and from potable sources have to be monitored as they impact on the estuary's functioning. Fresh water is a scarce resource.

The <u>socio-economic environment</u> reflects the relationship between the population distribution and the services rendered by the natural resource base. The economy of VL has limited tertiary and secondary activities i.e.

processing and value adding, as it is mainly based on natural resources abstraction. Provincial, district and local roads networks have created high accessibility, identifying one of VL's comparative advantages. A well-managed public sector, strong institutional base and suitable land for housing constitute the balance. Settlement form was dictated by natural resources (harbour and river resources) and function was directed by economic and population growth trends. The appreciation of natural resources has resulted in tourism becoming a strong economic contributor, while conflicting uses i.e. conservation and industrial uses, have to be accommodated. Therefore, the Berg River Estuary Management Plan provides for seven zones regulating activity along the river.

VL is part of the Saldanha-Northern Cape Development Corridor, located within the spheres of influence of the Saldanha IDZ and part of the major regional growth centre. Hence VL will serve as a residential alternative for the IDZ. The role and function of VL within a local and regional economy and the potential economic and spatial impact of IDZ on the area is analysed. Diversification and growth of the secondary, tertiary and quaternary economic sectors are also examined.

As VL is close to the Saldanha IDZ, people migrate to VL in search for work in the area whilst VL is not earmarked for infrastructure investment as it has a medium composite growth score.

The <u>built environment</u> reflects the socio-economic patterns in a given area. Consequently, the relationship between the built environment and the natural resource base is not a primary relationship as it impacts the most severely on resource sustainability. Although VL has slightly less than 4000 vacant stands, it constitutes a sub-regional node of the IDZ and major regional growth centre node and is thus one of the residential alternatives for the IDZ. These vacant erven have taken up services capacity with little return i.e. rates and taxes but no economic activity. Moreover, several formal and unofficial resorts have been established on both banks of the Berg River.

Current land uses lack economic and industrial diversity and variety in residential. Hence VL is made up of separate precincts and VL's low density discourages mobility and public transport.

The economic and environmental dangers posed by unreliable service providers are discussed as well as subsidised service provision. The impact of undeveloped, vacant erven which are fully serviced is evaluated from both a financial and an aesthetic point of view.

The <u>spatial concept and development framework</u> direct the proposals to follow and evaluate particularly the proposal to partially include Vlaminke Vlei within the urban edge of VL while determining whether this is necessary (responsible) and desirable (rational).

## **Legislative & Policy Context: Spatial Principles and Framework**

The guiding principles which inform the amendment of the Bergrivier SDF (2012- 2017) are the five principles of SPLUMA as well as two more as per the WCPSDF 2014: spatial justice, accessibility, spatial resilience, spatial sustainability, spatial efficiency, quality and liveability and good administration.

Comparing goals and objectives of the various policy frameworks and plans assist in generating the development framework. The comparison highlighted the IDP's purpose as implementation plan i.e. to address the needs of local residence over a 5 year period. The District IDP and SDF amplified national and provincial needs. The gap between the local level and district level planning provides the framework for the amendment. Hence two of the three spatial goals as set out in the West Coast District SDF (2014) became the development framework:

- a) Enhance infrastructure capacity in areas with the highest growth;
- b) Create an enabling environment to create employment, economic growth and grow tourism.

The analysis reveals that several plans and policies exist to enhance and protect biodiversity and agricultural assets, the third WCDSDF goal.

The amendment will therefore focus on opportunities related to infrastructure and economics and will address challenges at a sub-regional level as VL is part of the major regional growth centre and Saldanha-Northern Cape Development Corridor.

#### VL vision

VL is a:

- destination (influencing tourism based on natural resources)
- place to reside
- leading administrative town
- connector
- abstractor (collecting point) and producer and processor (economic value chain).

The spatial concept of VL is embedded in its sub-regional location (as illustrated): Capitalizing on VL's convenient en-route location within the Saldanha-Northern Cape Development Corridor as an IDZ sub-regional node to reside along the BRE. To enhance the spatial concept, land uses have to be consolidated, clustered, connected and expanded to capitalize on and optimize economic growth (e.g. commercial, industrial and residential tourism uses). As a result VL's credible and sustainable footprint has to be re-delineated to include sensitive and limited development to the north east, east and south while simultaneously aligning infrastructure and commuter transport to access the benefit from public sector investment in the major regional node, Vredenburg.

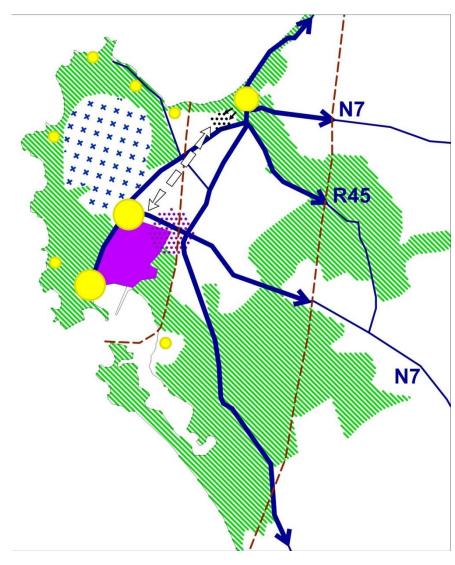


Figure 1: Spatial Concept

## **Development Proposal and Objectives**

The development proposal encompasses the development of Portion 1 of Farm Vlaminke Vlei No 54. The particular land use proposals include the following:

- Residential:
- High Density/ Mixed use 1.36ha (60 opportunities @ 420m²/unit 24 u/ ha);
- High Density: 12.10ha (251 opportunities @ 284m²/ unit 35 u/ha);
- Single Residential: 13.72ha (229 opportunities @ 608m²/unit 16 u/ha)
- Single Residential: 6.85ha (25 opportunities @ 2188m²/ unit 5 u/ha)
- Mixed use/Commercial: 3.9ha
- Light industrial and Institutional: 4.85ha
- Infrastructure: 5.75ha (1.44ha & 4.31ha)
- Aquaculture: 6.04ha
- Freshwater habitat: 4.31ha
- Agriculture: 31.58haConservation: 35.26ha

The development proposal and objectives build on the two WCDSDF goals and the five characteristics associated with VL (Similar to the One Cape 2040 vision). The following Objectives and supportive proposals enhance WCDSDF Goal 2 (Create an enabling environment to create employment, economic growth and grow tourism) to benefit VL from being located next to Saldanha Bay and being part of the Saldanha-Northern Cape Development Corridor.

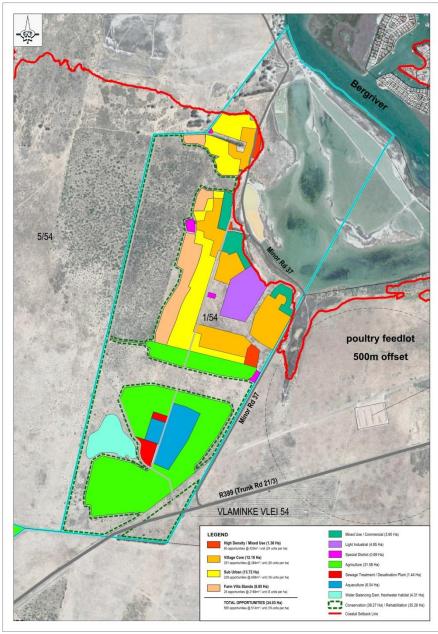


Figure 2: Development Proposal

<u>The first proposal</u> is to cluster and consolidate development within VL (develop inwards) to enhance economic development:

[6.1] Capitalize on being part of Saldanha-Northern Cape Development Corridor:

- [6.1.] a Enlarge tertiary and secondary sectors' contribution to GDP Create an enabling environment as alternative for investors considering setting up a plant in the IDZ
  - Align rates and taxes
  - Utilize en route accessibility
  - Provide for zoned land in SDF. See [6.1.]d
- [6.1.] b Diversify the economy of VL
  - Cluster economic activities
  - Implement VLPP proposals.
  - Agri-Aqua Tourism: Southern bank to cultivate mussels
  - Enhance conservation BRE which is part of the West Coast Biosphere Reserve and a regional climate change corridor.
- [6.1.] c Enhance specific links to IDZ and establish precincts outside IDZ e.g. yachting and tourism value chain.

- Enhance adventure sports including yacht building and related services and a Water Sport Academy at Laaiplek or western section of southern bank
- Enhance Cultural tourism and celebrate
  - Historic trading space or market where farmers from the interior and local fishermen traded fish and wine at the Vlaminke Vlei resort.
  - Historic entry point at De Plaat representing rural living,
  - Social spaces i.e. Channel to connect golf course and various residential precincts.
- Enhance industrial tourism by integrating the saltpans into the tourism economy.
- [6.1.] d Provide zoned land to change the economic status of VL
  - Expand SDF proposals
  - Connect four urban precincts
  - Bring about redevelopment of large isolated residential developments not being built up.
  - Develop a zoning target and restructuring implementation plan for VL.

#### Provide Industrial land

Compared to the norms for zoned land in developed economies i.e.
 the space per economically active (EA) persons required, VL needs

- ±85ha industrial land as per norm for single residential developments.
- As the extent of the industrial land required is vast, the development thereof could change the character of VL. Hence, such industrial land can primarily be provided within the IDZ, while less industrial land is required in VL.
- Cumulative additional industrial land demand for the IDZ in the Saldanha Bay Municipal area was calculated as 182.56 hectares most likely by 2024 (Next SDF 5 year cycle) followed by 572.10ha as the IDZ's catalysing effect settles in.
- Both St Helena and VL are ± 20km from the IDZ and are equally well and conveniently connected to the IDZ. Vredenburg, Saldanha and Langebaan are less than 10km from the IDZ and connect in an even stronger sense to the IDZ.

#### **Provide Residential Land**

## Residential land within VL

 Considering the population growth rate (5.6%) resulting in an estimated 8 414 to 8 974 households by 2027/28 (currently 5 153 to 5 496), it appears Velddrif has sufficient residential land till 2027/28 for the 3 733 to 3 981 additional families. The number of opportunities available total 3 632 (1 532 open erven plus 120ha developable land equals to 2100 opportunities).

- As the envisaged residential opportunities will be absorbed by 2027/28
   (over the 10 years after 2017), which is during the next SDF 5 year cycle
   (5th generation IDP), these projections should form part of the 2017 2022 SDF given that the SDF is a medium term (5 year) and long term
   (20 year) framework.
- To provide for the need in residential land arising in 2027/28, there are two strategies i.e. to densify or to develop additional land.
- By 2031 half of these additional households would have absorbed the densification opportunities applying the provincial densification norm of 25du/ha. By 2034 all of these opportunities will be absorbed.

## Residential land for the Sub-region (IDZ)

The residential land required and calculated by applying:

- the number of families directly employed (7 694 households) in the IDZ multiplied by a standard erf size (less than 224m²) or
- the residential ratio model adjusted or
- the mixed use model

Should households settle firstly within the Saldanha Bay municipal area (and at a population growth rate of 4.8%) the additional 1 219.8ha will be nearly taken up (with 31ha of residential land oversupplied) by 2031.

#### The need is confirmed as:

- The migration rate to the Saldanha Bay Municipality is estimated at as high as 15.4% whilst the migration rate to the West Coast is 4.8% (IDP Census Survey, 2017).
- The Bergrivier and Saldanha Bay municipal housing waiting lists confirmed the need for 1 330 (2017) and 8 866 (2013) dwellings respectively required in 2017. In 2017 Saldanha Bay had the highest number of informal structures, 15.5%, whilst Bergrivier has less than 1% informal dwellings. The projection is that 21 579 additional dwellings and 482ha of land will be required by 2021 including this backlog.
- Besides land required and provided for in the SDF there are other opportunities which need to be considered as part of the housing provision stock. These are:

Description	Opportunities
By 2023/2024	
Densification opportunities:	4 500
Number of permanent dwelling units with densification	
options (17 5251 or 84% of population living in	

<sup>&</sup>lt;sup>11</sup>84.4% permanent dwelling

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permanent structures of which 80% of households earn	
below R3 500 per annum)	
Opportunities equal 180ha land	
Opportunities: vacant serviced erven	10 726
Opportunities in St Helena alone: 5 652	
Opportunities equal 429ha residential land	
Total	15 226

- These projections may imply that there will be between 40 000 to 70 000 additional families in 2031.
- Adding the 15 226 opportunities, which include 11 010 vacant erven in Saldanha Bay, these opportunities may be absorbed by 2035. Thus 20 years from now, all opportunities will be taken up in Saldanha Bay.

In 20 years' time the need for additional residential stock will have to be supplied by

- Greenfields developments (expansions) should the 6% growth rate be applied and
- Rejuvenation and densification.

### 6.1.2.3 Provide Commercial Land

There are several options that cater for the associated commercial opportunities:

- within existing development

- Change land use to accommodate e.g. tourism related services within an existing residential area
- Rezone to commercial only (rejuvenation)
- Change land use to mixed use (e.g. VLPP proposals).
- Expand existing commercial nodes
- <u>Greenfields development</u> (land earmarked for mixed uses at northern entrance, some land north east, the southern bank and at eastern entrance).

Commercially zoned land is a prerequisite to exploit Velddrif's advantage of its proximity to the IDZ. Demand for residential and commercial uses are influenced by specific locational requirements (Saldanha Pre-feasibility Analysis, 2009) that VL can fulfil as it is:

- influenced by the spatial form anticipated for the IDZ e.g. pockets of industrial land separated with corridors of natural veld
- part of the Saldanha-Northern Cape Development Corridor
- part of a functional area
- part of a functional key grouping of towns
- has locational directives (destinations) within VL
- guided by historic directives locally and sub regionally

As the development focus within VL shifts to commercial and industrial, large isolated residential developments will be absorbed or redeveloped.

The development space will become increasingly shared, multi-purposed and compact.

The second proposal / objective is to capitalize on and to connect development within and outside VL (develop outwards) to enhance growth and development:

- [6.2] Exploit accessibility and proximity and capitalise on being part of the Bay of Saldanha, a major regional growth node:
- [6.2.] a Provide affordable commuter transport to access employment opportunities within the Bay of Saldanha
  - Embrace the Bergrivier IDP 2017 2022's proposed programme to use tuk-tuks for public transport
  - Include a public transport levy in development contributions
  - Institute a toll-fee for trucks
- [6.2.] b Capitalize on the spatial proposals where development related to the IDZ should happen (sphere of influence)

The spatial forms of the Growth centre, IDZ and Settlement are determined by the spatial concentration (agglomeration) of related and inter-dependent economic activities (type of industry clusters) which is not limited to the zone, but takes place within the regional growth centre and functional area.

Residential use will be accommodated outside the IDZ, in Saldanha, Vredenburg, Langebaan and other towns for example Velddrif within the major regional growth centre (defined by an area being covered by a circle with a 25km radius with Vredenburg being the centre point).

- [6.2.] c Promote VL as a place to live while working in the Bay of Saldanha
  - Promote existing residential options as an alternative e.g. vacant serviced erven within VL.

Promote the holiday houses built along Pelican Place and at Port Owen to:

- ii. Have a dual function and serve as homes and holiday accommodation.
- iii. Serve as permanent holiday (short term) accommodation, particularly the houses along the coast.
- iv. Identify precincts or areas where such uses can be promoted by the BM.
- Consolidate economic development spatially within VL (Four precincts): Implement the three (3) Spatial Proposals of the VLPP
- Use locational directives to guide mixed land use in existing and proposed developments
- Waterfronts:
- The town is fortunate to have a waterfront and this asset can be leveraged for the good of all.

- The Provincial Hot Spot Analysis (See Built Environment: Urban Settlement: Hierarchy and Role of Settlements) illustrates that several dwellings and nodes exist on the southern bank. Besides residential uses commercial and industrial uses such as saltpans, salt mines, desalination plants and intensive feedlot farming (poultry) occur.
- The Berg River meanders through Paarl and Wellington and passes on one side of Hermon and Velddrif with settlement developed on only one bank.
- The zones allocated to the Berg River estuary ecosystem, now registered as a Special Protected Area, direct land uses. Zone C creates the ideal environment to enhance tourism development for example holiday accommodation on the southern bank of the Berg River.
- The river, estuary and coast is a resource and also supports land uses such as aqua culture and industry. Aqua culture should be promoted as part of the ocean economy and land reform.
- Part of a major regional growth centre:
- Seeing that VL is included in a major regional growth centre and within a functional area with its spheres of influence most pertinent in a southern and north eastern direction, the southern bank, west

of the R27 entering Velddrif, is the first point of contact and should be included in the development footprint (urban edge) of VL. Although expansion of the urban edge is not supported by development policies, this expansion can be motivated as follows:

- VL will serve as a residential precinct for the IDZ and a wider geographical area, as it did historically for its fishing industry.
- There will be a demand for housing across the income scale. The southern bank lends itself to upmarket developments, catering for higher and middle income groups as well as first time home owners and some GAP housing working in the IDZ as the opportunities within Port Owen, Dwarskersbos (Kersbosstrand) and Laaiplek (Atlantic Waves and Atlantic Sands) will be taken up in ten years' time.
- The taxes and levies paid by the higher and middle-income groupings on the southern bank would contribute to the provision of services for subsidized residential developments.
- Exploit the comparative advantages of VL

The different Growth Potential Indices reflect that VL and St Helena have a medium composite growth score. They also have the same status in the major regional growth centre classification (i.e. sub-regional towns). VL has

a slightly stronger comparative advantage than St Helena while St Helena has approximately 4x more residential serviced erven than Velddrif.

It is highly likely that Velddrif will expand over the next 15 years in tandem with St Helena's development (5 000 vacant serviced erven will be built up and the 79ha as proposed in the draft SDF will be developed by 2031 due to high accessibility ascribed to:

- a) the main roads (R27 and R399) which connect Velddrif directly to the IDZ and
- b) the direct connections north- and southwards
- c) VL being part of the Saldanha-Northern Cape Development Corridor
- d) Locational directives which enhance public access to the estuary and coastline.
- e) Vredenburg is earmarked for socio-economic investment and VL can easily access the facilities: As VL has outgrown Piketberg, VL's socio-economic classification has to be revised. Commuter transport should be provided to ensure accessibility.

The above directives should guide the delineation of VL's total credible and sustainable footprint. Sensitive and limited development to the north east, east and south should be considered.

- Address waiting list need for 1330 households and provide fully subsidized houses (Pro poor)
- Change competition to co-operation (St Helena and VL).

The following objectives and proposals enhance WCDSDF Goal 2 (Enhance infrastructure capacity in areas with the highest growth) to benefit it from being located next to Saldanha Bay and being part of the Saldanha-Northern Cape Development Corridor.

The third proposal is to: [6.3] Grow VL as a leader town administratively (BM):

- [6.3.] a. Foster Strategic LED IDZ Partnership (as per BM IDP) with Saldanha Bay Municipality
- [6.3.] b. Change overview on BM's website to express being part of Saldanha Major Regional Growth Centre (& IDZ) and Saldanha-Northern Cape Development Corridor (<u>www.bergmun.org.za</u>)
- [6.3.] c. Request amendments of relevant documents and practices
- Expand the IDZ proposals and capitalize on opportunities for VL (WCDSDF & IDP) informed by VL being part of the functional area, major regional growth centre and sphere of influence across municipal boundaries
- To deliberate economic and development matters in VL, convene joint meetings including Wards 6 & 7, instead of convening separate ward meetings.

- Capitalize on the SDF and IDP revision and in particular the Ward 6 & 7 sections and high-light VL's sub-regional position within the major regional growth centre and being part of the Saldanha-Northern Cape Development Corridor. Develop a Ward SDF for VL.
- Saldanha IDZ would be the 4th IDZ along the South African coastline. The Saldanha IDZ will be uniquely positioned and differentiated from the other IDZ's along the coastline and within South Africa. However, political support, buy-in, funding, securing of land and partnerships will be key to the successful development of the Saldanha Bay IDZ. To benefit economically, the BM should become a significant partner through providing buy-in and political support.
- The provision of appropriately zoned land or land earmarked to be rezoned will enable BM to be prepared for and to attract secondary and tertiary sector investors (horizontal development).
- To provide appropriately zoned land, development plans such as the LED and IDP Plans have to expand their strategies to create an environment conducive to change the economy from developing to developed. The Bergrivier IDP in particular has to expand its focus on National Infrastructure Projects such as the Saldanha-Northern Cape Development Corridor culminating in the IDZ. All these plans, including the SDF, should thereafter be aligned with the IDP.

The fourth and last proposal/ objective is to: *Provide sufficient services* efficiently and effectively:

- [6.4.] a Provide civil and electrical services shortfalls e.g. Waste Water Treatment Works capacity, Water storage capacity and Bulk electricity
- [6.4.] b Provide commuter transportation
- [6.4.] c Redress historic developments whose privately-provided services collapsed and had to be taken over by the municipality. Allow municipal controlled services only.

Of note is the precarious situation where services that were installed by developers could not be maintained by them. The BM had to take over these services without funded mandates. Proposed developments should be carefully aligned with the long term budgets of the BM.

A comparison between privately and municipally operated services follows in the section below (Find detailed comparison in Addendum D). Given the tracts of undeveloped land, the Municipality has to decide whether it is going to take over and maintain the infrastructure as established by a developer and sell water and electricity to the inhabitants of the development. Two scenarios have been developed, of which the Municipality has to choose one.

#### Recommendation

The recommended expansion of VL is based on the following reasons:

## Capitalize on Locational Directives:

Location on river bank: Waterfronts can be leveraged for the good of the community

- Southern bank detected as a building hotspot indicating that there is a stronger presence of buildings there than before
- Zone C is earmarked for recreational purposes & tourism. River interface provides for holiday accommodation and water sport tourism which enhances public access
- The river, estuary and coast support aqua culture and allow industrial uses.

#### Location on main roads:

- South western entry point and sense of place
- o En route accessibility of corridor
- Main roads (R27 and R399) directly connect VL to IDZ
- A direct road connection north and southwards.

<u>Capitalize on VL's location within a major regional growth centre</u> as Vredenburg's and Piketberg's sphere of influence is nearly 3x larger and slightly more than 2x larger than that of VL respectively:

 Sub-regional town status within major regional growth centre enhances strong comparative advantages

- Medium composite growth score yet has outgrown Piketberg's population. Piketberg has medium composite growth score
- Potential housing for a wider geographical area and income scale.
   Spatial provision is made within SDF (2012 -2017): urban and architectural design guidelines
- Potential to formalize settlement node on southern bank (subsidize fully subsidized services)
- De Plaat has potential for rural living small holdings
- Potential for southern bank development to use social amenities provided within VL
- Potential to vest aqua culture at Vlaminke Vlei and formalise SPC conservation on southern bank
- o Potential to market St Helena Bay as world class yachting basin
- Potential to re-establish historic Market at Vlaminke Vlei.

## Enhance VL as a place to reside for those working in the Bay of Saldanha:

- Existing residential options could be promoted for alternative uses (Redevelopment)
- Existing residential options could be promoted as alternative settlement option
- Comparative advantages (Velddrif & St Helena co-operation)
- Potential for providing fully subsidized housing for 1 330 households (backlog)

 Potential to access higher order social facilities & amenities in Vredenburg (Medium socio-economic growth potential rating of VL).

<u>Provide affordable commuter transport</u> to access employment opportunities within greater Saldanha (major regional growth centre):

- Potential to use tuk-tuks (Bergrivier IDP 2017 2022) for public transport
- Development contributions could include a public transport levy
- Potential for instituting a toll-fee for trucks (& ring fence funds).

IDZ & Port are part of the Saldanha-Northern Cape Development Corridor, a localisation agglomeration made up of precincts (clusters) separated by green corridors where higher impact industrial activities are located further away from residential areas and residential uses located outside the zone (Conglomeration of the 5 nodes).

These reasons, together with a well-managed public sector and strong institutional base will enable VL to maximise its economic growth and employment opportunities.

<u>Foster Strategic LED-IDZ Partnership with Saldanha Bay Municipality</u> and BM to become a significant partner to IDZ (as per BM IDP 2017 - 2022):

- Change overview on BM's website to express being part of Saldanha Major Regional Growth Centre (& IDZ) and Saldanha-Northern Cape Development Corridor (www.bergmun.org.za)
- Call for joint meetings including VL in Ward 7 and both Noordhoek and Dwarskersbos in Ward 6 to participate in the future development of VL, especially meetings related to economic and community development
- Align proposed developments & BM long-term budgets
- Provide and maintain sufficient services efficiently and effectively and redress collapsed services of historic developments, Allow municipal controlled services only.

Therefore it is recommended that the inclusion of a portion of Portion 1 of Farm Vlaminke Vlei No 54 as per Addendum K into the urban edge of VL is adopted. This amendment constitutes an addition to the 2012 – 2017 BSDF's 20 year planning horizon and the VLPP.

# Proposed ad hoc amendment of the Bergrivier Spatial Development Framework: Status Quo and Proposals, 2012 – 2017, final draft

## 1. Purpose and approach

Several land use applications were submitted to BM to develop the southern bank of the Berg River at Velddrif. None of these land use applications were consistent with the Bergrivier Spatial Development Framework, 2012 – 2017 (BSDF). Hence, BM was requested to amend the BSDF with particular reference to Velddrif, Laaiplek, Noordhoek and Port Owen (Ward 6 & 7 - hereafter referred to as VL, except where specific reference is made to a specific precinct) in accordance with the Municipal Systems Act 2000, Act 32 of 2000 (MSA), to allow for opportunity to consider such applications.

The amendment of the BSDF is to be done in accordance with the Integrated Development Plan (IDP) amendment timelines. The steps to enable such an amendment are prescribed in the BM: Bylaw relating to Land Use Planning, 6 April 2018, PG Notice 7910. The points below provide an overview of the course of action to be taken to undertake an amendment:

- 1. All members of BM Council to be given reasonable notice of the intent to amend the BSDF.
- 2 A notice of intent to amend the BSDF must be published in a local

newspaper describing the amendment in at least two of the official most prominent languages spoken in the Province. The Notice must include:

- a) Municipal intention to amend an SDF
- b) The process to be followed for the amendment of the SDF.
- 3. BM has to inform the Provincial Minister, in writing, of the intention to amend the BSDF.

BM has to indicate to the Provincial Minister which process is to be followed for the amendment:

- a) Whether the Inter-Governmental Steering Committee (IGSC) process will be undertaken, or
- b) A Project Committee (PC) will be established.
- 4. BM has to establish an IGSC or PC. A PC must consist of:
  - Municipal Manager or a municipal employee designated by the Municipal Manager, and
  - Municipal employees appointed by the Municipal Manager who represent the following municipal departments: IDP, Spatial Planning, Engineering, Local Economic Development (LED) and Housing.
- Bergrivier Council considers Status Quo Report after review by the PC.
- 6. Bergrivier Council considers first draft of Ad Hoc amendment for comment after review by PC.
- 7. First draft of the Ad Hoc amendment is to be advertised in the local press for public comment for a period of 60 days. Invite individual comment from:
  - a) Organs of State & key role-players
  - b) District Municipality

Register all who comment on the draft BSDF amendment.

- 8. If BM decides not to establish an IGSC, the draft Ad Hoc Amendment must be submitted to the Provincial Minister for written comment within 60 days. BM may not approve the amendment until comment has been received or the 60 days has passed.
- 9. All comments received must be considered.
- 10. Council must consider all representations received in respect of the

	proposed BSDF amendment and adopt the final Ad Hoc Amendment.
11.	If the development proposal changes substantially, it has to be circulated for
	public comment.
12.	If adopted by Council, a notice of the adoption must appear in the media
	and the Provincial Gazette within 14 days of the date of adoption.
13.	Once adopted, the Municipal Manager must submit a copy of the amended
	BSDF (as adopted by Council) to the MEC of Local Government within 10
	days of the adoption.
	This submission must include:
	a) A Summary of the public participation process
	b) A Statement confirming that the process set out in Section 29(1) of the
	MSA has been complied with, and
	c) A Copy of the District Framework for Integrated Development Planning.

BM has completed Steps 1 to 10. BM decided to follow the Project Committee option at Step 3. Step 11 is now being executed as the development proposal changed substantially. The Status Quo report and final draft Spatial Development Framework are now in circulation for comment.

This document represents both the Status Quo report and final draft Spatial Development Framework, which are the two components a Spatial Development Framework Document (SDF) consists of.

A Status Quo is an analysis of the municipal and regional space and sector activities for which the SDF is written. From this analysis a vision is proposed.

This Status Quo Report is a compilation of the content of the Status Quo reports of the BSDF 2012-2017, the Velddrif and Laaiplek Precinct Plan - 2014 (VLPP), and the West Coast Spatial Development Framework (WCSDF) - 2014. Relevant supplementary data was obtained from additional sources such as the 2017 IDP Municipal Survey and site visits.

A Spatial Development Framework: Provides proposals and guidelines after spatial principles and tools are applied to generate concepts, obtain the buy-in from adjacent municipalities, other government departments, politicians and the public, and provides an implementation plan and budget.

The Status Quo analyses three key components i.e. the biophysical, socioeconomic and built environments which cumulatively define the space within which VL and Vlaminke Vlei (VV) are located. The analysis for each environment is summarised according to its Strengths, Weaknesses, Opportunities and Threats (SWOT).

The SWOT analysis and a policy overview provide broad directives to inform the vision, conceptual proposal and development framework for the amendment of the BSDF. The development proposals and implementation plan follow thereafter.

## 2. Issues raised during public participation

If development is to be permitted on the southern bank of the Berg River, the proposal has to account for the following:

## Necessity

- There is sufficient provision of serviced, undeveloped erven available for residential as well as light industrial uses in the following areas: Velddrif, Port Owen, Admiral Island and on the coast between Laaiplek and Dwarskersbos (Atlantic Waves north of Laaiplek) and St. Helena Bay.
- The large tracts of undeveloped erven in and around Velddrif make the area look deserted, thus infill development should be considered before expansion or Greenfield developments.
- The most pressing need is the provision of fully subsidized houses (propoor). The proposal only presents an affordable housing (first time home owners) component and high-income housing. The 2017- 2022 IDP prioritises only fully subsidized houses.
- The existing industrial area continues to be underutilized and development thereof is slow. That being said, Saldanha Bay Municipality (Vredenburg) will be the greatest beneficiary should the southern bank of the Berg River be developed for industrial or commercial purposes as residents on the southern bank will do business in Vredenburg.

Job creation in the West Coast is the foremost priority for inhabitants. It
has been agreed that a residential development will generate jobs
during the construction phase. There are different perspectives as to
what type of residential development will create employment
opportunities e.g. high income and subsidized.

## **Desirability**

- Any proposed development should adhere to the Coastal Management Line (no development below the 1:50 year flood line) [WCSDF Policy R2]. Ecological buffers and setbacks must also be adhered to.
- Development must abstain from intruding on the estuarine functional zone and should not interfere with estuarine processes and floodplain functioning. Intermittent flooding to maintain ecological processes is required as per Berg River EMP.
- Development should be subject to intensive and detailed environmental and specialist impact studies. An environmental economist should calculate the value of maintaining the pristine wetlands, environment and ambience of Lower Berg River.
- Enhance re-zoning of portions within the estuary functional zone as high priority conservation land with restrictions on development and future options for long-term protection (contributes ±60% of the available estuarine habitat on the West Coast): Estuary and floodplain as Critical

- Biodiversity Areas (CBAs) and Ecological Support Areas (ESAs): 2017 Western Cape Biodiversity Spatial Plan.
- Honour the Berg River estuary as one of the West Coast's most important natural assets, i.e. as important bird, biodiversity area and estuarine functional zone, to ensure the resilience of the estuary in the face of climate change, and to safeguard the natural processes (providing essential ecosystem services such as a nursery function to coastal fisheries) underpinning the vital ecosystem services the river provides.
- Development should not negate the estuary's role as part of a regional climate change corridor (Western Cape Biodiversity Spatial Plan).
- Development should not contribute to increased pollution levels in the Berg River. The proposed development and increased commercial & industrial activity pose additional risk of pollution from waste water and sewage. Pollution and ecological degradation will affect the economic potential of this area. There is a lack of pollution control.
- Residents of Ward 7 prefer to leave the southern bank of the Berg River undeveloped whilst the residents of Ward 6 prefer the southern bank to be developed. Residents appreciate the open scenic landscape across the river to the South, and have invested in properties there for the views. Development on the Southern bank of the river would spoil views

- of the landscape. A dense housing development is not fitting in an isolated area separated by a major river with a single bridge.
- Most middle and upper income housing developments are utilised almost exclusively for holiday housing and accordingly extensive parcels of land are transformed for relatively few users. This begs the question as to why fully subsidized housing is not provided along the waterfront.
- Should not restrict efficient and effective service delivery as the distance to service this development will increase the operating and logistical costs and will impact negatively on the Municipality and its ratepayers.
- Initially employment opportunities will increase, but an influx of employment seekers will counterbalance this growth leading to growing unemployment. Which in turn will create more informal settlements and related problems will arise.
- BM could benefit from the development of the Saldanha Bay IDZ by providing a residential development south of the Berg River.
- Including the south side in the urban edge which will not promote access to the IDZ compared to the current locality.
- Thoroughfare of freight, as a result of transporting minerals from the mines in the Northern Cape to Saldanha for processing and export, all of which must cross the Carinus Bridge, has consequently detracted from the town being viewed as a quaint fishing village.

- The workforce is dependent on private transport. The travelling distance for residents of Noordhoek is ±14 kilometres to Vlaminke Vlei (nearly the same distance as from Velddrif to Dwarskersbos).
- Law enforcement should deploy more boats in the foreseeable future to police the river as a response to increased poaching and overfishing which impacts adversely on the ecosystem. Studies of marine acidity in the open ocean and around coastal developments are often outside of pre-industrial requisites.
- Developing the southern bank of the Berg River can potentially impact negatively on safety and security and lead to an increase in crime, should people migrate to the area and find no employment opportunities.
- Design principles which enforce security should be implemented. Industrial development in Saldanha Bay Municipality serves as an example as the more people moving into the area, the higher the unemployment rate derived from a bigger base of people. Law enforcement is under pressure to maintain law and order.
- The IDZ is promoted often and over time, but not implemented as yet.
- There is a poultry farm in operation on the southern bank on the farm neighbouring the proposed development.
- Include the whole community in the same meetings, and do not only use
   Ward meetings to involve the community as Wards meet separately and have vastly different needs.

 Include a detailed development proposal e.g. how many units and what will it look like.

#### Sustainability

- Similar projects in isolated areas of the West Coast perform poorly. Fail to see validity of any development on the southern side of the estuary.
- Trade and economic development from Vlaminke Vlei and commuter flow will trend towards Vredenburg (asphalt road joins R399 to R27 south). Vredenburg offers a bigger business and services variety at a convenient, yet slightly longer travel distance than VL. Rather develop on the northern bank and long term business will remain in VL.
- Tourism is a major source of income for the area and cumulative impacts could have a negative effect.
- Serviced erven are not fully utilized and place an extra burden on the financial capacity of BM which trickles down to taxpayers. Service delivery (e.g. water and sanitation, removal and management of solid waste, electricity) cannot be guaranteed by the developer. The municipality and, indirectly, the tax payers will be responsible for the upkeep and cost of infrastructure and services. It has to be determined if the local municipality has sufficient infrastructure and personnel capacity to accommodate and manage Greenfield developments.

- There is limited water supply due to the drought. Disaster and river management services are limited (there is only one firefighting unit available in Velddrif which is not sufficient).
- It is unclear how the well-being of all residents will be catered for in respect of medical care, hospital and clinics.
- There is no provision for children's education and they will have to be transported to access educational facilities.
- The SWOT analysis does not support moving the urban edge to the southern side of the Berg River.
- South Africa is part of a global community that subscribes to Sustainable Development Goals.

### Consider alternative suitable sites and developable land

Alternative sites for development should be considered, not only Vlaminke Vlei, as different sites offer different qualities with respect to opportunities and accessibility: (North of Laaiplek and next to the R399 at De Plaat as well as the southern bank of the Berg River).

Why was the municipal boundary moved to include the first row of farms along the southern side of the Berg River? The boundary was previously the Berg River? What was the purpose of including the first row of farms?

Was it to secure the agricultural landscape, or to patrol the river, or to develop the land?

## 3. Detailed Status Quo Analysis: Challenges and Opportunities

In this section the three environments i.e. the biophysical, socio-economic and built environment are considered from a local and regional perspective.

## 3.1 Analysis of Biophysical Environment

The biophysical environment represents the natural capital base on which the socio-economic and built environment perform. Geology, soils and climate form the basic geomorphological relationship which gives rise to hydrological, topographical, biodiversity and vegetation patterns. Agriculture and mining are included in this sub-set due to their close relationship with the natural environment (Department of Rural Development and Land Reform, 2015 p20).

## 3.1.1 Geology & Soils

The geology and soil types for the rural areas around VL consist of sandy soil, well drained and dry, and they are used for the production of wheat, barley, oats and potatoes.

Along the banks of the Berg River, the soil of the river plain is sandy and shallow followed by a thick layer of clay which is visible along the embankment.

The coastline has fine sandy beaches.

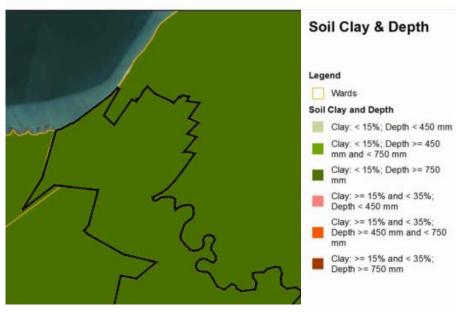


Figure 3: Soil and Clay Content

A fossil bank is present along the northern stretch of Laaiplek's coastline, which represents a pro-grading coastline - one of a few occurring along the South African Coast. Such seaward growth of the shoreline has preserved Holocene and Pleistocene beach levels with the fossil bank being an important indicator of sea level and paleo-environmental change. (VLPP). The region has a fossil park located between Hopefield and Vredenburg.

## 3.1.2 Topography

The topography illustrated by the contour map below, consists largely of flat sand plains and coastal land accompanied by an even lower estuary floodplain, with several shallow silted alluvial terraces within the tidal zone storing some of the seawater. These marshes and salt pans are important to migratory birds (VLPP). The salt pans are commercially mined.



Figure 4: Topography

#### 3.1.3 Climate

The climate for Velddrif and the region is similar. Gale force berg winds frequently blow seawards from the interior and carry dust and sand over 500km as the soil erodibility is moderate to high. Of the sand being blown over urban areas, the neighbourhood of Noordhoek bears the brunt (VLPP). Prevailing winds are South Westerly and Southerly during summer (from Port Owen to the harbour) and Northerly during winter (VLPP).



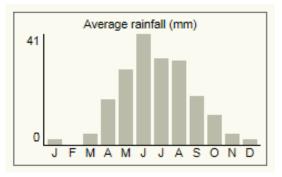
Figure 5: Soil Erodibility

Land and sea breezes occur usually at right angles to the coast. Land breezes (Easterly and North-Easterly winds) are frequent during the night or early morning time periods (down the Berg River). Sea breezes (South-Westerly and Westerly winds) are more prominent in the afternoon (In the afternoons this is seen from Port Owen to Velddrif) (Source: Heydorn & Tinley, 1980) (VLPP).

When the fishmeal processing factory operates odorous emissions are spread across Laaiplek and Port Owen and to a lesser extent across the Velddrif and Noordhoek.

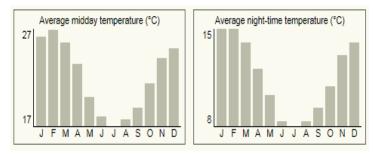
Advective sea fog occurs which is associated with cold water upwelling, causing coastal lows which lead to longshore movement and hence the sea fog. (VLPP)

VL normally receives about 190mm of rain per year mostly during winter as it has a Mediterranean climate. The chart illustrates the average rainfall values for VL per month in general. It receives the lowest rainfall (0mm) in February and the highest (41mm) in June.



Graph 1: Average rainfall (mm)

The monthly distribution of average daily maximum temperatures in general shows that the average midday temperatures for Velddrif range from 17°C in July to 26.9°C in February. The region is the coldest during July when the mercury drops to 7.6°C on average during the night.



Graph 2: Average midday and night-time temperature

The climate change impacts that are most likely to occur in VL are listed below:

- Decreased potable water volumes to be considered for future development and growth.
- Rise in sea level over the next 30 to 50 years. Therefore, coastal development has to be located behind the coastal setback line (PGWC Development Setback Line) as per Coastal Development Management Act of 2009. The Coastal Set Back Line, which is in some cases more restricting than 100m from the statutory highwater mark, avoids damages due to sea levels rising, manages coastal interface and protects low lying areas.
- Damage to infrastructure due to extreme events e.g. floods or drought, has an indirect impact on the economy.
- Decreased Tourism due to the risk of encountering extreme events
   e.g. flooding and extreme heat.
- Changing temperatures and precipitation causing changes to the landscape as:
  - Agricultural crop yield and types change.
  - Biodiversity decreases through extinction and lack of landscape connectivity.

These changes are exacerbated by:

- Cultivation and urban development encroaching onto sensitive biodiversity areas whilst rehabilitation and conservation of ecosystem functioning is required to allow for species migrating.
- The Heat-island effect and increased storm water run-off into the wetland as a result of hard and impermeable urban development infrastructure and surfaces.
- Environmental stress caused by pollution (boat oil) and water abstraction (flushing of engines) associated with fishing and speed boats particularly at both Laaiplek and Pelican harbours.
- Riparian erosion and damage to birds' nests as a result of boating on the river (from the wake of boats).

The Berg River estuary forms part of a regional climate change corridor as per the Western Cape Biodiversity Spatial Plan.

## 3.1.4 Hydrology & Aquatic Ecosystems

The Berg River estuary is the third most important estuary in South Africa (VLPP) and the primary hydrological system in the BM. Smaller Rivers and streams feed into the Berg River and drain towards the ocean (WCSDF). The Berg River is a tidal river and seawater pushes up into the river during Spring tide.

Man-made dams in the Berg River include the Berg River and Misverstand Dams which are used for bulk water reticulation intended for domestic and agricultural purposes.

Fresh groundwater is limited. A thick clay layer separates the fresh surface water that drains into the earth from the salty ground water below.

Pollution of the Berg River is a threat to water quality and ecosystems dependent on the river. River pollution should be resolved, to facilitate a healthy and thriving river ecosystem with acceptable water quality. The Atlantic Coastline is a valuable resource and should be protected by applying the Integrated Coastal Management Policy.

## 3.1.5 Biodiversity

A large variety of bird species, including about 30 000 wading birds, migrate to the estuary annually. Berg River Estuary is declared as an Important Bird Area (IBA) (WDCM, 2010) (VLPP).

The Atlantic Coastline is sensitive with a variety of marine and ecological species and conservation worthy elements:

The environmental integrity and biodiversity of large portions of the coastal zone, the Berg River wetlands and surrounding salt marshes are important in both local and regional ecosystems and biodiversity corridors, particularly

due to landscape gradients such as the Greater Cederberg Biodiversity Corridor (GCBC) as well as natural heritage and archaeological sites in relation to the Berg River (VLPP).

Application of Bioregional Planning as a basis for spatial planning, as adopted by the Provincial Government of Western Cape (PGWC), was applied (WCSDF) and regulated conservation in the Greater Saldanha Region. An EMP for the Greater Saldanha Region is drafted to fulfil the regulatory role, once adopted.

The Cape West Coast Biosphere Reserve (CWCBR) stretches from the Diep River in the Cape Metropolitan Area northwards along the coastline and coastal plain towards the northern banks of the Berg River north of Saldanha and Vredenburg (WCSDF). The CWCBR is bordered by the Greater Cederberg Biodiversity Corridor. The GCBC spans across two District Municipalities but the biggest coverage is located in the Bergrivier, Cederberg and Matzikama Municipalities (West Coast District).

The major conservation areas are located in the Cederberg Wilderness (CW) area, Langebaan West Coast National Park area and the Knersvlakte in Matzikama Provincial Nature Reserve.



Figure 6: West Coast Biosphere Reserve

## 3.1.6 Vegetation

Vegetation consists mainly of Cape Estuarine Salt Marsh Vegetation (short, shrubby and succulent), Sand Fynbos depressions on either side of the lower Bergrivier, seasonal Flats Strandveld Mosaic, Hopefield Sand Fynbos and Saldanha Flats Strandveld, dependent on underground water. Beyond the Sand Fynbos, the Langebaan Dune Strandveld, a mixture of shrubs with varying heights (0.5 to 2m) and thickets are found on calcareous (alkaline) dune sands.



Figure 7: Vegetation

Spring annuals can be spectacular on these sandy soils whilst north of the Berg River, the Dune Strandveld becomes less species rich. Veld flowers are also a big tourist attraction during the spring months.

## 3.1.7 Agriculture and Fisheries

Agriculture contributes largely to the economic base (primary sector) of the West Coast. Primary farming activities which are commonly practised around Velddrif pertain to mixed farming e.g. grain, sheep and potatoes (irrigated). Climate change may lead to decreased agricultural crop yields and the planting of alternative agricultural crop types.

Although commercial fisheries contribute 0.5% of South Africa's GDP (WWF, 2009), climate change will also impact fisheries, particularly with regard to rising water temperatures, hence the diminishing presence of fish. Agriculture on the West Coast hosts a diverse variety of activities. These range from intensive fruit production to extensive grain production. The Agriculture and Fishing Sectors are the sectors which have the most prominent impact on the natural environment. Agriculture impacts on biodiversity, ecosystems and water sources whilst unsustainable fishing practices have an impact on the coastal resources. As a result of these practices, some fish stocks are entirely depleted.

## 3.1.8 Mining & Building Materials

No building materials are mined in close proximity to VL (Ward 6 & 7) but salt mining forms part of primary economic sector activities. Salt is precipitated in artificial evaporation pans in the Berg River estuary.

A wide range of natural deposits are found and mined in the West Coast District including limestone, building sand, sandstone, diamonds, gypsum, salt, granite, marble and tungsten. The West Coast District is not considered a prominent mining area compared to the intensive mining and extracting of precious metals in the northern parts of SA (WCDSDF, 2014).

3.1.9 Biophysical Strengths, Weaknesses, Opportunities and Threats

#### **STRENGTHS**

Natural assets attract tourists & contribute to VL and its environs' Sense of Place

- S1. Sandy beaches popular among domestic tourists.
- S2. Fossil assets part of palaeontological landscape.
- S3. Berg River Estuary (BRE), its salt pans (important for wetland ecosystem functioning) & birdlife.
- S4. West Coast flowers.
- S5. Mediterranean Climate.
- S6. Flat, near treeless landscape, dominated by vegetation not higher than 2 meters, i.e. Strandveld fynbos and dune covers, occasional Eucalyptus tree windbreaks.
- S7. Associated with wide open spaces and natural beauty of the BRE, its birdlife, small fishing boats moored along the riverbanks and the flat wide open coast line without rocks and with big tankers awaiting entrance to the Port of Saldanha.

Natural resources abstracted and processed and exported regionally:

- S8. Wind, converted into energy. Opportunities exist to establish windfarms.
- S9. Salt mining.
- S10. Fish from Berg River and the sea.

#### **OPPORTUNITIES**

#### **BRE and Coastal Conservation**

- O1. BRE is an internationally recognised Important Bird and Biodiversity Area.
- O2. BRE ranked 3<sup>rd</sup> in SA for its conservation importance for fish and bird species.
- O3. Contributes ±60% of West Coast estuarine habitat, needs landscape connectivity to allow for species migrating.
- O4. BRE is part the West Coast Biosphere Reserve providing protection and linkages.

Legislation, policy and plans that minimize impacts and enhance estuarine functioning:

- O5. i. Bioregional Spatial Planning Categories, the basis for spatial planning Critical Bio-Diversity Areas (CBAs) and Ecologically Support Areas (ESAs).
  - ii. Western Cape Biodiversity Spatial Plan Climate change corridor.
  - iii. Draft Greater Saldanha Regional Implementation Framework.
  - iv. Special Protected Areas (7 zones) across the estuary (BRE EMP).
  - v. Coastal Management Act (Development to be located behind Coastal Setback Line (in some cases more restricting than 100m from statutory high water mark)).

#### WEAKNESSES

Limited natural resources capacity

- W1. VL has limited fresh groundwater resources (a thick clay layer separates the fresh and salty groundwater).
- W2. Soil bearing capacity has implications for building typologies (solid clay with fine sand has a bearing capacity approximately 2½ times higher than sandy soils).

#### Dysfunctional natural resource system

- W3. Wind and sand storms cause wind erosion and deposit sand in VL and particular Noordhoek (western coastline).
- W4. Estuarine habitat connectivity impeded by cultivation and urban development that encroached onto sensitive biodiversity areas.
- W5. Extensive agriculture (wheat production) practised on medium potential soil. Fish stocks declining.
- W6. Degrading natural beauty of estuary, river and coast, as the riverscape and coastline interface is subject to inappropriate development.

#### **THREATS**

## Climate change causes

- T1. Floods, droughts.
- T2. Extreme heat & water scarcity: decreased tourism.
- T3. Damage to infrastructure, impact on economy.

## Water Usage impact on the BRE

- T4. Inadequate fresh water flow volumes impact on flow regimes and cause hyper-salinity. Cause also negative impact on cultivation.
- T5. Pollutions' impact on quantity and quality of water entering the BRE system.
- T6. Intermittent flooding and preservation of floodplain habitat essential to maintain healthy functioning and biodiversity.
- T7. Mining activities impact on natural resources and road infrastructure.

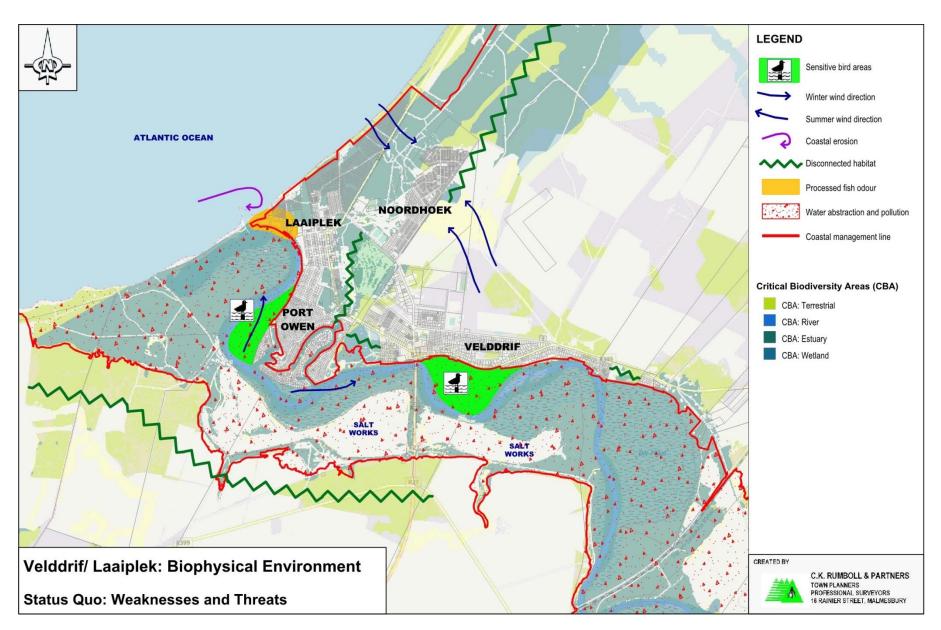


Figure 8: Biophysical Environment, VL: Weaknesses & Threat

## 3.1.10 Proposals related to Biophysical Environment

The following proposals emerged from the SWOT analysis:

- a) Grow and enhance tourism. Protect VL and environs' sense of place:
  - Develop urban design & aesthetic guidelines for the riverscape and coastline interface.
- b) Enhance conservation and protection of the natural environment with particular reference to the Estuary and the Coast:
  - West Coast estuarine habitat is crucial for migrating bird species. Prohibit cultivation and urban development encroaching sensitive biodiversity areas and development which impedes estuarine habitat connectivity.
  - Salt pans play an important role in wetland ecosystem functioning.
  - iii. As internationally important bird area.
  - iv. As being part of the West Coast Biosphere Reserve.
  - v. Expand conservation land uses in Ward 7 to link to Saldanha Bay and Cederberg (along the coast).
- c) Practise procedures to manage and be prepared for floods, damage to infrastructure, extreme heat, rise in sea level, drought, inadequate flow regimes and hyper salinity, declining quality and quantity of water and manage climate change through:

- i. Appling the BSPCs as per Western Cape Biodiversity Spatial Plan.
- Adhering to Special Protected Areas (seven zones) of Estuary Management Plan (EMP) and manage and monitor water usage (abstraction and pollution).
- iii. Adhering to Integrated Coastal Management Policy and Coastal Management Act (Development to be located behind Coastal Setback Line (in some cases more restricting than 100m from statutory high water mark).
- d) Monitor availability of limited fresh water and the demand therefore.
- e) Protect fishing stock (as natural resource) as an alternative to extensive agriculture on medium potential soil.

Weaknesses not addressed in this section that will be addressed in the built environment directives are:

- Soil bearing capacity having implication for building topologies.
- Wind and sand storms causing wind erosion.

Strengths not addressed in this section that will be addressed in the socioeconomic environment are:

 Enhance economy diversification as the economy is based on the abstraction of natural resources e.g. salt, fish and wind.

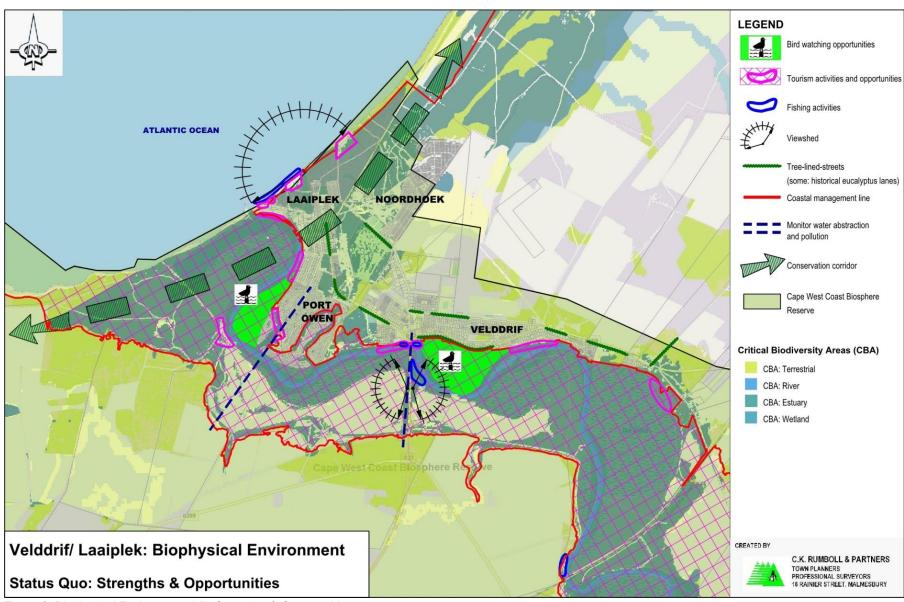


Figure 9: Biophysical Environment, VL: Strengths & Opportunities

# 3.2 Analysis of Socio- Economic Environment

The socio-economic environment reflects the relationship between the population distribution and the services rendered by the natural resource base e.g. mineral resources attract people (miners) who in turn attract other service providers such as shopkeepers and teachers.

# 3.2.1 Heritage

Traditionally, the inhabitants of VL depended on the Atlantic Ocean and Berg River for food and trade. Today's inhabitants maintain VL's cultural history as a Fishing Village as it defines VL as a destination (main association).

During pre-colonial times the Khoi and Khoikhoi relied on the sea for food and used shells to trade (VLPP). During colonial times, fish were salted for food and to trade. The salt fish or Bokkoms is a unique product to the West Coast. Whales were hunted in the Bay of Saldanha for trading purposes (VLPP). After colonial times, a fish house was built at Laaiplek, then known as Laaiplaats, followed by a fish processing facility. The processing facility was replaced by a fish factory and built on a portion of the farm Velddrif. Technology revolutionised the fish industry. The fishing factory at Laaiplek is being refurbished and old equipment is being replaced by new equipment and technology. Some activities (production

lines) are transferred to factories located in the Bays of Saldanha and St Helena. As factory activities declined, it led to job losses.

The economy was supported by transport infrastructure at the time and developed because of it e.g. the harbour where fish was distributed (Laaiplaats and later Laaiplek). The River was utilized for transporting commodities. A pont was used to cross the river from 1899 to 1950. The Carinus Bridge was completed in 1959 and the link to Cape Town permanently established. Rail (owned by state) replaced river transport (private). Previously transport infrastructure amplified VL role as a collecting point and recently its current role as connecter.

Historically development along the West Coast was driven by commercial and artisanal fishing. What is of note is the strategy (HR 21) in the WCDSDF, 2014, to consider regional heritage assets such as the rural landscape, cultural heritage and West Coast character as key informants (WCDSDF, 2014, p94) when development is contemplated.

# 3.2.2 Demography

2017 IDP survey determined the 2017 population of VL to be 15 126 people. In 2017 the compounded annual population growth rate of VL was 5.6%, which is higher than the 4.5% growth rate of the West Coast District and the 4% growth rate of BM in 2017 (IDP Census Survey,

2017). According to the 2011 Census, the annual population growth rate of VL was 5-6% (BSDF). The WCSDF provides a different annual population growth rate of 2.9% for BM and 3.3% for the West Coast District based on the 2011 Census (WCDSDF, 2014, p25 - 26).

VL also has the largest population in the Bergrivier Municipal area with an average household size of 3.6 persons per household. The population is relatively young as 66% of the population is of working age, whilst 23% is 14 years and younger (StatsSA, 2011):

Young (0-14)	22,9%
Working Age (15-64)	66,1%
Elderly (65+)	11%

#### 3.2.3 Growth Trends

<u>Migration</u> to VL can be attributed to commuters participating in the economy of the West Coast and living in VL or retirees settling in the town. The migration rate to VL is 12.3% and to Dwarskersbos 16% whilst the average migration rate to the BM is 7.3% (IDP Census Survey, 2017).

The percentage of households in urban areas by origin of previous residency is tabulated below (2016/2018 IDP Census Survey):

Assessment of growth/ development potential includes Settlement Indices of Human Capital, Economic, Physical, Infrastructure, Institutional and a composite growth potential. Future planning regarding growth potential has to consider the natural environment too.

VL's rating according to these Indexes is:

Human Capital	Economic	Physical	Infrastructure	Institutional
High	Low	Medium	High	High

VL has a medium composite growth potential score. VL has comparative populations (10 000 to 20 000) to Vredendal, Darling, Piketberg, St Helena Bay and Moorreesburg. VL has the largest population in the BM.

Its Socio-Economic Needs Index score, calculated in 2013, is low. This Index considers energy sources for lighting, main water supply, refuse disposal, toilet facilities, illiteracy, no schooling, dwelling type, employment, etc. Socio-economic needs correlate to growth potential and population numbers. Provincial government will focus on towns with a medium to high socio-economic index score, which excludes VL with its low socio-economic index score. Should this calculation be updated, it is highly likely that VL's score could change to medium. The reason for the likely updated score being:

- The economic role of VL changed over the last ten years from a service centre for fishing and agricultural activities to a more servicebased centre for tourism, as tourism increased on the West Coast and in VL. This change, anticipated to result in more employment opportunities, resulted temporarily in the opposite as the sector is establishing itself.
- This is exacerbated by more people migrating into VL looking for work.
- Whilst Velddrif serves as an administrative (municipal) centre, Laaiplek hosts the court and police station and Noordhoek the clinic. These and other supporting services and social infrastructure (churches, schools, libraries and sport facilities) are at the disposal of the inhabitants and surrounding rural populace.
- Seasonal residence and tourism add to the demand for municipal services. VL is home to year-round local residents whereas Port Owen is more seasonally occupied.

The development and growth potential of VL lies in the availability of natural resources, environmental beauty and its proximity to the Saldanha Bay Industrial Development Zone (IDZ) (WCSDF) and deep water port and its good administration. VL has been identified as a sub-regional

node in the conglomeration of towns being part of the IDZ while the towns also benefit from tourism to the West Coast region.

The Saldanha-Northern Cape Development Corridor is anchored in the IDZ around the Saldanha Bay port. Accordingly, as per envisaged development planning for the IDZ, the settlements of Vredenburg and Saldanha should be integrated and the link between Saldanha and Vredenburg should be continuous in order to unlock the economic development potential of these main towns. Hence an industrial development zone is envisioned between Vredenburg and Saldanha. The IDZ development would not only create opportunities for employment, but also create the preconditions for the optimal performance of these urban areas e.g. travel distances would be shortened, resulting in the optimal utilisation of the services and transportation infrastructure between towns.

The largely vacant and underutilised land between Saldanha and Vredenburg already has a well-developed road and rail infrastructure (pre-requisites for industrial development). Moreover, the land is well-located relative to the sea and holds the potential for rail transportation of goods. While the location of specific industries will be determined by market forces, it is important that higher impact industrial activities be located further away from residential areas.

<u>Historically, development proposals approved</u> for the Berg River's south bank included a proposal for a marina and for a resort (Addendum I).

A development proposal for the Remainder of Farm Vlaminke Vlei No 54 at the Berg River mouth was approved in 1993 (27 May 1993) (RE/54): The Chief Directorate Land Development Coordination, Wale Street, approved a development providing for 420 single residential erven and 160 higher density residential units. The approval was never executed and the rights lapsed.



Figure 10: Historically awarded and approved developments

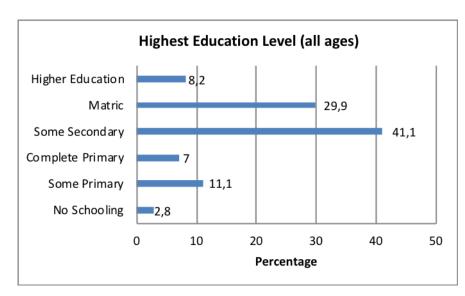
Resort rights were awarded on Portion 5 of Farm Vlaminke Vlei No 54 in 1997 (dated 30 October 1972 and 12 August 1997) as the traditional land use was a campsite with less formal permanent structures. Resort Zone 1 rights provide for holiday accommodation.

Development pressure on the southern bank is and will continue as Farm Vlaminke Vlei is conveniently located en-route to the IDZ and Saldanha deep water port and within the IDZ's sphere of influence. Investor confidence for this area tended thus far towards residential and tourism related developments.

#### 3.2.4 Education & Health

VL has pre-primary schools, two primary schools and a high school.

Nearly 30% of the population aged 20+ has matric, whilst 3% has no schooling and 8% has higher education. This means that 59% of the population aged 20+ has less than a matric qualification and would most likely be employed in non-professional jobs.

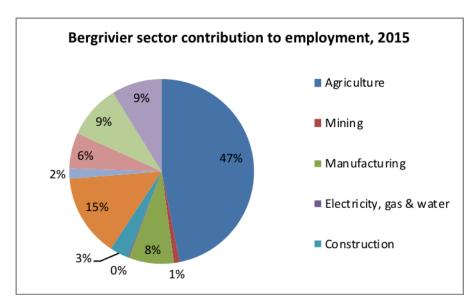


Graph 3: Educational Levels (Stats SA 2011)

West Coast district and the Saldanha Bay environs provide for special schools, Airforce Academy, Navy Academy and West Coast College.

# 3.2.5 Employment

In 2015, employment in agriculture and manufacturing contracted the most in the region as both were mechanised to a degree



Graph 4: Sectoral employment contribution (% share), Bergrivier (Quantec 2015 – MERO, 2017)

In 2015 unemployment<sup>2</sup> in the Western Cape and BM was 21.56% and 5.4% respectively and decreasing whilst in the West Coast it was 14.6% and increasing.

#### 3.2.6 Crime

The BM and West Coast reflect lower crime rates overall than Saldanha Bay and Swartland. VL falls in the second quintile for crimes committed

<sup>&</sup>lt;sup>2</sup> The labour force is defined as the population group that are between 15 and 64 years of age and able to work and this excludes persons that are not economically active or discouraged work-seekers.

in 2017 while Vredenburg/ Saldanha falls in the fifth or top quintile of crimes committed. As VL is a safe and secure settlement, it is deemed as a desirable retirement area.

# 3.2.7 Economy

The economic overview reflects firstly on VL's economic classification, sector contributors, workforce distribution and economic diversification.

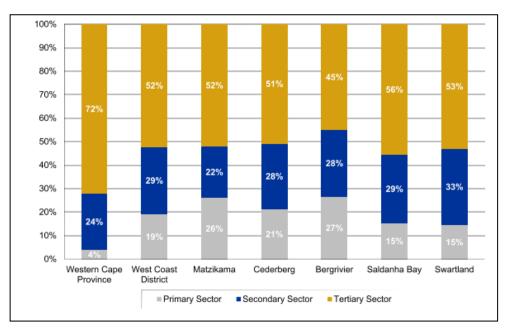
Secondly it focusses on VL being part of the Saldanha-Northern Cape Development Corridor.

# Economic Classification, Sector Contributors, Workforce Distribution and Economic Diversification

Economic sector contribution norms for developed economies are less than or equal to 3% in the primary sector, between 18% and 34% in the secondary sector and between 63% and 79% in the tertiary sector.

VL reflects a developing economy as does BM where the primary sector contributes 27%, the secondary contributes 28% and the tertiary sector contributes 45%. The graph below compares the contributions of BM's economy, a developing economy to that of a developed economy i.e. Western Cape Province. The comparison confirms that the secondary

and tertiary sectors in the Bergrivier and VL economies lag behind when compared to a developed economy.



Graph 5: Economic comparison – developing and developed economies

A further comparison to determine economic status is to compare workforce distribution norms for developed and developing economies. Sector employment contribution norms for developed economies are less than or equal to 40% in the primary sector, 40% in the secondary sector and 20% in the tertiary sector as tabulated below:

		Workforce Distribution				
Three sector economy		Developing	Bergrivier	Developed	Tertiary	
		/Traditional		/Transitional		
Primary	Raw	65%	29% (Agric)	40%	10%	
Secondary	Manufacturing	20%	11%(Manu)	40%	20%	
Tertiary	Services	15%	39%(Com)	20%	70%	
			15%(Gov)			
			54% Total			

The workforce employed in the Quaternary (Information Services) and Quinary (Human Services) sectors are included in the numbers of the Tertiary sector.

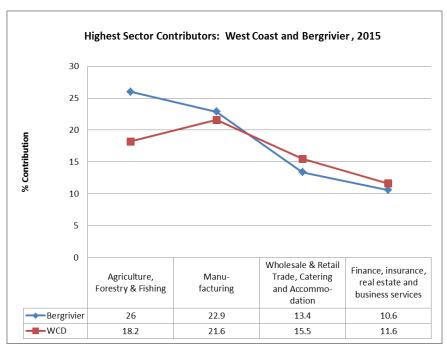
Table 1: Workforce distribution comparison: Developing vs Developed economies

- When employment sectors are compared to norms for developed and developing economies, the figures suggest that the secondary sector in BM, which includes VL, absorbs the lowest number of employees (only 11%). The primary sector in BM absorbs fewer employees than in developing and developed economies but more employees than in the tertiary economy. The tertiary workforce distribution rate in BM is closest to that of the tertiary economy. The workforce distribution rate in BM is representative of more than one economy.
- The West Coast workforce distribution represents more of a developing economy with the primary sector employing 34.8% of the workforce and the secondary and tertiary sectors 14% and 50% respectively.

Sector contributions reflect *economic diversity*: For example, the highest contributing sectors to economic growth in the Western Cape demonstrate economic diversity i.e. construction; financial intermediation, insurance, real estate and business services and general government.

- The West Coast has a well-diversified economy, which contributed
   5.1% towards the Western Cape economy. (MERO 2017, p111).
- The highest sector contributions are due to the following:
  - Manufacturing (21.6%) as the opportunities are strongly balanced by conservation (e.g. Cape Biosphere Reserve) and tourism to complement industrial development (e.g. Saldanha Bay Port and IDZ). These apparently opposite economic activities bring about diversity in the local economy, which has been greatly beneficial for West Coast and Saldanha Bay economies by creating resilience.
  - Agriculture, forestry & fishing (18.2%): The region is earmarked for Agricultural Land and Ocean Reform i.e. Mussel and Oyster cultivation in Saldanha and Velddrif, Abalone in Doringbaai and Pearls in Saldanha Bay. The secondary sector is also targeted for growth, as small harbours including Saldanha (& Pepper Bay), St Helena and Laaiplek are earmarked for upgrading.
  - Wholesale & retail trade, catering & accommodation services
     (15.5%) which can be ascribed to the West Coast becoming a

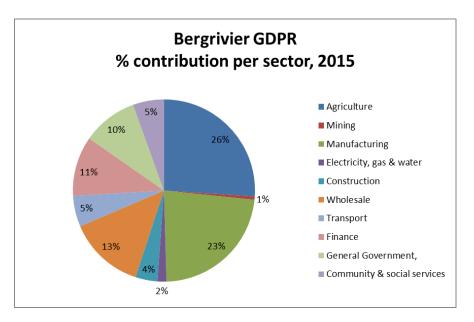
popular tourist destination. Tourism on the West Coast consists mainly of the domestic market, and to a lesser extent, of businesses and the overseas market.



Graph 6: Highest sector contributors – West Coast and Bergrivier

In 2015, the main economic sectors (see also graph above) contributing to the Bergrivier economy was the Agriculture, Forestry and Fishing sector (26%), Manufacturing sector (23%), Wholesale and retail trade and catering and accommodation sector (13%) and Finance, insurance, real

estate and business services sector (10.6%). Unlike the West Coast where Manufacturing, a secondary economic activity makes the highest contribution, Agriculture, forestry & fishing make the highest contribution in the Bergrivier Municipal Area. For both the West Coast and Bergrivier, Wholesale & Retail trade, Catering & Accommodation services is the third biggest contributor to the respective economies.



Graph 7: Bergrivier Sectoral GDPR contribution (% share) to West Coast Economy (Quantec 2015 - MERO, 2017)

Primary economic activities (salt mining and fishing) characterise it as the collecting point and lately as connector instead of as a processor or

producer of value added items. The reason being that further processing and refining of abstracted resources mainly extends across various towns outside VL.

Tourism, a tertiary economic activity is also dependent on VL's primary economic resources, the estuary and coast. Tourism has become a strong economic driver along the West Coast (since the early 2000's) which VL benefits from. With the growth of tourism VL has become a tourism destination. As a result, large residential expansions took place in West Coast towns, including VL, which mainly serve as holiday or weekend residences.

As VL does not have a diversified economy, VL scored low on the GPS' economic index, while its composite growth potential is medium.

Regional Economic Agglomeration, Spheres of Influence (growth potential), Proximity and Accessibility

The Saldanha-Northern Cape Development Corridor is one of 18 national strategic infrastructure projects as a key job driver in the economy. This strategic Catalyst Corridor includes the following initiatives:

a) Integrated rail and transport expansion

- b) Back of Port Industrial Capacity (including the IDZ)
- Strengthening maritime support capacity for oil and gas along the African West Coast
- d) Expansion of iron ore mine production and beneficiation.

Strategically located on the West Coast of South Africa, the Saldanha Bay Port serves as an international port from where iron ore and fish are exported mainly to China. In the future, oil rigs can be serviced here. Currently oil rigs can only be serviced on the West African coast. (WCDSDF, 2014, p85)

The following spatial implications result from the anticipated development:

Saldanha Bay II	DZ & Port area
 Part of the	A corridor is effective in linking infrastructure and
Saldanha-	economic development.
Northern Cape	The Saldanha Bay/Vredenburg area is the nucleus of
Development	development in the district due to the Saldanha Bay Port
Corridor	attracting economic activity and the GPS (2014) and
	WCDSDF (2014) directing development primarily in areas
	with the highest growth potential.
 A localisation	IDZs economies are based on localisation or urban
agglomeration	concentration. As firms are built near one another, factors
	such as input/output materials, source and forward
	and backward linkages with auxiliary industries are
	enhanced. Factors are labour, market, resource,
	agglomeration opportunities, and logistics orientation.
	A cluster approach ensures the effective use of land
	_

	taking into consideration ground conditions, topography, infrastructure requirements, climate and environmental considerations.
Made up of precincts separated by green corridors	Precincts are areas defined according to a spatial logic and the functionality of an area. A feasibility study conducted prior to the establishment of the Saldanha-Northern Cape Development Corridor and the IDZ identified the following clusters which are listed according to priority:  Renewable Energy Production and Manufacturing Cluster  Dry Dock – Oil and Gas Cluster  Maritime – Ship Building and Repair Cluster  Steel Production and Manufacturing Cluster  Minerals Production and Manufacturing Cluster  The envisaged spatial form for the IDZ is that Vredenburg and Saldanha are to become integrated. An asset is that the largely vacant and underutilised land between Saldanha and Vredenburg has well-developed road and rail infrastructure. The plan is to locate higher impact industrial activities further away from residential areas. The planned industrial uses are separated by large corridors of vegetation that are critically endangered.
Not conducive to residential uses	Residential use will be accommodated outside the IDZ, in Saldanha, Vredenburg, Langebaan and other towns for example Velddrif within the major regional growth centre (defined by an area being covered by a circle with a 25km radius with Vredenburg being the centre point – See Addendum G).  Town Growth Comparative Economic Base Potential Advantage  Vredenburg Very high Administrative Services

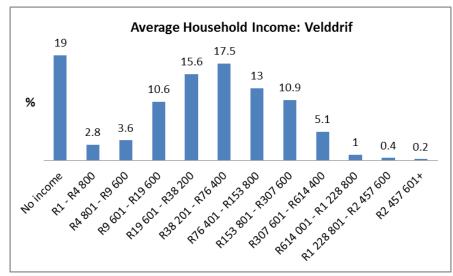
		Saldanha	Medium	Deep sea	Transport/
				harbour	Industrial
		Velddrif	Medium	Fishing / Tourism	Fishing
		Langebaan	High	Tourism	Residential
		01111	NA P	F: 1:	property market
		St Helena	Medium	Fishing, tourism & residential	Fishing, residential
	Located in a	Conglomor	otion of t		property market
		•			thin relative close
	major regional	proximity (cl	oser than	50km) creates th	e preconditions for
	node, in	economies	of scale	where the urba	an functional area
	immediate	becomes the	e main regi	onal motor for gro	owth.
	proximity of	Cumulative	additiona	l industrial lan	d demand in the
	regional nodes	Saldanha Ba	ay Municip	al area was calcu	ulated to be 182.56
	and in close	hectares by	2024 fo	llowed by 572.1	Oha as the IDZ's
	proximity of	catalytical effect settles in. The number of jobs that the			
	sub-regional	operation of industries will create at a point of maturity is			
	nodes	projected at 3 895 and 7 723 jobs respectively.			
	Enhance	The separa	tion of he	avy and light in	ndustries does not
	standards of	produce ber	nefits of <b>f</b>	unctional syner	gy as opposed to
	infrastructure,	clustering.	Functiona	ıl industrial syne	ergy is where one
	access and	manufactures, assembles or conducts business based			
	services	directly upon the products manufactured by a neighbouring			
		plant. Functional synergy enhances the standard of			
		infrastructure, access and services. The IDZ will			
		accommodate both separated and clustered			
		industries.			
۱			سم لمائييما		American a didina

Investment initiatives must build on the area's true competitive advantages, that is, its resource base as well as strategic location. Spatial concentration combined with a selected cluster approach should provide some form of balance to investment initiatives.

# 3.2.8 Income and Poverty

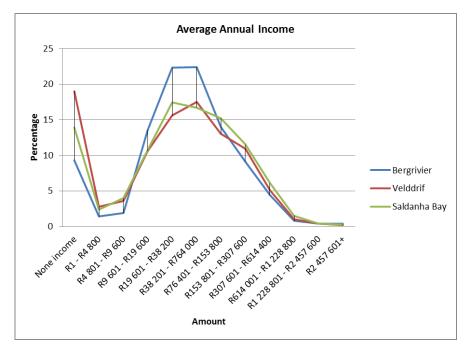
Nearly half (48.4%) of the households in VL has an average annual income of R42 000 or less, which amounts to approximately R3 500 per month. Nearly 37% earns between R3 500 and R15 000 per month.

The income statistics displayed in the graph below confirm that approximately 50% of all households qualify for indigent subsidies for services. Grants appear to be the source of income for over half of those receiving an income (SDF 2012- 2017). Ultimately it reflects the state of poverty VL.



Graph 8: Average Household Income: VL (StatsSA, 2011)

The average annual income trend for households in Saldanha is close to that of VL. The annual income trend for households in Bergrivier reflects a higher percentage of households in the GAP market (first home owners) earn between R42 000 and R180 000 per annum.



Graph 9: Average Annual Household Income: Bergrivier, VL and Saldanha Bay (StatsSA, 2011)

#### 3.2.9 Investment and Municipal finance

Municipal investment for the five years ahead (2017 - 2022) prioritise civil services and tourism. According to the IDP 2017 - 2022, the 5-year operational budget of Ward 7 is R3.607 million. The Capital Expenditure Programme per Town reflects that R10 million will be spent over the three years (2017 – 2020) in VL. Most of the capital expenditure will be used to upgrade tourist facilities in Velddrif and Laaiplek and to upgrade the WWTW and water storage (IDP 2017 - 2022).

Town	"'000	""000	""000
Bergrivier	10 254	12 595	14 457
Piketberg	4 177	2 400	4 830
Velddrif	900	4 122	5 406
Porterville	12 608	14 195	15 801
Aurora	140	565	560
Redelinghuys		975	200
Velddrif & Piketberg	900	950	900
Redelinghuys, Dwarskersbos & Eendekuil		1 650	1 800
Velddrif & Porterville	750		
Dwarskersbos	90	115	50
Piketberg	1 500	350	
Total	31 320	37 917	44 004

Table 2: Capital programme per town (IDP 20017 – 2022)

Something to acknowledge is the challenge BM was faced with in VL caused by developments where infrastructure provided by the developers did not meet or was not maintained according to the norm. The inhabitants of these developments complained to BM and BM was obliged to take over and supply these services.

Traditionally private investors invested in residential development. It appears as if the confidence of investors had not changed. Development proposals are still overwhelmingly residential based.

#### 3.2.10 Tourism

VL is earmarked as a tourism destination (coastal town). Tourism routes such as the R27 connect Cape Town with Saldanha and Velddrif.

Unique tourism attractions and potential initiatives exist in VL:

- The yachting harbour at Port Owen Marina is one such example where sailors enjoy the safe and smooth waters of the Bay of St Helena before approaching open seas. It acts as stand-over harbour to yachtsmen that sail round Africa.
- Port Owen has 3.5km of waterways that link to the Berg River.
- Port Owen, Laaiplek's Pelican Park and Stywelyne holiday resorts.
   There are several resorts on both banks of the Berg River.
- Various short-term accommodation facilities including two hotels and numerous guesthouses and self-catering accommodation.
- Boat cruises along the BRE are provided on a regular basis
- Bird watching as BRE is an important bird habitat and home to around 30 000 birds, including up to 80 species endemic to the Cape coast.

- Recreational activities (swimming, skiing, angling and sun-bathing).
   These occur in fragmented pockets just north of Laaiplek harbour along the coast and along the south-eastern riverbank at the Carinus Bridge.
- Excellent seafood as part of the West Coast Crayfish Route. A common scene is the wooden jetties with drying fish (Bokkoms).
- Veld flowers.
- Velddrif in particular boasts the following attractions and events:
  - The well-known annual Berg River Canoe Marathon between Paarl and Velddrif, draws a lucrative large numbers of visitors. It started in 1962 and is one of the toughest races in the world, and the longest canoe marathon course in South Africa.
  - o Bokkomlaan commemorates the history of artisanal fishing.

Tourism supports the WC tourism strategy in the following manner:

WC strategy	VL: Status Quo	
Holiday	Port Owen and Dwarskersbos followed by Velddrif and	
destinations	Laaiplek	
Adventure	Golf and canoe marathon	
Natural beauty &	Characterised by limited access: Boat trips, bird hides	
conservation		
Cultural tourism	Bokkomlaan and Pelican harbour	
Agri-aqua tourism	Ocean economy projects (Project Phakisa) and salt	
	pans	

- The VLPP links economic activities to existing tourism nodes e.g.
   Port Owen, Laaiplek and Pelican harbour.
- Tourist activities mainly take place on land classified as commercial or open space.

Tourism is regarded as an economic driver with the potential to contribute to the diversification of the district economy and to local economic development.

- The West Coast is a popular tourist destination due to its natural beauty, quaint coastal villages and proximity to the Cape Metropole as a primary tourist attraction.
- Tourism corridors include rural nodes and settlements which benefit from economic growth and reinforce rural development potential. One such corridor is the *West Coast Way* which has two specific routes: the *Berg Route* and *Foodie Route* both of which include Velddrif. Opportunities for economic growth in rural areas exist through the tourism sector. St Helena Bay, being a well-protected bay, is seen as a world class yachting basin. When South Africa lodged a bid to host the Olympic Games, St Helena Bay was put forward as the alternative to False Bay where all the water (boating) activities were to take place.

### 3.2.11 Land reform

The BSDF (2012 – 2017) land reform proposals for Ward 7 focus on commercial opportunities as opposed to subsistence farming:

- Promote stream aquaculture along the Berg River and in farm dams.
- Encourage:
  - Keeping underground water sources clean
  - Non soil-based production (tunnel and hydroponics)
  - Intensive feed farming or free range poultry
  - Urban agriculture, local consumption and domestic food production for own use

Green and alternative energy generation.

The WCDSDF (2014) provides spatial considerations for land reform:

- Concentrate development in existing nodes.
- Do not permit new isolated nodes for residential development.
- Minimize impact on biodiversity resources, functioning of ecosystems, wetlands and conservation.
- Agricultural activities should be combined with tourism that is compatible and sustainable.

# 3.2.12 Socio-Economic Strengths, Weaknesses, Opportunities and Threats

# STRENGTHS

VL's economy is based on natural resources, with limited tertiary and secondary activities:

- S11. Highly accessible provincial, district and local road networks and international linkages (port, airport) enhance the towns' connectivity and role as connector.
- S12. Comparative advantages for VL include accessibility, provincial, district and local road networks, international linkages (port, airport, etc.), availability of suitable land for housing development, well managed public sector and a strong institutional base.
- Tourism is enhanced by seven zones representing a Special Protected Area across and along the BRE, guiding boat traffic and water sports.

Settlement form is dictated by natural resources (i.e. harbour and river) and function by economic and population growth trends, and amenity and institutional activities.

- S14. The historic economy (maritime trading and fishing), dictates the settlement form (i.e. access to the river, informal storage along and transfers across the river).
- S15. VL's strong institutional base and daily commercial services, have made it an attractive settlement for home owners who own more than one house, commuters

#### **WEAKNESSES**

- W7 Lack of economic diversification negatively impacts the number and variety of jobs created.
- W8 VL's economy is vested in primary and secondary activities except tourism.
- W9 Extensive agriculture surrounding VL and the bay of Saldanha contributes far less to the GDP than intensive agriculture located elsewhere on the West Coast. Fisheries and exports are the major primary economic sector contributors.
- W10 Economic activity based on mining can cause long term environmental and economic harm and impacts negatively on CBA's and ESA's.
- W11. Job losses due to technological development.
- W12. Low education levels (60% with less than matric), result in many inhabitants being unskilled or semi-skilled.

S16	and retirees.  VL has a relatively young and fast growing population e.g. its population has outgrown Piketberg's population.	W13:	Recreational and economic activity cause: - Pollution (boat oil) and water abstraction (flushing engines) Riparian erosion (wake of boats) & damage to birds' nests.
		W14.	Restricted access to existing harbours, jetties and boat landings and beaches.
	OPPORTUNITIES		
	m generates economic opportunities		nfluence sphere of the Saldanha Bay IDZ provides high development
O6:	Exploiting West Coast as the following tourist destinations (due to natural beauty,	poten	tial for VL:
	quaint coastal villages) close to the Cape Metropole.	014	Interaction and linkages between towns, as well as movement of
	Holiday – coastal towns with a unique coastline	:	people, means that business and resources are not tied to municipal
	Adventure – recreational activities and sport		boundaries.
	Nature conservation and natural beauty – Eco Tourism	015	Being part of the Saldanha Bay cluster of activities being within easy
	Cultural Tourism - the attraction of Velddrif as a fishing village		reach of the Saldanha Bay Port and the future IDZ.
	Agri- Aqua Tourism	016	Comparative regional advantage from being part of the Saldanha –
People	e migrate to VL motivated by comparative advantages such as:	:	: Bay Northern Cape Economic Corridor.
07:	Good infrastructure and amenities (schools, hospitals, roads, etc.) on the West	•	eting uses that are not mutually exclusive help to diversify the economy:
	Coast.	017	Conservation (estuary and coast) versus economic activity (living from
08:	A variety of educational facilities on the West Coast.	040	the estuary and coast, commercial fishing or industrial activity).
09:	Proximity to Cape Town where higher order services can be accessed	O18	Historic similarities exist between the economies of VL, St Helena Bay
010:	Strong institutional base i.e. court, post office, municipal office, police station.	010	and Saldanha Bay (maritime trading and deep sea fishing).
011:	A relatively well-managed public sector	O19	Opportunities for economic and land reform exist within the ocean
012:	A safe & convenient (proximity to Cape Town to access higher order services)	O20	economy (aqua culture).
	environment for retirees (high and middle income migrants).	O20	Land reform approach to reach beyond redistribution of agricultural land to include the ocean economy.
O13:	VL's proximity to the IDZ and accessibility to the R27 and R339, which have been	021	Create integrated local economic development initiatives in which local
	identified as freight routes (WCDM SDF), opens opportunities to exploit the IDZ	021	residents participate which offer equal opportunities for all residents.
	value chain.		residents participate which oner equal opportunities for all residents.
	THREATS		
	tion caused by economic growth	Τ0	The collection of the form of the collection of
T8	Migration into the area causes higher demands for housing, employment,	Т9	The policy is to focus settlement development in urban areas with
	infrastructure and services. The provision of housing and employment requires		highest growth potential. This benefits VL slightly as has a medium growth potential.
	spatial consideration e.g. locality, accessibility and affordability.		growth potential.

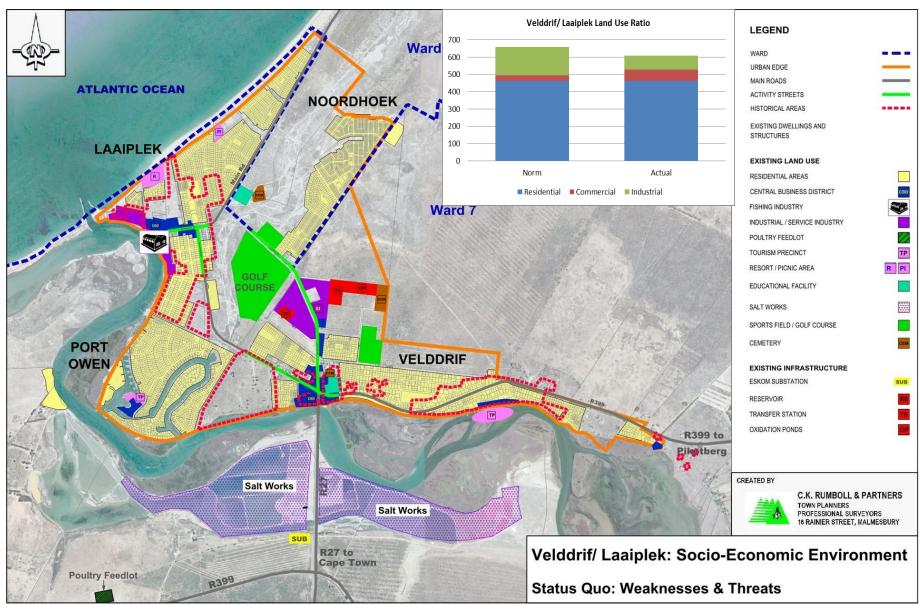


Figure 11: Socio-Economic Environment, VL: Weaknesses & Threats

# 3.2.13 Proposals related to Socio-economic Environment

The following proposals emerged from the SWOT analysis:

Expand the **tertiary** and **secondary economic** activities by **enhancing** the natural resource based economy of VL through:

- a) Economic diversification: Processing and value adding;
- a) Competing uses that are not mutually exclusive. Conservation and commercial fishing;
- b) New technologies: Future generation of wind energy;
- c) Provision for industrial and commercially zoned land to help change the economic status from developing to developed;
- d) Economic reform within the ocean economy (aqua culture): Integrate local economic development initiatives and the redistribution of land;
- e) Education (skills training) in conjunction with the skills development campaign conducted by the municipality;
- Management plans that guide economic activity. Berg River Estuary Management Plan regulating boat traffic and water sports across and along the BRE and its ecosystems; Build and enhance tourism as an economic opportunity. This would involve capitalising on and consolidating:
  - Eco-tourism based on natural beauty & nature conservation.
  - Cultural tourism: coastal and fishing village holiday destination.
  - Adventure tourism: recreational activities e.g. Canoe Marathon.

- Agri- & Aqua Tourism.
- Proximity close to the Cape Metropole.

Capitalize on and connect to the **sphere of influence of Saldanha Bay IDZ** and **deep water Port** and being part of the **Saldanha-Northern Cape Development Corridor**, as Velddrif is on a main route:

- a) Capitalize on being part of the economic development in a Major
   Regional Development Corridor and Growth Centre;
- b) Encourage specific prioritised links (e.g. yachting) to industrial activities in the IDZ (Saldanha-Northern Cape Development Corridor);
- c) Capitalize on interaction and linkages between towns in the district, as well as movement of people, business and resources not tied to municipal boundaries;
- d) Encourage links to economic and industrial activities related to raw material exports and transportation of bulk goods attracting;
- e) Consolidate opportunities for market oriented industries and agglomeration which are presented by the forward and backward linkages between the various sectors;
- f) Capitalize on evolving transport infrastructure and improved transport linkages, dictating accessibility and development patterns of the Saldanha-Northern Cape Development Corridor (one of 18 National Infrastructure Plan (SIP's).



Figure 12: IDZ: Anchor of Saldanha-Northern Cape Development Corridor

# **Consolidate Comparative Advantages**

People choose to settle in VL while they commute to work or to retire, and the reason being the presence of

- Good infrastructure and amenities;
- Proximity to Cape Town where higher order services can be accessed (convenience);
- Strong institutional base i.e. court, post office, municipal office, police station;
- Relatively well managed public sector;
- Safe environment for retirees (High and middle income migrants);
- Suitable land for housing vs strong competition from St Helena;
- Primary economic function and potential future development;

# **Revitalised function** (and economic growth), through:

- a) Changing development focus from residential development, with some supportive commercial land uses, to commercial and industrial development with social and residential uses in support thereof,
- b) Rejuvenated economic activity and technological advancement.
- c) Leveraging socio-economic trends e.g. fast growing population to benefit from public sector investment allocation priorities.
- d) Spatial form directed locality and affordability and accessibility.

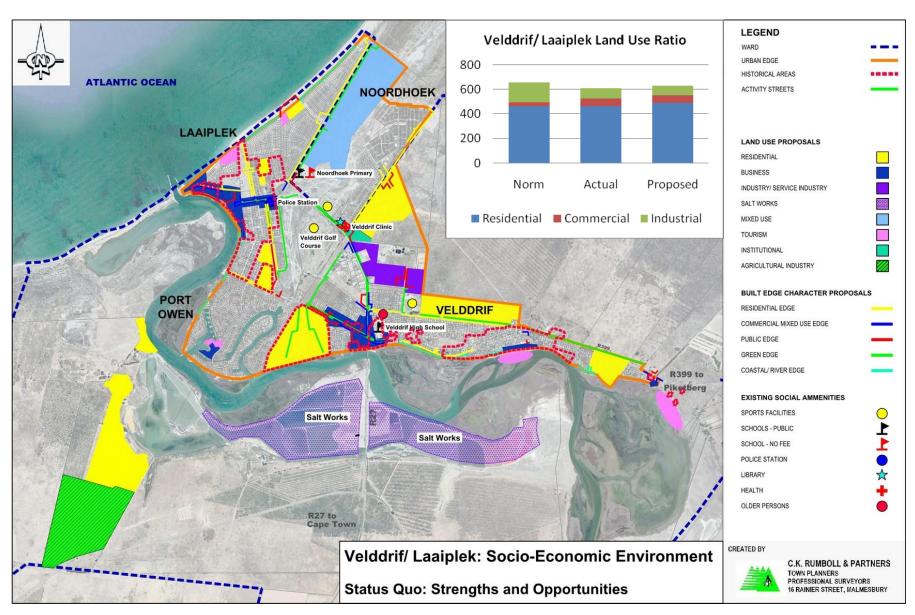


Figure 13: Socio-Economic Environment, VL: Strengths and Opportunities

# 3.3 Analysis of Built Environment

The Built Environment reflects the socio-economic patterns in a given area. Consequently, the relationship between the built environment and the natural resources base is not a primary relationship as it impacts most severely on resource sustainability.

# 3.3.1 Urban Settlements: Hierarchy and role of settlements

VL has been developed on the northern bank of the Berg River. The municipal jurisdiction stretches over the river to the farms on the southern side, where no formal urban land uses vested. The exception is the resort with less formal permanent structures that provides for holiday accommodation. Resort Zone 1 rights were awarded on Portion 5 of Farm Vlaminke Vlei No 54 in 1997 as the traditional land use was a campsite

An analysis of the increase in development (growth trends) reflects a sharp increase in buildings within VL and on the southern bank (See *Detecting Building Hotspots* Map).

Velddrif is a river corridor settlement and Laaiplek is a coastal town.

According to the functional classification of towns (See table), Velddrif is a fishing/ tourism settlement whilst Saldanha Bay is fishing/ industrial, and St-

Helena Bay is a fishing/ residential settlement. Velddrif and St Helena Bay are located at similar distances from the IDZ.

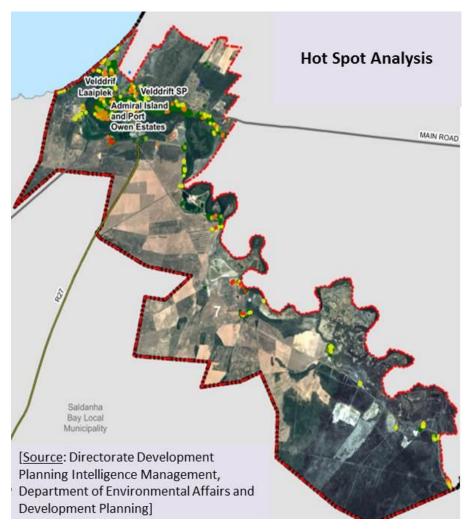


Figure 14: Hot Spot Analysis

The functional classification of VL follows in the table below:

Economic Base	Place Identity	Investment Priorities	SDF classification
Serviced based tourism, fishing and salt mining industries with supporting services and social infrastructure Two (2) central business districts	Coastal fishing towns combined with sensitive natural areas along the river and coast.	Major infrastructure	High order service centre

As extensive agriculture is practiced, fewer workers are employed and therefore no formal agri-villages have been established in the area. The provision of bulk services infrastructure, basic services and housing in Ward 6 & 7 would be provided within VL. VL will meet the local needs for services, household goods and community facilities and in turn will have links to higher order facilities in Vredenburg, Piketberg, Malmesbury and Cape Town.

Vredenburg is a Regional Centre whilst Piketberg is an Agricultural Services Centre according to the Growth Potential Study's classification<sup>3</sup> of towns. At a municipal level both Piketberg and Vredenburg are the main towns<sup>4</sup> and administrative centres in Bergrivier and Saldanha Bay.

Development and Spatial implications for VL:

VL is GPS clusters towns with the highest growth potential and of Part population size in functional key groupings. One<sup>5</sup> such functional key example is Saldanha, Vredenburg, Langebaan, St Helena grouping and Velddrif (WCDSDF, 2014, p77). towns WCDSDF refers to clusters as Major Regional Growth Included in a major regional Centres which include all towns within a 20 – 25km radius i.e. growth node Saldanha, Vredenburg, Langebaan, St Helena and Velddrif Part of a GPS divides the West Coast into three functional areas i.e. functional area Saldanha Bay – Swartland & a portion of Bergrivier's Ward 7 (Malmesbury is grouped together with Cape Metropole), Bergrivier - Cederberg and thirdly Matzikama. Functional Areas are not confined to statutory boundaries. The sphere of influence of Vredenburg (Saldanha Bay) is Located within stronger than that of Piketberg. spheres Vredenburg is (as the crow flies) 21km away while Piketberg influence is 57 km away. The influence of Vredenburg is nearly 3x (2.7) that of VL while the influence of Piketberg is 2x (2.4) that of Velddrif. VL is accessible via the R27 and the R339, both identified as Accessible freight routes (WCDM SDF) VL has outgrown Piketberg in population size.

VL and St Helena Bay basin have similar assets and economies (historically based on maritime trading and artisanal fishing). VL's population has outgrown that of Piketberg.

<sup>&</sup>lt;sup>3</sup> Five categories: Regional; Agricultural Service Centre; Fishing/ industrial; Residential and Tourism

<sup>&</sup>lt;sup>4</sup> Main town classification is determined by population, economic activity and administrative functions

 $<sup>^{\</sup>rm 5}$  Second cluster: Piketberg, Moorreesburg and Malmesbury form part of the Regional Corridor along the N7

# 3.3.2 Urban Settlements: Form and functionality

Velddrif has developed in a linear pattern along the river (2km before where the river meets the ocean) whilst Laaiplek developed on the curved edge of the ocean at the river mouth. The third urban area is that of Noordhoek which is located to the north, between Velddrif and Laaiplek. Limited physical connection exists between these three urban nodes which are separated by Port Owen, vacant land and the golf course. Port Owen was developed on a low lying marshland between Laaiplek and Velddrif which was uninhabitable when the Berg River was in flood.

The urban structure of Velddrif is further defined by road infrastructure:

- Main road R27 crosses the Berg River and Carinus Bridge intersection, a thoroughfare for trucks
- Voortrekker Road changes into Church and Lofdal Street and links to Main Road which runs parallel to the coast, in a northern direction towards Elands Bay. This route bypasses Port Owen and Laaiplek.
- Voortrekker Road towards Piketberg becomes the R399.

In the older neighbourhoods of VL, the historic grid street pattern ensures for ease of access and orientation whereas in more recent developments such as Port Owen, the curvilinear street network constrains penetrability and general thoroughfare.

Lower density residential erven are located along the river and ocean front and higher density residential uses northwest of the town. There are various vacant land parcels distributed throughout the town, which provide for infill opportunities (BSDF).

VL's urban structure and form does not support walkability and ease of movement, especially for tourists and local pedestrians, due to vast open spaces between the various activity centres and the general lack of cycle routes and clearly defined pedestrian pathways (unpaved). Pedestrian movement is mainly along

- a) access streets into Noordhoek (Church & Lofdal)
- b) Voortrekker and Main roads.

A taxi rank is located at the Lofdal, Church and Albatross Street intersection, next to the local community centre which serves the community of Noordhoek. The community centre precinct is in need of complementary uses.

While settlement form and function contributes to economic status, the form and function of sub-regional areas do too. These sub-regional areas are referred to as functional areas. In the case of the West Coast District, the Saldanha Bay – Swartland functional area:

- Aids the realization of the IDP priorities through the combined and integrated efforts of local authorities, together with the District Municipality. Such approach is consistent with the Western Cape Strategic Objective #10, namely; "Integrated services delivery for maximum impact" (WCSDF).
- Enables spontaneous interaction between towns in the district and movement of people, business and resources that are not tied to municipal boundaries
- Amplifies regional comparative advantages.



Figure 15: Major regional growth centre in function area

#### 3.3.3 Urban Settlements: Sense of place

The character of VL is dominated by the salt pans and estuary, the river, fishermen and anglers and the old harbour as one enters from the south. The main entry creates a defined gateway and sense of arrival. The entrance from Piketberg and Dwarskersbos is predominantly undefined.

The assets of Laaiplek (e.g. the fish factory, harbour and defining coastline) are only visible from one point in Laaiplek or from the Berg River itself. As blank edges and dead-ends face onto the water edges, the urban landscape is disconnected from water features (VLPP).

The main identity-defining nodes are at Laaiplek harbour, Pelican harbour and Bokkomlaan due to the historical value and partial preservation of architecture and activity of these nodes (e.g. West Coast architecture, large fishing boats and smaller yachts moored together and surrounded by water birds such as White Pelicans and Lesser Flamingos). These nodes represent mixed land uses (recreation, conservation, industrial and commercial). They are economic hubs and create links to the sources of VL's beauty (i.e. the sea and the coast).

This impression of openness continues to dominate the urban landscapes due to vast tracks of vacant land and underutilised open spaces. The dispersed built character of the town is due to incomplete housing projects situated along the northern coast, vacant properties throughout Laaiplek and wide road layouts.

The built character, and particularly non-residential land uses, manifest in the river and main street interfaces. The river interface is mainly dominated by private residential development that provides little access to the water whilst the main street commercial development interface is lined by eclectic building facades. The town's unique position on the north bank of the Berg River provides for extensive views over the river estuary, salt marshes and plateau-like landscape, especially to the south. Fishing and recreational boats can enter the river from the sea via the river mouth to moor at the jetties along the river. These sensitive visual elements of the town need to be protected in future development (VLPP). A fishing cottages theme in building design predominates (VLPP).

The peripheral segregated neighbourhood of Noordhoek is identified by a harsh urban character and is completely separated from all natural attributes. The location of the golf course also serves as a major buffer between the three urban areas with development being constrained in this buffer area due to the existing watercourse and high water table (VLPP).

The VLPP proposes (8 Focus areas) strengthening entry points and focus areas and enhancing VL's sense of place. These proposals should be

implemented. The proposals made in the VLPP, which focus on a micro scale, intend to achieve social justice and resilience. The precinct plan proposes the following:

- Better design, use, integration and protection of natural resources,
   cultural assets and unique natural features;
- Strengthening Velddrif's current identity through integrating the settlement nodes into a coherent network of destinations, routes, landmarks and spaces that draw people and activities.

#### 3.3.4 Urban Settlements: Settlement densities

The current gross density for VL is 5.1du/ha indicating a very low urban density. Future densification of the town will be subject to vacant land being developed.



Figure 16: VL settlement density

A vacant land audit was done for all the towns in the Bergrivier Municipal area. This audit indicated that in VL there is 260ha vacant land available which is made up of 13 land parcels. The land is earmarked for residential, commercial or industrial development.

# 3.3.5 Urban Settlements: Land Use Management Issues

Commercial and Industrial land use activities in VL are generally concentrated, with the majority of businesses and facilities located within the two central nodal centres and concentrated along the associated movement corridors. Light industrial uses are linked to the fishing industry. Social uses include; schools, a community hall, a clinic, municipal offices and library, sports grounds, business premises and cemeteries.

Land Use	Number	Description
Residential	4 046	A large number of these erven are situated north of Laaiplek and are still undeveloped.
Business	±100	Located at Carinus Bridge entrance (Velddrif) and along main feeder roads, Main Road Laaiplek, Port Owen and Pelican harbour areas.
Clinic	1	In Noordhoek
Schools	2	Noordhoek Primary – 975 learners Velddrif High School – 414 learners
Libraries	2	At Town Hall and at Noordhoek Community Centre
Cemetery	2	One to northwest of town and one at WWTW
Community	2	Town Hall at municipal offices and Community Hall in
Hall		Noordhoek
Resorts	2	Pelican Park & Stywelyne
Golf course	1	9 hole course

Table 3: Spatial classification of VL

In general, there is limited diversity in the land uses across VL as the dominant land use within the town relates to single residential dwellings

# 3.3.6 Transportation

VL extends 6.2km from East to West and 4.3km from North to South, which means that most services are not within appropriate walking distance for residents, thus encouraging vehicular traffic (See Addendum H).

The road network links VL directly to Cape Town via the R27 crossing the Berg River. VL is linked to Piketberg via the Main Road 529 (R399) in the east and to Dwarskersbos and Elands Bay via the Main Road (R399) to the north.

Public Transport (minibus taxis) is privatised as is the long distance bus service (Intercape and others). The long distance bus route departs from Cape Town via the N7 to Windhoek in Namibia and alternatively to Upington in the Northern Cape. There is a daily service between Saldanha Bay and Cape Town. Minibus taxi services and private transport are the only available modes of transport used by commuters within Velddrif or people walk.

A freight rail line runs between Cape Town and Saldanha and from Cape Town to Bitterfontein. No passenger rail service exists for Velddrif. The

Sishen-Saldanha (Orex) line is a dedicated line which transports iron-ore and sand from Sishen and Brandsebaai respectively to Saldanha.

Road freight transport services are frequent and connect to the transport corridor between Cape Town and Windhoek (Namibia) and Cape Town and Upington.

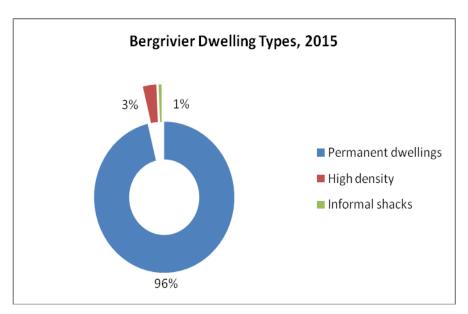
The WCDM has no commercial airports that cater for domestic and international airlines. Several airstrips present are privately or state owned, where state owned are exclusively used for specific functions e.g. military, Langebaanweg airfield. The latter has the potential to be upgraded to a commercial airfield in the future (WCDSDF 2014).

Saldanha is a major harbour on the West Coast. Besides handling all iron ore exports from Sishen, the harbour also accommodates a variety of vessels, including cargo, bulk carriers, container ships, tankers, coasters, foreign fishing vessels, SA trawlers and others. Other harbours in the District, primarily concerned with small fishing boats and recreational boats, are located in Lambert's Bay, Elands Bay, Velddrif, St Helena Bay, Yzerfontein, Saldanha and Doringbaai.

# 3.3.7 Housing and Human Settlements

The 2017 IDP survey confirmed that 96.1% of households live in permanent single residential dwellings, 3.1% (130 households) in high density dwellings (flats or townhouses) and 0.7% in informal shacks. Across this dwelling type distribution, 11.1% (467) of households live in backyard dwellings.

In 2017 the Bergrivier housing waiting list reflected 1 330 applications (1 298 fully subsidized and 32 GAP houses) for VL (2017 - 2022 BIDP). To provide at a gross density of 25 units per hectare, 46 hectares of land is required.



Graph 10: Bergrivier Dwelling Types, 2015

#### 3.3.8 Infrastructure

The West Coast District Municipality is the partial provider of bulk services and infrastructure (water supply and solid waste management). Other bulk services such as sewer management, electricity and storm water are locally provided. Service infrastructure provided by the District Municipality is integrated with municipal services and connects to these services.

# 3.3.9 Infrastructure: Water Storage & Supply

- WCDM provides water to municipal areas including Swartland,
   Saldanha Bay and Bergrivier through an extensive bulk distribution system (Withoogte and Swartland).
- Water sources used by these systems relate to the Berg River (Misverstand Dam), Voëlvlei Dam and the Langebaan Aquifer.
- Water is supplied to VL via the WCDM pipeline which passes along the Carinus Bridge. The development of a substantial number of new erven, north of Laaiplek, brought about storage capacity problems in that water can only be stored for 36 hours and not the required normal time period of 48 hours (BSDF).
- There is a general lack of water along the West Coast. Desalination plants were approved elsewhere on the coast to compensate for the increased demand for water (average annual demand of 3.53%).

A desalination plant was proposed in Laaiplek to convert sea water to
potable water (see BSDF). It is proposed that a desalination plant or
reverse osmosis plant (RO Plant) is constructed. The capital that would
be required to upgrade external bulk water infrastructure can
alternatively be invested in a RO Plant. This would make VL selfsufficient in terms of water supply and will place no pressure on the
existing water supply. Cerebos has established a desalination plant on
its mining site (site observation, 2018).

# 3.3.10 Infrastructure Waste Water Treatment (Sanitation)

Two sewerage systems are currently used in VL: A waterborne system for the Port Owen, Noordhoek and new development areas and a septic tank system for the older residential areas. The WWTW is situated to the north of the town with pump stations to pump sewage to the treatment works. The WWTW was upgraded from an Oxidation Pond System to an Activated Sludge System.

# 3.3.11 Infrastructure: Solid Waste Management

WCDM is responsible for regional solid waste management as per the Integrated Solid Waste Management Plan (2011). This plan is consistent with the specifications of NEMA: Waste Act No 59 of 2008 and:

- Prevents waste generation
- Recovers waste when generation cannot be prevented
- Safely dispose of waste that cannot be recovered.

The waste from the two transfer stations at Piketberg and Velddrif is transported to Highlands Landfill Site outside Malmesbury and all other waste is transported to Vredenburg.

The disposal site to the northwest of Noordhoek was closed and rehabilitated. Refuse is collected from erven and transported to the Transfer Station next to the WWTW from where it is taken to Highlands.

# 3.3.12 Infrastructure: Energy

An electricity capacity upgrade, doubling the capacity of the town was completed (overhead cables enter Velddrif via the Carinus Bridge). Eskom

is the bulk provider and the BM is the provider to the inhabitants.

#### 3.3.13 Infrastructure: Storm Water

An adequate system to control storm water run-off is already in place for all residential areas. At Noordhoek and newer higher density areas, proper storm water channels feed into a storm water retention pond.

Wind resources on the West Coast are substantial. Thus various wind turbine projects have been successfully undertaken in the region, with turbines in Darling, Hopefield, Gouda and Sere north of Vredendal.

Saldanha harbour has sufficient infrastructure and manoeuvrability to facilitate the importing of wind turbines into the West Coast District.

#### 3.3.14 Infrastructure: Telecommunications

Existing telecommunication infrastructure needs upgrading.

# 3.3.15 Built Environment: Strengths, Weaknesses, Opportunities and Threats

STRENGTHS	WEAKNESSES
Capitalise on VL's classification as	W15: VL experiences a lack of economic diversity/ a lack of appropriately zoned land.
having medium growth potential.	VL's form directs function and growth potential (Economics of Urban Form and Structure).
S18: Vacant land can be divided	W16: Vested as a result of its historic function resulting in three scattered and isolated commercial and industrial spaces.
into a total of 3911 erven,	W17: Consists of four separate residential precincts and vast open spaces and vacant land compounded by an overall low
which should result in an	dwelling unit density which constrains permeability (the ease with which the pedestrian can observe the route to follow),
increased density of 15	legibility and weakens sense of place.
dwelling units per hectare.	W18: Includes large tracts of isolated residential developments, purchased by the market but not built up as yet.
S19: VL is located nearly the	W19: The main road interface is degraded by inappropriate development.

same distance from the IDZ
as St Helena Bay, and is an
alternative residential node
of sub-regional status for
the industrial economy.

W20: Access to existing harbours, jetties, boat landings and beaches is restricted.

W21: The golf course, a major buffer between the four urban areas precincts, to change to an integrated social space.

Provide shortfall in infrastructure and guide public investment.

W22: Insufficient waste water treatment works, water storage and bulk electricity capacity but bulk services augmentation is planned and budgeted.

W23: Provide for housing backlog.

#### **OPPORTUNITIES**

# Hierarchy aids economic growth (intensification and diversification):

O22: VL's accessibility to Vredenburg (locational advantage) and more distantly to Piketberg.

O23: VL as an alternative residential location to St Helena, Saldanha and Vredenburg for those operating in the IDZ.

O24: Determine development patterns of the Saldanha-Northern Cape Development Corridor by industrial activity such as being conducted at the Saldanha Bay IDZ, transportation of bulk goods (raw materials exports) in the only deepwater Port of Saldanha Bay and by transport linkages i.e. main access routes (N7 connecting Cape Town and Namibia)

Land use as a tool to enable opportunities:

O25: Encourage sustainable development within the context of Ward 7 by expanding conservation land uses to link to Saldanha Bay and Cederberg (along the coast) and by formalizing development on the southern bank of the Berg River.

O26: Conservation and associated direct enhancement of tourism.

O27: Industrial and Commercial land availability to change the economic status (from developing to developed) and economic sector representation (primary to secondary & tertiary).

O28: Mixed use developments to provide integrated housing with a variety of housing typologies.

O29: Shift economic focus to secondary & tertiary and develop local people's skills (provide institutional capacity).

O30: Change development focus to commercial and industrial development, to better absorb or redevelop large isolated residential developments.

O31: Deliver innovative housing typologies, increasing overall density and realising urban efficiency.

Enhance mobility to aid access to employment and economic growth:

O32: Passenger transport can be provided by private and public service respectively.

O33: Intact transport network infrastructure will be strengthened and expanded as the IDZ grows which can accommodate a diversity of modes of transport.

#### **THREATS**

T10: The capital expenditure opportunity cost of nearly 4 times (3.7x) as many vacant serviced erven compared to build up erven in Velddrif.

T11: Some formal and unofficial resorts are located on the southern bank of the Berg River including a resort with less formal permanent structures that provides for holiday accommodation located on Portion 5 of Farm Vlaminke Vlei No 54 that started as an official resort.

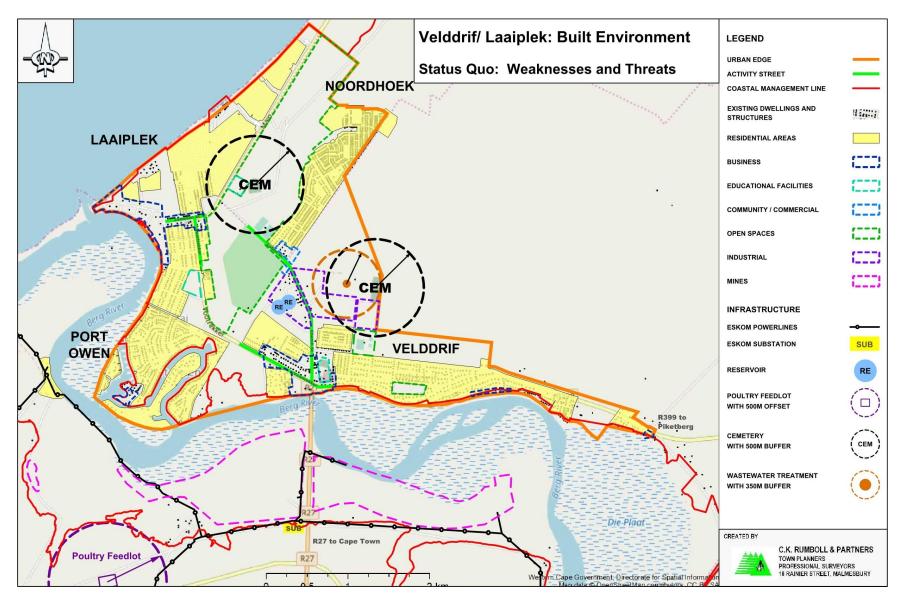


Figure 17: Built Environment: VL: Weaknesses & Threats

# 3.3.16 Proposals relating to the Built Environment

The following proposals emerged from the SWOT analysis:

- a) Spatially consolidate
- economic development:
  - Intensify, cluster and expand commercial, industrial and residential tourism uses. VL's form generated from its historic function caused commercial and industrial spaces to be scattered and isolated among four residential precincts.
  - Capitalise on Vredenburg and Saldanha's sphere of influence as major regional centres compared to Piketberg's sphere of influence as capital and main town.
- o the built environment:
  - Introducing an appropriate variety of building topologies keeping in mind soil bearing capacity;
  - Provide for housing backlog;
  - VL is characterised by separate precincts, vast open spaces and vacant land, overall low density and open space buffers i.e. golf course, and
  - Some formal and unofficial resorts located on the northern and southern bank including a resort with less formal permanent structures that provides for holiday accommodation located on Portion 5 of Farm Vlaminke Vlei No 54.

- b) Spatially connect:
- The interface between the built environment and the estuary, river and coast. Develop guidelines for the riverscape and coastline interface:
- And refocus large tracts of isolated residential developments (3.7x as many vacant serviced erven compared to build up erven), purchased by the market but not developed at this stage. Unlock the capital spent to develop these erven (utilise the service capacity reserved for these erven);
- And utilise the opportunity to densify, an important component in realising urban efficiency, and the need for housing to deliver innovative housing typologies that will increase the overall density;
- And promote wind hedges to protect urban environments from sand storms which causes wind erosion.
- c) Focus VL as a residential location and:
- As an alternative to St Helena, Saldanha and Vredenburg. Velddrif and St Helena have several similarities i.e. nearly the same distance from the IDZ and both have sub-regional status in the hierarchy of towns within the regional growth centre and both are fishing and tourism settlements.

- Capitalise on Velddrif's proximity and locational advantage to Vredenburg and Saldanha.
- Encourage mixed use developments providing for integrated housing developments and a variety of housing typologies that caters for various income groups and different needs;
   Unlock development of vacant land earmarked for residential development (a total of 3 911 erven, 15 dwelling units per hectare);
- Benefit from public sector investment in the major growth centre as VL is classified as having medium growth potential, and less likely to receive public sector investment individually;
- Delineate VL's total credible and sustainable footprint. Sensitive and limited development to the north east, east and south should be investigated.
- d) Enhance mobility of goods and people and
- Expand the limited passenger transport (private taxi service) and involve public and private sector (direct investment);
- Maintain and upgrade freight transport (road, rail & water) especially linkages to Saldanha Bay Port and the proposed IDZ;
- Commercialise an airfield(s). The existing ones are privately or state owned (not for commercial purposes);
- Upgrade Laaiplek harbour;

- Promote a diversity of transport modes and strengthen accessibility;
- Enhance sense of place utilising public and open spaces;
- Rejuvenate the main road interface;
- Improve access to harbours, jetties, boat landings and beaches;
- Change the golf course, a major buffer between the three urban areas (of Laaiplek, Velddrif and Noordhoek), to an integrated social space.
- e) Provide efficient and effective civil and electrical services:
- Infrastructure such as Waste Water Treatment Works capacity, Water storage capacity and Bulk electricity are insufficient. (Bulk services budgeted for: Roads resealed R7.6m; Bulk electricity for housing R5.1m; Replacing conventional meters R1.75m; Upgrading electricity network R350 000; New reservoir 13ML R8.4m; Upgrading WWTW (0.97ML per day to 1.95ML) R69m);
- Services shortage is magnified given VL's history of developments that collapsed and had to be taken over by the Municipality.

Opportunities addressed under the biophysical environment are:

 Expand conservation land uses to link to Saldanha Bay and Cederberg (along the coast).

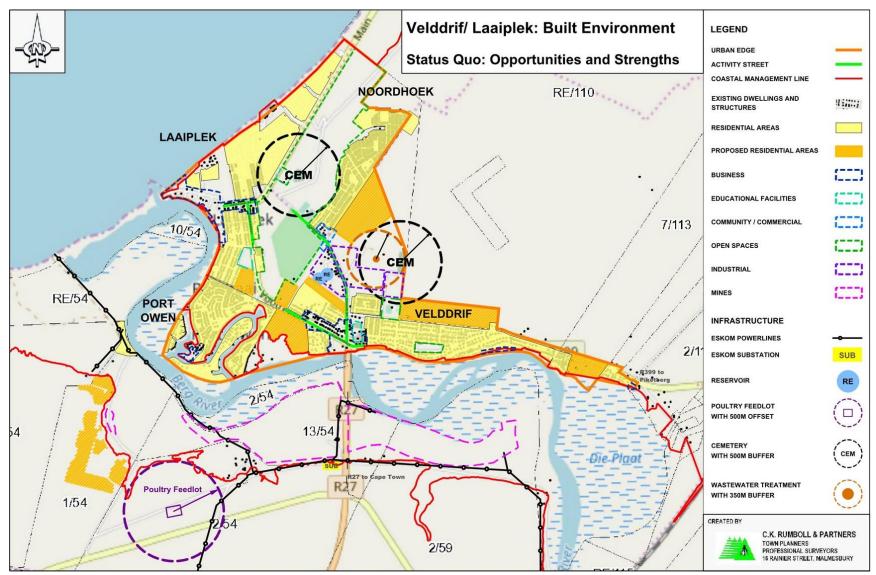


Figure 18: Built Environment, VL: Opportunities and Strengths

# 4. Legislative & Policy Context

The various policy frameworks and plans that serve as guiding principles and as framework for development, are considered in this section.

# 4.1 Guiding principles for development proposals

The guiding principles which inform the amendment of the Bergrivier SDF (2012- 2017) are the five SPLUMA principles and two more as per the WCPSDF 2014. The selection of these principles followed from a broad comparison of the principles of various planning documents (See Addendum A) that relate directly to the Bergrivier SDF as contained in the table below. These include:

- WC Provincial Spatial Development Framework, 2014
- One Cape 2040 (Western Cape long term economic vision)
- WCPSDF Spatial Development Agenda, 2011
- West Coast Spatial Development Framework, 2014
- West Coast Integrated Development Programme, 2017- 2022
- Bergrivier Spatial Development Framework, 2012 2017
- Bergrivier Integrated Development Programme, 2017 -2022
- The VL Precinct Plan, 2014

Thus, the principles guiding the amendment are spatial justice, accessibility, spatial resilience, spatial sustainability, spatial efficiency, quality and liveability and good administration.

SPLUMA principles & WCPSDF [in brackets if different or additional]	One Cape 2040 Vision	Prov. SP Agenda (Themes)	WCDSDF & BMSDF principles	BMSDF & VLPP principles
Spatial justice: Redressing imbalances through access to and use of land. (& Accessibility)	Working (Economic Access) Connecting (Cultural)	Open up opportunities in spatial assets	Maximise access. Redress imbalances	Convenient
Spatial resilience: Securing communities & livelihoods from shocks - mitigation & flexibility.	Educating (Knowledge) Green (Ecological)	Open up opportunities in spatial assets	Celebrate diversity	Safe
Spatial sustainability: Protecting agricultural land; Limiting urban sprawl; Creating viable communities: consider infrastructure & amenity cost.	Green (Ecological)	Sustainable use of spatial assets	Sustainable. Resources use. High quality living environments	Attractive
Spatial efficiency: Promoting growth & employment; Optimising resource & infrastructure use. (Quality & Liveability]	Living (Settlement)	Integrated & Sustainable settlement	Urban efficiency. Horizontal & Vertical integration	Efficient
Good administration: Integrating the approach to land use & development & predictability.	Leading (Institutional)		Public Good prevails. Equal benefits & protection. Fair & good governance	Effectively Managed

# 4.2 A framework for development proposals

Comparing goals and objectives of the various policy frameworks and plans with those of the Bergrivier IDP (2017- 2022), SDF (2012 - 2017) and the VLPP (2014) as per Addendum A provides a framework for the development proposals. This comparison was supplemented by a detailed analysis (Addendum B) of projects planned and budgeted for in the Bergrivier IDP, SDF and VLPP which assisted in focusing the development proposals as per Addendum B. The comparison highlighted the IDP's purpose as implementation plan i.e. to address the needs of local residence over a 5 year period. The District IDP and SDF amplified national and provincial needs. The gap between the local and district level planning provides the framework for the amendment. Hence two of three the spatial goals as set out in the West Coast District SDF (2014) became the development framework;

- c) Enhance infrastructure capacity in areas with the highest growth;
- d) Create an enabling environment to create employment, economic growth and grow tourism;

The analysis reveals that several plans and policies exist to enhance and protect biodiversity and agricultural assets, the third WCDSDF goal.

The amendment will therefore focus on opportunities related to infrastructure and economics and will address challenges at a sub-regional

level as VL is part of the major regional growth centre and Saldanha-Northern Cape Development Corridor.

#### 5. Spatial concept for Velddrif and Laaiplek

To generate a conceptual proposal for VL, the spatial logic of the WCPSDF 2014 was applied.

In the Status Quo VL was characterised as playing the following roles:

- Connecting economic activities (a connector);
- An abstractor of natural resources on which its economy is based (a collecting point);
- A tourism destination (appreciate natural resources);
- A strong institutional base (or leading administrative town).

Within its local context, development within VL has to be concentrated and consolidated, for VL to amplify these characteristics. To this end several proposal and projects from the 2017 - 2022 IDP, VLPP 2014 and 2012 - 2017 BMSDF can be found in Addendum B.

Within its sub-regional context and being part of a functional area, development within VL has to be capitalized upon and connected to the region in order for VL to grow its characteristics outlined above.

The matrix below helps to express the spatial concept:

	WCPSDF Spatial	Capitalize	Connect	Consolidate	Cluster
WORKING	Logic vs Expression Economic Access & Transition: Livelihood prospects; employment opportunities & developing enterprises	On Saldanha Bay Port and IDZ	Sub- regional node to Saldanha Bay Northern Cape Econ. Corridor	Zoned land	Economic precincts
EDUCATE	Knowledge Transition: Good education, and places of innovation & learning	Access opportunities in IDZ	Enhance opportunities (part of a functional area)	Enable opportunities within VL	Enable opportunities (part of major regional growth centre)
CONNECT	Cultural Transition Communities are inclusive, integrated, connected (local, global)	Being part of a Functional Area	Within the West Coast district & beyond	Connect isolated pockets of development	Social amenities
GREEN	Ecological Transition Access basic resources efficiently. Service & safeguard ecosystems. (Sustainable, low- carbon resource use)	Accommoda ting conflicting use; SPCs	Biosphere & Tourism	Bergrivier Estuary Managemen t Plan & CML	Services
LIVING	Settlement Transition Healthy, safe, enabling & accessible living and working environments; multi-opportunity, liveable communities	Settlement consolidation / expansion	Serve as a residential precinct for IDZ	VLPP: 8 destinations	VLPP: connected destinations
LEADING	Administrative Transition Effectively managed urban and rural areas. (Open, collaborative).	Adjustment of core municipal documents	Partnership with IDZ, Add to BMIPD	Adjustment of BMSDF	Zoning Target

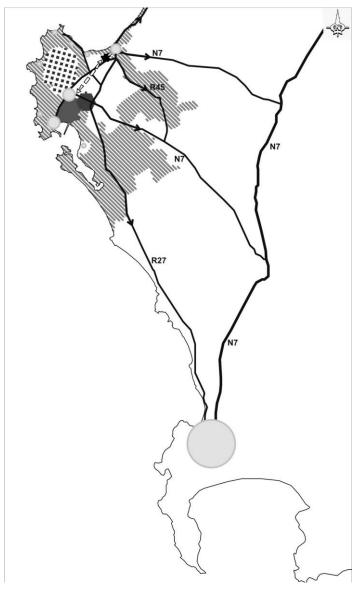


Figure 19: Spatial Concept: Regional

In order to bring about the spatial transition at a sub-regional level, the findings of the Status Quo SWOT Analysis were related to the Growth Potential of Towns Study Indices (as per the table below) and, in particular, those indices where VL obtained a medium or low score.

	Challenges	s & Opportunities	Indices Element	S	
KEY			(Numbered as in GPS)		
×	Economic	Built Residential	Infrastructure	Institutional	Natural
	Threatened settlement se riverscape; c Estuary & cc Several police	sm and natural assets sub-regional (ward) & ense of place (landscapastal & main street in eastal conservation pacty directives to protect	2. Tourism potenti		
Economic Index: Low	historic fun	f VL indirectly generations of these thand industrial spaces (Economics of Urbations settlement down areas with the inefits VL.	Average per capita income     Total personal income.     Number of formal retail outlets & services sector businesses.     Number of formal retail outlets & services sector businesses per person.		
Econ	network, inte availability	advantages for provincial, district a rnational linkages (po of suitable land , well managed publicase.	10. Growth of high labour	y skilled	
	Form is dictated by natural structuring elements e.g. harbour where function is shaped by economic growth trends and supported by institutional uses, amenities & population growth.			11.Value of transactions 12. Property tax rev	property renue
Physical	Provide sho transport Intact transp	ortfall in infrastructu port networks will be ed as the IDZ grows	re and public	Projected shor surplus/ shortfall summer GAADD internal reticulat	s of peak considering

		2011 (mcm/a)
	Lack of fresh water & rain	5. Potential evaporation
	Regular strong wind & sun	6. Grazing capacity
	Wind erosion & sandstorms	7. % Area cultivated (2012)
	Estuarine habitat connectivity impediment	8. Growth in % area cultivated
	Climate change causing floods, extreme heat and	9. Size & status of unexploited
	rise in sea levels	minerals
	Water Use to be monitored	
	Comparative advantages for VL include strong	5, 6, 7, 8: Access to education
	institutional base (See index).	(pre- & after schools & schools)
	There are nearly 4 times (3.7x) as many vacant	9: Housing backlog (and room
	serviced erven compared to developed erven in	density)
	VL. The capital expenditure to develop these	
	erven has no benefit as they have not taken up	
	the service capacity reserved for them.	
ě	Economy is based on natural resources	11: Employment
Socio-economic index	exploration, with limited tertiary and secondary	12: Income
ic.	activities e.g. processing and value adding	13: Economic dependency
JOI	Economy not diversified, impacts on number and	(smaller families, better
S	variety of jobs generated	financial provision)
ě	Economic opportunities exist in tourism and in	
CiC	Industrial Development Zone (Saldanha-Northern	
S	Cape Development Corridor)	
	Fisheries, not Agriculture, is the major primary	
	economic sector contributor to Coastal GDP.	
	People migrate to VL to settle while commuting to	1, 2, 3, 4: Energy source for
	work; to look for work; or retire.	lighting (1), main water supply
	Positive growth trends, as people migrate into the	(2), refuse disposal (3), toilet
	area, cause a higher demand for housing,	facilities (4)
	employment, infrastructure and services.	

The transition analysis to bring about spatial transition at a sub-regional level crystallizes the vision generated from the SWOT analysis:

#### From:

Velddrif and Laaiplek form vibrant, well managed and attractive areas that offer safe, integrated open spaces, streets and amenities, where the unique landscape, cultural and social assets, their proximity to the IDZ, location within a major regional growth centre and the West Coast Biosphere create opportunities for residents and attract tourists.

#### To:

#### VL is a:

- destination (tourism, based on natural resources)
- place to reside
- leading administrative town
- connector
- abstractor (collecting point) and producer and processor (economic value chain)

The spatial logic and concept, as derived from the WCPSDF 2014, underpinning the objectives and proposals which accelerate and provide momentum to this spatial vision, is tabulated and illustrated below:

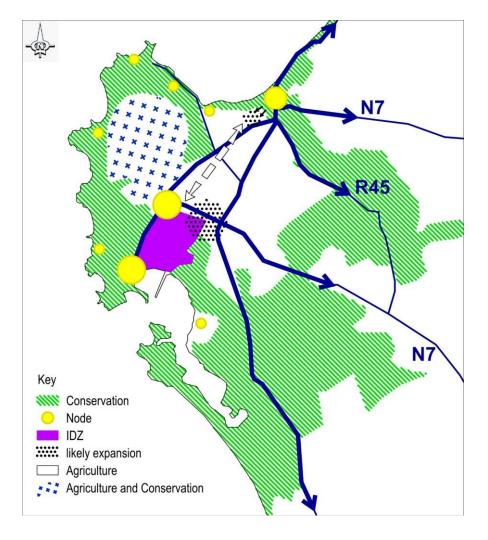


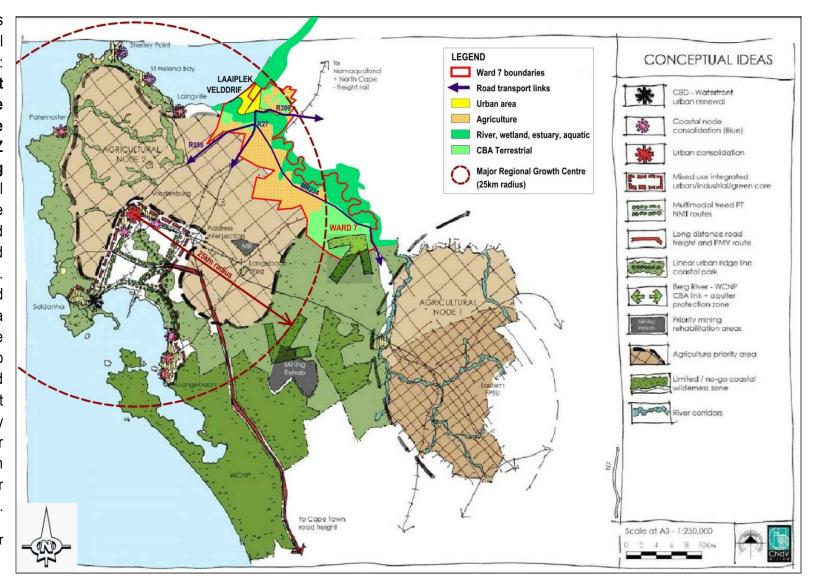
Figure 20: Spatial Concept

Scale & Description	Capitalize	Consolidate	Connect	Cluster
REGIONAL GROWTH NODES Primary urban concentrations and areas of growth e.g. Saldanha Bay region - major regional growth centre  REGIONALISM Rural regions defined by agricultural and water systems, the cultural and landscape character, local conditions and function e.g. Berg River Catchment and West Coast	Capitalise on assets: iconic landscapes, rural & coastal lifestyle, knowledge economy, agriculture e.g. Estuary & Coast line - enhance tourism, industrial tourism & recreation  Celebrate unique regional identities and experiences e.g. West Coast & Berg River Estuary, Biosphere	Prioritise consolidated investment in economically vibrant areas e.g. VLPP and WCSDF proposals  Balance development and resource protection through close management of natural, cultural landscape and agricultural assets in relation to growth pressures e.g. SDF development proposals within urban edge	Connect regional economic infrastructure (regional transport, freight logistics, energy, broadband) e.g. IDZ and deep water port of Saldanha  Strengthen regional ecological connectivity (Build economic linkages regionally between rural and urban areas e.g. Biosphere and Saldanha-Northern Cape Development Corridor.	Align high-level planning & investment prioritisation (BRT systems, human settlement pilots) e.g. population growth warrants affordable, sustainable transport between IDZ and settlements.  Coordinate regional planning based on response to local conditions and functions e.g. conservation and tourism
District INTER SETTLEMENT SYSTEMS Hierarchy and functional linkages between regional centres and smaller surrounding towns e.g. growth centre vs medium development potential of subregional nodes	Capitalise on unique cultural landscapes, heritage assets, character areas and typologies  e.g. a place to reside, a destination, a connector, a producer, processor and administrative leader	Promote hierarchical social service delivery patterns based on regional role of settlement (regional centre vs small towns) e.g. Health: Vredenburg hospital and Noordhoek clinic. Local: court, social services, Regional: special needs schools and Military Academy	Focus on sub-regional public transport systems (Ensure connected rural-urban social services systems and networks) e.g. increase accessibility of R27 and 339 connector to Vredenburg	Regionally align clustering of primary health, educational and other social facilities  e.g. Tertiary: West Coast College campus in Vredenburg, Military  Academy  FET & BE: Schools and preschools in towns;  Hospitals in Vredenburg,  Courts in Vredenburg and Laaiplek, etc.
SETTLEMENT FORM AND STRUCTURE Physical and socio-economic manifestations of activity within a town and/ or neighbourhood e.g. VLPP	Capitalise and preserve unique local built form and natural typologies, character and heritage e.g. linear development along river banks, a historic trend, capitalise on formalising development on southern bank	Promote urban rather than suburban model: avoid further fragmentation of townships. Consolidate social services, mixed uses, density e.g. Precinct plan destinations, zoned land SDF proposals, density benchmarks to keep character of towns	Focus on creating connections to economic and social opportunity to promote spatial and socio-economic integration e.g. transport to IDZ & within VL (Tuk-tuks) (links between regional and sub regional nodes and between precincts within VL)	Cluster all social facilities and complementary activities.  Promote multi-purpose and mixed use activities e.g. enhance VL as a destination and a place to reside.

Table 4: Spatial logic (WCPSDF 2014) of Development proposal

The spatial concept of VL is in its embedded sub-regional location (as illustrated): Capitalizing on VL's convenient en-route location within the Saldanha-Northern Cape Development Corridor as an IDZ sub-regional node to reside along the BRE. To enhance the spatial concept, land uses have to be consolidated, clustered, connected and expanded to capitalize on and optimize economic growth commercial, industrial and residential tourism uses). As a result VL's credible and sustainable footprint has to be re-delineated to include sensitive and limited development to the north east, east and south while simultaneously aligning infrastructure and commuter transport to access the benefit from public sector investment in the major regional node, Vredenburg.

Figure 21: Spatial Concept: Major Regional Growth Centre



#### 6. Development Proposal and Objectives

The development proposal encompasses the development of Portion 1 of Farm Vlaminke Vlei No 54 (See Addendum J and L). The particular land use proposals includes the following:

- Residential:
- High Density/ Mixed use 1.36ha (60 opportunities @ 420m²/unit 24 u/ ha);
- High Density: 12.10ha (251 opportunities @ 284m²/ unit 35 u/ha);
- Single Residential: 13.72ha (229 opportunities @ 608m²/unit 16 u/ha)
- Single Residential: 6.85ha (25 opportunities @ 2188m²/ unit 5 u/ha)
- Mixed use/Commercial: 3.9ha
- Light industrial and Institutional: 4.85ha
- Infrastructure: 5.75ha (1.44ha & 4.31ha)
- Aguaculture: 6.04ha
- Freshwater habitat: 4.31ha
- Agriculture: 31.58ha
- Conservation: 35.26ha

The development proposal and objectives build on the two WCDSDF goals and the five characteristics associated with VL (Similar to the One Cape 2040 vision). See also Addendum F for the Alignment of Proposal with WCPSDF Objectives.

The following Objectives and supportive proposals enhance WCDSDF Goal 2 (Create an enabling environment to create employment, economic growth and grow tourism) to benefit VL from being located next to Vredenburg and being part of the Saldanha-Northern Cape Development Corridor. See Addendum E for the Needs and Desirability analysis.

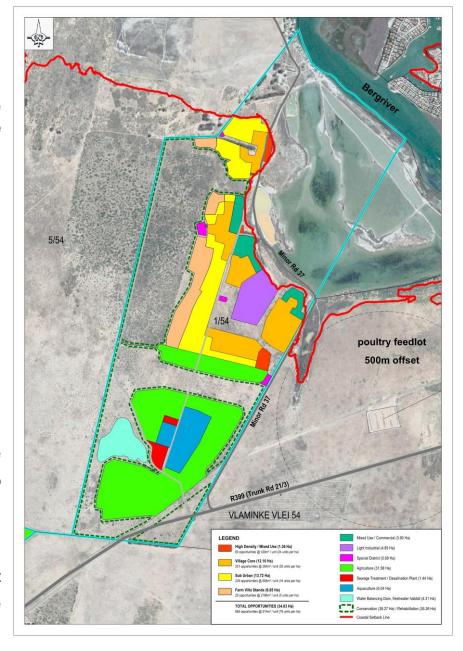


Figure 22: Development Proposal

### 6.1 VL as a processor/ producer area and tourism destination

The table below contains proposals to build VL as a processor/ producer area and tourism destination.

	Capitalize on being part of Saldanha-Northern Cape Development Corridor						
	Proposals: To consolidate and cluster						
6.1a	<ul> <li>Enlarge tertiary and secondary sectors' contribution to GDP</li> <li>Create an enabling environment as an alternative for investors considering setting up a plant in the IDZ e.g.</li> <li>Align rates and taxes</li> <li>Utilize en route accessibility</li> <li>Provide for zoned land in SDF: See 6.1d</li> </ul>	Capitalize					
6.1b	Diversify the economy of VL  - Cluster economic activities  - Implement VLPP proposals  Cluster & Connect						
6.1c	Enhance specific links to IDZ and precincts outside IDZ e.g. yachting and tourism value chain						
6.1d	Zone land to change the economic status of VL: <ul> <li>Expand SDF proposals</li> <li>Connect four urban precincts</li> <li>Bring about redevelopment of large isolated residential developments which are not built-up</li> <li>Develop a zoning target and restructuring implementation plan for VL</li> </ul>	Capitalize Connect Consolidate Cluster					

Proposals 6.1c and 6.1d will be elaborated upon.

# 6.1.1 Enhance specific links to IDZ and establish precincts outside IDZ

### Proposal 6.1c

Tourism has formalized and increased, but there is room to consolidate the formalization, by implementing the WC tourism strategy, as tabulated below:

WC strategy	у	VL: Existing		VL: Proposals	
Holiday		Port Owe	n and	Velddrif, Laaiplek, VLPP proposals	
Destination		Dwarskersbo	s, less	(some of the 8 destinations)	
		so in Veld	drif and	Southern bank, east & west reflect a	
		Laaiplek		high increase in built structures	
Adventure		Golf course.		Yacht building and related services.	
		Berg River	Canoe	Water Sport Academy at Laaiplek or	
		Marathon		western section of southern bank	
Natural bea	auty	Characterise	d by Bird watching day hikes on south		
& conserva	tion	limited acce	ss: Boat	bank.	
		trips, bird hid	des Conservation on the northern bank		
Cultural	Bok	komlaan	Vlaminke	Vlei formal resort with its less formal	
tourism	and	Pelican	permane	nt structures was the historic trading	
	Har	bour	space or	market where farmers from the interior	
			and loca	al fishermen traded fish and wine.	
			Celebrate	e this bygone trading space.	
			De Plaat	- rural living, historic entry point	
			Channel	to connect golf course and various	
residential precincts – create a socia			al precincts – create a social space.		
Agri-Aqua	Plar	nned: Project	Project Phakisa – improve Southern bank to		
Tourism	har	bour and cultiv	vate mussels. cultivate mussels		

As tourism uses formalise, the appropriate development mix will attract both permanent residents and tourists as demonstrated by existing plans and programmes to enhance tourism:

- The Velddrif and Laaiplek Precinct Plan VLPP identifies eight (8) destinations with proposals to develop mixed use spaces e.g. adjacent area to the Harbour at Laaiplek, the Old Factories on the northern bank of the river at Velddrif's southern entrance and Bokkomlaan.
- The VLPP has made several commercial development proposals to increase access to water (river or sea) by the public and establish movement linkages between activities and tourism nodes

Within the regional tourism context through the implementation of the VLPP and West Coast Tourism Strategy and the natural assets which VL has, the area will increasingly become a destination, a place where one stays for longer periods due to enjoyment of the area, and visits again.

To enhance VL as a destination, the following should be added:

- Industrial tourism should be promoted by integrating the saltpans into the tourism economy. The southern bank of the Berg River is already taking on this role informally.
- Enhance mixed land use as tourism activities take place mainly in spaces destined for more than one purpose. Such spaces often have mixed land use zonings.

 Enhance conservation of the BRE which is part of the West Coast Biosphere Reserve and a regional climate change corridor.

# 6.1.2 Provide for zoned land to change the economic status of Velddrif

#### Proposal 6.1d

#### 6.1.2.1 Provide Industrial land

 The norms for zoned land in developed economies i.e. the space per economically active (EA) persons required, was calculated from various sources and provides the directive for the extent of appropriately zoned developable land that is required.

Zoned Land	l /per EA person	Residential	Commercial	Industrial
Square meter	ers (single residential)	200m²	14m²	70m²
Ratio: 20 economy)6	) (norm tertiary	14	1	5
Square m developmen	eters (mixed use ts)	56m²	14m²	42m²
Ratio: 8 (nor	m tertiary economy)7	4	1	3
Remarks	25 dwelling units/ ha,	Erf size 400m <sup>2</sup>	or less, 50% co	verage

<sup>&</sup>lt;sup>6</sup> Ratio: 20 Single res: 2.3x Commercial & Industrial

<sup>&</sup>lt;sup>7</sup> Ratio: 8 Mixed use 1x (50:50) commercial & industrial

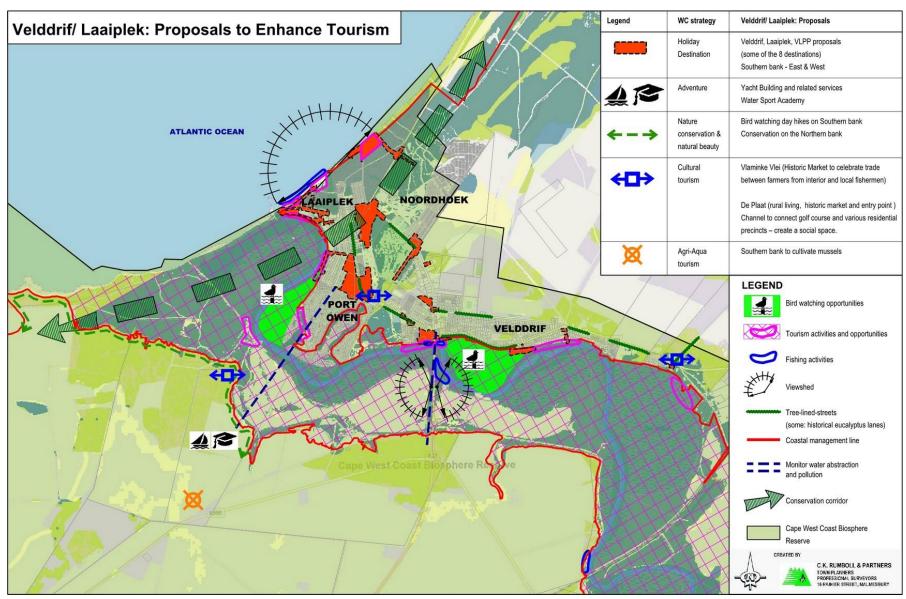


Figure 23: Proposals to enhance tourism

• Compared to the norms for zoned land in developed economies it is evident that VL's zoned land and land earmarked to be zoned do not add up to a developed economy. In order to grow the economy of VL, opportunities in the secondary and tertiary sector have to be created. Calculations confirm the need for ±85ha industrial land as per norm for single residential developments. Supplementary industrial and commercial land is also required when the norms for mixed use developments are applied. As the extent of the industrial land required is vast, the development thereof could change the character of VL. Hence the types of industrial uses should consider the natural environment and be implemented with the necessary caution as VL is a sensitive environment - as is the Bay of Saldanha. The table below provides examples of uses that are practised or potentially could be practised (underlined):

Use	Primary	Secondary	Tertiary	
Agriculture	Aquaculture.	Bokkoms	Aqua & Agri tourism	
	<u>Kelp</u>		Education & Awareness	
	<u>cultivation</u>		(Conservation)	
Industrial	Salt mining	Boat building	Industrial tourism (salt	
		Boat repairs	pans & bird watching)	
		Processing fish		
Commercial	Agri	Water transport	Restaurants	
	processing	(leisure)	Education (Water Sports	
		Water transport	<u>Academy)</u>	
		(commercial &	Accommodation, non-	
		industrial)	permanent, short term	

- Alternatively, such industrial land can primarily be provided within the IDZ, while less industrial land is required in VL. . The IDZ is a locational development zone/ agglomeration economy with the settlements around it being part of a key functional grouping of towns playing various supporting roles in the IDZ. Hence, VL has to capitalize on infrastructure development in anticipation of the IDZ, including the main transport routes serving as connectors.
- Cumulative additional industrial land demand for the IDZ in the Saldanha
  Bay Municipal area was calculated as 182.56 hectares most likely by
  2024 (Next SDF 5 year cycle) followed by 572.10ha as the IDZ's
  catalysing effect settles in. The number of jobs that the operation of
  industries will create at a point of maturity is 3 895 and 7 723 jobs
  respectively. It is estimated that 2 597 and 7 723 households (10 320
  households in total) will absorb these jobs. (Saldanha Development
  Zone, Pre-feasibility Analysis, 2009)

According to the envisaged development and spatial planning for the IDZ the towns of Vredenburg and Saldanha must become integrated and the link between Saldanha and Vredenburg must be continuous to unlock the economic development potential of these main towns. The largely vacant and underutilised land between Saldanha and Vredenburg has well developed road and rail infrastructure (pre-

requisites for industrial development). Moreover, the land is well-located relative to the sea and holds the potential for rail transportation of goods. While the location of specific industries will be determined by market forces, it is important that higher impact industrial activities be located further away from residential areas. Given the Saldanha Bay peninsula's environmental sensitivity, the planned industrial uses are separated by large corridors of vegetation that are critically endangered.

• The impact of industrial activities planned, the spatial form (pockets of industrial uses) within the IDZ as well as the road infrastructure makes St Helena and VL convenient residential precincts for the IDZ. Both St Helena and VL are ± 20km from the IDZ and are equally well connected to the IDZ. Vredenburg, Saldanha and Langebaan are less than 10km from the IDZ and connect in an even stronger sense to the IDZ. It is anticipated that the commuter population will increase in VL and St Helena (with a consequent growth in population numbers) and will result in an increased uptake rate of serviced residential erven and need for such erven.

#### 6.1.2.2 Provide Residential Land

#### Residential land within VL

Considering the population growth rate (5.6%) resulting in an estimated
 8 414 to 8 974 households by 2027/28 (currently 5 153 to 5 496), it

appears Velddrif has sufficient residential land till 2027/28 for the 3 733 to 3 981 additional families. The number of opportunities available total 3 632 (1 532 vacant erven plus 120ha developable land equals to 2100 opportunities).

- As the envisaged residential opportunities will be absorbed by 2027/28
   (over the 10 years after 2017), which is during the next SDF 5 year cycle
   (5th generation IDP), these projections should form part of the 2017 2022 SDF given that the SDF is a medium term (5 year) and long term
   (20 year) framework.
- To provide for the need in residential land arising in 2027/28, there are two strategies i.e. to densify or to develop additional land. Densification will be considered before expansion.
- In 2012 the density in VL was 5.1du/ha. The provincial densification norm of 25du/ha was applied to the 120ha earmarked for residential development. The average density achieved 2027/28 is 18du/ha which is 7du/ha under the norm. Further densification to achieve the 25du/ha norm will accommodate 3 234 households.
- By 2031 half of these additional households would have absorbed the densification opportunities (See Densification Map below). By 2034 all of these opportunities will be absorbed.

 Bear in mind that people migrate to VL because of its <u>comparative</u> advantages. The migration rates are tabulated below:

% Town	No Relocation	Else- where in town	Another town in BM	A farm in BM	Elsewhere in South Africa	Another country
Dwarskersbos	64.0	14.0	4.0	0.0	16.0	2.0
VL	74.5	10.8	1.2	1.2	12.3	0.0
BM Mun Ave.	80.4	8.8	2.1	0.9	7.3	0.4

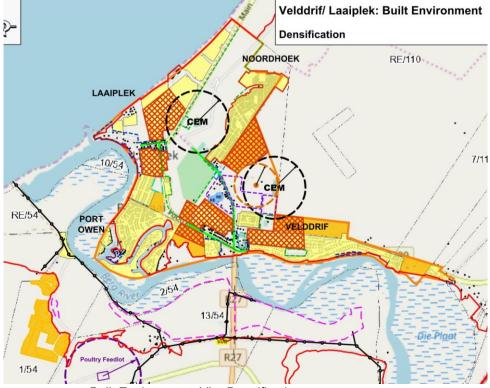


Figure 24: Built Environment, VL: Densification

#### Residential land for the Sub-region (IDZ)

- The industries in the IDZ will, at a point of maturity, create 3 895 and 7
   723 jobs respectively by 2024 and thereafter. It is estimated that 2 597 and 5 097 households (7 694 households in total) will absorb these jobs.
- The residential land required until 2031 by the number of families directly employed is 172.4ha (Erf size is less than 224m²).

Calculated accordingly to the residential ratio model, the residential land required until 2031 relates to 2 114ha or 52 850 opportunities (400m² size erven at 25u/ha). Should the mixed use ratio norm be applied 504ha residential land is required generating 50 400 opportunities (100m² per unit at 100du/ha). In the case of an IDZ it is most likely that the residential land required, given the intensity of the industries vesting in the zone and hence the lower coverage, can be halved to a total of 1 057ha.

It is assumed that households will settle firstly within the Saldanha Bay municipal area. By 2031 (and at a growth rate of 4.8%) the additional land will be taken up with 31ha of residential land oversupplied out of a total of 1 219.8ha (See Addendum C). The extent of the residential land up take (1 189.8ha) is close to the 1 057ha residential land that the IDZ development requires.

- These projections may imply that there will be, depending on the growth rate applied, between 40 000 to 70 000 additional families in 2031.
- Other opportunities which need to be considered as part of the housing provision stock are:

Description	Opportunities
By 2023/2024	
Densification opportunities:	4 500
Number of permanent dwelling units with densification	
options (17 5258 or 84% of population living in	
permanent structures of which 80% of households earn	
below R3 500 per annum)	
Opportunities equal 180ha land	
Opportunities: vacant serviced erven	10 726
Opportunities in St Helena alone: 5 652	
Opportunities equal 429ha residential land	
Total	15 226

 Adding the 15 226 opportunities, which include the vacant erven in Saldanha Bay, these opportunities may be absorbed by 2035. Thus 20 years from now, all opportunities will be taken up in Saldanha Bay.

<sup>8</sup>84.4% permanent dwelling

- 109 027 people as per 2016 community survey; 25 959 households (21 909 = 84.4%)
- 11 1971 people as per 2016/17 census survey adjust to 2016 community survey); 26 659 households (22 500 = 84.4%)
- 151 564 people as per 2016/17 census survey; 36 086 households (30 457 = 84.4%)

In 20 years' time the need for additional residential stock will have to be supplied by

- Greenfields developments (expansions) should the 6% growth rate be applied and
- Rejuvenation and densification.

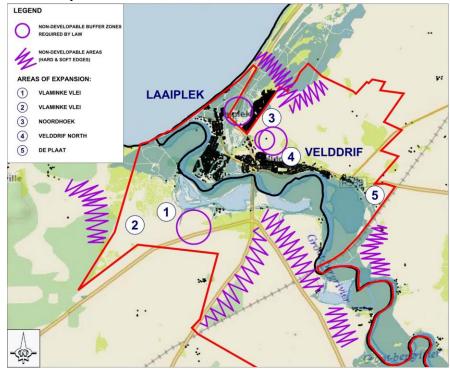


Figure 25: Likely development options

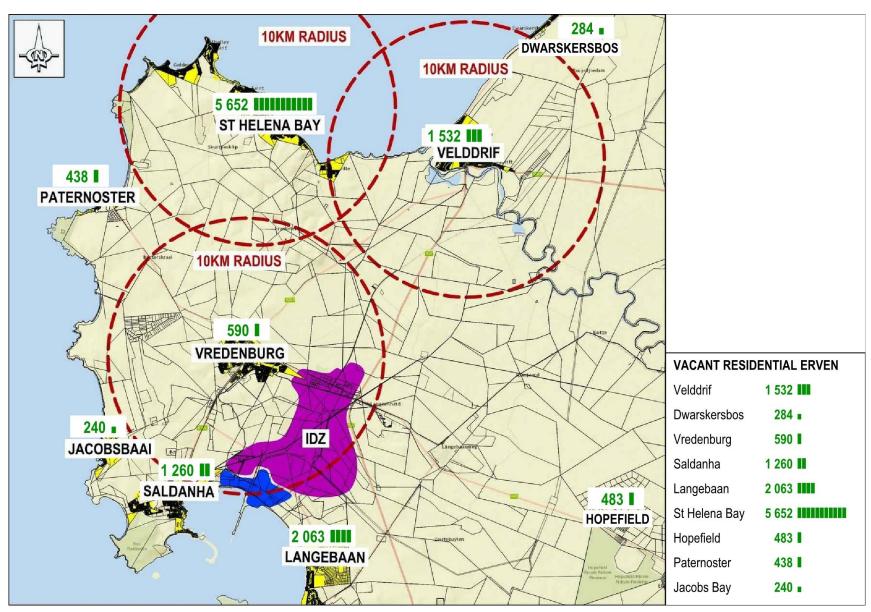


Figure 26: Vacant Residential Erven in the Vredenburg Saldanha Major Regional Growth Centre

#### 6.1.2.3 Provide Commercial Land

Higher order economies, i.e. tertiary economies, represent a high intensity of integration of land uses. As the optimal land use mix has residential space equal to commercial and industrial space, residential space evolves at the same rate, or close to, the commercial and industrial uses. Of note is the need for residential space, in this case, it is driven by commercial land uses and not the reverse (i.e. the residential space demands commercial uses).

There are several options that cater for the associated commercial opportunities:

- within existing development
- Change land use to accommodate e.g. tourism related services within an existing residential area
- Rezone to commercial only (rejuvenation)
- Change land use to mixed use (e.g. VLPP proposals).
- Expand existing commercial nodes
- <u>Greenfields development</u> (land earmarked for mixed uses at northern entrance, some land north east, the southern bank and at eastern entrance).

Commercially zoned land is a prerequisite to exploit Velddrif's advantage of its proximity to the IDZ and increase the role it plays in support of and the

benefits it gains because of the IDZ. Market potential is influenced not only by consumer income and expenditure, but also by the characteristics of the area under consideration. Demand for residential and commercial uses are influenced by specific locational requirements (Saldanha Pre-feasibility Analysis, 2009) that VL can fulfil as it is:

- influenced by the spatial form anticipated for the IDZ e.g. pockets of industrial land separated with corridors of natural veld
- part of the Saldanha-Northern Cape Development Corridor
- part of a functional area
- part of a functional key grouping of towns
- has locational directives (destinations) within VL
- guided by historic directives locally and sub regionally

As the development focus within VL shifts to commercial and industrial, large isolated residential developments will be absorbed or redeveloped. The development space will become increasingly shared, multi-purposed and compact.

#### 6.2 VL as a connector and a place to reside

The table below contains proposals to build VL as a connector and a place to reside.

6.2	Exploit accessibility and proximity and thus capitalise on being part of the Bay of Saldanha, a major regional growth node					
	Proposals: To capitalize and provide the area as a connecte	or				
6.2.a	Provide affordable commuter transport to access employment opportunities within the Bay of Saldanha.  - Bergrivier IDP 2017 - 2022 includes tuk-tuks for public transport.  - Development contributions to include a public transport levy.  - Institute a toll-fee system for trucks.					
6.2.b	Capitalize on the spatial proposals where development Cluster & related to the IDZ should happen (sphere of influence) Capitalize					
	Enhance VL into a place to reside while working in the Bay of Saldanha	Capitalize Connect				
6.2.c	<ul> <li>Promote take up of vacant serviced erven.</li> <li>Consolidate economic development spatially. (Four precincts).</li> <li>Use locational directives to guide mixed land use in existing and proposed developments.</li> <li>Exploit the comparative advantage</li> <li>Address waiting list of 1 330 households</li> </ul>	Capitalize Consolidate				
	<ul> <li>Change competition to co-operation (vs. St Helena).</li> </ul>	Consolidate				

Proposals 6.2.b and 6.2.c will be elaborated upon.

# 6.2.1 Capitalize on the spatial proposals and sphere of influence of the IDZ

#### Proposal 6.2.b

With Industrial Zones, the dependency between the nucleus (IDZ) and the settlements dictates the spatial form of the major regional growth centre within the functional area. The major regional growth centre in the case of the Saldanha Bay IDZ is defined by an area being covered by a circle with a 25km radius with Vredenburg being the centre point.

This dependency can be expressed as the sphere of influence because of the spatial concentration of the industrial activities. It can be illustrated for example by the breaking point<sup>9</sup> or trade area boundary for towns within the major regional growth centre. The breaking point for VL is tabulated below:

	Velddrif	Vredenburg (Vrb)	Saldanha +(Vrb)	Piketberg
Population	15 126	50 875	Vrb +31 125	13 981
Distance (Km)	0	21	21	57
Breaking Point (Km)		8.4	6.3	29
Ratio		2.5	3.3	1.96

The table illustrates that it is likely that for every time inhabitants of VL conduct business in VL, they conduct business double the number of times in Piketberg and three times in Vredenburg and Vredenburg/ Saldanha.

 $<sup>^9\</sup>mathrm{The}$  breaking point or trade area boundary between two towns is determined by their commercial attraction and population size.

The sphere of influence of a nucleus or settlement changes as its commercial attraction or population changes.

The spatial form of the industrial zone, is determined by the type of industry clusters or agglomeration with its own sphere of influence as listed below:

- 1. Renewable Energy Production and Manufacturing Cluster
- 2. Dry Dock Oil and Gas Cluster
- 3. Maritime Ship Building and Repair Cluster
- 4. Steel Production and Manufacturing Cluster
- 5. Minerals Production and Manufacturing Cluster

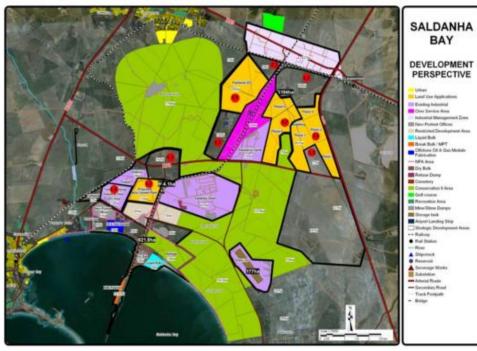


Figure 27: IDZ development proposal.

Residential use will be accommodated outside the IDZ but within the major regional growth centre. The nature of industrial zones implies an area where there is good economic growth. Hence densification, rejuvenation, strategic expansions or Greenfield developments are likely strategies for town development within the proximity of the IDZ e.g. beyond Vredenburg and Saldanha e.g. in Langebaan, the Bay of St Helena and Velddrif.

#### 6.2.2 Enhance VL as a place to reside

#### Proposal 6.2.c

To enhance VL as a place to reside, the strategies below have to be employed:

- Use existing residential options to promote alternative uses.
- Consolidate economic development
- Capitalize on locational directives
  - Exploit the comparative advantages (Velddrif & St Helena to cooperate instead of compete)
  - Address the waiting list for subsidized housing (1 330 households)

These strategies are discussed below:

#### 6.2.2.1 Use existing residential options to promote alternative uses

Promote the holiday houses built along Pelican Place and at Port Owen to:

- a) Have a dual function and serve as homes and holiday accommodation.
- b) Serve as permanent holiday (short term) accommodation, particularly the houses along the coast.
- c) Identify precincts or areas where such uses can be promoted by the BM.

#### 6.2.2.2 Consolidate economic development

The VLPP has three (3) Spatial Proposals, which should be implemented:

- Establish a connected system o destinations (8 nodes)
- Reinforce destinations through investment in public space and landscape
- Guide investment to respond appropriately to development

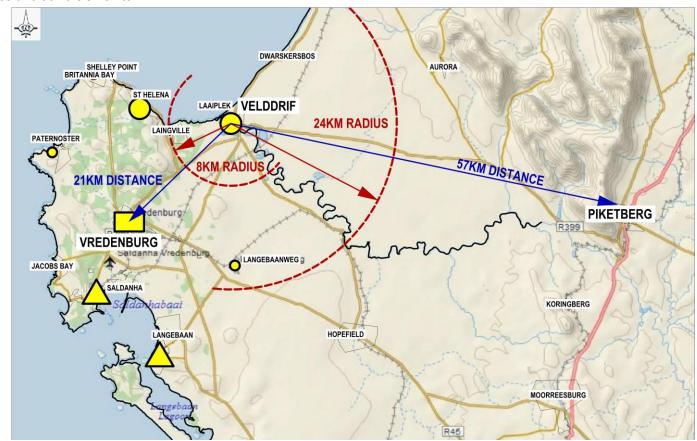


Figure 28: VL & Sphere of Influence

#### 6.2.2.3 Capitalize on Locational Directives

#### Waterfronts:

- The town is fortunate to have a waterfront and this asset can be leveraged for the good of all. It is ideal for mixed use developments allowing for residential development and increasing river access.
- VL has developed on the northern riverbank. The southern bank has not been formally developed and is not included in the urban edge of Velddrif. However, the Provincial Hot Spot Analysis (See Built Environment: Urban Settlement: Hierarchy and Role of Settlements) illustrates that several dwellings and nodes exist on the southern bank. Besides residential uses commercial and industrial uses such as saltpans, salt mines, desalination plants and intensive feedlot farming (poultry) occur.
- The Berg River meanders through Paarl and Wellington and passes on one side of Hermon and Velddrif. *Paarl and Wellington* developed *on both banks of the River*. Hermon and Velddrif developed on only one bank.
- The zones allocated to the Berg River estuary ecosystem, now registered as a Special Protected Area, direct land uses. West of the R27 crossing the Berg River are zones A to C. While zone A is

earmarked for conservation and zone B is for commercial use, zone C is earmarked for recreational purposes (Integrated Estuary Management Plan (IEMP 2010). The zones north of the R27 promote conservation. Zone C creates the ideal environment to enhance tourism development on the southern bank of the Berg River.

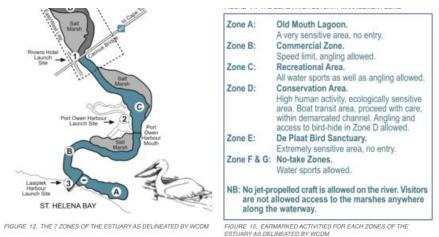


Figure 29: 7 Zones of Berg River Estuary

Residential development close to the river interface provides which in turn promotes tourism. In providing permanent housing and holiday accommodation, the development will be home to water sport enthusiasts and provide access to the waterfront and marine resources in accordance with the purpose for which zone C is earmarked.

 The river, estuary and coast is a resource and also supports land uses such as aqua culture and industry. Aqua culture should be promoted as part of the ocean economy and land reform.

Economies	Southern Bank of Berg River		
Primary	Agri-processing/ Aqua culture		
Secondary	Light Industrial activity e.g. yacht building; making fishing nets		
Tertiary	Tourism, commercial & recreation		
Residential	First time home owners & high income		

#### Part of a major regional growth centre:

Seeing that VL is included in a major regional growth centre a with its spheres of influence most pertinent in a southern and north eastern direction, the southern bank, west of the R27 entering Velddrif, is the first point of contact and should be included in the development footprint (urban edge) of VL.. Although expansion of the urban edge is not supported by development policies, this expansion can be motivated as follows:

- VL will serve as a residential precinct for the IDZ, as it did historically for its fishing industry. VL, and in particular the southern bank of the Berg River should provide housing for a wider geographical area i.e. the functional area because of its proximity to Saldanha Bay.
- There will be a demand for housing across the income scale. The southern bank lends itself to upmarket developments, catering for higher

and middle income groups as well as first time home owners working in the IDZ. This demand arises as opportunities within Port Owen, Dwarskersbos (Kersbosstrand) and Laaiplek (Atlantic Waves and Atlantic Sands) will be taken up in ten years' time.

 The taxes and levies paid by the higher and middle-income groupings on the southern bank would contribute to the provision of services for subsidized residential developments.

#### 6.2.2.4 Exploit VL's comparative advantage

The table below illustrates the difference in comparative advantage for VL and St. Helena.

Advantage	VL	S	St Helena	S
Accessibility	On route 3 Off route, but access		Off route, but accessible	2
Provincial, district and local road networks	On route (R27)	3 Off route, but accessible		2
International linkages	Removed but	2	Close	2
(port, airport, etc.),	within limits.		Own harbours	
	Own harbours			
Availability of suitable	Land available for	3	Land available for some	2
land for housing development	various topologies		topologies	
Well managed public	Within Velddrif:	3	At Vredenburg:	2
sector and strong	Municipal office &		Municipal office and	
institutional base	magistrates court		magistrates court	
Economic growth and	Low	1	Medium	2
employment				

opportunities				
Safe environment for	2 <sup>nd</sup> Quintile	2	5 <sup>th</sup> Quintile	1
retirees (High and				
middle-income				
migrants)				
Total Score (TS)		17		13

Another comparison is the different Growth Potential Indices which reflect that VL and St Helena have a medium composite growth score.

GPS	Human	Economic	Physical	Infrastructure	Institutional
rating	Capital				
Velddrif	High	Low	Medium	High	High
St Helena	Low	Medium	Medium	Very high	Medium

The comparison revealed that Velddrif has a stronger comparative advantage than St Helena while St Helena has approximately 4x more residential serviced erven than Velddrif. Both towns have the same status in the major regional growth centre classification (i.e. sub-regional towns) and the same composite growth score.

It is highly likely that Velddrif will expand over the next 15 years in tandem with St Helena's development (5 000 vacant serviced erven will be built up and the 79ha as proposed in the draft SDF will be developed by 2031) due to:

f) the main roads (R27 and R399) which connect Velddrif directly to the IDZ

g) the direct connections north- and southwards

Velddrif historically played the role of connector of the southern and northern parts of the region. The roads through Velddrif are indicative of where expansion and intensification should be considered:

- Route northwards via Dwarskersbos and Piketberg:
  - limited infill to connect Noordhoek and Velddrif North utilities and offsets to be taken into consideration
  - land west of R399 and south of Berg River
  - extend Velddrif East.

h) VL being part of the Saldanha-Northern Cape Development Corridor

Corridors/ zones and growth centres are created to generate sustainable economic growth and development in relatively underdeveloped areas, according to the inherent economic potential of the locality. Corridors are used to restructure regions into a more efficient and robust structure as it aids in the linkage and integration of facilities, nodes and precincts and enhances opportunities and maximises new development potential). Such areas need to be well connected and located along specific corridors demarcated for such purposes i.e. southern bank, route to Dwarskersbos and route to Piketberg

 Locational directives which enhance public access to the estuary and coastline.

St Helena's attraction is its calm sea. Velddrif's attraction is the estuary and coastline. Accessibility can be increased making use of both embankments.

 VL is currently classified as having low socio-economic needs and a medium growth potential, and is thus less likely to receive public sector investment. (Vredenburg is earmarked for such investment: High socio-economic need and very high growth potential.)

VL has outgrown Piketberg. VL's socio-economic classification has to be revised and it is most like that it will change to be similar to Piketberg which has a medium growth potential and socio-economic needs. However, VL will have access to higher order facilities within close proximity, as these facilities will be located in Vredenburg. Commuter transport should be provided to ensure accessibility.

The above directives should guide the delineation of VL's total credible and sustainable footprint. Sensitive and limited development to the north east, east and south should be considered.

#### 6.2.2.5 Provide subsidized housing (Pro-poor)

- There was, and continues to be, a backlog of 1 330 houses in VL since 2015/2016.
- Spatial provision was made for the provision of different housing within the SDF (2012 -2017).
- Densification and social integration should be a focus of the IDP.
   Hence areas for densification should be spatially earmarked and densification should be initiated.
- The social amenities and access to them such as schools, are located and proposed in close proximity to the subsidized precinct, Noordhoek. There are proposals in the VLPP to integrate the

- subsidized precinct with VL through the provision of a school site at the entrance of Port Owen.
- Proposed Greenfield development (i.e. the southern river bank)
   should use the social amenities provided within VL.

The following objectives and proposals enhance WCDSDF Goal 2 (Enhance infrastructure capacity in areas with the highest growth) to benefit it from being located next to Saldanha Bay and being part of the Saldanha-Northern Cape Development Corridor.

#### 6.3 Grow Velddrif as a leading administrative town

The table below contains proposals to build VL as a leading administrative town.

	Grow Velddrif as a leader town in terms of administration (BM)				
6.3.a	Foster Strategic LED Partnership (as per BM IDP) with Saldanha Bay Municipality and in particular the IDZ				
6.3.b	Change overview on BM's website to express being part of Saldanha Major Regional Growth Centre (& IDZ) and Saldanha-Northern Cape Development Corridor (www.bergmun.org.za).				
6.3.c	Request amendments to relevant documents and practices  o Expand the IDZ proposals and capitalize on opportunities for VL (WCDSDF & IDP) informed by VL being part of the functional area, major regional				

- growth centre and sphere of influence across municipal boundaries
- To deliberate economic and development matters in VL, convene joint meetings including both Wards 6 & 7 instead of convening separate ward meetings.
- Capitalize on the SDF and IDP revision and in particular the Ward 6 & 7 sections and highlight VL's sub-regional position within the major regional growth centre and being part of the Saldanha-Northern Cape Development Corridor. Develop a Ward SDF for VL.
- Saldanha IDZ would be the 4th IDZ along the South African coastline. The Saldanha IDZ will be uniquely positioned and differentiated from the other IDZ's along the coastline and within South Africa. However, political support, buy-in, funding, securing of land and partnerships will be key to the successful development of the Saldanha Bay IDZ. To benefit economically, the BM should become a significant partner through providing buy-in and political support.
- The provision of appropriately zoned land or land earmarked to be rezoned will enable BM to be prepared for and to attract secondary and tertiary sector investors (horizontal development).
- To provide appropriately zoned land, development plans such as the LED and IDP Plans have to expand their strategies to create an environment conducive to change the economy from developing to

developed. The Bergrivier IDP in particular has to expand its focus on National Infrastructure Projects such as the Saldanha-Northern Cape Development Corridor culminating in the IDZ. All these plans, including the SDF, should thereafter be aligned with the IDP.

#### 6.4 Provide municipal controlled services

The table below contains proposals to build VL as an administrative leading town.

	Provide sufficient services efficiently and effectively.					
6.4.a	Meet civil and electrical service shortfalls: e.g. Waste Water Treatment Works capacity, water storage capacity and bulk electricity.	Capitalize				
6.4.b	Provide commuter transportation Connect					
6.4.c	Redress historic developments whose private-ownership provided services that had collapsed and had to be taken over by the Municipality.  O Allow municipally controlled services only.	Consolidate				

According to a study conducted in 2016/2017 by BM, the following infrastructure upgrades are required:

Water sources: 2020 – 2025

- Water Treatment Works: 2020 – 2025

- Water storage: 2020 R8.4 million (13ML)

- Waste Water Treatment Works: 2020 R69 million (1.95ML)

Electricity: 2020 R5.1 million (bulk) & R1.75 (meters)

The Bergrivier Municipal Annual Report, 2016/2017 highlighted operational costs and provision therefor. Of note is the precarious situation where services that were installed by developers could not be maintained by them. The BM had to take over these services without funded mandates. Proposed developments should be carefully aligned with the long term budgets of the BM.

A comparison between privately and municipally operated services follows in the section below (Find detailed comparison in Addendum D). Given the tracts of undeveloped land, the Municipality has to decide whether it is going to take over and maintain the infrastructure as established by a developer and sell water and electricity to the inhabitants of the development. Two scenarios have been developed, of which the Municipality has to choose one.

Sc	enario 1:	Sc	enario 2:		
Mu	unicipality takes over full responsibility from the Developer, after the guarantee period.	Developer retains ownership & full responsibility for the development			
a)	The Developer establishes all infrastructure, inter alia water reticulation, electricity distribution, roads	, sev	verage handling and rubbish collection points.		
b)	The Developer funds the infrastructure upgrade for the supply of bulk water and bulk electricity.	a)	The Developer funds the infrastructure upgrade for the supply of bulk water and bulk electricity (VV).		
c)	The Developer pays a capital contribution to the Municipality, as determined by the relevant Acts.	b)	The Developer has to recover all capital cost (to supply the		
(d)	The Developer & Municipality negotiate deductions, from the contribution, e.g. bulk supply of water and electricity for neighbouring land uses (e.g. Cerebos) and a Sewerage Package Plant.  No deductions from the capital contribution for Vlaminke Vlei (VV), except the Sewerage Package Plant.		bulk infrastructure) of the development from the sale of the units (houses).		
e)	The Developer has to recover all other costs of the development from the sale of the units.				
f)	The Developer will be responsible for warranty, repairs and upgrades, in the case of underperformance of the infrastructure, for 2 years (if contracted as such).				
g)	The Municipality sells Water and Electricity to the development.				
h)	The Municipality takes over the infrastructure when the Developer's warranty expires.				
i)	The owners via the Body Corporate of VV, pay levies and taxes to the Municipality.	c)	The owners via the body corporate of VV, pay their levies to the Developer and taxes to the Municipality.		
j)	The Municipality now has to recover any further cost, of extensions to the bulk supply, the maintenance cost of all infrastructure and the delivery of services, from the levies and rates and taxes.	d)	The Body Corporate now has to recover all future costs, of extensions to the bulk supply, the maintenance cost of all infrastructure and the delivery of services, from the levies.		
k)	The Municipality now has the responsibility to provide the inhabitants of VV with the necessary services and support, which include water, electricity, rubbish removal, fire brigade services and sanitation.	e)	The Body Corporate now has the responsibility to provide the inhabitants of VV with the necessary services and support, which include water, electricity, rubbish removal, fire brigade services and sanitation.		
l)	The Municipality has the opportunity to use income from this development to cross subsidise lower income housing.	f)	The Developer pays no Capital Contribution.		

The data and values used in the calculations were based on a Greenfield development application i.e. VV. Where data was not available in the mentioned reports, government publications and guidelines for urban development were used. The values, thus, are only indicative, but are ball park figures, sufficiently adequate to support the arguments.

The figures are only for VV. In reality one should, presumably, also, simultaneously, provide figures for the development of Cerebos (all the developable land on the southern bank of the Berg River). The reservoir capacity of 1.5Ml is only for VV, while the pipeline is for both VV and Cerebos.

The best option, as shown, and assuming that the figures used are near enough to reality, is **Scenario 1**. The most important requirements and benefits are the following:

- a) The Municipality takes control of the development, which is within the municipal borders.
- b) The risk of having a development on its doorstep, which cannot supply its own demand, will not be a threat.
- c) Income, from the selling of Water and Electricity and the collection of levies, can be generated for the Municipality, which may be utilised for cross subsidising of lower income developments.

- d) The bulk supply infrastructure, for the supply of water and electricity, for the neighbouring land use or planned developments e.g. Cerebos development, can be put in place simultaneously.
- e) The Developer has to pay the full contribution, after the cost of the neighbouring development i.e. Cerebos' share of the bulk supply infrastructure and the Sewerage Package Plant, which will be put in place by the developer, has been subtracted.
- f) The rate of sales will dictate infrastructure development, which should be phased to limit exposure to the maintenance of unsold erven.
- g) The Sewerage Package Plant will enable the Municipality to provide the sewerage infrastructure for VV.
- h) The slow uptake of erven may put pressure on unrecovered maintenance costs, but this can be financed from the contribution.
- The cost of maintenance is estimated in the Cost of Maintenance table as per Addendum D.

#### 6.5 Conclusion

The expansion of VL, at the time when opportunities within VL's urban edge have been absorbed and developed, is based on the following reasons

#### <u>Capitalize on Locational Directives:</u>

Location on riverbank: Waterfronts can be leveraged for the good of all.

- Southern bank detected as a Provincial Hot Spot (presence of structures)
- Zone C earmarked for recreational purposes & tourism. River interface provides for holiday accommodation and water sport tourism - enhance public access.
- The river, estuary and coast support aqua culture and aqua industry.
   Location on main roads
- South western entry point and sense of place
- Use en route accessibility of corridor
- Main roads (R27 and R399) directly connects Velddrif to IDZ
   A direct road connection north and southwards

<u>Capitalize on VL's location within a major regional growth centre</u> as Vredenburg's and Piketberg's sphere of influence is nearly 3x and 2x respectively stronger than that of VL:

- Sub-regional town status within major regional growth centre enhance strong comparative advantages
- Medium composite growth score but has outgrown Piketberg's population
- Provide housing for a wider geographical area and income scale. Spatial provision made within SDF (2012 - 2017). Require urban and architectural design guidelines
- Formalize settlement node on southern bank (cross subsidize fully subsidized developments)
- Establish De Plaat rural living small holdings
- Southern bank development to use social amenities provided within VL
- Vest aqua culture at Vlaminke Vlei and formalise SPC conservation on southern bank
- Market St Helena Bay as world class yachting basin.
- Re-establish historic Market at Vlaminke Vlei.

Enhance VL as a place to reside for those working in the Bay of Saldanha and major regional growth centre:

- Promote existing residential options for alternative uses (Redevelopment)
- o Promote residential options as an alternative settlement option.

- Exploit the comparative advantages (Velddrif & St Helena cooperate)
- Provide fully subsidized housing for 1 330 households (backlog)
- Access higher order social facilities & amenities in Vredenburg (Medium socio-economic growth potential rating of VL)

Provide affordable commuter transport to access employment opportunities within the greater Saldanha (major regional growth centre).

- Use Tuk-Tuks (Bergrivier IDP 2017 2022) for public transport.
- Development contributions to include a public transport levy.
- Institute a toll-fee for trucks (& ring fence funds).

IDZ & Port are part of the Saldanha-Northern Cape Development Corridor, a localisation agglomeration: made up of precincts (clusters) separated by green corridors where higher impact industrial activities be located further away from residential areas and residential uses located outside the zone (Conglomeration of the 5 nodes)

The proposed expansion, together with a well-managed public sector and strong institutional base will enable VL to maximise its economic growth and employment opportunities.

By fostering a Strategic LED-IDZ Partnership with Saldanha Bay Municipality BM will consolidate its position as a significant partner to IDZ (as per BM IDP 2017 - 2022).

The time frames in which these expansions are proposed allow sufficient time to align BM's long-term budget with the proposals and to enable management mechanism not to deflect unnecessarily additional costs on the inhabitants.

Therefore it is recommended that the inclusion of a portion of Portion 1 of Farm Vlaminke Vlei No 54 as per Addendum K into the urban edge of VL is adopted. This amendment constitutes an addition to the 2012 – 2017 BSDF's 20 year planning horizon and the VLPP.

## 7. Implementation Plan:

Action Required	Result anticipated for VL:	IDP cycle			
Cluster & consolidate (Develop inwards)	Capitalize on being part of Saldanha-Northern Cape Development Corridor	2017 -2022	2022 -2027	2027 - 2032	2032-2037
Develop a Ward 6 (partially) & 7 SDF	Enlarge VL's tertiary and secondary sectors' investment and contribution to GDP; Create an enabling environment for investors considering setting up plant outside the IDZ; Enhance specific links to and establish related precincts outside IDZ i.e. yachting, tourism value chain & water sports academy		X 500		
Develop a zoning target and restructuring (integration and densification) implementation plan for VL	Provide for zoned land to change the economic status; Compile annual status report; Provide ±85ha industrial land: within VL (partially on southern bank) and/or within IDZ	X 750	X 50	X 50	X 50
Capitalize on the SDF and IDP revision and focus on Ward 7 & 6 (partially)	Diversify the economy of VL (tourism, conservation, redevelopment of large isolated residential developments.  Promote Industrial tourism (saltpans)	X 50			
Implement VLPP proposals & Revision of BMSDF2017 - 2022 Develop a business plan	Consolidate economic development: Cluster economic activities and Connect four urban precincts.  Build channel to connect golf course and integrate Noordhoek, VL  Establish School at Port Owen entrance (VLPP) - Integrate Noordhoek, VL.	X 500			
Capitalize & connect (Develop outwards)	Connecting (accessibility and proximity) development within VL to the IDZ given its spatial form and its sphere of influence (major regional growth centre)	2017 -2022	2022 -2027	2027 - 2032	2032-2037
Develop a major regional growth centre 20 year Development Framework and implementation plan (by West Coast District Municipality or ensure it becomes a focus area for 2017 – 2022 WCDSDF revision)	IDZ & Port are part of the Saldanha-Northern Cape Development Corridor, a localisation agglomeration: made up of precincts (clusters) separated by green corridors where higher impact industrial activities will be located further away from residential areas and residential uses located outside the zone (Conglomeration of the 5 nodes)	X 1500			
Develop a major regional economic growth centre transport plan and strategy (West Coast District Municipality).	Provide affordable commuter transport to access employment opportunities within the greater Saldanha area (major regional growth centre).  - Use Tuk-Tuks (Bergrivier IDP 2017 - 2022) for public transport.  - Development contributions to include a public transport levy.  - Institute a toll-fee for trucks (& ring fence funds).	X 800	Х		
Address Saldanha-Northern Cape Development Corridor and IDZ in BMSDF Provide all housing typologies and land required for expansion in the Human Settlement Plan which is currently under revision.	Enhance VL as a place to reside while working in the Bay of Saldanha  Promote existing residential options for alternative uses (Redevelopment)  Promote residential options as an alternative settlement option.  Exploit the comparative advantages (Velddrif & St Helena co-operate)  Provide fully subsidized housing for 1 330 households (backlog)  Access higher order social facilities & amenities in Vredenburg (Medium socioeconomic growth potential rating of VL)	X			

Expand the urban edge of VL.  Capitalize on the spatial proposals where development related to the IDZ should happen (sphere of influence)  Request amendments of relevant documents	300		X		
and practices: Capitalize on WCDSDF IDZ proposals and expand IDZ section when revising the WCDSDF.	<ul> <li>The river, estuary and coast support aqua culture and aqua industry.</li> <li>Location on main roads</li> <li>South western entry point and sense of place</li> <li>Use on route accessibility of corridor</li> <li>Main roads (R27 and R399) directly connects Velddrif to IDZ</li> <li>A direct road connection north and southwards</li> </ul>	<u>500</u>		X	
Expand IDZ section in BMIDP. Bergrivier IDP section/ focus on National Infrastructure Projects i.e. as Northern Cape Saldanha-Northern Cape Development Corridor culminates in the IDZ. All plans, including the SDF, should thereafter be aligned with the IDP.	Capitalize on VL's location within a major regional growth centre as Vredenburg's and Piketberg's sphere of influence is nearly 3x and slightly more than 2x respectively that of VL:  Sub-regional town status within major regional growth centre enhances strong comparative advantages  Medium composite growth score but have outgrown Piketberg's population Provide housing for a wider geographical area and income scale. Spatial provision made within SDF (2012 - 2017): urban and architectural design guidelines Formalize settlement node on southern bank (subsidize fully subsidized services) Establish De Plaat rural living small holdings Southern bank development to use social amenities provided within VL Vest aqua culture at Vlaminke Vlei and formalise SPC conservation on southern bank Market St Helena Bay as world class yachting basin. Re-establish historic Market at Vlaminke Vlei.		X 300		
Foster Strategic LED-IDZ Partnership with	Grow VL (BM) as a leader town administratively:  BM becomes a significant partner to IDZ (as per BM IDP 2017 - 2022).	Х	Х	X	X
Saldanha Bay Municipality Change overview on BM's website	Change evention on PM's website to everses being part of Caldarks Maior	10	10	10	10
	Change overview on BM's website to express being part of Saldanha Major Regional Growth Centre (& IDZ) and Saldanha-Northern Cape Development Corridor ( <a href="https://www.bergmun.org.za">www.bergmun.org.za</a> )	X 10			
Call for joint Ward 6 & 7 VL meetings: include Noordhoek	To deliberate economic and development matters in VL, convene joint meetings including Wards 6 & 7, instead of convening separate ward meetings.	Х	Х	Х	Х
Align proposed developments & BM long-term budgets	Provide and maintain sufficient services efficiently and effectively. Provide civil and electrical services shortfalls: i.e. Waste Water Treatment Works capacity, Water storage capacity and Bulk electricity. Redress collapsed services of historic developments. Allow municipal controlled services only	Х	Х	Х	Х

#### References

Bergrivier Municipality (2017): Fourth Generation Integrated Development Plan: 2017 – 2022

City Think Space (2014): Velddrif / Laaiplek Precinct Plan Final Report November 2014.

CK Rumboll & Partners (2013): Bergrivier Spatial Development Framework, 2012 – 2017

CNdV Africa (Pty) Ltd (2017): Saldanha Bay Municipality Spatial Development Framework – Draft Conceptual Framework Report.

Western Cape Government (2014): Provincial Spatial Development Framework – Draft for Comment, December 2013.

Western Cape Government (2012): One Cape 2040 (2012): The Western Cape agenda for joint action on economic development, Draft 4 (19 October 2012).

Western Cape Government (2011): WCPSDF Spatial Development Agenda, 2011

West Coast District Municipality (2017): West Coast District Municipality Integrated Development Plan 2017 – 2022.

West Coast District Municipality (2014): West Coast Spatial Development Framework, 2014

West Coast District Municipality (2018): West Coast Integrated Development Plan, 2017- 2022

ADDENDUM A: Comparison of provincial, district and local IDP and SDF goals and objectives

WCPSDF Spatial	PSDF, 2009 &	WCDSDF 2014	WCDIDP 2017 - 2022	BIDP 2017 - 2022 & BSDF	VL Precinct Plan Proposals/
Expression, 2014	Strategic Plan, 2011			2012 – 2017	Expression
Economic Access & Transition (WORKING CAPE): Livelihood prospects; employment opportunities & develop enterprises (& entrepreneurs)		Goal 1: Enhance infrastructure capacity in areas with highest economic growth potential, ensuring continued provision of sustainable basic services.	Focusing on Tourism (Tourism Strategy)  Regional Economic Development Strategy	Local Focus Increase economic opportunities (SDF) Create enabling environment to grow economy (IDP) Limited Sub-regional Focus	VLPP: Establish a connected system of destinations (8 nodes) Strategic urban development & improved movement - unlock local economic development options
Knowledge Transition (EDUCATING CAPE) Good education, and places of innovation & learning Cultural Transition	Conserve Sense of	Goal 2: Facilitate and create		Local Focus A sustainable and inclusive living environment (IDP) Limited Sub-regional Focus Local	Strategic urban development & improved movement (1 of 8 destinations include a school)  VLPP:
(CONNECTING CAPE) Communities are inclusive, integrated, connected (local & global)	place of important natural, cultural & productive landscapes, artefacts & buildings.	an enabling environment for employment, economic growth and tourism development, while promoting access to public amenities (education & health)		Protect and strengthen the natural and built environment (SDF) Limit Sub-regional focus	Reinforce destinations through investment in public space - Enhancing local sense of place & identity - Capitalise on existing character & activities to promote tourism & investment
Ecological Transition (GREEN CAPE) Access basic resources efficiently, services & safeguard ecosystems. (Sustainable, low-carbon resource use)	Protect Bio-diversity and agricultural land &  Proactive management of Climate change	Goal 3: Enhance and protect key bio-diversity and agricultural assets and minimise human footprint on nature, while also mitigating climate change.  And Goal 1	Regional Climate Change Framework & Strategy; Integrated Environmental Strategy & Programme; Integrated Coastal & Estuary Management Plan & Forum Bulk Infrastructure Master Plan	Local Protect and strengthen the natural and built environment (SDF) Sustainable service delivery (IDP) Limited Sub-regional focus	- Ensure environmental sustainability of region.
Settlement Transition (LIVING CAPE) Living and working environments are healthy, safe, enabling and accessible - Healthy, accessible, liveable, multi-opportunity	Minimize consumption of scarce resources: water, fuel and land (pristine & other rural land – non-renewable resource)	Goal 2: To create an enabling environment for employment, economic growth and tourism development]	Community Development: Restoring society's social fabric. Environmental Health Services Air Quality Management Plan	Local Provide and maintain an effective social environment (SDF) Promote a safe, healthy, educated and integrated community (IDP).Sub-	VLPP: a) Reinforce destinations through investment in public space and landscape - Creating a more sustainable,

communities		Disaster Management Plan	regional: only local required	viable and safe community;
LEADING CAPE Urban and rural areas are effectively managed. (Open, collaborative systems).	Promote Sustainable Development, prioritise development in highest growth potential areas and facilitate development along key corridors within the West Coast District.	choice through an open opportunity society through outstanding service delivery.	Local Strengthen financial sustainability and further enhance good governance (IDP) Limited sub-regional focus	VLPP: a) Guide investment to respond appropriately

## ADDENDUM B: Proposed Projects as per BM IDP, SDF and VLPP

Challenges identified and objectives generated were compared to projects proposed in the BM IDP, SDF and VLPP to consolidate the focus for the proposed amendment.

Ch	allenges & Objectives	Projects & Proposals: BM IDP, SDF & VLPP
1.	Capitalize on being part of Saldanha-N be a processor/ producer)	orthern Cape Development Corridor (to
a)	Enlarge tertiary and secondary sectors' contribution to GDP	UFN: Noordhoek job creation Premises & funding for informal traders UF: SMME database Commercial Node: Saldanha Bay IDZ;
b)	Diversify the economy of VL	Required
c)	Enhance specific economic value chain themes i.e. yachting and tourism value chain	
d)	Provide for zoned land to change the economic status of Velddrif  through expansion of SDF proposals  Bring about redevelopment of large isolated residential developments that have not been built.  Develop a zoning target and restructuring implementation plan for Velddrif	

2. Exploit accessibility and proximity and capitalise on the Bay of Saldanha as functional area and growth node				
a)	Provide affordable commuter transport to access employment opportunities within the Bay of Saldanha.	Truck stop UF: Tuk-Tuks (Transport System Dwarskersbos/ VL)		
b)	Capitalize on the spatial proposals where development related to the IDZ should happen as directed by its. sphere of influence			
c)	Change VL into a place to live while working in the Bay of Saldanha	<ul> <li>VL Precinct Plan:</li> <li>b) Establish a connected system of destinations (8 nodes)</li> <li>c) Reinforce destinations through investment in public space and landscape</li> <li>d) Guide investment to respond appropriately</li> </ul>		
e)	Promote existing residential options as an alternative i.e. require unbuilt developments within VL to be built up.			
f)	Consolidate economic development spatially within VL. (Four residential precincts each with their own commercial and industrial hub – historic form & function)			
a)	Use locational directives to guide mixed land use in existing and proposed developments.	<ul> <li>8 Destinations incl.: Central business node created (properties on both sides adjoin main activity streets i.e. Noordhoek Road;</li> <li>Laaiplek CBD/River mouth link</li> </ul>		

3. Provide sufficient services efficiently and e	effectively						
Provide civil and electrical services: Infrastructure i.e. Waste Water Treatment Works capacity, Water storage capacity and Bulk electricity are insufficient and need to be upgraded.							
Provide commuter transportation	See Objective 1, Proposal 1						
Redress historic developments whose private provided services collapsed and had to be taken over by the Municipality. (BUILT)	New SA police site north east of golf course Private Hospital (at old land fill site) Multipurpose centre (at school site next to SAP site) Three more crèches/nurseries & 3 more churches Roads resealed R7.6m Bulk electricity for housing R5.1m Replace conventional meters R1.75m Upgrade electricity network R350 000 New Reservoir 13ML R8.4m Upgrade WWTW (0.97ML per day to 1.95ML) R69m						
Consolidate: Allow municipal controlled services only.							
4. Exploit the comparative advantages for VL as follows":							
Provide for higher demand for housing, employment, infrastructure and services (due to positive growth trends)	Department of Education: - Noordhoek amalgamation of schools – 1 primary & 1 secondary - Xhosa primary school Department of Health:						

	- Extension of clinic  Department of Social Services  Retirement home				
Address waiting list need for 1 330 households (subsidized and GAP)	Housing: 107 units in Noordhoek & 34 units in Laaiplek R7.4m (Top Structures on 89 erven in Velddrif (2016/7 and 2017/18) & Servicing of 134 erven (Albatros Street) in Velddrif (2015/16)				
Claim benefits from policy to focus settlement development in existing urban areas with the highest growth potential benefits VL.	Animal clinic services rendered; Library programme & systems				
Mobilise accessibility and proximity  Develop suitable land for housing	UFN: Velddrif – ownership of Bokkomlaan UFN: Channel heavy traffic out of Voortrekker Road				
Change strong competition from St Helena to co-operation.	1				
5. Grow VL as a leader town.					
a) Ensure enabling spatial conditions to enhance economic development.					
b) Implement Strategic LED Partnership (as per BM IDP): with Saldanha Bay Municipality and in particular the IDZ	BM adopts a turn-around (local development with an economic focus) plan for Velddrif to improve a) growth potential indices Economic & Physical and b) socio-economic index elements Income & Education     BM IDP includes a focus on neighbouring municipalities, particularly Ward 7's neighbour				

c)	Change overview on BM's website to include BM being part of Major
	Regional Growth Centre and
	Saldanha Northern Cape Economic
	Corridor:
BM	(www.bergmun.org.za):
C:4.	ated north of Coldonka Day the

Situated north of Saldanha Bay, the Bergrivier region is particularly suited to agriculture. Livestock, fruit, vegetation and flowers are farmed in the area and there are opportunities in kelp farming and processing.

# Saldanha, hosting a National Infrastructure Priority project

- WCDM IDP 2018/2019 revision to include the role of the IDZ and the Northern Cape Saldanha Economic Corridor and how the district and local municipalities (Saldanha, Bergrivier and Swartland) relate to it.
- WCDM develops strategies for functional areas to benefit all municipalities within such an area (SDF revision)
- Change overview on BM's website to express being part of

The large cement factory and small salt reclamation works are indicators of business development opportunities related to mining.

Saldanha Major Regional Growth Centre (& IDZ) and Saldanha-Northern Cape Development Corridor (www.bergmun.org.za)

ADDENDUM C: Additional Land Required as per Saldanha Draft SDF, 2016

	Hh in 2031			Additional land required			Oversupply/ - Undersupply in Hectares			Additional land in 2031
	(4%)	(4.8%)	(6%)	(4%)	(4.8%)	(6%)	(4%)	(4.8%)	(6%)	Additional land over next 20 years
Vredenburg	15 283	19 504	27100	332.5	491.5	687	143.5	11.5	-211ha	None, exceeding 20 years
Saldanha	10 815	13 733	18 983	234.2	344.1	479.3	-18.2	-128.1	-263.3	Infill & densification
Langebaan	4 191	5 266	7 201	90.1	130.6	180.5	134.9	94.4	44.5	Infill & densification
Paternoster	770	953	1 284	16.3	23.2	31.7	76.7	69.8	61.3	None
St Helena	4 195	5 241	7 123	89.9	128.8	177.2	10.9	-49.8	-98.2	No additional land
Jacobs bay	159	297	321	9.5	17.8	19.3	9.5	17.8	19.3	Limited development
Hopefield	2 814	3 464	4 634	59.4	83.8	113.8	38.2	15.4	-14.4	No additional land
Total	38 227	48 458	66 646	831.9	1 219.8	1 688.8	252	31	-250,.8	

Growth scenarios: Status quo = (4%); IDZ only High Case = (4.8%); IDZ & Other High Case = (6%)

	2017	2011; more +	Status quo	IDZ only High	IDZ & Other High Case	Additional land	
	Proposals	and (less)		Case			
Vredenburg	476	+182	143.5ha (4%)	11.5 (4.8%)	211ha	None, exceeding 20 years	
Saldanha	216	(287)	18.2	128.1	263.3	Infill & densification	
Langebaan	225	(471.5)	134.9	94.4	44.5	Infill & densification	
St Helena	79	(395)	10.9	49.8	98.2	No additional land	
Jacobs bay	0	(80.4)	9.5	17.8	19.3	Limited development	
Hopefield	99.6	5	38.2	15.4	14.4	No additional land	

## ADDENDUM D: Comparison between private and municipal operated service

## Comparison between private operated services and municipal operated services

BM has to decide if it is going to take over and maintain the infrastructure of Vlaminke Vlei, as established by the Developer, maintain those facilities and sell water and electricity to the development.

This study endeavours to support BM in its decision.

Two Options, of which the Municipality has to choose one, have been developed:

## OPTION 1: The Municipality takes over full responsibility from the Developer, after the guarantee period.

- 1. The Developer establishes all infrastructure for water reticulation, electricity distribution, roads, sewerage handling and rubbish collection points.
- 2. The Developer funds the infrastructure upgrade for the supply of bulk water and bulk electricity.
- 3. The Developer pays over a capital contribution to the Municipality, as determined by the relevant Acts.
- 4. The Developer negotiates with the Municipality about deductions, from the contribution, inter alia with respect to the establishment of the bulk supply of water and electricity for Cerebos and the Sewerage Package Plant for Vlaminke Vlei. No deductions from the contribution for that part of the capital which is for Vlaminke Vlei, except for the Sewerage Package Plant.
- 5. The Developer has to recover all other cost of the development from the selling of the units.
- 6. The Developer will be responsible for warranty repairs and upgrades, in the case of underperformance of the infrastructure, for 2 years (if contracted as such).
- 7. The Municipality sells Water and Electricity to the development.
- 8. The Municipality takes over the infrastructure when the Developer's warranty expires.
- 9. The owners/body corporate of Vlaminke Vlei pay their taxes/levies to the Municipality.
- 10. The Municipality now has to recover any further cost, of extensions to the bulk supply, the maintenance cost of all infrastructure and the delivery of services, from the levies and rates and taxes.
- 11. The Municipality now has the responsibility to provide the inhabitants of Vlaminke Vlei with the necessary services and support, which include water, electricity, rubbish removal, fire brigade services and sanitation.
- 12. The Municipality has the opportunity to use income from this development to cross subsidise lower income housing.

## OPTION 2: Developer retains ownership and full responsibility for the development

- 1. The Developer establishes all infrastructure, inter alia for water reticulation, electricity distribution, roads, sewerage handling and rubbish collection points.
- 2. The Developer funds the infrastructure upgrade for the supply of bulk water and bulk electricity. Only that which is for Vlaminke Vlei.
- 3. The Developer has to recover all capital cost of the development from the selling of the units.
- 4. The owners/body corporate of Vlaminke Vlei pays their levies to the Developer and taxes to the Municipality.

- 5. The Body Corporate now has to recover all future cost, of extensions to the bulk supply, the maintenance cost of all infrastructure and the delivery of services, from the levies.
- 6. The Body Corporate now has the responsibility to provide the inhabitants of Vlaminke Vlei with the necessary services and support, which include water, electricity, rubbish removal, fire brigade services and sanitation.
- 7. The Developer pays no Capital Contribution.

**NOTE**: The values used in this comparison were those published in the reports already produced for this development and, where not available in mentioned reports, found in government publications/guidelines for urban development. The values, thus, are only indicative, but are ball park figures, adequate to support the arguments. The figures are only for Vlaminke Vlei and for the sake of the argument. In reality one should, presumably, also, simultaneously, provide for the Cerebos development. The reservoir capacity of 1.5Ml is only for Vlaminke Vlei, while the R9 651 000 \* 1.06^9 (inflation 2008 tot 2017) (R16 305 161), for the pipeline, is for both Vlaminke Vlei and Cerebos.

## TABLE OF COST ESTIMATES, USED IN CALCULATION OF THE SIZE OF A FUND REQUIRED TO MAINTAIN FOR 20 YEARS

(Any of the inputs may be changed and the model will respond accordingly)

## **COST ASSUMPTIONS**

ITEM	Size	Unit cost	Total cost	Maintenance/y ear factor	Maintenance Cost for Year 1 (P)	Present value of growing annual maintenance cost for 20 years
CAPITAL ITEMS						
Reservoir 1 (Vergeleë) Vlaminke Vlei and Cerebos	3 200 000	R 1.60	R 5 120 000.00	0.015	R 76 800.00	R 1 095 034.79
Reservoir 2 (balancing storage after meter) Only Vlaminke Vlei	1 500 000	R 1.60	R 2 400 000.00	0.015	R 36 000.00	R 513 297.56
Sewerage Package Plant for 620 houses	620	R 3 650.00	R 2 263 000.00	0.025	R 56 575.00	R 806 661.37
Water Reticulation for 620 houses	620	R 6 000.00	R 3 720 000.00	0.015	R 55 800.00	R 795 611.21
Additional feed pipe cost (R9651000*1.06^9-Reservoir)			R 16 305 161.43	0.015	R 244 577.42	R 3 487 249.80
Electrical Distribution for 620 houses	620	R 18 500.00	R 11 470 000.00	0.025	R 286 750.00	R 4 088 557.62
Roads between houses @ 44km	44	R 2 000 000.00	R 88 000 000.00	0.015	R 1 320 000.00	R 18 820 910.42
Open Spaces @ 40ha	40	R 11 800.00	R 472 000.00	0.015	R 7 080.00	R 100 948.52
		TOTALS	R 129 750 161.43		R 2 083 582.42	R 29 708 271.29

NOTE: Some of the above items will have to be replaced at certain intervals. This has not been provided for, but can easily be added to the Table.

Note on area calculation:			Possible income from water:			
1. Vlaminke Vlei Area @ ha		132.43		Price	Volume	Income
2. Open Spaces @ 30% (ha)	0.3	39.73				0
3. Residential @ 620 erven @ 532.26m2 each (ha)	532.26	33.00				
			Possible cost of Water:			
Note on Growing Annual Maintenance Cost				Unit cost	Volume	Cost
1. Annual cost of maintenance will increase with inflation@ 6%/a						0
2. Cost at which capital can be borrowed, i.e. cost of capital @9%/a						

3. Present value, of the total of 20 years' maintenance, is equal to the amount that the Municipality, for example, will have to invest @ 9%/year. The income would then cover the yearly maintenance for 20 years		Possible income from electricity:  Possible cost of Electricity:	Price	Volume	Income
Formula for the calculation of the Present Value of the growing (@6%) annual maintenance cost:			Unit cost	Volume	Cost
		Possible income:			0
$PV = (P/(r-g))(1-((1+g)/(1+r))^n)$		Possible cost:			0
PV = Present Value		Gross Profit			0
P = First payment					
r = rate per period (Cost of Capital)	0.09				
g = growth rate of yearly maintenance cost (inflation rate)	0.06				
n = number of periods (20 years)	20				

## **SCENARIO 1: PROS AND CONS**

Whereas the developer will:

- provide the Storage and the Balance reservoirs for both Vlaminke Vlei and Cerebos; and
- install a Package Sewerage Plant; and
- provide all Water and Electricity distribution networks in the development; and
- make a Capital Contribution to the Municipality; and

Whereas the Municipality will:

- subtract the portion of the cost pertaining to Cerebos from the contribution to be paid by the Developer; and
- take over all supply and maintenance of infrastructure pertaining to the supply of Electricity; and
- take over all supply and maintenance of infrastructure pertaining to the supply of Water; and
- take over the running and Maintenance of the Package Sewerage Plant; and
- take over the Maintenance of the open spaces and the roads; and
- collect all refuse at a central drop-off point to deliver to the rubbish dump; and
- collect all Rates and Taxes and Levies from the Owners/Body Corporate.

PROS	CONS
1. Receive full <b>contribution</b> of 620 x R34 401.58 = R21 328 979.60.	1. The fact that the Developer has to pay the contribution and for the full development, as well as his portion of the upgrade of the bulk supply infrastructure, <b>pipeline and 2 x reservoirs</b> , may put pressure on his investment, the unit cost/price and, as a result of <b>the higher unit prices</b> , <b>the tempo of the sales of units</b> .
2. The Municipality may negotiate with the Developer to provide for Cerebos in the upgrade of the <b>bulk water supply pipeline</b> . The cost of the full upgrade is estimated at R16.3m, of which about 47% is for Vlaminke Vlei and 53% for Cerebos. The Cerebos portion, R8.64m, may then be deducted from the contribution. The developer of Cerebos will then have to pay back its portion, but at least the capacity will be in place.	2. The <b>maintenance of the development</b> will be the responsibility of the Municipality. As estimated on the Cost of Maintenance Table, the maintenance will be about R2m per year. This cost must, inter alia, be recovered from the levies and taxes received from the Body Corporate. If the estimate is in the right ballpark, the maintenance part of the levy would be approximately R3 226/year per unit (R2m/620 = R3 226) for year 1. For example if the following uptake is estimated: Year 1 = 20% = 620 x 0.2 = 124. Year 2 = 20% = 124. Year 3 = 30% = 186. Year 4 = 30% = 186. This means that the Maintenance cost of R2m per year, growing at an inflation rate of 6%, will be spread as follows: Year 1: R2m/124 = R16 129/unit.  Year 2: (R2mx1.06)/ (124x2) = R2.12m/248 = R8 549/unit. Year 3: (R2mx1.06²)/ (124x2+186) = R2.247m/434 = R5 178/unit. Year 4: (R2mx1.06³)/620 = R3 842/unit. If we assume that the maintenance part of the levy/tax will be R3226/year, increasing at 6% per year, the following shortfalls will have to be addressed:
	Year 1: (124 x R16 129) - (124 x R3 226) = R1.6m Year 2: (248 x R8 549) - (248 x R3 420) = R1.27m Year 3: (434 x R5

178) - (434 x R3 625) = R0.674m Year 4: (620 x R3 842) - (620 x R3	842) = R0 See PROS 4 for remedy.
3. The Municipality may negotiate with the Developer to provide for Cerebos in the upgrade of the <b>bulk water supply Reservoirs at Vergeleë</b> . The cost of the full upgrade (3.2Ml) is estimated at 3 200 000 x R1.60 = R5.2m, of which about 47% is for Vlaminke Vlei and 53% for Cerebos. The Cerebos portion, R2.76m, may then be deducted from the contribution. The developer of Cerebos will then have to pay back its portion, but at least the capacity will be in place.	3. To cover the contribution also, the Developer will have to <b>increase the unit prices</b> , which may slow down the sales tempo.
4. The <b>tempo of the sales of the units</b> will have a direct effect on the income from the selling of water and electricity, as well as the income from levies and taxes. For example if the following uptake is estimated: Year 1 = 20% = 620 x 0.2 = 124. Year 2 = 20% = 124. Year 3 = 30% = 186. Year 4 = 30% = 186. <b>This means that the levy, taxes, water sales and electricity sales income will be similarly spread.</b> The fact that the Developer bears all the capital cost, actually <b>protects the Municipality</b> from any risks, except for the maintenance part, which may be addressed by the part of the contribution, which is not deducted, i.e. <b>R21.3-R8.64-R2.76 = R9.9m</b> and the water and electricity sales to the already sold units. As calculated in CONS 2, the <b>shortfall in Maintenance cover, over the first 3 years, may add up to R3.54m</b> . This amount can easily be covered by the interest earned on the R9.9m contribution left after deductions. This supports the fact that no further discounts can be given to the developer.	4. If selling is slow, the injection in the <b>economy of</b> the region may also take off slower.
5. The Municipality may negotiate with the Developer to provide for a <b>Package Sewerage Plant</b> at an estimated cost of R2.3m. This will save the Municipality the cost and trouble to extend its own sewerage plant. The cost of the Package Plant may then be deducted from the contribution. Another advantage of the Package Plant is that the partly purified water can be reused in gardens and for agriculture.	
6. Municipality can sell Electricity (2.5MVA)	
7. Municipality can sell Water (0.5Ml per day for Vlaminke Vlei only)	
3. Income, from the selling of Water and Electricity and the collection of levies, can be generated for the Municipality, which may also be utilised for cross <b>subsidising of the lower income developments</b> .	
7. The fact that the Municipality has taken responsibility, will give <b>peace of mind</b> to the owners of units.	
8. Peace of Mind may increase confidence, which may lead to quicker sales.	
9. Quicker sales will <b>boost the economy</b> faster.	

## **OPTION 2 PROS AND CONS**

Whereas the developer will:

- provide the Storage and the Balance reservoirs; and
- install a Package Sewerage Plant; and
- provide all Water and Electricity distribution networks in the development; and
- provide all supply and maintenance of infrastructure pertaining to the supply of Electricity; and
- provide all supply and maintenance of infrastructure pertaining to the supply of Water; and
- do the running and Maintenance of the Sewerage Plant; and

Whereas the Municipality will collect all refuse at a central drop-off point to deliver to the rubbish dump; and

Whereas the Developer will pay no Contribution.

PROS	CONS
1. Municipality will still <b>receive some taxes</b> from the owners/Body	
Corporate.	1. Levies will now go to Body Corporate.
2. Full Risk of the tempo of sales now on Developer.	2. No control over body Corporate.
3. Developer has to budget for Services and Maintenance.	3. No capital contribution from the Developer.
4. With <b>no Contribution to be paid</b> , the unit prices may go down, which may result in faster sales, which, in turn, may have a quicker positive effect on the economy of the region.	4. Body Corporate may run out of money to Maintain and/or supply Electricity and Water.
	5. Burden will then fall on Municipality, who will not have budgeted for it and may then also be out of pocket.
	6. May be difficult to collect taxes.
	7. No income from Water and Electricity sales.
	8. Cross subsidising of sub-economic housing, from levies and taxes, not possible.
	9. Buyers may not feel so confident with the developer as with the Municipality. This may lead to a slower take up of units, which may slow down the economic impact.
	10. Cerebos bulk supply, pipelines and reservoir, not put in place now.

## **ADDENDUM E: Needs and Desirability of Proposed Development**

## **Alternative 1: Proposed Development**

**Alternative 2: No Development** 

## **Need (Timing)**

Question 1: Is the land use (associated with the activity being applied for) considered within the time frame intended by the existing approved Spatial Development Framework (SDF) agreed to by the relevant environmental authority (i.e. is the proposed development in line with the projects and programmes identified as priorities within the credible IDP). See explanation below.

Explanation: Question 1 & 2 seeks to find clarity as to whether the proposed land use is catered for in the current planning framework of the credible SDF and is intended for at that specific point and time. In this context the term land use should not only be broadly defined as agriculture, residential or industrial use, etc. but where relevant, it must be further qualified, for example, stating specifically whether a housing development is for social or high income purposes, or whether the industrial use is for service development. Furthermore, if the proposed land use is to occur in the proximity of an urban area, clarity must also be provided regarding its location in relation to the urban area.

The land use proposed: Residential, high, medium and low density, first time home owners and for tourism purposes. Commercial and Light Industrial.

#### The land use is/is not:

- Is not agreed to by Department of Environmental Affairs and Development Planning (previously and first round of public participation)
- Is not included in the approved SDF (2012-2017)
- Is not part of the 5 year horizon
- But fits into the 20 year horizon
- Is not a project identified or prioritised within the Bergrivier Municipality (BM) SDF 2012 2017
- Is part of a major regional growth centre as per WCDSDF 2014 (Figure 9.3 p126)
- Is part of one of 18 National Strategic Infrastructure Projects, namely the Saldanha-Northern Cape Development Corridor.

The land use proposed:

If no development, the dominant land use:

- Remains agriculture
- With intermittent salt pans (mining)
- Potential to intensify consent uses (tourism related such as resorts or restaurants).
- A poultry feedlot has been established on the neighbouring farm, thus potential for intensified agricultural industry.

Question 2: Should development, or if applicable, expansion of the town/ area concerned in terms of this land use (associated with the activity being applied for) occur here at this point in time? See explanation below.

Specify the proposed land use as per zoning scheme should development be approved:

Land uses include:

- Residential:
  - -High Density/ Mixed use 1.36ha (60 opportunities @ 420m²/unit 24 units per ha);
  - -High Density: 12.10ha (251 opportunities @ 284m²/ unit 35 units per ha);

Specify the proposed land use as per zoning scheme should development be approved:

The current land use has no opportunities to provide for the identified backlog of fully subsidized houses in the IDP but does provide for GAP houses as some of the 251 high

- -Single Residential: 13.72ha (229 opportunities @ 608m²/unit 16 units per ha)
- -Single Residential: 6.85ha (25 opportunities @ 2188m²/ unit 5 units per ha)
- Mixed use/Commercial: .3.9ha
- Light industrial and Institutional: 4.85ha
- Infrastructure 5.75ha (1.44ha & 4.31ha)
- Aquaculture (6.04ha)
- Freshwater habitat (4.31ha)
- Agriculture: 31.58ha
- Conservation 35.26ha

## Compare the proposed land use with the priorities of the IDP:

According to the BM **IDP 2017 -2022** there is a backlog of 1 298 fully subsidized houses and 32 GAP houses within VL. A third (30.5% or 1 282) of households in VL qualify for GAP housing according to their average annual income. Slightly more than half (51.6% or 2 168) of households qualify for fully subsidized houses. The proposed development will provide 251 high density and 60 mixed use opportunities of which 11 opportunities will be in the GAP category and 40 opportunities will be first time home owners.

The aqua culture project is aligned with the IDP.

The proposed development should and could, through conditions of approval, contribute to commuter transport and to alleviate poverty:

transport and to anoviate poverty.				
IDP Strategic Objective	To improve transport systems and enhance mobility of poor isolated communities in partnership with sector departments	A commuter transport service to be provided as part of the conditions of approval. This will enable people to work within this precinct in decent jobs and it will enable them to get		
New Game Changers	Develop an Integrated Transport Plan	closer to the IDZ to access work and development opportunities. Such a service		
New Game Changers	Implement a programme to enhance local mobility through business development	could enhance transport services to the IDZ.		
Strategic To alleviate poverty Objective		Proposed aqua-culture project. Likely to be linked to operation Phakisa.		
New Game	Develop a programme for food			

density or 60 mixed use opportunities could serve as GAP and first time home owners housing.

Compare the proposed land use with the priorities of the IDP: The BM IDP 2017 - 20122 does not address horizontal links and connectivity with its neighbouring municipality, but it does include the need for economic development as a strategic goal:

goui.	
Strategic Goal	Facilitate an <b>enabling environment for</b>
	economic growth to alleviate poverty
Strategic	To improve the regulatory environment
Objective	for ease of doing business
New Game	Use procurement policy and procedures
Changers	to stimulate the domestic economic
	development, redistribute wealth and
	promote social justice
New Game	Link Economic and Social Development
Changers	to existing standing committees to
	mainstream and fast track projects
Strategic	To facilitate an environment for the
Objective	creation of jobs
New Game	Develop a programme for SMME
Changers	development with municipal
	opportunities such as clear public open
	spaces, manufacturing of pavers and
	hardening of pavements, EPWP
	programmes.
New Game	Develop an investment programme to
Changers	fast track new business development

The proximity of the development in relation to the urban area should be stated.

The current land use does not contribute to any of the goals

Changers	security in conjunction with sector departments and investors.	
Strategic	To improve the regulatory	Proposed development provides, as part of
Objective	environment for ease of doing	the conditions approval housing opportunities
•	business	for first time home owners and GAP housing.
New Game	Use procurement policy and	The proposed development will accommodate
Changers	procedures to stimulate the domestic	some of the housing that needs to be provided
	economic development, redistribute	on account of the housing backlog i.e. 11 GAP
	wealth and promote social justice	and 30 first time home owners opportunities

The proximity of the development in relation to the urban area should be stated.

The proposed development on the southern bank of the Berg River is not within a convenient and appropriate walking distance from the centre of Velddrif as it is within a  $\pm 3$ km radius and  $\pm 10$ km by road.

Bear in mind that VL extends 6.2km from East to West and 4.3km from North to South, which means that most services are not within walking distance for residents, thus encouraging vehicular traffic. Transport to be provided i.t.o. development will be equally useful for the existing commute beyond the appropriate walking distance of 1km (20 minutes).

## Should the development occur here at this point in time?

Yes -

- Developing the site now will create economic opportunities for a range of income groups and prepare VL to maximize the opportunity of being part of the Saldanha-Northern Cape Development Corridor and becoming a major regional growth centre.
- The proposed development will accommodate some of the housing that needs to be provided on account
  of the housing backlog i.e. 11 GAP and 30 first time home owners opportunities.
- Developing the site now will enable Bergrivier Municipality (BM) to gain financially and to better ensure
  efficient provision and maintenance of services. Developing the property now may enable BM to upgrade
  bulk services for example the water treatment works, through the capital contributions to be paid.
- Providing commuter transport between Vlaminke Vlei (VV) and VL has to be addressed and has to be a
  condition of approval. There is a similar lack of commuter transport within VL. Inhabitants access work
  opportunities on foot. Providing such a service, will enable people to work within this precinct in decent
  jobs and it will enable them to get closer to the IDZ to access work and development opportunities. Such

or objectives and should it have been actively farmed, its contribution would have been most likely less than the proposed development (harsh agricultural conditions caused the number of commercial farms to decrease: In 1980 there had been 128 000 commercial farmers, which had dropped to 58 000 in 1997 and to just under 40 000 in 2011. It is estimated that there is most likely 28 000 commercial farmers left in 2018).

Should the development occur here at this point in time?

No -

- Vacant land is available between Noordhoek, Laaiplek and Velddrif
- Vacant land can be used to accommodate the housing backlog.
- Focussing on the vacant land will result in better urban form and higher densities.
- Higher densities will lead to improved utilization of services.

a service could enhance transport services to the IDZ.

• Developing the site now will provide residential alternatives on the free market and accordingly enhance VL's opportunity to serve as a residential alternative for the IDZ.

Question 3: Does the community/area need the activity and the associated land use concerned (is it a societal priority)? This refers to the strategic as well as local level (e.g. development is a national priority, but within a specific local context it could be inappropriate)

Explanation: Question 3 relates to the type of development and land use and not just its associated benefits or costs (i.e. the specific needs of the community at that specific time, e.g. small business rather than shopping centre, low-cost housing rather than luxury housing etc. must be considered)

Is the activity associated with the proposed land use a priority now (within 5 years)

- Nationally yes: VL as a sub-regional settlement has the potential to become a major regional growth centre which will offer residential opportunities to those working and doing business in the IDZ, which is a strategic infrastructure project. Proposed aquaculture could be part of operation Phakisa to transform the ocean economy.
- provincially yes, it addresses the need for GAP housing partially
- provincially yes partially: aquaculture opportunities will provide work and conservation offset
- locally no: Several alternative residential options exist within VL
- Locally yes partially: it provides for light industrial and prepares VL to secure opportunities that will otherwise be located elsewhere.

Is the activity associated with the land use a longer term need (within 20 years)

- nationally yes: see above i.e. VL as residential alternative and advancing ocean economic reform aquaculture
- provincially yes partially: growing the economy
- Locally both yes and no. Yes: the need for jobs (IDZ job opportunities and economic links vs
  those who wish VL to remain a "quiet" town for retirees and weekend / holiday getaways) is a high
  priority and No due to people not want the proposed development not to be "in my back yard"
  (NIMBY)

## Is the activity associated with the land use appropriate

- nationally yes: as SIP benefits will be enhanced (economic development and job creation)
- provincially yes partially: conservation will be formalized and VL, as sub-regional node, will benefit as the economy grows
- Locally yes: some locals prefer implementation of VLPP only, others view the development as an opportunity to generate long term employment.

Is the activity associated with the current land use (extensive agriculture) a priority now (within 5 years)

- nationally yes: although extensive agriculture vs SIP
- provincially yes partially: unofficial conservation
- locally yes partially: no development on southern bank favoured by Ward 7, development favoured by Ward 6

Is the activity associated with the current land use (extensive agriculture) a longer term need (within 20 years)

- Same as above

Is the activity associated with the current land use i.e. extensive agriculture appropriate

- nationally yes: contributes marginally to food security
- Provincially yes: can contribute to agricultural landscape and conservation.
- provincially yes: A backdrop for tourism
- Locally
   – both yes & no: some locals prefer implementation of VLPP only (No), others view the development as an opportunity to generate long term employment (Yes).
- To be noted: Most likely that the resort with its less formal permanent structures will expand and particularly so as the IDZ's implementation progresses, without due consideration of natural environment.

Question 4: Are the necessary services with adequate capacity currently available (at the time of application), or must additional capacity be created to cater for the development?

Explanation of Question 4 & 5: According to the NEMA EIA Regulations an EIA must contain a description and assessment of the significance of any environmental impacts, including cumulative result of any construction, erection or decommissioning associated with the undertaking of the activity. An associated activity/ component essential for the undertaking of a proposed development (i.e. any associated component of the development which cannot be separated from the development itself; e.g. residential development that cannot exist without the essential municipal infrastructure to serve it in terms of water and electricity provision, waste removal, treatment of sewage and management of storm-water) must be considered together with the proposed development before the environmental authority decides on the development application. The environmental authority must (be able to) apply its mind to all the impacts (of the development and all its associated activities/ components) prior to decision-making. Deferring decision-making on associated components to a future date constitutes conditional and piecemeal (incremental) decision-making, which result in the environmental authority not applying its mind to all the impacts and the pre-empting of decisions on the associated components – resulting in unsustainable development and legally impermissible administrative action

## At the time of the application:

- Are necessary services with adequate capacity currently available (at the time of application)?
  - Electricity
  - Water
  - Sewerage
  - Storm Water Management
  - Roads/ Routes

- Must additional capacity be created to cater for the development?
  - Electricity provision & reticulation
  - Water provision, storage & reticulation
  - Sewerage treatment
  - Storm Water management
  - Waste removal & management
  - Roads/ Routes
- Currently there is not sufficient capacity. Additions to bulk services are phased in to provide sufficient capacity to accommodate existing development. Bulk services capacity planned for as per 2017 2022 IDP and included in the IDP budget:
- Water sources: 2020 2025
- Water Treatment Works: 2020 2025
- Water Storage: 2020; R8.4 million (13ML)
- Waste Water Treatment Works: 2020; R69 million (1.95ML)
- Electricity: 2020; R5.1 million (bulk) & R1.75 (meters)

No additional services required should it stay agriculture;

Velddrif will be the recipient of people looking for work in the IDZ. Ultimately the resort with its less formal permanent structures is going to grow (within 15 years from now or 2 cycles since completion of the current cycle) without civil services. Whereas private public partnership can benefit the resort, it may become a state funded initiative only. Should no development take place the cumulative impact of poverty and unemployment should be seriously considered together

• Bear in mind that the provision of/contribution to bulk infrastructure is a condition of development approval, then proposed developments are provided for at the application stage.

According to the NEMA EIA Regulations an EIA must contain

A description and assessment of the significance of any environmental impacts, including cumulative result of any construction, erection or decommissioning associated with the undertaking of the activity.

An associated activity/ component essential for the undertaking of a proposed development (i.e. any associated component of the development which cannot be separated from the development itself; e.g. residential development that cannot exist without the essential municipal infrastructure to serve it in terms of water and electricity provision, waste removal, treatment of sewage and management of stormwater) must be considered together with the proposed development before the environmental authority decides on the development application.

The proposed development of such infrastructure will happen above the CML and resultant impacts can be mitigated.

Services, potable water and electricity, is transported across the river.

The maintenance of these services can be managed if the capital contribution should include the maintenance calculated for the first 20 years. The contribution should be invested and governed to provide for effective and efficient service delivery and maintenance. An alternative approach to fund any shortfall between the capital contribution and the maintenance cost will be to cover maintenance from levies. The intention is not to place the burden on VL inhabitants or taxpayers. The development will contribute to address the following IDP needs:

- a) Create work
- b) Create additional bulk capacity
- c) Cross subsidize fully subsidized housing (1 298 fully subsidized backlog) and
- d) Generate municipal income by selling electricity (if not going alternative)

State all the impacts (of the development and all its associated activities/ components).

Deferring decision-making on associated components to a future date constitutes conditional and piecemeal (incremental) decision-making (mind not applied to all the impacts and decisions on the associated components pre-empted – unsustainable development and legally impermissible administrative action:

- Listed activities in terms of the National Environmental Management Act, 1998 (Actno.107of1998) (NEMA), Environmental Impact Assessment (EIA) Regulations, 2014 as defined in Government Notice ("GN") No. R. 983, R. 984 and R.985 of 4 December 2014 (as amended) that may be triggered:
- Item 54 of ListingNotice1ofGN No.R983 of 2014 (as amended): The expansion of facilities (jetties, stabilizing structures, port infrastructure) take place 100m inland of the high-water mark

with the damage that can be caused over the next 15 years given the environmental sensitivity of the southern bank.

Continuous agricultural practices do not trigger environmental impact studies.

- Item 19A of Listing Notice 1 of GN No.R983of2014 (as amended): Infilling or depositing of any material of more than 5 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 5 cubic metres from 100m inland of the high water mark of the sea,
- Item 28 of Listing Notice 1 of GN No. R983 of 2014 (as amended): commercial and/or industrial development take place where such land was used for agriculture, game farming, equestrian purposes or afforestation
- Item 5 of Listing Notice 3 of GN No. R.985 of 2014 (as amended): tourism facilities be developed that sleep less than 15 people
- Item 12 of Listing Notice 1 of GN No.R.983of2014(as amended): development which exceeds 100 square metres take place within 32 metres of a watercourse
- Item 7 of Listing Notice 1 of GN No. R. 983 of 2014 (as amended): "the development and related operation of facilities, infrastructure or structures or aquaculture .... where the facility, infrastructure or structures will have a production output exceeding 50 000 kg per annum (wet weight)".
- Item 13 of Listing Notice 3 of GN No. R. 985 of 2014 (as amended): "the development and related operation of facilities of any size for any form of aquaculture.

Question 5: Is the development provided for in the infrastructure planning of the municipality, and if not what will the implication be on the infrastructure planning of the municipality? (priority and placement of services and opportunity costs)

Is the development provided for in the infrastructure planning of the municipality, and if not what will the implication be on the infrastructure planning of the municipality (priority and placement of services and opportunity costs)

At this point in time no provision has been made for the proposed development (It is not reflected in the infrastructure planning of the municipality).

Additions to bulk services are phased in to provide sufficient capacity to accommodate existing development. As the proposed development is not taking place at this point and time and as bulk services are planned over 5 to 20 year horizons, the services needed, can be planned for. BM can only plan for services of proposed developments should such developments be provided for in the SDF as part of the 20 year horizon. The proposed VV development is an example of a development that require long range planning and the required civil and electrical services can only be planned for once the proposed development is spatially included in the SDF as part of its 20 year horizon. Resultantly BM can plan to be prepared for the development within the next 15 years and over the next two IDP cycles.

No services are required.

Question 6: Is this project part of a national programme to address an issue of national concern or importance?

Explanation: Question 6: While the legislative frameworks require that national, provincial and municipal plans should be aligned, it is acknowledged that there might be certain strategically important developments (e.g. the construction of a nuclear power station) that are part of strategic programmes that are not always catered for in current planning frameworks of the SDFs. In these instances the strategic need and desirability considerations must be measured against the need and desires of the area in question when determining the need and desirability of the development under consideration.

## Is this project part of a national programme to address an issue of national concern or importance?

Yes: Velddrif serves as one of the sub-regional nodes for one of 18 SIPs. Velddrif and St. Helena will provide alternative residential options to Vredenburg, Saldanha and Langebaan which serve as the primary residential precincts for the IDZ.

No: Although food security is a national priority, the subject agricultural land's contribution to food security is marginal.

Are there certain strategically important developments (e.g. the construction of a nuclear power station) that are part of strategic programmes that are not provided for in current planning frameworks of the SDF's.

The strategic need and desirability considerations must be measured against the need and desires of the area in question.

Yes: the Saldanha-Northern Cape Development Corridor and IDZ are important strategically and constitute one of the 18 SIPs.

The community views are divided and they viewed the first proposal as follows:

There IS NO NEED for the development as:

- Ward 7 prefers to leave the Southern bank of the Berg River undeveloped
- Sufficient provision of serviced, undeveloped erven is available
- Without ongoing infilling, current developments can fail. Considered infill before expansion or greenfield developments
- Pressing needs. Does not address the provision of fully subsidized houses (propoor).
- Existing industrial area continues to be under-utilized, no additional industrial development is needed.
- No guaranteed significant job creation, the most important priority for inhabitants

There IS A NEED for the proposed development:

- Ward 6 prefers the Southern bank to be developed
- Development will create nearly and equal number of temporary and permanent jobs. It is estimated that ±1000 jobs can be created temporary during the construction phase whilst a similar number of permanent jobs could be generated during the operational phase.
- Pressing needs: The proposed development meets one housing need i.e. provides for GAP/affordable housing (first time home owners): i.e. 11 GAP and 30 first time home owners opportunities
- The adjusted proposal reworked after due consideration of the public comment have the following benefits and negative consequences. The adjusted proposal locate all development above the CML whilst the first proposal did not adhere to the Coastal Management Line (the CML)

## Negative consequences:

- Contributes to pollution and need for river policing/patrol levels
- Detracts from views of the Southern bank landscape
- Middle and upper income housing component utilises extensive parcels of proposed development
- Efficient and effective service delivery could be burdened by

#### Benefits:

- Provides residential alternatives for the IDZ, i.e. housing on Southern bank is more accessible for the IDZ than VL
- Overall efficient and effective service delivery in VL could be enhanced as scale up to cater for increased population/residences.
- Greater revenue income for VL as new rate payers add to rates revenue stream.

- proposed development: Distance for maintaining services could potentially increase rates in VL.
- Increased initial employment opportunities (most like ±1000 jobs for 12 months or fewer jobs spread out over 3 -4 years of implementation) will cause influx of employment seekers and result in more informal settlements that impact negatively on safety and security and crime.
- Freight movement increased significantly in the last few years and detracts from the town's quiet fishing village atmosphere.
   It is feared that with industrial expansion, this distraction will be more severe.
- The workforce is not within walking distance from the workplace. There will be a cost to reach work.
- IDZ is promoted often, but not implemented as yet. Fear that demand for residential development would not be forthcoming.
- Trade (and economic development) from southern bank and commuter flow will trend towards Vredenburg
- Cumulative negative impacts on tourism, a major earner, may cause tourism to decline.

- Levies that will be charged to Vlaminke Vlei (VV) home owners will offset extra costs of providing services across the bridge.
- VV levies will contribute to extra policing of river and monitoring of pollution levels, benefitting the whole VL area.
- There will be additional opportunities for cross-subsidising services to poorest community.
- The workforce can access work as private transport is provided to reach work at the expense of the developer. (VL is ±10 kilometres to VV from VL whilst the furthest precinct, Noordhoek, is 14km)
- Applying classic design principles to greenfield development enforces security and sense of place
- Alternative sites should be considered: the whole southern bank beyond VV, north of Laaiplek and at De Plaat.
- Moving the municipal boundary (previously the Berg River was the municipal boundary) will open development opportunities for Saldanha-Northern Cape Development Corridor.
- Expansion is subject to intensive and detailed environmental and specialist impact studies
- Formalization of (re-zoning portions within) the estuary functional zone as high priority conservation areas
- Adjusted proposal is above the Coastal Management Line (CML) and terrestrial and aquatic CBA areas are protected (35ha for conservation).
- Cumulative positive impacts on tourism, a major earner, will enhance tourism.

## **Alternative 1: Proposed Development**

Alternative 2: No Development

## Desirability ('placing):

Question 7: Is the development the best practicable environmental option for the land/site?

Explanation: Question 7: According to NEMA the "best practicable environment option" means the option that provides the most benefit and causes the least damage to the environment as a whole, at a cost acceptable to society, in the long term as well as in the short term. In determining the best practicable environmental option, adequate consideration must also be given to opportunity costs.

## "best practicable environment option":

- most benefit: The proposed development will be environmentally sensitive with a very

"best practicable environment option":

most benefit:

strong focus on tourism and recreation, amplifying the BRE as sources of VL's economy.

- causes least damage to the environment as a whole: The proposed development will take place above the CML and:
  - a) bring about formal conservation (35ha) of the estuary and CBA areas.
  - b) avoid the disconnection of natural habitat by protecting the extensive natural corridor along the coast and the river.
  - c) the environmental impact caused can be described as standard for residential and mixed use developments.
- at a cost acceptable to society in the long term as well as in the short term: Ward 7 inhabitants argue that maintenance of services cost will increase and that besides taking away the view across an undeveloped southern bank, they will have to pay more for services. The increase in services costs is not necessarily directly related to operational expenditure. It can be argued that it is as much related to the financial management model local authorities are following.

Ward 6 inhabitants argue that the proposed development will create meaningful work (commercial and industrial opportunities) in the long term and attracts families that can contribute privately to job creation (general labour). There will be temporary employment opportunities during the development phase and permanent longer term employment in tourism and recreation and development maintenance.

## What is the opportunity costs:

Developing VV will preclude potential alternate development options for VV.

The benefits for the common good for all that the proposed development brings about, outweigh the loss of agricultural potential.

- Should the property remain a farm within a zone earmarked for conservation In this case its tourism component could be expanded.
   In this case the conservation worthy areas must be protected.
- Should it proceeds as an agricultural unit, it is not guaranteed that it follows the Best Practicable Environmental Options (BPEO).
- causes least damage to the environment as a whole:
- Least damage would be to continue as a non-operational farm with a focus on conservation as operating it as a farm will contribute marginally to food security, alternately, restore it to an operational farm.
- At a cost acceptable to society in the long term as well as in the short term: Keeping the property as an operational or nonoperational farm will be acceptable to the inhabitants of Ward 7 in the long term. An operational or conservation farm will provide limited employment opportunities and the unemployment rate will stay high.
- Developing it to create employment is the option that the inhabitants of Ward 6 favour.

## What is the opportunity cost

- Poverty and unemployment will prevail in Velddrif and opportunities to grow the economy will be lost affecting those who can afford it the least, the most.
- Without VV developed, attraction as an alternate residential choice for the IDZ is decreased, to the advantage of competing closer areas

Question 8: Would the approval of this application compromise that integrity of the existing approved and credible municipal IDP and SDF as agreed to by the relevant authorities.

Explanation: Question 8 & 9: if the development is to occur in the proximity of an urban area, clarity must also be provided whether or not it will be situated within or outside the urban area, with the impacts associated with its location in relation the urban area to be specifically considered and reported on.

Would the development compromise the integrity of approved and credible municipal IDP and SDFs.

- State situated within or outside the urban area,

Would the development compromise the integrity of approved and credible municipal IDP and SDFs.

At the moment the proposed development is situated outside the urban area as per the current 5 year cycle. Within next 15 years (third cycle from 2017 – 2022 thus 2027 – 2032) the proposed development can be accommodated within the urban area.

- list impacts associated with its location in relation to the urban area
- Expensive service maintenance, offset by localised (area specific) taxes.
- Workforce to travel more than 10km to work. Travel cost at the expense of the workforce to be avoided. Infrastructure provision for commuter transport (tuk-tuks) and a commuter transport service to be provided as part of the conditions of approval. This will enable people to work within this precinct. It will enable the workforce to get closer to the IDZ to access work and development opportunities as a commuter transport service between VL and VV could enhance transport services to the IDZ.
- No fully subsidized housing options offered

- State situated within or outside the urban area,
- If no development, outside urban area
- list impacts associated with its location in relation the urban area
- If no development, the resort with less formal permanent structures adjacent VV, is likely to expand.
- If no development, miss out on an opportunity to consolidate informal commuter transport (tuk-tuks/private taxi services)

Question 9: Would the approval of this application compromise the integrity of the exiting environmental management priorities for the area (e.g. as defined in EMFs) and if so, can it be justified in terms of sustainability considerations?

Would the proposed development compromise the integrity of the existing environmental management priorities for the area (e.g. as defined in EMFs)?

No, as firstly the sensitive and rehabitable areas are not to be developed but protected and secondly the interface of the development areas is managed through guidelines. The proposed development would contribute to strengthen the integrity of environmental management priorities, instead of compromise.

- can it be justified in terms of sustainability considerations?

Sustainability considerations

No poverty	Employment and development will work against increased poverty. Poverty is increasing			
	(and per capita income decreasing) due to migration into VL and little economic activity			
Zero hunger	Employment and development will work against increased poverty. Poverty is increasing			
	(and per capita income decreasing) due to migration into VL and little economic activity			
Good health & well-being	Reliable commuter transport will make health services more accessible.			
Quality Education	Condition			
Gender Equality	Condition			
Clean water and sanitation	Desalination of water in bulk can contribute if option is accepted.			
Affordable and clean energy	Could contribute if option is accepted.			
Decent work and economic growth	Aquaculture, access to IDZ and tourism activities will contribute to decent work.			
Industry, Innovation and Sphere of influence of IDZ; enhanced commuter transport and being part of Saldanh				

Would the proposed development compromise the integrity of the exiting environmental management priorities for the area (e.g. as defined in EMFs)?

- can it be justified in terms of sustainability considerations?

If no development is pursued and the farm continues as an operational or non-operational farm, no contribution will be made and no guarantees are provided to promote conservation and protect tourism assets.

Infrastructure	Northern Cape Development Corridor will secure infrastructure development to support	
	industry and enhance innovation.	
Reduced inequalities	Opportunities for GAP and first time home owners	
Sustainable cities and communities	Increased densities and mixed use	
Responsible consumption and	Introducing a green building development.	
production		
Climate action	Alternative services are an option, however the municipality needs an income from	
	conventional services. CML will be adhere to.	
Life below water	Monitor water abstraction and pollution (condition) and practised decrease current	
	abstraction and pollution.	
Life on land	Conservation of Critical and Sensitive Areas	
Peace, justice and strong	Partnership with Saldanha to benefit from Saldanha-Northern Cape Development Corridor	
institutions	and IDZ	
Partnerships for Goals	Secure maintenance of services (private public partnership)	
	Partnership with Saldanha re Saldanha Northern Cape IDZ	
		·

Question 10: Do location factors favour this land use (associated with the activity applied for) at this place? (this relates to the contextualisation of the proposed land use on this site within its broader context)

Do location factors favour this land use (associated with the activity applied for) at this place? Contextualise proposed land use on this site within its broader context

#### Yes

- River embankments are a rare asset
- As it is a favourable tourism development location.
- Tourism enhances public access to river embankment
- It's convenient en-route location calls for the proposed development
- Alternative residential option as sub-regional node (similar to St Helena)
- It is located above the CML, on one of the few developable areas left.
- It is in close proximity of the IDZ and its sphere of influence.
- The development topology will avail opportunities for cross-subsidising services to poor.
- It open up the formalisation of the southern river bank. This will enhance management according to guidelines instead of random development.
- It is located within the Saldanha-Northern Cape Development Corridor

No,

-It is a private property without access to river as a resource, except if future agri-tourism activities are implemented. - Expansion is subject to a detailed environmental assessment to protect critical resources.

Question 11: How will the activity or the land use associated with the activity applied for, impact on sensitive natural and cultural areas (built and rural/ natural environment)

How will the activity or the land use associated with the activity applied for, impact on sensitive natural and cultural areas

- built and rural/ natural environment
- The development will be located above the CML and CBAs will be conserved
- Development guidelines proposed will mitigate the impact on sensitive natural and cultural environments. However, keep in mind that infrastructure e.g. wind turbines, roads, mines and power lines, has been established in the area particularly within the last 10 years, changing the undiluted landscape into a slightly cluttered landscape to the SIP proposed. In ten (10) years' time more infrastructure may be present and may be even more prominent because of the development within the major regional growth centre area. The regional growth centre landscape appears to be supportive to the SIP although located within a highly sensitive natural environment.

The existing land use will not further impact on sensitive natural and cultural areas, neither will it provide any formal protection.

Question 12: How will the development impact on people's health and well-being (e.g. in terms of noise, odours, visual character and sense of place, etc.?

How will the development impact on people's health and well-being:

- noise: noise levels from residential and tourism development will be within acceptable ambient noise levels
- odours: Odours should be absent from residential and tourism developments one
- visual character: The visual character will change, yet the proposed development will fit in and blend in with the variety of land uses in close proximity of the proposed development. Urban design guidelines will mitigate development impact.
- sense of place: has been compromised by infrastructure development. Within the built environment the proposed development will enhance sense of place particularly in the long term as the development mature.

How will the development impact on people's health and well-being:

- noise none,
- odours none,
- visual character and none
- sense of place, etc.? none

Question 13: Will the proposed activity or the land use associated with the activity applied for, result in unacceptable opportunity costs?

Explanation: Question 13: Opportunity costs can be defined as the net benefit that would have been yielded by the next best alternative (for example, if farming is the next best alternative for a piece of land, then the foregone benefit of losing the farming option will be the opportunity cost of any other land use, or if not proceeding with the activity, then the foregone benefits of the proposed activity is the opportunity cost of not proceeding). Opportunity cost also related to the use of limited resources, for example water. If a limited volume of water is available in an area the most desirable use of the water considering the needs in the area must be determined in order to consider the opportunity costs associated with the different use of water. The concept of opportunity cost is applicable to project alternatives as well as policy selection. It is vital information if decision makers are to understand the implications associated with specific development proposals. A key part of considering opportunity cost is commonly to comparatively consider and assess the different alternatives in terms of the benefits and/or disadvantages associated with each alternative. Opportunity cost is a concept that often need not involve monetary values, though where these values can be given, they allow for a more detailed comparison than would otherwise be possible.

Will the proposed activity or the land use associated with the activity applied for, result in unacceptable opportunity costs?	
Opportunity cost if next best alternative is farming is low.	Opportunity cost if next best alternative
Limited resources – the propose development can assist in generating potable water	is farming is low:

Overall water will be a challenge for the IDZ hence a desalination plant is planned at Vredenburg/ Saldanha
In the case of this development there are two opportunities i.e. how will conservation and sense of place, the drivers of tourism be impacted. And how will the poor benefit

- a) Conservation will benefit as specific areas will be officially conserved and protected. Hence these areas can be monitored and managed.
- b) The poor will benefit as:
- GAP and First time home owners will have access to housing opportunities
- A commuter transport service to be provided as part of the conditions of approval. This will enable people to work within this precinct in decent jobs and it will enable them to get closer to the IDZ to access work and development opportunities. Such a service could enhance transport services to the IDZ.

Opportunities to create work and to benefit from the IDZ infrastructure and economic activities will not be capitalised on.

## Question 14: Will the proposed land use result in unacceptable cumulative impacts?

Question 14: Cumulative impacts can be defined as:

- Additive: the simple sum of all the impacts (e.g. the accumulation of ground water pollution from various developments over time leading to a decrease in the economic potential of the resource)
- Synergistic effects occur where impacts interact with each other to produce a total effect greater than the sum of individual effects. These effects often happen as habitats or resources approach capacity (e.g. the accumulation of water, air and land degradation over time leading to a decrease in the economic potential of an area)
- Time crowding effects occur when frequent, repetitive impacts occur on a particular resource at the same time (e.g. boreholes decreasing the value of water resources).
- Neutralizing effects occur where impacts may counteract each other to reduce the overall effect (e.g. infilling of a wetland for road construction and creation of new wetlands for water treatment)
- Space crowding effects occur where we have a high spatial density of impacts on a particular ecosystem (e.g. rapid informal settlement)
- Externalisation of disadvantages occurs when there is no or insufficient consideration given to the associated social costs that will be borne by the public.

## Will the proposed land use result in unacceptable cumulative impacts?

- Additive: the simple sum of all the impacts (e.g. the accumulation of ground water pollution from various developments over time leading to a decrease in the economic potential of the resource)
  - Most of the development in the area between the IDZ and the southern bank will be infrastructure related or agri-tourism as settlement development will be limited to the towns included in the major regional growth centre. The proposed residential development would be designed to minimize impact and blend in, and the sum of all the impacts would be within acceptable levels.

Will the land use result in unacceptable cumulative impacts?

 Additive: the simple sum of all the impacts (e.g. the accumulation of ground water pollution from various developments over time leading to a decrease in the economic potential of the resource)

Without development there will be no contribution from this site.

- Synergistic effects occur where impacts interact with

- Synergistic effects occur where impacts interact with each other to produce a total effect greater than the sum of individual effects. These effects often happen as habitats or resources approach capacity (e.g. the accumulation of water, air and land degradation over time leading to a decrease in the economic potential of an area)
  - The synergy between the existing town and this development together with the infrastructure development would most likely produce a positive effect even greater than the sum of the individual effects: The existing staggered planning without any harmony will prevail should planning not be controlled. Hence the development should be guided by urban design guidelines particularly related to service infrastructure.
- Time crowding effects occur when frequent, repetitive impacts occur on a particular resource at the same time (e.g. boreholes decreasing the value of water resources).
  - Settlement extension is limited immediate adjacent footprint expansion. An extension, jumping the river as in this proposed development, is unique and it is unlikely that it would happen anywhere else along the southern bank of the Berg River, except for this utmost western section. Hence it should not create time crowding.
- Neutralizing effects occur where impacts may counteract each other to reduce the overall effect
   (e.g. infilling of a wetland for road construction and creation of new wetlands for water treatment)
  - The development will secure the conservation of the CBA space and the sensitive bird areas west of the development. It will contribute to the monitoring and management of the abstraction of water out of the river and the pollution of the river by boat oil. These effects will be neutralizing for the development and surrounding activities.
- Space crowding effects occur where we have a high spatial density of impacts on a particular ecosystem (e.g. rapid informal settlement)
  - The development will add little to the existing impact on the view shed given existing developments linked to the IDZ.
  - Wind farms at Koperfontein and Vredenburg have an impact day and night. Eskom power lines have mostly an impact by day.
  - It will add little to the extensive farm yards linked to agri-tourism, mining, and other commercial activities which are visible from a distance in the absence of high trees screening off the development.

Externalisation of disadvantages occurs when there is no or insufficient consideration given to the

each other to produce a total effect greater than the sum of individual effects. These effects often happen as habitats or resources approach capacity (e.g. the accumulation of water, air and land degradation over time leading to a decrease in the economic potential of an area)

- Without development there will be no contribution from this site.
- Time crowding effects occur when frequent, repetitive impacts occur on a particular resource at the same time (e.g. boreholes decreasing the value of water resources).
  - Without development there will be no contribution from this site.
- Neutralizing effects occur where impacts may counteract each other to reduce the overall effect (e.g. infilling of a wetland for road construction and creation of new wetlands for water treatment)
  - Without development there will be no contribution from this site.
- Space crowding effects occur where we have a high spatial density of impacts on a particular ecosystem (e.g. rapid informal settlement)
  - Without development there will be no contribution from this site.
- Externalisation of disadvantages occurs when there is no or insufficient consideration given to the associated social costs that will be borne by the public.

Should the development not take place, it is likely that migrants to VL will predominantly be people in the subsidized income category and the ratio

## associated social costs that will be borne by the public.

- Should the development not take place, it is likely that migrants to VL will predominantly be people in the subsidized income category and the ratio between those with an income to contribute to rates and taxes and those with an income level which precludes contributing, will become skewed. This will put a heavy burden on VL with the municipal income its only source. It may also cause VL to lose out on the opportunity to draw maximum benefit from the influence of the IDZ and the resultant economic upswing

between those with an income to contribute to rates and taxes and those with an income level which precludes contributing, will become skewed. This will put a heavy burden on VL with the municipal income its only resource. It may also cause VL to lose out on the opportunity to draw maximum benefit from the influence of the IDZ and the resultant economic upswing

## ADDENDUM F: Alignment of proposal with WCPSDF objectives

A comparison of each policy directive and objectives as per WCPSDF 2014 with the proposed development is tabulated below. Results were highlighted in grey following on objectives in clear rows. Different words were used to summarise and introduce the result of each comparison:

**Aligned**: means the proposed development supports the objective.

**Aligned, partially**: means the proposed development support the objective to some extend but not completely or not all aspects of it.

**Condition**: means the directives taken from the objective should become a condition of the development approval.

**Indirectly related**: means the proposed development's consequences could support or contribute to the objective but it is not a direct result of planning.

**Not applicable**: The proposed development and its consequences do not support the objectives nor relate to it.

**Not aligned**: The proposed development is in contrast with the objective.

## Policy related to Biophysical Resources

## POLICY R1: PROTECT BIODIVERSITY & ECOSYSTEM SERVICES

1. WCape's CBA mapping & draft priority climate change adaption corridors must inform spatial planning and land use management decisions

## Aligned:

The following data directed the development proposal: WCCBA mapping, biodiversity assessments (physical assessment/ ground trothing of the subject property) and climate change adaptation corridor delineations.

2. Using latest available CBA mapping as a primary informant, municipal SDFs must delineate Spatial Planning Categories (SPCs) that reflect suitable land use activities. Ensure the nature, scale and form of land uses that are suitable in each SPC, the 2009 PSDF's draft Western Cape Rural Land Use Planning and Management Guidelines

## Aligned:

The SPCs were allocated in the 2012 -2017 SDF and reflect indicative land use categories. A detail site assessment revealed that the vegetation below the CML represents an Aquatic CBA area and the area earmarked for conservation reflects a terrestrial CBA area (both core areas). The proposed development takes place on land that was cultivated several years ago (agricultural and buffer areas). Guidelines for rural land use are outlined in the 2009 PSDF draft Western Cape Rural Land Use Planning and Management guidelines.

3. SDFs should highlight priority areas outside the protected area network that are critical for the achievement of the province's conservation targets. SDFs need to develop strategies and policies for securing these areas, inclusive of incentivising private landowners to contribute to the Western Cape's biodiversity network.

## Aligned:

The proposed development contributes to areas outside the protected area network (below the development line). These areas contribute to achieving the province's conservation targets. The proposed amendment includes strategies

to secure areas to be protected by private landowners to contribute to the Western Cape's biodiversity network.

# POLICY R2: MANAGE, REPAIR & OPTIMISE PROVINCIAL WATER RESOURCES

1. Mainstream a 'water wise' planning and design approach in the W Cape's built environment (due to water deficits, accentuated by climate change).

#### Aligned:

Proposed development can access desalinated water produced by Cererbos on the neighbouring property, but dependent on conditions set by Bergrivier Municipality;

#### Conditions:

Water wise and natural vegetation gardens to be introduced.

Buildings being designed water wise & tanks to collect rainwater to be a standard feature.

2. Rehabilitation of degraded water systems requiring built environment upgrading, improved farming practises and involvement of diverse stakeholders. Lessons learnt from the Berg River Water Improvement Plan: remedial actions are complex and preventative measures important.

#### Conditions:

Home owners association adopt conditions to improve the water quality of the Berg River.

3. Introduce and retrofit appropriate levels of water and sanitation systems technologies in informal settlements and formal neighbourhoods with backyard shacks as a priority.

#### Conditions:

Appropriate levels of technologies (water and sanitation systems) to be introduced.

Bulk contribution to cross subsidize same for informal settlement and formal neighbourhoods with backyard shacks.

4. Water demand management approach – maximise efficiencies, optimise storage capacity and optimise groundwater extraction, with the last resort option of desalination being explored, if necessary.

#### Conditions:

Water management to be introduced (even though desalinated water is accessed).

Additional sources to be explored i.e. ground water extraction.

5. Protection and rehabilitation of river systems and high yielding groundwater recharge areas, particularly in areas of intensive land use (i.e. agricultural use, industry, mining and settlement interactions).

## Aligned:

Protection: All proposed development is above the CML.

Rehabilitation: Natural vegetation and estuarine area being zoned to open space/ for conservation purposes.

6. Develop Regional Plans for Water Management Areas: Ensure clear linkages and interdependencies between the natural & water resource base and socio-economic development of region are understood and addressed.

## Conditions:

To be part of/ contribute to regional plan: Berg River Water Quality Improvement Plan.

Linkages and interdependencies between the natural & water resource base and socio-economic development of region to be quantified and actioned. Clear guidelines for proposed development to be provided.

7. Agricultural water demand management programmes to be developed with an emphasis on Breede Valley and Oliphants/Doorns agricultural areas.

## Indirectly related:

Agricultural water use along upper Berg River impacts indirectly on proposed development's water sources.

8. Industrial water demand management programmes to be developed with an emphasis on Saldanha, Southern Cape and Cape Town functional regions.

#### Condition:

Develop an IDZ water demand management plan as its water demand will impact on the availability of water for the proposed development. Proposed development has to be water wise.

9. Settlement water demand management programmes to be developed with an emphasis on the Cape Town functional region.

#### Conditions

Directives for water demand management to be provided. Take into consideration how water demand from Cape Town, which gets its water from the same sources as Saldanha Bay and Velddrif (West Coast) impacts on source and provision for proposed development.

10. Government facilities (inclusive of education, health and public works facilities) to lead in implementing effective and efficient water demand management programmes.

#### Conditions:

Institutional buildings to be designed to be water saving.

11. Continue with programmes (such as Working for Water) which reduce the presence of alien vegetation along river systems.

#### Conditions:

Proposed development to participate in/ contribute to removing of alien vegetation along Berg River

12. Delineate and promulgate appropriate coastal development set-back lines to mitigate against impacts and reduce risks.

## Aligned:

Development takes place behind CML.

13. For the Western Cape's vulnerable and degraded estuaries, compile and implement management plans as a basis for reconciling ecological, social and economic interests.

## Aligned:

Proposed development acknowledges Berg River EMP and aligns activities: Protects estuarine vegetation and ecosystems (development above CML); Natural vegetation offsets support Important Bird Area habitats.

14. Most productive offshore habitats supporting marine biodiversity are not formally protected: Extend MPA network & include strategic geographic priority areas.

#### Condition:

Proposed development to enhance formal protection of offshore habitats along Berg River and West Coast

15. Development along coast, lakes & dams should be encouraged adjacent to existing settlements: highly contained manner, a limited footprint that maintains ecological integrity, tourism potential and landscape character. Ensure public access to the coast at all times.

### Aligned, partially:

Not adjacent, but adjacent to a resort with less formal permanent structures. Represents a limited footprint (34.03ha) and similar in extent to conservation (35.26ha) and agricultural (31.58ha) footprints. Maintains ecological integrity (development above CML). Enhances tourism potential and increases access to coast/ river banks.

16. Necessary buffers and setbacks must be adhered to in all development along the coast and river systems.

## Aligned.

Adhered to CML, all development above CML

# POLICY R3: MANAGE, PROTECT & SUSTAINABLY USE PROVINCIAL AGRICULTURAL & MINERAL RESOURCES

1. Reconcile conflicting land development pressures through proactive spatial planning and a land use management system that opens up opportunities for improved livelihoods and jobs. Unique and high potential agricultural land (as currently being mapped by the provincial Department of Agriculture) should not be alienated.

## Aligned:

Medium potential land is utilised for development. No high potential land is at stake. The proposed development provides opportunities for sustainable

livelihoods and jobs as there is provision for commercial and industrial opportunities.

2. Promote and drive agri-tourism and agri-processing value addition to increase the export value of agricultural goods from the agricultural areas of the Western Cape.

#### Aligned:

Development proposal promotes agri-processing and thus value addition to increase value of goods e.g. aqua culture. It indirectly enhances agri-tourism opportunities along the Berg River.

3. Promote on-farm diversification to renewable energy, where it is feasible, appropriate and allowable from a landscape and heritage character protection perspective.

#### Condition:

The feasibility and appropriateness from a landscape and heritage character protection perspective to be investigated. This to include on-farm diversification to renewable energy as the agricultural land can be used for renewable energy generation.

4. As water is a significant constrainer to agricultural production, improve agricultural production in water-scarce areas of the Province by farming appropriate crops and applying water-wise farming methods.

#### Condition:

Aqua culture to be conducted in a water-wise manner. Appropriate crops to be planted and water-wise farming methods to be applied.

# POLICY R4: MINIMISE NEGATIVE IMPACTS OF RESOURCES CONSUMPTION & DISPOSAL

1. Recycling and recovery of waste must be mainstreamed in the high waste generation areas of the Province to both unlock economic opportunities and to increase the lifecycle of current waste disposal sites.

#### Condition:

Waster to be recycled and recovered.

2. Regional waste sites should be located adjacent to rail infrastructure to unlock the opportunity to transport waste via the rail network and decrease operational costs and energy requirements associated with the need for road freight. Indirectly related.

3. Providing all low income areas with access to electricity and/or off-grid renewable energy sources will go some way in reducing air quality and health issues associated with domestic fuel burning.

#### Condition:

Off-grid renewable energy sources to be applied.

4. Promoting a shift in the transport of people from private to public transport, as well as freight from road trucks to rail freight, will go some way in reducing air quality concerns, energy production and contribution to climate change.

#### Condition:

Enhance public transport given the proposed development's en-route location

5. Prevent the conflict between agricultural spraying practices by discouraging the location of development adjacent to agricultural areas that utilise crop spraying and discouraging locating new development in agricultural areas.

## Indirectly related:

No intensive agricultural cultivation and hence no crop spraying. Buffer between proposed development and intensive feed farming honoured.

6. Energy diversification and energy efficiency are two key policies that must be pursued in order for province to transition to a low carbon, sustainable energy future and to delink economic growth from energy use.

### Condition:

Energy diversification and efficiency to be applied as part of proposed development's detail design.

7. Emergent IPPs and sustainable energy producers (wind, solar, biomass and wasteconversion initiatives) must be supported and encouraged to thrive in the rural and renewable resource rich areas of the province as a means to uplift rural, stagnating economies.

#### Condition:

Should R3 no 3 be positive to partner with an IPP.

8. Support initiatives that promote a shift from private to public transport and from road freight to rail.

#### Condition:

Enhance public transport given its en-route location

9. Non-motorised transport infrastructure (informed by urban design principles) must be put in place in all settlements of the province to accommodate this mode oftransport.

#### Condition:

Non-motorised transport infrastructure (road and water) to be provided to link Vlaminke Vlei and Velddrif

10. Mainstream water conservation & demand management in settlement making and upgrading.

#### Condition:

Water wise design to be applied to conserve water and to manage demand.

11. Vulnerable built environments, where inhabitants cannot be relocated, must be built or retrofitted to accommodate extreme weather events (e.g. flooding).

## Not applicable.

12. Ecosystems based adaption.

## Aligned:

Development above CML. Ecosystem recovery possible

13. Agricultural land that holds long terms food security value must be aggressively protected from urban expansion.

## Aligned:

Development takes place on medium potential agricultural soil.

14. Social resilience networks to be developed and supported.

#### Condition:

Social resilience networks to be identified and proposed support to be offered.

15. Mainstream energy efficiency & demand management in settlement making and upgrading.

#### Condition:

Energy efficient design and demand management to be applied.

16. Encourage and support renewable energy generation at scale.

#### Condition:

Should R3 no 3 be positive, to partner with PPI.

7. Drive the development of innovative and sustainable (energy resilient) public transport systems.

#### Condition:

Public transport mode (tuk-tuks) to be promoted; to identify and contribute to energy resilient transport mode between Velddrif & IDZ- Vredenburg.

# POLICY R5: PROTECT & MANAGE ALL PROVINCIAL LANDSCAPE & SCENIC ASSETS

1. Scenic & Landscape character considerations must have explicit input on Land Use Management and infrastructure development in the Western Cape.

## Aligned:

Proposed development character is similar to West Coast vernacular.

2. The protection and enhancement of regional landscapes and scenic assets rely on appropriate responses to the heritage, biodiversity, agricultural and scenic assets of the province. It is essential to the future sustainability of the Western Cape that agricultural resource areas, ecosystem services, heritage and scenic assets are not undermined through inappropriate development and land use change.

## Aligned:

Development is proposed on Medium Potential Agricultural Land. Intensive agricultural activities continue as buffers are in place (Intensive agricultural practices and urban development adjacent to one another). Ecosystems are officially protected (development proposal and Land Use Category) and ecosystem services can function, heritage and scenic assets are amplified and made accessible (reinstate historic market and access to southern bank and to

## riverbanks)

3. The delineation of urban edges have significant implications from a scenic perspective, especially with respect to the protection of natural and cultural landscapes from the encroachment of further urban development, defining an appropriate interface between urban development and significant landscapes, and protecting the visual and agricultural setting of historical settlements. However, it should be noted that the urban edges cannot be solely be depended on to provide the necessary effective long term protection and management of landscapes of heritage and scenic value

### Aligned:

Although the proposed development creates an intermittent urban edge, the natural and cultural landscapes are protected as the development node will become one of many scattered development nodes in the view shed and blend in with the other nodes (the cumulative impact is not greater than the sum total of the different nodes). The scattered character can be ascribed to the sum total of the nodes and the alternative energy and other infrastructure around and behind Patrysberg as it forms part of the agri-industrial and industrial land uses of the major regional growth node.

The proposed development contributes to enhance the riverscape interface which is completely lacking, whilst it enhances the reinstatement of the social history of the southern bank by making available appropriate facilities to host a regular farmers market. The vernacular style of the proposed development will amplify the style of the historical settlement.

4. Strategies towards achieving adequate legislation to protect scenic resources, as well as towards establishing more detailed classification of landscape and scenic typologies are required. Conservation strategies and guidelines are also particularly important in the effective management of scenic landscape quality and form. They must describe the qualities of an area and the nature of development that is likely to be permitted, thus preventing wasteful expenditure, misunderstanding and conflict on the part of owners, developers, architects and the local authority. They can also ensure that the local authority is consistent in its

management of the area in terms of the maintenance and enhancement of the public realm and in terms of development control.

## Aligned:

All applicable legislation was applied including

- a) Spatial Planning Categories for natural vegetation as per Bioregional Planning Framework, 2000.
- b) No development is proposed below the Coastal Management Line, as per Coastal Management Act 24 of 1999.
- c) Development guidelines will be required at application stage to protect the character of the area according to the National Heritage Resources Act, Act 25 of 1999.
- 5. Priority focus areas proposed for conservation or protection include:
- i. Rural landscapes of scenic and cultural significance situated on major urban edges and under increasing development pressure, e.g. Cape Winelands.
- ii. Undeveloped coastal landscapes under major development pressure.
- iii. Landscapes under pressure for large scale infrastructural developments such as wind farms, solar energy facilities, transmission lines and fracking, e.g. Central Karoo.
- iv. Vulnerable historic mountain passes and 'ports'.

## Aligned:

Portions of the Vlaminke Vlei and surroundings can be classified as priority focus areas and the proposed development earmarked these areas for conservation or protection as it represents:

- i. Rural landscapes of scenic and cultural significance situated on major urban edges and under increasing development pressure from the major regional development node defined by an area being covered by a circle with a 25km radius with Vredenburg being the centre point.
- ii. Undeveloped coastal landscapes under major development pressure. The estuary is viewed as tidal and treated the same way as the coastal landscape.
- iii. Landscapes under pressure from large scale infrastructural developments such as the IDZ and the entire major regional development node defined by an area

being covered by a circle with a 25km radius with Vredenburg being the centre point.

The proposed development contributes 35ha to conservation which links to and form part of the conservation worthy areas earmarked within the ambit of the major regional development node. Protected natural areas enhance agricultural activities and guide future development of the southern bank as current land uses include industrial and agri-industrial uses.

## Policy related to the Economy

# POLICY E1: USE REGIONAL INFRASTRUCTURE INVESTMENT TO LEVERAGE ECONOMIC GROWTH

1. Consolidate and align the various regional economic infrastructure investment proposals (i.e. SIPs, SOEs, national or provincial Departments) in integrated regional SDFs for the Cape Metro, greater Saldanha/Vredenburg, and Mossel Bay/ George regions.

## Aligned:

The proposed development and amendment calls for the consolidation and alignment of national infrastructure proposals with the regional and local SDFs. This highlights the lack of such integrated regional documents.

2. Use Regional or District SDFs as basis for addressing and reconciling competing and overlapping demands for regional economic infrastructure (e.g. regional airport).

## Aligned:

Proposed amendment addresses and reconciles competing demand for regional economic infrastructure as it focuses on how Bergrivier Municipality can benefit from the IDZ by enhancing development within Velddrif instead of only Saldanha Bay Municipality benefitting.

3. Evaluate investment alternatives on the basis of holistic cost/benefit models that factor in capital and operating costs over the lifecycle of the investment. Use the WCIF prioritisation model to prioritise and programme alternative regional infrastructure investment proposals. Align and synchronise bulk infrastructure, transport and housing investment programmes

## Aligned:

Saldanha-Northern Cape Development Corridor is a Strategic Infrastructure Project and Velddrif is en-route. The proposed development is en-route and supports the role of Velddrif within the major economic development node.

4. Integrate the spatial component of bulk infrastructure master plans, public transport plans and housing/human settlement plans into one SDF prepared at the appropriate scale (i.e. regional, district or local municipal).

#### Aligned:

The proposed development and amendment calls for the consolidation and alignment of national infrastructure proposals with a regional SDFs and highlights the need thereof.

5. Provide spatial planning input and support to the sector plans of provincial departments.

## Aligned, partially:

Supports Bergrivier Local Economic Development Strategy, 2015, as the proposed development promotes economic development, and tourism in particular.

6. Prioritise developing the required bulk infrastructure capacity to serve the connection and compaction of existing human settlements, over developing bulk infrastructure to serve the outward growth of settlements.

## Aligned:

Proposed to develop bulk infrastructure capacity to serve outward growth of settlements.

7. Limit new urban transport investment to spatial developments that reduce average travel times, as opposed to extending them.

## Not aligned:

However, given Vlaminke Vlei's location en-route, the proposed development can contribute to urban transport thresholds (number and concentration of people required) and enhance the investment significance of such a service.

8. After Cape Town and George, target the emerging regional economic growth centres (i.e. Saldanha/Vredenburg and Mossel Bay) for the next phase of the roll-out of urban public transport systems. Synchronise public transport investment with complementary investment in non-motorised transport.

#### Aligned:

Velddrif and the proposed development is en-route.

9. Employ off-grid infrastructure technologies to serve all new development outside the urban edge. Align public transport planning with spatial planning (i.e. complementary plans for settlement intensification along designated public transport corridors). Use off-grid technologies when the upgrading of infrastructure is required in small towns with no apparent growth potential.

#### Aligned:

Off grid infrastructure is an alternative proposed, however BM will confirm the infrastructure required.

10. Prioritise remote rural areas, small towns and low income urban areas for the roll-out of broadband.

## Aligned:

Proposed development contributes to the threshold to roll-out broadband through the prospective increase in number of households.

11. Apply PSDF's biodiversity, heritage and scenic landscape and agricultural criteria in assessing the suitability of sites for bulk infrastructure project.

## Aligned:

No bulk infrastructure is located within biodiverse sensitive, historic or scenic landscape.

#### POLICY E2: DIVERSIFY & STRENGTHEN THE RURAL ECONOMY

1. Rural considerations to be factored into all municipal IDPs and SDFs, with priority given to getting rural coverage in all district SDFs and then refining the detail of the planning at local municipality level. SDFs should be able to assist in the identification of strategically located land for land reform purposes in terms of the Pro-active Land Acquisition Strategy (PLAS). Provincial government should strengthen its partnership with DRD&LR in giving support to municipalities in their undertaking rural planning.

#### Aligned:

Earmark a portion of the proposed development for land reform.

2. The provincial Department of Agriculture's area based plans (1:10 000 scale) and associated spatial data are useful tools to use for detailed planning or assessing farm level land use applications.

## Aligned:

The area based plans of the Provincial Department of Agriculture were considered and used in the preparation of the proposals. There is no high potential agricultural land in the subject area.

3. Where regional SDFs are compiled by provincial government, rural considerations are to be dealt with on the same basis as municipal SDFs.

## Indirectly related:

The Ad Hoc Amendment proposal was prepared and rural consideration dealt with on the same basis as a municipal SDF. The document could be included in a regional SDF as has been referenced.

4. Compatible and sustainable rural activities (i.e. activities that are appropriate in a rural context, generate positive socioeconomic returns, and do not compromise the environment or ability of the municipality to deliver on its mandate) and of an appropriate scale and form can be accommodated outside the urban edge (except in bona fide wilderness areas). The 2009 PSDF draft Rural Land Use Planning & Management Guidelines should be reviewed and updated to serve as basis for clarifying the interpretation of this policy.

The following criteria should be applied in assessing consistency with this policy:

- i. Environmental authorisation
- ii. Compatibility with land use activities suitable in the CBA it is situated in, and subject to an EIA
- Does not alienate unique or high value agricultural land, or compromise existing farming activities.
- iv. Does not compromise the current or future possible use of mineral resources
- Is consistent with the cultural and scenic landscapes within which it is situated – the landscape is cluttered with infrastructure and development nodes.
- vi. Does not involve extensions to the municipality's reticulation networks (i.e. served by off-grid technologies.)
- vii. Does not impose real costs or risks to the municipality delivering on their mandate.
- viii. Does not infringe on the authenticity of rural landscapes.

Aligned at application stage
Aligned land use activities as
development is located outside
CBA area.

Aligned, no alienation of unique or high value agricultural land or compromising of existing farming activities

Aligned, salt mining can proceed despite development

Aligned as the proposed development will enhance the consolidations of development nodes within the view shed.

Not aligned, does involve extension and new reticulation networks

Aligned, should the developedevelop services to municipality is takir services over.

No, as landscape is characterised by scattered nodal and infrastructure developments

5. Land use incentives should be used to facilitate rural land use transitions that the state cannot afford to fund on its own (e.g. securing priority biodiversity areas or climate adaptation corridors; rural development; agrarian transformation). Condition:

Proposed development includes natural areas to be protected and could be used

to facilitate rural land use transitions e.g. protection of natural vegetation, biodiversity and ecosystems.

6. The current provincial resort policy should be reviewed to make it consistent with the PSDF, and its recommendations should be incorporated in the updated 2009 PSDF draft Rural Land Use Planning & Management Guidelines.

Indirectly related:

But relevant to various resorts on southern and northern bank

7. The new provincial guidelines for renewal energy facilities should be incorporated in the updated 2009 PSDF draft Rural Land Use Planning & Management Guidelines.

Indirectly related:

But relevant to surrounding and future renewal energy facilities.

8. The principles contained in the gazetted provincial farm worker settlement policy are endorsed (see Box 8), but amendments may be warranted following consideration of FARE's recent recommendations.

Indirectly related.

9. Extend current rural livelihood support programme (i.e. CRDP) to cover a wider range of activities and build a broader rural skills base (e.g. environmental resource management, rural public works, land care, Working with Water, Working on Fire, Working with Wetlands, etc.). Target future support to settlements that are stagnating or situated in a remote rural area. Use broadband technology to extend the programme's coverage and align with Thusong Centres.

Aligned:

Rural livelihoods are extended by aquaculture and small scale intensive agriculture.

10. The principles contained in the gazetted provincial policy for small scale farming in the urban fringe are endorsed (see Box 7) but amendments may be warranted following consideration of FARE's recent recommendations.

Not applicable.

11. In line with national policy, state land will be leased for this purpose – it should not be subdivided and alienated.

Not applicable.

12. Where there is a combination of land suitable for agriculture and raw water available in proximity to settlements, this strategic provincial asset should be safeguarded for agricultural purposes.

## Aligned:

Proposed greywater system could be utilized in small scale agriculture.

13. Commonages should be safeguarded for their original purpose, and municipal SDFs should give consideration to the establishment of new commonages.

### Aligned:

Natural corridors between sub-nodes safeguard natural vegetation and contribute to commonages and common property.

14. Municipalities should forge partnerships with non-governmental or public benefit organisations to assume management responsibilities for commonages, and investigate the practicality of providing basic agricultural infrastructure (e.g. treated effluent) with the support of provincial and national government.

## Aligned:

Natural corridors are privately taken care off and grey water can be used to maintain these corridors and commonages.

15. Land targeted for new commercial ventures (e.g. farming, fishing, ecotourism, etc.) should have the same resource attributes as existing commercial ventures, and be in proximity to markets, facilities and transport.

## Aligned:

New commercial development has similar and improved (on and at the waterfront) resources attributes as existing commercial ventures (at and away from the waterfront) and is in the proximity to markets, facilities and transport.

16. Pilot projects should be motivated that fulfil the criteria of the NDP's Resource Critical Areas.

## Aligned:

Protect surface water sources (development take place above the CML) and optimise the use of ground water sources (alternative to water supplied by West Coast District Municipality);

Condition:

Manage demand.

# POLICY E3: REVITALISE AND STRENGTHEN URBAN SPACE ECONOMIES AS THE ENGINE OF GROWTH

1. Priority should be given to building the national competitive advantages and innovation of the Western Cape established and emerging regional economic centres through appropriate infrastructure, facility, amenity, and social service investment (e.g. public and non-motorised transport, tertiary education, health, public open spaces, gap and rental housing, etc.) to support the knowledge economy. Human settlement planning needs to respond appropriately to the specialist requirements of these centre's skills base.

## Aligned:

The proposed development builds the regional and national competitive advantages and innovation as it will provide structure and focus for the Saldanha-Northern Cape Development Corridor.

2. Whilst public investment in the built environment should be spatially targeted to complement new regional economic infrastructure investments (in the dominant and emerging regional growth centres as identified), it should also be made available to any settlement that makes a business case for delivering on the provincial strategic objectives. In this regard the GPS needs to be used as a tool to inform spatial investment decisions.

## Aligned:

VL is identified as a medium growth settlement and part of a Major regional growth centre. The GPS favours VL to complement and enhance new regional economic infrastructure investment. The proposed expansion of VL will capitalise on its en-route location and will assist to grow the local economy.

3. Transversal spatial governance systems and structures (see 3.1) should be applied at regional or district levels to determine integrated public investment programmes (e.g. housing transport, bulk infrastructure), and these should be premised on applying the PSDF's spatial principles. The long term land requirements in settlements for education and health facilities should be accommodated in these integrated plans.

#### Condition:

Regular education and health facilities to be provided according to the norms within VL. Aligned, partially:

Specialised academic institutions e.g. yachting or sports academy, are included in the proposed development.

4. Spatial targets within settlements for public investment should be delineated and defined, and the implementation of built environment investment programmes should be monitored to ensure that on the ground delivery is spatially aligned and synchronised. The suite of existing spatial targeting instruments (e.g. UDZs) should be consolidated and rationalised.

## Aligned:

Spatial targets within the settlement for public investments are delineated and defined (VLPP). Implementation of built environment investment programme should be monitored to ensure on the ground delivery is spatially aligned and synchronised. The proposed development will take spatial targets forward.

5. Existing economic assets (e.g. CBDs, township centres, modal interchanges, vacant and under-utilised strategically located public land parcels, fishing harbours, public squares and markets, etc.) should be targeted to levers the regeneration and revitalisation of urban economies.

## Aligned:

Broader and neighbouring economic assets (salt mines and water purification) are targeted and proposed to revitalise and focus urban economics.

6. A specialist 'land assembly' unit should be established within the province (either HDA, inter-departmental structure, or specialist unit within a Department, or public/private SPV) to identify, allocate, release, secure appropriate land use rights, and package strategic land parcels for development (i.e. state assisted housing/mixed use initiatives, PPPs, or private sector delivery incorporating inclusionary prescriptions). This unit to take on provincial land assembly responsibility and support municipalities assemble land parcels for development. Land assembly unit to investigate use of land policy instruments (e.g. land banking, land value capture, land rating system, etc.) to make urban land markets accessible to households.

## Aligned:

First time home owners and households can access land markets.

7. Incentives should be put in place to attract economic activities close to dormitory residential areas, facilitate brownfields development (e.g. mixed use development and densification in appropriate locations), and private sector involvement in the rental and gap housing markets.

## Aligned:

Part of proposal/ strategy to turn-around VL economy.

First time home owner's dwellings and rental accommodation are included in proposed development.

8. As per the recommendations of the specialist study into the impact of commercial and office decentralisation (ICOD), a policy framework for a regional (intra-municipality) perspective for the planning and approval processes of super-regional malls must be developed. In addition the findings and recommendations of the ICOD study need to be shared with municipalities (see Box 9).

Not applicable.

## Policy related to Build Resources

## POLICY S1: PROTECT, MANAGE AND ENHANCE THE PROVINCE'S SENSE OF PLACE, HERITAGE AND CULTURAL LANDSCAPE

1. Prevent settlement encroachment into agricultural areas, scenic landscapes and biodiversity priority areas, especially between settlements, along coastal edges and river corridors.

#### Alianed:

Medium Potential Agricultural Land will be developed; Intensive agricultural activities can continue as buffers are in place (Intensive agricultural practices and urban development adjacent to one another), ecosystems are officially protected (development proposal and Land Use Category) and ecosystem services can function, natural corridors are kept in between pockets of development, heritage and scenic assets are amplified and made accessible (historic market and access to southern bank and to water)

2. Promote smart growth ensuring the efficient use of land and infrastructure by containing urban sprawl and prioritising infill, intensification and redevelopment within settlements.

#### Condition:

Smart growth to inform detail precinct design.

3. 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.

#### Aligned:

As the proposed development is enhancing the economic, social and spatial hierarchy of the settlement within the major regional growth node and within the municipal area.

The character of the proposed development will preserve the structural hierarchy of the tows.

4. Use heritage resources, and adapt historic buildings, enhancing area character, stimulate urban regeneration, encourage investment and create tourism opportunities: Ensuring interventions are consistent with local building and landscape typologies, scale, massing, form and architectural idiom.

#### Aligned:

Social history will be celebrated as an economic asset within the proposed development footprint.

Proposed development guidelines are consistent with local building and landscape typologies.

5. Conservation strategies, detailed place-specific guidelines and explicit development parameters must supplement urban edges to ensure the effective management of settlement and landscape quality and form.

#### Aligned:

All applicable legislation was applied including

- Spatial Planning Categories for natural vegetation as per Bioregional Planning Framework, 2000.
- b) No development is proposed below the CML, as per Coastal Management Act 24 of 1999.

#### Condition:

c) Development guidelines will be required at application stage to protect the character of the area according to the National Heritage Resources Act, Act 25 of 1999.

#### POLICY S2: IMPROVE PROVINCIAL, INTER & INTRA-REGIONAL ACCESSIBILITY

1. Built environment investment programmes should focus on compacting and connecting urban development (especially along public transport routes), and clustering public facilities along these connections.

#### Aligned, partially:

Proposed built environment is compact and connects urban development while connecting to facilities in different nodes simultaneously.

2. New settlement formation that increases average travel times should be avoided. Not aligned:

Travel time is viewed to increase but the inhabitants could have lived in the main towns e.g. V/L and Vredenburg and have to travel 26km. Living here means a shorter distance.

3. Promote the upgrading of existing rail infrastructure to offer higher levels of service while developing combined road and rail transport corridors throughout the province - to provide a real alternative to road transport for passengers and freight.

## Not applicable.

4. Rank, prioritise and develop fully Integrated Rapid Public Transport Networks (IRPTN) in the higher-order urban regions of the Province.

Indirectly related.

5. Developing fully Integrated Public Transport Networks (IPTN) in the rural regions that are strategically connected to higher-order urban regions.

#### Alianed:

Proposed development will contribute to thresholds required for Public Transport Network that links to Vredenburg and Saldanha

6. Direct public funding to unlocking well located land within cities and towns to reduce the operating costs of public transport (as per PLTF).

#### Not applicable:

Although the land is well located within the major regional node.

7. Develop a safe public transport system: Achieve adequate thresholds by densification and enhancement of opportunities for the poor along all public transport routes and corridors.

#### Aligned:

Opportunities for the poor along public transport routes and corridors are enhanced by the location of the proposed development, thus making access to the proposed development easy.

8. Improve intermodal integration and regional linkages of all public transport based services through linking localised public transport between villages and towns with regional multi-modal transport hubs.

#### Aligned:

As development promotes intermodal links between local and public transport (local within V/L and proposed development and public between V/L and Vredenburg) and between nodes (Laaiplek, Velddrif, Noordhoek, etc.) and towns (V/L and Vredenburg).

9. Strengthen functional linkages between settlements and larger towns, with specified attention given to introducing rural transport systems.

#### Aligned:

Proposed development strengthens functional linkages between settlements and larger towns by enhancing the conditions for the provision of transport systems.

10. Roll-out Western Cape's Green Economy and broadband programme has significant rural settlement implications, particularly related to building and services applications. New technologies offer the prospects of making living in and working out of rural towns and villages more attractive.

#### Condition:

Development to promote Green Economy and broadband installation.

## POLICY S3: ENSURE COMPACT, BALANCED & STRATEGICALLY ALIGNED ACTIVITIES & LAND USES

1. Target existing economic assets (e.g. CBDs, township centres, modal interchanges, vacant and under-utilised public land parcels, fishing harbours, public squares and markets, etc.) to lever settlements regeneration and revitalisation.

#### Aligned:

Historic market levers settlement development. Residential development turns industrial abstraction of natural resources into a tourism possibility.

2. Promote functional integration and mixed use to achieve improved levels of settlement liveability; Densify and fill in to counter apartheid spatial patterns.

#### Aligned:

The development proposed mixed use nodes.

3. Consolidate and rationalise the suite of existing spatial targeting instruments (e.g. UDZs) and delineate and define spatial targets for public investment

#### Aligned:

Targets for zoned land are achieved through proposed development. Targets for public investment have been defined.

4. Locate and package integrated packages of land, infrastructure and services as critical inputs to business establishment and expansion in places that capture efficiencies associated with agglomeration.

#### Aligned:

Proposed development represents a package of land and infrastructure and services critical to business establishment and expansion assisted by agglomeration and its likely efficiencies.

5. Prioritise rural development investment based on rural settlements' economic role and function, acknowledging agriculture, fishing, mining and tourism as important economic underpinning of rural settlements.

#### Aligned:

Proposed development is based on settlement's economic role and function.

6. Support informal livelihood opportunities and informal markets. Retain flexibility required by emerging (& poor) whilst supporting formal business

## Aligned:

Formal opportunities at market and informal opportunities are created by the proposed development.

7. Prioritise establishment of Integration Zones in urban, rural and coastal regions, & guide public intervention to promote more inclusive, efficient and sustainable forms of urban development (see Box 11).

## Aligned:

All applicable legislation was applied including

- a) Spatial Planning Categories for natural vegetation as per Bioregional Planning Framework, 2000.
- b) No development is proposed below the Coastal Management Line, as per Coastal Management Act 24 of 1999.

#### Condition

Development guidelines will be required at application stage to protect the character of the area according to the National Heritage Resources Act, Act 25 of 1999. 8. Continue to deliver public investment to meet basic needs in all settlements, with ward level priorities informed by Dept of Social Development's human development indices.

#### Aligned:

Social development needs are addressed by proposed development e.g. job opportunities and to grow the economy.

## POLICY S4: ENSURE BALANCED & COORDINATED DELIVERY OF FACILITIES AND SOCIAL SERVICES

1. Balance sustainable service delivery and equitable access to education and health services to improve equitable access to social services such as health and education across the Province.

#### Aligned:

Inhabitants will have access (and be mobile due to support of commuter transport) to health and education facilities.

2. Apply the principles of space utilization efficiency, multi-functionality and clustering to all facility provision projects

#### Aligned:

Facilities and spaces will be multi-functional and clustered.

3. Coordinate and cluster public facilities, services and government offices to increase convenience, accessibility and efficiency regarding operations, maintenance and security as well as optimal use of land.

#### Aligned partially:

Supports VLPP proposals and does not duplicate clusters. Does propose a sports academy cluster.

4. Rationalise and balance the regional distribution of health and education services around a coherent hierarchy of services and only invest in places where people can easily access these services.

#### Aligned:

Development will contribute to confirm hierarchy and can easily access services.

5. Develop a set of facility provision guidelines and indicators. Municipalities to plan accordingly to increase effectiveness of social services and facilities.

Indirectly related, but can contribute.

6. Articulate short- and long-term goals for facility performance, which build links between budgets, activities and expected consequences.

#### Aligned:

Facilities will be multi-purposed.

7. Promote flexibility through the prioritisation of mobile services in areas of need and

limited access.

Not applicable.

8. Focus fixed investment in schools and school upgrading on settlements with a population of over 250 000.

Indirectly related, but inhabitant will contribute to thresholds demanding schools.

9. Mobile, internet based and period education systems and services should be delivered to settlements smaller than the required threshold to support a primary school (xx households)

#### Aligned:

Mobile and internet based education can be offered as infrastructure will be available. Most likely that kids will attend school in Vredenburg and V/L.

## POLICY S5: ENSURE SUSTAINABLE, INTEGRATED AND INCLUSIVE HOUSING PLANNING AND IMPLEMENTATION

1. Align housing delivery projects with the identification of Integration Zones and Social Housing Restructuring Zones (see Policy 3).

#### Align:

Opportunities are offered for first time home owners.

2. Ensure that housing development provides as wide a choice of housing and tenure options as is reasonably possible, based on is economic, fiscal, social and financial affordability

## Aligned, partially:

High density / mixed use -13.46ha and single residential options -20.57ha are offered to first time home owners, medium and high income earners.

3. Ensure that all future housing delivery projects are founded on principles of sustainability and based on integrated development planning.

## Aligned:

As different income groups and topologies are offered, design principles applied including likelihood of alternative services to enhance sustainability.

4. Promote private-sector participation in the lower end of the market to diversify and expand housing delivery options.

#### Alianed:

Homes for first time home owners and rental stock will become available.

5. Make households mobile and provide residential environments with access to opportunities that support productive activities and reduce levels of exclusion.

#### Alianed:

It is a mixed use precinct (include commercial and industrial). Opportunities and inhabitants can connect to commuter transport from within development.

6. Increase densities of settlements and dwelling units in new housing projects.

#### Aligned:

Development has an average density of 19du/ha, which is the highest for this development type within Velddrif.

7. Prioritise investment in community facilities, public infrastructure and public space, rather than exclusive focus on housing or top structures.

#### Aligned:

Public Infrastructure will be provided as well as public space.

8. Promote more mixed-income, mixed-use, inclusionary forms of development through incorporating various scales of economic opportunities within housing projects.

#### Aligned:

From first time homeowners to high income.

9. Manage urban informality proactively through the UISP and ABS programs, and managed land settlement.

#### Not applicable

10. Enable and support incremental housing, with phased service provision to accelerate housing provision that alleviates suffering and improves livelihoods to as many people as possible within the shortest possible time frames.

Indirectly related, but supports the provision of bulk services.

11. Achieve a wider range of housing opportunities with regards to diversity of tenure, size, density, height and quality in order to promote a ladder of upward mobility for households to progress as economic circumstances change over time

#### Aligned:

From first time homeowners to high income and from medium density development to single residential.

12. Identify, allocate, release and packaged strategic land parcels for all forms of state funded rental projects, prioritising the rental market for households with monthly incomes of between R1 500 and R7 500.

#### Not applicable

13. Strengthen the role of municipalities to manage public intervention in urban land development processes.

#### Condition:

BM to present needs and priorities of which those agreed to should become part of the development conditions.

14. Acknowledge social value of land and develop investment and land management tools that evaluate development so that the societal value of land is prioritized in relation to other claims or benefits.

#### Aligned:

Ownership opportunities for first time home owners are afforded.

15. Proactively plan, align and coordinate the strategic use and disposal of public land to ensure that opportunities for its use for public housing are not lost.

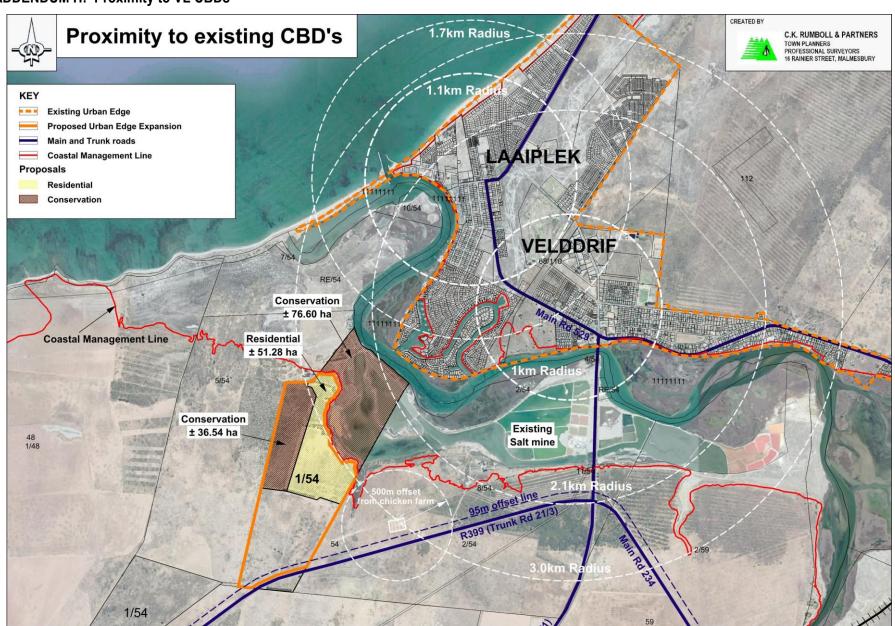
#### Not applicable

St. Helena O (H3 Velddrif Freight Route North Paternoster\_ Vredenburg Langebaanweg Saldanha reight Route Central Hopefield Langebaan 0 Transport Informants: Proposals: Strategic Spatial Interventions **Existing Towns/ Nodes: WEST COAST SDF** Extension of R45
HGV Route Major Regional Growth Centre Major Regional Node VREDENBURG - SALDANHA MAJOR REGIONAL Passenger Rail A High priority industrial development area - Back of Port B Desalination plant (subject to EA) Sub-Regional Node GROWTH CENTRE Airport C Commercial airport (subject to further studies) R27 Tourism Route (D) HVG Route (options 1 to 3) H1-5 Harbours URBAN DYNAMICS WESTERN CAPE Berg River EMF Environmental Informants: West Coast Biodiversity Corridor F Priority: Highest growth potential & Socio-Economic needs - Vredenburg - Saldanha Berg River ecological corridor IDZ and TNPA export harbour: Industrial Economic Node

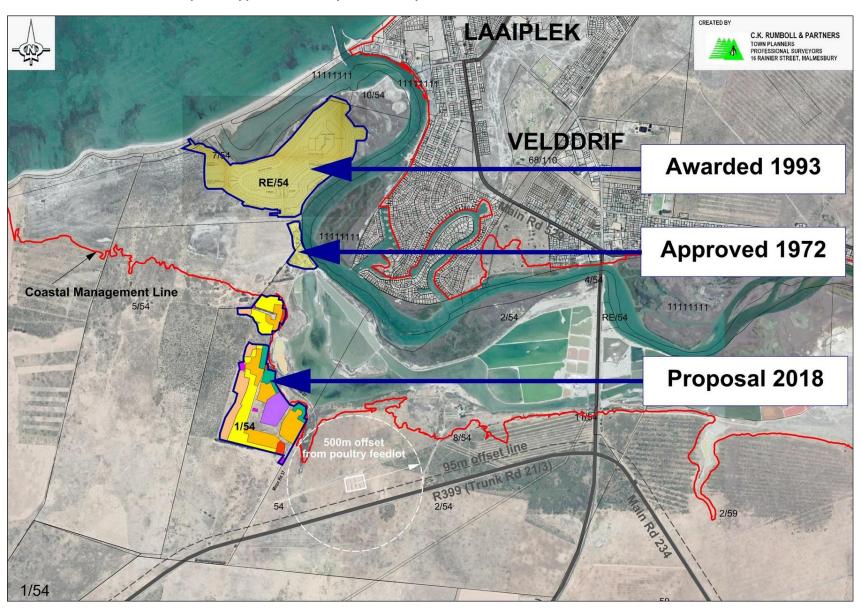
ADDENDUM G: Vredenburg Saldanha Major Regional Growth Centre

(Source: WCDSDF 2014)

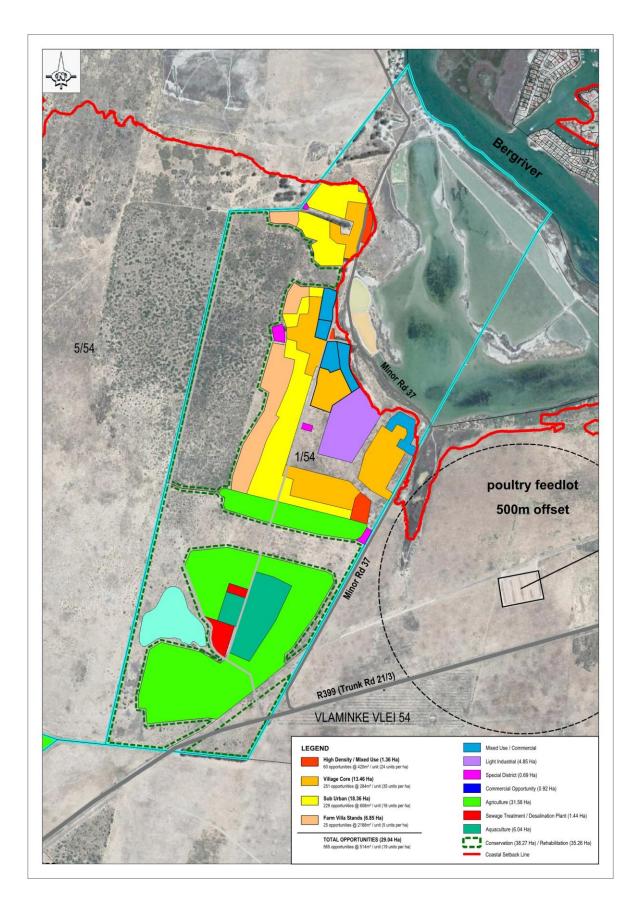
ADDENDUM H: Proximity to VL CBDs



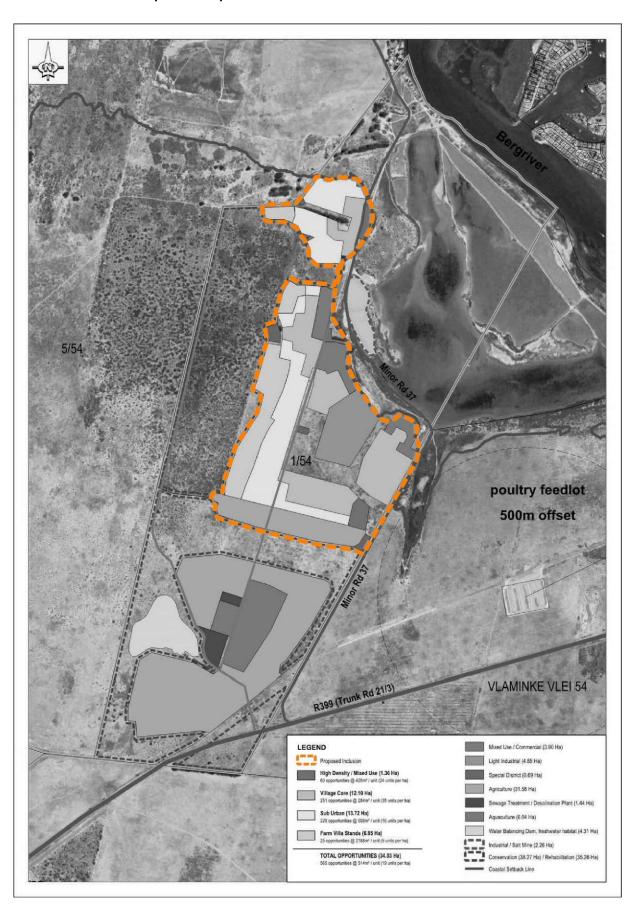
ADDENDUM I: Historic Development Approvals and Proposed Development



ADDENDUM J: Proposed Development: Amended



ADDENDUM K: Development Proposal for Inclusion



ADDENDUM L: Initial Development Proposal (First Draft)

