



## **Pioneer Industrial Park**

### **Second Amendment Final Scoping Report**

**Locality: Saldanha Bay**

**Departmental Ref No: 16/3/1/2/F4/23/3007/14**

**SHANGONI**  
*Management Services (Pty) Ltd*



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**Locality: Saldanha Bay**

**Departmental Ref No: 16/3/1/2/F4/23/3007/14**

**February 2017**

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## PROJECT DETAILS

Competent Authority	Western Cape Department of Environmental Affairs and Development Planning
Reference No.:	16/3/1/2/F4/23/3007/14
Project Title:	Pioneer Industrial Park
Project Number:	STR-SAL-14-02-06
Compiled by:	Lee-Anne Fellowes 
Date:	February 2017
Technical Reviewer:	Jan Nel 



## EXECUTIVE SUMMARY

### The Applicant

The property for the proposed development is privately owned by Ms AM Thom who wishes to establish an Industrial Park on the property (Pioneer Industrial Park).

### Background description

Portion 39 (remaining extent) of the Farm Eenzaamheid 135, Malmesbury RD, is a predominantly undeveloped, privately owned property located in the Western Cape Province. The site is approximately 180 hectares in extent. A residential dwelling and warehouse are present on the property.

The property has an “undetermined” zoning and was used for agricultural activities approximately 20 years ago.

### Project description

The applicant is proposing to develop a Mixed Industrial Park on the property, including heavy industrial, and light industrial use. The applicant will either develop the property herself, or the property will be sold to a developer. Refer to Figure 2 for the proposed layout of the development.

The development will entail the following:

- The physical alteration and clearance of up to 180.5106ha of vegetation on undeveloped/vacant land.
- It is proposed to develop 5 Heavy Industrial erven ( $\pm 118$ ha) and 5 Light Industrial erven ( $\pm 39$ ha).

### Roads

Roads will be designed for typically for a 10 to 15 years' period, assuming adequate interim maintenance is done on the roads. The minimum road reserve width inside the development is 20 metres. All roads will be provided with formal sidewalks and precast barrier kerbs will be used. A minimum longitudinal grade on roads is 0,75%, minimum cross grade on roads is 3%. and minimum bellmouth radii of 10 metres. Turning circles will be provided inside the development on all dead ends, sufficient for the turning of a heavy vehicle. Refer to table below on the design criteria for the roads.

Road Reserve Width	Road Width	Design Speed	Min Horizontal Curve Radius	Min K Value	Min Vertical Curve Length
20m	7m	35 km/h	20m	2	20m
30m	7m	35 km/h	30m	2	30m

The road pavement will be structurally designed for the appropriate traffic loads. The information below must be seen as a general guide. Only once a geotechnical investigation on the roadbed can be done, will final layerworks be concluded.

- A 300mm deep compacted in-situ layer (sand).
- A gravel G5 Subbase layer or Cement stabilized layer compacted thickness of 150mm.
- A gravel G3 Basecourse layer compacted thickness of 150mm.
- A 40mm Premix Bituminous surface treatment.

Alternatively, the road pavement could be based on the following design:

- A 300mm thick compacted in-situ layer (sand).
- A gravel G5 Subbase layer compacted thickness of 150mm.
- A gravel G4 Basecourse layer compacted thickness of 150mm
- Interlocking concrete paving units (80mm thick and 35 MPa) laid on a 25mm thick sand bedding layer.

### **Railway line**

A siding is proposed, the sidings straight length (“stacking length”) is 950m and the centreline is 30m from the existing centreline and it is 10m from our proposed cadastral boundary.

### **Bulk Water Supply**

The matter of the bulk water supply to the Saldanha area and the Westcoast area in general, is currently being addressed by the Local Authorities and the Department of Water Affairs. We are aware of an existing 375mm Ø water pipe that runs through the site towards Saldanha within the Electrical services servitude and we will negotiate with West Coast District Municipality to be able to connect onto this pipe for potable water. The consumption can only be finalized once the type of Industries to be developed is known.

In terms of potable Water, the potable water reticulation network will be designed based on the following criteria:

- Consumption & Flow
  - An average daily Industrial consumption calculated at 20-30 Kl/day/ha
  - An average daily domestic consumption calculated at 1 000l/day per unit
  - A Peak Factor of 4 is suggested by the design guidelines.
  - Maximum static head of 90m.
  - Minimum static head of 25m.
  - Maximum velocity allowed of 1,5m/s under peak flow conditions.
  - Consumption metering will be done at the erf boundary with individual meters.
- Consumption estimate
  - Light industrial sites: 39 ha @ 20 Kl/day ≈ 780 Kl/day
  - Heavy Industrial sites: 118 ha @ 30 Kl/day ≈ 3 540 Kl/day

TOTAL: 4 320 Kl/day

It must be noted that the types of industry are not currently known and the consumption assumptions above is very conservative. However, if treated sewer effluent can be generated on the development and utilized, it will drastically reduce the estimated consumption.

Water will have to be temporarily stored on site. Portion 15 of the site is set aside for this storage. Refer to Figure 2.

Construction of a round insitu cast reinforced concrete reservoir of 8,64 MI (8 640 000 litre) with a footprint of 26,3m radius and a height of 4m. A pressure pump station (6m x 6m) to obtain the minimum required water pressure in each development will be build adjacent to the reservoir.

### **Electricity**

The following bulk electrical services report is to replace section 8 of Element Consulting Engineer's services report, "Engineering Services Report: Pioneer Industrial Park", dated March 2016.

Supporting Documentation:

The deduction in the following report is based on the following supporting documentation;

- BCD's Draft Motivational Report,
- "Official Gazette 4567, 1989, Land use Planning Ordinance, 1985, Vredenburg-Saldanha Municipality".

According to the above documentation there are 3 different industrial zonings, namely: industrial, light industrial and special industrial zone.

### **Light Industrial (Portions 5,6,9,10,11):**

From an electricity point of view, the fact that all power-driven machinery must be electrically powered and cannot exceed a maximum demand of 100kVA. Then one can argue that the lighting general power offices, aircon etc. will make up an additional 50kVA.

Hence the allowance for these portions would be 150KVA / portion, totalling 750kVA.

### **Industrial (Portions 1-4&13):**

Although BCD's zoning plan reverts to Heavy industrial, Vredenburg-Saldanha's definition for industrial and special industrial is used for this report. No definite guide is given regarding electrical energy limitation.

The description of possible uses does not include processing of raw materials, nor of any manufacturing, which is the type of industry that is the most energy intensive. The restricted industry being applied for is being described as metal storage, not processing, sorting or converting.

It is also clearly stated that for any other use the owner will have to apply to Council for consent. Due to a large land area of these portions a practical electrical allocation for each portion would be 1MVA. Also since a prospective client has already indicated that they would only require 650kVA. Allowance for future growth must also be allowed for, hence the 1000kVA. Thus, the total load for these five plots totals 5MVA.

**Existing 11kV infrastructure:**

Eskom confirmed that the existing 11KV infrastructure, that reticulates over and adjacent to the site, has no spare capacity available. Not even to kick off the project with the 650kVA required currently.

Existing 66kV infrastructure:

Although capacity is unconfirmed from Eskom, it is not recommended to try and tie into to the 66kV network at or near the site, as this will necessitate the construction of a 66/11kV step down substation. The cost of which will be estimated at MR10.

**Electrical bulk supply:**

The nearest source from where 5-6MVA can be supplied is still Eskom's Blouwater Substation, some 5km away. An 11kV overhead transmission line will have to be built from Blouwater to the site. An additional 11kV breaker would have to be supplied and installed at Blouwater sub's 11kV switch room. In our opinion this is not a listed activity in terms of the EIA process, however this must be confirmed by an Environmental Consultant.

The existing Eskom servitude will have to be widened to accommodate the additional 11kV line or alternatively a new separate servitude will have to be registered for the entire 5km route. The overhead line will terminate into a Ring Main Unit or Remote Metering Unit and from there onwards the internal 11kV network will be via and underground cable/s. As and when each plot is developed the required infrastructure is cut into the cable to supply the plot and the cost of which is paid by the developer of each individual plot.

The power supply to the site will be limited to 5-6MVA and hence the supply to each sub divided plot will be limited as set out above. And this fact will have to be disclosed / included in the condition of sale.

Element Consulting Engineers advise that the above approach does not conform to industry norm when compared to similar industrial developments and this is a very much reduced supply capacity. If any additional supply would be required in future, it will not be a simple upgrade of the 11kV as 5MVA

is the limit Eskom allows on 11kV. An increase in supply would mean a complete new installation at a higher voltage, as required.

At the time, when increased capacity would be required, one would have to revisit the capacity available from Eskom, as it is known that the Eskom's network is overburdened in the area with very limited spare capacity.

### **Telecommunication**

Provision will be made during construction for the following infrastructure related to telecommunications:

- All underground ducting that will be required by a Service Provider.
- All the required inspection chambers and draw boxes that will be required for cabling.
- The individual property owners will however be responsible for the application for telecommunication facilities with the relevant authorities.

Note that Element Consulting Engineers will not design the telecommunication reticulation but will only provide ducting for these services. The Client must appoint a specialist to assist with the design.

### **Stormwater**

Provision will be made for a minor and a major system.

The minor stormwater system will be designed as an underground pipe system and associated structures to accommodate the runoff of a 1 in 5-year storm event. The major stormwater system will predominantly consist of suitably graded roads to temporarily accommodate surface runoff of storm events in excess of the 5-year storm. The emergency system recognises failure or malfunction of the minor and / or major systems by providing continuous overland flow routes in order to minimise flooding. It is intended to route all stormwater to a detention facility on the site.

The design criteria are as follows:

#### **Runoff & Flow**

- The MAP for the region is taken as 500mm per annum.
- The minor system is designed to cater for a 5-year return period with a maximum overland flow distance of approximately 150m.
- Stormwater flow velocities in roadways and side channels will be kept as low as possible and related to the surface finish utilized to prevent scour and erosion.
- Roads will be graded to ensure a free and continuous flow of stormwater towards the main drainage routes as well as to prevent the ponding of water in intersections.
- Materials
- Stormwater pipes will generally be Class 100D precast concrete pipes with spigot and socket rubber ring joints, laid on a Class B bedding.



- Minimum pipe diameter is 375mm.
- Length of stormwater pipelines is approximately 4337m.
- The minimum cover on stormwater pipes is generally 0,8m and at least 1,0m at road intersections.
- Approximate distance between manholes or catchpits of 50m but not exceeding 90m.
- Pre-cast concrete ring manholes will be used.
- On completion of construction, the Engineer will supervise and certify the testing of all stormwater lines.

#### General

There is a natural low point in the site that we would propose be utilized as a stormwater evaporation facility. The expected geology of the area will also allow for water to dissipate into the substrata.

#### **Sewage systems/networks**

The sewer system will be designed as a conventional waterborne, gravity reticulation network and will be tied into the existing municipal infrastructure or will be treated on site, stored in a lined facility and recycled for industrial use.

The design of the sewer system is based on the following:

#### Discharge & Flow

- An average discharge of 80% of domestic water consumption/day.
- An un-attenuated Peak Factor of 3,25.
- An infiltration rate of 15%.
- A minimum flow velocity of 0,7m/s achieved at least once per day.

Element Consulting Engineers have indicated, that the preferred option for sewage treatment is WKL environmental solutions BioBloo Mega Range. This system treats flow rates of 1ML to 10.5ML per day.

The benefits of this system are:

- Compact,
- Fully self-contained,
- Suitable for very large applications, very cost effective.
- Water can be re-used for many applications,
- Minimal maintenance,
- Minimal sludge disposal required,
- Hygienic,
- Uses a fully natural process,
- No odour around plant,
- Does away with septic tank emptying,
- Environmentally friendly.

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Refer to Appendix G for more information on the system

### **Solid Waste**

The Local Authority will collect solid waste from collection areas in the development for removal to the nearby municipal dumping site.

### **Storage of dangerous goods**

The proposed project will likely also entail the construction of facilities for the storage and handling of dangerous goods, such as diesel, petrol, oil and lubricants, the construction of a bulk water supply reservoir and the construction of a facility for the treatment of sewage and/or effluent, such as a package plant. The exact combined capacity is unknown at this stage of the process; the capacity will be above >500 cubic metres.

### **Water Use License**

The Pioneer Industrial Park will require a Water Use License in terms of the National Water Act, 1998, for water use activities, the treatment of sewage that may be undertaken on the site. Water supply will be connected to the West Coast District Municipality feeder line that runs in the servitude in the project area towards Saldanha.

Water Use activities that will require licensing are:

- Section 21 (b) – Storage of water,
- Section 21 (e) – Engaging in a controlled activity, identified as such in Section 37(1)(a): Irrigation of any land with waste or water containing waste generated through any industrial activity or by a waterworks.

## **Legal requirements and legislative process**

As part of the proposed Industrial Park Development project, listed activities defined under the National Environmental Management Act, Act No. 107 of 1998 (NEMA, 1998), as amended, and the regulations there under will take place. Relevant listed activities triggered by the proposed activities are described further in this Scoping Report (refer to Part 1.5).

It is the intention of this Scoping Report to provide the necessary information pertaining to the proposed activities associated with the project, as required in terms of the Environmental Impact Assessment Regulations (EIA Regulations R543: EIA Regulations in terms of Chapter 5 of the NEMA, 1998, dated June 2010) under the NEMA, 1998, as amended. This Scoping Report intends to highlight all information relevant to the proposed Industrial Park Development project.

In conjunction to this Application of Environmental Authorisation, the following specialist studies will also be conducted:

- Social and Economic Impact Assessment;

- Traffic Impact Assessment Study,
- Desktop Geohydrological Assessment,
- Botanical Survey,
- Application to the South African Civil Aviation Authority for obstacle approval; and
- Application in terms of Section 53 of the Mineral Petroleum Resources Development Act, 2002.

The diagram below provides a visual representation of the Scoping- and EIA approach followed in terms of NEMA, 1998, as amended, and the Environmental Impact Assessment Regulations, dated 2010.

**Schedule**

**Process**

**Steps**

**Application submission:**

25 Aug 2014

**PPP:**

20 Nov 2014 –

19 January

2015

**Application Phase:**

- EIA Application form
- Background Information

- Submission of Application form and obtaining Project reference number
- I&APs & Stakeholder register/database
- Background Information Document distributed, newspaper advertisement and site notices placed
- Telephonic and electronic notifications
- I&APs and Stakeholder comments recorded

**Draft Scoping Report PPP:**

19 June 2015 –

31 July 2015

**Amended Final Scoping Report PPP:**

15 May-4 June

2016

4 February

2017

**Scoping Phase:**

- Draft Scoping Report and Plan of Study for EIA
- Submission of Final Scoping Report and Plan of Study for EIA
- Submission of second Amended Final Scoping Report

- Letters to inform I&APs and Stakeholders of the availability of the draft Scoping Report
- Draft Scoping Report for public and Stakeholder comment (available on [www.shangoni.co.za](http://www.shangoni.co.za))
- Consultation with local authorities
- Public meeting(s)/open days (if required)
- Incorporation of comments and issues into Scoping Report
- Final Scoping Report submission

**Current Process**

**Draft EIR PPP:**

April – June 2017

August 2017

**EIA Phase:**

- Specialist Studies
- Impact Assessment and Mitigation measures.
- Draft EIA Report
- Final EIA Report

- Letters to inform I&APs and Stakeholders of the availability of the draft EIA Report
- Draft EIA Report for public and Stakeholder comment (available on [www.shangoni.co.za](http://www.shangoni.co.za))
- Continued consultation with local authorities and communication to I&APs
- Incorporation of comments and issues into EIA Report.
- Final EIA Report submission

November

2017

**Final Phase:**

- Authorities decision-making stage

- Notify I&APs and Stakeholders of government authority's decision on the EIA
- Available on [www.shangoni.co.za](http://www.shangoni.co.za)

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## **Anticipated impacts**

For the purpose of the Scoping report it is required by Regulation 28(g) (of Regulation 543) of the EIA Regulations dated 2010, under the NEMA, 1998, as amended, that the major potential impacts that the activities, processes and actions may have on the surrounding environment, are identified.

Regulation 31 (of Regulation 543) of the EIA Regulations, 2010, under the NEMA, 1998, requires that an Environmental Impact Assessment Report (EIR) includes an assessment of the status, extent, duration, probability, reversibility, replaceability of resources and mitigatory potential of the major potential environmental impacts of the proposed project be undertaken.

A baseline identification of the major potential impacts has therefore only been included in this Scoping Report. The prediction of the nature of each impact, the evaluation of each impact by rating its significance and the management and mitigation measures adopted to address each impact, will be assessed during the EIR.

The activities associated with the proposed project are described in full in Part 1.5 and the anticipated impacts of the proposed project are described in Part 7.2.

Potential significant impacts that have been identified during the scoping process are:

**Potential impacts in the design and planning phase**

Activity	Potential impacts
Potential impacts associated with the Storm water management system	<ul style="list-style-type: none"> <li>• Soil, surface water and groundwater pollution during the operational phase due to inadequate design of the storm water system;</li> </ul>
Potential impacts associated with the development and/or expansion of the railway network	<ul style="list-style-type: none"> <li>• Soil, surface water and groundwater pollution;</li> <li>• Generation of noise and subsequent nuisance to nearby landowners;</li> <li>• Generation of atmospheric emissions, dust and odours and subsequent nuisance to nearby landowners;</li> <li>• Loss or disturbance of vegetation;</li> <li>• Loss of topsoil;</li> <li>• Soil erosion;</li> </ul>
Potential impacts associated with the Storage and handling of dangerous goods	<ul style="list-style-type: none"> <li>• Contamination of surface water runoff.</li> </ul>
Potential impacts associated with the Treatment of sewage and waste water	<ul style="list-style-type: none"> <li>• Soil, surface water and groundwater pollution during the operational phase due to inadequate design of the wastewater/sewage treatment system, if applicable;</li> </ul>
Potential Socio-economic impacts	<ul style="list-style-type: none"> <li>• Community and Institutional Structures,</li> <li>• Individual and family changes,</li> <li>• Community Resources,</li> </ul>
Potential impacts on the wetlands (if any)	Disturbance of alleged seasonal pond



**Potential impacts during the construction phase**

Activity	Potential impacts
<p>Construction of a new roads and widening of existing roads on site</p>	<ul style="list-style-type: none"> <li>• Soil, surface water and groundwater pollution;</li> <li>• Generation of noise and subsequent nuisance to nearby landowners;</li> <li>• Generation of atmospheric emissions, dust and odours and subsequent nuisance to nearby landowners;</li> <li>• Loss or disturbance of vegetation;</li> <li>• Loss of topsoil;</li> <li>• Soil erosion;</li> <li>• Disturbance of alleged seasonal pond; and</li> <li>• Contamination of surface water runoff.</li> <li>• Soil, surface water and ground water pollution due to incorrect management and disposal of cement and concrete;</li> <li>• Generation of dust, atmospheric emissions and nuisance;</li> <li>• Wear of access roads, accidents on access roads, unpermitted transport of materials and loss of materials being transported on the access roads;</li> <li>• Potential traffic impacts during the construction phase.</li> <li>• Potential groundwater impacts on the Langebaan Road aquifer.</li> </ul>
<p>Construction of proposed bulk water reservoir</p>	<ul style="list-style-type: none"> <li>• Soil, surface water and groundwater pollution;</li> <li>• Generation of noise and subsequent nuisance to nearby landowners;</li> <li>• Generation of atmospheric emissions, dust and odours and subsequent nuisance to nearby landowners;</li> <li>• Loss or disturbance of vegetation;</li> <li>• Loss of topsoil;</li> </ul>

	<ul style="list-style-type: none"> <li>• Soil erosion;</li> <li>• Disturbance of alleged seasonal pond; and</li> <li>• Contamination of surface water runoff.</li> <li>• Soil, surface water and ground water pollution due to incorrect management and disposal of cement and concrete;</li> <li>• Generation of dust, atmospheric emissions and nuisance;</li> </ul>
Storm water runoff of the Proposed Pioneer Industrial Park	<ul style="list-style-type: none"> <li>• Soil, surface water and groundwater pollution during the operational phase due to inadequate design of the storm water system;</li> <li>• Soil, surface water and ground water pollution due to the run-off of contaminated wash water;</li> <li>• Soil pollution and degradation due to incorrect management, storage and disposal of construction, general and hazardous waste;</li> <li>• Soil, surface water and groundwater pollution due to the contamination of clean surface water runoff;</li> </ul>
Construction of facilities or infrastructure exceeding 1000 metres in length for bulk transportation of sewage, and storm water	<ul style="list-style-type: none"> <li>• Soil, surface water and ground water pollution due to potential hydrocarbon spillages;</li> <li>• Soil, surface water and ground water pollution due to unsanitary conditions onsite;</li> <li>• Generation of dust, atmospheric emissions and nuisance;</li> </ul>
Construction of facilities for the transmission and distribution of electricity	<ul style="list-style-type: none"> <li>• Wastage and depletion of valuable resources such as water and electricity as a result of poor management and redundant use;</li> <li>• Potential impacts on birds as the site is located within the Saldanha Flyway bird corridor,</li> </ul>
Clearance of more than 20 hectares of vegetation	<ul style="list-style-type: none"> <li>• Loss of habitat for fauna species on site; and,</li> <li>• Disturbance or destruction of sites, features or artefacts of archaeological and/or historical importance.</li> <li>• Destruction of the cluster of six, vulnerable <i>Arctopus dregei</i> plants on site</li> <li>• Disturbance of vegetation surrounding the site during site clearance;</li> </ul>

	<ul style="list-style-type: none"> <li>• Generation of dust, atmospheric emissions and nuisance;</li> <li>• Destruction of degraded vegetation onsite;</li> <li>• Unsuitable management of topsoil may lead to loss of fertility of the soil as well as soil erosion;</li> </ul>
Potential impacts associated with the development and/or expansion of the railway network	<ul style="list-style-type: none"> <li>• Visual impact upon receptors in the vicinity of the site, including neighbouring properties and the R27 and potentially R45;</li> <li>• Generation of noise pollution and nuisance;</li> <li>• Generation of dust, atmospheric emissions and nuisance;</li> </ul>
Potential impacts associated with the Storage and handling of dangerous goods	<ul style="list-style-type: none"> <li>• Spillages</li> <li>• Fire hazards</li> <li>• Surface and groundwater pollution</li> <li>• Soil, surface water and ground water pollution due to the incorrect management, storage and disposal of chemicals;</li> </ul>
Potential impacts associated with the Treatment of sewage and waste water	Soil, surface water and groundwater pollution during the operational phase due to inadequate design of the wastewater/sewage treatment system, if applicable;
The construction of facilities or infrastructure for any process that requires a permit or license (Water Use License)	
Potential Socio-economic impacts	<ul style="list-style-type: none"> <li>• Population impact due to potential in-migration,</li> <li>• Community and Institutional Structures,</li> <li>• Individual and family changes,</li> <li>• Community Resources,</li> <li>• Alternative land-use,</li> <li>• Increase in Investment,</li> <li>• Increase in GDP,</li> </ul>

	<ul style="list-style-type: none"> <li>• Increase in employment</li> </ul>
Potential impacts on the wetlands (if any)	None.
Operation of a new roads that were constructed for the site	<ul style="list-style-type: none"> <li>• Potential traffic impacts associated with the development during construction phase.</li> </ul>

### Potential impacts during the operational phase

Activity	Potential impacts
Storm water runoff of the Proposed Pioneer Industrial Park	<ul style="list-style-type: none"> <li>• Soil, surface water and groundwater pollution during the operational phase due to inadequate design of the storm water system;</li> <li>• Soil, surface water and ground water pollution due to the run-off of contaminated wash water;</li> <li>• Soil pollution and degradation due to incorrect management, storage and disposal of construction, general and hazardous waste;</li> <li>• Soil, surface water and groundwater pollution due to the contamination of clean surface water runoff;</li> <li>• Soil pollution and degradation due to incorrect management, storage and disposal of general and hazardous waste;</li> <li>• Soil, surface water and ground water pollution due to unsanitary conditions onsite;</li> </ul>
Operation of facilities or infrastructure exceeding 1000 metres in length for bulk transportation of sewage, and storm water	<ul style="list-style-type: none"> <li>• Soil, surface water and ground water pollution due to potential hydrocarbon spillages;</li> <li>• Soil, surface water and ground water pollution due to unsanitary conditions onsite;</li> <li>• Generation of dust, atmospheric emissions and nuisance;</li> </ul>
Operation of facilities for the transmission and distribution of electricity	<ul style="list-style-type: none"> <li>• Wastage and depletion of valuable resources such as water and electricity as a result of poor management and redundant use;</li> </ul>
Potential impacts associated with the operation of the railway network	<ul style="list-style-type: none"> <li>• Visual impact upon receptors in the vicinity of the site, including neighbouring properties and the R27 and potentially R45;</li> </ul>

	<ul style="list-style-type: none"> <li>• Generation of noise pollution and nuisance;</li> <li>• Generation of dust, atmospheric emissions and nuisance;</li> <li>• Wear of access roads, accidents on access roads, unpermitted transport of materials and loss of materials being transported on the access roads;</li> <li>• Generation of noise pollution and nuisance;</li> </ul>
Potential impacts associated with the Storage and handling of dangerous goods	<ul style="list-style-type: none"> <li>• Spillages</li> <li>• Fire hazards</li> <li>• Surface and groundwater pollution</li> <li>• Soil, surface water and ground water pollution due to the incorrect management, storage and disposal of chemicals,</li> <li>• Soil, surface water and ground water pollution due to potential hydrocarbon spillages;</li> </ul>
Potential impacts associated with the Treatment of sewage and waste water	<ul style="list-style-type: none"> <li>• Potential ineffective treatment of wastewater/effluent and sewage and subsequent pollution of the soil, surface water and ground water;</li> </ul>
Potential Socio-economic impacts	<ul style="list-style-type: none"> <li>• Population impact due to potential in-migration,</li> <li>• Community and Institutional Structures,</li> <li>• Individual and family changes,</li> <li>• Community Resources,</li> <li>• Alternative land-use,</li> <li>• Increase in Investment,</li> <li>• Increase in GDP,</li> <li>• Increase in employment</li> </ul>
Potential impacts on the wetlands (if any)	Potential pollution of the alleged seasonal pan.
Operation of a new roads that were constructed for the site	<ul style="list-style-type: none"> <li>• Potential traffic impacts associated with the development during construction phase.</li> </ul>

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Additional potentially significant impacts may be highlighted at a later stage during the process. The extent of the identified potentially significant impacts will be quantified and will be reported on as part of the EIR.

## Knowledge gaps

The following knowledge gaps and uncertainties have been identified during the scoping process of the proposed Industrial Park Development project and require further investigations that will be carried out comprehensively as part of the EIA process for the proposed project:

At this stage the development will consist of heavy and light industry. Dependent on the type of industry, there will be general and hazardous waste. However, the capacities are not known at this stage. If a waste license is required or additional listed activities are triggered, these will be applied for as part of a new application.

- All relevant specialist studies need to be conducted for the area associated with the proposed Industrial Park Development. The studies identified during the Scoping Phase include the following:
  - Traffic Impact Assessment (as requested by the Western Cape Department of Transport and Public Works);
  - Desktop geohydrological assessment (as requested by CapeNature)
  - Botanical Survey (as requested by CapeNature)
  - Need and Desirability study
  - Wetland study for the seasonal pan as requested by the Department of Water and Sanitation,
  - Application in terms of Section 53 of the Mineral Petroleum Resources Development Act, 2002 (as requested by the Department of Mineral Resources); and
  - Application to the South African Civil Aviation Authority for an obstacle approval (as requested by the South African Civil Aviation Authority).
- While impacts have been identified as part of the scoping process, it is required as part of the EIA Phase to fully quantify impacts to all aspects of the environment.



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## DEFINITIONS

### Air Pollution

According to NEM: AQA means any change in the composition of the air caused by smoke, soot, dust (including fly ash), including cinders, solid particles of any kind, gases, fumes, aerosols and odour substances. [NEM: AQA, (Act 39 of 2004)].

### Atmospheric Emission

Means any emission or entertainment process emanating from a point, non-point or mobile source that results in air pollution. [NEM: AQA, (Act 39 of 2004)].

### Building and Demolition Waste

Means waste, excluding hazardous waste, produced during the construction, alteration, repair or demolition of any structure, and includes rubble, earth, rock and wood displaced during that construction, alteration, repair or demolition [NEM: WA, (Act No. 59, 2008)].

### Demography

The scientific study of human population, especially, with reference to their size, structure and distribution.

### Domestic Waste

Means waste, excluding hazardous waste, that emanates from premises that are used wholly or mainly for residential, educational, health care, sport or recreation purposes [NEM: WA, (Act No. 59, 2008)].

### Environment

The surroundings (biophysical, social and economic) within which humans exist and that are made up of

- (i) the land, water and atmosphere of the earth;
- (ii) micro-organisms, plant and animal life;
- (iii) any part or combination of (i) and (ii) and the interrelationships among and between them; and
- (iv) the physical, chemical, aesthetic and cultural properties and conditions of the foregoing that influence human health and wellbeing.

### Environmental Aspects

Elements of an organisation's activities, products or services that can interact with the environment.



## Environmental Degradation

Refers to pollution, disturbance, resource depletion, loss of biodiversity, and other kinds of environmental damage; usually refers to damage occurring accidentally or intentionally as a result of human activities.

## Environmental Impacts

Any change to the environment, whether adverse or beneficial, wholly or partially resulting from an organisation's activities, products or services.

## Environmental Impact Assessment

A study of the environmental consequences of a proposed course of action.

## Environmental Impact Report

A report assessing the potential significant impacts as identified during the environmental impact assessment.

## Environmental Impact

An environmental change caused by some human act.

## General Waste

Means waste that does not pose immediate hazard or threat to health or to the environment, and includes-

- (a) domestic waste;
- (b) building and demolition waste;
- (c) business waste; and
- (d) inert waste [*NEM: WA, (Act No. 59, 2008)*].

## Hazardous waste

Means any waste that contains organic or inorganic elements compounds that may, owing to the inherent physical, chemical or toxicological characteristics of that waste, have a detrimental impact on health and the environment [*NEM: WA, (Act No. 59, 2008)*].

## Land use

Land use is defined as the various ways in which land may be employed or occupied. Planners compile, classify, study and analyse land use data for many purposes, including the identification of trends, the forecasting of space and infrastructure requirements, the provision of adequate land area



for necessary types of land use, and the development or revision of comprehensive plans and land use regulations.

## Pollution

Pollution means any change in the environment caused by -

- (i) substances;
- (ii) radioactive or other waves; or
- (iii) noise, odours, dust or heat,

emitted from any activity, including the storage or treatment of waste or substances, construction and the provision of services, whether engaged in by any person or an organ of state, where that change has an adverse effect on human health or wellbeing or on the composition, resilience and productivity of natural or managed ecosystems, or on materials useful to people, or will have such an effect in the future [NEM: WA, (Act No. 59, 2008)].

## Pollution Prevention

Pollution prevention can be any activity that reduces or eliminates pollutants prior to recycling, treatment, control or disposal. [NEM: AQA, (Act 39 of 2004)]

## Public Participation Process

A process of involving the public in order to identify needs, address concerns, in order to contribute to more informed decision making relating to a proposed project, programme or development.

## Registered Interested and Affected Party

In relation to an application, means an interested and affected party whose name is recorded in the register opened for that application.

## Topography

Topography, a term in geography, refers to the "lay of the land" or the physio-geographic characteristics of land in terms of elevation, slope and orientation.

## Vegetation

All of the plants growing in and characterising a specific area or region; the combination of different plant communities found there.

## Waste

As per the definition of the National Environmental Management Waste Act, Act 59 of 2008 - means any substance, whether or not that substance can be reduced, re-used, recycled and recovered—

- (b) that is surplus, unwanted, rejected, discarded, abandoned or disposed of;



- (c) which the generator has no further use of for the purposes of production;
- (d) that must be treated or disposed of; or
- (e) that is identified as a waste by the Minister by notice in the Gazette, and includes waste generated by the mining, medical or other sector, but— (i) a by-product is not considered waste; and 3(ii) any portion of waste, once re-used, recycled and recovered, ceases to be waste.



## ABBREVIATIONS

<b>BID</b>	-	Background Information Document
<b>CRR</b>	-	Comments and Responses Report
<b>DWS</b>	-	Department of Water and Sanitation
<b>EAP</b>	-	Environmental Assessment Practitioner
<b>ECA</b>	-	Environmental Conservation Act of 1989
<b>EIA</b>	-	Environmental Impact Assessment
<b>EIR</b>	-	Environmental Impact Report
<b>EMF</b>	-	Environmental Management Framework
<b>EMP</b>	-	Environmental Management Programme
<b>GN</b>	-	Government Notice
<b>HWC</b>	-	Heritage Western Cape
<b>I&amp;AP</b>	-	Interested and Affected Party
<b>NEMA</b>	-	National Environmental Management Act, Act No. 107 of 1998 as amended
<b>R</b>	-	Regulation
<b>S&amp;EIR</b>	-	Scoping and Environmental Impact Reporting
<b>WCDEADP</b>	-	Western Cape Department of Environmental Affairs and Development Planning



# 1. INTRODUCTION

This Amended Final Scoping Report forms part of an application for environmental authorisation for a proposed Industrial Park Development near Vredenburg, Western Cape. The application is made in terms of the EIA Regulations, dated 2010, under the National Environmental Management Act (NEMA), 1998 (Act No. 107 of 1998).

The application process is undertaken on behalf of the applicant, Ms A.M. Thom, by Shangoni Management Services (Pty) Ltd. Shangoni was appointed, as independent environmental practitioner, to assist the applicant in undertaking the process as prescribed in the before mentioned environmental legislation.

An application to undertake an Environmental Impact Assessment (Scoping and Environmental Impact Reporting) process was submitted to the identified competent authority, the Western Cape Department of Environmental Affairs and Development Planning. The Department subsequently registered the project and the formal process was thereby initiated. All the findings from the scoping process are included in this report.

This Scoping Report is divided into the following parts:

- Part 1: Introduction (including a description of the project).
- Part 2: Nature and extent of the environment affected by activity.
- Part 3: Applicable legislation and guidelines.
- Part 4: Public Participation Process.
- Part 5: Need and desirability for the project.
- Part 6: Description of alternatives.
- Part 7: Identification of anticipated environmental Impacts.
- Part 8: Plan of study for EIA.
- Part 9: Conclusion.

## 1.1 Process followed

### 1.1.1 Objectives of the scoping process and the Scoping Report

Scoping is the procedure that is undertaken during the initial stages of the Planning Phase of a project, and is used to determine the extent of, and approach to an EIA (i.e. terms of reference). This process is required for the proposed project in terms of the NEMA, 1998, and the EIA Regulations, 2010, there under.





The objectives of the Scoping Process are to:

- Provide an opportunity for the Applicant, relevant Authorities and Interested and Affected Parties (I&APs) to exchange information and express their views and concerns regarding the proposed project before the EIA is undertaken. This is a requirement in terms of Regulation 54 of the EIA Regulations, dated 2010.
- Focus the study on identifying relevant anticipated impacts, issues and concerns, as well as reasonable alternatives (as per Regulation 28 of the EIA Regulations, dated 2010), and knowledge gaps, to ensure that the resulting EIA is useful to the Authorities for decision-making, and addresses the impacts, issues and concerns as identified.
- Facilitate an efficient assessment process that optimises time, resources and costs.

### 1.1.2 Methodology applied to conducting the scoping process

The figure below indicates the methodology that was applied in conducting the scoping process.

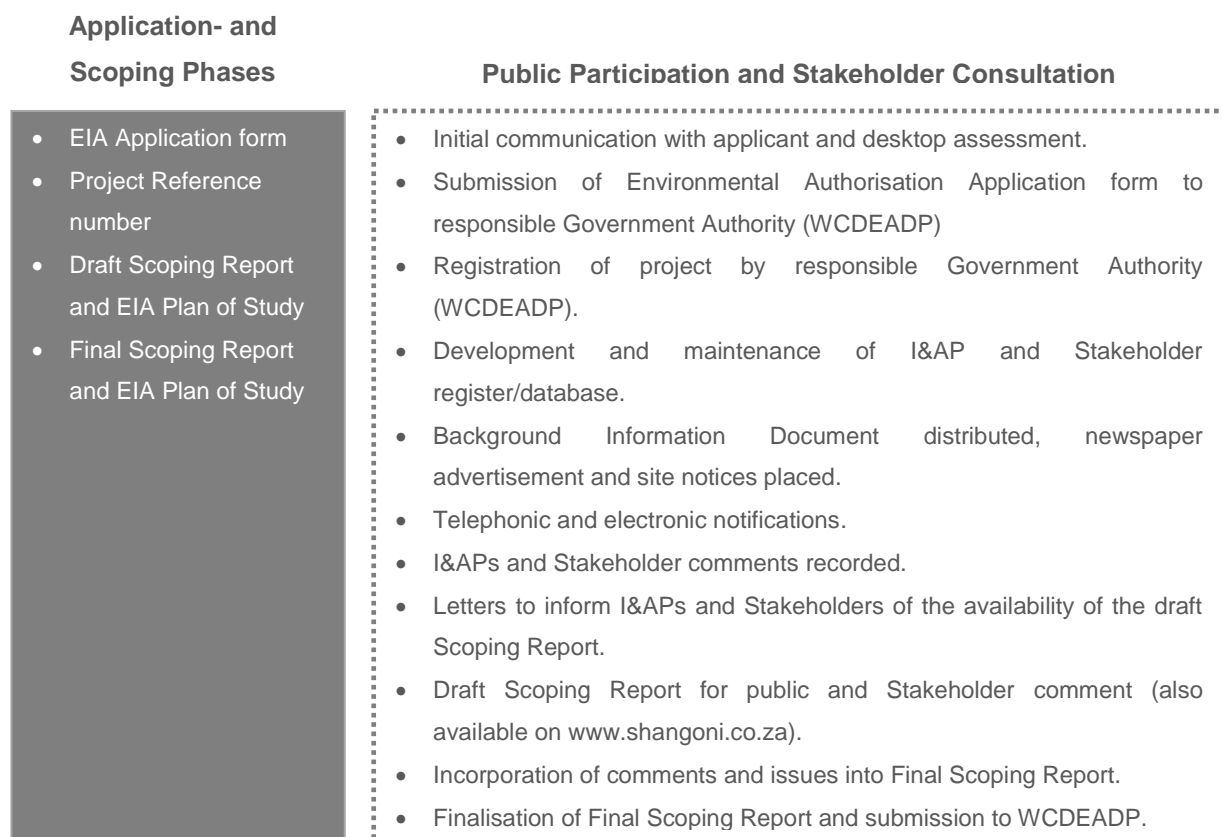


Figure 1: Methodology applied to conducting the scoping process



### 1.1.3 The Scoping Report in terms of the requirements of NEMA, 1998

Regulation 28(1) of the EIA Regulations, 2010 under the NEMA, 1998, lists aspects that must be included in Scoping Reports. Table 1 indicates the parts where information has been provided as part of this Scoping Report.

Table 1: The Scoping Report in terms of the EIA Regulations, 2010, under the NEMA, 1998

Regulation No:		Description	Scoping Report Part
R543 Regulation 28(1)(a)		Details of the Environmental Assessment Practitioner (EAP).	Part 1 & Appendix C
	(i)	Details of the EAP who prepared the report.	
	(ii)	Details of the expertise of the EAP to carry out scoping procedures.	
R543 Regulation 28(1)(b)		A description of the proposed activity.	Part 1
R543 Regulation 28(1)(c)		Any feasible and reasonable alternatives that have been identified.	Part 6
R543 Regulation 28(1)(d)		A description of the property on which the activity is to be undertaken and the location of the activity on the property.	Part 1
R543 Regulation 28(1)(e)		A description of the environment that may be affected by the activity and the manner in which the physical, biological, social, economic and cultural aspects of the environment may be affected by the proposed activity.	Part 2
R543 Regulation 28(1)(f)		An indication of all legislation and guidelines that have been considered in the preparation of the scoping report.	Part 3
R543 Regulation 28(1)(g)		A description of environmental issues and potential impacts, including cumulative impacts that have been identified.	Part 7
R543 Regulation 28(1)(h)		Details of the public participation process conducted in terms of Regulation 27(a).	Part 4 & Appendix D
	(i)	Steps taken to notify potentially interested and affected parties of the application.	
	(ii)	Proof that notice boards, advertisements and notices notifying potentially interested and affected parties of the application have been displayed, placed or given.	
	(iii)	A list of all persons or organisations that were identified and registered in terms of Regulation 55 as interested and affected parties in relation to the application.	



Regulation No:		Description	Scoping Report Part
R543 Regulation 28(1)(h)	(iv)	A summary of the issues raised by interested and affected parties, the date of receipt of, and the response of the EAP to those issues.	Part 4 & Appendix D
R543 Regulation 28(1)(i)		A description of the identified potential alternatives to the proposed activity, including advantages and disadvantages that the proposed activity or alternatives may have on the environment and communities that may be affected by the activity.	Part 6
R543 Regulation 28(1)(j)		A description of the need and desirability of the proposed activity.	Part 5
R543 Regulation 28(1)(k)		Copies of any representations and comments received in connection with the application or the scoping report from interested and affected parties.	Part 4 & Appendix D
R543 Regulation 28(1)(l)		Copies of any minutes of any meetings held by the EAP with interested and affected parties and other role players that record the views of the participants.	Part 4 & Appendix D
R543 Regulation 28(1)(m)		Any responses by the EAP to those representations and comments and views.	Part 4 & Appendix D
R543 Regulation 28(1)(n)		A plan of study for Environmental Impact Assessment (EIA), which sets out the proposed approach to the EIA of the application.	Part 8
	(i)	A description of tasks that will be undertaken as part of the EIA process including any specialist reports or specialised processes, and the manner in which such tasks will be undertaken.	
	(ii)	An indication of the stages at which the competent authority will be consulted.	Part 4 & Part 8
	(iii)	A description of the proposed method of assessing the environmental issues and alternatives, including the option of not proceeding with the activity.	Part 7 & Part 8
	(iv)	Particulars of the public participation process that will be conducted during the EIA process.	Part 4 & Part 8
R543 Regulation 28(1)(o)		Any specific information required by the competent authority.	Section 1.5
R543 Regulation 28(1)(p)		Any other matters required in terms of Section 24(4) (a) and (b) of the Act.	N/A*

The EIA process will be undertaken subsequent to the scoping process and will be conducted in accordance with Regulations 31 of the Environmental Impact Assessment Regulations, 2010, under



the NEMA, 1998. The EIA document for the proposed project will include detailed information pertaining to anticipated or potential impacts that may be associated with the proposed project.

## 1.2 Details of the project applicant

<b>Name of Applicant</b>	Ms A.M. Thom
<b>Postal Address</b>	P.O. Box 589, Vredenburg, 7380
<b>Telephone No.</b>	022 715 3034
<b>Fax No.</b>	012 365 1266
<b>Farm name and portion on which the activities take place</b>	Portion 39 (remaining extent) of the farm Eenzaamheid, 135, Malmesbury RD
<b>Title Deed Number and 21 Digit Code</b>	C04600000000013500039
<b>Co-ordinates of operation</b>	32°56'26.17" S 18°04'0.72" E

## 1.3 Appointed Environmental Assessment Practitioner

<b>Name of firm</b>	Shangoni Management Services (Pty) Ltd.	
<b>Postal address</b>	PO Box 74726 Lynwood Ridge Pretoria 0040	
<b>Telephone No.</b>	012 807 7036	
<b>Fax</b>	012 807 1014/086 643 5360	
<b>E-mail</b>	lizette@shangoni.co.za	
<b>Team of Environmental Assessment Practitioners on project</b>		
<b>Name</b>	<b>Qualifications &amp; experience to conduct the EIA*</b>	<b>Responsibility</b>
Mr. Jan Nel	<ul style="list-style-type: none"> <li>MSc Environmental Management (University of Johannesburg)</li> <li>More than 10 years' experience conducting Environmental Impact Assessments and Waste Management License Applications</li> </ul>	EIA Project Leader and Co-ordinator
Ms. Lee-Anne Fellowes	<ul style="list-style-type: none"> <li>B-tech degree in Nature Conservation (University of Technology)</li> <li>More than 10 years' experience conducting Environmental Impact Assessments and Waste Management License Applications</li> </ul>	EAP
Ms Karien du Plessis	<ul style="list-style-type: none"> <li>B.Sc. (Hons) Environmental Management</li> </ul>	EAP

	<ul style="list-style-type: none"> <li>• Less than 1 years' experience conducting Environmental Impact Assessments and Waste Management License Applications.</li> </ul>	
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\* Detailed CVs for the project team are attached (Appendix C).

### **Jan Nel – Project Manager**

Jan has been actively involved over the past 16 years in environmental management within the mining industry, providing assistance with EMP Compliance, Environmental Impact Assessments (EIA), Financial Provision Calculations, Closure Plans, Rehabilitation Plans, Environmental Management Programme Reports (EMP) and EMP Performance Assessments. He is further experienced in environmental management through third party certification audits as well as Environmental Management System (EMS) implementation and has in excess of 8000 audit hours to date. Jan is also the vice chairman of TC 207 in South Africa.

### **Lee-Anne Fellowes – Environmental Practitioner**

Lee-Anne has a B-tech degree in Nature Conservation from the Tshwane University of Technology and holds a National Diploma in Nature Conservation. She gained valuable experience in the conservation and the environmental field through her employment at Gauteng's Department of Agriculture, Conservation and Environment. Her areas of expertise include alien invasive surveys & conservation plans, Environmental Impact Assessments (EIA), Environmental Management Programmes (EMP), Section 24G Rectification Applications, Basic Assessments and Project Management. Lee-Anne has 10 years' experience at Shangoni Management Services as project lead to EIA's and EMP's.

### **Karien Venter – Environmental Practitioner**

Karien obtained a B.Sc. degree in Biological Science with Zoology and Physiology as majors. She went on to complete her B.Sc. Honors degree in Environmental Science at the North-West University majoring in Aquatic Ecosystem Health. She is currently assisting in Waste Management License Applications and Environmental Impact Assessments (EIAs) at Shangoni.



## 1.4 Current situation

The land on which the proposed development will take place is not currently zoned for a specific use (undetermined). The site has historically been used for agricultural activities and livestock currently graze the property. There is also a homestead and a warehouse on the property.

Table 2 shows the current landowner.

Table 2: Owner of the project property

Farm Name	Title deed	Owner
Eenzaamheid 135	T73752/1991	Ms AM Thom

## 1.5 Proposed activity(ies)

The following information was extracted from the Engineering Services Report: Pioneer Industrial Park Industrial Development on Portion 39 Of Farm 135 Eenzaamheid, Saldanha, done by Element Consulting Engineers Dated March 2016.

The applicant is proposing to develop a Mixed Industrial Park on the property, including heavy industrial, and light industrial use. The applicant will either develop the property herself, or the property will be sold to a developer. Refer to Figure 2 for the proposed layout of the development.

The development will entail the following:

- The physical alteration and clearance of up to 180.5106ha of vegetation on undeveloped/vacant land.
- It is proposed to develop 5 Heavy Industrial erven ( $\pm 118$ ha) and 5 Light Industrial erven ( $\pm 39$ ha).

### 1.5.1 Roads

Roads will be designed for typically for a 10 to 15 years' period, assuming adequate interim maintenance is done on the roads. The minimum road reserve width inside the development is 20 metres. All roads will be provided with formal sidewalks and precast barrier kerbs will be used. A minimum longitudinal grade on roads is 0,75%, minimum cross grade on roads is 3%. and minimum bellmouth radii of 10 metres. Turning circles will be provided inside the development on all dead ends, sufficient for the turning of a heavy vehicle. Refer to table below on the design criteria for the roads.

Road Reserve Width	Road Width	Design Speed	Min Horizontal Curve Radius	Min K Value	Min Vertical Curve Length
20m	7m	35 km/h	20m	2	20m
30m	7m	35 km/h	30m	2	30m



The road pavement will be structurally designed for the appropriate traffic loads. The information below must be seen as a general guide. Only once a geotechnical investigation on the roadbed can be done, will final layerworks be concluded.

- A 300mm deep compacted in-situ layer (sand).
- A gravel G5 Subbase layer or Cement stabilized layer compacted thickness of 150mm.
- A gravel G3 Basecourse layer compacted thickness of 150mm.
- A 40mm Premix Bituminous surface treatment.

Alternatively, the road pavement could be based on the following design:

- A 300mm thick compacted in-situ layer (sand).
- A gravel G5 Subbase layer compacted thickness of 150mm.
- A gravel G4 Basecourse layer compacted thickness of 150mm
- Interlocking concrete paving units (80mm thick and 35 MPa) laid on a 25mm thick sand bedding layer.

### 1.5.2 Railway line

A siding is proposed, the sidings straight length (“stacking length”) is 950m and the centreline is 30m from the existing centreline and it is 10m from our proposed cadastral boundary. Refer to Figure 4.

### 1.5.3 Bulk Water Supply

The matter of the bulk water supply to the Saldanha area and the Westcoast area in general, is currently being addressed by the Local Authorities and the Department of Water Affairs. We are aware of an existing 375mm Ø water pipe that runs through the site towards Saldanha within the Electrical services servitude and we will negotiate with West Coast District Municipality to be able to connect onto this pipe for potable water. The consumption can only be finalized once the type of Industries to be developed is known.

In terms of potable Water, the potable water reticulation network will be designed based on the following criteria:

- Consumption & Flow
  - An average daily Industrial consumption calculated at 20-30 Kl/day/ha
  - An average daily domestic consumption calculated at 1 000l/day per unit
  - A Peak Factor of 4 is suggested by the design guidelines.
  - Maximum static head of 90m.
  - Minimum static head of 25m.
  - Maximum velocity allowed of 1,5m/s under peak flow conditions.
  - Consumption metering will be done at the erf boundary with individual meters.
- Consumption estimate
  - Light industrial sites: 39 ha @ 20 Kl/day ≈ 780 Kl/day
  - Heavy Industrial sites: 118 ha @ 30 Kl/day ≈ 3 540 Kl/day



TOTAL: 4 320 Kl/day

It must be noted that the types of industry are not currently known and the consumption assumptions above is very conservative. However, if treated sewer effluent can be generated on the development and utilized, it will drastically reduce the estimated consumption.

Water will have to be temporarily stored on site. Portion 15 of the site is set aside for this storage. Refer to Figure 2.

Construction of a round insitu cast reinforced concrete reservoir of 8,64 MI (8 640 000 litre) with a footprint of 26,3m radius and a height of 4m. A pressure pump station (6m x 6m) to obtain the minimum required water pressure in each development will be build adjacent to the reservoir.

#### **1.5.4 Electricity**

The following bulk electrical services report is to replace section 8 of Element Consulting Engineer's services report, "Engineering Services Report: Pioneer Industrial Park", dated March 2016.

Supporting Documentation:

The deduction in the following report is based on the following supporting documentation;

- BCD's Draft Motivational Report,
- "Official Gazette 4567, 1989, Land use Planning Ordinance, 1985, Vredenburg-Saldanha Municipality".

According to the above documentation there are 3 different industrial zonings, namely: industrial, light industrial and special industrial zone.

#### **Light Industrial (Portions 5,6,9,10,11):**

From an electricity point of view, the fact that all power-driven machinery must be electrically powered and cannot exceed a maximum demand of 100kVA. Then one can argue that the lighting general power offices, aircon etc. will make up an additional 50kVA.

Hence the allowance for these portions would be 150KVA / portion, totalling 750kVA.

#### **Industrial (Portions 1-4&13):**

Although BCD's zoning plan reverts to Heavy industrial, Vredenburg-Saldanha's definition for industrial and special industrial is used for this report. No definite guide is given regarding electrical energy limitation.





The description of possible uses does not include processing of raw materials, nor of any manufacturing, which is the type of industry that is the most energy intensive. The restricted industry being applied for is being described as metal storage, not processing, sorting or converting.

It is also clearly stated that for any other use the owner will have to apply to Council for consent. Due to a large land area of these portions a practical electrical allocation for each portion would be 1MVA. Also since a prospective client has already indicated that they would only require 650kVA. Allowance for future growth must also be allowed for, hence the 1000kVA. Thus, the total load for these five plots totals 5MVA.

**Existing 11kV infrastructure:**

Eskom confirmed that the existing 11KV infrastructure, that reticulates over and adjacent to the site, has no spare capacity available. Not even to kick off the project with the 650kVA required currently.

Existing 66kV infrastructure:

Although capacity is unconfirmed from Eskom, it is not recommended to try and tie into to the 66kV network at or near the site, as this will necessitate the construction of a 66/11kV step down substation. The cost of which will be estimated at MR10.

**Electrical bulk supply:**

The nearest source from where 5-6MVA can be supplied is still Eskom's Blouwater Substation, some 5km away. An 11kV overhead transmission line will have to be built from Blouwater to the site. An additional 11kV breaker would have to be supplied and installed at Blouwater sub's 11kV switch room. In our opinion this is not a listed activity in terms of the EIA process, however this must be confirmed by an Environmental Consultant.

The existing Eskom servitude will have to be widened to accommodate the additional 11kV line or alternatively a new separate servitude will have to be registered for the entire 5km route. The overhead line will terminate into a Ring Main Unit or Remote Metering Unit and from there onwards the internal 11kV network will be via and underground cable/s. As and when each plot is developed the required infrastructure is cut into the cable to supply the plot and the cost of which is paid by the developer of each individual plot.

The power supply to the site will be limited to 5-6MVA and hence the supply to each sub divided plot will be limited as set out above. And this fact will have to be disclosed / included in the condition of sale.

Element Consulting Engineers advise that the above approach does not conform to industry norm when compared to similar industrial developments and this is a very much reduced supply capacity. If any additional supply would be required in future, it will not be a simple upgrade of the 11kV as 5MVA



is the limit Eskom allows on 11kV. An increase in supply would mean a complete new installation at a higher voltage, as required.

At the time, when increased capacity would be required, one would have to revisit the capacity available from Eskom, as it is known that the Eskom's network is overburdened in the area with very limited spare capacity.

### **1.5.5 Telecommunication**

Provision will be made during construction for the following infrastructure related to telecommunications:

- All underground ducting that will be required by a Service Provider.
- All the required inspection chambers and draw boxes that will be required for cabling.
- The individual property owners will however be responsible for the application for telecommunication facilities with the relevant authorities.

Note that Element Consulting Engineers will not design the telecommunication reticulation but will only provide ducting for these services. The Client must appoint a specialist to assist with the design.

### **1.5.6 Stormwater**

Provision will be made for a minor and a major system.

The minor stormwater system will be designed as an underground pipe system and associated structures to accommodate the runoff of a 1 in 5-year storm event. The major stormwater system will predominantly consist of suitably graded roads to temporarily accommodate surface runoff of storm events in excess of the 5-year storm. The emergency system recognises failure or malfunction of the minor and / or major systems by providing continuous overland flow routes in order to minimise flooding. It is intended to route all stormwater to a detention facility on the site.

The design criteria are as follows:

#### **Runoff & Flow**

- The MAP for the region is taken as 500mm per annum.
- The minor system is designed to cater for a 5-year return period with a maximum overland flow distance of approximately 150m.
- Stormwater flow velocities in roadways and side channels will be kept as low as possible and related to the surface finish utilized to prevent scour and erosion.
- Roads will be graded to ensure a free and continuous flow of stormwater towards the main drainage routes as well as to prevent the ponding of water in intersections.
- Materials
- Stormwater pipes will generally be Class 100D precast concrete pipes with spigot and socket rubber ring joints, laid on a Class B bedding.



- Minimum pipe diameter is 375mm.
- Length of stormwater pipelines is approximately 4337m.
- The minimum cover on stormwater pipes is generally 0,8m and at least 1,0m at road intersections.
- Approximate distance between manholes or catchpits of 50m but not exceeding 90m.
- Pre-cast concrete ring manholes will be used.
- On completion of construction, the Engineer will supervise and certify the testing of all stormwater lines.

#### General

There is a natural low point in the site that we would propose be utilized as a stormwater evaporation facility. The expected geology of the area will also allow for water to dissipate into the substrata.

#### 1.5.7 Sewage systems/networks

The sewer system will be designed as a conventional waterborne, gravity reticulation network and will be tied into the existing municipal infrastructure or will be treated on site, stored in a lined facility and recycled for industrial use.

The design of the sewer system is based on the following:

##### Discharge & Flow

- An average discharge of 80% of domestic water consumption/day.
- An un-attenuated Peak Factor of 3,25.
- An infiltration rate of 15%.
- A minimum flow velocity of 0,7m/s achieved at least once per day.

Element Consulting Engineers have indicated, that the preferred option for sewage treatment is WKL environmental solutions BioBloo Mega Range. This system treats flow rates of 1ML to 10.5ML per day.

The benefits of this system are:

- Compact,
- Fully self-contained,
- Suitable for very large applications, very cost effective.
- Water can be re-used for many applications,
- Minimal maintenance,
- Minimal sludge disposal required,
- Hygienic,
- Uses a fully natural process,
- No odour around plant,
- Does away with septic tank emptying,



- Environmentally friendly.

Refer to Appendix G for more information on the system.

#### **1.5.8 Solid Waste**

The Local Authority will collect solid waste from collection areas in the development for removal to the nearby municipal dumping site.

#### **1.5.9 Storage of dangerous goods**

The proposed project will likely also entail the construction of facilities for the storage and handling of dangerous goods, such as diesel, petrol, oil and lubricants, the construction of a bulk water supply reservoir and the construction of a facility for the treatment of sewage and/or effluent, such as a package plant. The exact combined capacity is unknown at this stage of the process; the capacity will not exceed >500 cubic metres.

#### **1.5.10 Water Use License**

The Pioneer Industrial Park will require a Water Use License in terms of the National Water Act, 1998, for water use activities, the treatment of sewage that may be undertaken on the site. Water supply will be connected to the West Coast District Municipality feeder line that runs in the servitude in the project area towards Saldanha.

Water Use activities that will require licensing are:

- Section 21 (b) – Storage of water
- Section 21 (e) – Engaging in a controlled activity, identified as such in Section 37(1)(a): Irrigation of any land with waste or water containing waste generated through any industrial activity or by a waterwork.



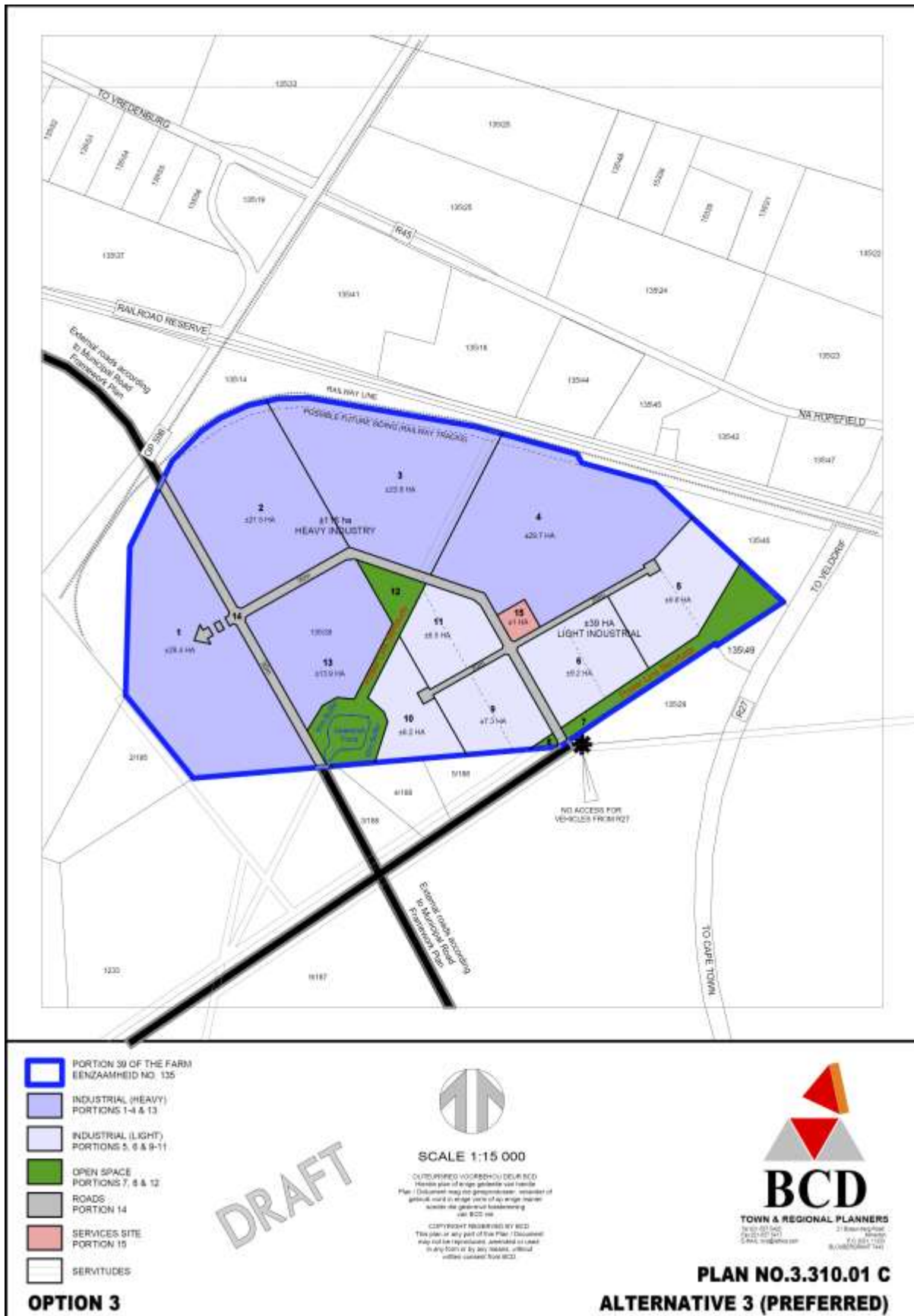


Figure 2: Proposed layout plan (option 3)

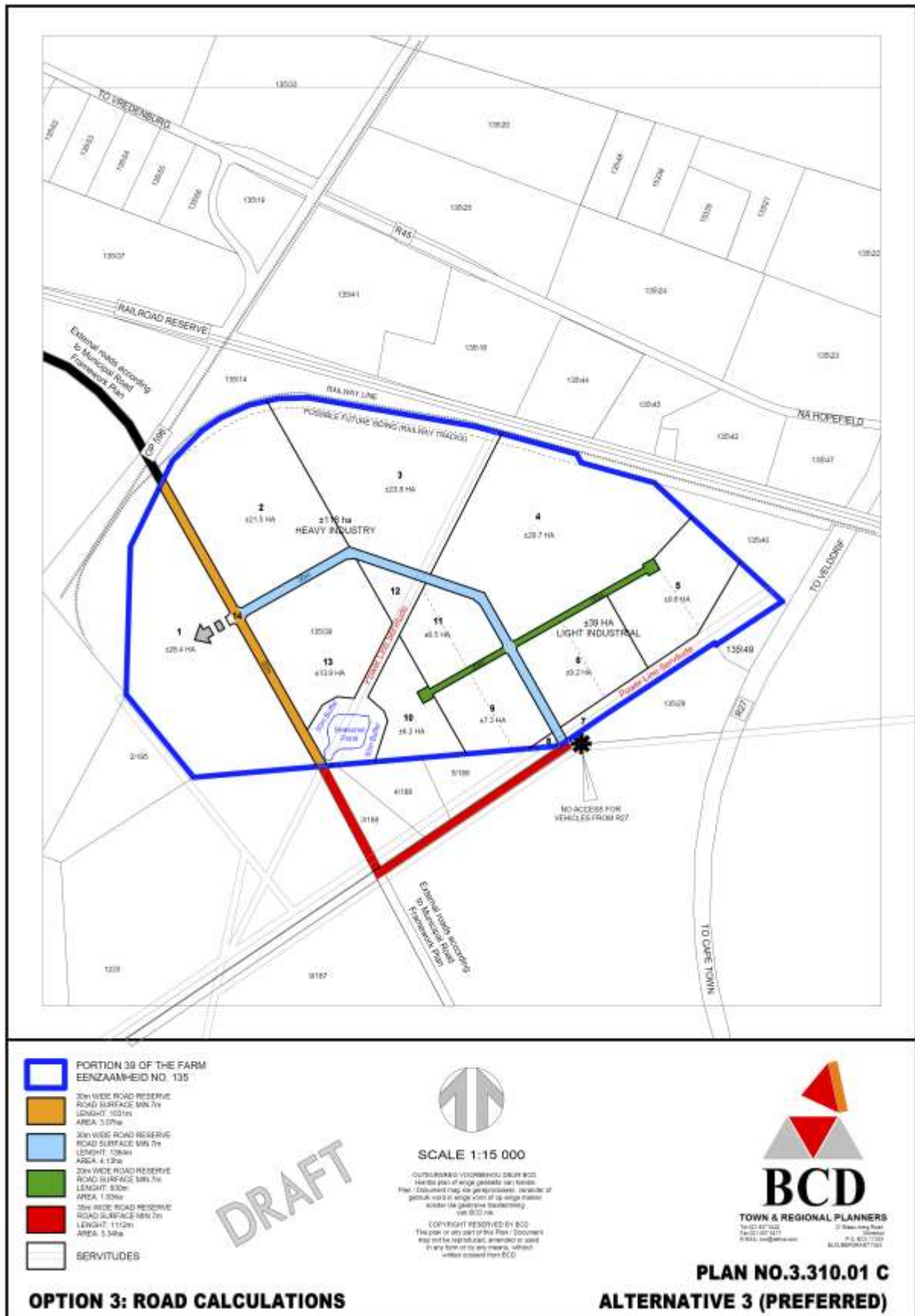


Figure 3: Option 3 road calculations





Figure 4: Proposed siding

Table 3 and Table 4 show the listed activities in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998) that are being applied for in terms of the 2010 and 2014 Environmental Management Regulations.





Table 3: Listed activities in terms of GN. No R 544, 545 and 546, dated 2010 under NEMA, 1998

Number and date of the relevant notice	Activity No	Description	Relation to Listed Activity triggered by the development
GN. No. R 544 Listing Notice 1 18 June 2010	9	The construction of facilities or infrastructure exceeding 1000 metres in length for the bulk transportation of water, sewage or storm water – (i) With an internal diameter of 0.36 metres or more; or (ii) With a peak throughput of 120 litres per second or more, Excluding were: a. Such facilities or infrastructure are for bulk transportation of water, sewage or storm water or storm water drainage inside a road reserve; or b. Where such construction will occur within urban areas but further than 32 metres from a watercourse, measured from the edge of the watercourse.	Storm water on site will piped to the lowest point of the site and have a diameter of 0.36 metres.  Water reticulation pipe will be less than 0.36 meters' in diameter, water will be connected to the West Coast District Municipality feeder line that runs in the servitude in the project area towards Saldanha.  4000 cubic metres of sewage will be treated on site per day.  There are no existing road reserves on the property and the property is not situated within an urban area.
GN. No. R 544 Listing Notice 1 18 June 2010	13	The construction of facilities or infrastructure for the storage, or for the storage and handling, of a dangerous good, where such storage occurs in containers with a combined capacity of 80 but not exceeding 500 cubic metres.	The exact combined capacity is unknown at this stage. However, the heavy and light industrial industries proposed will require the storage of dangerous goods and will not exceed 500 cubic metres.
GN. No. R 544 Listing Notice 1 18 June 2010	22	The construction of a road, outside urban areas, (i) with a reserve wider than 13,5 meters or,	Roads will be constructed within the Pioneer Industrial Park with a road reserve wider than 20 metre and the road diameter is 7 metres. The combined length of proposed roads is approximately 4337m. Refer to Figure 3.
GN. No. R 544 Listing Notice 1 18 June 2010	55A	The construction of facilities for the treatment of effluent, wastewater or sewage with a daily throughput capacity of more than 2000 cubic metres but less than 15000 cubic metres.	Construction of a sewage package plant to treat 4000 cubic metres per day.



Number and date of the relevant notice	Activity No	Description	Relation to Listed Activity triggered by the development
GN. No. R 545 Listing Notice 2 18 June 2010	5	The construction of facilities or infrastructure for any process or activity which requires a permit or license in terms of national or provincial legislation governing the generation or release of emissions, pollution or effluent and which is not identified in Notice No. 544 of 2010 or included in the list of waste management activities published in terms of section 19 of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) in which case that Act will apply.	The development will require a Water Use License in terms of the National Water Act, 1998, for Water Use Activities that will take place on the property. This will include, treatment of 4000 cubic metres of sewage. Activities applied for include: Section 21 (b) – Storage of water, Section 21 (e) – Engaging in a controlled activity, identified as such in Section 37(1)(a): Irrigation of any land with waste or water containing waste generated through any industrial activity or by a waterworks.
GN. No. R 545 Listing Notice 2 18 June 2010	11	The construction of railway lines, stations or shunting yards, excluding - (i) railway lines, shunting yards and railway stations in industrial complexes or zones; (ii) underground railway lines in a mining area; and (iii) additional railway lines within the reserve of an existing railway line;	A siding is proposed, the sidings straight length (“stacking length”) is 950m and the centreline is 30m from the existing centreline and it is 10m from our proposed cadastral boundary.
GN. No. R 545 Listing Notice 2 18 June 2010	15	Physical alteration of undeveloped, vacant or derelict land for residential, retail, commercial, recreational, industrial or institutional use where the total area to be transformed is 20 hectares or more; except where such physical alteration takes place for: i. linear development activities; or i. agriculture or afforestation where activity 16 in this Schedule will apply.	More than 20 hectares will be disturbed, it is proposed to develop 5 Heavy Industrial erven (±118ha) and 5 Light Industrial erven (±39ha).  This development is not a linear development and the physical alternation/clearance is not for agriculture or afforestation activities.
GN. No. R 546 Listing Notice 3 18 June 2010	2	The construction of reservoirs for bulk water supply with a capacity of more than 250 cubic metres.  (d) In Western Cape: iii. All areas outside urban areas.	Construction of a round <i>insitu</i> cast reinforced concrete reservoir of 8,64 MI (8 640 000 litres) with a footprint of 26,3m radius and a height of 4m. A pressure pump station (6m x 6m) to obtain the minimum required water pressure in each development will be build adjacent to the reservoir.
GN. No. R 546	14	The clearance of an area of 5 hectares or more of vegetation where 75% or	More than 20 hectares will be disturbed, it is proposed to develop 5

Number and date of the relevant notice	Activity No	Description	Relation to Listed Activity triggered by the development
Listing Notice 3 18 June 2010		<p>more of the vegetative cover constitutes indigenous vegetation, except where such removal of vegetation is required for:</p> <p>(1) purposes of agriculture or afforestation inside areas identified in spatial instruments adopted by the competent authority for agriculture or afforestation purposes;</p> <p>(2) the undertaking of a process or activity included in the list of waste management activities published in terms of section 19 of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) in which case the activity is regarded to be excluded from this list;</p> <p>(3) the undertaking of a linear activity falling below the thresholds in Notice 544 of 2010.</p> <p><b>a) In Eastern Cape, Free State, KwaZulu-Natal, Gauteng, Limpopo, Mpumalanga, Northern Cape, Northwest and Western Cape:</b></p> <p>i. All areas outside urban areas.</p>	<p>Heavy Industrial erven (±118ha) and 5 Light Industrial erven (±39ha).</p> <p>The vegetation type of the site is “Saldanha Flats Strandveld” which is an Endangered Vegetation type in terms of section 52 of the National Environmental Management: Biodiversity Act, 2004.</p> <p>The property lies within the following Critical Biodiversity Areas in terms of the Saldanha Bay Critical Biodiversity Areas Map (SANBI Biodiversity GIS website):</p> <ul style="list-style-type: none"> <li>- Other Natural Areas</li> <li>- No Natural Remaining</li> </ul>
GN. No. R 546 Listing Notice 3 18 June 2010	19	<p>The widening of a road by more than 4 metres, or the lengthening of a road by more than 1 kilometre.</p> <p><b>(d) In Western Cape:</b></p> <p>ii. All areas outside urban areas.</p>	<p>Roads will be constructed within the Pioneer Industrial Park with a road reserve wider than 20 metre and road diameter is 7 meters.</p> <p>Existing roads on the property will be widened by more than 4 metres and/or lengthened by more than 1 kilometre.</p> <p>The property is situated outside of an urban area in the Western Cape Province.</p>



Table 4: Listed activities in terms of GN. No R 983, 984 and 985, dated 2014 under NEMA, 1998

Number and date of the relevant notice	Activity No	Description	Relation to Listed Activity triggered by the development
GN. No. R 983 Listing Notice 1 4 December 2014	9	The development of infrastructure exceeding 1000 metres in length for the bulk transportation of water or storm water- (i) with an internal diameter of 0,36 metres or more; or (ii) with a peak throughput of 120 litres per second or more; excluding where- (a) such infrastructure is for bulk transportation of water or storm water or storm water drainage inside a road reserve; or (b) where such development will occur within an urban area.	Storm water on site will piped to the lowest point of the site and have a diameter of 0.36 metres. The combined length of all the stormwater pipelines will be approximately 4337m. Refer to Figure 3.
GN. No. R 983 Listing Notice 1 4 December 2014	10	The development and related operation of infrastructure exceeding 1000 metres in length for the bulk transportation of sewage, effluent, process water, waste water, return water, industrial discharge or slimes (i) with an internal diameter of 0,36 metres or more; or (ii) with a peak throughput of 120 litres per second or more; excluding where- (a) such infrastructure is for bulk transportation of sewage, effluent, process water, waste water, return water, industrial discharge or slimes inside a road reserve; or (b) where such development will occur within an urban area.	4000 cubic metres of sewage will be treated on site per day.  There are no existing road reserves on the property and the property is not situated within an urban area.
GN. No. R 983 Listing Notice 1	14	The development of facilities or infrastructure, for the storage, or for the storage and handling, of a dangerous good, where such storage occurs in	The exact combined capacity is unknown at this stage. However, the heavy and light industrial industries proposed will require the storage

Number and date of the relevant notice	Activity No	Description	Relation to Listed Activity triggered by the development
4 December 2014		containers with a combined capacity of 80 cubic metres or more but not exceeding 500 cubic metres.	of dangerous goods and will not exceed 500 cubic metres.
GN. No. R 983 Listing Notice 1 4 December 2014	19	The 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- (i) a watercourse; excluding where such infilling, depositing, dredging, excavation, removal or moving- (a) will occur behind a development setback; (b) is for maintenance purposes undertaken in accordance with a maintenance management plan; or (c) falls within the ambit of activity 21 in this Notice, in which case that activity applies.	<b>This activity is not applicable to the EIA application.</b>
GN. No. R 983 Listing Notice 1 4 December 2014	24	The development of- (i) a road for which an environmental authorisation was obtained for the route determination in terms of activity 5 in Government Notice 387 of 2006 or activity 18 in Government Notice 545 of 2010; or (ii) a road with a reserve wider than 13,5 meters, or where no reserve exists where the road is wider than 8 metres; but excluding- (a) roads which are identified and included in activity 27 in Listing Notice 2 of 2014; or (b) roads where the entire road falls within an urban area.	Roads will be constructed within the Pioneer Industrial Park with a road reserve wider than 20 metre and the road diameter is 7 metres.



Number and date of the relevant notice	Activity No	Description	Relation to Listed Activity triggered by the development
GN. No. R 983 Listing Notice 1 4 December 2014	25	The development and related operation of facilities or infrastructure for the treatment of effluent, wastewater or sewage with a daily throughput capacity of more than 2000 cubic metres but less than 15000 cubic metres.	Construction of a sewage package plant to treat 4000 cubic metres per day.
GN. No. R 983 Listing Notice 1 4 December 2014	56	The widening of a road by more than 6 metres, or the lengthening of a road by more than 1 kilometre- (i) where the existing reserve is wider than 13,5 meters; or (ii) where no reserve exists, where the existing road is wider than 8 metres; excluding where widening or lengthening occur inside urban areas.	Existing roads will be expanded within the Pioneer Industrial Park with a road reserve wider than 20 metre and the road diameter is 7 metres.
GN. No. R 984 Listing Notice 2 4 December 2014	6	The development of facilities or infrastructure for any process or activity which requires a permit or licence in terms of national or provincial legislation governing the generation or release of emissions, pollution or effluent, excluding activities which are identified and included in Listing Notice 1 of 2014; (ii) activities which are included in the list of waste management activities published in terms of section 19 of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) in which case the National Environmental Management: Waste Act, 2008 applies; or (iii) the development of facilities or infrastructure for the treatment of effluent, wastewater or sewage where such facilities have a daily throughput capacity of 2000 cubic metres or less.	The development will require a Water Use License in terms of the National Water Act, 1998, for Water Use Activities that will take place on the property. This will include, treatment of 4000 cubic metres of sewage. Activities applied for include: Section 21 (b), and Section 21 (e).
GN. No. R 984 Listing Notice 2 4 December 2014	12	The development of railway lines, stations or shunting yards excluding - (i) railway lines, shunting yards and railway stations in industrial complexes or zones; (ii) underground railway lines in a mining area; or (iii) additional railway lines within the railway line reserve.	A siding is proposed, the sidings straight length (“stacking length”) is 950m and the centreline is 30m from the existing centreline and it is 10m from our proposed cadastral boundary.

Number and date of the relevant notice	Activity No	Description	Relation to Listed Activity triggered by the development
GN. No. R 984 Listing Notice 2 4 December 2014	15	The clearance of an area of 20 hectares or more of indigenous vegetation, excluding where such clearance of indigenous vegetation is required for- (i) the undertaking of a linear activity; or (ii) maintenance purposes undertaken in accordance with a maintenance management plan.	More than 20 hectares will be disturbed; it is proposed to develop 5 Heavy Industrial erven (±118ha) and 5 Light Industrial erven (±39ha).  This development is not a linear development and the physical alternation/clearance is not for agriculture or afforestation activities.
GN. No. R 985 Listing Notice 3 4 December 2014	2	The development of reservoirs for bulk water supply with a capacity of more than 250 cubic metres. (f) In Western Cape: ii. In areas containing indigenous vegetation;	Construction of a round <i>insitu</i> cast reinforced concrete reservoir of 8,64 MI (8 640 000 litre) with a footprint of 26,3m radius and a height of 4m. A pressure pump station (6m x 6m) to obtain the minimum required water pressure in each development will be build adjacent to the reservoir.
GN. No. R 985 Listing Notice 3 4 December 2014	18	The widening of a road by more than 4 metres, or the lengthening of a road by more than 1 kilometre. <b>(f) In Western Cape:</b> i. All areas outside urban areas: (aa) Areas containing indigenous vegetation.	Roads will be constructed within the Pioneer Industrial Park with a road reserve wider than 20 metre and road diameter is 7 meters.  Existing roads on the property will be widened by more than 4 metres and/or lengthened by more than 1 kilometre. The property is situated outside of an urban area in the Western Cape Province.



### 1.5.1 Proposed locality

The proposed site for the Industrial Park is located on the remaining extent of Portion 39 of the farm Eenzaamheid 135, situated approximately 6.8km south-east of Vredenburg.

Table 6 shows the distance from the closest towns.

The proposed site is situated within the Saldanha Bay Local Municipalities' jurisdiction. This local municipality forms part of the West Coast District Municipality, located within the Western Cape Province. Refer to Table 5 for the administrative and water management boundaries.

*Table 5: Administrative and water management boundaries*

<b>Province</b>	Western Cape
<b>District Municipality</b>	West Coast District Municipality
<b>Local Municipality</b>	Saldanha Bay Local Municipality
<b>Ward</b>	2
<b>Department of Mineral Resources (DMR) Local Office</b>	Western Cape Regional Office
<b>Department of Water Affairs (DWA) Local Office</b>	Sanlamhof
<b>Catchment Zone</b>	G10M
<b>Water Management Area (if applicable)</b>	Berg Water Management Area

*Table 6: Direction and distance to the nearest towns*

<b>Closest town</b>	<b>Distance from site</b>	<b>Direction from town</b>
Vredenburg	6.8km	South-east
Langebaanweg	7.13km	North-west

The site locality map is given below as Figure 5. Site photographs are also provided below [refer to Figure 6(a-i)] and are also attached in Appendix A.





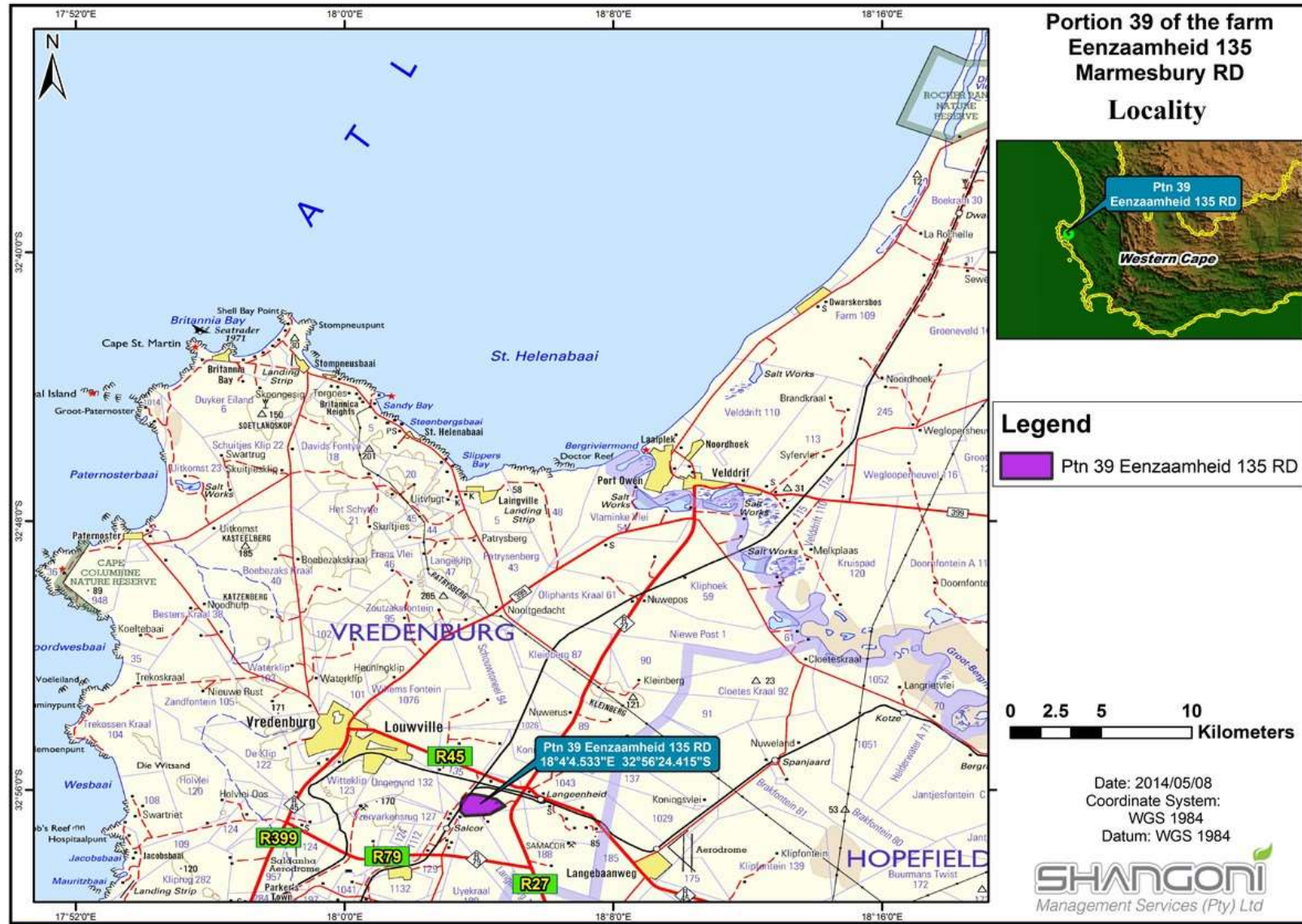


Figure 5: Locality of the site



*a – Photo from the middle of the site (1)*



*b - Photo from the middle of the site (2)*



*c - Photo from the middle of the site (3)*



*d - Photo from the middle of the site (4)*





*e - Photo from the middle of the site (5)*



*f - Photo from the middle of the site (6)*



*g - Photo from the middle of the site (7)*



*h - Photo from the middle of the site (8)*





*i – Livestock grazing onsite*

*Figure 6(a-i): Site Photographs*





### 1.5.2 Land tenure and use of immediately adjacent land

The adjacent land owners of the proposed project property are listed in the Table 7 below. Refer also to Part 4 for more detail regarding the Public Participation Process.

Table 7: Adjacent land owners of the proposed site

Farm Name	Owner
Ptn 3 of the farm Eenzaamheid 135	Waterwyk (Pty) Ltd - Hugo Tallies
Ptn 6 of the farm Eenzaamheid 135	Transnet (Pty) Ltd
Ptn 7 of the farm Eenzaamheid 135	Transnet (Pty) Ltd/Gavin O'Connor
Ptn 14 of the farm Eenzaamheid 135	Transnet (Pty) Ltd
Ptn 17 of the farm Eenzaamheid 135	Plasto Prop 5 (Pty) Ltd
Ptn 18 of the farm Eenzaamheid 135	Jason & Tamia Familie Trust/F.H. Jordaan
Ptn 27 of the farm Eenzaamheid 135	Lampies Elektries - Lambrechts Gerhard
Ptn 29 of the farm Eenzaamheid 135	Jan R Malan
Ptn 34 of the farm Eenzaamheid 135	Mr Richard van Wyk
Ptn 37 of the farm Eenzaamheid 135	Lampies Elektries - Lambrechts Gerhard
Ptn 40 of the farm Eenzaamheid 135	Corries Construction Services CC – Mr Corrie Schutte
Ptn 40 of the farm Eenzaamheid 135	SA Kalk & Gips - Mr Ben Krog
Ptn 41 of the farm Eenzaamheid 135	Juffroushoogte Gasteplaas – Dr Sam Hapley
Ptn 42, 46 and 47 of the farm Eenzaamheid 135	Geriona Johanna Mouton
Ptn 44 of the farm Eenzaamheid 135	Saldanha Ind Services CC - Noerie Laatoe
Ptn 45 of the farm Eenzaamheid 135	Cameron Peter James
Ptn 49 of the farm Eenzaamheid 135	Ms A.M. Thom
Ptn 15630 of the farm Eenzaamheid	Spannies Spangenberg
Ptn 0 of the farm Langeberg 188	Trans African Murals (Pty) Ltd
Ptn 3 of the farm Langeberg 188	Unknown
Ptn 4 of the farm Langeberg 187	C.J. Steyn
Ptn 5 of the farm Langeberg 188	Unknown
Ptn 6 and 9 of the farm Langeberg 187	Gavin Stiglingh
Farm Nooitgedacht	H.S.C. Steenkamp
Witteklip 123, Vredenburg	KRRC Trust – Herman van As
Ptn 1 of the farm 133	Transnet (Pty) Ltd
Ptn 2 of the farm 1195	Abloma Familie Trust

### 1.5.3 Design

The development will entail the following:

- The physical alternation and clearance of up to 180.5106ha of vegetation on undeveloped or vacant land.
- The construction and/or expansion/widening of road infrastructure, including access roads and an internal road network.



- The construction and/or expansion of a railway network on the property, including railway lines, stations and shunting yards.
- The construction and/or expansion of bulk services, including electricity, water, stormwater and sewage systems/networks.
- The proposed project will likely also entail the construction of facilities for the storage and handling of dangerous goods, such as diesel, petrol, oil and lubricants, the construction of a bulk water supply reservoir and the construction of a facility for the treatment of sewage and/or effluent, such as a package plant.



## **2. NATURE AND EXTENT OF THE ENVIRONMENT AFFECTED BY ACTIVITY**

### **2.1 Geology**

The site is underlain by rocks of the Cenozoic Era. According to Mucina and Rutherford (2006) the main geology of the area consists of shallow calcareous sand overlaying a fossiliferous Pleistocene limestone hardpan layer along an old marine terrace. Refer to Figure 7.



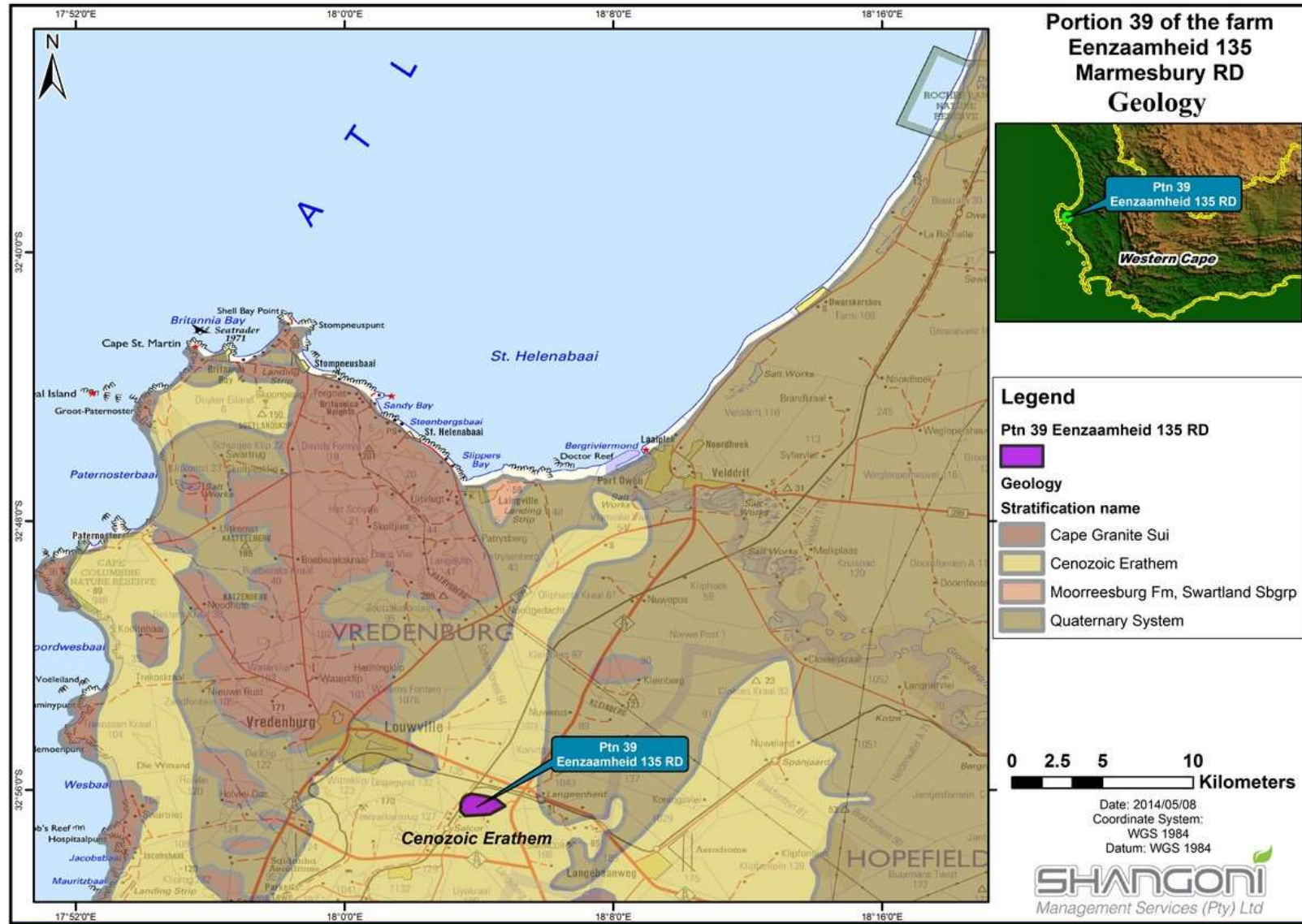


Figure 7: Geology of the Site



## 2.2 Regional climate

The site is located in an area with a Mediterranean climate and winter rainfall.

### 2.2.1 Rainfall

According to the AGIS Comprehensive Atlas (2007), the mean annual rainfall at the site area is 201-400 mm. Figure 8 shows the long-term annual monthly rainfall at the site.

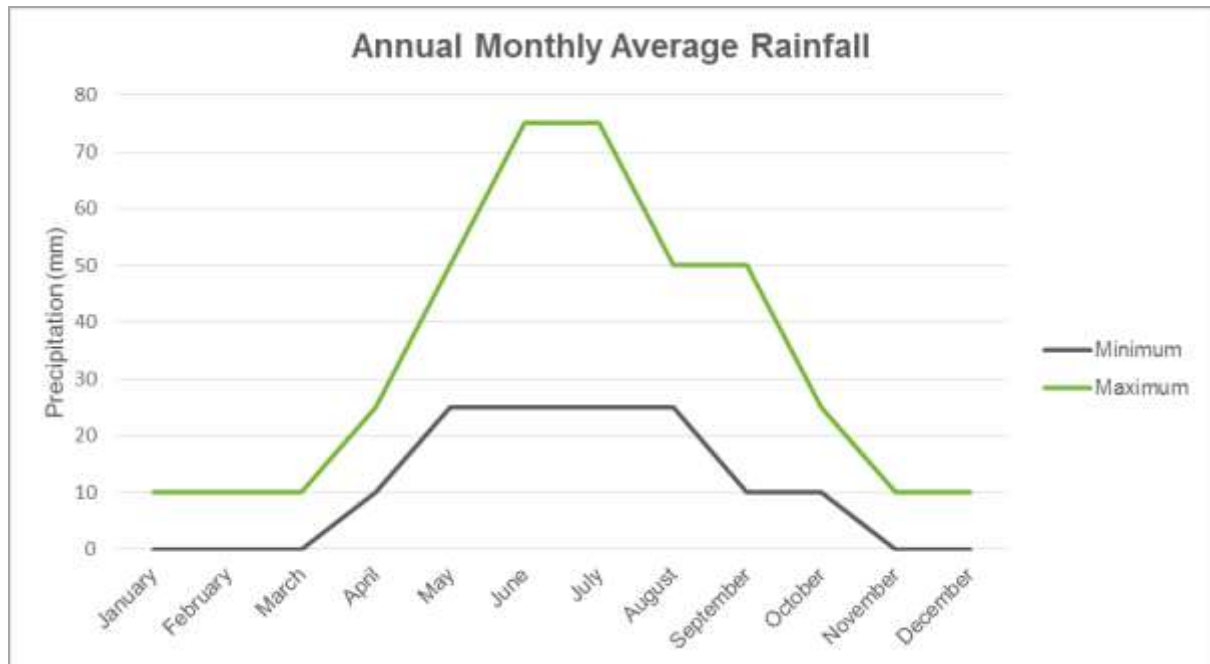


Figure 8: Annual Monthly Average Rainfall at the Study Site

### 2.2.2 Temperature

The maximum mean annual temperature for the site is between 27.1°C and 29°C and the minimum mean annual temperature for the site area is between 6.1°C and 8°C (AGIS, 2007). The Figure 9 shows the long-term annual monthly average temperature at the site.



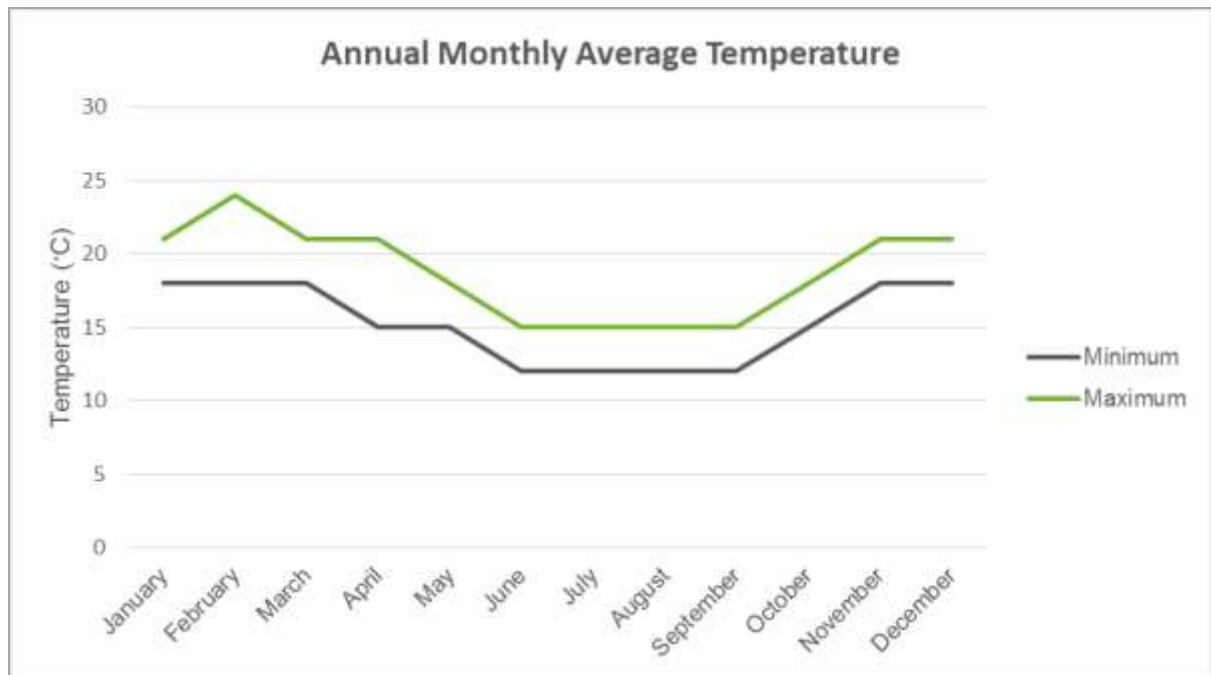


Figure 9: Annual Monthly Average Temperature at the Study Site

### 2.2.3 Evaporation

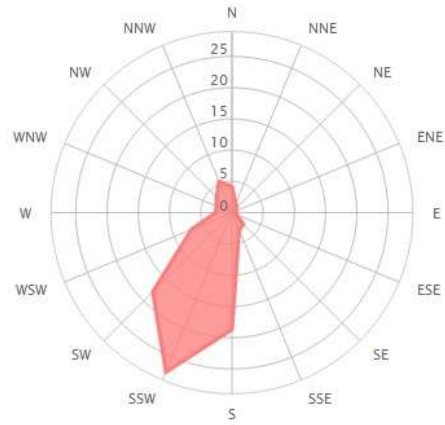
The evaporation at the site ranges between 2 001-2 400mm per annum (AGIS, 2007).

### 2.2.4 Wind

The closest weather station to the site is the Langebaanweg airport weather station. This weather station is approximately 9km to the east of the project site. Figure 10 show the monthly wind direction at the Langebaanweg weather station, as compiled from [www.windfinder.com](http://www.windfinder.com). The prevailing wind direction at this weather station is South-southwest.

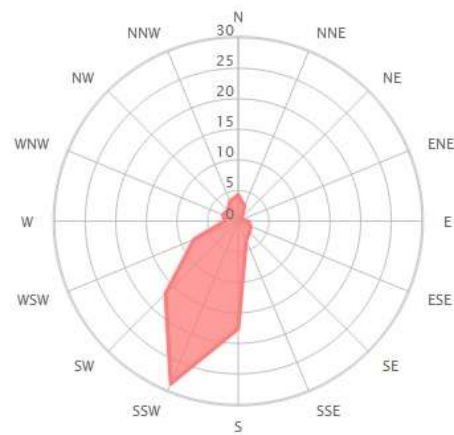


Wind direction distribution in (%)  
January



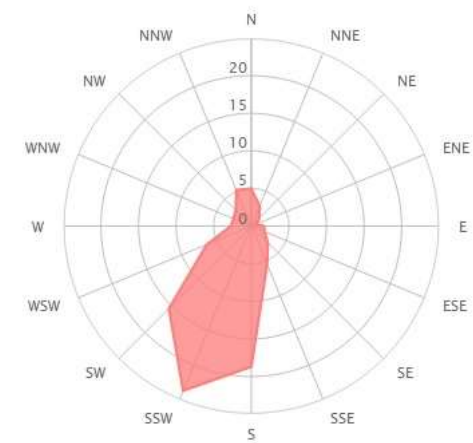
a

Wind direction distribution in (%)  
February



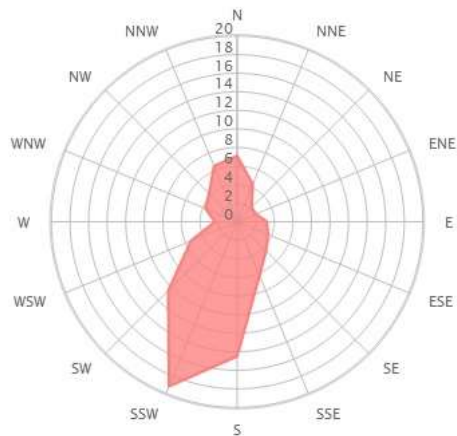
b

Wind direction distribution in (%)  
March



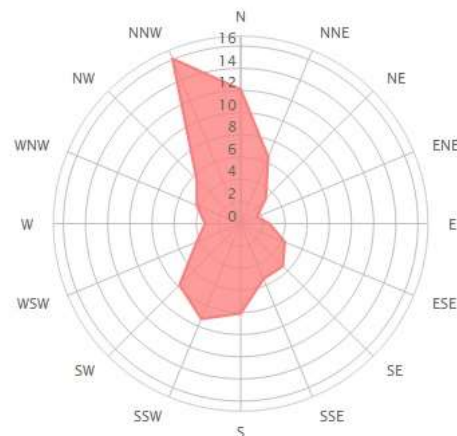
c

Wind direction distribution in (%)  
April



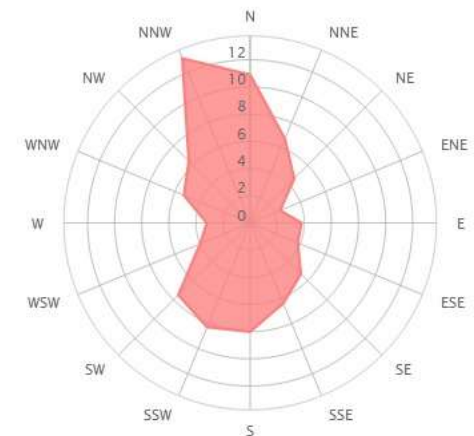
d

Wind direction distribution in (%)  
May



e

Wind direction distribution in (%)  
June



f



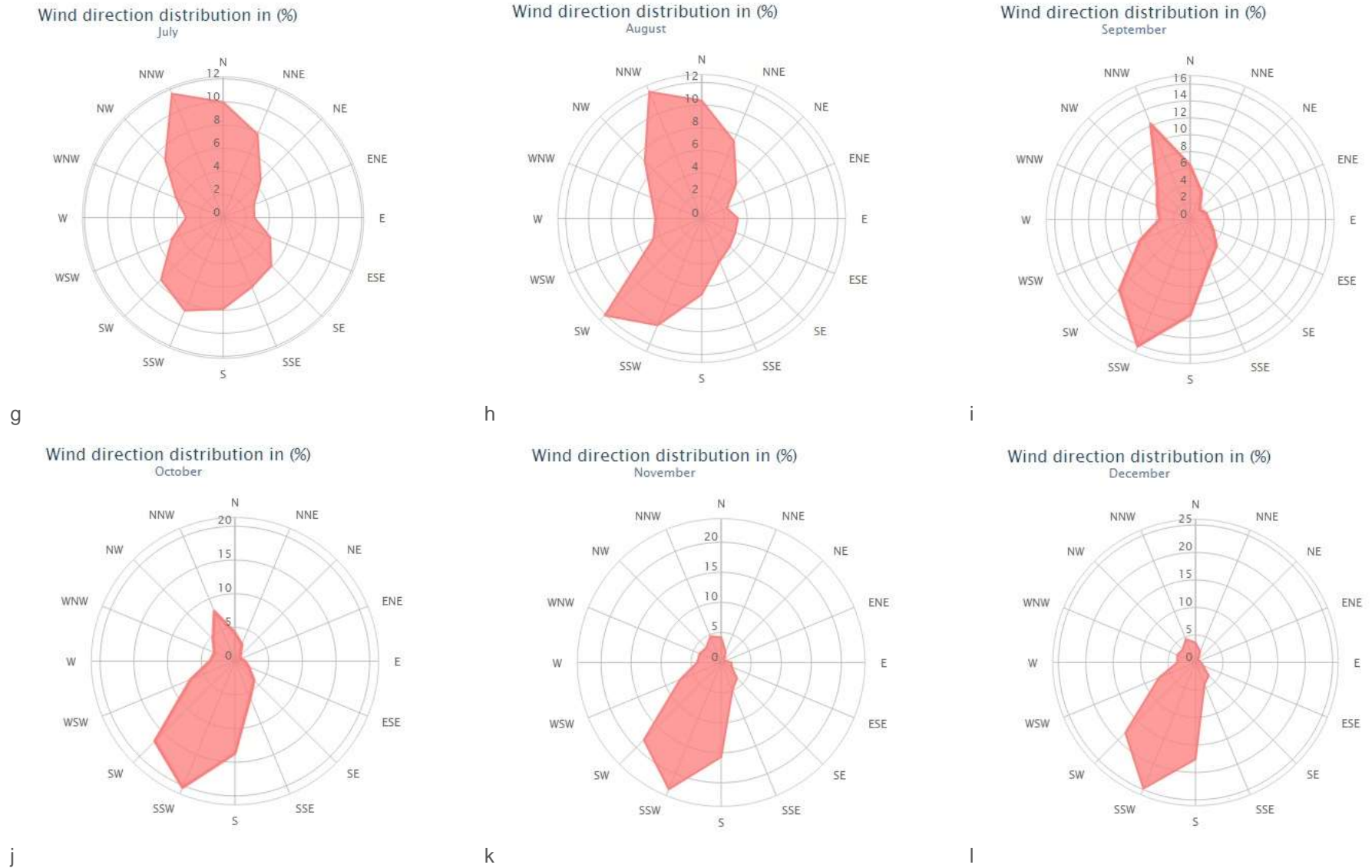


Figure 10: Wind Roses Showing the Monthly Wind Direction at the Site



## 2.3 Topography

As can be seen in Figure 11, the site is located at elevations ranging between 5 and 125 masl (metres above sea level).

The property is typical of the Saldanha flats area, namely flat with some sand covered areas. The site is slightly elevated at the Southern section (Eco Impact Legal Consulting, 2014).





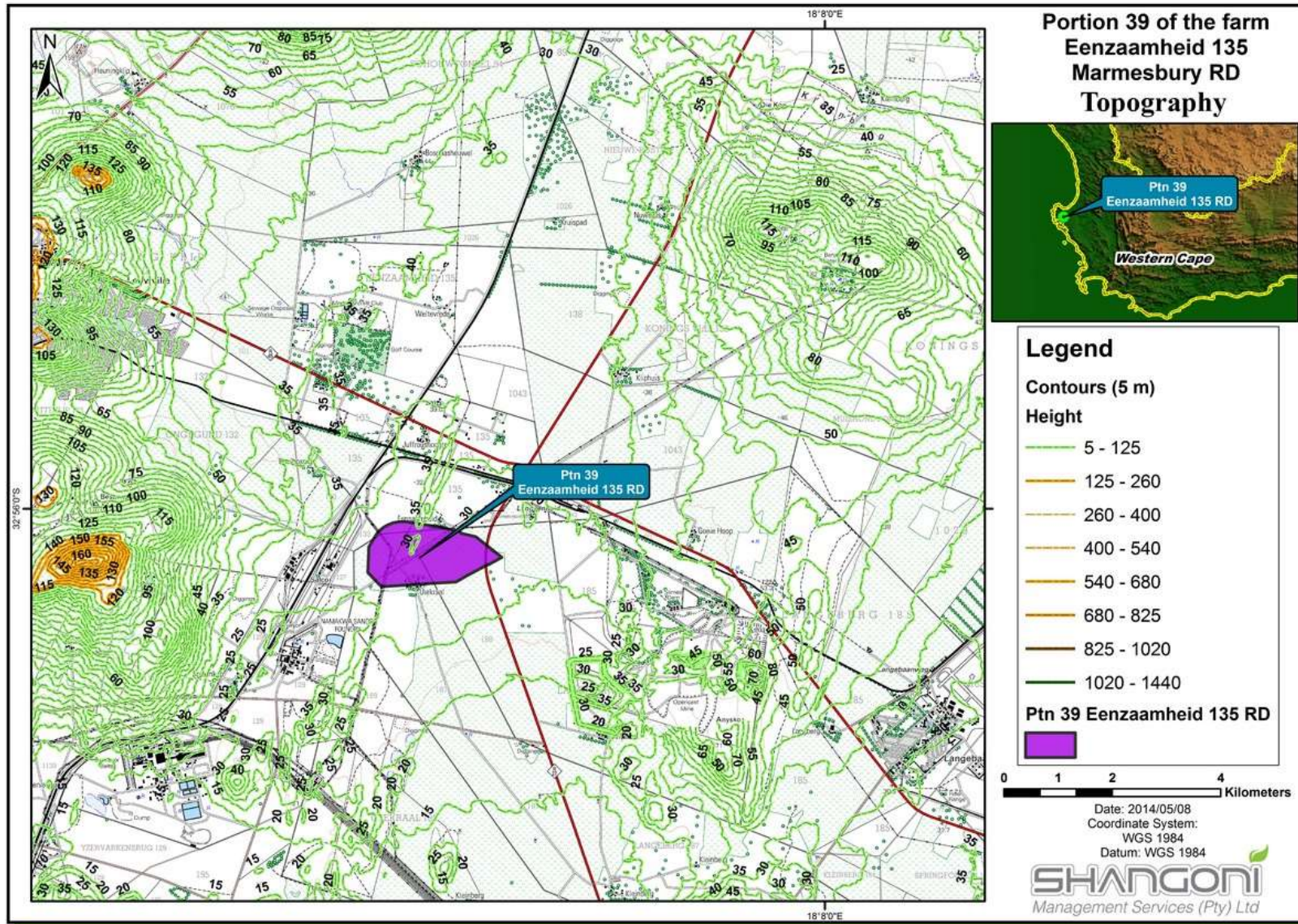


Figure 11: Topography at the Site

## 2.4 Soils

Figure 12 shows that the site consists of the S17 soil type. S17 soils are associated with soil classes 1 to 4 and are undifferentiated, structureless soils. These soils have favourable physical properties, but are limited by low base statuses, restricted soil depth, high erodibility and excessive or imperfect drainage.





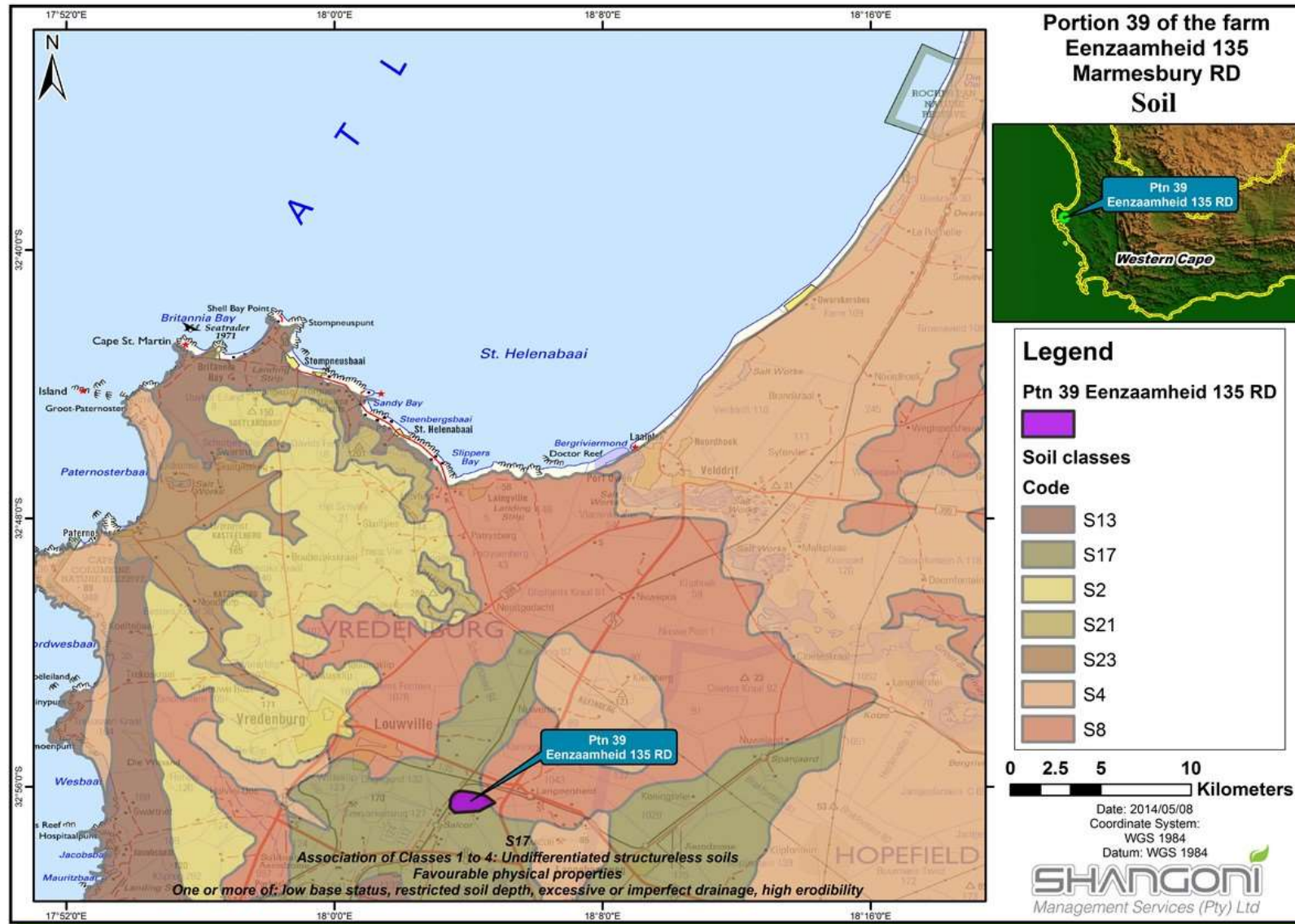


Figure 12: Soils Present at the Site



## 2.5 Land use and land capability

### 2.5.1 Current land use

The zoning of the property for the proposed Mixed Industrial Park development is undetermined, according to Zoning Map: VDG-SAL/1, dated 06/06/1982. The property is, however, located within the conceptual industrial extension area as earmarked by the Saldanha Bay Spatial Development Framework refer to Figure 13. The site is indicated with a black star).

The Saldanha Bay IDP confirms the potential of an industrial corridor behind Saldanha Port, along the railway line, as proposed by the SDF (the SDF is a Sectoral Plan of the IDP). Industrial development is also identified as one of the nine major “thrusts” under the Local Economic Development Strategies to create momentum in the economy of the Saldanha Bay Municipality.

An application for rezoning from “Undetermined” (as per the Zoning Map) to “Subdivisional Area” (industrial, light Industrial and associated uses) will be submitted in terms of the Land Use Planning Ordinance (Ordinance 15 of 1985) or the new Land Use Planning Act (Act No. 3 of 2014) (whichever is applicable at the time of the submission of the rezoning application).

The property was historically used for agricultural activities and livestock also currently graze the land. The property is mostly vacant and undeveloped, except for the homestead and warehouse on site.

The dominant land use and cover, within a radius of 10km of the proposed property, is commercially cultivated land, shrubland and Fynbos. Pockets of commercial and residential built-up land, exotic plantations, mines/quarries and thicket and bushland can also be found scattered within a 10km radius from the site refer to Figure 14.

In general, sensitive receptors include the following: residential dwellings, accommodation (hotels, B&Bs, guesthouses), hospitals, nursing homes, schools, churches, holiday/weekend dwellings, campsites, caravan parks, sports facilities and offices. Please refer to the Table 8 below for the sensitive receptors identified within a 10km radius from the proposed Mixed Industrial Park.

*Table 8: A list of potentially sensitive receptors within a 10km radius from the site*

Sensitive receptors	Distance from the site	Direction from the site
Juffroushoogte Gasteplaas	300m	N
Jurie Hayes Primary School	2.7km	E
Eden Primary School	6.4km	NW
Laerskool Vredenburg	8.5km	NW
Vredenburg High School	8.2km	NW
Huis Wittekruijn (Old age home)	8.9km	WNW
Vredenburg Hospitaal	8.2km	WNW



Sensitive receptors	Distance from the site	Direction from the site
Provincial Hospital	7.9km	WNW
Vredenburg Hospital - A R V Clinic	7.9km	WNW
Life West Coast Private Hospital - Theatre	7.9km	WNW
Hanna Coetzee Clinic	6.5 km	WNW
Louwville Clinic	7.3 km	WNW
Mens Clinic International - Vredenburg	8.4 km	WNW
Vredenburg Clinic	8.4 km	WNW
Vredenburg Golf Club	3.1km	NNW
Windstone Backpackers & Group Accommodation	2.6km	E
West Coast Fossil Park	4.5km	ESE
AFB Langebaanweg (Airfield)	8.5km	ESE

A number of Environmental Authorisation applications are/have been underway in the vicinity of the project site. 330m to the west of the site, two Environmental Authorisation applications have been granted for renewable solar projects. 1.1km to the south-west of the site, an Environmental Authorisation application has been approved for a co-generation plant. Directly to the south of the site, an Environmental Authorisation application for an Ore Storage and Link Rail to the existing Namaqua Sands Link Rail is underway. There are also a number of other applications situated further from the project site.

(<https://dea.maps.arcgis.com/apps/webappviewer/index.html?id=b8452ef22aeb4522953f1fb10e6dc79e>).



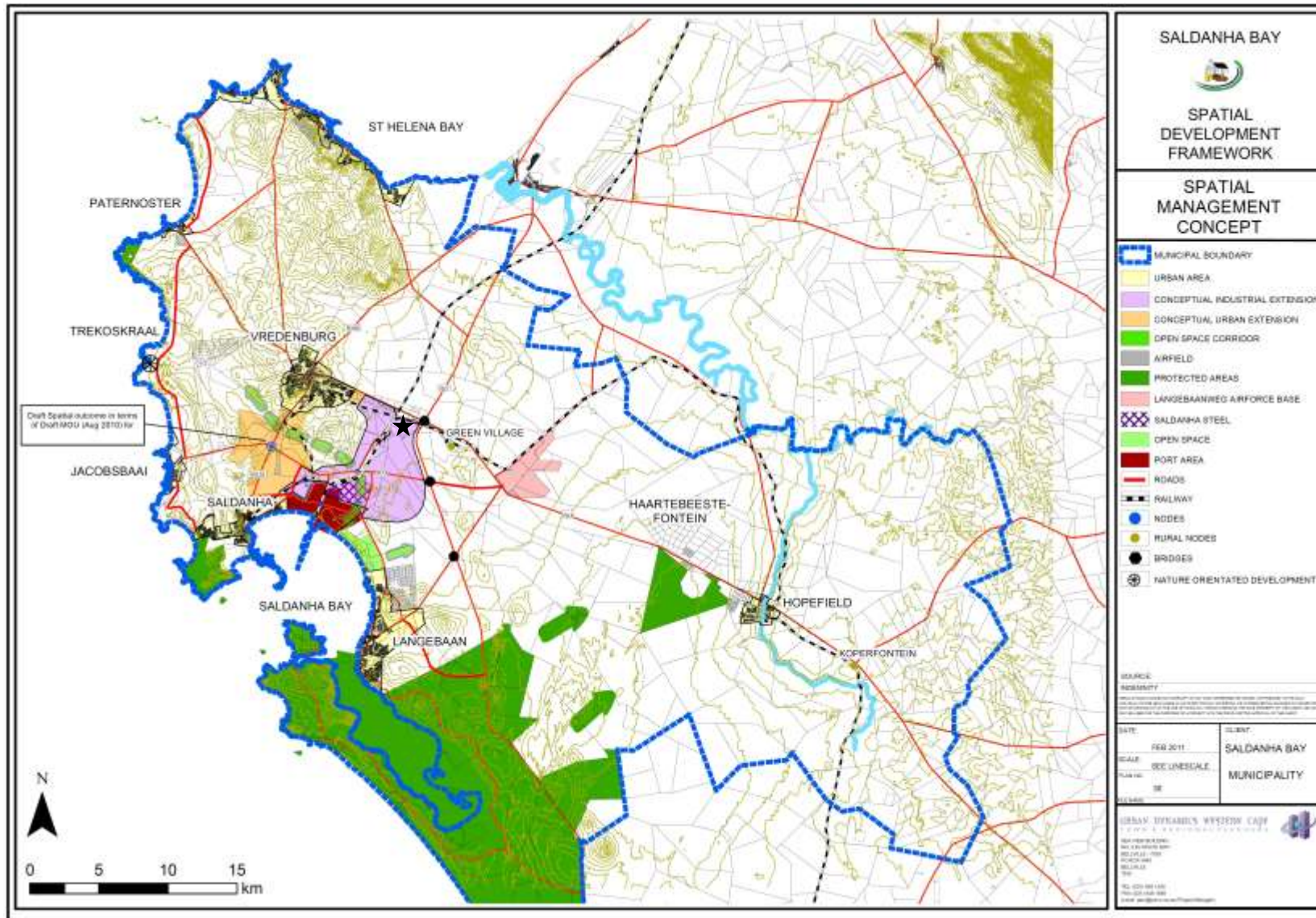


Figure 13: Spatial Management Concept (SDF, 2011)



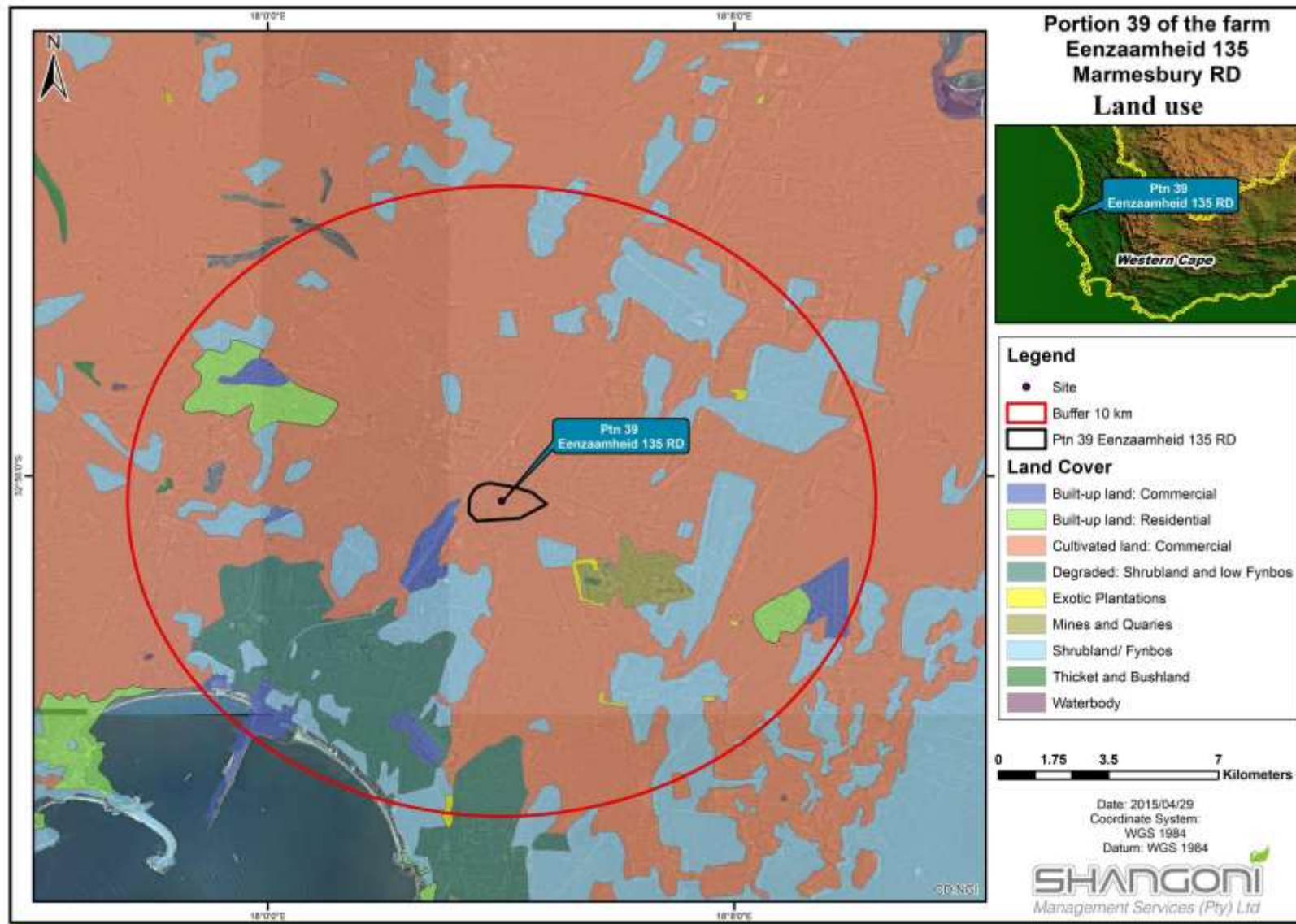


Figure 14: Land Use Map

## 2.6 Vegetation

### 2.6.1 Vegetation type(s)

As shown in the Figure 15, the vegetation type of the general area of the project site and surrounds is the Saldanha Flats Strandveld. According to Musina & Rutherford (2006), this vegetation type is endangered, with a conservation target of 24%. 11% of the vegetation is statutorily conserved in the West Coast National Park and Yzerfontein Nature Reserve. A very small portion is also conserved in private conservation areas such as Jakkalsfontein and West Point. The vegetation type is characterised by sclerophyllous shrublands of a sparse, emergent and moderately tall shrub layer and an open shrub layer forming the undergrowth. In spring, geophytes and annual herbaceous flora are prominent (Musina & Rutherford, 2006).

CapeNature has recently produced updated provincial ecosystem status statistics in accordance with the National principles, criteria, and approach<sup>1</sup>. The key findings relevant to this study show that under criterion A1 (irreversible loss of habitat) Saldanha Flats Strandveld, which has less than 36% of its original extent remaining, meets the criteria for listing as Endangered in terms of Section 52 of the Biodiversity Act.

Eco Impact Legal Consulting (Pty) Ltd. conducted a biodiversity baseline survey of the project property in August 2009 and October 2010. This survey was updated in March 2014 for this proposed project. This survey found that although the project property lies in the general area supporting Saldanha Flats Strandveld, the strandveld on site is substantially degraded and has minimal conservation value. The site is further also surrounded by agricultural activities.



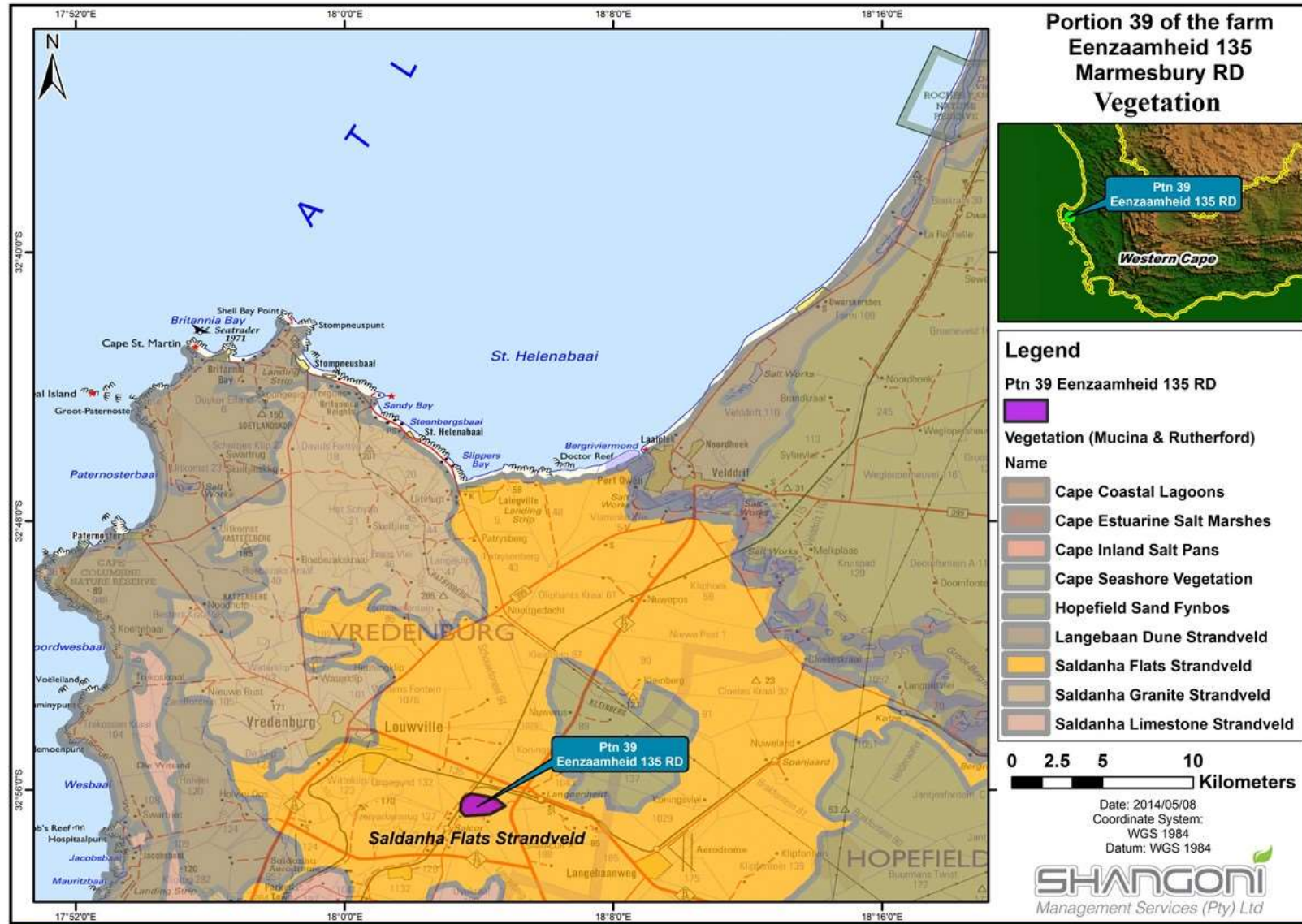


Figure 15: Vegetation Types Present at the Site

## 2.6.2 Observed species

Table 9 lists the vegetation species that were identified by Eco Impact Legal Consulting on the project property during the August 2009 survey:

Table 9: Vegetation Species Observed on the Site

Observed Species	
<i>Senecio sarcoides</i>	<i>Zaluzianskya villosa</i>
<i>Chrysanthemoides monilifera</i>	<i>Atriplex semibaccata</i>
<i>Septulina glauca</i>	<i>Massonia angustifolia</i>
<i>Nylandtia spinosa</i>	<i>Gethyllis afra</i>
<i>Rhus glauca</i>	<i>Arctopus echinatus</i>
<i>Conicosia pugioniformis</i>	<i>Arctotis hirsute</i>
<i>Muraltia harveyana</i>	<i>Asparagus capensis</i>
<i>Galium tomentosum</i>	

## 2.6.3 Endangered or rare species

Only one cluster of conservation worthy species is present on the site, namely *Arctopus dregei*. Six of these vulnerable plants are present on the project property.

## 2.6.4 Alien invasive species

The alien invasive species *Acacia cyclops* was observed on the site.

## 2.7 Animal life

### 2.7.1. Commonly occurring species

#### 2.7.1.1 Fish

No fish species were present on or within the vicinity of the proposed development site (Eco Impact Legal Consulting, 2014).

#### 2.7.1.2 Invertebrates

The proposed property does not appear to be the preferred habitat of any particular invertebrates. The only insects observed onsite include butterflies, bees and spiders. No known rare species were observed or are known to occur or breed at the project site.

#### 2.7.1.3 Avifauna

188 bird species are known to occur in the project area (Hockey *et al.*, 2006). Table 10 lists the bird species that were observed during the botanical survey conducted by Eco Impact Legal Consulting:





Table 10: Avifaunal Species Observed on the Site

Species	Common Name
<i>Numida meleagris</i>	Guinea fowl
<i>Alopochen aegyptiacus</i>	Egyptian geese
<i>Bostrychia hagedash</i>	Hadedda
<i>Buteo rufofuscus</i>	Jackal buzzard

No breeding or roosting sites were observed on the site.

#### 2.7.1.4 Mammals

Small buck, such as the common duiker and steenbok, rodents, such as mole rats, field mice and hares, as well as carnivores such as mongoose and genets are likely to inhabit the area. A total of 68 mammal species are known to occur in the project area (Smithers, 1983). Table 11 lists the mammal species that were observed during the botanical survey conducted by Eco Impact Legal Consulting:

Table 11: Mammals Observed on the Site

Species	Common Name
<i>Raphicerus campestris</i>	Steenbok
<i>Antidorcas marsupialis</i>	Springbok
<i>Lepus saxatilis</i>	Scrub hare

Field mouse and mole activity was observed on the site.

#### 2.7.1.5 Amphibians and Reptiles (Herpetofauna)

Angulate tortoises (*Chersina angulata*) were observed during the surveys conducted by Eco Impact Legal Consulting. No Red Listed, rare or localised reptile or amphibian species were observed onsite.

#### 2.7.2 Endangered species

The near-threatened Namaqua Plated Lizard (*Gerrhosaurus typicus*) could be present in the vicinity of the project site, but was not observed by Eco Impact Legal Consulting.

Table 12 shows the Red Data Listed Avifaunal species that are known to occur in the project area:

Table 12: Red Data List Avifaunal Species that could occasionally occur at the site

Species	Common Name	Status
<i>Circus maurus</i>	Black Harrier	Near Threatened
<i>Falco biarmicus</i>	Lanner Falcon	Near Threatened
<i>Anthropoides paradiseus</i>	Blue Crane	Vulnerable
<i>Circus ranivorous</i>	African Marsh Harrier	Vulnerable
<i>Falco peregrinus</i>	Peregrine Falcon	Near Threatened
<i>Phoenicopterus ruber</i>	Greater Flamingo	Near Threatened



Species	Common Name	Status
<i>Phoenicopterus minor</i>	Lesser Flamingo	Near Threatened
<i>Pelecanus onocrotalus</i>	Great White Pelican	Near Threatened
<i>Asio capensis</i>	March Owl	Locally Threatened
<i>Neotis ludwigii</i>	Ludwig's Bustard	Vulnerable
<i>Charadrius pallidus</i>	Chestnut-banded Plover	Near Threatened
<i>Hydroprogne caspa</i>	Caspian Tern	Near Threatened
<i>Morus capensis</i>	Gape Gannet	Vulnerable
<i>Phalacrocorax capensis</i>	Cape Cormorant	Near Threatened
<i>Ciconia</i>	White Stork	Rare

None of the above listed species were observed on or near the site by Eco Impact Legal Consulting during their surveys. It is more likely that the species occasionally visit the project site, but do not breed there.

Table 13 shows Red Data Listed mammal species that may possibly occur on the project site:

Table 13: Red Data Mammal Species which may possibly occur on the site

Common Name	Scientific Name	Red Data Category	Predicted Occurrence on site
Lesueur's Wing-gland Bat	<i>Cistugo lesueuri</i>	Near threatened	Unlikely
Long-tailed Serotine Bat	<i>Eptesicus hottentotus</i>	Least Concern	Unlikely
Schreibers' Long-fingered Bat	<i>Miniopterus schreibersii</i>	Near Threatened	Possible
Temminck's Hairy Bat	<i>Myotis tricolor</i>	Near Threatened	Possible
Cape Serotine Bat	<i>Neoromicia capensis</i>	Least Concern	Possible
Egyptian Split Faced Bat	<i>Nycteris thebaica</i>	Near threatened	Possible
Cape horseshoe bat	<i>Rhinolophus capensis</i>	Near threatened	Possible
Geoffroy's horseshoe bat	<i>Rhinolophus clivosus</i>	Near threatened	Possible
Egyptian Fruit Bat	<i>Rousettus aegyptiacus</i>	Least Concern	Unlikely
Egyptian Free-tailed Bat	<i>Tadarida aegyptiaca</i>	Least Concern	Possible
Mauritian Tomb Bat	<i>Taphozous mauritanus</i>	Least Concern	Unlikely
Rock Hyrax	<i>Procavia capensis</i>	Least Concern	Unlikely
Cape Clawless Otter	<i>Aonyx capensis</i>	Least Concern	Unlikely
Water Mongoose	<i>Atilax paludinosus</i>	Least Concern	Likely
Black-backed Jackal	<i>Canis mesomelas</i>	Least Concern	Unlikely
Caracal	<i>Caracal</i>	Least Concern	Likely
Yellow Mongoose	<i>Cynictis penicillata</i>	Least Concern	Possible
African Wild Cat	<i>Felis silvestris</i>	Least Concern	Unlikely
Small Grey Mongoose	<i>Galerella pulverulenta</i>	Least Concern	Likely
Small-spotted Genet	<i>Genetta</i>	Least Concern	Likely
Large-spotted Genet	<i>Genetta tigrina</i>	Least Concern	Likely
Large Grey Mongoose	<i>Herpestes ichneumon</i>	Least Concern	Likely
Striped Polecat	<i>Ictonyx striatus</i>	Least Concern	Possible



Common Name	Scientific Name	Red Data Category	Predicted Occurrence on site
Honey Badger	<i>Mellivora capensis</i>	Near Threatened	Unlikely
Bat-eared Fox	<i>Otocyon megalotis</i>	Least Concern	Possible
Leopard	<i>Panthera pardus</i>	Least Concern	Unlikely
African Weasel	<i>Poecilogale albinucha</i>	Data deficient	Unlikely
Aardwolf	<i>Proteles cristatus</i>	Least Concern	Unlikely
Cape Fox	<i>Vulpes chama</i>	Least Concern	Unlikely
Red Hartebeest	<i>Alcelaphus buselaphus</i>	Least Concern	Unlikely
Springbok	<i>Antidorcas marsupialis</i>	Least Concern	Unlikely
Cape Mountain Zebra	<i>Equus zebra</i>	Vulnerable	Unlikely
Klipspringer	<i>Oreotragus</i>	Least Concern	Unlikely
Grey Rhebok	<i>Pelea capreolus</i>	Least Concern	Unlikely
Steenbok	<i>Raphicerus campestris</i>	Least Concern	Likely
Eland	<i>Taurotragus oryx</i>	Least Concern	Unlikely
Kudu	<i>Tragelaphus strepsiceros</i>	Least Concern	Unlikely
Reddish-grey Musk Shrew	<i>Crocidura cyanea</i>	Data Deficient	Unlikely
Least Dwarf Shrew	<i>Suncus infinitesimus</i>	Data deficient	Unlikely
Cape Hare	<i>Lepus capensis</i>	Least Concern	Unlikely
Scrub Hare	<i>Lepus saxatilis</i>	Least Concern	Likely
Hewitt's Red Rock Rabbit	<i>Pronolagus saundersiae</i>	Least Concern	Unlikely
Chacma Baboon	<i>Papio ursinus</i>	Least Concern	Possible
Cape Spiny Mouse	<i>Acomys subspinosus</i>	Least Threatened	Unlikely
Namaqua Rock Mouse	<i>Aethomys</i>	Least Threatened	Unlikely

According to the survey report (Eco Impact Legal Consulting, 2014), there are no bat roosting sites within the proposed development site. The striped weasel is under threat due to a loss of habitat and a reduction in prey for this mammal. It is, however, unlikely to occur on the project property and no African weasel or any sign of their activities was observed during the site surveys. Other Red Data Listed species, such as the Grey Climbing Mouse, Porcupine, Striped Mouse, Bat Eared Fox, Small and Large Spotted Genets, Large and Small Grey Mongoose, are likely to occur on site, but were also not observed during the survey. The mole species are most likely to be impacted upon by the proposed development, however, the species onsite are listed as “least threatened”.

## 2.8 Surface water

### 2.8.1 Catchment areas

The site is situated in the Berg Water Management Area. The Berg River is the only major river in the Water Management Area (DWAF, 2004). The Berg River Catchment covers an area of almost 9 000km<sup>2</sup> and is subdivided into 12 quaternary catchments, with the site lying within the G10M quaternary catchment area (WCDEADP, 2015). Figure 16 illustrates the catchments and drainage areas.



### **2.8.1 Mean annual runoff**

The total Mean Annual Runoff for the Berg Water Management Area is 1 429 million m<sup>3</sup>/annum and the Ecological Reserve is 217 million m<sup>3</sup>/annum (DWAF, 2004).

### **2.8.2 Surface water quantity and use**

The West Coast is known to be a water scarce area with an average rainfall of 201-400 mm per year. Water demand in the Saldanha Bay municipal area increased significantly due to the establishment of a number of industries in the 1980s and 1990s. Industrial water users account for approximately 50% of potable water use within the Saldanha Bay municipal area. The West Coast District Municipality provides bulk potable water to the Saldanha Bay Municipality through the Misverstand Scheme. Water for the Misverstand Scheme is obtained from both the Berg River and the Langebaan Road Aquifer (WCDEADP, 2015).

### **2.8.3 Water authority**

The relevant water authority is the Department of Water and Sanitation, Western Cape Regional office.

## **2.9 Groundwater**

### **2.9.1 Aquifers**

The project property overlies the Langebaan Road Aquifer. Figure 17 illustrates the groundwater discharge zone and aquifer regions. Groundwater discharge which plays an important role in maintaining surface water systems and it is estimated that the contribution of groundwater to the Berg River base flow is in the order of 10-20% of the mean annual rainfall (WCDEADP, 2015). The Langebaan Road Aquifer is therefore an important water source and forms part of the West Coast District Municipality Misverstand Scheme.

The probability of occurrence of “Aquifer Dependent Ecosystems” at the project site is medium (WCDEADP, 2015).

Figure 18 illustrates groundwater and biodiversity interaction.

### **2.9.2 Depth of water tables**

The depth to the water level is approximately 12.7mbgl (metres below ground level) and the groundwater recharge is approximately 81mm per annum. The baseflow is approximately 2mm per annum in the vicinity of the site (DWAF, 2010).

### **2.9.3 Groundwater use**

No groundwater will be used for the proposed development. The construction of a bulk water supply system is proposed to supply the industrial and commercial activities with municipal water.



#### **2.9.4 Groundwater quality**

The mean TDS (Total Dissolved Solids) found in groundwater in the project area is 2 978mg/l (DWAF, 2010).



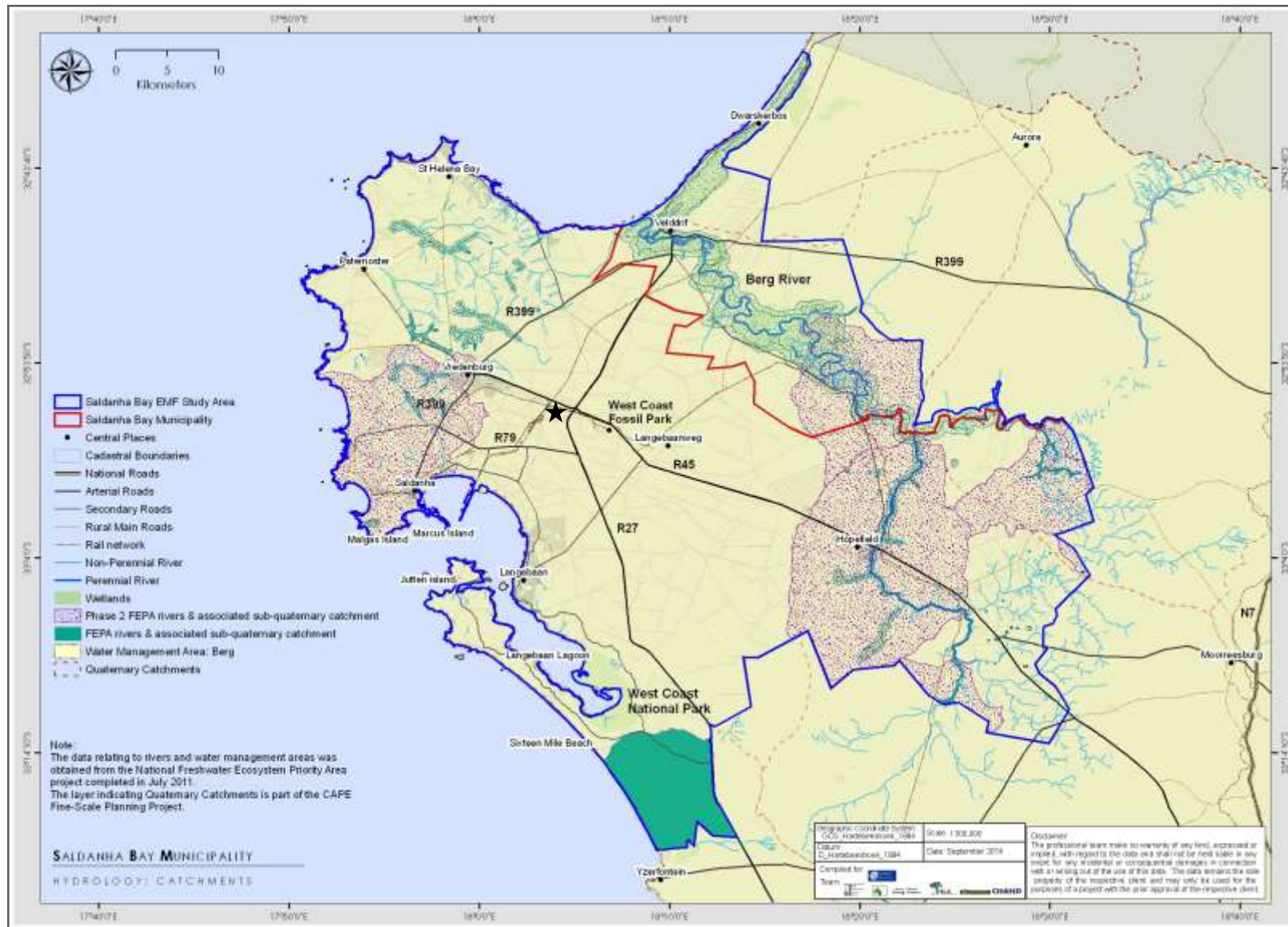


Figure 16: Catchments and drainage areas (WCDEADP, 2015).



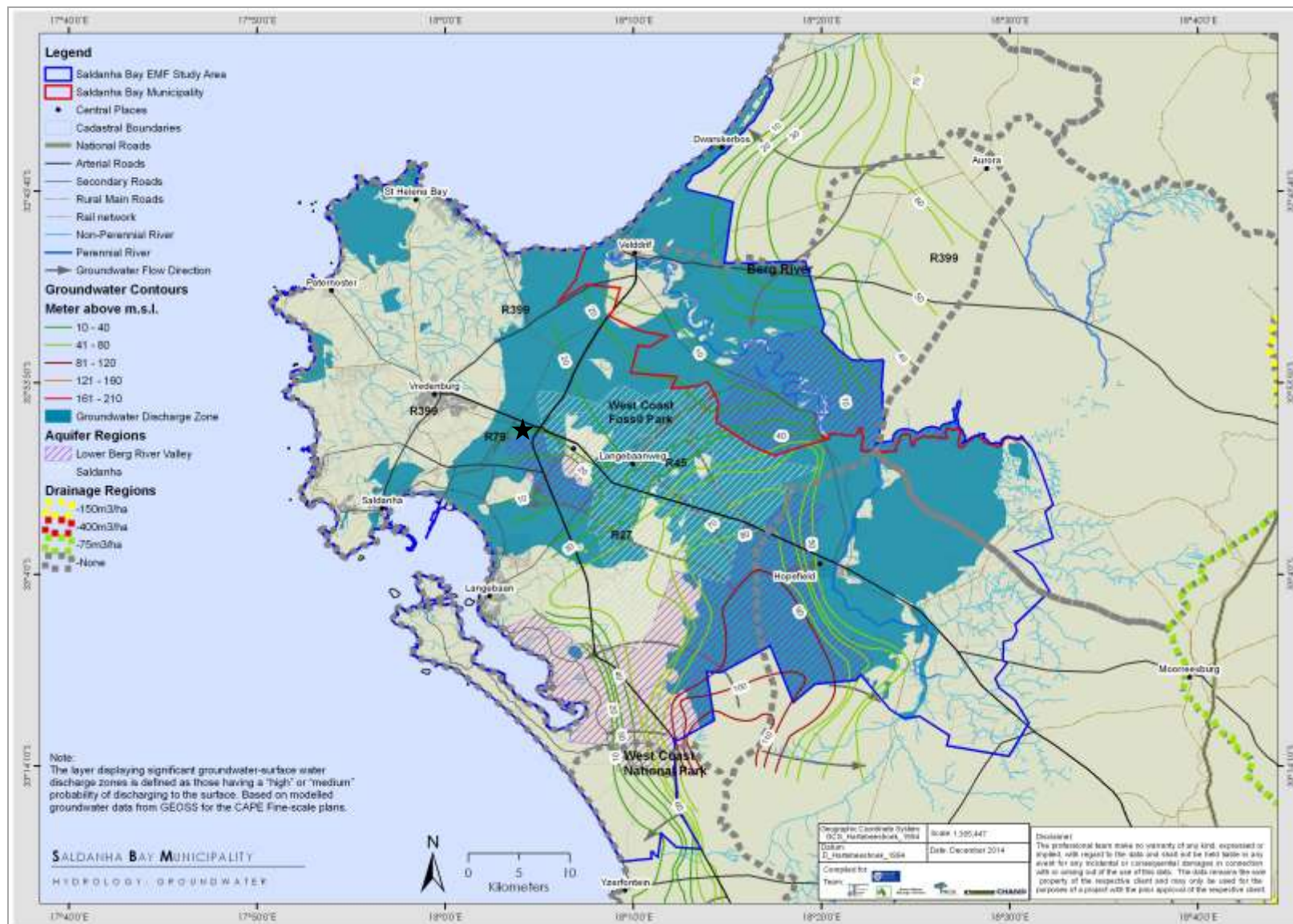


Figure 17: Groundwater discharge zone and aquifer regions (WCDEADP, 2015).

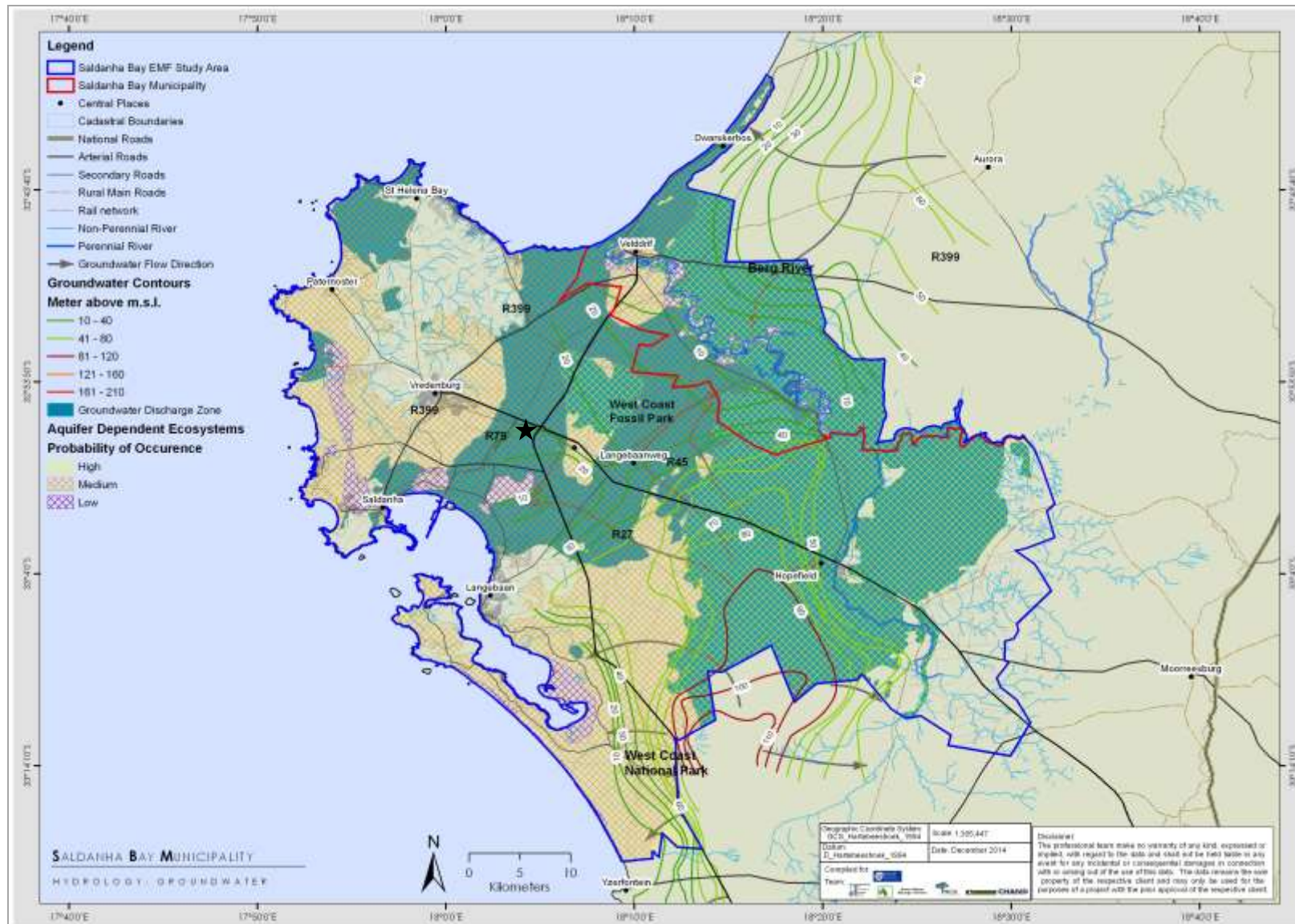


Figure 18: Groundwater and biodiversity interaction (WCDEADP, 2015).

## 2.10 Sensitive landscapes

### 2.10.1 Protected areas

The site for the proposed development lies outside of the following protected areas:

- RAMSAR Sites refer to Figure 20;
- FEPA rivers, wetlands and estuaries;
- Critical Biodiversity Areas (Terrestrial and Aquatic) refer to Figure 19;
- Marine Protected Areas;
- Sensitive Dune Fields;
- Private Nature and Game Reserves;
- Conservancies;
- National Parks;
- Provincial Nature Reserves;
- Local Nature Reserves; and the
- National Protected Areas Expansion Strategy Focus Area.

### 2.10.2 Biospheres

A biosphere reserve integrates conservation and development through appropriate zoning. The zonation of each biosphere includes a core area, buffer zone and transitional zone.

The site for the proposed development lies within the transition zone of the Cape West Coast Biosphere reserve, as shown in Figure 21. The transitional area may contain a variety of agricultural activities, settlements and other uses and require cooperation from communities, management agencies, scientists, non-governmental organisations, cultural groups, economic interests and other stakeholders to work together to manage and sustainably develop the area's resources.

### 2.10.3 Threatened terrestrial ecosystems

The site for the proposed development lies within the Saldanha Flats Strandveld vegetation type. This ecosystem is listed as “Endangered” in terms of Section 52 of the National Environmental Management: Biodiversity Act, 2004.

Figure 22 illustrates the ecosystem status.

### 2.10.4 Bird corridors

A flyway is a predictable route used by migratory birds and insects to get from winter feeding grounds to summer breeding grounds and back. The site for the proposed development lies within a bird corridor called the Saldanha Flyway, as shown in Figure 23.





### **2.10.5 Wetlands**

According to the Biodiversity Baseline Survey conducted by Eco Impact Legal Consulting, a seasonal pond with a radius of approximately 5m was observed west of the homestead on the project property, underneath the Eskom power lines. The GPS coordinates of the pond are: 32°56'41.45" S; 18°03'52.18" E. It is recommended that no infrastructure be constructed within 32m of this pond.

A wetland specialist will be appointed and a wetland study will be conducted in the rainy season. The report will be included in the EIR.



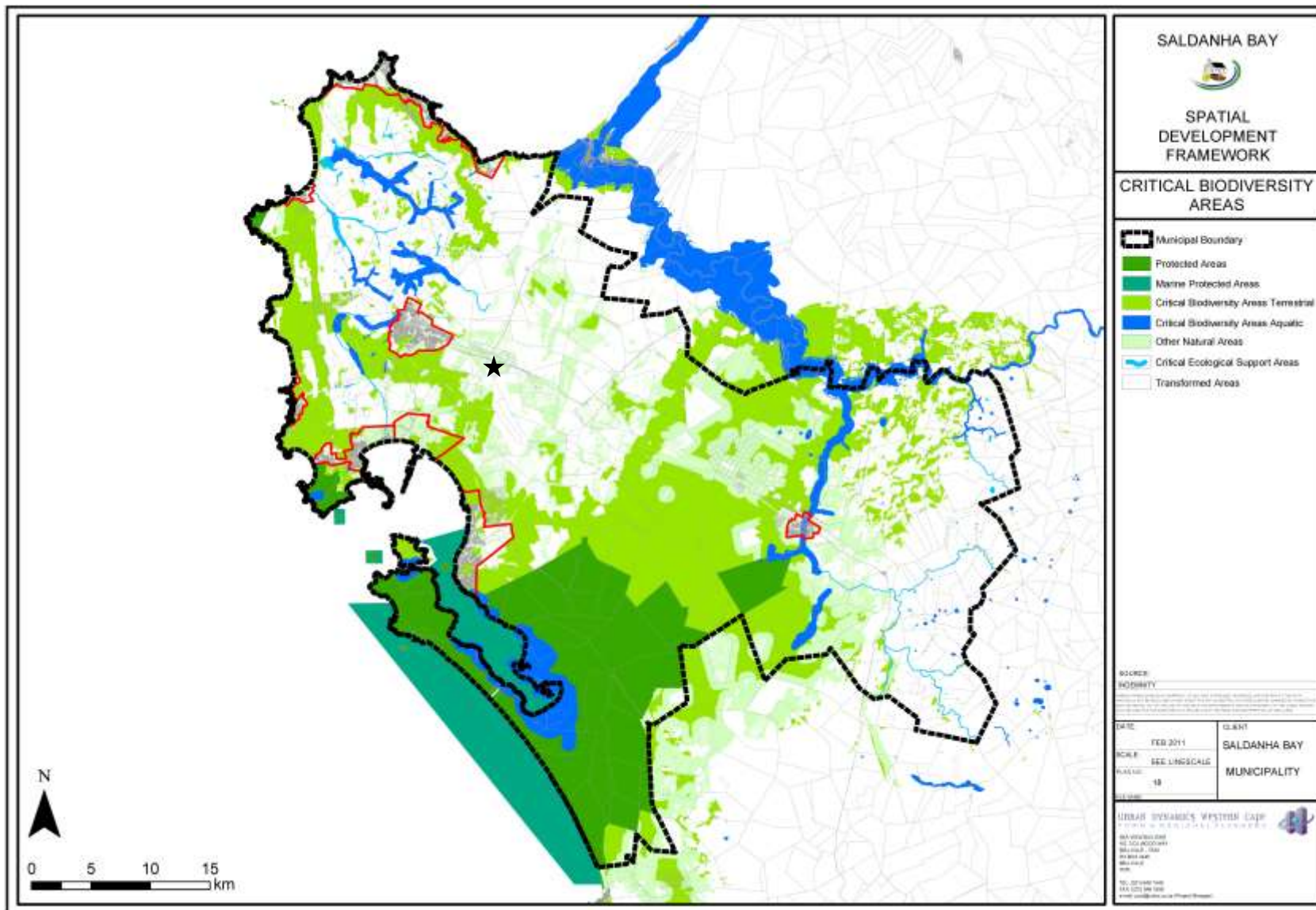


Figure 19: Critical Biodiversity Areas (Saldanha Bay Municipality, 2011).

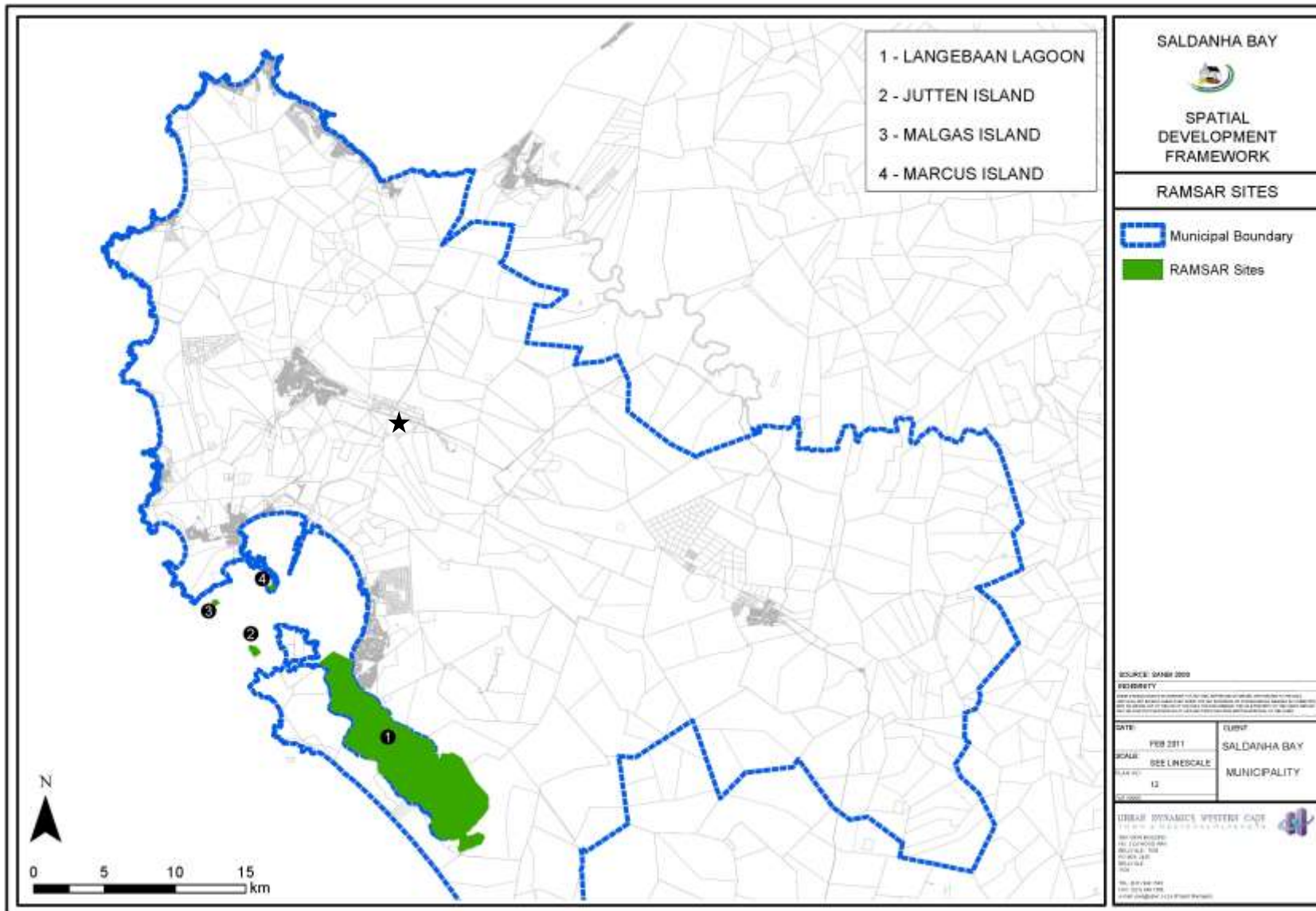


Figure 20: RAMSAR Sites (Saldanha Bay Municipality, 2011).



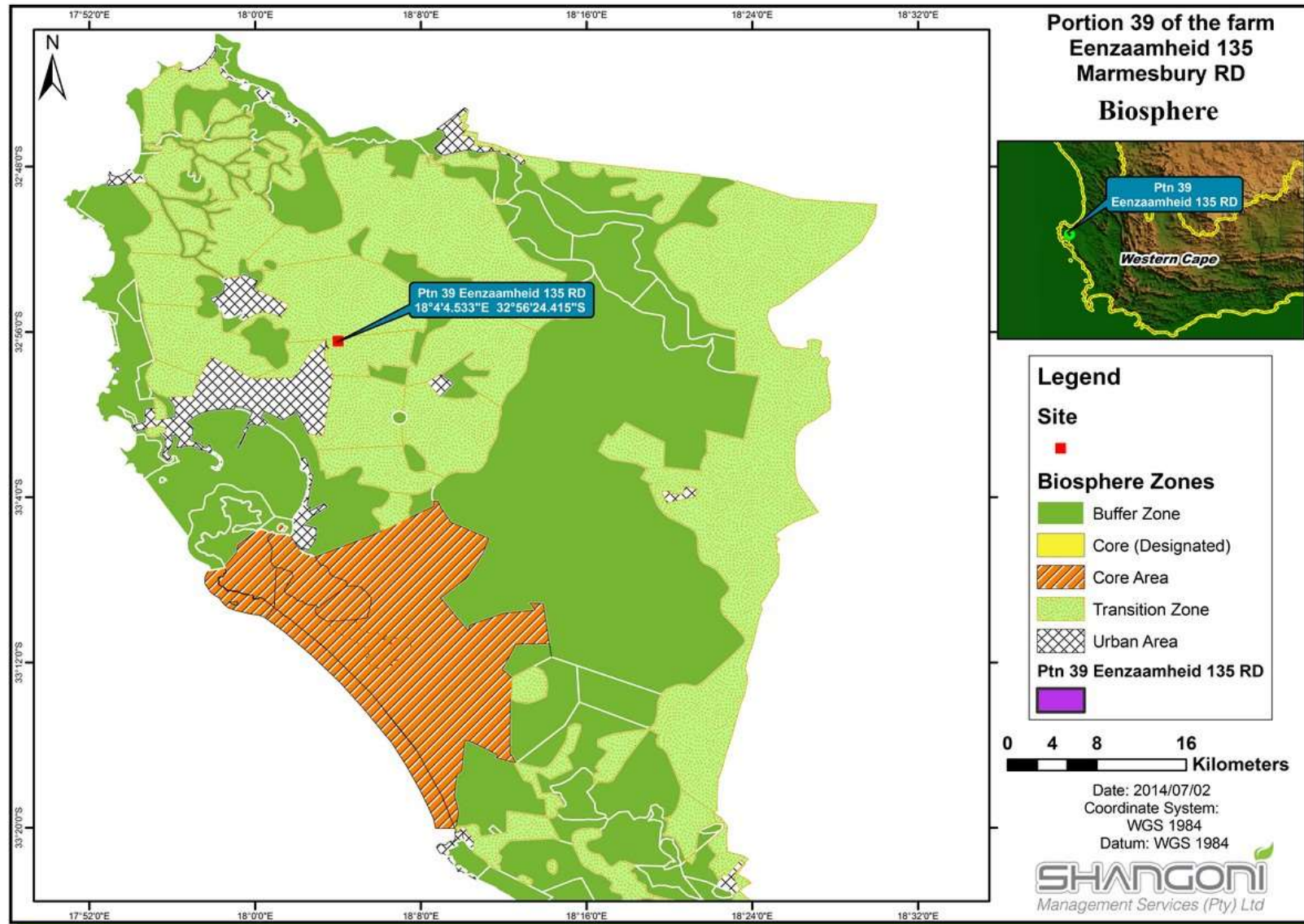


Figure 21: Cape West Coast Biosphere zones

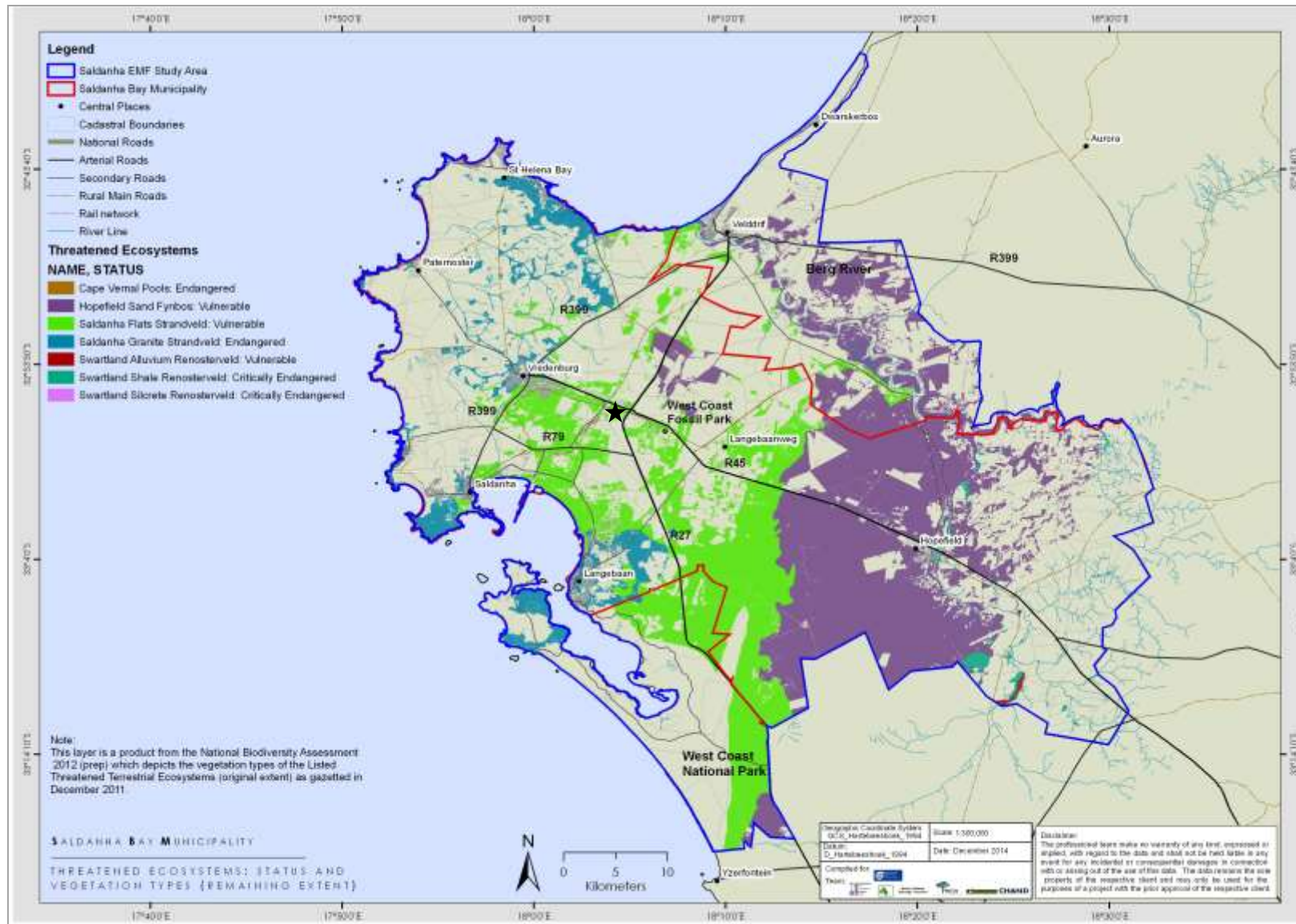


Figure 22: Ecosystem status (WCDEADP, 2015).



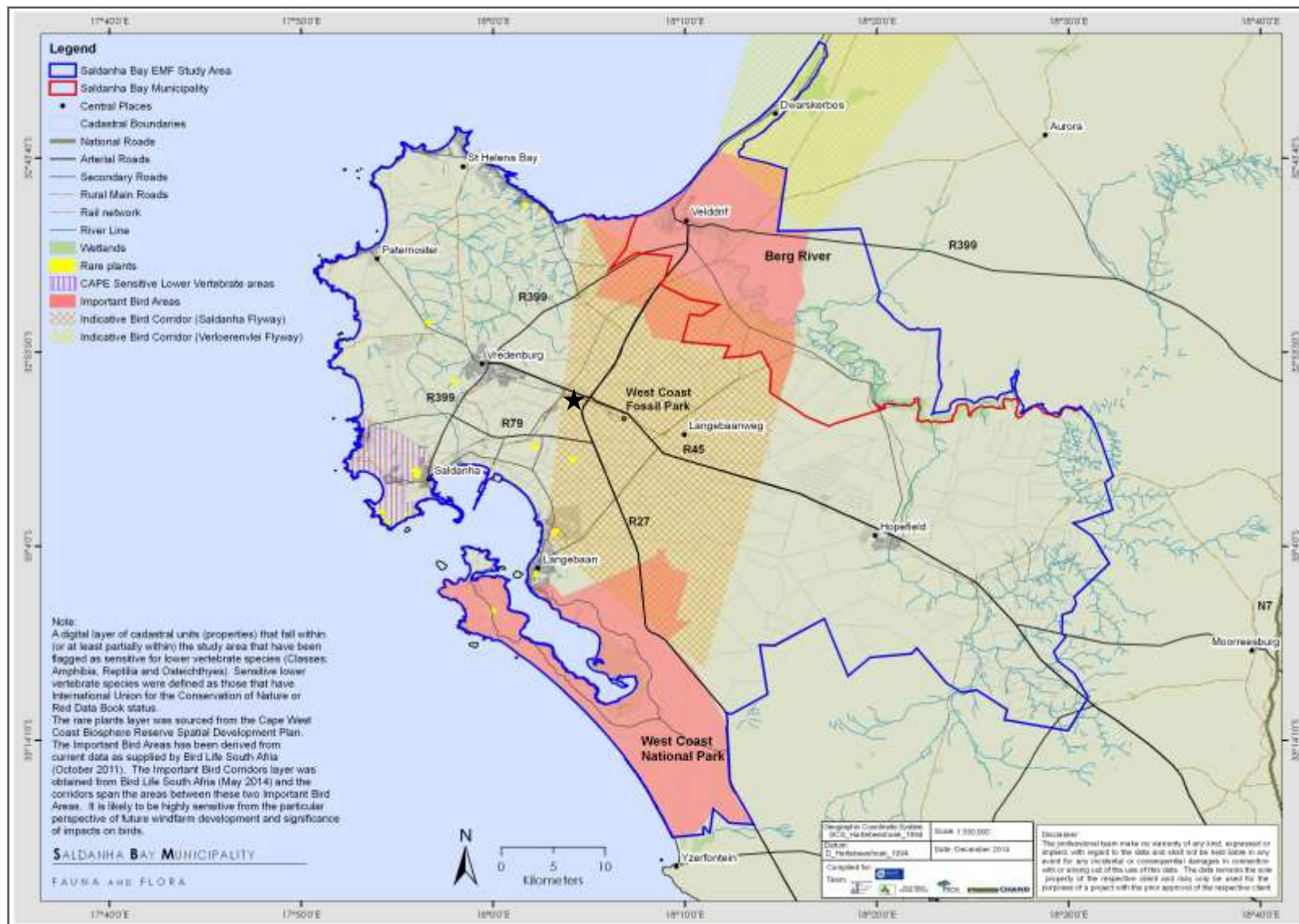


Figure 23: Bird corridor (WCDEADP, 2015).

## 2.11 Sites of archaeological and cultural interest

Fossil bone finds have been made in the area surrounding the proposed development. The Varswater Formation outcrop and fossils can be found approximately 4km to the east of the proposed development, in the area of the West Coast Fossil Park (refer to Figure 24). The West Coast Fossil Park is a cultural site and the Saldanha Flats Strandveld is viewed as a cultural landscape (refer to Figure 25 and Figure 26).

The site was studied for any archaeological significant signs (Avery & Avery, 2009). A survey was conducted on foot to visually scan the surface for any archaeological material. Mounds from rodents were examined for artefacts or bones brought to the surface.

During the survey no signs of any archaeological significance were found. No Stone Age archaeological material was observed. The only surface palaeontological material observed were sparse land snail (*Trigonephrus globulus*) shells that are embedded in outcrops of calcrete. Their presence, while in itself not likely of significance, may point to the subaerial occurrence of terrestrial reptile, mammal or bird remains in the calcareous sediments, similar to those preserved in the calcareous Late Pliocene Anyskop sediments that can be seen at the West Coast Fossil Park. Deeper below ground, important Late Miocene and Early Pliocene terrestrial and marine fossils may be found. Such material would need to be systematically recovered during foundation excavation work. Monitoring should take place during foundation excavations. The potentially significant palaeontological potential of the area will most likely be realised during deep excavations (40-60m below ground). The exposure of fossils as part of excavation activities should be viewed in a positive light, as this will provide an opportunity for the fossils to be accessed, as long as appropriate monitoring and systematic palaeontological excavations are provided for.

According to this specialist study, there is no archaeological reason for the development not to take place, provided that recommended mitigation recommendations are followed.

The above mentioned specialist report by Avery & Avery (2009) was submitted to Heritage Western Cape together with a Notice of Intent to Develop. Heritage Western Cape has indicated, upon review of the NID and specialist report, that no further heritage studies are required and that the recommendations made by Avery & Avery (2009) are accepted and should be upheld for the proposed development.





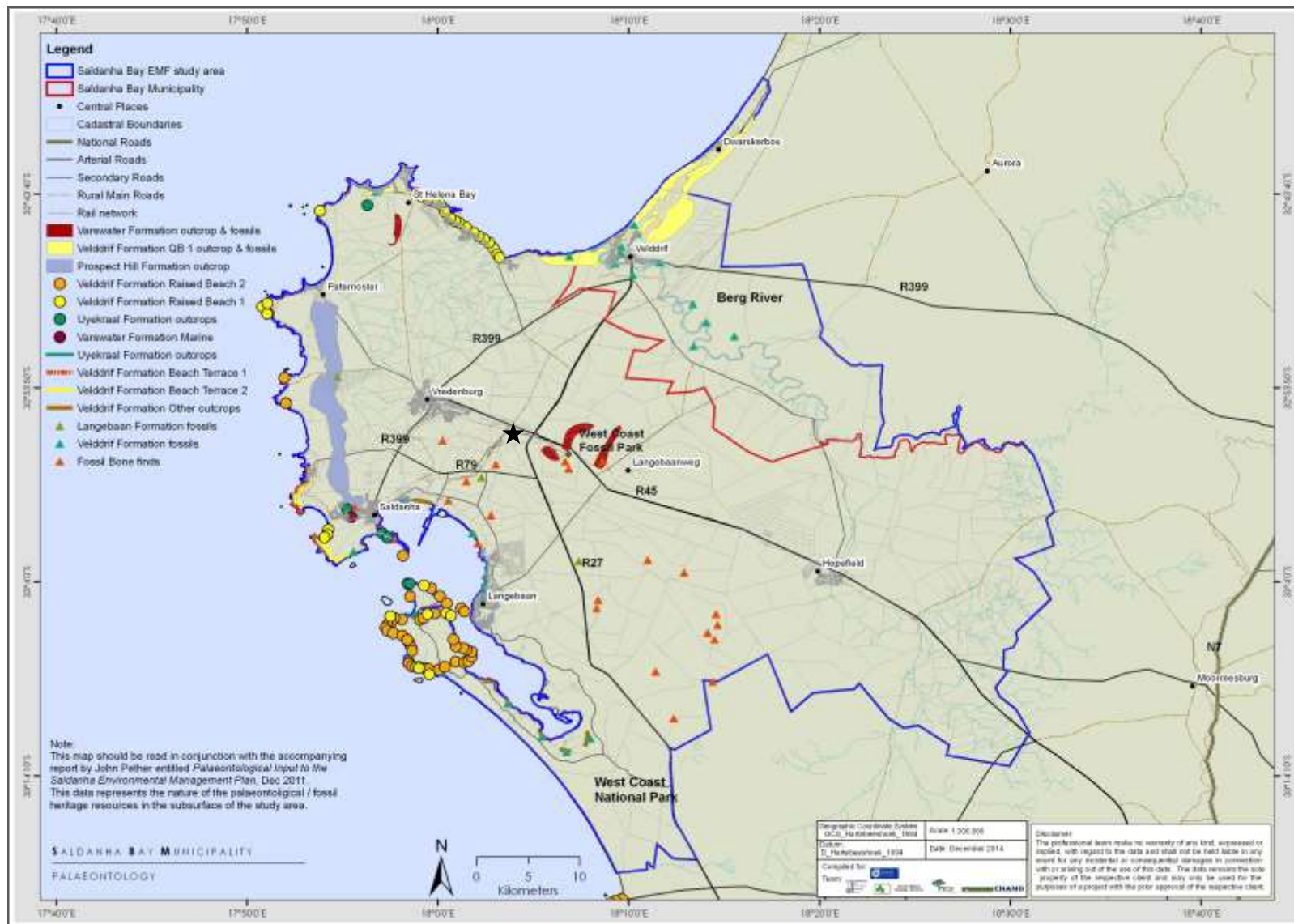


Figure 24: Palaeontology (WCDEADP, 2015).







Figure 26: Heritage and Aesthetic Resources (WCDEADP, 2015).

## 2.12 Air Quality

The West Coast District Municipality lies outside any of the Airshed Priority Areas and the air quality is generally good, except in localised areas, where emissions from urbanised and industrialised areas, in combination with emissions from vehicles, result in the degradation of the ambient air quality (refer to Figure 27).

Emission sources in the West Coast District Municipality include:

- Industrial emissions;
- Wood burning in low-income residential areas;
- Windblown dust and refuse burning;
- Seasonal agricultural and biomass burning;
- Dust from bulk ore handling in Saldanha Bay; and
- Odour from Fish-meal processing.

Under prevailing north-westerly winds, air pollutants may be transported from the West Coast District Municipality into the Cape Winelands District Municipality. Similarly, under prevailing southerly winds, air pollutants may be transported from the City of Cape Town into the southern parts of the West Coast DM (AQMP, 2010).

The proposed industrial park lies within the Industrial Development Zone (refer to Figure 28). The air quality in the study area appears to be compromised in the vicinity of Saldanha Iron Ore Handling Facility (IOHF), Exarro Namakwa Sands and the Arcelor Mittal Saldanha Steel Works, whilst the air quality in the nearby residential areas of Saldanha Bay, Vredenburg and Langebaan is of an acceptable quality (Wesgro, 2011).



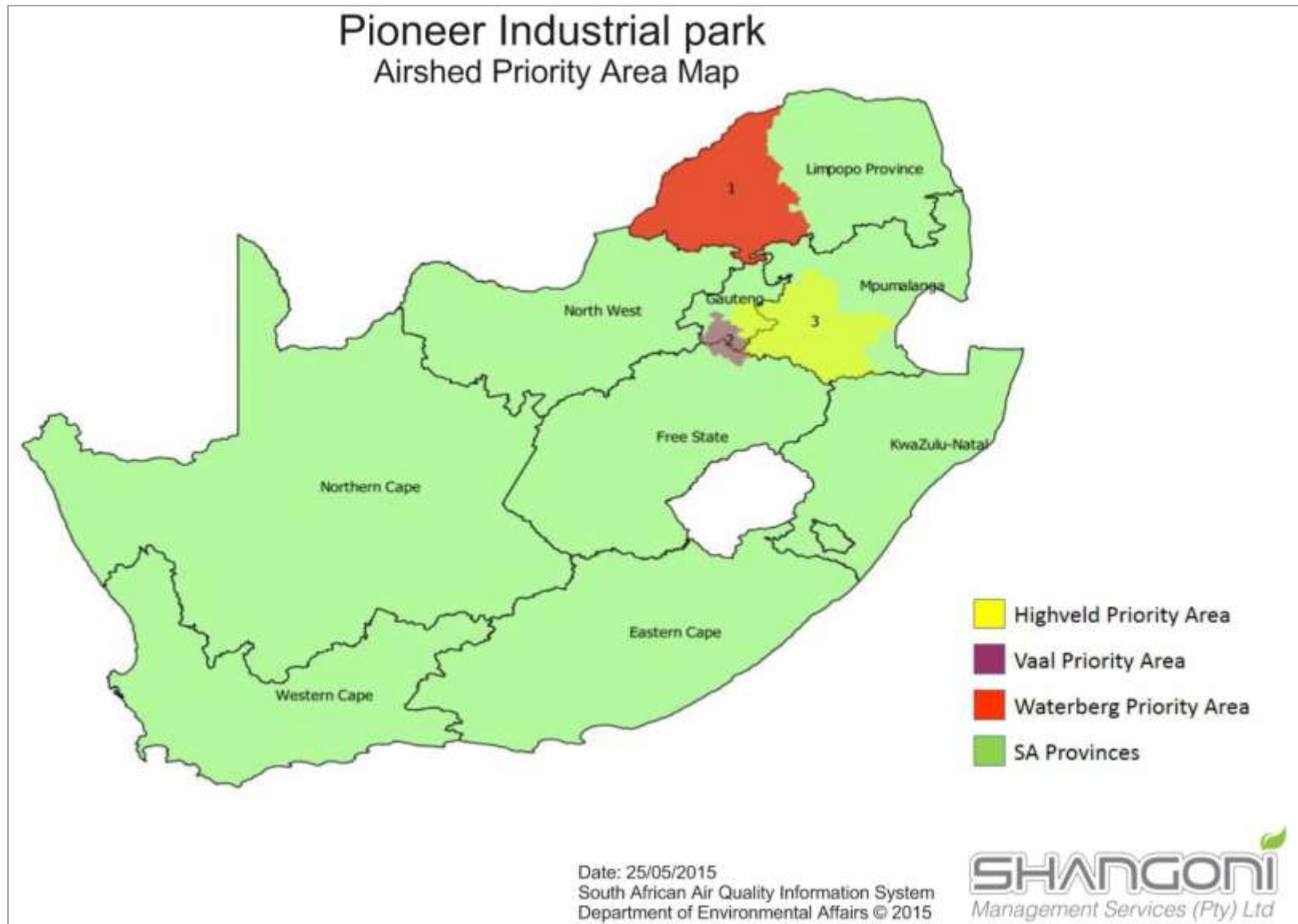


Figure 27: Airshed Priority Areas (SAAQIS, 2015).



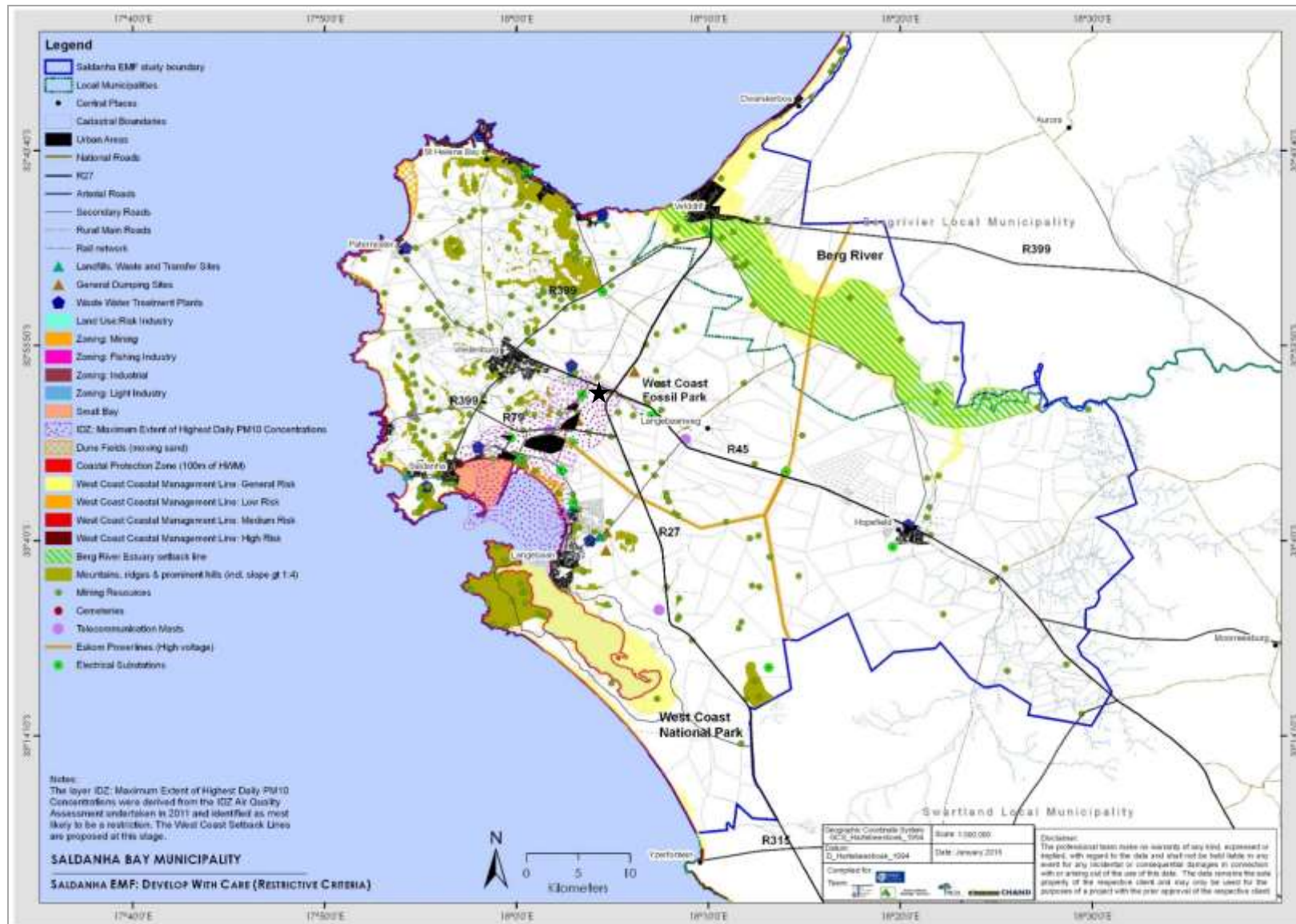


Figure 28: IDZ: Maximum Extent of Highest Daily PM10 Concentrations (WCDEADP, 2015).



## 2.13 Noise

Noise in the area surrounding the proposed industrial park originates from the Salkor train station, trains on the railway lines, traffic on the R27 and the R45 and industries such as ArcelorMittal South Africa and Namaqua sands.

During construction phase of the proposed project, additional noise will also be generated. According to Jorgensen & Johnson (1981), the noise levels generated by general construction activities on a building site can reach levels of approximately 70 dB, caused by for instance heavy machinery. Sound is inversely proportional to the distance from the source and can get absorbed by buildings and vegetation barriers. Noise intensities (dB) will be at their highest on site and will decrease as one moves away from their sources.

The noise decline curve gives an indication of how noise generated at the site will decrease with distance. It gives an indication of the distance that the sound would have travelled upon reaching a level of 60 dB, prescribed by the SABS as being the acceptable limit for environmental noise. According to noise decline curve, at a distance of 27 metres from the construction site, the generated noise would have decreased to a level of 60 dB and at a distance of 45 metres it would have decreased to approximately 55dB. It can therefore be said that noise travelling further than 45 metres will have a low impact on neighbouring farms and sensitive receptors.

## 2.14 Visual aspects

The site is visible to adjacent land owners, people passing the site via train on the railway to the west of the site, motorists travelling past the site on the R27 to the east of the site and potentially motorist travelling on the R45 to the north of the site.

## 2.15 Environmental Management Zones

There are three Environmental Management Zones within the Environmental Management Framework for the greater Saldanha area. These EMZs are identified based on a combination of the environmental characteristics of the area and the potential for significant impacts in relation to activities listed in the 2010 NEMA EIA Regulations, namely Listing Notices 1, 2 and 3 (GN 544, 545 and 546 of 18 June 2010, as amended on 30 July 2010).

The proposed industrial park lies within EMZ 2 and EMZ 3 (refer to Figure 29 and Figure 30). The objective of EMZ 2 and EMZ 3 is to promote development with care, with respect to the valued resources and restrictive conditions or constraints (attributes), respectively.

Activities that should be avoided in EMZ2 include:

- Mining projects;



- Extraction or processing of oil or gas; and
- Power generation projects (fossil fuels or nuclear).

Activities that should be avoided in EMZ3 include:

- Residential projects;
- Commercial or retail facilities;
- Intensive agriculture;
- Facilities for the concentration of livestock or for intensive/commercial livestock production;
- Forestry/afforestation;
- Dams (instream and off stream) and water transfer schemes;
- Recreational facilities; and
- Tourism facilities (WCDEADP, 2015).



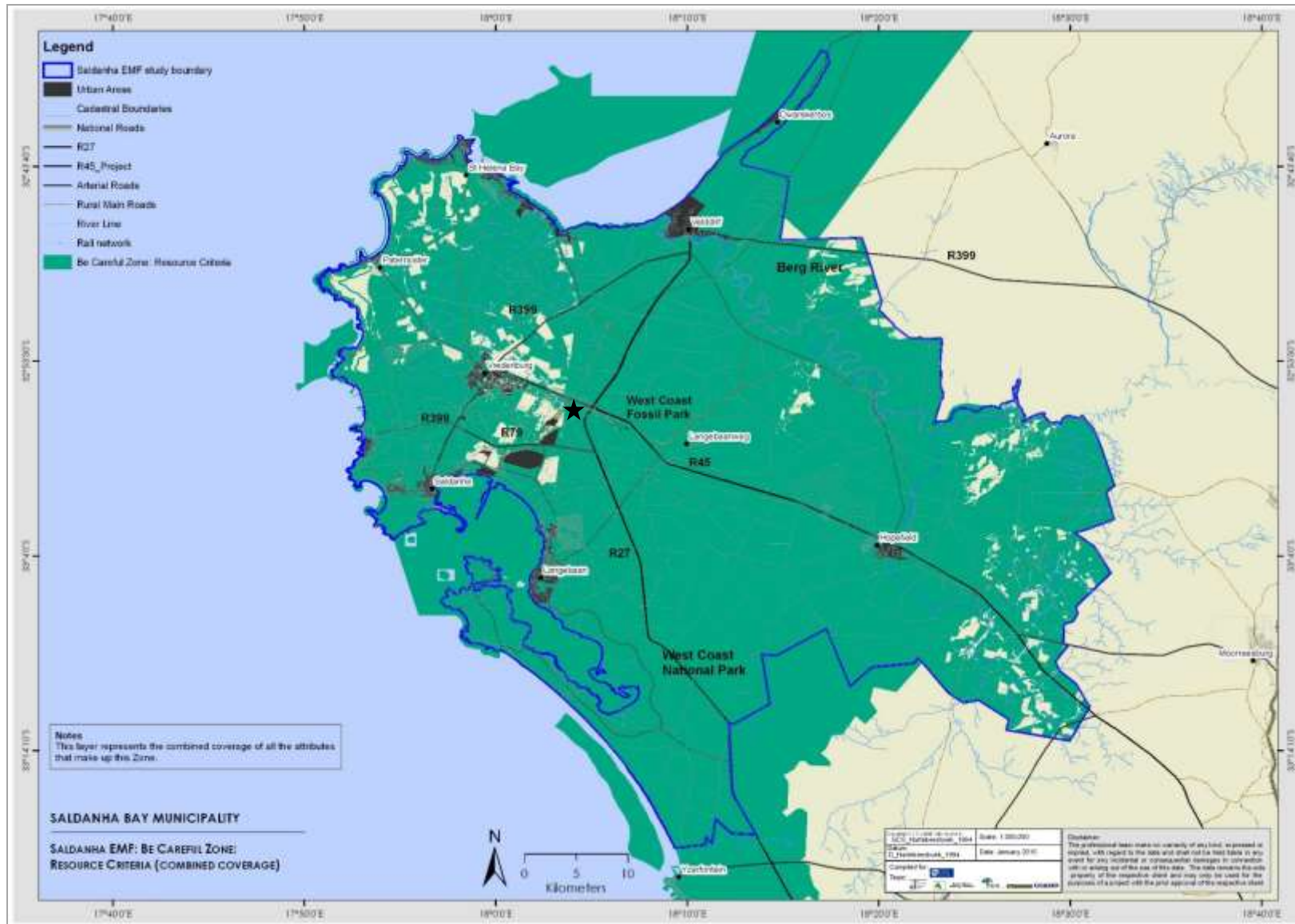


Figure 29: Environmental Management Zone 2 – develop with care: valued resources (WCDEADP, 2015).

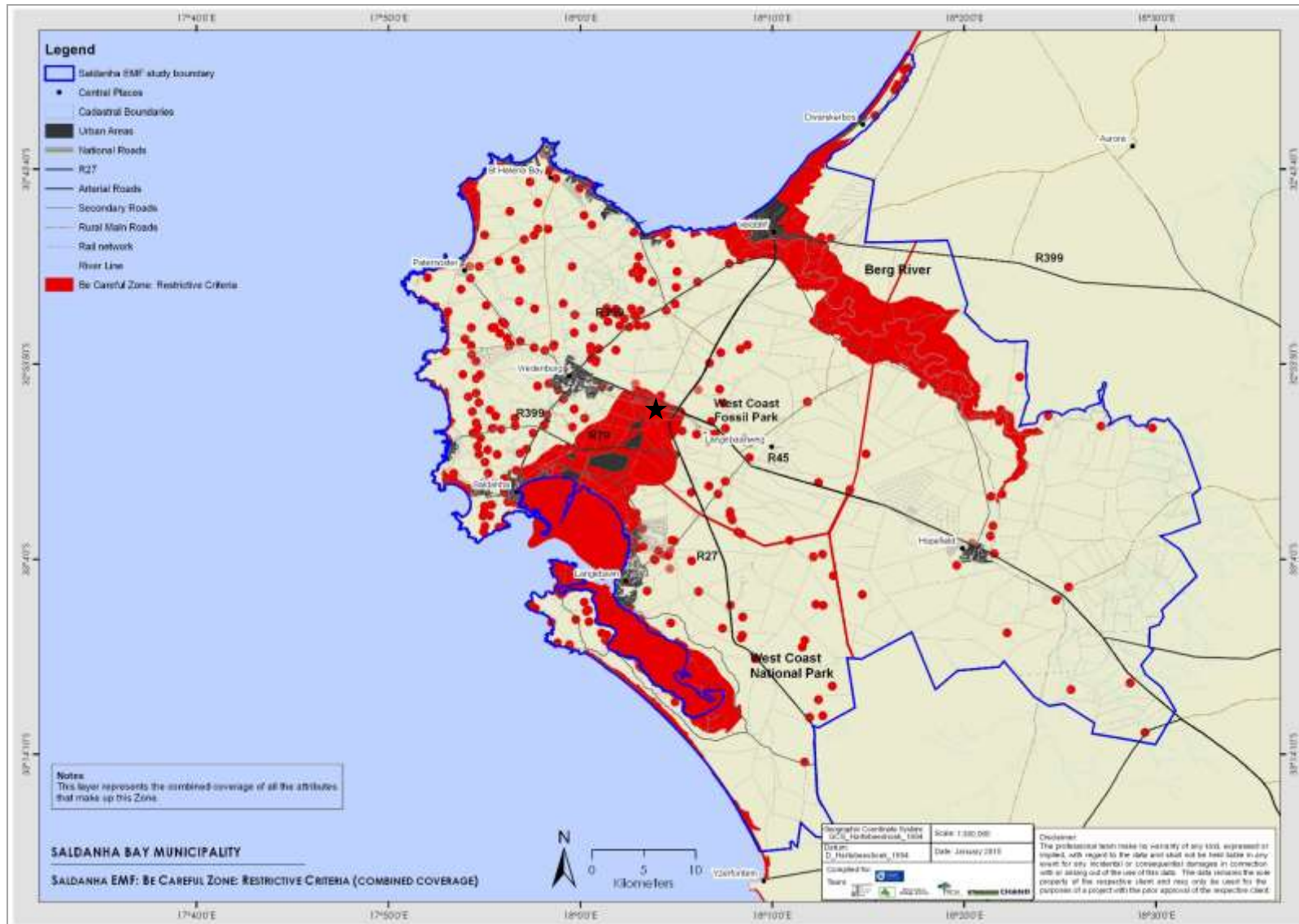


Figure 30: Environmental Management Zone 3 – develop with care: restrictive conditions or constraints (WCDEADP, 2015).

## 2.16 Socio-economic aspects

### 2.16.1 Demography

According to the 2011 census, 99 193 people formed part of the 28 835 households in the Saldanha Bay Local Municipality. The average household size is 3.4 people per household. The growth rate in the municipality is 3.45% per annum. There are 99.2 men for every 100 women in the municipality (Statistics South Africa, 2011). Table 14 below shows the age structure of the municipality.

*Table 14: Demographic Profile of the Saldanha Bay Local Municipality*

Age Group	Percentage of Population (%)
Under 15 years of age	25.3
15 to 64 years of age	69.5
Over 65 years of age	5.2
<b>Total</b>	<b>100</b>

### 2.16.2 Major economic activities

The major economic activities in the Saldanha Bay area are manufacturing activities. These activities contribute 29.3% of the municipality's General Growth Properties (GGP). Agriculture is the second most important economic activity with a contribution of 11.5% to the GGP (Urban-Econ Development Economists, 2005).

### 2.16.3 Unemployment and employment

The 2011 census found that the official unemployment rate was 23.4% and the youth unemployment rate (15 to 34 years of age) was 30.4%. The dependency ratio was 44.0 per 100 people between the ages of 15 and 64 years (Statistics South Africa, 2011).



### 3. APPLICABLE LEGISLATION AND GUIDELINES

Table 15 below provides an indication of the main legislation, policies and/or guidelines applicable to the proposed industrial park project.

Table 15: Applicable legislation, policies and/or guidelines

Title of legislation, policy or guideline	Administering authority	Aim of legislation, policy or guideline
<b>Laws of General Application</b>		
The Constitution of the Republic of South Africa, 1996 (Act No. 108 of 1996)	-	To establish a Constitution with a Bill of Rights for the RSA.
Environment Conservation Act, 1989 (Act No. 73 of 1989 as amended)	Western Cape Department of Environmental Affairs and Development Planning	To control environmental conservation.
National Environmental Management Act, 1998 (Act No. 107 of 1998)	Western Cape Department of Environmental Affairs and Development Planning	To provide for the integrated management of the environment, and to regulate the 'Duty of Care' Principle.
National Environmental Management Amendment Act, 2008 (Act No. 62 of 2008)		
Promotion of Access to Information Act, 2000 (Act No. 2 of 2000 as amended)	-	To give effect to the constitutional right of access to any information held by the State and any information that is held by another person and that is required for the exercise or protection of any rights.
<b>Air Quality and Noise</b>		
National Environmental Management: Air Quality Act (Act No. 39 of 2004)	West Coast Municipality	To reform the law regulating air quality to protect the environment by providing reasonable measures for the prevention of pollution. To provide for national norms and standards regulating air quality monitoring, management and control.
<b>Water Management</b>		
National Water Act (NWA), 1998 (Act No. 36 of 1998)	Department of Water and Sanitation	To provide for fundamental reform of the law relating to water resources.
<b>Waste Management</b>		
National Environmental Management Amendment Act, 2008 (Act No. 62 of 2008)	Western Cape Department of	To reform the law regulating waste





Title of legislation, policy or guideline	Administering authority	Aim of legislation, policy or guideline
Management: Waste Act (Act No. 59 of 2008)	Environmental Affairs and Development Planning	management in order to protect health and the environment by providing reasonable measures for the prevention of pollution and ecological degradation.
National Environmental Management: Waste Act (Act No. 59 of 2008) – Waste Classification and management regulations (GNR. 634 of 23 August 2013).	Western Cape Department of Environmental Affairs and Development Planning	To regulate the classification and management of waste in a manner that supports and implements the provisions of the Waste Act.
<b>Biodiversity</b>		
National Environmental Management Biodiversity Act, 2004 (Act No. 10 of 2004)	Western Cape Department of Environmental Affairs and Development Planning	To provide for the management and conservation of South Africa's biodiversity within the framework of the National Environmental Management Act, 1998.
Conservation of Agricultural Resources Act, 1983 (Act No. 43 of 1983)	Western Cape Department of Agriculture	To provide for control over the utilisation of the natural agricultural resources of South Africa in order to promote the conservation of the soil, the water sources and the vegetation and the combating of weeds and invader plants.
National Veld and Forest Fire Act, 1998 (Act No. 101 of 1998)	Western Cape Department of Agriculture	To reform the law on veldt and forest fires.
Agricultural Pest Act, 1983 (Act No. 36 of 1983 as amended) – GN R276 of 5 March 2004	Western Cape Department of Agriculture	To regulate plants, plant products and other regulated articles when imported into South Africa.
<b>Soil and Land Management</b>		
National Environmental Management Act, 1998 (Act No. 107 of 1998)  National Environmental Management Amendment Act, 2008 (Act No. 62 of 2008)	Western Cape Department of Environmental Affairs and Development Planning	To provide for the integrated management of the environment and to regulate the 'Duty of Care' Principle.
Environment Conservation Act, 1989 (Act No. 73 of 1989 as amended)	Western Cape Department of Environmental Affairs and Development Planning	To control environmental conservation.
<b>Heritage and Archaeological Resources</b>		
National Heritage Resources Act No 25 of 1999 (Act No. 25 of 1999 as	Heritage Western Cape	To introduce an integrated and interactive system for the



Title of legislation, policy or guideline	Administering authority	Aim of legislation, policy or guideline
amended)		management of the national heritage resources; to promote good government at all levels, and empower civil society to nurture and conserve their heritage resources so that they may be bequeathed to future generations
<b>Protected Areas</b>		
National Environmental Management: Protected Areas Act, 2003 (Act No. 57 of 2003 as amended)	Western Cape Department of Environmental Affairs and Development Planning	To provide for the protection and conservation of ecologically viable areas representative of South Africa's biological diversity and its natural landscapes.
<b>Planning of New Activities</b>		
National Environmental Management Act, 1998 (Act No. 107 of 1998)  National Environmental Management Amendment Act, 2008 (Act No. 62 of 2008)	Western Cape Department of Environmental Affairs and Development Planning	To provide for the integrated management of the environment and to regulate the 'Duty of Care' Principle.
EIA Regulations R 543, R 544, R 545 and R 546, dated June 2010) under the NEMA, 1998	Western Cape Department of Environmental Affairs and Development Planning	To regulate and control the authorisation of certain listed activities.
<b>Mining</b>		
Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002)	Department of Mineral Resources	To make provision for equitable access to and sustainable development of the nation's mineral and petroleum resources.



## 4. PUBLIC PARTICIPATION PROCESS

### 4.1 Objectives of the Public Participation Process (PPP)

Section 24 of the Constitution of the Republic of South Africa of 1996 guarantees everyone the right to an environment that is not harmful to their health and well-being and to have the environment protected for the benefit of present and future generations. In order to give effect to this right, the National Environmental Management Amendment Act (NEMA), 2008 came into effect.

In terms of Section 24 (4) of the NEMA, 2008, procedures for the investigation, assessment and communication of the potential consequences or impacts of activities on the environment must, *inter alia*, ensure, with respect to every application:

- Coordination and cooperation between organs of state in the consideration of assessments where an activity falls under the jurisdiction of more than one organ of state.
- That the findings and recommendations flowing from an investigation, the general objective of integrated management laid down in NEMA, 2008 and the principles of environmental management set out in Section 2 of NEMA, 2008 are taken into account in any decision made by the organ state in relation to any proposed policy, programme, process, plan or projects, consequences or impacts.
- Public information and participation procedures which provide all integrated and affected parties, including all organs of state in all spheres of government that may have jurisdiction over any aspect of the activity, with a reasonable opportunity to participate in those information and participation procedures.

One of the general objectives of integrated environmental management laid down in Section 23(2) (d) of NEMA, 2008 is to: “ensure adequate and appropriate opportunity for public participation in decisions that may affect the environment.”

The National Environmental Management Principles as stipulated in NEMA, 2008 say:

- “Environmental management must place people and their needs at the forefront of its concern, and serve their physical, psychological, developmental, cultural and social interests equitably.
- The participation of all interested and affected parties in environmental governance must be promoted, and all people must have an opportunity to develop the understanding, skills and capacity necessary to achieve equitable and effective participation, and participation by vulnerable and disadvantaged persons must be ensured”.



## 4.2 Legislation and guidelines followed for the PPP

The public participation process for this project was conducted by Shangoni Management Services in terms of:

- The procedures and provisions in terms of the NEMA (as amended), 2008;
- Chapter 6 of the EIA Regulations of 2010;
- GN 807; Public Participation Guideline in the Environmental Impact Assessment Process, dated October 2012; and
- Other relevant legislation such as the Promotion of Access to Information Act (PAIA), 2000.

Refer to Appendix D for an extract regarding the required public participation process to be followed, taken from the relevant legislation and guidelines.

## 4.3 Public Participation Process followed

### 4.3.1 Identification and registration of I&APs and key stakeholders

Table 16 below lists the landowners and adjacent landowners identified and notified (by means of e-mail, fax and/or registered post) of the proposed project. Copies of the notifications to the I&APs have been included in Appendix D3.

*Table 16: List of landowners and adjacent landowners identified and notified*

Farm Name	Owner
Ptn 3 of the farm Eenzaamheid 135	Waterwyk (Pty) Ltd - Hugo Tallies
Ptn 6 of the farm Eenzaamheid 135	Transnet (Pty) Ltd
Ptn 7 of the farm Eenzaamheid 135	Transnet (Pty) Ltd/Gavin O'Connor
Ptn 14 of the farm Eenzaamheid 135	Transnet (Pty) Ltd
Ptn 17 of the farm Eenzaamheid 135	Plasto Prop 5 (Pty) Ltd
Ptn 18 of the farm Eenzaamheid 135	Jason & Tamia Familie Trust/F.H. Jordaan
Ptn 27 of the farm Eenzaamheid 135	Lampies Elektries - Lambrechts Gerhard
Ptn 29 of the farm Eenzaamheid 135	Jan R Malan
Ptn 34 of the farm Eenzaamheid 135	Mr Richard van Wyk
Ptn 37 of the farm Eenzaamheid 135	Lampies Elektries - Lambrechts Gerhard
Ptn 40 of the farm Eenzaamheid 135	Corries Construction Services CC – Mr Corrie Schutte
Ptn 40 of the farm Eenzaamheid 135	SA Kalk & Gips - Mr Ben Krog
Ptn 41 of the farm Eenzaamheid 135	Juffroushoogte Gasteplaas – Dr Sam Hapley
Ptn 42, 46 and 47 of the farm Eenzaamheid 135	Geriona Johanna Mouton
Ptn 44 of the farm Eenzaamheid 135	Saldanha Ind Services CC - Noerie Laatoe
Ptn 45 of the farm Eenzaamheid 135	Cameron Peter James
Ptn 49 of the farm Eenzaamheid 135	Ms A.M. Thom
Ptn 15630 of the farm Eenzaamheid	Spannies Spangenberg
Ptn 0 of the farm Langeberg 188	Trans African Murals (Pty) Ltd



Farm Name	Owner
Ptn 3 of the farm Langeberg 188	Unknown
Ptn 4 of the farm Langeberg 187	C.J. Steyn
Ptn 5 of the farm Langeberg 188	Unknown
Ptn 6 and 9 of the farm Langeberg 187	Gavin Stiglingh
Farm Nooitgedacht	H.S.C. Steenkamp
Witteklip 123, Vredenburg	KRRC Trust – Herman van As
Ptn 1 of the farm 133	Transnet (Pty) Ltd
Ptn 2 of the farm 1195	Abloma Familie Trust

All organs of state which may have jurisdiction in respect of the proposed project is considered to be registered I&APs.

The following organs of state were notified of the proposed project:

- Western Cape Department of Agriculture;
- Western Cape Department of Community Safety;
- Western Cape Department of Cultural Affairs and Sport;
- Western Cape Department of Economic Development and Tourism;
- Western Cape Department of Energy;
- Western Cape Department of Environmental Affairs and Development Planning;
- Western Cape Department of Health;
- Western Cape Department of Human Settlements;
- Western Cape Department of Local Government;
- Western Cape Department of Social Development;
- Western Cape Department of Transport and Public Works;
- Department of Mineral Resources – Western Cape Region;
- Department of Water and Sanitation;
- Department of Environmental Affairs;
- South African Civil Aviation Authority;
- South African Air Force;
- Air Force Base Langebaanweg;
- Saldanha Bay Municipality;
- Saldanha Bay Municipal Traffic Department;
- West Coast District Municipality;
- CapeNature;
- Heritage Western Cape;
- South African Biodiversity Institute;
- SA National Parks;
- Transnet;
- WESSA;



- SANRAL; and
- Eskom.

Copies of the notifications to the organs of state have been included in Appendix D2 and examples are included in the Figure 31, Figure 32, and Figure 33.







Shangoni Management Services Pty (Ltd)  
Reg. 2001/0000385/7 (P/L) - 469 076 1068

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PO Box 74728 - Lynnwood Ridge - 0041

20 November 2014

EIA REF: 16/3/1/2/F4/23/3007/14; SMS REF: STR-SAL-14-02-06

**Department of Water Affairs**

Private Bag X16  
Sanlamhof  
7532

Attention: Mr R Khan

**NOTICE OF APPLICATION FOR ENVIRONMENTAL AUTHORISATION AND POTENTIAL WATER USE LICENCE FOR THE PROPOSED PIONEER INDUSTRIAL PARK DEVELOPMENT ON PORTION 39 (REMAINING EXTENT) OF THE FARM EENZAAMHEID 135, MALMESBURY RD**

You are hereby notified that an application for environmental authorisation in terms of the Environmental Impact Assessment (EIA) Regulations of 2010 (regulations in terms of chapter 5 of the National Environmental Management, 1998 (Act No. 107 of 1998), as amended (NEMA), has been lodged with the Western Cape Department of Environmental Affairs and Development Planning (WCDEADP). A Water Use Licence Application may also be submitted to the Department of Water Affairs in terms of Chapter 4 of the National Water Act, 1998 (Act No. 36 of 1998).

**Applicant:** Ms A.M. Thom.

**Project Name:** Pioneer Industrial Park.

**Project Location:** Portion 39 (remaining extent) of the farm Eenzaamheid 135, Malmesbury RD, Vredenburg.

**Environmental Authorisation Application Process Reference Number:**  
16/3/1/2/F4/23/3007/14.

**Project Description:**

The proposed site [Portion 39 (remaining extent) of the farm Eenzaamheid 135, Malmesbury RD], is privately owned property situated 6.6km to the South-east of Vredenburg in the Western Cape Province. The site is approximately 180ha in extent. The current zoning of the property is "undetermined" according to the Zoning Map: VDG-SAL/1, dated 06/06/1982. The site was, however, used for agricultural activities approximately 20 years ago.

Figure 31: Notification Letter - Page 1

The applicant proposes to establish a mixed use Industrial Park on the site, including heavy industrial, light industrial and commercial uses. The proposed development will entail the following:

- The physical alternation and clearance of up to 180.5106ha of vegetation on undeveloped/vacant land.
- The construction and/or expansion/widening of road infrastructure, including access roads and an internal road network.
- The construction and/or expansion of a railway network on the property, including railway lines, stations and shunting yards.
- The construction and/or expansion of bulk services, including electricity, water, stormwater and sewage systems/networks.
- The proposed project will likely also entail the construction of facilities for the storage and handling of dangerous goods, such as diesel, petrol, oil and lubricants, the construction of a bulk water supply reservoir and the construction of a facility for the treatment of sewage and/or effluent, such as a package plant.
- It is possible that the facility will require a Water Use Licence in terms of the National Water Act, 1998, for water use activities, such as the storage of water and the treatment of wastewater that may be undertaken on the site. Potential Water Use activities that may require licensing are:
  - Section 21(a): Taking of water from a water resource;
  - Section 21(b): Storage of water;
  - Section 21(c) and (i): Impeding or Diverting the flow of water in a watercourse; and Altering the bed, banks, course or characteristics of a watercourse;
  - Section 21(f): Discharge of waste or water containing waste into a water resource through a pipe, canal, sewer or other conduit; and
  - Section 21(g): Disposing of waste in a manner which may detrimentally impact on a water resource.

A Background Information Document (BID) and Interested and Affected Party (I&AP) Registration Form are also attached to this letter in order to provide more detail with regards to the proposed project and so that persons may register as I&APs for the proposed project, should they so wish.

**Invitation to participate:** Should you wish to be registered as an I&AP or comment on the above-mentioned project and application process, please submit a completed Interested and Affected Party Registration Form (attached to this letter) or your name, contact information and interest in the matter, in writing, to the contact person below, by no later than **19 January 2015**.

Figure 32: Notification Letter - Page 2



**Where to obtain more information:** To obtain additional information please contact the Environmental Assessment Practitioner at the details provided below.

**Environmental Assessment Practitioner:** Shangoni Management Services (Pty) Ltd  
PO Box 74726, Lynnwood Ridge, Pretoria, 0040. Contact Person: **Lizette Crous**: Tel: 012 807 7036, Cell: 071 673 3355, Fax: 012 807 1014/086 643 5360, E-mail: [lizette@shangoni.co.za](mailto:lizette@shangoni.co.za). For online participation go to [www.shangoni.co.za](http://www.shangoni.co.za) and click on the "Public Documents" link.

Regards,



*Lizette Crous*  
Shangoni Management Services

Figure 33: Notification Letter - Page 3

## **4.3.2 Methods of notification**

### **4.3.2.1 Advertisement(s)**

The proposed project was advertised in a local newspaper, The Weslander, on the 20<sup>th</sup> of November 2014. The Weslander Newspaper was found to be the most appropriate newspaper in terms of its accessibility to the I&APs. A copy of the advertisement and proof of the placement thereof is attached in Appendix D6. Refer also to Figure 34 below.

### **4.3.2.2 Placement of site- and public notices**

Notice was also given to Interested and Affected Parties (I&APs) via the placement of notice boards. Notice boards were placed at different, noticeable and conspicuous places on the 20<sup>th</sup> of November 2014. A copy of the site notice and photographs of the site notices are attached in Appendix D5. Refer also to Figure 35 below.

### **4.3.2.3 Background Information Document**


The Background Information Document (BID) developed for the proposed project provides information pertaining to the project and is intended to inform I&APs of the proposed project. The BID also includes a registration form which I&APs, stakeholders and organs of state are encouraged to complete in order to register as an I&AP for the proposed project.

The BID was made available on the 20<sup>th</sup> of November 2014 to all landowners within and surrounding the site on which the proposed project will be undertaken, as well as to all organs of state that may have jurisdiction over any aspect of the activity. The BID will also be made available to any other person who becomes involved in the on-going Public Participation Process.

Copies of the BID and proof of distribution of the BID to the adjacent landowners and organs of state have been attached under Appendix D4.





**Weslander** 29  
20 November, 2014

**NOTICE OF ENVIRONMENTAL AUTHORISATION APPLICATION AND POTENTIAL WATER USE LICENCE APPLICATION: PROPOSED PIONEER INDUSTRIAL PARK DEVELOPMENT ON PORTION 39 (REMAINING EXTENT) OF THE FARM EENZAAMHEID 135, MALMESBURY RD**  
(EIA Reference Number: 16/3/1/2/F4/23/3007/14; SMS Reference Number: STR-SAL-14-02-06)

**NOTICE OF ENVIRONMENTAL AUTHORISATION APPLICATION AND POTENTIAL WATER USE LICENCE APPLICATION: PROPOSED PIONEER INDUSTRIAL PARK DEVELOPMENT ON PORTION 39 (REMAINING EXTENT) OF THE FARM EENZAAMHEID 135, MALMESBURY RD**  
(EIA Reference Number: 16/3/1/2/F4/23/3007/14; SMS Reference Number: STR-SAL-14-02-06)

The purpose of this notice is to provide information to interested and Affected Parties (I&APs) about potential decisions that may affect them and to afford I&APs an opportunity to influence those decisions in the Environmental Authorisation and potential Water Use Licence application processes for the proposed Pioneer Industrial Park Development Project on Portion 39 (remaining extent) of the farm Eenzaamheid 135, Malmesbury RD. A Water Use Licence Application may be submitted to the Department of Water Affairs in terms of Chapter 4 of the National Water Act, 1998 (Act No. 36 of 1998).

**BACKGROUND TO THE PROJECT**  
Portion 39 of the Farm Eenzaamheid 135 is a vacant, privately owned property located in the Western Cape Province. The site is approximately 180ha in extent. The property has an "undetermined" zoning and was used for agricultural activities approximately 20 years ago. The applicant proposes to establish an Industrial Park on the property for mixed use, including heavy industrial, light industrial and commercial uses. The development will entail the following:

- The physical alternation and clearance of up to 180,5106ha of vegetation on undeveloped/vacant land.
- The construction and/or expansion/widening of road infrastructure, including access roads and an internal road network.
- The construction and/or expansion of a railway network on the property, including railway lines, stations and shunting yards.
- The construction and/or expansion of bulk services, including electricity, water, stormwater and sewage systems/networks.
- The proposed project will likely also entail the construction of facilities for the storage and handling of dangerous goods, such as diesel, petrol, oil and lubricants, the construction of a bulk water supply reservoir and the construction of a facility for the treatment of sewage and/or effluent, such as a package plant.
- It is possible that the facility will require a Water Use Licence in terms of the National Water Act, 1998, for water use activities, such as the storage of water and the treatment of wastewater that may be undertaken on the site.

**LEGISLATIVE REQUIREMENTS**  
**Procedure applied to the application**  
As the proposed activities entail the development of new infrastructure, a Scoping and Environmental Impact Assessment (EIA) will be required in compliance with the National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA) for the authorisation of listed activities contained in GNR 544 of 18 June 2010, GNR 545 of 18 June 2010 and GNR 546 of 18 June 2010 published in terms of Sections 24(2) and 24D the NEMA.

**Application submitted to the competent Authority**  
An application for Environmental Authorisation in terms of the NEMA, as amended, and the Environmental Impact Assessment Regulations, 2010, was submitted for the proposed activities on the 25th of August 2014 to the Western Cape Department of Environmental Affairs and Development Planning (WCDEADP). The application was accepted by the WCDEADP on the 8th of September 2014 and subsequently the reference number 16/3/1/2/F4/23/3007/14 was assigned to the application.

**Listed activities applicable to the application**  
The listed activities that have been applied for include Listed activities 9, 10, 12, 13, 22, 37, 38, 47, 53 and 55A of GNR 544. Listed activities 2, 4, 10, 12, 13, 14 and 19 of GNR 546 and Listed activities 5, 8, 11, 15 and 27 of GNR 545. Potential Water Use activities that may require licensing are: Section 21(a): Taking of water from a water resource; Section 21(b): Storage of water; Section 21(c) and (i): Impeding or Diverting the flow of water in a watercourse, and Altering the bed, banks, course or characteristics of a watercourse; Section 21(f): Discharge of waste or water containing waste into a water resource through a pipe, canal, sewer or other conduit; and Section 21(g): Disposing of waste in a manner which may detrimentally impact on a water resource.

**Legislation associated with the application**  
South African legislation requires that a Scoping and Environmental Impact Assessment Report, as well as an Environmental Management Programme (EMP), be compiled in accordance with the National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA), as amended. The proposed project might also require a Water Use Licence under the National Water Act, 1998 (Act No. 36 of 1998) (NWA). In order to do so, A.M. Thom has appointed Shangoni Management Services (Pty) Ltd (Shangoni), as the independent Environmental Assessment Practitioner (EAP), in terms of Regulation 16 of GNR 543, to undertake and manage the processes of applying for the required environmental authorisations. Furthermore, Shangoni meets the requirements set out in Regulation 17 of GNR 543.

**PUBLIC PARTICIPATION**  
People have a right to be informed about potential decisions that may affect them and to be afforded an opportunity to influence those decisions.

**Register as an I&AP**  
You may be an I&AP for this proposed project. To register as an I&AP of this project, or to obtain more information or submit comments, please request an I&AP Registration Form from Shangoni and return it to the contact details provided below.

**Availability of the draft Scoping Report**  
The draft Scoping Report will be made available to the public for review for a period of forty (40) days in due course.

**Where to obtain more information**  
To obtain additional information, please contact Shangoni Management Services at the details provided below.

**Environmental Assessment Practitioner: Shangoni Management Services (Pty) Ltd**  
**Contact person:** Lizette Crous  
**Tel:** 012 807 7036, **Mobile:** 071 673 3355, **E-mail:** [lizette@shangoni.co.za](mailto:lizette@shangoni.co.za),  
**Fax:** 012 807 1014/086 643 5360,  
**Postal Address:** PO Box 74726, Lynnwood Ridge, 0040




Figure 34: Newspaper Advertisement



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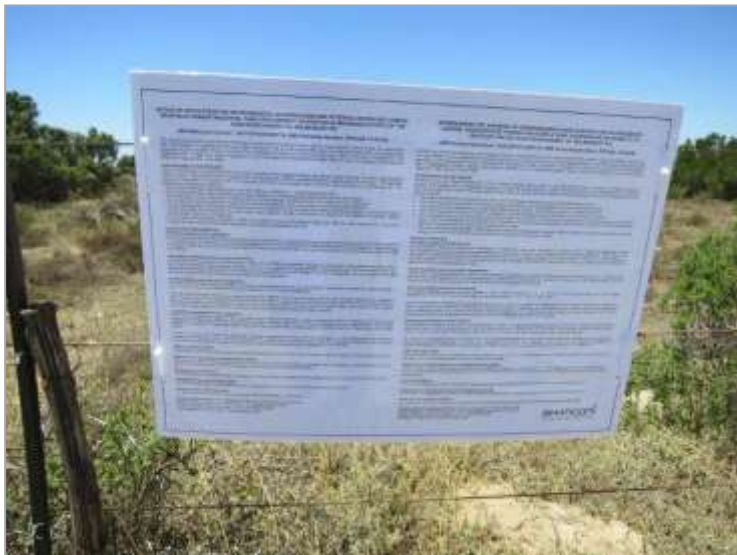




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Figure 35 (a-n): Site Notice Photographs





### 4.3.3 I&AP register

Once all landowners, adjacent landowners, organs of state and the public were notified of the proposed project, an I&AP Register (as provided in Appendix D1) was compiled. Table 17 below provides an extract of the I&AP Register indicating the organs of state and other I&APs that have been registered.

Table 17: Registered I&APs

No.	Name	Department
<b>Organs of State</b>		
1	Cllr Joubert Skei	Saldanha Bay Municipality – Ward 2
2	Cllr Frank Pronk	Saldanha Bay Municipality – Ward 5
3	Doretha Kotze	West Coast District Municipality
4	Ms Nazeema Duarte	Saldanha Bay Municipality
5	Mr Lindsey Gaffley	Saldanha Bay Municipality
6	Mr Gary Tomlinson	Saldanha Bay Municipality
7	Daan Visser	Saldanha Bay Municipality
8	Hendrick Snyders	Saldanha Bay Municipality
9	Piet Fabricius	Saldanha Bay Municipality
10	Mr R. Khan	Department of Water and Sanitation
11	Andrew September	Heritage Western Cape
12	Andrew Hall	Heritage Western Cape
13	Mariagrazia Galimberti	South African Heritage Resources Agency
14	Joyene Isaacs	Western Cape Department of Agriculture
15	J.H. Smit	Western Cape Department of Agriculture
16	Official	Elsenburg Land Care
17	Solly Fourie	Western Cape Department of Economic Development and Tourism
18	Brent Walters	Western Cape Department of Cultural Affairs and Sport
19	Piet van Zyl	Western Cape Department of Environmental Affairs and Development Planning
20	Johan Pienaar	Western Cape Department of Transport and Public Works
21	Grace Swanepoel	Western Cape Department of Transport and Public Works
22	Prof K.C. Househam	Western Cape Department of Health
23	Nathan Adriaanse	Western Cape Department of Local Government
24	Dr Hildegard Fast	Western Cape Department of Local Government
25	Dr. Robert Macdonald	Western Cape Department of Social Development
26	Fuad Allie	Western Cape Department of Energy
27	Elize Breytenbach	Western Cape Department of Energy
28	Duduzile Kunene	Department of Mineral Resources – Western Cape Region
29	Nomawethu Qase	Western Cape Department of Energy



No.	Name	Department
30	Dr Gilbert Lawrence	Western Cape Department of Community Safety
31	Muhammad Essop	Department of Environmental Affairs
32	Abraham Sibusiso Donda	South African Biodiversity Institute
33	Elton le Roux	South African Biodiversity Institute – SANBI Cape Town Office
34	Mr Randall Julies	Transnet
35	John Geeringh	Eskom
36	Rene de Kock	SANRAL
37	Colene Runkel	SANRAL
38	Lt. Col. Tyrone King	South African Air Force
39	Lt. Col. Mokwebo	South African Air Force
40	Mr Kenneth Molomo	South African Air Force
41	Lizelle Stroh	South African Civil Aviation Authority
No.	Name	Interest
<b>Registered I&amp;APs</b>		
1	Alana Duffel-Canham	CapeNature
2	Philip le Roux	Elandsfontein Exploration and Mining
3	Herman van As – KRRC Trust	Adjacent Landowner
4	Olivier Bester Family Trust	I&AP
5	Paulita Neuman	TFR
6	Cllr Frank Pronk	Saldanha Bay Municipality – Ward 5
7	Doretha Kotze	West Coast District Municipality
8	Pippa Haarhoff	West Coast Fossil Park
9	Stanley Ralph Nomdo	Western Cape Department of Health
10	ML Watters/Ms GD Swanepoel	Western Cape Department of Transport and Public Works
11	Dries Schreuder	Infinite projects
12	N Ndobeni	Department of Water and Sanitation
13	Debra-Anne Third	Western Cape Department of Community Safety

Refer also to Appendix D7 for a detailed I&AP Register including contact information for all registered organs of state and I&APs.

#### 4.3.4 Public meeting(s)

No public meetings have been held, nor is one anticipated at this time.

#### 4.3.5 Access and opportunity to comment on written submissions

The draft Scoping Report was made available to all Departments, Organs of State as well as the registered I&APs for review, for a period of forty (40) days. The review period was from the 19<sup>th</sup> of June 2015 to the 31<sup>st</sup> of July 2015. An electronic copy of the draft Scoping Report was also posted on



the Shangoni Management Services' website ([www.shangoni.co.za](http://www.shangoni.co.za)) for public comment for the same period of forty days. The report was also submitted to the Western Cape Department of Environmental Affairs and Development Planning for review.

The Final Amended Scoping report will be made available for a period of 21 days from 15 May – 4 June 2016 to all the Interested and Affected Parties as well as the Western Cape Department of Environmental Affairs and Development Planning for review.

The Amended Final Scoping report will be made available for a period of 14 days from 16 to 29 of January 2017 to all the Interested and Affected Parties as well as the Western Cape Department of Environmental Affairs and Development Planning for review.

#### **4.3.6 Consultation with the relevant Authorities**

##### **4.3.6.1 Application form in terms of the NEMA, 1998**

The applicable Environmental Authorisation application form under NEMA, 1998, was submitted to the Western Cape Department of Environmental Affairs and Development Planning (WCDEADP) on the 25<sup>th</sup> of August 2014. A reference number (16/3/1/2/F4/23/3007/14) was issued by the Department on 8 September 2015. The letter of acknowledgement indicating the above mentioned reference number is attached as Appendix B.

##### **4.3.6.2 Authorities meeting(s)**

No meetings have been held with the competent authorities, nor is one anticipated at this time.

#### **4.3.7 Comments and responses**

All issues, comments and questions received from the I&APs up to date have been summarised in the table below. All comments on the draft Scoping Report have been included in Table 18. Copies of the comments received have also been included in Appendix D15.





Table 18: Comments and Responses Report

Name of contact person	Company	Date	Method of comment	Issue raised/Comment	Response
Andrew B Hall	Heritage Western Cape	23 July 2014 (Received 18 September 2014)	Post	<p><b>CASE NUMBER: 14060207AS0604E</b></p> <p><b>NID: PROPOSED INDUSTRIAL PARK ON PORTION 39 OF THE FARM EENZAAMHEID 135, MALMESBURY RD, VREDENBURG</b></p> <p>The matter above has reference.</p> <p>Your NID dated 11 July 2014 was tabled and the following was discussed:</p> <ol style="list-style-type: none"> <li>1. HWC reviewed the proposed industrial park on Portion 39 of Farm Eenzaamheid 135, Vredenburg, Saldanha Bay.</li> <li>2. HWC notes the previous archaeological and palaeontological studies done by G. Avery &amp; D. Avery (2009).</li> <li>3. No significant finds were found.</li> </ol> <p>Decision:</p> <ol style="list-style-type: none"> <li>1. The recommendations from the previous reports were accepted and should be upheld (G. Avery &amp; D.M. Avery, 2009, Palaeontological and Archaeological Assessment: Eenzaamheid 135 Portion 39 (a portion of portion 3) 3218CA &amp; CC Veldrif. Prepared for Shangoni Management Services. Iziko South African Museum).</li> <li>2. No further studies required.</li> </ol> <p><b>Terms and Conditions:</b></p> <ol style="list-style-type: none"> <li>1. This approval does not exonerate the applicant from obtaining</li> </ol>	Comments and decision of Heritage Western Cape are noted. The recommendations of Avery & Avery (2009) will be upheld for the proposed project.



Name of contact person	Company	Date	Method of comment	Issue raised/Comment	Response
				<p>local authority approval or any other necessary approval for the proposed work.</p> <p>2. If any heritage resources, including archaeological material, palaeontological material, graves or human remains, are encountered work must cease and they must be reported to Heritage Western Cape immediately.</p> <p>3. Heritage Western Cape reserves the right to request additional information as required.</p> <p><b>Should you have any further queries, please contact the official above and quote the case number above.</b></p>	
Randall Julies	Transnet Freight Rail	13 November 2014	Email	<p>RE: NOTICE OF APPLICATION FOR ENVIRONMENTAL AUTHORISATION (REF: 16/3/1/2/f4/23/3007/14; SMS REF: STR-SAL-14-02-06)</p> <p>Hi Lizette</p> <p>Thank you for copying this office in on the correspondence wrt the environmental authorisation. This is to acknowledge that we received your communication.</p> <p>I will process and submit as soon as I am able to.</p>	<p>Good morning Mr Julies</p> <p>Thank you for the confirmation of receipt.</p>
Lizelle Stroh	South African Civil Aviation Authority	20 November 2014	Email	<p>RE: NOTICE OF APPLICATION FOR ENVIRONMENTAL AUTHORISATION (EIA REF: 16/3/1/2/F4/23/3007/14; SMS REF: STR-SAL-14-02-06)</p>	<p>Good day Lizelle</p> <p>Thank you for your email. We will attend to your request as soon as</p>



Name of contact person	Company	Date	Method of comment	Issue raised/Comment	Response
				<p>Good day Karien, I need you to apply for an obstacle approval, for the SACAA to provide you with consent to the proposed development, I need to get comment for the SAAF headquarters Pretoria. If you could reason with the Airport Management Langebaan in the meantime.</p> <p>Please complete the application for an obstacle approval on the SACAA website, links, information for the industry: obstacle forms Part 139-27. Complete and submit <u>on the form itself</u>, it drops into our obstacle e-mail address, for the admin to provide you with a pro forma invoice, the payment will initiate the process. Please enquire with Thembi on mbongwat@caa.co.za or 0115451092.</p> <p>Thanks</p>	possible.
Alana Duffell-Canham	CapeNature	20 November 2014	Email	<p>To whom it may concern:</p> <p>CAPENATURE'S REQUIREMENTS FOR PROVIDING COMMENTS ON AGRICULTURAL, ENVIRONMENTAL, MINING, PLANNING AND WATER-USE RELATED APPLICATIONS</p> <p>CapeNature is the statutory custodian of biodiversity in the Western Cape<sup>1</sup> and commenting authority concerning potential impacts on biodiversity. This letter outlines the minimum requirements for</p>	<p><b>First response</b></p> <p>CONFIRMATION OF REGISTRATION AS AN INTERESTED AND AFFECTED PARTY: PROPOSED PIONEER INDUSTRIAL PARK DEVELOPMENT ON PORTION 39 (REMAINING EXTENT) OF THE FARM EENZAAMHEID 135,</p>

<sup>1</sup> Section 9, Western Cape Nature Conservation Board Act 15 of 1998



Name of contact person	Company	Date	Method of comment	Issue raised/Comment	Response
				<p>submission of applications to CapeNature for the consideration, investigation and reporting on the biodiversity aspects of proposed changes to land use that may require an official decision.</p> <p>In order to ensure that biodiversity and ecological issues are addressed as early as possible in the development application process and as comprehensively as required, please take note of the following information. This is applicable to any application that requires comment from CapeNature and complying with these recommendations should assist in avoiding unnecessary delays in the process.</p> <p><b>Minimizing negative impacts on biodiversity</b></p> <p>1. As part of the commenting process, CapeNature’s involvement will relate specifically to the impact of the proposed development activities on the biodiversity and ecological aspects of the receiving environment. CapeNature expects that a precautionary and risk-averse approach be adopted towards those projects which may result in substantial detrimental impacts on biodiversity and ecosystems, especially the irreversible loss of habitat and ecological functioning in threatened ecosystems (as identified by the National Biodiversity Assessment, 2012)<sup>2</sup> or designated sensitive areas: i.e. Critical Biodiversity Areas (as identified by</p>	<p>MALMESBURY RD</p> <p>Dear Alana</p> <p>Your e-mail received on the 20<sup>th</sup> of November 2014 refers: We hereby confirm receipt of your Interested and Affected Party Registration form and that you have now been registered as an Interested and Affected Party for the Pioneer Industrial Park Development Project. You will henceforth receive all correspondence regarding public participation opportunities as the process unfolds.</p> <p><b>Second response</b></p> <p>We take note of the various requirements, requests, procedures and guidelines stipulated in your letter and these will be taken into</p>

<sup>2</sup> Formerly the National Spatial Biodiversity Assessment of 20014



Name of contact person	Company	Date	Method of comment	Issue raised/Comment	Response
				<p>systematic conservation plans, Biodiversity Sector Plans or Bioregional Plans) and Freshwater Ecosystem Priority Areas.</p> <p>2. All reports must firmly demonstrate how the proponent intends complying with the principles contained in section 2 of the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended<sup>3</sup> (NEMA), which, amongst other things, indicates that environmental management should:</p> <ul style="list-style-type: none"> <li>• In order of priority aim to: avoid, minimise or remedy disturbance of ecosystems and loss of biodiversity;</li> <li>• Avoid degradation of the environment;</li> <li>• Avoid jeopardising ecosystem integrity;</li> <li>• Pursue the best practicable environmental option by means of integrated environmental management;</li> <li>• Protect the environment as the people’s common heritage;</li> <li>• Control and minimise environmental damage; and</li> <li>• Pay specific attention to management and planning procedures pertaining to sensitive, vulnerable, highly dynamic or stressed ecosystems.</li> </ul> <p>These principles serve as guidelines for all decision-making concerning matters that may affect the environment. As such, it is incumbent upon the proponent to show how proposed activities would comply with these principles and thereby contribute towards</p>	<p>account for the duration of this Environmental Impact Assessment process.</p>

<sup>3</sup> [http://www.westerncape.gov.za/your\\_gov/406](http://www.westerncape.gov.za/your_gov/406)



Name of contact person	Company	Date	Method of comment	Issue raised/Comment	Response
				<p>the achievement of sustainable development as defined by the NEMA.</p> <p><b>Guidelines and biodiversity plans</b></p> <p>3. The Western Cape Department of Environmental Affairs and Development Planning (DEA&amp;DP) has produced a series of guideline documents that provide clear guidance on the EIA process<sup>6</sup>. Specifically, they aim to improve the capacity of environmental assessment practitioners (EAPs) to draft appropriate terms of reference that meet the information requirements for informed environmental decision-making. In addition, the Fynbos Forum Ecosystems Guidelines for Environmental Assessment in the Western Cape (see point 3b below) provides appropriate terms of reference for Botanical Assessments. By meeting the requirements for submission of accurate and relevant information, EAP's can support efficient and accountable decision-making.</p> <p>With a view to adequately assessing impacts on biodiversity, we request that your environmental assessment is informed by the following documents. The implementation of relevant recommendations and/or actions as stipulated in these documents should be critically considered, regardless of whether a Basic Assessment, Scoping &amp; EIA or any other authorisation process is to be undertaken.</p> <p>a. Brownlie S (2005) <i>Guideline for involving biodiversity specialists in EIA processes: Edition 1</i>. CSIR Report No ENV-</p>	



Name of contact person	Company	Date	Method of comment	Issue raised/Comment	Response
				<p>S-C 2005 053 C. Republic of South Africa, Provincial Government Western Cape, Department of Environmental Affairs and Development Planning, Cape Town<sup>4</sup>.</p> <p>b. De Villiers C, Driver A, Clark B, Euston-Brown D, Day L, Job N, Helme N, Holmes P, Brownlie S and Rebelo T (2005) <i>Fynbos Forum Ecosystem Guidelines for Environmental Assessment in the Western Cape</i>, Fynbos Forum and Botanical Society of South Africa, Kirstenbosch, Cape Town<sup>7</sup>.</p> <p>c. The National Spatial Biodiversity Assessment (2011)<sup>5</sup>.</p> <p>d. The most recent conservation plans and their associated reports and guidelines are available at the SANBI Biodiversity GIS Unit website<sup>6</sup>. The mapping tools can be useful, but please note that while these tools can help to identify potential issues, the use thereof does not constitute a biodiversity assessment.</p> <p>e. Biodiversity Sector Plans for municipalities, where available<sup>7</sup>.</p> <p>f. The Western Cape Provincial Spatial Development Framework: Statutory Report (2009) (Department of Environmental Affairs &amp; Development Planning)<sup>8</sup>.</p>	

<sup>4</sup> Contact the Botanical Society on 021 797 2090 or email [info@fynbosforum.org.za](mailto:info@fynbosforum.org.za) or download at <http://bgis.sanbi.org/wces/project.asp>

<sup>5</sup> <http://bgis.sanbi.org/nba/project.asp>

<sup>6</sup> <http://bgis.sanbi.org> or email [BGISHelp@sanbi.org](mailto:BGISHelp@sanbi.org)

<sup>7</sup> Biodiversity Sector Plans include Critical Biodiversity Areas Maps, Municipal Biodiversity Profiles and Land and Resource Use Guidelines

<sup>8</sup> [http://www.westercape.gov.za/eng/pubs/public\\_info/W/186589](http://www.westercape.gov.za/eng/pubs/public_info/W/186589)



Name of contact person	Company	Date	Method of comment	Issue raised/Comment	Response
				<p><b>Biodiversity ‘red flags’ in the Western Cape</b></p> <p>4. The following factors must be taken into account during project planning and assessment:</p> <ul style="list-style-type: none"> <li>a. CapeNature does not support activities that may negatively impact on the following habitats and their ecological functioning:                             <ul style="list-style-type: none"> <li>i. Rivers, wetlands, groundwater-dependent communities or ecosystems, flood plains and estuaries, tidal flats or salt marshes.</li> <li>ii. Viable and/or connected habitat in Critically Endangered and Endangered ecosystems.</li> <li>iii. Any area that has been identified as a Critical Biodiversity Area or Ecological Support Areas as identified by the most recent systematic conservation planning initiative.</li> <li>iv. Any other special habitats that may contain a unique assemblage of species. This could include inter alia, dolomite outcrops, quartz or ferricrete patches.</li> <li>v. Any habitat that may contain rare, threatened or range-restricted floral or faunal species.</li> <li>vi. Natural habitat in an ecological corridor or along a vegetation boundary (including frontal dune systems).</li> <li>vii. Formally declared Mountain Catchment Areas.</li> </ul> </li> </ul> <p>Appropriate buffers must be determined by a suitably qualified specialist to avoid impacting on these habitats and particular attention should be paid to avoiding the loss of intact habitat, maximizing connectivity at a landscape scale, maximizing</p>	

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				<p>habitat heterogeneity and reducing fragmentation at a local and regional scale. Please also note that an infestation by alien plants does not necessarily mean that an area is not important for biodiversity conservation.</p> <p>b. The Cape Floristic Region is largely a fire-dependent system and natural fire regimes must be maintained and managed in the landscape. The exclusion of fire from certain habitats will be considered unacceptable as this may ultimately cause the loss of species. Where appropriate, the location of fire-breaks should be indicated and these fire-breaks may be considered part of the development footprint. A fire-risk assessment can help inform an appropriate layout for developments adjacent to fire-prone vegetation.</p> <p>c. <u>Water</u> is a limited resource in the Western Cape. Water requirements for proposed activities and the potential impact on broader surface and underground water resources must be rigorously assessed and considered by an aquatic/freshwater specialist, including the cumulative impact if other developments are also taking place in an area. Cumulative impacts on infrastructure such as Waste Water Treatment Works must also be considered.</p> <p>Groundwater use for bulk supply purposes and irrigation must be assessed rigorously with specific reference to the possible groundwater-surface water interfaces. Groundwater use assessments must include the identification of possible</p>	

Name of contact person	Company	Date	Method of comment	Issue raised/Comment	Response
				<p>groundwater dependent ecosystems and/or possible interfaces with surface resources. Aquifers need to be described in terms of: aquifer type, aquifer characteristics, aquifer condition, as well as aquifer recharge and yield<sup>9</sup>.</p> <p>Specialist assessment(s) should be undertaken if any of the above-mentioned circumstances prevail or if there is any doubt about the biodiversity value of the potentially impacted areas. The opportunities and constraints of the receiving environment should be used to inform the desirability and layout of any development proposal so as to ensure that developments do not compromise the biodiversity value of the area.</p> <p><b>Commissioning of biodiversity specialists</b></p> <p>5. A suitably qualified and experienced specialist is often critical to ensuring that the necessary information is provided for informed decision-making. Please take note of the following recommendations from the <i>Guideline for involving biodiversity specialists in EIA processes (DEA&amp;DP 2005)</i>.</p> <p>Biodiversity specialists should:</p> <p>a. Be competent at interpreting and evaluating information and able to explain the direct and indirect consequences of an</p>	

<sup>9</sup> For groundwater-related assessments, consult: Saayman, I (2005) Guideline for involving hydrogeologists in EIA processes: Edition 1. CSIR Report No ENV-S-C 2005 053 D. Republic of South Africa, Provincial Government of the Western Cape, Department of Environmental Affairs & Development Planning, Cape Town.

Name of contact person	Company	Date	Method of comment	Issue raised/Comment	Response
				<p>activity to biodiversity;</p> <ul style="list-style-type: none"> <li>b. Have appropriate formal training in his/her field of expertise;</li> <li>c. Have sufficient practical experience working in the specific ecosystems of the affected region;</li> <li>d. Be able to trace impact pathways and identify indirect or cumulative impacts and consider ecosystem goods and services;</li> <li>e. Have good knowledge relating to assessment techniques and to relevant legislation, policies and guidelines;</li> <li>f. Be independent; and</li> <li>g. Be registered with South African Council for Natural Scientific Professions (SACNASP).</li> </ul> <p>CapeNature also recommends that specialists be asked to review the information in the report to be submitted for decision-making to confirm that their opinion has been adequately reflected.</p> <p><b>Permit requirements</b></p> <p>6. Please note that according to Section 63(1) of the Western Cape Nature Western Cape Nature Conservation Laws Amendment Act No. 3 of 2000:</p> <p><b>No person shall—</b></p> <ul style="list-style-type: none"> <li>(a) uproot the plant in the process of picking the flower of any flora;</li> <li>(b) without a permit—               <ul style="list-style-type: none"> <li>(i) pick any endangered or protected flora, or</li> <li>(ii) pick any flora on a public road or on the land on either side</li> </ul> </li> </ul>	


Name of contact person	Company	Date	Method of comment	Issue raised/Comment	Response
				<p>of such road within a distance of ninety metres from the centre of such road, or</p> <p>(c) pick any protected or indigenous unprotected flora on land of which he or she is not the owner, without the permission of the owner of such land or of any person authorised by such owner to grant such permission.</p> <p>If these activities will be involved in the application, make sure that you also apply for a CapeNature permit to carry out these activities.</p> <p><b>Format of reports</b></p> <p>7. Please help us provide you with a timely response by supplying all information in a readily accessible format:</p> <ul style="list-style-type: none"> <li>a. The main report must be submitted, and include: locality maps, all alternative layout plans and all biodiversity related specialist reports. All reports longer than 50 pages must be submitted in hardcopy, shorter reports can be submitted on disc. The hardcopy should be accompanied by a digital copy of the complete application on disc.</li> <li>b. Electronic reports must be submitted on cd/dvd – we will not accept reports sent via email or ftp or website links.</li> <li>c. We also encourage you to reduce the amount of paper used by printing both sides of a page.</li> <li>d. Please supply all maps and alternative layouts in colour.</li> <li>e. To facilitate assessment of potential impacts, we request that maps of proposed development layouts be overlaid with</li> </ul>	



Name of contact person	Company	Date	Method of comment	Issue raised/Comment	Response
				<p>identified environmental features of a site. If provided separately, maps should be produced at the same scale.</p> <p>f. Where available, GIS shape-files of the proposed development footprint, particularly for linear features or for combined applications with numerous sites, would be appreciated.</p> <p>g. Please allow sufficient time for post or courier services to deliver the documents at the beginning of the commenting period. We receive a large number of reports and need to treat applicants and consultants fairly therefore applications will be processed from date of receipt within the required number of days as stipulated by the DEA&amp;DP, the DMR or other competent authority.</p> <p>h. For spatial planning reports or Environmental Management Frameworks however, electronic reports submitted via ftp sites will be accepted.</p> <p><b>Status of CapeNature’s comment</b></p> <p>8. Please note that CapeNature does not consider verbal discussions regarding any aspect of a proposed development as adequate or complete comment. Please ensure that you obtain written comment once all the necessary information is made available for review. We reserve the right to amend our position based on any new information that may be received.</p> <p>9. Applications requiring comment from CapeNature should be sent to the following addresses:</p>	

Name of contact person	Company	Date	Method of comment	Issue raised/Comment	Response
				<p><b>City of Cape Town, Theewaterskloof, Overstrand, Stellenbosch &amp; Drakenstein Municipalities:</b></p> <p>CapeNature                      Scientific Services: Land Use Advice                      P/Bag X5014                      STELLENBOSCH                      7599  <u>Attention: Rhett Smart</u>                      Email: rsmart@capenature.co.za                      Tel: 021 866 8000                      Fax: 021 866 1523 / 086 529 4992</p> <p><b>DMA01, Matzikamma, Cederberg, Berg River, Swartland, Saldanha, Breede Valley, DMA02 &amp; Witzenberg Municipalities:</b></p> <p>CapeNature                      Scientific Services: Land Use Advice                      P/Bag X5014                      STELLENBOSCH                      7599  <u>Attention: Alana Duffell-Canham</u>                      Email: aduffell-canham@capenature.co.za                      Tel: 021 866 8000                      Fax: 021 866 1523 / 086 529 3475</p> <p><b>George, Knysna, Bietou, Oudtshoorn, Uniondale, Beaufort West, DMA05, Prince Albert, DMA04 &amp; Laingsburg</b></p>	

Name of contact person	Company	Date	Method of comment	Issue raised/Comment	Response
				<p><b>Municipalities:</b>                      CapeNature                      Scientific Services: Land Use Advice                      P/Bag X6546                      GEORGE                      6530  <u>Attention: Benjamin Walton</u>                      Email: landusegeorge@capenature.co.za                      Tel: 044 802 5328                      Fax: 086 645 2546</p> <p><b>Hessequa, Mossel Bay, Kannaland, Swellendam, Langeberg &amp; Agulhas Municipalities:</b>                      CapeNature                      Scientific Services: Land Use Advice                      P/Bag X6546                      GEORGE                      6530  <u>Attention: Clyde Lamberts</u>                      Email: clamberts@capenature.co.za                      Tel: 044 802 5328                      Fax: 086 645 2546</p> <p><b>Forward Planning Documents and Environmental Management Frameworks for all regions in the Western Cape:</b>                      CapeNature</p>	

Name of contact person	Company	Date	Method of comment	Issue raised/Comment	Response
				<p>Scientific Services                      Private Bag X7                      Claremont                      7735  <u>Attention: Kerry Maree</u>                      Email: Kmaree@capenature.co.za                      Tel: 021 799 8731                      Fax: 021 797 7186</p> <p>A map (Figure 1) illustrating the officials responsible for each municipality is provided below.</p> <p>Thank you in advance for your co-operation in this regard.</p>  <p><i>Figure 36: Map illustrating the officials responsible for each municipality</i></p>	
Stuart Kirkman	Western Cape	21 November	Email	RE: NOTICE OF APPLICATION FOR ENVIRONMENTAL AUTHORISATION (EIA REF: 16/3/1/2/F4/23/3007/14; SMS REF:	Good morning Stuart

Name of contact person	Company	Date	Method of comment	Issue raised/Comment	Response
	Department of Transport and Public Works	2014		<p>STR-SAL-14-02-06)</p> <p>Good morning</p> <p>I am under the impression that this document was sent to this Bureau erroneously, iow not for Government Motor Transport.</p> <p>Thank you</p>	Thank you. We take note of your comment.
Alana Duffell-Canham	CapeNature	24 November 2014	Email	<p>Dear Ms Crous</p> <p><b>Re: Proposed Pioneer Industrial Park Development on Portion 39 of the Farm Eenzaamheid 135, Malmesbury RD – Background Information Document.</b></p> <p>DEA&amp;DP Ref: 16/3/1/2/F4/23/3007/14</p> <p>CapeNature would like to thank you for the opportunity to comment on this proposed activity and wish to make the following comments:</p> <ol style="list-style-type: none"> <li>1. According to the South African Vegetation Map and the vegetation mapping done for the CAPE fine-scale project, the proposed development site was covered by Saldanha Flats Strandveld. Although the list of threatened ecosystems published in 2011 under NEMBA still lists Saldanha Flats Strandveld as Vulnerable, in an effort to utilise best available science, including more recent landcover and ecosystem mapping sets than those used for the 2011 listing, CapeNature has recently produced updated provincial ecosystem status statistics in accordance with</li> </ol>	<p>Dear Alana</p> <p>We hereby acknowledge receipt of your comments and requests for a botanical survey to be conducted and a groundwater specialist to be appointed.</p> <p>A biodiversity baseline survey was conducted by Eco Impact Legal Consulting (Pty) Ltd. This report has been provided to CapeNature for review.</p> <p>As part of this Environmental Impact Assessment, a Desktop Geohydrological Assessment has been included as one of the</p>



Name of contact person	Company	Date	Method of comment	Issue raised/Comment	Response
				<p>the National principles, criteria and approach<sup>10</sup>. The key findings relevant to this study show that under criterion A1 (irreversible loss of habitat) Saldanha Flats Strandveld, which only has 36% of its original extent remaining, meets the criteria for listing as Endangered in terms of Section 52 of the Biodiversity Act.</p> <p>2. It appears that much of the property has been degraded although some remnant patches of natural vegetation remain. The property has not been determined as Critical Biodiversity Area but due to current losses as well as possible future losses of the vegetation type present on site elsewhere, any viable remnants of Saldanha Flats Strandveld may become important in future in order to meet conservation targets. We would therefore like to request that a botanical survey be undertaken, preferably at the appropriate time of year (late July to September) to determine if any plant species of conservation concern are present as well as the current condition of the vegetation on site.</p> <p>3. The site is located above an aquifer of regional importance and it is therefore important to appoint a groundwater specialist to consider potential impacts.</p> <p>CapeNature reserves the right to revise initial comments and request further information based on any additional information that may be received.</p>	<p>specialist studies that need to be completed.</p>

<sup>10</sup> Government Gazette 34809, No. 1002. National list of ecosystems that are threatened and in need of protection. National Environmental Management: Biodiversity Act, 9 December 2011.





Name of contact person	Company	Date	Method of comment	Issue raised/Comment	Response
Jan Briers	Department of Mineral Resources	25 November 2014	Email	Dear Karien  You may need to apply i.t.o. Sec 53 of the MPRDA.	Dear Mr Briers  Thank you for your email. Please could you provide us with more information and guidance regarding whether the client needs to apply in terms of Section 53 of the MPRDA? I.e. when does one need to apply and what is the process for such an application?
Leonard Bosch	Private	26 November 2014	Email	Good day Lizette  Concerning your enviro park or whatever you busy with outside Vredenburg I would like to know who the private owner of the property is.	Good morning Leonard  We herewith confirm receipt of your email and query.  The applicant for the project is Ms Annemarie (AM) Thom.  Would you like to register as an Interested and Affected Party for the project in order to receive further correspondence? If so we could send you an Interested and Affected Party Registration Form.  Do not hesitate to contact us if you



Name of contact person	Company	Date	Method of comment	Issue raised/Comment	Response
					require any further information.
Doretha Kotze	West Coast District Municipality	11 December 2014	Email	<ol style="list-style-type: none"> <li>1) Water provision</li> <li>2) Environmental health</li> <li>3) Air quality</li> <li>4) Access</li> </ol>	<p>Your e-mail received on the 11th of December 2014 refers: We hereby confirm receipt of your Interested and Affected Party Registration form and that you have now been registered as an Interested and Affected Party for the Pioneer Industrial Park Development Project. You will henceforth receive all correspondence regarding public participation opportunities as the process unfolds.</p> <p>We also take note of your comments. They will be included in and addressed in the reports for this project.</p>
René de Kock	SANRAL	11 December 2014	Email	<p>Dear Karien</p> <p>Thank you for your email.</p> <p>The South African National Roads Agency SOC Limited (SANRAL) has no comment with regard to the above application as the N7 will not be affected.</p>	<p>Good morning René</p> <p>We take note of your email and response, as well as the attached circular. Thank you for your inputs.</p> <p>Would you like to receive further correspondence during the</p>



Name of contact person	Company	Date	Method of comment	Issue raised/Comment	Response
				Attached please find a circular for future applications.	application process or should we remove you from our Interested and Affected Party database?
Grace Swanepoel & ML Watters	Western Cape Department of Transport and Public Works	17 December 2014	Email	<p><b>COMMENTS ON BACKGROUND INFORMATION DOCUMENT: PORTION 39 OF FARM EENZAAMHEID 135, DIVISION MALMESBURY: SALDANHA BAY MUNICIPAL AREA: TRUNK ROADS 77/1 AND 85/1</b></p> <ol style="list-style-type: none"> <li>1. Your e-mail STR-SAL-14-02-06 of 20 November 2014 refers. <ol style="list-style-type: none"> <li>1.1 The DEADP Ref is 16/3/1/2/F4/23/3007/14.</li> </ol> </li> <li>2. Please register this Branch as an Interested and Affected Party.</li> <li>3. Comment is required on a Background Information Document for a mixed use Industrial Park on Portion 39 of Farm Eenzaamheid 135, division Malmesbury. The proposed mixed use Industrial Park will include heavy industrial, light industrial and commercial uses.</li> <li>4. This Branch, the Road Authority of <i>inter alia</i> Trunk Road 77/1 and Trunk Road 85/1 in the vicinity of the development, has the following initial comments: <ol style="list-style-type: none"> <li>4.1 This development will not be allowed direct vehicular access form Trunk Road 77/1;</li> <li>4.2 Access to the development must be via an internal municipal road to an approved position on Trunk Road 85/1 and</li> <li>4.3 A detailed Traffic Impact Assessment by a competent traffic engineer will be required.</li> </ol> </li> <li>5. Formal comment on the traffic issues will be provided to the</li> </ol>	<p><b>CONFIRMATION OF REGISTRATION AS AN INTERESTED AND AFFECTED PARTY: PROPOSED PIONEER INDUSTRIAL PARK DEVELOPMENT ON PORTION 39 (REMAINING EXTENT) OF THE FARM EENZAAMHEID 135, MALMESBURY RD</b></p> <p>Dear Ms Swanepoel</p> <p>Your email received on the 19<sup>th</sup> of December 2014 refers: We hereby confirm receipt of your Interested and Affected Party Registration form and that you have now been registered as an Interested and Affected Party for the Pioneer Industrial Park Development Project. You will henceforth receive all correspondence regarding public participation opportunities as the</p>



Name of contact person	Company	Date	Method of comment	Issue raised/Comment	Response
				Local Authority in terms of the LUPO.	process unfolds.  We also take note of your comments. They will be included and addressed in the reports for this project.
Pippa Haarhoff	West Coast Fossil Park	9 February 2015	Email	<p>Dear Lizette</p> <p>Thank you for this email.</p> <p>I understand the deadline has passed but I would still like to register as an I&amp;AP, if possible?</p> <p>My concerns would include the possible negative impact on:</p> <ul style="list-style-type: none"> <li>• Potential <i>in situ</i> palaeontological material</li> <li>• Natural occurring fauna and flora</li> <li>• Water resources</li> <li>• Aesthetics of the local landscape</li> <li>• Air pollution</li> </ul> <p>Thank you for your attention to my request</p>	<p><b>CONFIRMATION OF REGISTRATION AS AN INTERESTED AND AFFECTED PARTY AND ACKNOWLEDGEMENT OF COMMENTS RECEIVED: PROPOSED PIONEER INDUSTRIAL PARK DEVELOPMENT ON PORTION 39 (REMAINING EXTENT) OF THE FARM EENZAAMHEID 135, MALMESBURY RD</b></p> <p>Dear Ms Haarhoff</p> <p>Your email received on the 9<sup>th</sup> of February 2015 refers: We hereby confirm receipt of your request to be registered as an Interested and Affected Party and that you have now been registered as an</p>



Name of contact person	Company	Date	Method of comment	Issue raised/Comment	Response
					<p>Interested and Affected Party for the proposed Pioneer Industrial Park Development Project. You will henceforth receive all correspondence regarding public participation opportunities as the process unfolds.</p> <p>We also take note of your comments. They will be included and addressed in the subsequent reports for this project.</p>
Mrs B.G. Vermeulen	Olivier Bester Family Trust	13 January 2015	Fax	<p>Dear Sir/Madam</p> <p><b>OBJECTION IN RESPECT OF APPLICATION FOR ENVIRONMENTAL AUTHORISATION AND POTENTIAL WATER USE LICENCE FOR THE PROPOSED PIONEER INDUSTRIAL PARK DEVELOPMENT ON PORTION 39 (REMAINING EXTENT) OF THE FARM EENZAAMHEID 135, MALMESBURY RD.</b></p> <p><b>ENVIRONMENTAL AUTHORISATION APPLICATION PROCESS REFERENCE NUMBER: 16/3/1/2/F4/23/3007/14</b></p> <p>The trustees of the Olivier Bester Family Trust (IT 159/96) wish to:</p> <p>I. Register the Trust as an Interested and Affected Party (I&amp;AP), since the Trust’s properties, farms Kliphuis and Nuwerus, are</p>	<p><b>CONFIRMATION OF REGISTRATION AS AN INTERESTED AND AFFECTED PARTY AND ACKNOWLEDGEMENT OF COMMENTS RECEIVED: PROPOSED PIONEER INDUSTRIAL PARK DEVELOPMENT ON PORTION 39 (REMAINING EXTENT) OF THE FARM EENZAAMHEID 135, MALMESBURY RD</b></p> <p>Dear B.G. Vermeulen or A.J.</p>



Name of contact person	Company	Date	Method of comment	Issue raised/Comment	Response
				<p>close to the proposed site and will be negatively affected as a neighbouring landowner;</p> <p>II. Place our objection to the abovementioned application for industrial development on record in the strongest possible terms.</p> <p>WITH REFERENCE TO THE NOTICE SENT TO THE VREDENBURG LANDBOU-VERENIGING ON 20 NOVEMBER 2014, THE RESPONDENT COMMENTS AS FOLLOWS:</p> <ol style="list-style-type: none"> <li>1. To the best of our knowledge, the site has never been used for any other purpose than agriculture.</li> <li>2. The clearance of vegetation on the proposed land will result in severe erosion as the South-Easterly wind blows ferociously during late spring and summer. This can lead to “dust storms” on the existing road between Langebaanweg and Vredenburg.</li> <li>3. The expansion of the road and rail infrastructure, the construction of bulk services and the storage of dangerous goods will add to the risk of fires and pollution in the area. It will also lead to an influx of jobseekers and pose therefore many challenges to farm owners who already suffer losses from increasing stock theft.</li> <li>4. However, our main concern is the threat to the current water supply as the area is water-poor. There are a few boreholes on neighbouring farms, but most water reaches the area through a network, which originates from the Voëlvlei Dam. Water rates are high and taking or contaminating water from underground resources will result in farm owners being stripped from the little</li> </ol>	<p>Vermeulen</p> <p>Your fax received on the 16<sup>th</sup> of January 2015 refers: We hereby confirm receipt of your Interested and Affected Party Registration form and that you have now been registered as an Interested and Affected Party for the Pioneer Industrial Park Development Project. You will henceforth receive all correspondence regarding public participation opportunities as the process unfolds.</p> <p>We also take note of your comments. They will be included in and addressed in the reports for this project.</p>



Name of contact person	Company	Date	Method of comment	Issue raised/Comment	Response
				<p>“natural” water they have access to.</p> <p>Diverting the flow of water may, in the immediate future, not pose any problems, but the respondent is well aware of severe rain storms that occurred in the early 1970’s and the existence of a dry-waterbed helped to alleviate the impact of the flooding on agricultural land.</p> <p>The proposed industrial site is above or very close to an aquifer. Disposing of waste-water will have a negative impact on the existing biosphere. The respondent farms with cattle, sheep, pigs, springbok and bees and the livelihood of the animals, the farm labourers and manager may be threatened, if contaminated water reaches the existing water resources. The impact may be significant and long-lasting.</p> <p>Therefore, it is our opinion that the granting of the application will be detrimental to the other existing landowners and object to the abovementioned application for industrial development in the strongest possible terms.</p> <p>Please contact me, if you have any questions or if you require any further information.</p>	
Stanley Ralph Nomdo	Western Cape Provincial	21 January 2015	Fax	Concerns raised: Environmental pollution and possible health effects.	<b>CONFIRMATION OF REGISTRATION AS AN INTERESTED AND AFFECTED</b>



Name of contact person	Company	Date	Method of comment	Issue raised/Comment	Response
	Department of Health				<p><b>PARTY AND ACKNOWLEDGEMENT OF COMMENTS RECEIVED: PROPOSED PIONEER INDUSTRIAL PARK DEVELOPMENT ON PORTION 39 (REMAINING EXTENT) OF THE FARM EENZAAMHEID 135, MALMESBURY RD</b></p> <p>Dear Mr Nomdo</p> <p>Your fax received on the 21st of January 2015 refers: We hereby confirm receipt of your Interested and Affected Party Registration form and that you have now been registered as an Interested and Affected Party for the Pioneer Industrial Park Development Project. You will henceforth receive all correspondence regarding public participation opportunities as the process unfolds.</p> <p>We also take note of your comments. They will be included in</p>

Name of contact person	Company	Date	Method of comment	Issue raised/Comment	Response
					and addressed in the reports for this project.
Ben Krog	Private	19 June 2015	Email	<p>Karien</p> <p>Ek het geen agtergrond oor hierdie ontwikkeling nie?</p> <p>Ek bly in Somerset Wes en het geen belange in Malmesbury nie.</p> <p>Groete</p> <p>Ben Krog</p> <p><b>English Translation</b></p> <p>Karien</p> <p>I have no background regarding this development?</p> <p>I live in Somerset West and have no interests in Malmesbury.</p> <p>Regards</p> <p>Ben Krog</p>	<p><b>Initial response</b></p> <p>Goeie dag Meneer Krog</p> <p>Baie dankie. Ons neem kennis hiervan.</p> <p>Ons sal Meneer verwyder van ons lys van geaffekteerde partye.</p> <p><b>English Translation</b></p> <p>Good day Mr Krog</p> <p>Thank you very much. We take note hereof.</p> <p>We will remove you from our list of Interested and Affected Parties.</p>
Grace Swanepoel and ML Watters	Western Cape Department of Transport	7 July 2015	Post	<b>COMMENT ON DRAFT SCOPING REPORT: INDUSTRIAL PARK ON PORTION 39 OF FARM EENZAANHEID 135, DIVISION MALMESBURY: SALDANHA BAY MUNICIPAL AREA: TRUNK ROADS 77/1 AND 85/1</b>	<p><b>Initial Response</b></p> <p>Dear M.L. Watters and Ms Swanepoel</p>



Name of contact person	Company	Date	Method of comment	Issue raised/Comment	Response
	and Public Works			<p>1. The following refer:-</p> <p>1.1 Your e-mail STR-SAL-14-02-06 with DEA&amp;DP Ref 16/3/1/2/F4/23/3007/14 of 19 June 2015 and</p> <p>1.2. This Branch’s letter 16/9/6/1-24/22 (Job 1802) dated 17 December 2014.</p> <p>2. Comment is required on a Draft Scoping Report for a mixed use Industrial Park on Portion 39 of Farm Eenzaamheid 135, division Malmesbury. The proposed mixed use Industrial park will include heavy industrial, light industrial and commercial uses.</p> <p>3. This Branch’s comment of 17 December 2014 remains applicable to future phases of the environmental process.</p>	<p>Your letter dated 7 July 2015 refers: We hereby acknowledge receipt of your comments. The comments will be included and addressed in the subsequent reports for this project.</p> <p><b>Second Response</b> Dear M.L. Watters and Ms Swanepoel</p> <p>Your letter dated 7 July 2015 refers: We hereby acknowledge that the Department’s comment of 17 December 2015 remains applicable for the future phases of the Environmental Impact Assessment process.</p> <p>We have noted that the proposed development will not be allowed direct vehicular access from Trunk Road 77/1 and that access must be via an internal municipal road to an approved position on Trunk Road 85/1. We have further noted that a detailed Traffic Impact Assessment</p>



Name of contact person	Company	Date	Method of comment	Issue raised/Comment	Response
					<p>by a competent traffic engineer will be required.</p> <p>The applicant has been made aware of these requirements. A Traffic Impact Assessment has been commissioned and will be included in the Environmental Impact Assessment Reports for this project.</p>
Doretha Kotze	West Coast District Municipality	30 July 2015	Email	<p>Ref: 13/2/12/3/1</p> <p>Madam</p> <p>The West Coast District Municipality supplies the Saldanha Bay Municipality with bulk water through its bulk water infrastructure system. Saldanha Bay Municipality has to ascertain, via the normal procedure through consultation with GLS Consulting Engineers, whether it will be able to supply the proposed development with sufficient water. The proposed development should not be approved before this process is completed.</p> <p>The West Coast District Municipality takes note of all the information contained in the Draft Scoping Report for the proposal and will provide further comments during the EIR phase of the assessment.</p>	<p><b>Initial Response</b></p> <p>Dear Ms Kotze</p> <p>Your email dated 30 July 2015 refers: We hereby acknowledge receipt of your comments. The comments will be included and addressed in the subsequent reports for this project.</p> <p><b>Second Response</b></p> <p>Dear Ms Kotze</p> <p>Your email dated 30 July 2015 refers: We take note of the approval process required for the supply of water to the proposed development.</p>



Name of contact person	Company	Date	Method of comment	Issue raised/Comment	Response
					The applicant has also been informed of this process. Any further information relating to this application process will be included in the Environmental Impact Assessment Reports for this project.
N. Ndobeni	Department of Water and Sanitation	21 August 2015	Post	<p><b>DRAFT SCOPING REPORT FOR THE PROPOSED PIONEER INDUSTRIAL PARK DEVELOPMENT ON PORTION 39 (REMAINING EXTENT) OF THE FARM EENZAAMHEID 135, MALMESBURY</b></p> <p>Reference is made to the above-mentioned document dated 19 June 2015 with reference number 16/3/1/2/F4/23/3007/14.</p> <p>The Department has perused the Draft Scoping Report and has noted in the Report that there is planned construction for a package plant. The Department will provide conclusive comments upon receipt of a detailed EIA should any water use in terms of the National Water Act, 1998 (Act 36 of 1998) be triggered by the proposed industrial park. Any water use in terms of Section 21 which might be triggered by the proposed activity must obtain authorisation from this before commencement.</p> <p>Please do not hesitate to contact the above official should there be any queries.</p>	<p><b>Initial Response</b></p> <p>Dear Ms Ndobeni</p> <p>Your letter dated 3 August 2015 refers: We hereby acknowledge receipt of your comments. The comments will be included and addressed in the subsequent reports for this project.</p> <p><b>Second Response</b></p> <p>Dear Ms Ndobeni</p> <p>Your letter dated 3 August 2015 refers: We take note of your indication that conclusive comments will be provided from the Department's side upon receipt of the Environmental Impact Assessment Report. Any further</p>





Name of contact person	Company	Date	Method of comment	Issue raised/Comment	Response
					information regarding the package plant will be included in the future Environmental Impact Assessment Reports for the proposed project.
Debra-Ann Third	Department of Community Safety	31 July 2015	Email	<p>Dear Ms Crous</p> <p>The Department of Community Safety acknowledge receipt of your letter, dated 19 June 2015 of which the content is noted.</p> <p>Mr Moegamat Frizlar, Chief Director: Management Support wish to confirm that the Department has no comments in terms of the proposed project.</p>	<p>Dear Mr Frizlar and Ms Third</p> <p>Your email dated 31 July 2015 refers: We hereby acknowledge receipt of your email.</p> <p>We further acknowledge that the Department of Community Safety has no comments on the proposed project.</p> <p>Please do not hesitate to contact me should you have any queries.</p>
Ms K. Adriaanse	Western Cape Department of Environmental Affairs and Development Planning	17 December 2015	Received via fax on the 18 December 2015	<p>The final SR dated 25 November 2015 and received by this department on 26 November 2015 and this Directorate's acknowledgement thereof dated 08 December 2015, refer.</p> <p>1. This letter serves to inform you that in terms of Regulation 30 of GN No R.543 of 18 June 2010, the final SR is rejected by this Directorate. The final SR is missing substantive information.</p> <p>2. The final SR must be amended to include the following outstanding</p>	<p>Dear Ms K. Adriaanse,</p> <p>Your letter dated 17 December 2015 refers: We hereby acknowledge receipt of your letter.</p> <p>1. This is noted.</p> <p>2. The Final Scoping Report was</p>



Name of contact person	Company	Date	Method of comment	Issue raised/Comment	Response
				<p>information:</p> <p>2.1 Activity Description: The activity description is inadequate. A detailed description of following proposed infrastructure must be provided in the amended SR:</p> <p>2.1.1 The new roads to be developed. The description must include the dimensions (i.e. length and width) of the roads and the road reserve;</p> <p>2.1.2 The roads to be widened;</p> <p>2.1.3 The new railway network to be developed;</p> <p>2.1.4 The existing railway network that will be expanded;</p> <p>2.1.5 The bulk service infrastructure to be developed;</p> <p>2.1.6 The existing bulk service infrastructure to be expanded;</p> <p>2.1.7 The dangerous goods to be stored and handled (including the volume (m3)) on the site;</p> <p>2.1.8 The bulk water supply reservoir (including the volume (m3)) to be developed;</p> <p>2.1.9 The treatment of sewage and/or package plant (including the volume (m3)) to be developed; and</p> <p>2.1.10 Any other associated infrastructure.</p> <p>2.2 Applicable listed activities</p> <p>2.2.1 In this Directorate's correspondence dated 08 September 2014, you were informed that the applicable listed activities must be confirmed in the SR once the activity description of the proposed development is refined and finalised. The amended SR must therefore only include the listed activities that are triggered by the</p>	<p>amended to include your comments.</p> <p>2.1 Refer to 1.5 for an updated activity description</p> <p>2.1.1 Refer to section 1.5.1</p> <p>2.1.2 Refer to section 1.5.1</p> <p>2.1.3 – 2.1.6 Refer to section 1.5.3 – 1.5.7</p> <p>2.1.7 Refer to section 1.5.9</p> <p>2.1.8 Refer to section 1.5.3</p> <p>2.1.9 Refer to section 1.5.7</p> <p>2.1.10 There will be no other infrastructure associated with the development.</p> <p>2.2.1 Noted, only the applicable listed activities will be included. Refer to section 1.5 table 3 for 2010 regulations &amp; table 4 for 2014 regulations.</p>

Name of contact person	Company	Date	Method of comment	Issue raised/Comment	Response
				<p>proposed development.</p> <p>2.2.2 In this Directorate’s correspondence dated 08 September 2014, you were informed that since the site contains Saldanha Flats Strandveld vegetation (which has been classified as Vulnerable in terms of the National Environmental Management: Biodiversity Act, 2004 (Act 10 of 2004) – National List of Ecosystems that are threatened and in need of protection (Government Gazette No. 34809 of 09 December 2011) and is mapped as having Vulnerable vegetation, Activities 12 and 13 of GN No. R. 546 are not triggered by the proposed development. However, it has still been included in the final SR. You are therefore required to remove these listed activities;</p> <p>2.2.3 It is noted that Activity 10 of GN No R.544 of 18 June 2010 has been included in the final SR. However, a description of the infrastructure for the transmission and distribution of electricity has not been provided in the activity description. You are required to provide a description of the infrastructure required for the transmission and distribution of electricity; and</p> <p>2.2.4 Be advised that you must describe the portions of the proposed development that relate to the applicable listed activities. You are therefore required to include a table of the listed activities with an explanation as to how the listed activity is triggered by the proposed development.</p> <p>2.3 Need and Desirability</p> <p>Although a Need and Desirability investigation will be conducted in the EIA phase, Regulation 28(i) of the NEMA EIA Regulations, 2010 states that a description of the need and desirability of the proposed</p>	<p>2.2.2 Activities 12 and 13 of GN No. R. 546 were removed from table 3.</p> <p>2.2.3 Refer to section 1.5.4 for additional information on the infrastructure for the transmission and distribution of electricity.</p> <p>2.2.4 Refer to Table 3 &amp; 4.</p> <p>2.3 Refer to the Table 19 in section 5.</p>

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				<p>development must be provided. As such, a description of the need and desirability of the proposed development must be provided in the amended SR.</p> <p>2.4 Alternatives</p> <p>2.4.1 It is noted that livestock grazing, crop production and the residential development will be assessed as activity alternatives during the EIA phase. However, livestock grazing and residential development are not deemed as feasible and reasonable activity alternatives in this regard due to the following:</p> <p>2.4.1.1 Page 27 of the final SR indicates that livestock grazing is currently occurring on the proposed site. Therefore, livestock grazing is considered to be the “no-go” alternative in this regard; and</p> <p>2.4.1.2 Page 84 of the final SR indicates that residential projects should be avoided in areas occurring Environmental Management Zone 3 (in accordance with the draft Environmental Management Framework for the Greater Saldanha Area, 2015). Clarity must therefore be provided in this regard.</p> <p>2.4.2 Page 142 of the final SR indicates that layout alternatives cannot be identified as the layout plans have not been finalised. Please note that a description of the identified potential layout plans must be provided;</p> <p>2.4.3 Although activity and layout alternatives have been described in the final SR, the potential advantages and disadvantages or the potential alternatives have not been provided. You are reminded of</p>	<p>2.4.1 This is noted. Section 6.2 has been updated to include layout alternatives.</p> <p>2.4.1.1 This is noted and the no-go option has been updated in section 6.3.</p> <p>2.4.1.2 Pioneer Industrial Park is not a residential development, but an industrial development which is in line with the Saldanha Bay Spatial Development Framework</p> <p>2.4.2 Please refer to the alternative layout plans in section 6.</p> <p>2.4.3 Please refer to section 6.2</p>

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				<p>Regulation 28(j) of the NEMA EIA regulations, 2010, states that a description of identified potential alternatives to the proposed activity, including advantages and disadvantages that the proposed activity or alternatives may have on the environment and the community that may be affected; and</p> <p>2.4.4 You are reminded that only the alternatives that are deemed feasible and reasonable are to be comparatively assessed in the EIA phase.</p> <p>2.5 Services</p> <p>2.5.1 A detailed description of the services required to service the proposed development must be provided. It is recommended that an Engineering of Services Report be compiled;</p> <p>2.5.2 The service provider for the various services must be confirmed in the amended SR.</p> <p>2.5.2.1 Note that confirmation of space, unallocated capacity of the specified services will be required in the EIA report.</p> <p>2.6 Potential impacts</p> <p>2.6.1 According to the South African National Biodiversity Institute National Wetland and National Freshwater Ecosystem Priority Areas</p>	<p>2.4.4 Noted.</p> <p>2.5.1 Refer to section 1.4 for the extract of the services report.</p> <p>2.5.2 The service providers for the project are as follows:</p> <ul style="list-style-type: none"> <li>• Water - West Coast District Municipality</li> <li>• Sewage - Saldanha Bay Local Municipality.</li> <li>• Storm water - Saldanha Bay Municipality.</li> <li>• Electricity - Eskom.</li> <li>• Roads - Saldanha Local Municipality</li> </ul> <p>2.5.2.1 Noted.</p> <p>2.6.1 Refer to correspondence with</p>

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				<p>map, no wetlands have been mapped on the proposed site. Confirmation of whether the seasonal pond (identified in the Updated Biodiversity Baseline Survey (dated 26 March 2014)) is classified as a wetland must be obtained from the Department of Water and Sanitation; and</p> <p>2.6.2 The following potential impacts must be included in the amended SR and must be assessed in the EIA phase:</p> <p>2.6.2.1 The potential impacts associated with the development and/or expansion of the railway network;</p> <p>2.6.2.2 The potential impacts associated with the storage and handling of dangerous goods;</p> <p>2.6.2.3 The potential impacts associated with the treatment of sewage and waste water;</p> <p>2.6.2.4 The potential socio-economic impacts; and</p> <p>2.6.2.5 The potential impacts on the wetlands (if any).</p> <p>2.7 Plan of Study for EIA</p> <p>The following specialist studies must be included in the Plan of Study for EIA:</p> <p>2.7.1 The Social and Economic Impact Assessment;</p> <p>2.7.2 Should the proposed development be classified as a Major Hazard Installation Facility, a Quantitative Risk Assessment must be undertaken; and</p> <p>2.7.3 Should the seasonal pond be classified as a wetland; a freshwater assessment may be required.</p>	<p>the Department of Water and Sanitation (Appendix B). The Department conducted a visit on the 3 May 2016, and requested a wetland study is conducted.</p> <p>2.6.2 Noted</p> <p>2.6.2.1 – 2.6.2.5 Refer to section 7.2 for impacts identified.</p> <p>2.7 Noted.</p> <p>2.7.1 Refer to section 8.6 of the amended Scoping report for an updated Plan of Study.</p> <p>Included in the Plan of Study.</p> <p>2.7.2 A Major Hazard Installation Facility is not relevant to the development.</p> <p>2.7.3 The Seasonal pond is classified as a wetland therefore; a wetland study is required.</p>



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				<p>2.8 Legislative requirements</p> <p>2.8.1 Page 28 of the final SR indicates that a Water Use Licence may be required. Note that should a Water Use Licence be required, proof of submission of the Water Use Licence Application to the relevant authority must be provided in the amended SR; and</p> <p>2.8.2 Page 155 of the final SR indicates that a mining permit in terms of the Mineral Petroleum Resources Development Act, 2002 (Act No. 28 of 2002) will be applied for. However, the activity description does not indicate whether mining activities will be associated with the proposed development. You are required to provide clarification in this regard.</p>	<p>2.8.1 Refer to section 1.5.10. Shangoni Management Services was appointed to conduct the Water Use License. The Pioneer Industrial Park will require a Water Use License in terms of the National Water Act, 1998, for water use activities, the treatment of sewage that may be undertaken on the site. Water supply will be connected to the West Coast District Municipality feeder line that runs in the servitude in the project area towards Saldanha.</p> <p>A Water Use activities that may require licensing are: Section 21 (b), (e); the project will connect to the West Coast District Municipality feeder line that runs in the servitude in the project area towards Saldanha.</p> <p>2.8.2 This is not a mining activity. Section 53 of the Mineral Petroleum Resources Development Act, 2002 (Act No. 28 of 2002), refers to the</p>

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				<p>Use of land surface rights contrary to objects of Act. Correspondence received from the DMR indicate that the client may have to apply for Section 53.</p> <p>2.9 Public Participation</p> <p>2.9.1 Copies of comments provided by registered interested and affected parties on the final SR have not been included in the final SR. You are required to include these comments in the amended SR;</p> <p>2.9.2 Comments on the final SR from the Saldanha Bay Municipality, this Department’s Directorate: Waste Management and CapeNature must be included in the amended SR.</p> <p>2.9.3 Proof of the notification of the 21-day commenting period on the final SR must be provided in the amended SR.</p> <p>2.10 General</p> <p>Page 106 of the final SR indicates that the reference number for this EIA application was issued on 17 September 2015. Please note that the reference number was issued on 08 September 2014.</p> <p>3. The amended SR must be made available to registered interested and affected parties for a commenting period of 14 days.</p>	<p>2.9.1 Noted. The Amended Final Scoping Report will be circulated and included.</p> <p>2.9.2 Noted.</p> <p>2.9.3 Noted.</p> <p>2.10 Noted, this has been corrected. Refer to section 4.3.6.1.</p> <p>3. Noted. Refer to Appendix D2 for</p>

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				<p>3.1 Note that proof of the 14-day commenting period and any comments on the amended SR must be submitted to this Directorate.</p> <p>4. You are reminded of Regulation 1(3) of the NEMA EIA Regulations, 2010 which states: “For any action contemplated in terms of these regulations for which a timeframe is prescribed, the period of 15 December to 02 January must be excluded in the reckoning of days.”</p> <p>5. Be advised that in terms of Regulation 67 of Government Notice No. R.543 of 18 June 2010, an application lodged in terms of the EIA Regulations promulgated in terms of Chapter 5 of the National Environmental Management Act, 1998 (Act 107 of 1998) lapses if the applicant, after having submitted the application fails for a period of six months to comply with a requirement of the Regulations relating to the consideration of the application.</p> <p>6. Please note that one printed copy as well as one electronic copy (saved on CD/DVD) of the amended SR must be submitted to this Directorate.</p> <p>7. Note that a listed activity may not commence prior to written authorisation being granted by the competent authority.</p>	<p>the notification letters sent.</p> <p>3.1 Refer to Appendix D3 for proof of the notification letters sent.</p> <p>4. Noted.</p> <p>5. Noted.</p> <p>6. Noted.</p> <p>7. Noted.</p>
Alana Duffell-Canham	CapeNature	16 May 2016	Letter	1. As stated previously in our comments dated 24 November 2014, the proposed development site was covered by Saldanha Flats Strandveld. Although the list of threatened ecosystems published in	1. In the rejection letter from the Competent Authority dated 18 December 2015, points 2.2.2 In



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				<p>2011 under NEMBA still lists Saldanha Flats Strandveld as Vulnerable, in an effort to utilise best available science, including more recent landcover and ecosystem mapping sets than those used for the 2011 listing, CapeNature has recently produced updated provincial ecosystem status statistics in accordance with the National principles, criteria, and approach<sup>1</sup>. The key findings relevant to this study show that under criterion A1 (irreversible loss of habitat) Saldanha Flats Strandveld, which has less than 36% of its original extent remaining, meets the criteria for listing as Endangered in terms of Section 52 of the Biodiversity Act.</p>	<p>this Directorate’s correspondence dated 08 September 2014, you were informed that since the site contains Saldanha Flats Strandveld vegetation (which has been classified as Vulnerable in terms of the National Environmental Management: Biodiversity Act, 2004 (Act 10 of 2004) – National List of Ecosystems that are threatened and in need of protection (Government Gazette No. 34809 of 09 December 2011) and is mapped as having Vulnerable vegetation, Activities 12 and 13 of GN No. R. 546 are not triggered by the proposed development. However, it has still been included in the final SR. You are therefore required to remove these listed activities.</p> <p>Therefore, these listed activities were removed. However, the vegetation description was updated.</p>



Name of contact person	Company	Date	Method of comment	Issue raised/Comment	Response
				<p>2. Although it appears that much of the property has been degraded and the site has not been mapped as Critical Biodiversity Area (CBA) it is unfortunate that an updated botanical survey has not been done. The fieldwork conducted for the biodiversity baseline report was conducted nearly 7 years ago and the current conditions on the ground should be verified. The report also contains some outdated terminology, for example, reference is made to red data plant species, the report should rather refer to Species of Conservation Concern (SCC) as all plant species are now technically listed under the red data species listings.</p> <p>3. We note the inclusion of a desktop geohydrological study which recommends that a Groundwater monitoring programme be implemented. Note that groundwater samples should be taken from several boreholes on and surrounding the site to establish baseline conditions. Additional boreholes may have to be created for this purpose.</p> <p>4. However, without knowing the exact types of industry that will occur on the site, it is not possible to predict the type and quantities of waste and effluent that may be produced which may have an impact on groundwater. The same applies to potential air pollutants. It is therefore impossible to support development on this site at this stage as many of the impacts cannot be predicted. We therefore suggest that standards be set for the site as a whole which dictate the maximum amount of effluent and air emissions (and chemical substances contained therein) that may be produced as a result of all activities on the site. Additional studies dealing with air quality and waste management may still</p>	<p>2. An updated Ecological baseline survey for portion 39 of the Farm Eenzaamheid 135, dated 24 May 2016 was done.</p> <p>3. This is noted and will be included in the mitigation measures and included in the EIR.</p> <p>4. We acknowledge the fact that there is no specific information regarding the types of industries to be established. Taking this into account we commit to include standards related to amongst other the following components in the EIA document for your perusal and approval:</p> <ul style="list-style-type: none"> <li>• Air emissions,</li> </ul>

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				<p>be required for each separate industry that wishes to be located on the site.</p>	<ul style="list-style-type: none"> <li>• Waste handling and storage,</li> <li>• Water handling and storage,</li> <li>• Noise generation,</li> <li>• Illumination,</li> <li>• Visual impact,</li> <li>• Chemical handling and storage.</li> </ul> <p>This approach has been successfully implemented in similar projects.</p>
Alana Duffell-Canham	CapeNature	31 May 2016	Letter	<p>Re: Proposed Pioneer Industrial Park Development on Portion 39 of the Farm</p> <p>Eenzaamheid 135, Malmesbury RD – Comments on updated ecological baseline survey. DEA&amp;DP Ref: 16/3/1/2/F4/23/3007/14</p> <p>CapeNature would like to thank you for providing an updated ecological baseline survey on which to comment. Overall, we are satisfied with the updated report. The site presents low botanical constraints except for the presence of <i>Arctopus dregei</i>, which is of conservation concern as this species is declining steadily. However, the population on site is fairly small and it is a suitable species for translocation therefore search and rescue can be considered as a condition in this case.</p> <p>However, a suitable receiving site that will be safe-guarded from development in the long-term must be determined prior to any</p>	<p>Dear Alana,</p> <p>We hereby acknowledge receipt of your comments. Your comments will be included in the draft EIR.</p> <p>Regards</p> <p>Lee-Anne Fellowes</p>

Name of contact person	Company	Date	Method of comment	Issue raised/Comment	Response
				<p>clearing of vegetation occurring on site.</p> <p>We support the implementation of a minimum buffer of 50m between development and the wetland on site but please note that approval must still be obtained from the Department of Water and Sanitation (DWS) in this regard. CapeNature reserves the right to revise initial comments and request further information based on any additional information that may be received.</p>	
Doretha Kotze	West Coast District Municipality	2 June	Letter	<p>FINAL SCOPING REPORT: PROPOSED PIONEER INDUSTRIAL PARK, PORTION 39 OF THE FARM EENZAAMHEID NO 135, DIVISION MALMESBURY, SALDANHA BAY MUNICIPALITY</p> <ol style="list-style-type: none"> <li>I refer to your letter dated, 13 May 2016 and the Amended Final Scoping Report for the proposal.</li> <li>The West Coast District Municipality welcomes the intention to assess the cumulative impacts of air emissions, environmental noise and loss of vegetation during the EIA Reporting phase and awaits the Draft Environmental Impact Report.</li> <li>Kindly note that the municipality's confirmation regarding the availability of sufficient water to the development should be included in the DEIR.</li> </ol>	<p>Dear Doretha Kotze,</p> <p>We hereby acknowledge receipt of your comments.</p> <ol style="list-style-type: none"> <li>Noted.</li> <li>Noted. This will be included in the draft EIR that will be distributed for comment later this year.</li> <li>We note the fact that the Saldanha Local Municipality must confirm the availability of sufficient water in the EIA</li> </ol>





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					phase, and included in the Draft EIR.
N. Duarte	Saldanha Bay Local Municipality	2 June 2016	Letter	<p>AMENDED FINAL SCOPING REPORT AVAILABLE FOR REVIEW: APPLICATION FOR ENVIRONMENTAL AUTHORISATION AND POTENTIAL WATER USE LICNESE FOR THE PROPOSED PIONEER INDUSTIRAL PARK DEVELOPMENT ON PORTION 39 (REMAINING EXTENT) OF THE FARM EENZAAMHEID 135, MALMESBURY RD</p> <ol style="list-style-type: none"> <li>1. The notification for the availability of a Final Scoping Report for review: Application for Environmental Authorisation and Potential Water Use License for the proposed Pioneer Industrial Park Development on Portion 39 (Remaining extent) of the farm Eenzaamheid 135, Malmesbury Rd dated 13 May 2016 refers.</li> <li>2. The cumulative loss of habitat and further degradation within Critical Biodiversity Areas in Saldanha Bay Municipality is a priority concern and it should be avoided, especially within vegetation types which are considered to be endangered or vulnerable.</li> </ol>	<p>Dear N. Duarte,</p> <p>We hereby acknowledge receipt of your comments.</p> <ol style="list-style-type: none"> <li>1. Noted.</li> <li>2. In the Updated Ecological Baseline Survey report dated 24 May 2016, the ecologist identified the vegetation as the Saldanha Flats Strandveld, and is listed as a vulnerable vegetation type. The survey did not identify the study are as a regionally important specific site from a biodiversity point of view, as it does not lie within a Critical Biodiversity Area. The</li> </ol>

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				<p>3. Although the types of industries which will be operating on these sites are not yet known, any industries which will be producing industrial effluent must consult with the Water and Sanitation Department of the Saldanha Bay Municipality.</p>	<p>Saldanha Flats Strandveld (vulnerable) on the specific site is substantially degraded and has minimal conservation value.</p> <p>3. Noted. Shangoni Management Services was appointed to conduct the Water Use License. The Pioneer Industrial Park will require a Water Use License in terms of the National Water Act, 1998, for water use activities, the treatment of sewage that may be undertaken on the site. Water supply will be connected to the West Coast District Municipality feeder line that runs in the servitude in the project area towards Saldanha.</p> <p>Potential Water Use activities that may require licensing are: Section 21 (b), (e). No storage of water will be undertaken on the site; the project will connect to</p>

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				<p>4. The industries must consult with the Air Quality Officer of the Saldanha Bay Municipality, in the event that these industries will be emitting gas/storing products which will negatively impact the quality of air in the Saldanha Bay area.</p> <p>5. The industries should also consider the use of alternative types of water for their cooling, processing and cleaning, if the type of industry allows.</p> <p>6. Please indicate the Environmental &amp; Heritage Section of the Saldanha Bay Municipality on the list of contacts for any Palaeontological and Archaeological findings for our records.</p> <p>7. Appendix A of the Palaeontological and Archaeological Assessment was incomplete on the hard copy with which the Environment and Heritage Section was supplied.</p> <p>8. Please advise on the method of disposal for excavated material. This municipality is experiencing high incidence of</p>	<p>the West Coast District Municipality feeder line that runs in the servitude in the project area towards Saldanha.</p> <p>4. Noted. The industries will consult with the relevant Air Quality Officer of the Saldanha Bay Municipality. This will be included as a commitment in the EMPr.</p> <p>5. Noted. The industries will also consider the use of alternative types of water for their cooling, processing and cleaning. This will be included as a commitment in the EMPr.</p> <p>6. Mr. Gary Tomlinson was included in the list of contacts for town planning, environment and heritage.</p> <p>7. Noted. This has been rectified.</p> <p>8. All construction waste, and waste accumulated during operational phase will be</p>

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				illegal dumping.	disposed of at the Vredenburg landfill site according to the waste procedure. This mitigation measure will be included in the EMPr.
Lance McBain-Charles	Western Cape Department of Environmental Affairs and Development Planning Directorate: Waste Management	2 June 2016	Letter	<p>COMMENT ON THE AMENDED FINAL SCOPING REPORT (Afsr) AVAILABLE FOR REVIEW: APPLICATION FOR ENVIRONMENTAL AUTHORISATION AND POTENTIAL WATER USE LICENESE FOR THE PROPOSED PIONEER INDUSTRIAL PARK DEVELOPMENT ON PORTION 39 (REMAINING EXTENT) OF THE FARM EENZAAMHEID 135, MALMESBURY RD, SALDANHA BAY.</p> <ol style="list-style-type: none"> <li>1. The aforementioned amended Final Scoping Report (aFSR) dated 13 May 016 and received by the Department on 12 May 2016, refers.</li> <li>2. The Sub-Directorate: Waste Management Licensing has no objection to the above-mentioned application subject to the following conditions: <ol style="list-style-type: none"> <li>2.1 Waste minisation should be implemented, such as the avoidance, reduction, re-use and recycling of waste during construction, before considering the disposal of such waste.</li> <li>2.2 The local municipality must identify the Waste Disposal Facility (WDF) where the waste from the development will be disposed of and also confirm that the WDF has the capacity to accept the waste from the proposed</li> </ol> </li> </ol>	<p>Dear Lance McBain-Charles,</p> <p>We hereby acknowledge receipt of your comments.</p> <ol style="list-style-type: none"> <li>1. Noted</li> <li>2. Noted. <ol style="list-style-type: none"> <li>2.1 Waste minimisation will be implemented (avoidance, reduction, re-use and recycling) as per the Waste management procedure during the construction phase.</li> <li>2.2 This is noted and the Saldanha Local Municipality will be consulted in this regard, and a response will be included in the EIA phase.</li> </ol> </li> </ol>



Name of contact person	Company	Date	Method of comment	Issue raised/Comment	Response
				<p>development.</p> <p>2.3 Dust, odour and noise must be controlled appropriately and should not cause any nuisance conditions during all the phases of the project.</p> <p>2.4 The leakage of fuels, oils etc. must be minimised and/or prevented.</p> <p>2.5 All chemicals must be stored in a bunded area which exceeds the maximum allowable volume by 10%. The storage area should be fenced and access controlled.</p> <p>2.6 Material spilled during transfers from tank to storage and decanted to vehicles should be regarded as hazardous waste. Spills must be contained using commercially available absorbent material. The fuel soaked absorbent material must be treated as hazardous waste and disposed to hazardous disposal facility in line with all regulatory requirements.</p> <p>2.7 All hazardous waste must be stored in a demarcated area and disposed of by using professional waste disposal contractors. All documents relating to volumes and types of wastes must be kept on site for inspection.</p> <p>2.8 Any major spills must be reported and dealt with in accordance to Section 30 of the National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA), as amended. All authorities, as required, must be informed in line with eth Act. Clean up and remediation should proceed as soon as possible.</p> <p>2.9 Although a National Environmental Management: Waste</p>	<p>2.3 Dust, odour and noise will be controlled, by setting environmental limits on the proposed industries.</p> <p>2.4 If, fuels, oils etc. are to be stored on site, they will be stored in a bunded area.</p> <p>2.5 Chemicals will be stored in a bunded area, which can store at least 110% of the total volume and will be fenced and access will be controlled.</p> <p>2.6 All spillages will be treated as hazardous waste and disposed of at Vissershok, a site that is registered to dispose of hazardous waste (H:H equivalent) high risk waste.</p> <p>2.7 All hazardous waste will be handled in terms of the Waste procedure. Waste will be stored in a demarcated area and disposed of by a professional waste disposal contractor.</p> <p>2.8 Noted. Handling of spillages will be included in the EMP, and</p>

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				<p>Act, 2008 (Act 59 of 2008) (NEM:WA), as amended, authorisation may not be required based on the information received, all relevant legislation and requirements of other government departments (i.e. National, Provincial and Local), in particular Section 28 of the NEMA, must still be complied with.</p> <p>3. The Department reserves the right to revise initial comments and request further information based on new information received.</p>	<p>dealt with according to Section 30 of the National Environmental Management Act, 1998 (Act No. 107 of 1998).</p> <p>2.9 Noted. If an activity triggers a Waste License, this will be applied for, and duty of care will be implemented on site.</p> <p>3. Noted</p>
Ms K. Adriaanse	Western Cape Department of Environmental Affairs and Development Planning	18 July 2016	Received by fax 18 July 2016	<p>REJECTION OF THE AMENDED FINAL SCOPING REPORT ("SR") AND PLAN OF STUDY FOR ENVIRONMENTAL IMPACT ASSESSMENT ("EIA") FOR THE PROPOSED INDUSTRIAL AND COMMERCIAL DEVELOPMENT AND ASSOCIATED INFRASTRUCTURE ON PORTION 3' or PARM EENZAAMHEID NO. 135, SALDANHA.]</p> <p>The final SR dated 25 November 2015 and received by this Department on 26 November 2015, this Directorate's acknowledgement thereof dated 08 December 2015: this Directorate's rejection of the final SR dated 17 December 2015, your correspondence dated and received by this Directorate via facsimile on 15 April 2016, this Directorate's correspondence dated 20 April 2016, the amended final SR dated June 2016 and received by this Department on 10 June 2016 and this Directorate's</p>	<p>Dear Ms K. Adriaanse,</p> <p>Your letter dated 17 June 2016 refers: We hereby acknowledge receipt of your letter and will address your concerns in the second amendment of the scoping report.</p>

Name of contact person	Company	Date	Method of comment	Issue raised/Comment	Response
				<p>acknowledgement thereof dated 24 June 2016, refer.</p> <p>1. Competent Authority in terms of electricity generation, distribution and transmission</p> <p>1.1. The National' Department to Environmental Affairs is the competent authority for all listed activities related to the generation, transmission and distribution of electricity.</p> <p>1 2. The following options are available:</p> <p>1.2.1. You may withdraw your application with this Department and submit a new application for environmental authorisation to the National Department of Environmental Affairs for all listed activities; or</p> <p>1.2.2. You may request this Directorate to request delegation from the National Department of Environmental Affairs to continue administering your application for environmental authorisation.</p> <p>1.3 Should you request this Directorate to request delegation from the National Department of Environmental Affairs, this must be done as a matter of urgency.</p> <p>1.4 Note that the information requested below must be submitted after the National Department of Environmental Affairs has granted the request for delegation.</p> <p>2. In terms of Regulation 30 of GN No R.543 of 18 June 2010. the amended final SR is rejected by this Directorate. The amended final SR is still missing substantive information. The amended final SR must be amended to include the following outstanding information already highlighted in this Directorate's rejection letter dated 17</p>	<p>1. Noted</p> <p>1.1 Noted.</p> <p>1.2 Noted.</p> <p>1.2.1 This activity is not relevant anymore, as the client will not be triggering the electricity listed activity, as the proposed line is only 11kV, and below the threshold of 33kV outside urban areas.</p> <p>1.2.2 Noted. This is not relevant anymore.</p> <p>1.3 Noted. This is not relevant anymore.</p> <p>1.4 Noted. This is not relevant anymore.</p> <p>2. The second amendment Scoping report will complete the substantive information that was outstanding before.</p>



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				<p>December 2015:</p> <p>2.1 Collapsing of the Scoping and Environmental Impact Reporting ("EIR") process</p> <p>2.1.1 You were informed in this Directorate's correspondence dated 08 September 2014 that the Scoping phase and EIR phase are two distinctly separate phases each having its own requirements and reports to be submitted. Due to the fact that a Palaeontological and Archaeological Assessment (dated August 2009), an Ecological Baseline Survey (updated 24 May 2016), a Desktop Geohydrological Study (dated April 2016), an Engineering Services Report (dated March 2016) and a Need and Desirability Study (dated 02 May 2016) was undertaken, the Scoping and EIR phases have been collapsed.</p> <p>2.1.2 Although specialist assessments may commence prior to the commencing of the EIR phase, the specialist reports and the assessment of the potential impacts must be reported on in the EIA Report.</p> <p>2.1.3 The amended SR must therefore report on the scope of the potential impacts and those requiring further investigation.</p> <p>2.2 Listed activities</p> <p>2.2.1 The following listed activities must be removed from the amended SR:</p> <p>2.2.1.1 Activity 4 GN No, R.546 of 18 June 2010 and Activity 4 of GN No. R.985 of 04 December 2014 will not be triggered as the road</p>	<p>2.1</p> <p>2.1.1 Noted the specialist studies were removed from the scoping report and will be included in the EIR.</p> <p>2.1.2 Noted. The specialist assessments will be included in the EIR.</p> <p>2.1.3 Refer to section 8 for the updated plan of study.</p> <p>2.2</p> <p>2.2.1.</p> <p>2.2.1.1 These two listed activities</p>

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				<p>reserve will be greater than 13.5m in extent.</p> <p>2.2.1.2 Activity 10 GN No. R.546 of 18 June 2010 and Activity 10 of GN No. R.985 of 04 December 2014 will not be triggered as the proposed storage of dangerous goods will exceed 80m<sup>3</sup>.</p> <p>2.2.2. The following listed activities in the amended final SR are questioned:</p> <p>2.2.2.1 Activity 9 of GN No. R.983 of 04 December 2014 in relation to the length of the proposed storm water pipeline.</p> <p>2.2.2.2. Activity 19 of GN No, R.983 of 04 December 2014 in relation to a wetland that may be located on the site.</p> <p>2.2.2.3. Activity 56 of GN No. R .983 of 04 December 201 4 and Activity 18 of GN No. R.985 of 04 December 2014 in relation to the proposed roads to be widened.</p> <p>2.2.2.4. Activity 2 of GN No. R.985 of 04 December 2014 in relation to the proposed bulk water reservoir.</p> <p>2.2.3. Note that any additional listed activities must be included in the SR. The SR must include the scope of the additional listed activities and identify the potential impacts associated with the proposed development.</p> <p>2.2.4. In addition, the Plan of Study for EIA must be amended to include the additional information related to the additional listed activities.</p> <p>2.2.5. The application form must be amended and re-submitted to</p>	<p>were removed refer to table 3 &amp; 4.</p> <p>2.2.1.2 These two listed activities were removed refer to table 3 &amp; 4.</p> <p>2.2.2</p> <p>2.2.2.1 Activity 9 was included in table 4.</p> <p>2.2.2.2 Activity 19 is not relevant and is indicated as such in table 4.</p> <p>2.2.2.3 Activity 56 is still relevant.</p> <p>2.2.2.4 Activity 2 was included in table 4.</p> <p>2.2.3 Noted.</p> <p>2.2.4 Noted. Please refer to section 8 of the final scoping report for the updated plan of study.</p>

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				<p>reflect the correct listed activities being applied for.</p> <p>2.3. Activity Description</p> <p>2.3.1 As previously requested in this Directorate's correspondence dated 17 December 2015, a detailed description of the following proposed infrastructure must be provided in the amended SR:</p> <p>2.3.1.1 The new railway network to be developed;</p> <p>2.3.1.2. The existing railway network that will be expanded; and</p> <p>2.3.1.3. The bulk water supply reservoir (including the volume (m3)) to be developed.</p> <p>2.3.2. It is noted that a facility for the treatment of sewage and/or effluent will be developed as part of the proposed development. Note that a description of the facility for the treatment of sewage and/or effluent must be provided.</p> <p>2.4. Alternatives</p> <p>Two layout alternatives have been identified for the proposed development. However, both layout alternatives do not make provision for proposed facility for the 'treatment of sewage and/or effluent and the proposed bulk water reservoir. The layout alternatives must be corrected to reflect the aforementioned infrastructure.</p> <p>2.5. Plan of Study for EIA</p> <p>2.5.1. It is noted that the amended final SR provides a list of potential</p>	<p>2.2.5 Noted. The application form was updated and submitted.</p> <p>2.3</p> <p>2.3.1</p> <p>2.3.1.1 Refer to section 1.5.2</p> <p>2.3.1.2 Refer to section 1.5.2</p> <p>2.3.1.3 Refer to section 1.5 for the size of the bulk water supply reservoir.</p> <p>2.3.2 A brief description of the treatment of sewerage is given in section 1.5. For more detail refer to Appendix G.</p> <p>2.4 Both layout plans were updated to include the treatment of sewage. Refer to section 6.2.</p>

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				<p>impacts. However, the following potential impacts have not been included:</p> <p>2.5.1.1. The potential Impacts on birds as the site is located within the Saldanha Flyway Bird control,</p> <p>2.5.1.2. The potential Impacts associated with the proposed bulk water reservoir:</p> <p>2.5.1.3. The potential traffic impacts associated with the development and operational phases:</p> <p>2.5.1.4. The potential visual impacts as the proposed site is located adjacent to the R27 and R45;2.5. .5. The potential impact on heritage resources;</p> <p>2.5.1.6. The potential ground water impacts as the site is located on the Langebaan Road aquifer;</p> <p>2.5.1.7. The potential noise impacts; and</p> <p>2.5.1.8. The potential dust impacts.</p> <p>2.5.2. Note that a list of potential impacts to be assessed as part of the EIA process has not been provided in the plan of study for EIA. You are required to provide a list of potential impacts to be assessed as part of the EIA process and,</p> <p>2.5.3. The Plan of Study for ESA indicates that the draft EIA Report will be available for a 40-day commenting period in terms of Section 24(0) of the NEMA. It is noted that this is in line with the previous requirements of Section 24(0) of the NEMA. Note that the NEMA has</p>	<p>2.5</p> <p>2.5.1</p> <p>2.5.1.1 These impacts were included in sections 7.2 and 8.7.</p> <p>2.5.1.2 These impacts were included in sections 7.2 and 8.7.</p> <p>2.5.1.3 These impacts were included in sections 7.2 and 8.7.</p> <p>2.5.1.4 These impacts were included in sections 7.2 and 8.7.</p> <p>2.5.1.6 These impacts were included in sections 7.2 and 8.7.</p> <p>2.5.1.7 These impacts were included in sections 7.2 and 8.7.</p> <p>2.5.1.8 These impacts were included in sections 7.2 and 8.7.</p> <p>2.5.2 Refer to section 8.7.</p> <p>2.5.3 Noted. The plan of study was updated to allow for a commenting period of 30 days. Refer to section 8 of the scoping report.</p>

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				<p>been amended by Act No. 25 of 2014: National Environmental Management Laws Amendment Act, 2014 which came into effect on 02 September 2014. The amendment, inter alia, allows a minimum commenting period of 30 days.</p> <p>2.6. Water Use Licence Application It is noted that a wetland specialist study will be undertaken to determine if the seasonal pan located on the site is classified as a wetland. It is further noted that a Water Use Licence Application will be submitted to the Department of Water and Sanitation upon the findings of the specialist assessment. You are reminded that proof of submission of the Water Use Licence Application to the Department of Water and Sanitation must be included in the amended SR.</p> <p>3. The amended SR must be made available to registered interested and affected parties for a commenting period of 14 days. 3.1. Note that proof of the 14-day commenting period and any comments and responses thereto on the amended SR must be</p>	<p>2.6 The wetland study will be included in the EIR. The Pioneer Industrial Park will require a Water Use License in terms of the National Water Act, 1998, for water use activities. Water Use activities that will require licensing are:</p> <ul style="list-style-type: none"> <li>• Section 21 (b) – Storage of water,</li> <li>• Section 21 (e) – Engaging in a controlled activity, identified as such in Section 37(1)(a): Irrigation of any land with waste or water containing waste generated through any industrial activity or by a waterworks. Refer to Annexure H.</li> </ul> <p>3 3.1 Noted. The amended report was made available from 16 to 29 of January 2017. Refer to appendix</p>

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				<p>submitted to this Directorate along with the amended SR.</p> <p>4. Be advised that in terms of Regulation 67 of Government Notice No. R. 543 of 18 June 2010, an application lodged in terms of the EIA Regulations promulgated in terms of Chapter 5 of the National Environmental Management Act, 1998 (Act 107 of 1998) lapses if the applicant, after having submitted the application fails for a period of six months to comply with a requirement of the Regulations relating to the consideration of the application.</p> <p>5. Please note that one printed copy as well as one electronic copy (saved on CD/DVD) of the amended SR must be submitted to this Directorate.</p> <p>6. Note that a listed activity may not commence prior to written authorisation being granted by the competent authority.</p> <p>7. Note: This Directorate is not satisfied with the progress on this application. It remains the responsibility of the applicant and the environmental assessment practitioner to ensure that all the relevant information is submitted timeously to the competent authority.</p>	<p>D14 for comments received.</p> <p>4 Noted.</p> <p>5 Noted.</p> <p>6 Noted.</p> <p>7 Noted.</p>



#### **4.3.8 Conclusions of the PPP**

In conclusion, the Public Participation exercise has provided adequate information to enable an understanding of what the proposed development of an Industrial Park activities would entail and to address the concerns and comments received during the scoping process.





## 5. NEED AND DESIRABILITY FOR THE ACTIVITY

A need and desirability for this project is evident from the following perspectives:

### 5.1 Developer/Applicant

The proposed project will generate a source of income for the applicant, through the operation of the mixed industrial development or through the sale of portions of the property to developers that wish to establish mixed uses, including commercial, light industrial and heavy industrial uses, on the land.

### 5.2 Local community

The construction and operation of the mixed use development will generate temporary and permanent job opportunities. Sourcing of material from local suppliers will also stimulate the local economy. Industries associated with the mixed use development will also be stimulated by the proposed project and this will also contribute positively towards the local economy.

### 5.3 Need and Desirability

Need and Desirability in terms of the Guideline on Need and Desirability dated 20 October 2014

On the 20<sup>th</sup> of October 2014, the Department of Environmental Affairs published a Guideline on Need and Desirability in terms of the Environmental Impact Assessment (EIA) Regulations, 2010, in Government Notice 891 of 2014.

The need for and desirability of an proposed activity must specifically and explicitly be addressed throughout the EIA process (screening, "scoping", and assessment) when dealing with individual impacts and specifically in the overall impact summary by taking into account the answers to inter alia the following questions as per the General notice 891 of 2014 integrated environmental management guideline series 9 guideline on need and desirability in terms of the environmental Impact assessment (EIA) regulations, 2010 as published on the 20th of October 2014. Table 19 refers to the questions to be engaged with when considering need and desirability.



**Table 19: Questions to be engaged with when considering need and desirability**

Requirement	Part where requirement is addressed/response
<p>1. How will this development (and its separate elements/aspects) impact on the ecological integrity of the area?</p>	<p>Section 1.5 refers to the project description. The layout option 3 which is the preferred option, allows for open spaces. The seasonal pan which is classified as a wetland is within the open space and the town planners have allowed for a 50 metre buffer.</p>
<p>How were the following ecological integrity considerations taken into account?</p>	
<p>1.1.1 <i>Threatened Ecosystems.</i></p>	<p>Section 2.10 refers to the sensitive landscapes within the project area.</p> <p>The site for the proposed development lies within the Saldanha Flats Strandveld vegetation type. This ecosystem is listed as “Endangered” in terms of Section 52 of the National Environmental Management: Biodiversity Act, 2004.</p> <p>A flyway is a predictable route used by migratory birds and insects to get from winter feeding grounds to summer breeding grounds and back. The site for the proposed development lies within a bird corridor called the Saldanha Flyway.</p> <p>According to the Biodiversity Baseline Survey conducted by Eco Impact Legal Consulting, a seasonal pond with a radius of approximately 5m was observed west of the homestead on the project property, underneath the Eskom power lines. The GPS coordinates of the pond are: 32°56’41.45” S; 18°03’52.18” E. It is recommended that no infrastructure be constructed within 32m of this pond.</p> <p>During the EIA phase a wetland study will be conducted to determine the Present Ecological Status (PES) and Ecological Importance and Sensitivity (EIS).</p>
<p>1.1.2 <i>Sensitive, vulnerable, highly dynamic or stressed ecosystems, such as coastal</i></p>	<p>Section 2.10 refers to the sensitive landscapes within the project area.</p>



Requirement	Part where requirement is addressed/response
<p><i>shores, estuaries, wetlands, and similar systems require specific attention in management and planning procedures, especially where they are subject to significant human resource usage and development pressure.</i></p>	<p>According to the Biodiversity Baseline Survey conducted by Eco Impact Legal Consulting, a seasonal pond with a radius of approximately 5m was observed west of the homestead on the project property, underneath the Eskom power lines. The GPS coordinates of the pond are: 32°56'41.45" S; 18°03'52.18" E. It is recommended that no infrastructure be constructed within 32m of this pond.</p> <p>During the EIA phase a wetland study will be conducted to determine the Present Ecological Status (PES) and Ecological Importance and Sensitivity (EIS).</p>
<p><i>1.1.3 Critical Biodiversity Areas ("CBAs") and Ecological Support Areas ("ESAs").</i></p>	<p>Section 2.10 refers to the sensitive landscapes within the project area.</p> <p>The site for the proposed development lies within the Saldanha Flats Strandveld vegetation type. This ecosystem is listed as "Endangered" in terms of Section 52 of the National Environmental Management: Biodiversity Act, 2004.</p> <p>There are no critical biodiversity and ecological support areas on the project area.</p>
<p><i>1.1.4 Conservation targets.</i></p>	<p>The vegetation type of the general area of the project site and surrounds is the Saldanha Flats Strandveld. According to Musina &amp; Rutherford (2006), this vegetation type is endangered, with a conservation target of 24%. 11% of the vegetation is statutorily conserved in the West Coast National Park and Yzerfontein Nature Reserve. A very small portion is also conserved in private conservation areas such as Jakkalsfontein and West Point. The vegetation type is characterised by sclerophyllous shrublands of a sparse, emergent and moderately tall shrub layer and an open shrub layer forming the undergrowth. In spring, geophytes and annual herbaceous flora are prominent (Musina &amp; Rutherford, 2006).</p>
<p><i>1.1.5 Ecological drivers of the ecosystem.</i></p>	<p>Section 2.6 &amp; 2.7 refers to the species that are found in the project area.</p>
<p><i>1.1.6 Environmental Management Framework.</i></p>	<p>Section 2.15 refers to the Environmental Management Zones, there are three Environmental</p>

Requirement	Part where requirement is addressed/response
	<p>Management Zones within the Environmental Management Framework for the greater Saldanha area. These EMZs are identified based on a combination of the environmental characteristics of the area and the potential for significant impacts in relation to activities listed in the 2010 NEMA EIA Regulations, namely Listing Notices 1, 2 and 3 (GN 544, 545 and 546 of 18 June 2010, as amended on 30 July 2010).</p> <p>The proposed industrial park lies within EMZ 2. The objective of EMZ 2 and EMZ 3 is to promote development with care, with respect to the valued resources and restrictive conditions or constraints (attributes), respectively.</p> <p>Activities that should be avoided in EMZ2 include:</p> <ul style="list-style-type: none"> <li>• Mining projects;</li> <li>• Extraction or processing of oil or gas; and</li> <li>• Power generation projects (fossil fuels or nuclear).</li> </ul> <p>Activities that should be avoided in EMZ3 include:</p> <ul style="list-style-type: none"> <li>• Residential projects;</li> <li>• Commercial or retail facilities;</li> <li>• Intensive agriculture;</li> <li>• Facilities for the concentration of livestock or for intensive/commercial livestock production;</li> <li>• Forestry/afforestation;</li> <li>• Dams (instream and offstream) and water transfer schemes;</li> <li>• Recreational facilities; and</li> <li>• Tourism facilities (WCDEADP, 2015</li> </ul>

Requirement	Part where requirement is addressed/response
1.1.7 <i>Spatial Development Framework.</i>	The Integrated Development Plan (IDP) states that “the establishment of an environment for economic growth in order to sustain and develop communities is lastly extremely important for Council. Council have therefore adopted a spatial development framework that announces a movement system to be used in a proactive way to create a new pattern of accessibility and to create opportunities for investment in those places. Within the overall spatial management concept, areas of intermediate growth were identified, creating a triangle between Vredenburg, Saldanha and the Transnet port. An important aspect of this concept is the promotion of a proposed activity corridor which is to link Saldanha and Vredenburg. This will promote the establishment of an industrial zone (IDZ) which was also mentioned in the State of the Nation Speech by President Zuma, 2012
1.1.8 <i>Global and international responsibilities relating to the environment (e.g. RAMSAR sites, Climate Change, etc.).</i>	Not applicable.
1.2 How will this development disturb or enhance ecosystems and/or result in the loss or protection of biological diversity? What measures were explored to firstly avoid these negative impacts, and where these negative impacts could not be avoided altogether, what measures were explored to minimise and remedy (including offsetting) the impacts? What measures were explored to enhance positive impacts?	The layout option 3 which is the preferred option, allows for open spaces. The seasonal pan which is classified as a wetland is within the open space and the town planners have allowed for a 50 metre buffer.
1.3 How will this development pollute and/or	Strict mitigation measures will be imposed on the development to avoid pollution. Positive impacts will



Requirement	Part where requirement is addressed/response
degrade the biophysical environment? What measures were explored to firstly avoid these impacts, and where impacts could not be avoided altogether, what measures were explored to minimise and remedy (including offsetting) the impacts? What measures were explored to enhance positive impacts?	be the creation of employment opportunities and GDP growth.
1.4 What waste will be generated by this development? What measures were explored to firstly avoid waste, and where waste could not be avoided altogether, what measures were explored to minimise, reuse and/or recycle the waste? What measures have been explored to safely treat and/or dispose of unavoidable waste?	At this stage the development will consist of heavy and light industry. Dependent on the type of industry, there will be general and hazardous waste. However, the capacities are not known at this stage.
1.5 How will this development disturb or enhance landscapes and/or sites that constitute the nation's cultural heritage? What measures were explored to firstly avoid these impacts, and where impacts could not be avoided altogether, what measures were explored to minimise and remedy (including offsetting) the impacts? What measures were explored to enhance positive impacts?	Section 6 refers to the identified alternatives for the project, option 3 took into account the seasonal pan and an open space was allocated with a 50 metre buffer where the seasonal pan occurs on site.

Requirement	Part where requirement is addressed/response
<p>1.6 How will this development use and/or impact on non-renewable natural resources? What measures were explored to ensure responsible and equitable use of the resources? How have the consequences of the depletion of the non-renewable natural resources been considered? What measures were explored to firstly avoid these impacts, and where impacts could not be avoided altogether, what measures were explored to minimise and remedy (including offsetting) the impacts? What measures were explored to enhance positive impacts?</p>	<p>The activity will not impact on non-renewable natural resources.</p>
<p>1.7 How will this development use and/or impact on renewable natural resources and the ecosystem of which they are part? Will the use of the resources and/or impact on the ecosystem jeopardise the integrity of the resource and/or system taking into account carrying capacity restrictions, limits of acceptable change, and thresholds? What measures were explored to firstly avoid the use of resources, or if avoidance is not possible, to minimise the use of resources?</p>	<p>The activity will not impact on non-renewable natural resources.</p>



Requirement	Part where requirement is addressed/response
<p>What measures were taken to ensure responsible and equitable use of the resources? What measures were explored to enhance positive impacts?</p>	
<p>1.7.1 <i>Does the proposed development exacerbate the increased dependency on increased use of resources to maintain economic growth or does it reduce resource dependency (i.e. dematerialised growth)? (note: sustainability requires that settlements reduce their ecological footprint by using less material and energy demands and reduce the amount of waste they generate, without compromising their quest to improve their quality of life)</i></p>	<p>Not applicable.</p>
<p>1.7.2 <i>Does the proposed use of natural resources constitute the best use thereof? Is the use justifiable when considering intra- and intergenerational equity, and are there more important priorities for which the resources should be used (i.e. what are the opportunity costs of using these resources this the proposed development alternative?)</i></p>	<p>The activity will not impact on non-renewable natural resources.</p>
<p>1.7.3 <i>Do the proposed location, type and scale of</i></p>	<p>Not applicable.</p>



Requirement	Part where requirement is addressed/response
<i>development promote a reduced dependency on resources?</i>	
1.8 How were a risk-averse and cautious approach applied in terms of ecological impacts?	During the EIA phase, the specialists will complete a risk assessment table as part of their specialist studies.
1.8.1 <i>What are the limits of current knowledge (note: the gaps, uncertainties and assumptions must be clearly stated)?</i>	At this stage it is uncertain, what the heavy and light industries will consist of.
1.8.2 <i>What is the level of risk associated with the limits of current knowledge?</i>	The level of risk is associated with the design parameters that could change and therefore the specialist studies could not be relevant anymore and would need to be amended.
1.8.3 <i>Based on the limits of knowledge and the level of risk, how and to what extent was a risk-averse and cautious approach applied to the development?</i>	All specialist studies were conducted by registered and certified specialists in their fields. The mitigation measures proposed by the specialists will be considered by the client.
How will the ecological impacts resulting from this development impact on people's environmental right in terms following:	
1.8.4 <i>Negative impacts: e.g. access to resources, opportunity costs, loss of amenity (e.g. open space), air and water quality impacts, nuisance (noise, odour, etc.), health impacts, visual impacts, etc. What measures were taken to firstly avoid negative impacts, but if avoidance is not possible, to minimise,</i>	Refer to section 7 for identified environmental impacts associated with the activity.



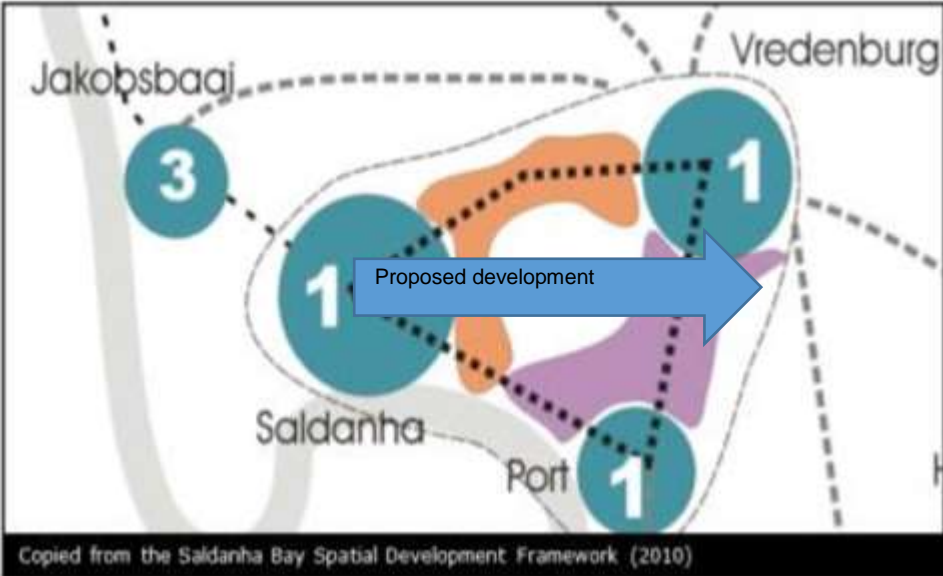
Requirement	Part where requirement is addressed/response
<i>manage and remedy negative impacts?</i>	
1.8.5 <i>Positive impacts: e.g. improved access to resources, improved amenity, improved air or water quality, etc. What measures were taken to enhance positive impacts?</i>	Positive impacts are related to Social and Socio-economic.
1.9 Describe the linkages and dependencies between human wellbeing, livelihoods and ecosystem services applicable to the area in question and how the development's ecological impacts will result in socio-economic impacts (e.g. on livelihoods, loss of heritage site, opportunity costs, etc.)?	Refer to section 7 for identified environmental impacts associated with the activity.
1.10 Based on all of the above, how will this development positively or negatively impact on ecological integrity objectives/targets/considerations of the area?	Refer to section 7 for identified environmental impacts associated with the activity.
1.11 Considering the need to secure ecological integrity and a healthy biophysical environment, describe how the alternatives identified (in terms of all the different elements of the development and all the different impacts being proposed), resulted in the selection of the "best practicable	Refer to section 7 for identified environmental impacts associated with the activity.



Requirement	Part where requirement is addressed/response
environmental option" in terms of ecological considerations?	
1.12 Describe the positive and negative cumulative ecological/biophysical impacts bearing in mind the size, scale, scope and nature of the project in relation to its location and existing and other planned developments in the area?	Refer to section 7 for identified environmental impacts associated with the activity.
What is the socio-economic context of the area, based on, amongst other considerations, the following considerations?:	
2.1.1 <i>The IDP (and its sector plans' vision, objectives, strategies, indicators and targets) and any other strategic plans, frameworks of policies applicable to the area,</i>	<p>Given statements based on the Integrated Development Plan of the Saldanha Bay Local Municipality, it is thus fair to comment that the proposed development would add greatly to local economic aspirations. As can be seen in the figure below, the proposed development falls well into the movement of goods and people as envisaged in the Integrated Development Plan.</p> <p>The statements that corroborate the desirability of the proposed development comes from the Saldanha Bay Local Municipality draft Integrated Development Plan for the 2012 – 2017 period.</p> <p>It states that one of its strategic objectives is to diversify the economic base of the municipality through industrialisation, whilst at the same time nurturing traditional economic sectors.</p> <p>The Integrated Development Plan continues by saying that the municipality wants to create an enabling environment for the promotion of economic development as well as tourism and the elevation of the industrial potential.</p>

Requirement	Part where requirement is addressed/response
	<p>The Integrated Development Plan furthermore states that “the establishment of an environment for economic growth in order to sustain and develop communities is lastly extremely important for its Council. Council have therefore adopted a spatial development framework that announces a movement system to be used in a proactive way to create a new pattern of accessibility and to create opportunities for investment in those places. Within the overall spatial management concept, areas of intermediate growth were identified, creating a triangle between Vredenburg, Saldanha and the Transnet port. (See figure below) An important aspect of this concept is the promotion of a proposed activity corridor which is to link Saldanha and Vredenburg. This will promote the establishment of an industrial zone (IDZ) which was also mentioned in the State of the Nation Speech by President Zuma, 2012. The Integrated Development Plan also states that the increase in population in these areas are as a result of the influx of migrants to the Saldanha Bay Local Municipality as a result of the growing secondary sector and the establishment of the Industrial Development Zone (IDZ).</p> <p>Industrial development movement system proposed by Saldanha Bay Local</p>

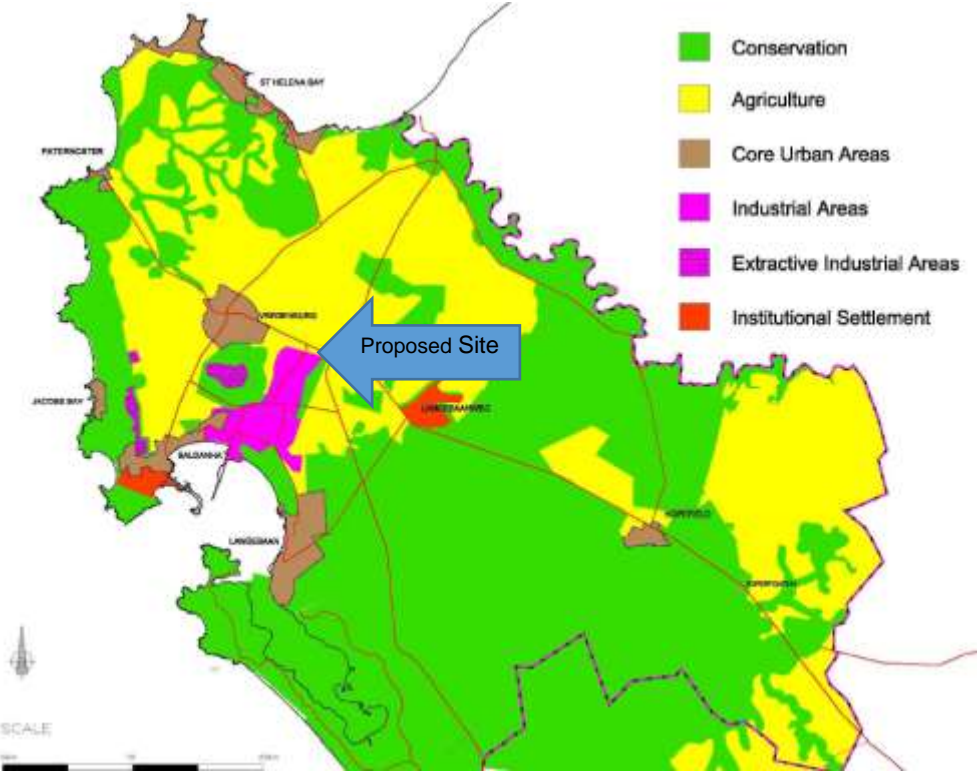


Requirement	Part where requirement is addressed/response
	 <p>Source 1 : sblm Integrated Development Plan 2012-2017</p> <p>A further statement by the Integrated Development Plan goes on to say that the pedestrian growth of the Western Cape District manufacturing sector is explained to a large extent by the recessionary slump and only partial recoveries in key industries (metals and engineering, non-metal minerals, food and beverages and wood products) and the Saldanha Bay Municipality seems to be at the centre of the impact.</p> <p>The Integrated Development Plan also states that the 2010 revision of the 2004 growth potential study of towns in the Western Cape stated that most towns in the Saldanha Bay municipal area show sound growth as a consequence of the region’s competitive advantages, inter alia, the largest natural harbour in the country; relative short distances to Cape Town; a developing manufacturing sector; and the proximity of exploitable gas fields along the West Coast.</p>

Requirement	Part where requirement is addressed/response
	<p>This study also rated Saldanha and Vredenburg as two of the 15 ‘leader’ towns in the Western Cape. It stated that Saldanha has a well-balanced economic base (the fishing industry, institutional services, tourism, the harbour and the industrial sector) which holds strong development potential and which could bring great relief to the human needs in the wider region. Vredenburg fulfils the role of a regional service centre for the West Coast and has sufficient land for future expansion.</p>
<p>2.1.2 <i>Spatial priorities and desired spatial patterns (e.g. need for integrated of segregated communities, need to upgrade informal settlements, need for densification, etc.),</i></p>	<p>Reviewing the Saldanha Spatial Development Framework it is evident that there is very little reason why the proposed site could not be converted to an industrial site. One of the principles proposed by the study is spatial development based on locational advantages. According to the study it includes the diversification of industrial and rural based economic development, to be based on proven locational and comparative resource advantages. Such development opportunities should be promoted in strategic locations to maximise integration and the stimulation of economic growth and employment opportunities.</p> <p>The Saldanha Spatial Development Framework recognised the current spatial patterns as presented in one of the figures in its report (figure below), and it can be seen that the farm Eenzaamheid is situated on the border of the current industrial area of the Saldanha Bay Local Municipality.</p> <p>Current spatial pattern</p>






Requirement	Part where requirement is addressed/response
	 <p data-bbox="835 1086 1630 1114">Source 2: Saldanha Spatial Development Framework 2010 Report</p> <p data-bbox="835 1166 2045 1238">Of importance is to note that the proposed site does not fall in, or is even in close proximity to conservation areas.</p> <p data-bbox="835 1291 2045 1362">The Saldanha Spatial Development Framework recognises the importance of industrial development in the Saldanha Bay Local Municipality as it is tightly linked to Saldanha deep water Port for bulk</p>

Requirement	Part where requirement is addressed/response
	<p>exports. The development of Saldanha Steel (steel mill) was a further catalyst for industrial development in the municipality. Mention is furthermore made of the municipality's transport links (sea, rail, road and air), which gives the port of Saldanha a direct link with the main consumer markets and industrial zone of the West Coast.</p> <p>These links are equally important to the proposed Pioneer Industrial Park as it can leverage the current infrastructure. The proposed park will be situated next to two railway lines, namely the Saldanha-Sishen line as well as the main railway line connecting Cape Town to Namibia.</p> <p>Furthermore, the report states that several opportunities are created by the growing west African oil and gas industry. These opportunities should be exploited by the Saldanha Port, in co-operation with the Cape Town Port. With the spin-off effects from Saldanha Steel that are experienced there is a definite need to spatially identify and quantify future industrial land needs related to future port expansion, downstream processing and predicated light industrial growth and the ultimate realisation of an Industrial Development Zone (IDZ). These factors clearly are to the benefit of the proposed Pioneer Industrial Park, and the other way around.</p> <p>The report suggests that with the high occurrence of irreplaceable vegetation, and the scarcity of fresh water in the study area, industrial areas should be planned in areas where the natural environment will be affected the least. In this regard, the Pioneer Industrial Park will be established on low value agricultural land, almost to the point where one could categorise it as degraded.</p> <p>The concern that the study has that there is a conflict in interest between industrial development and the conservation of the pristine natural environment in the municipal area, especially in the area between Langebaan and the Saldanha Port, is not applicable in the case of the Pioneer Industrial Park given that the proposed site falls well outside that area.</p>

Requirement	Part where requirement is addressed/response
	<p>A further argument for the desirability of the Pioneer Industrial Park is stated in the study where it is said that in order to promote local economic development, accessibility to light industrial opportunities for the previously disadvantaged communities should be promoted. The report states that in order to ensure light industrial development in core urban areas, a balanced mix of site sizes should be available for industrial development. With its central location, the Pioneer Industrial Park would fulfil the need for the provision of light industrial sites for economic development.</p> <p>The figure below shows the close proximity of the proposed site to two of the large industries in the Saldanha Bay Local Municipality at present. From this it can be gleaned that the proposed development is not out of line with existing industrial spatial development because the area is ideally suited for such development.</p> <p>Industrial areas nearby the proposed site</p>



Requirement	Part where requirement is addressed/response
	 <p>The image is an aerial photograph of the Saldanha Bay Industrial Area. A red dashed line outlines the industrial zone. Three blue arrows point to specific locations: 'Proposed Site' (top right), 'Namaqua Sands' (middle right), and 'Saldanha Steel' (bottom right). A black box in the top right corner contains the text 'SALDANHA BAY INDUSTRIAL AREA'. A black box in the bottom right corner contains the number '6.1.7'. The map shows various industrial buildings, roads, and a large body of water (Saldanha Bay) at the bottom left.</p> <p>Source 3: Image from <a href="http://www.skyscrapercity.com/">http://www.skyscrapercity.com/</a></p>
<p>2.1.3 Spatial characteristics (e.g. existing land uses, planned land uses, cultural landscapes,</p>	<p>See above</p>



Requirement	Part where requirement is addressed/response
<i>etc.), and</i>	
<p>2.1.4 <i>Municipal Economic Development Strategy ("LED Strategy").</i></p>	<p>The local economic development strategy based on the Saldanha Bay Local Municipality local economic development document dated May 2013 does not provide much detail in terms of a plan, but delivers a strategic intent and this is shown in the diagram directly below. It identifies key work streams for economic growth, namely the IDZ for oil and gas servicing, aquaculture, utilisation of the deep harbour port and tourism.</p> <p>With respect to industrial development, it identifies up- and downstream industrial development in the metals industry, and this cluster for development should pave the way for a development such as the Pioneer Industrial Park.</p> <p>Figure 37: Local economic development strategy depiction from Saldanha Bay Local Municipality local economic development document</p>



Requirement	Part where requirement is addressed/response
	<p>Source 4: Saldanha Bay Municipality Medium Term Economic Development Strategy May 2013</p>
<p>2.2 Considering the socio-economic context, what will the socio-economic impacts be of the development (and its separate elements/aspects), and specifically also on the socio-economic objectives of the area?</p>	<p>Socio-economic Baseline information</p> <p>Using the key aspects from the Saldanha Bay Local Municipality Integrated Development Plan, and other databases, the salient socio-economic aspects are summarised below.</p> <p>a. The Saldanha Bay Municipality covers an area of 2 015 km<sup>2</sup> and has a coastline of 238km, which emphasise its obvious status as a coastal town, and most coastal towns derive much of their livelihood from the sea and tourism.</p>

Requirement	Part where requirement is addressed/response
	<p>b. Its Gross Geographic Product of over R5 billion per annum makes Saldanha a relatively small economic entity relative to other SA municipalities – it’s in the bottom third of municipal Gross Geographic Product’s in the country.</p> <p>c. The municipality has a Gross Geographic Product of just under R29 000 per hectare, which is slightly less than the SA average of just under R32 000 per hectare, indicating that the municipality is large in extent for the Gross Geographic Product that it produces. Its average Gross Geographic Product per capita is also 12% lower than that of the average national statistic of just over R72 000 per capita in 2015.</p> <p>d. Its Integrated Development Plan notes that it has a 2.2% population growth rate, but given the downturn in the global and its local economy, this may have declined as people migrate to the cities to find jobs in difficult times.</p> <p>e. An interesting statistic from the Integrated Development Plan is that the female population is 52% relative to males 48%, which indicate that males may well seek jobs outside the Saldanha Bay Local Municipality.</p> <p>f. Based on the literacy and educational statistics presented by the Integrated Development Plan, it seems possible that the average literacy and educational levels of the Saldanha Bay Local Municipality is better than that of the average South African.</p> <p>g. A very impressive statistic is the fact that only 18% of the workforce in the municipality is unemployed.</p> <p>h. It was nonetheless surprising that just under 25% of the municipality’s population live below the</p>

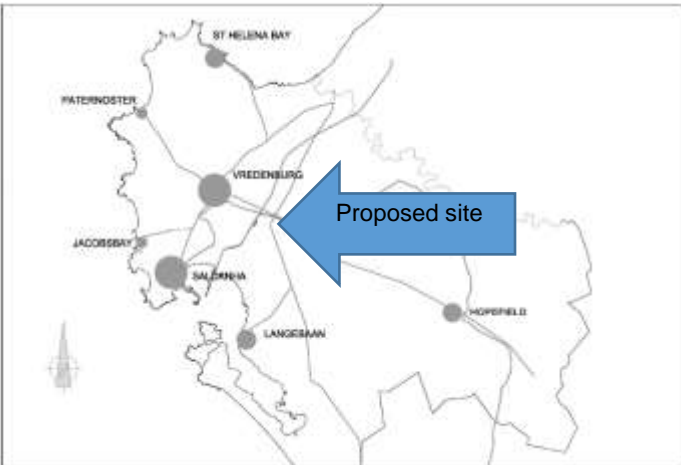




Requirement	Part where requirement is addressed/response
	<p>poverty line, as the unemployment rate is low, and these two statistics often don't have these contradictory outcomes.</p> <p>i. Most of the basic service in the municipality is better than the norm for most municipalities in South Africa, and this bodes well for the future development of the area.</p> <p>j. The employment and Gross Geographic Product per sector is presented below. From this graph it can be seen that the economy, albeit small, is better balanced than most others that this specialist had analysed over his career. The tertiary sectors, thus service sectors, of the Saldanha Bay Local Municipality are the largest, and it is assumed that this is driven by tourism and possibly pensioner residing in the area.</p> <p>Manufacturing employs less than 10% of the total employed, which is slightly less than the national average, but on average much better than most municipalities in SA of this size. On the whole, these sectoral statistics corroborate the strategies put forward in local Integrated Development Plan. It suggests that spatial development has to be balanced, as all the industries in Saldanha Bay Local Municipality could have a competitive advantage relative to other regions in the country.</p> <p>Employment and Gross Geographic Product (value add per sector)</p>



Requirement	Part where requirement is addressed/response																																				
	<div data-bbox="840 263 2042 805"> <p><b>Sum of 2013</b></p> <p>Column Labels <input type="text" value="IS000: Formal employment by skill: Value added at factor cost, Rm"/></p> <p>Row Labels <input type="text" value="Total (Number)"/></p> <table border="1"> <thead> <tr> <th></th> <th>Total (Number)</th> <th>Value added at factor cost, Rm</th> </tr> </thead> <tbody> <tr> <td>PA01: Agriculture, forestry and fishing [SIC: 11-13]</td> <td>4 659,36</td> <td>449,09</td> </tr> <tr> <td>PB: Mining and quarrying [SIC: 2]</td> <td>406,47</td> <td>131,36</td> </tr> <tr> <td>SC: Manufacturing [SIC: 3]</td> <td>2 173,90</td> <td>618,42</td> </tr> <tr> <td>SE: Construction [SIC: 5]</td> <td>555,23</td> <td>211,81</td> </tr> <tr> <td>TF16: Wholesale and retail trade [SIC: 61-62]</td> <td>2 078,60</td> <td>664,30</td> </tr> <tr> <td>TF17: Catering and accommodation services [SIC: 63]</td> <td>491,65</td> <td>66,19</td> </tr> <tr> <td>TG: Transport, storage and communication [SIC: 7]</td> <td>829,35</td> <td>528,57</td> </tr> <tr> <td>TH: Finance, insurance, real estate and business services [SIC: 8]</td> <td>6 341,08</td> <td>1 742,12</td> </tr> <tr> <td>TI: Community, social and personal services [SIC: 92, 95-6, 99, 0]</td> <td>2 821,19</td> <td>278,15</td> </tr> <tr> <td>TJ: General government [SIC: 91, 94]</td> <td>5 886,73</td> <td>1 285,86</td> </tr> <tr> <td><b>Grand Total</b></td> <td><b>26 243,57</b></td> <td><b>5 975,86</b></td> </tr> </tbody> </table> </div> <p data-bbox="840 853 1041 877">Source: Quantec</p> <p data-bbox="840 933 1019 957">Social Impacts</p> <p data-bbox="840 1013 2042 1268">Looking at best practice social impacts, it can be concluded that other than and possibly in-migration of job-seekers, there are no other foreseeable negative social impacts. The main reason for this is that there are no immediate residential areas or settlements around the proposed site. As can be seen from the figure below, the proposed site is several kilometres away from densely populated areas, and has been mentioned earlier in this report, it is located in an undetermined land-use zone, albeit that the actual land-use nearby is sheep farming, and industrial.</p> <p data-bbox="840 1316 1064 1340">Core Urban Areas</p>		Total (Number)	Value added at factor cost, Rm	PA01: Agriculture, forestry and fishing [SIC: 11-13]	4 659,36	449,09	PB: Mining and quarrying [SIC: 2]	406,47	131,36	SC: Manufacturing [SIC: 3]	2 173,90	618,42	SE: Construction [SIC: 5]	555,23	211,81	TF16: Wholesale and retail trade [SIC: 61-62]	2 078,60	664,30	TF17: Catering and accommodation services [SIC: 63]	491,65	66,19	TG: Transport, storage and communication [SIC: 7]	829,35	528,57	TH: Finance, insurance, real estate and business services [SIC: 8]	6 341,08	1 742,12	TI: Community, social and personal services [SIC: 92, 95-6, 99, 0]	2 821,19	278,15	TJ: General government [SIC: 91, 94]	5 886,73	1 285,86	<b>Grand Total</b>	<b>26 243,57</b>	<b>5 975,86</b>
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	 <p data-bbox="842 783 1520 810">Source: Saldanha Spatial Development Framework 2010</p> <p data-bbox="842 863 2045 938">The full social impact assessment is in the body of the Environmental Impact Assessment, and we give a description of the impacts below.</p> <ul data-bbox="891 991 2045 1342" style="list-style-type: none"> <li>Assuming that the industrial park will be developed over a ten-year period, we estimate that there could be as many as 200 construction jobs created per annum over a ten-year period. New jobs of this type is known for attracting job seekers, and it is possible that job-seekers could arrive at a ratio of employed to active work force, or 3:1, whichever is the biggest. (This is a rule of thumb used by Strategy4Good on various projects.) This means that as many as 600 people may migrate into the area, assuming no construction companies are used in the Saldanha Bay Local Municipality. The impact on the nearly 90 000 population of Saldanha Bay Local Municipality will be small.</li> </ul>

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	<ul style="list-style-type: none"> <li>• In addition to this, once the whole industrial park is complete, we estimate total employment of the proposed site to be between 1250 and 2000 permanent employees, but as this is likely to be phased over ten years, it is not expected to have a major impact on annual in-migration.</li>   <li>• We do not foresee any impact on the community and institutional structures. This aspect refers to the size, structure, and level of organization of local government including linkages to the larger political systems. They also include the size and level of activity of voluntary associations, religious organizations and interest groups, and finally, how these institutions relate to each other. This aspect also refers to political and social distribution of power authority, the interested and affected publics, and the leadership capability and capacity within the community or region.</li>   <li>• We also do not foresee any material impact on individual and family changes. This aspect refers to factors which influence the daily life of the individuals and families, including attitudes, perceptions, family characteristics and friendship networks. These changes range from attitudes toward the policy to an alteration in family and friendship networks to perceptions of risk, health, and safety.</li>   <li>• We furthermore do not foresee any negative impacts on community resources. Resources include patterns of natural resource and land use; the availability of housing and community services to include health, police and fire protection and sanitation facilities. A key to the continuity and survival of human communities are their historical and cultural resources. Under this collection of variables falls possible changes for indigenous people and religious sub-cultures. We do not foresee any impacts in this regard.</li> </ul>



Requirement	Part where requirement is addressed/response
	<p style="text-align: center;">Economic Impacts</p> <ul style="list-style-type: none"> <li>• Possibly the strongest argument for a favourable environmental authority to change the current land-use from agriculture to industrial is the fact that the land as it is, has little economic value. Due to its small size of 180 ha, it has an insignificant value as a livestock farm, and furthermore the lack of fresh water makes it undesirable for cash crop farming. It is possible that wine or wheat farming could be undertaken, but it seems clear that the area is not conducive to this type of crop farming.</li> <li>• It is furthermore also possible that the land could be used for residential development, however, there seems to be little appetite for this type of development at that location.</li> <li>• As it is, the land yield of the farm is currently zero as no farming activity takes place there, and it is being encroached by industrial developments.</li> <li>• From an economic perspective, industrial property could yield a Gross Geographic Product of anything between R250 000 to R1m per hectare, and hence if even just one hectare is developed, the economic value of the land would be superior to its current use.</li> <li>• Triggering an economic value means an increase in Gross Domestic Product per capita, which means it contributes to the better quality of life on South Africans.</li> <li>• Furthermore, it needs to be stated that changing the land-use from indeterminate to industrial does not pose any food security risks for the country.</li> <li>• Assuming that the development will be phased based on the applicant’s means, then it is</li> </ul>



Requirement	Part where requirement is addressed/response
	<p>conceivable that in the first year one of the industrial sites will be developed. On average a light industrial site comprise 8 hectares which means that an investment in year one of R240 million is likely. (Based on R3000 per sq meter). This could result in a robust increase in investment of 15% for the Saldanha Bay Local Municipality, and is based on an assumed investment ratio of 20% of Gross Geographic Product, which is an upside norm of investment to Gross Domestic Product in the South African economy.</p> <ul style="list-style-type: none"> <li>• The probability of this investment occurring in the immediate future is medium, if not low because there is no clear indication of industrialists coming forward to develop the site.</li> <li>• Due to the fact that there is no clear indication as to the exact type of factory that will be developed, the Gross Geographic Product addition is calculated using the product of the investment amount above and a ratio that equates to an average return to the economy. On this basis, a R240 million industrial property development would require a return in EBITDA of at least 20%, plus a provision of a further 30% has to be made for salaries and wages, which means the total Gross Geographic Product produced on an 8-hectare industrial property is likely to be R120 million per annum. This amount would attract a local income multiplier of at least 1,5 which means a total addition of R180 million in Gross Geographic Product could be expected. This could well be an increase in local Gross Geographic Product of 2.2% per annum.</li> <li>• Over a twenty-year period, should the industrial even be developed in a phased approach, it goes without saying that a significant increase in Gross Geographic Product in Saldanha Bay Local Municipality could be effected, provided that the demand for such development eventuate.</li> </ul>

Requirement	Part where requirement is addressed/response
	<ul style="list-style-type: none"> <li>A total of 200 construction workers could be on site annually for the foreseeable future, depending on the speed of development. In addition to this, it is conceivable that 125 new manufacturing jobs could be created in the first development, hence as a minimum new jobs of 325 could be created in the short term. Adding a multiplier of 1,5, we can assume that 487 new jobs would be created. Based on an estimated workforce of 29 000 in Saldanha Bay Local Municipality at present, this amounts to a new job creation ratio of 1,7% which is not insignificant.</li> </ul>
2.2.1 <i>Will the development complement the local socio-economic initiatives (such as local economic development (LED) initiatives), or skills development programs?</i>	Yes, we have illustrated this above.
2.3 How will this development address the specific physical, psychological, developmental, cultural and social needs and interests of the relevant communities?	We illustrated above that the proposed development will create needed jobs in the region.
2.4 Will the development result in equitable (intra- and inter-generational) impact distribution, in the short- and longterm? Will the impact be socially and economically sustainable in the short- and long-term?	<p>This development will take place over a long period (at least ten years), and hence is positive in this regard.</p> <p>Once the industrial developments take place, it needs to be assumed it will be sustainable over this economic generation.</p>





Requirement	Part where requirement is addressed/response
2.4.1 result in the creation of residential and employment opportunities in close proximity to or integrated with each other,	The project will create jobs as described above. Residential development will take place over the development period of the project.
2.4.2 reduce the need for transport of people and goods,	There will not be a reduced need for transport, but rather more transport will be needed as the proposed development is located just outside Vredenburg, Saldanha and Langebaan.
2.4.3 result in access to public transport or enable non-motorised and pedestrian transport (e.g. will the development result in densification and the achievement of thresholds in terms public transport),	No densification is foreseen, and it is not expected that public transport will be used to get to the industrial site.
2.4.4 compliment other uses in the area,	There are two industrial sites in close proximity, and this development would assist in increasing the marketability of those properties.
2.4.5 be in line with the planning for the area,	We illustrated this above.
2.4.6 for urban related development, make use of underutilised land available with the urban edge,	Not applicable in this case as it is not an urban development.
2.4.7 optimise the use of existing resources and infrastructure,	This development will optimise the use of the current land value.
2.4.8 opportunity costs in terms of bulk infrastructure expansions in non-priority areas (e.g. not aligned with the bulk infrastructure planning for the settlement that reflects the	These costs have not been fully accounted for yet, but in a phased approach it is expected that the developer will incur these costs.



Requirement	Part where requirement is addressed/response
<i>spatial reconstruction priorities of the settlement),</i>	
2.4.9 <i>discourage "urban sprawl" and contribute to compaction/densification,</i>	If not well managed, this development could contribute to urban sprawl as it is on the fringes of the urban areas. However, it is closely aligned with spatial development plans, and hence it could be managed,
2.4.10 <i>contribute to the correction of the historically distorted spatial patterns of settlements and to the optimum use of existing infrastructure in excess of current needs,</i>	This development is neutral in this respect, and will certainly not add to distorted spatial patterns.
2.4.11 <i>encourage environmentally sustainable land development practices and processes,</i>	Not applicable.
2.4.12 <i>take into account special locational factors that might favour the specific location (e.g. the location of a strategic mineral resource, access to the port, access to rail, etc.),</i>	The land in question is closely situated to existing industrial sites, railway lines and regional roads, making this land ideal for industrial use.
2.4.13 <i>the investment in the settlement or area in question will generate the highest socio-economic returns (i.e. an area with high economic potential),</i>	Based on the alternative land-use economics described above, there can be no question that this is its best use of the land at present. To reiterate, industrial land per hectare produces anything between R250 000 to R1m per hectare, whereas agriculture produces between R7 000 and R100 000 per hectare.
2.4.14 <i>impact on the sense of history, sense of place and heritage of the area and the socio-cultural and cultural-historic characteristics</i>	This development is neutral in this regard.



Requirement	Part where requirement is addressed/response
<i>and sensitivities of the area, and</i>	
2.4.15 <i>in terms of the nature, scale and location of the development promote or act as a catalyst to create a more integrated settlement?</i>	This development is neutral in this regard.
How were a risk-averse and cautious approach applied in terms of socio-economic impacts?:	
2.4.16 <i>What are the limits of current knowledge (note: the gaps, uncertainties and assumptions must be clearly stated)?</i>	Due to the fact that over a ten-year period there are few socio-economic as a result of no receptor communities, this aspect does not require close attention.
2.4.17 <i>What is the level of risk (note: related to inequality, social fabric, livelihoods, vulnerable communities, critical resources, economic vulnerability and sustainability) associated with the limits of current knowledge?</i>	There are limits in knowledge with respect to the scale and time period of the proposed development, for example should the development take place in a much shorter period than expected, say three years, then the impacts on transportation and informal settlements are not well known. However, it is not expected that this development can viably be developed in such a short period of time, and hence over a ten-year period with close supervision by the municipality building department, the knowledge gap will be considerably shortened. As we anticipate this development to take place over at least a ten-year period, the knowledge gap from a socio-economic perspective is not a risk to this development.
2.4.18 <i>Based on the limits of knowledge and the level of risk, how and to what extent was a risk-averse and cautious approach applied to the development?</i>	We recommend that it be adopted in the record of decision that this development be phased over a ten-year period. Should the period changed, permission to change the record of decision needs to be obtained.
How will the socio-economic impacts resulting from this development impact on people's environmental right in terms following:	



Requirement	Part where requirement is addressed/response
2.4.19 <i>Negative impacts: e.g. health (e.g. HIV-Aids), safety, social ills, etc. What measures were taken to firstly avoid negative impacts, but if avoidance is not possible, to minimise, manage and remedy negative impacts?</i>	We do not foresee this as a material risk in a phased development.
2.4.20 <i>Positive impacts. What measures were taken to enhance positive impacts?</i>	The positive impacts such as employment and income generation are self-propelling, and no enhancement strategies are required. In addition to this, merely complying with labour and tax laws of the country, much cumulative benefits are derived.
2.5 Considering the linkages and dependencies between human wellbeing, livelihoods and ecosystem services, describe the linkages and dependencies applicable to the area in question and how the development's socioeconomic impacts will result in ecological impacts (e.g. over utilisation of natural resources, etc.)?	As stated above, this proposed development is in line with the Integrated Development Plan, and is closely aligned with the Spatial Development Framework. It is also very positive for employment creation; hence the local communities can benefit substantially.
2.6 What measures were taken to pursue the selection of the "best practicable environmental option" in terms of socio-economic considerations?	The best solution is the one that is defined as the one that maximises economic benefits, and minimises social risks. In this regard industrial development is potentially the best option compared to any other land use. The measures taken were to analyse various economic yields per hectare for the area, and industrial development is by far the most economically beneficial.
2.7 What measures were taken to pursue environmental justice so that adverse environmental impacts shall not be distributed	Various sources of information gathered during the initial study was used to identify the preferred options based on different criteria.



Requirement	Part where requirement is addressed/response
<p>in such a manner as to unfairly discriminate against any person, particularly vulnerable and disadvantaged persons (who are the beneficiaries and is the development located appropriately)? Considering the need for social equity and justice, do the alternatives identified, allow the "best practicable environmental option" to be selected, or is there a need for other alternatives to be considered?</p>	
<p>2.8 What measures were taken to pursue equitable access to environmental resources, benefits and services to meet basic human needs and ensure human wellbeing, and what special measures were taken to ensure access thereto by categories of persons disadvantaged by unfair discrimination?</p>	<p>As part of the scoping process a stakeholder analysis was undertaken. The goal of the stakeholder analysis is to develop a strategic view of the human and institutional landscape, and of the relationships between the different stakeholders and the issues they care about most.</p> <p>The stakeholder analysis will help the project identify:</p> <ul style="list-style-type: none"> <li>• The interests of all stakeholders who may affect or be affected by the project;</li> <li>• Potential conflicts or risks that could jeopardise the initiative;</li> <li>• Opportunities and relationships that can be built on during implementation;</li> <li>• Groups that should be encouraged to participate in different stages of the project;</li> <li>• Appropriate strategies and approaches for stakeholder engagement; and</li> <li>• Ways to reduce negative impacts on vulnerable and disadvantaged groups (WWF, 2005).</li> </ul>
<p>2.9 What measures were taken to ensure that the responsibility for the environmental health and safety consequences of the development has been addressed throughout the</p>	<p>Mitigation measures have been proposed by various specialists on the project to ensure that the project doesn't impact on the surrounding community's health and well-being. Furthermore, the environmental impacts assessments done by the specialist highlighted areas where the community can be impacted. The project contributes insignificantly to the external impacts considering the size of</p>

Requirement	Part where requirement is addressed/response
development's life cycle?	the proposed development.
What measures were taken to:	
2.9.1 <i>ensure the participation of all interested and affected parties,</i>	<p>The public participation process for this project was conducted by Shangoni Management Services in terms of:</p> <ul style="list-style-type: none"> <li>• The procedures and provisions in terms of the NEMA;</li> <li>• Chapter 6 of the 2014 EIA Regulations;</li> <li>• GN 807 of 2012; Public Participation Guideline; and</li> <li>• Other relevant legislation such as the Promotion of Access to Information Act (PAIA), 2000.</li> </ul>
2.9.2 <i>provide all people with an opportunity to develop the understanding, skills and capacity necessary for achieving equitable and effective participation,</i>	Public will have ample opportunity with the Scoping Phase and EIA phase to provide comments and their inputs on the project.
2.9.3 <i>ensure participation by vulnerable and disadvantaged persons,</i>	All public including vulnerable and disadvantaged persons will be included in our public participation process.
2.9.4 <i>promote community wellbeing and empowerment through environmental education, the raising of environmental awareness, the sharing of knowledge and experience and other appropriate means,</i>	Employment opportunities will be created during the project life time.
2.9.5 <i>ensure openness and transparency, and access to information in terms of the process,</i>	The public participation process for this project was conducted by Shangoni Management Services in terms of:
2.9.6 <i>ensure that the interests, needs and values of</i>	<ul style="list-style-type: none"> <li>• The procedures and provisions in terms of the NEMA;</li> </ul>



Requirement	Part where requirement is addressed/response
<p><i>all interested and affected parties were taken into account, and that adequate recognition were given to all forms of knowledge, including traditional and ordinary knowledge, and</i></p>	<ul style="list-style-type: none"> <li>• Chapter 6 of the 2014 EIA Regulations;</li> <li>• GN 807 of 2012; Public Participation Guideline; and</li> <li>• Other relevant legislation such as the Promotion of Access to Information Act (PAIA), 2000.</li> </ul> <p>Therefore, the process was open and transparent and the public had access to all documents throughout the process. All public comments have been included in this document and addressed appropriately.</p>
<p>2.9.7 <i>ensure that the vital role of women and youth in environmental management and development were recognised and their full participation therein were be promoted?</i></p>	
<p>2.10 Considering the interests, needs and values of all the interested and affected parties, describe how the development will allow for opportunities for all the segments of the community (e.g. a mixture of low-, middle-, and high-income housing opportunities) that is consistent with the priority needs of the local area (or that is proportional to the needs of an area)?</p>	<p>The development will cater for all income brackets as low income earners can be part of the construction team and high income earners can be part of the engineering team.</p>
<p>2.11 What measures have been taken to ensure that current and/or future workers will be informed of work that potentially might be harmful to human health or the environment or of dangers associated with the work, and</p>	<p>As this is a Human Rights issue, each industrialist has to ensure this aspect is complied with. This aspect will thus be enacted as and when a new industrial building is developed and operated.</p>





Requirement	Part where requirement is addressed/response
<p>what measures have been taken to ensure that the right of workers to refuse such work will be respected and protected?</p>	
<p>Describe how the development will impact on job creation in terms of, amongst other aspects:</p>	
<p>2.11.1 <i>the number of temporary versus permanent jobs that will be created,</i></p>	<p>Annually it is expected that up to 200 construction jobs could be created over a ten year phased period. Permanent jobs that could be created could peak at 1250, but it will probably build up in an increment of 125 jobs per annum, depending on the uptake of industrial building development.</p>
<p>2.11.2 <i>whether the labour available in the area will be able to take up the job opportunities (i.e. do the required skills match the skills available in the area),</i></p>	<p>The local economy could easily supply semi- and unskilled labour, however, skilled labour will more than likely be sourced outside the municipality. It is not expected that skilled labour will come from outside the Western Province.</p>
<p>2.11.3 <i>the distance from where labourers will have to travel,</i></p>	<p>Employees are most likely to live in Vredeburch and Saldanha residential areas, and this is within a 10 km radius from the proposed site. Thus no long travel distance and time between the proposed site and current residential areas is expected.</p>
<p>2.11.4 <i>the location of jobs opportunities versus the location of impacts (i.e. equitable distribution of costs and benefits), and</i></p>	<p>As the Saldanha Bay Local Municipality has a population of nearly 90 000 people, it is most likely that employees of the proposed development will be easily absorbed over a ten-year period in the local municipality, and hence little social pathologies is expected. In addition to this, local citizens will have the most favourable chance of obtaining a job due to the lower cost of having to move employees from one region to another, thus the local communities will benefit from jobs created.</p>
<p>2.11.5 <i>the opportunity costs in terms of job creation (e.g. a mine might create 100 jobs, but impact on 1000 agricultural jobs, etc.).</i></p>	<p>The economics of the alternative land use analysis is illustrated in 2.2 above in this table. There are currently no employees on the proposed site and hence the opportunity losses of jobs are nil, whereas the benefits of over 1250 permanent jobs over a ten-year period is significant.</p>



Requirement	Part where requirement is addressed/response
2.11.6 <i>that there were intergovernmental coordination and harmonisation of policies, legislation and actions relating to the environment, and</i>	All applicable environmental legislation will be considered and adhered to during the Scoping and EIA phase of the project.
2.11.7 <i>that actual or potential conflicts of interest between organs of state were resolved through conflict resolution procedures?</i>	The development will have specific forums where members of the public and organs of state can meet to have their concerns addressed.
2.12 What measures were taken to ensure that the environment will be held in public trust for the people, that the beneficial use of environmental resources will serve the public interest, and that the environment will be protected as the people's common heritage?	All mitigation measures proposed that will form part of the specialist studies will be focussed on minimising the potential impacts associated with the activities. This focus is on the protection of the environment through amongst others minimising pollution.
2.13 Are the mitigation measures proposed realistic and what long-term environmental legacy and managed burden will be left?	The mitigation measures are still to be provided by the specialists during the EIA phase of the project.
2.14 What measures were taken to ensure that the costs of remedying pollution, environmental degradation and consequent adverse health effects and of preventing, controlling or minimising further pollution, environmental damage or adverse health effects will be paid	All mitigation measures proposed that will form part of the specialist studies will be focussed on minimising the potential impacts associated with the activities. This focus is on the protection of the environment through amongst others minimising pollution.

Requirement	Part where requirement is addressed/response
for by those responsible for harming the environment?	
2.15 Considering the need to secure ecological integrity and a healthy bio-physical environment, describe how the alternatives identified (in terms of all the different elements of the development and all the different impacts being proposed), resulted in the selection of the best practicable environmental option in terms of socio-economic considerations?	<p>We outline in 2.2 above the socio-economic benefits. On a cumulative basis, an industrial development of this nature has many multipliers, and the linkages to other industries are strong and well described in economics. As a propulsive sector, manufacturing is by far one of the best sectors in an economy, and will also be in Saldanha Bay Local Municipality.</p> <p>There are relatively few socio-economic negative impacts, but cumulatively actions will be required for transportation management and the prevention of informal settlements in the area.</p>
2.16 Describe the positive and negative cumulative socio-economic impacts bearing in mind the size, scale, scope and nature of the project in relation to its location and other planned developments in the area?	



## 6. IDENTIFIED ALTERNATIVES

### 6.1 Alternatives in relation to proposed development

The following definition of “alternatives” is given in the EIA Regulations of 18 June 2010: “alternatives”, in relation to the proposed activity, *means different means of meeting the general purpose and requirements of the activity, which may include alternatives to-*

- a) *the property on which or location where it is proposed to undertake the activity;*
- b) *the type of activity to be undertaken;*
- c) *the design or layout of the activity;*
- d) *the technology to be used in the activity;*
- e) *the operational aspects of the activity; and*
- f) *the option of not implementing the activity”.*

Several potential alternatives have been identified for the project:

- a) Layout plan:
  - Option 3 (Preferred).
  - Option 2 (alternative 1),
- b) Treatment of sewerage:
  - WKL Environmental Systems (Preferred),
  - Bio Sewage Systems (alternative 1),
  - Lilliput system (alternative 2).
- c) Sourcing of water for the project:
  - Municipal supply (Preferred),
  - Groundwater abstraction (alternative 1).
- d) The option of not implementing the activity.

#### 6.1.1 Methodology applied in ranking alternatives

##### 6.1.1.1 Categories for Site Selection

Four categories have been selected for review of each selected option, which include Environmental, Technical/Engineering, Economical and Social. Criteria as used for the various categories are reflected in Table 20.

##### 6.1.1.2 Criteria

Under the 4 selected categories, a number of criteria have been identified for assessment, as contained within Table 20.



**Table 20: Site selection criteria**

CRITERIA	CATEGORY			
	ENVIRONMENTAL / LEGAL	TECHNICAL / ENGINEERING	ECONOMICAL	SOCIAL
AIR QUALITY	X			
AQUATIC AND SURFACE WATER	X			
CULTURAL HERITAGE	X			
FAUNA	X			
FLORA	X			
GEOHYDROLOGY	X			
GEOLOGY	X			
NOISE	X			
SOIL	X			
TRAFFIC	X			
VIBRATION AND AIR BLAST	X			
VISUAL	X			
OTHER LEGAL REQUIREMENTS (E.G. WATER USE ACTIVITIES, EIA REQUIREMENTS ETC.)	X			
SENSE OF PLACE				X
SOCIAL LICENSE TO OPERATE				X
SOCIO-ECONOMIC				X
HAZARDS TO COMMUNITY, THEFT, HEALTH RISKS, ETC.				X
EASE OF INTEGRATION WITH PLANNED INFRASTRUCTURE		X		
SITE ACCESS		X		
CONSTRAINTS TO SITE LAYOUT		X		
CONSTRUCTION DURATION		X		
CONSTRUCTION RISKS		X		
OPERATIONAL RISKS		X		
CAPITAL COST (INCLUDING SITE ESTABLISHMENT / PREPARATION)			X	
OPERATING COST			X	
SITE REHABILITATION			X	



### 6.1.1.3 Assigning score

Under each of the four categories, by assessing the identified criteria, a score is assigned to each of the identified options (Between 1 and 3, with 3 being most favourable). The final score obtained for each of the option support decision on the most suitable for the proposed development.

### 6.1.1.4 Category Weighting

Table 21 contains the weighting as assigned to each category. The higher the weighting, the more important the category.

Table 21: Category Weighting

CATEGORY	Layout plan	Layout option 2	Layout option 3
ENVIRONMENTAL/LEGAL	0.35	0.25	0.25
SOCIAL	0.20	0.25	0.30
TECHNICAL/ENGINEERING	0.25	0.25	0.20
ECONOMICAL	0.20	0.25	0.25

### 6.1.1.5 Criteria Weighting

Table 22 contains the weighting as assigned to each criteria. The higher the weighting, the more significant the criteria.

Table 22: Criteria Weighting

MAJOR CRITERIA	Layout plan	Alternative 1 Layout option 2	Preferred Layout option 3
AIR QUALITY	2	2	2
AQUATIC AND SURFACE WATER	3	1	2
CULTURAL HERITAGE	4	1	1
FAUNA	4	1	2
FLORA	4	1	2
GEOHYDROLOGY	2	3	2
GEOLOGY	3	1	2
NOISE	3	2	2
SOIL	3	2	2
TRAFFIC	3	2	2
VIBRATION AND AIR BLAST	3	2	2
VISUAL	3	2	2
OTHER LEGAL REQUIREMENTS (E.G. WATER USE ACTIVITIES, EIA REQUIREMENTS ETC.)	3	2	2
SENSE OF PLACE	2	1	2

SOCIAL LICENSE TO OPERATE	2	2	2
SOCIO-ECONOMIC	3	2	2
HAZARDS TO COMMUNITY, THEFT, HEALTH RISKS	3	1	1
EASE OF INTEGRATION WITH PLANNED INFRASTRUCTURE	3	1	2
SITE ACCESS	2	1	1
CONSTRAINTS TO SITE LAYOUT	3	2	1
CONSTRUCTION DURATION	2	1	2
CONSTRUCTION RISKS	2	1	2
OPERATIONAL RISKS	3	1	2
CAPITAL COST (INCLUDING SITE ESTABLISHMENT/ PREPARATION)	3	1	2
OPERATING COST	3	1	2
SITE REHABILITATION	2	1	2

#### 6.1.1.6 Calculating Score

##### *Initial score*

An initial score is assigned to each of the options, for each of the criteria identified. As this is a comparative analysis, a score of 1, 2 and 3 is assigned, where 1 is least favourable, and 3 being most favourable. In event where all options have similar favourability, a score of 3 is assigned to all sites. Where only two alternatives are assessed a score of either 1 (least favourable) or 2 (most favourable) is assigned.

##### *Assigning weighting*

The weighting value of the assessed criteria is multiplied with the initial score allocated to each option for every criteria assessed, which is added to obtain a final score to be reflected under the four categories. Final values to be reflected as percentage of maximum score.

##### *Final score*

The final score for each of the options is obtained by multiplying the % score for each category by the assigned weighting and adding the respective scores (as obtained for each category) to reach a final value for each option. The higher the % value, the more favourable the option.





## 6.2 Alternatives considered

### 6.2.1 Layout plans

- Alternative 1 - Option 2, consists of ±118 hectares of 5 heavy industry and ±39 hectares of 5 light industrial erven. The area is divided into 13 smaller areas, with access routes through the site. Refer to Figure 38.
- Preferred - Option 3, consists of ±118 hectares of 5 heavy industry and ±39 hectares of 5 light industrial erven. The area is divided into 13 smaller areas, with access routes through the site and has two (2) open space areas on portions 7, 8 and 12. Refer to Figure 39.

Table 23 below describes the differences between the option 2 and 3 of the layout plan. Table 24 is an initial scoring of the comparative assessment. The comparative assessment will be done in detail during the EIA phase in conjunction with the outcomes of the specialist studies.

Table 23: Comments for alternatives in terms of the Layout plans for the Proposed Industrial Park

Layout plan	Alternatives	Comments
Option 2	Alternative 1	This option doesn't make provision for the seasonal pan.
Option 3	Preferred	This option makes provision for the alleged seasonal pan situated on portion 12, which makes provision for a 50-meter buffer.

Table 24: Initial scoring of comparative assessment

Aspect	Alternative 1 Option 2	Preferred Option 3
Environmental	53.33%	72.50%
Social	50.00%	63.33%
Technical	40.00%	55.56%
Economic	33.33%	66.67%
<b>FINAL SCORE</b>	<b>45.33%</b>	<b>65.26%</b>

Based on the comparative assessment in terms of the Environmental, Technical/Engineering, Economical and Social categories, the preferred option 3 has received the highest comparative Score of 65.26%. Economically and environmentally this layout plan will be the most suitable for the project.

In terms of the comparative assessment of positive and negative implications of the proposed activity alternatives, Table 25 refers to a comparison is done below to assess the positive and negative implications of the proposed development compared with the no-go alternative. This should provide a fundamental consideration of the feasibility of the project.



Table 25: Comparison of the proposed preferred activities and the no-go option

Layout alternatives	Alternative 1 Option 2	Alternative 2 Option 3	No-go option
<b>Positive impacts</b>	The entire 118 hectares is used for heavy and industrial industry.	Open spaces are allowed for in the layout plan and a buffer zone of 50 meters around the seasonal pond.	Continuation of the existing land use can take place.
<b>Negative impacts</b>	From an environmental point of view, no open spaces are allowed for and the seasonal pan will be negatively affected.	Development area is lost from a development perspective.	As the property is located within the conceptual industrial extension area as earmarked by the Saldanha Bay Spatial Development Framework.  If development doesn't take place, the area will not form part of the conceptual industrial extension area as earmarked by the Saldanha Bay Spatial Development Framework

As shown in the Table 25 above, the development has a preferred alternative either being alternative 1 or preferred. In terms of the Proposed Pioneer Industrial Park Development option 3 is the preferred alternative.



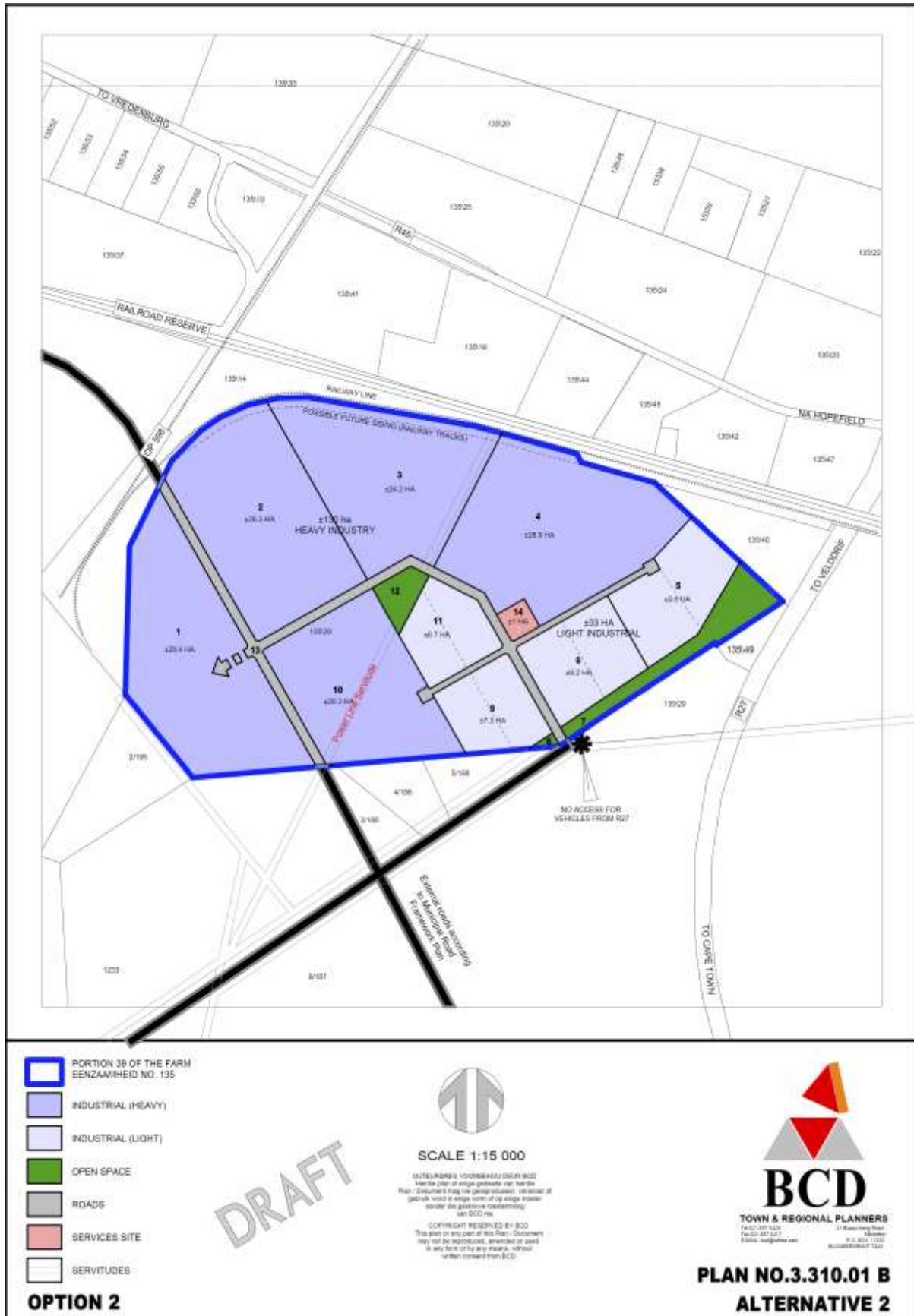


Figure 38: Layout option 2

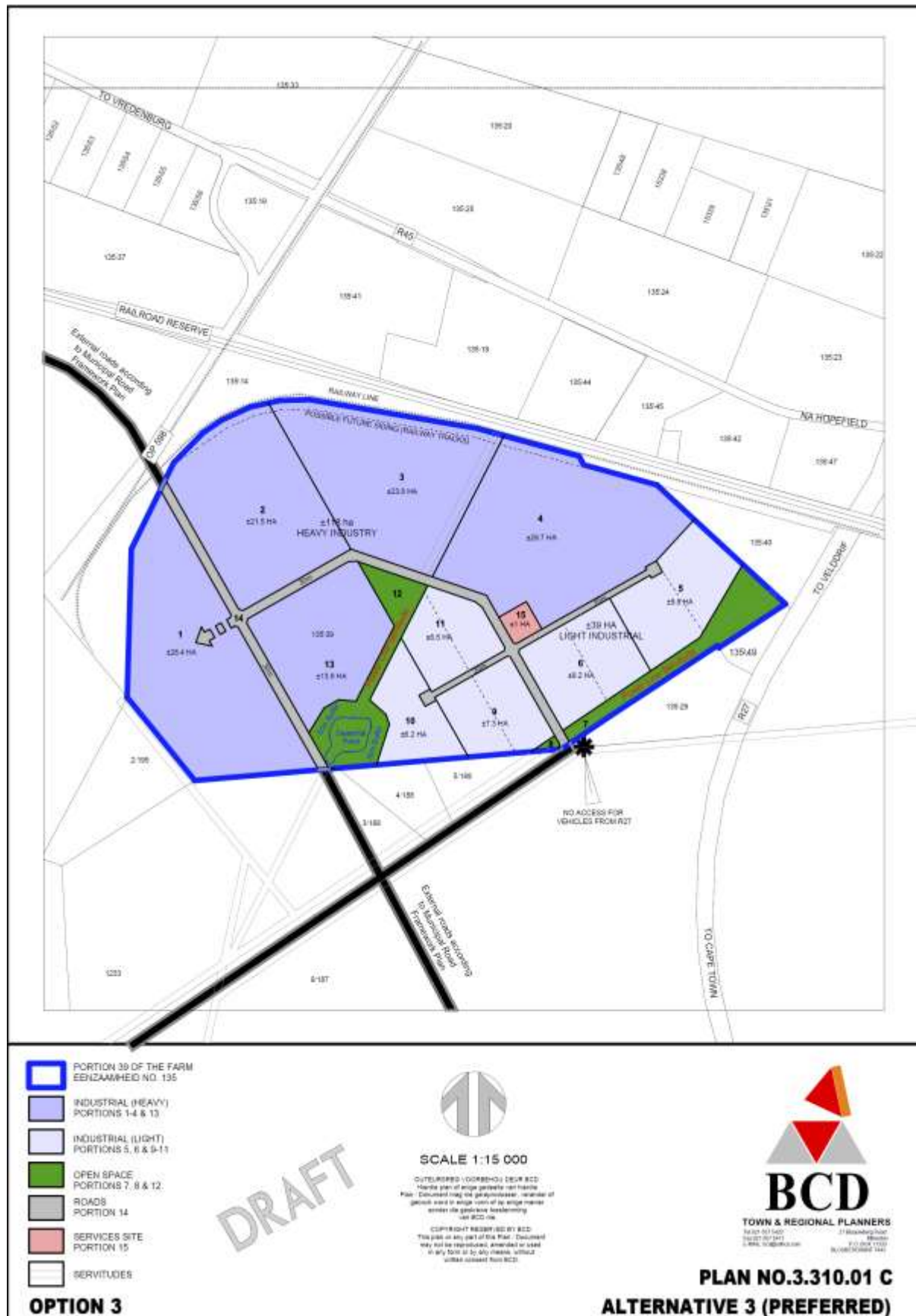


Figure 39: Layout option 3

### 6.2.2 Treatment of sewerage

- WKL Environmental Systems (Preferred)  
WKL environmental solutions BioBloo Mega Range. This system treats flow rates of 1ML to 10.5ML per day.
- Bio Sewage Systems (alternative 1)  
The Bio Sewage System is very similar to the WKL environmental solutions, with no soak-aways to pollute your ground-water and no bulky septic tanks to be emptied.
- Lilliput system (alternative 2)  
The Lilliput system works on a septic tank system; the municipality has moved away from septic tank systems.

Table 26 below describes the differences between the treatment of sewerage. Table 27 is an initial scoring of the comparative assessment. The comparative assessment will be done in detail during the EIA phase in conjunction with the outcomes of the specialist studies.

Table 26: Comments for alternatives in terms of the treatment of sewerage for the Proposed Industrial Park

Treatment of sewage	Alternative	Comments
WKL Environmental Systems	Preferred	<p>The two main processes used in a Biological Sewage treatment plant: Aerobic, as the title suggests, means in the presence of air (oxygen); while anaerobic means in the absence of air (oxygen). These two terms are directly related to the type of bacteria or microorganisms that are involved in the degradation of organic impurities in a given wastewater and the operating conditions of the bioreactor. Therefore, aerobic treatment processes take place in the presence of air and utilize those microorganisms (also called aerobes), which use molecular/free oxygen to assimilate organic impurities i.e. convert them in to carbon dioxide, water and biomass.</p> <p>The anaerobic treatment processes, on other hand take place in the absence of air (and thus molecular/free oxygen) by those microorganisms (also called anaerobes) which do not require air (molecular/free oxygen) to assimilate organic impurities. The final products of organic assimilation in anaerobic treatment are methane and carbon dioxide gas and biomass.</p>
Bio Sewage Systems	Alternative 1	By using 5 SHIN technology the reactors make use of nature's own methods – including anoxic, aerobic and anaerobic systems, effectively breaking down the suspended and dissolved solids in both grey and black water, and working continuously to create clear, clean, odourless and reusable



Treatment of sewage	Alternative	Comments
		water.
Lilliput system	Alternative 2	The Lilliput system works on a septic tank system; the municipality have moved away from septic tank systems. This system is also expensive to operate as collection and disposal of sewerage will have to take place. The closest water works is situated approximately 5 km from the site.

Table 27: Initial scoring of comparative assessment

Aspect	WKL Environmental Systems	Bio Sewage Systems	Lilliput system
	Preferred	Alternative 1	Alternative 2
Environmental	70.00%	64.17%	53.33%
Social	66.67%	60.00%	50.00%
Technical	60.00%	55.56%	57.78%
Economic	54.17%	45.83%	45.83%
FINAL SCORE	63.67%	57.51%	52.28%

Based on the comparative assessment in terms of the Environmental, Technical/Engineering, Economical and Social categories, the preferred has received the highest comparative Score of 63.67%. Economically and Socially this layout plan will be the most suitable for the project.

In terms of the comparative assessment of positive and negative implications of the proposed activity alternatives, Table 28 refers to a comparison is done below to assess the positive and negative implications of the proposed development compared with the no-go alternative. This should provide a fundamental consideration of the feasibility of the project.

Table 28: Comparison of the proposed preferred activities and the no-go option

Layout alternatives	WKL Environmental Systems Preferred	Bio Sewage Systems Alternative 1	Lilliput system Alternative 2	No-go option
Positive impacts	<ul style="list-style-type: none"> <li>o Compact,</li> <li>o Fully self - contained,</li> <li>o Suitable for very large applications, very cost effective.</li> <li>o Water can be re-used for many applications,</li> </ul>	The design of the Bio Sewage Systems (Flush n Spray® Range, BioBEE Range and the Mobile Container Unit) enables the effective treatment	The Lilliput® final output (treated effluent) may be used for many purposes including irrigation, water features, car washing etc. Otherwise it can be	There will be no impacts if the development doesn't take place.



	<ul style="list-style-type: none"> <li>o Minimal maintenance,</li> <li>o Minimal sludge disposal required,</li> <li>o Hygienic,</li> <li>o Uses a fully natural process,</li> <li>o No odour around plant,</li> <li>o Does away with septic tank emptying,</li> <li>o Environmentally friendly,</li> </ul>	<p>of black and grey water streams using a modular, simple and robust technology, with minimal mechanical components, which has the ability to tolerate high peak flows.</p> <p>The 3 stages of sewage treatment:</p> <p>Reduction of the organic load using predominantly an anaerobic process.</p> <p>Reduction in the nitrogen load.</p> <p>Reduction in the pathogen load.</p>	<p>released to water courses, dams, lakes or stormwater systems. The final output more than satisfies limits for discharge to the environment. See output and results for more information</p>	
<b>Negative impacts</b>	The system is expensive to install and operate.	The system is expensive to install and operate.	The Lilliput system works on a septic tank system; the municipality have moved away from septic tank systems.	There will be no impacts if the development doesn't take place.

As shown in the Table 28 above, the development has a preferred alternative. In terms of the Proposed Pioneer Industrial Park Development WKL Environmental System is the preferred alternative.

### 6.2.3 Sourcing of water for the project:

- Municipal supply (Preferred)

There is an existing 375mm Ø water pipe that runs through the site towards Saldanha within the Electrical services servitude. However, consent must be sought from the Local Municipality to be able to connect onto this pipe for potable water.

- Groundwater abstraction (alternative 1)

The other alternative is to abstract groundwater from boreholes on site. It must be noted that the study area is located in a Zone A Groundwater Taking Zone. That implies that no water may be taken from this drainage region except as set out under schedule 1 and small





industrial users; the latter is limited to 20 m<sup>3</sup> of water per day (Section 39 of the National Water Act, 1998, Government Notice No. 399, 26 March 2004).

Table 29 below describes the sources of water for the project. Table 30 is an initial scoring of the comparative assessment. The comparative assessment will be done in detail during the EIA phase in conjunction with the outcomes of the specialist studies.

Table 29: Comments for alternatives in terms of sourcing of water for the Proposed Industrial Park

Sourcing of water	Alternative	Comments
Municipal supply	Preferred	Water will be supplied from the Local Municipality to the site.
Groundwater abstraction	Alternative 1	Abstraction of groundwater from boreholes.

Table 30: Initial scoring of comparative assessment

Aspect	Water supplied by Local Municipality	Borehole water
	Preferred	Alternative 1
Environmental	76.67%	59.17%
Social	90.00%	33.33%
Technical	73.33%	48.89%
Economic	79.17%	87.50%
FINAL SCORE	79.00%	57.10%

Based on the comparative assessment in terms of the Environmental, Technical/Engineering, Economical and Social categories, the preferred has received the highest comparative Score of 79.00%. Economically and Socially water supplied from the Local Municipality will be the most suitable for the project.

In terms of the comparative assessment of positive and negative implications of the proposed activity alternatives,

Table 31 refers to a comparison is done below to assess the positive and negative implications of the proposed development compared with the no-go alternative. This should provide a fundamental consideration of the feasibility of the project.



Table 31: Comparison of the proposed preferred activities and the no-go option

Layout alternatives	Water supplied by Local Municipality <b>Preferred</b>	Borehole water <b>Alternative 1</b>	<b>No-go option</b>
<b>Positive impacts</b>	Access can be gained to the existing 375mm Ø water pipe that runs through the site towards Saldanha within the Electrical services servitude.	Boreholes can be easily drilled for water abstraction on the property.	There will be no impacts if the development doesn't take place.
<b>Negative impacts</b>	Permission must be sought from the Local Municipality.	It must be noted that the study area is located in a Zone A Groundwater Taking Zone. That implies that no water may be taken from this drainage region except as set out under schedule 1 and small industrial users; the latter is limited to 20 m3 of water per day (Section 39 of the National Water Act, 1998, Government Notice No. 399, 26 March 2004).	There will be no impacts if the development doesn't take place.

As shown in the above, the development has a preferred alternative. In terms of the Proposed Pioneer Industrial Park Development water supplied from the Local Municipality is the preferred alternative.

### 6.3 No-Go option



The potential impact of the preferred project option on environmental and socio-economic attributes identified during the assessment phase is evaluated against the potential impact of the No-Go option on the same attributes. The summary of this assessment is provided in Table 32 below.

Table 32: Development vs. No-Go option

Attribute	Development Option	No-go Option
<b>Physical environment</b>		
Air Pollution	Negative impact	No impact
Noise Pollution	Negative impact	No impact
Water Quality	Negative impact	No impact
Water Quantity	Negative impact	No impact
Visual Aesthetics	Negative impact	No impact
<b>Biophysical environment</b>		
Fauna and Flora	Negative impact	No impact
Sensitive Environments	Negative impact	No impact
<b>Social environment</b>		
Traffic	Negative impact	No impact
Impact on property values	Negative impact	No impact
Safety and security	Negative impact	No impact
National and regional economy	Positive impact	Negative impact
Infrastructure development	Positive impact	Negative impact

As can be seen in the Table 32, the development option will result in more negative impacts than the No-Go option, as derived from comparative analysis.

The No-Go Option will not have any environmental impacts, however, the land is currently used for livestock grazing. The property is, however, located within the conceptual industrial extension area as earmarked by the Saldanha Bay Spatial Development Framework. The Saldanha Bay IDP confirms the potential of an industrial corridor behind Saldanha Port, along the railway line, as proposed by the SDF (the SDF is a Sectoral Plan of the IDP). Industrial development is also identified as one of the nine major “thrusts” under the Local Economic Development Strategies to create momentum in the economy of the Saldanha Bay Municipality.



## 7. IDENTIFICATION OF ANTICIPATED ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

This part of the document focuses on the identification of the major potential impacts the activities, processes and actions may have on the surrounding environment. It indicates the major impacts that these activities may have on the environmental components associated with the site, as required in terms of Regulation 28 (g) of R.543 of the EIA Regulations, 2010, under the NEMA, 1998.

### 7.1 Project phases and activities to be undertaken

For the purposes of this impact assessment, the project timeframe will be subdivided into the following four phases:

- Design and Planning Phase
- Construction Phase.
- Operational Phase.
- Decommissioning and Closure Phase.

Potential significant impacts that have thus far been identified during the scoping phase have been listed below for the planning and design phase, the construction phase, the operational phase and the decommissioning phase.

#### 7.1.1 Design and planning Phase

Table 33 lists the potential impacts that can be expected if proper environmental management plans are not developed and implemented:

**Table 33: Potential impacts in the design and planning phase**

Activity	Potential impacts
Potential impacts associated with the Storm water management system	<ul style="list-style-type: none"> <li>• Soil, surface water and groundwater pollution during the operational phase due to inadequate design of the storm water system;</li> </ul>
Potential impacts associated with the development and/or expansion of the railway network	<ul style="list-style-type: none"> <li>• Soil, surface water and groundwater pollution;</li> <li>• Generation of noise and subsequent nuisance to nearby landowners;</li> <li>• Generation of atmospheric emissions, dust and odours and subsequent nuisance to nearby landowners;</li> </ul>



	<ul style="list-style-type: none"> <li>• Loss or disturbance of vegetation;</li> <li>• Loss of topsoil;</li> <li>• Soil erosion;</li> </ul>
Potential impacts associated with the Storage and handling of dangerous goods	<ul style="list-style-type: none"> <li>• Contamination of surface water runoff.</li> </ul>
Potential impacts associated with the Treatment of sewage and waste water	<ul style="list-style-type: none"> <li>• Soil, surface water and groundwater pollution during the operational phase due to inadequate design of the wastewater/sewage treatment system, if applicable;</li> </ul>
Potential Socio-economic impacts	<ul style="list-style-type: none"> <li>• Community and Institutional Structures,</li> <li>• Individual and family changes,</li> <li>• Community Resources,</li> </ul>
Potential impacts on the wetlands (if any)	Disturbance of alleged seasonal pond

### 7.1.2 Construction Phase

Table 34 lists the potential impacts that can be expected during the construction phase, if proper environmental management plans are not developed and implemented.

**Table 34: Potential impacts during the construction phase**

Activity	Potential impacts
Construction of a new roads and widening of existing roads on site	<ul style="list-style-type: none"> <li>• Soil, surface water and groundwater pollution;</li> <li>• Generation of noise and subsequent nuisance to nearby landowners;</li> <li>• Generation of atmospheric emissions, dust and odours and subsequent nuisance to nearby landowners;</li> <li>• Loss or disturbance of vegetation;</li> <li>• Loss of topsoil;</li> <li>• Soil erosion;</li> <li>• Disturbance of alleged seasonal pond; and</li> <li>• Contamination of surface water runoff.</li> <li>• Soil, surface water and ground water pollution due to incorrect management and disposal of cement and concrete;</li> <li>• Generation of dust, atmospheric</li> </ul>



	<p>emissions and nuisance;</p> <ul style="list-style-type: none"> <li>• Wear of access roads, accidents on access roads, unpermitted transport of materials and loss of materials being transported on the access roads;</li> <li>• Potential traffic impacts during the construction phase.</li> <li>• Potential groundwater impacts on the Langebaan Road aquifer.</li> </ul>
Construction of proposed bulk water reservoir	<ul style="list-style-type: none"> <li>• Soil, surface water and groundwater pollution;</li> <li>• Generation of noise and subsequent nuisance to nearby landowners;</li> <li>• Generation of atmospheric emissions, dust and odours and subsequent nuisance to nearby landowners;</li> <li>• Loss or disturbance of vegetation;</li> <li>• Loss of topsoil;</li> <li>• Soil erosion;</li> <li>• Disturbance of alleged seasonal pond; and</li> <li>• Contamination of surface water runoff.</li> <li>• Soil, surface water and ground water pollution due to incorrect management and disposal of cement and concrete;</li> <li>• Generation of dust, atmospheric emissions and nuisance;</li> </ul>
Storm water runoff of the Proposed Pioneer Industrial Park	<ul style="list-style-type: none"> <li>• Soil, surface water and groundwater pollution during the operational phase due to inadequate design of the storm water system;</li> <li>• Soil, surface water and ground water pollution due to the run-off of contaminated wash water;</li> <li>• Soil pollution and degradation due to incorrect management, storage and disposal of construction, general and hazardous waste;</li> <li>• Soil, surface water and groundwater</li> </ul>



	<p>pollution due to the contamination of clean surface water runoff;</p>
<p>Construction of facilities or infrastructure exceeding 1000 metres in length for bulk transportation of sewage, and storm water</p>	<ul style="list-style-type: none"> <li>• Soil, surface water and ground water pollution due to potential hydrocarbon spillages;</li> <li>• Soil, surface water and ground water pollution due to unsanitary conditions onsite;</li> <li>• Generation of dust, atmospheric emissions and nuisance;</li> </ul>
<p>Construction of facilities for the transmission and distribution of electricity</p>	<ul style="list-style-type: none"> <li>• Wastage and depletion of valuable resources such as water and electricity as a result of poor management and redundant use;</li> <li>• Potential impacts on birds as the site is located within the Saldanha Flyway bird corridor,</li> </ul>
<p>Clearance of more than 20 hectares of vegetation</p>	<ul style="list-style-type: none"> <li>• Loss of habitat for fauna species on site; and,</li> <li>• Disturbance or destruction of sites, features or artefacts of archaeological and/or historical importance.</li> <li>• Destruction of the cluster of six, vulnerable <i>Arctopus dregei</i> plants on site</li> <li>• Disturbance of vegetation surrounding the site during site clearance;</li> <li>• Generation of dust, atmospheric emissions and nuisance;</li> <li>• Destruction of degraded vegetation onsite;</li> <li>• Unsuitable management of topsoil may lead to loss of fertility of the soil as well as soil erosion;</li> </ul>
<p>Potential impacts associated with the development and/or expansion of the railway network</p>	<ul style="list-style-type: none"> <li>• Visual impact upon receptors in the vicinity of the site, including neighbouring properties and the R27 and potentially R45;</li> <li>• Generation of noise pollution and nuisance;</li> </ul>





	<ul style="list-style-type: none"> <li>• Generation of dust, atmospheric emissions and nuisance;</li> </ul>
Potential impacts associated with the Storage and handling of dangerous goods	<ul style="list-style-type: none"> <li>• Spillages</li> <li>• Fire hazards</li> <li>• Surface and groundwater pollution</li> <li>• Soil, surface water and ground water pollution due to the incorrect management, storage and disposal of chemicals;</li> </ul>
Potential impacts associated with the Treatment of sewage and waste water	Soil, surface water and groundwater pollution during the operational phase due to inadequate design of the wastewater/sewage treatment system, if applicable;
The construction of facilities or infrastructure for any process that requires a permit or license (Water Use License)	
Potential Socio-economic impacts	<ul style="list-style-type: none"> <li>• Population impact due to potential in-migration,</li> <li>• Community and Institutional Structures,</li> <li>• Individual and family changes,</li> <li>• Community Resources,</li> <li>• Alternative land-use,</li> <li>• Increase in Investment,</li> <li>• Increase in GDP,</li> <li>• Increase in employment</li> </ul>
Potential impacts on the wetlands (if any)	None.
Operation of a new roads that were constructed for the site	<ul style="list-style-type: none"> <li>• Potential traffic impacts associated with the development during construction phase.</li> </ul>

### 7.1.3 Operational Phase

Table 35 lists the potential impacts that can be expected during the operational phase, if proper environmental management plans are not developed and implemented.

**Table 35: Potential impacts during the operational phase**

Activity	Potential impacts
Storm water runoff of the Proposed Pioneer Industrial Park	<ul style="list-style-type: none"> <li>• Soil, surface water and groundwater pollution during the operational phase due to inadequate design of the storm water system;</li> <li>• Soil, surface water and ground water</li> </ul>

	<p>pollution due to the run-off of contaminated wash water;</p> <ul style="list-style-type: none"> <li>• Soil pollution and degradation due to incorrect management, storage and disposal of construction, general and hazardous waste;</li> <li>• Soil, surface water and groundwater pollution due to the contamination of clean surface water runoff;</li> <li>• Soil pollution and degradation due to incorrect management, storage and disposal of general and hazardous waste;</li> <li>• Soil, surface water and ground water pollution due to unsanitary conditions onsite;</li> </ul>
<p>Operation of facilities or infrastructure exceeding 1000 metres in length for bulk transportation of sewage, and storm water</p>	<ul style="list-style-type: none"> <li>• Soil, surface water and ground water pollution due to potential hydrocarbon spillages;</li> <li>• Soil, surface water and ground water pollution due to unsanitary conditions onsite;</li> <li>• Generation of dust, atmospheric emissions and nuisance;</li> </ul>
<p>Operation of facilities for the transmission and distribution of electricity (via a 11kV line)</p>	<ul style="list-style-type: none"> <li>• Wastage and depletion of valuable resources such as water and electricity as a result of poor management and redundant use;</li> </ul>
<p>Potential impacts associated with the operation of the railway network</p>	<ul style="list-style-type: none"> <li>• Visual impact upon receptors in the vicinity of the site, including neighbouring properties and the R27 and potentially R45;</li> <li>• Generation of noise pollution and nuisance;</li> <li>• Generation of dust, atmospheric emissions and nuisance;</li> <li>• Wear of access roads, accidents on access roads, unpermitted transport of materials and loss of materials being</li> </ul>



	<p>transported on the access roads;</p> <ul style="list-style-type: none"> <li>• Generation of noise pollution and nuisance;</li> </ul>
Potential impacts associated with the Storage and handling of dangerous goods	<ul style="list-style-type: none"> <li>• Spillages</li> <li>• Fire hazards</li> <li>• Surface and groundwater pollution</li> <li>• Soil, surface water and ground water pollution due to the incorrect management, storage and disposal of chemicals,</li> <li>• Soil, surface water and ground water pollution due to potential hydrocarbon spillages;</li> </ul>
Potential impacts associated with the Treatment of sewage and waste water	<ul style="list-style-type: none"> <li>• Potential ineffective treatment of wastewater/effluent and sewage and subsequent pollution of the soil, surface water and ground water;</li> </ul>
Potential Socio-economic impacts	<ul style="list-style-type: none"> <li>• Population impact due to potential in-migration,</li> <li>• Community and Institutional Structures,</li> <li>• Individual and family changes,</li> <li>• Community Resources,</li> <li>• Alternative land-use,</li> <li>• Increase in Investment,</li> <li>• Increase in GDP,</li> <li>• Increase in employment</li> </ul>
Potential impacts on the wetlands (if any)	Potential pollution of the alleged seasonal pan.
Operation of a new roads that were constructed for the site	<ul style="list-style-type: none"> <li>• Potential traffic impacts associated with the development during operational phase.</li> </ul>

#### 7.1.4 Closure and Decommissioning Phase

Closure and decommissioning of the proposed Pioneer Industrial Park is not anticipated for the foreseeable future. Should the industrial park close, a detailed closure and rehabilitation plan will be submitted to the Western Cape Department of Environmental Affairs and Development Planning prior to decommissioning.



## 7.2 Impacts identified

The main impacts identified for the Industrial Park project were listed above. The environmental impact assessment report will include a full risk assessment of all environmental impacts. The Environmental Management Programme (EMP) will set out mitigation measures to be implemented during the Planning and Pre-Construction, Construction, Operational and Decommissioning Phases. Refer to Part 8 of this Scoping Report for the Impact Assessment methodology that will be followed as part of the EIA process.

### 7.2.1 Cumulative Impacts

Table 36 lists the potential cumulative impacts have been identified and will be investigated further during the EIA phase:

*Table 36: Cumulative impacts*

Impact	Contributing aspects
Environmental noise	Noise generated at the site will combine with noise generated in the vicinity of the site, such as that created by motorists travelling on the R27 and R45 and trains passing the site on the railway line to the west.
Air pollution	Depending on the nature of the commercial and industrial activities that will be established on the project property, atmospheric emissions may be generated. These emissions may then combine with emissions from other industries in the area, such as from ArcelorMittal's Saldanha Steel Works and Namaqua Sands.
Loss of vegetation	The development would result in the loss of vegetation of the Saldanha Flats Strandveld vegetation type. This loss could combine with losses on other sites, with remnants of the strandveld therefore becoming important in order to meet conservation targets.

## 7.3 Conclusion on impacts identified

The potential impacts identified in this report will be expanded and evaluated as part of the Environmental Impact Assessment Phase of the project. Furthermore, the required specialist studies and investigations will be conducted and will be taken into consideration when conducting the risk (impact) assessment for the proposed project. Refer to Part 8 of this Scoping Report for further information.



## 7.4 Processes to be undertaken to ensure that impacts are mitigated

Mitigation measures need to be identified to ensure that impacts from the proposed activity are reduced as far as possible. The following mitigation measures objectives will be kept in mind while mitigation measures are identified:

- To find more environmentally sound ways of undertaking specific activities;
- To enhance any environmental and social benefits of a proposed activity;
- To avoid, minimise or remedy negative environmental impacts; and
- To ensure that any residual negative environmental impacts are environmentally acceptable.

Identifying appropriate mitigation measures will be conducted in a hierarchal manner:

1. Preventative measures will be identified to avoid, where possible, negative impacts that may arise as a result of the proposed activity;
2. Measures will be identified to minimise and/or reduce the negative impacts to “as low as practicable” levels; and
3. Measures will be identified to compensate or remedy residual negative impacts that are unavoidable and cannot be minimised or reduced any further (Department of Environmental Affairs, 2006).

Proposed mitigation measures will be communicated to the applicant for review as part of Draft Environmental Management Plan (EMP). The applicant will comment on the feasibility and practicality of implementing the mitigation measures. The mitigation measures may be adjusted based on the applicant's comments.



## 8. PLAN OF STUDY FOR EIA

In accordance with of Regulation 28 (of Regulation 543) of the EIA Regulations (2010), under the NEMA, 1998, the knowledge gaps identified and a description of the tasks that will be undertaken as part of the EIA process, including any specialist reports or specialised processes (including the manner in which such tasks will be undertaken), are discussed in this part of the Scoping Report.

### 8.1 Tasks to be undertaken as part of the EIA process

The Environmental Impact Assessment process will be conducted subsequent to the Scoping process and will be undertaken in accordance with the Regulation 31 of the EIA Regulations of 18 June 2010. The Environmental Impact Report (EIR) for the proposed project will include detailed information relating to the potential or anticipated impacts that may arise as a result of the proposed activity.

The EIR and draft EMP in accordance with NEMA (1998) and as per the EIA Regulations R.543 of 18 June 2010, will include, but is not limited, to the following:

- Details of the Environmental Assessment Practitioner (EAP);
- Expertise of the EAP to carry out an EIA;
- A detailed description of the proposed activity;
- A description of the property on which the activity is to be undertaken and the location of the activity on the property;
- A description of the environment that may be affected by the activity and the manner in which the physical, biological, social, economic and cultural aspects of the environment may be affected by the proposed activity;
- Details of the public participation process followed;
- A description of the need and desirability of the proposed activity;
- A description of the identified alternatives to the proposed activity, including advantages and disadvantages that the proposed activity may have on the environment and the community that may be affected by the activity;
- An indication of the methodology used in determining the significance of potential environmental impacts;
- A description and comparative assessment of all alternatives identified during the environmental impact assessment process;
- A summary of the findings and recommendations of any specialist report or report on a specialised process (no specific requests have been received from the competent authorities to date);
- A description of all environmental issues that were identified during the environmental impact assessment process, an assessment of the significance of each issue and an indication of the extent to which the issue could be addressed by the adoption of mitigation measures;



- An assessment of each identified potentially significant impact, including cumulative impacts, the nature of the impact, the extent and duration of the impact, the probability of the impact occurring, the degree to which the impact can be reversed, the degree to which the impact may cause irreplaceable loss of resources, and the degree to which the impact can be mitigated;
- A description of any assumptions, uncertainties and gaps in knowledge;
- A reasoned opinion as to whether the activity should or should not be authorised, and if the opinion is that it should be authorised, any conditions that should be made in respect of that authorisation;
- An environmental impact statement;
- A draft environmental management programme containing the aspects contemplated in regulation, including, but not limited to, environmental management objectives and goals, mitigation measures and management of significant impacts, a description of persons responsible for mitigation implementation, description of time periods applicable to mitigation implementation, and monitoring and performance assessment;
- Inclusion of technical and supporting information;
- Copies of any specialist reports and reports on specialised processes complying with regulation;
- Any specific information that may be required by the competent authority; and
- Any other matters required in terms of sections 24(4)(a) and (b) of the Act.

Compilation of the EIR and draft EMP will be conducted according to the EIA Regulations of 18 June 2010 (R.543) as per NEMA, 1998, and will include, but is not limited to, the following:

- The compilation of the EIR as stipulated in Regulation 31 of R.543 (18 June 2010), as per NEMA, 1998;
- The draft EIR and EMP will be submitted to the applicant for input prior to its submission for public and competent authority comment;
- Public Participation will be conducted in accordance with the EIA Regulations of 18 June 2010 (R.543). This will include submission of the draft EIR and EMP to the competent authority and the public in order to obtain their comments for a period of 30 days [R543(56)];
- All comments, objections and/or representations received during the Public Participation Process will be included and addressed in the final EIR and this document will be finalised;
- The final EIR and draft EMP will be submitted to the client to obtain their inputs;
- Registered Interested and Affected Parties will be given an opportunity to comment on the final EIR as stipulated in R543 (56) (6). Their comments will be submitted to the competent authority and the EAP or applicant will be copied;
- The final EIR and draft EMP will be submitted to the competent authority for consideration. The competent authority will have 14 days to acknowledge receipt of the final EIR. Thereafter, the competent authority has 60 days to consider the report and in writing accept the report, reject the report, or ask for additional information or amendments to the document [R.543(34) (2)]. Once the report has been accepted, the competent authority has 45 days to grant or refuse authorisation [R.543(35) (1)];





- Continued consultation with the relevant authority until issuing of the decision.

## 8.2 Stages at which the competent authority will be consulted

The stages, at which the competent authority will be consulted in the process of compiling the EIR and draft EMP as per the EIA Regulations R.543 (2010), will include amongst other, the following:

- During the Public Participation Process in accordance to EIA Regulations R.543 (2010), the draft EIR will be submitted to the competent authority for a period of 30 days (unless agreed otherwise) to obtain their comments [R543 (56)];
- The final EIR will be submitted to the competent authority. They will have 60 days, after acknowledging receipt of the final EIR, to consider the report and in writing accept the report, reject the report or request additional information or amendments to the document [Regulation 543(34) (2)]; and
- Continued consultation with the competent authority until the decision is issued.

## 8.3 Methodology of assessing the environmental impacts

It is required by Regulation 28 (g) of R.543 of the EIA Regulations, 2010, that major potential impacts on the surrounding environment, as a result of the proposed activity, are identified during the Scoping Phase.

Regulation 31 of R.543 of the EIA Regulations (2010), under the NEMA (1998), requires that an EIR includes an assessment of the status, extent, duration, probability, reversibility, replaceability of resources and mitigatory potential of the major potential environmental impacts of the proposed activity.

A baseline identification of the major potential impacts has therefore only been included in this Scoping Report. The prediction of the nature of each impact, the evaluation of each impact by rating its significance and the management and mitigation measures adopted to address each impact, will be assessed during the EIR.

Impact assessments should be conducted based on a methodology that includes the following:

- Clear processes for impact identification, predication and evaluation;
- Specification of the impact identification techniques;
- Criteria to evaluate the significance of impacts;
- Design of mitigation measures to lessen impacts;
- Definition of the different types of impacts (indirect, direct or cumulative); and
- Specification of uncertainties.



In broad terms, the impact assessment for this project will include the following:

- All potential impacts of the proposed activity will be identified and assessed;
- The nature, extent, magnitude and duration of all potentially significant impacts will be predicted;
- A range of mitigation measures that could diminish the impacts will be identified; and
- The significant of residual impacts that remain, after the proposed mitigation measures are implemented, will be evaluated.

The construction, operational and decommissioning phases of the project will be considered whilst identifying impacts. A detailed understanding of the proposed activity will be obtained to ensure that all the potential impacts are identified. The following process will be followed to identify and assess the potential impacts of the proposed activity:

- The current environmental conditions will be determined in detail. This will act as a baseline against which impacts can be identified and measured;
- The changes that will occur in future, should the proposed activity not occur, will be identified;
- A detailed understanding of the activity will be obtained in order to fully understand its consequences; and
- The significant impacts that will occur as a result of the proposed activity will be identified (should the activity be authorised).

After all impacts have been identified, the nature of each impact can be predicted. The impact prediction will take into account physical, biological, socio-economic and cultural information and will then estimate the likely parameters and characteristics of the impacts. The impact prediction will aim to provide a basis from which the significance of each impact can be determined and appropriate mitigation measures can be developed.

The risk assessment methodology is based on defining and understanding the three basic components of the risk, i.e. the source of the risk, the pathway and the target that experiences the risk (receptor). Refer to Figure 40 for a model representing the above principle (as contained in the DWA's Best Practice Guideline: G4 – *Impact Prediction*).

Figure 40: DWAs model for impact prediction (risk assessments)

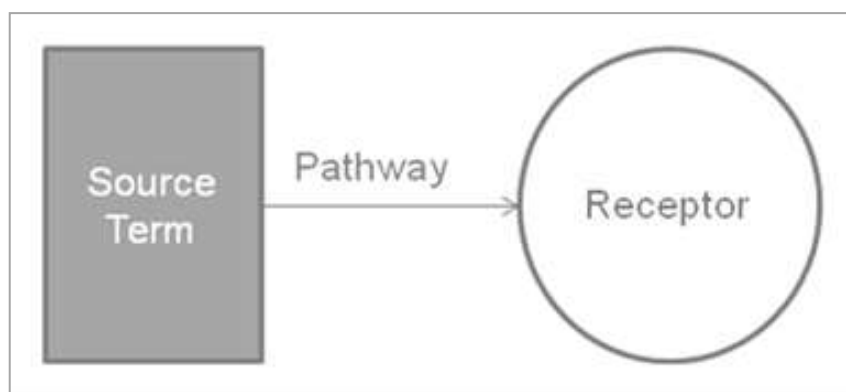


Table 37 and Table 38 below indicate the methodology to be used in order to assess the Probability and Magnitude of the impact, respectively, and Table 39 provides the Risk Matrix that will be used to plot the Probability against the Magnitude in order to determine the Severity of the impact.

*Table 37: Determination of Magnitude of Impact*

Frequency of Aspect / Unwanted Event	Score	Availability of pathway from the source to the receptor	Score	Availability of receptor	Score
Never known to have happened, but may happen	1	A pathway to allow for the impact to occur is never available	1	The receptor is never available	1
Known to happen in industry	2	A pathway to allow for the impact to occur is almost never available	2	The receptor is almost never available	2
< once a year	3	A pathway to allow for the impact to occur is sometimes available	3	The receptor is sometimes available	3
Once per year to up to once per month	4	A pathway to allow for the impact to occur is almost always available	4	The receptor is almost always available	4
Once a month - Continuous	5	A pathway to allow for the impact to occur is always available	5	The receptor is always available	5

**Step 1:** Determine the **PROBABILITY** of the impact by calculating the average between the Frequency of the Aspect, the Availability of a pathway to the receptor and the availability of the receptor.



Table 38: Determination of Magnitude of Impact

Source								Receptor			
Duration of impact	Score	Extent	Score	Volume / Quantity / Intensity	Score	Toxicity / Destruction Effect	Score	Reversibility	Score	Sensitivity of environmental component	Score
Lasting days to a month	1	Effect limited to the site. (metres);	1	Very small quantities / volumes / intensity (e.g. < 50L or < 1Ha)	1	Non-toxic (e.g. water) / Very low potential to create damage or destruction to the environment	1	Bio-physical and/or social functions and/or processes will remain unaltered.	1	Current environmental component(s) are largely disturbed from the natural state. Receptor of low significance / sensitivity	1
Lasting 1 month to 1 year	2	Effect limited to the activity and its immediate surroundings. (tens of metres)	2	Small quantities / volumes / intensity (e.g. 50L to 210L or 1Ha to 5Ha)	2	Slightly toxic / Harmful (e.g. diluted brine) / Low potential to create damage or destruction to the environment	2	Bio-physical and/or social functions and/or processes might be negligibly altered or enhanced / Still reversible	2	Current environmental component(s) are moderately disturbed from the natural state. No environmentally sensitive components.	2
Lasting 1 – 5 years	3	Impacts on extended area beyond site boundary (hundreds of metres)	3	Moderate quantities / volumes / intensity (e.g. > 210 L < 5000L or 5 – 8Ha)	3	Moderately toxic (e.g. slimes) Potential to create damage or destruction to the environment	3	Bio-physical and/or social functions and/or processes might be notably altered or enhanced / Partially reversible	3	Current environmental component(s) are a mix of disturbed and undisturbed areas. Area with some environmental sensitivity (scarce / valuable environment etc.).	3
Lasting 5 years to Life of Organisation	4	Impact on local scale / adjacent sites (km's)	4	Very large quantities / volumes / intensity (e.g. 5000 L – 10 000L or 8Ha– 12Ha)	4	Toxic (e.g. diesel & Sodium Hydroxide)	4	Bio-physical and/or social functions and/or processes might be considerably altered or enhanced / potentially irreversible	4	Current environmental component(s) are in a natural state. Environmentally sensitive environment / receptor (endangered species / habitats etc.).	4
Beyond life of Organisation / Permanent impacts	5	Extends widely (nationally or globally)	5	Very large quantities / volumes / intensity (e.g. > 10 000 L or > 12Ha)	5	Highly toxic (e.g. arsenic or TCE)	5	Bio-physical and/or social functions and/or processes might be severely/substantially altered or enhanced / Irreversible	5	Current environmental component(s) are in a pristine natural state. Highly Sensitive area (endangered species, wetlands, protected habitats etc.)	5

**Step 2:** Determine the **MAGNITUDE** of the impact by calculating the average of the factors above.



Table 39: Determination of Severity of Impact

ENVIRONMENTAL IMPACT RATING / PRIORITY					
	MAGNITUDE				
PROBABILITY	1 Minor	2 Low	3 Medium	4 High	5 Major
5 Almost Certain	Low	Medium	High	High	High
4 Likely	Low	Medium	High	High	High
3 Possible	Low	Medium	Medium	High	High
2 Unlikely	Low	Low	Medium	Medium	High
1 Rare	Low	Low	Low	Medium	Medium

**Step 3:** Determine the **SEVERITY** of the impact by plotting the averages that were obtained above for Probability and Magnitude in the table below.

## 8.4 Public Participation during the EIA process

The compilation of the EIR and draft EMP as per R.543 will include, but is not limited to, the following public participation:

- The draft EIR and draft EMP will be provided to the client for review prior to public and competent authority comment;
- The Public Participation Process will be conducted in accordance with the EIA Regulations R.543 (2010). This will include submitting the draft EIR to the competent authority and public for a review period of 30 days [Regulation 543(56)];
- All comments, objections and/or representations received during the Public Participation Process will be included and addressed in the final EIR and this document will be finalised;
- The final EIR and draft EMP will be submitted to the client to obtain their inputs; and
- Registered Interested and Affected Parties (I&APs) will be given an opportunity to comment on the final EIR as stipulated in R.543 (56) (6). Their comments will be submitted to the competent authority and the EAP or applicant will be copied.

## 8.5 Alternatives

Several potential alternatives have been identified for the project:

- a) Layout plan:
  - Option 3 (Preferred).
  - Option 2 (alternative 1),
- b) Treatment of sewerage:
  - WKL Environmental Systems (Preferred),
  - Bio Sewage Systems (alternative 1),



- Lilliput system (alternative 2).
- c) Sourcing of water for the project:
- Municipal supply (Preferred),
  - Groundwater abstraction (alternative 1).
- d) The option of not implementing the activity.

## 8.6 Knowledge gaps and specialist studies

The following knowledge gaps and uncertainties have been identified during the scoping process of the proposed Industrial Park Development project and require further investigations that will be carried out comprehensively as part of the EIA process for the proposed project:

- All relevant specialist studies need to be conducted for the area associated with the proposed Industrial Park Development. The studies identified during the Scoping Phase include the following:
  - Traffic Impact Assessment (as requested by the Western Cape Department of Transport and Public Works);
  - Desktop geohydrological assessment (as requested by CapeNature),
  - Botanical Survey (as requested by CapeNature),
  - Need and Desirability study,
  - Wetland study for the seasonal pan as requested by the Department of Water and Sanitation,
  - Application in terms of Section 53 of the Mineral Petroleum Resources Development Act, 2002 (as requested by the Department of Mineral Resources); and
  - Application to the South African Civil Aviation Authority for an obstacle approval (as requested by the South African Civil Aviation Authority).
- While impacts have been identified as part of the scoping process, it is required as part of the EIA Phase to fully quantify impacts to all aspects of the environment.

## 8.7 Description of the aspects to be assessed as part of the EIA assessment process

The following aspects will be assessed as part of the EIA assessment process:

- Vegetation,
- Animal life,
- Wetland,
- Geo-hydrological,
- Need and Desirability,
- Traffic,
- Aviation application for obstacle approval,
- Application in terms of Section 53 of the Mineral Petroleum Resources Development Act, 2002 (as requested by the Department of Mineral Resources);



Table 40: Aspects to be assessed by specialists during the EIA phase

<b>Environmental Aspect</b>	<b>Aspect to be assessed as part of the environmental impact assessment process and professional specialist opinion given</b>	<b>Aspect to be assessed by a Specialist</b>
Geology	No	No
Regional Climate	No	No
Topography	No	No
Soils	No	Yes
Land use and land capability	No	No
Vegetation	Yes	Yes
Animal life	Yes	Yes
Surface water	No	No
Ground water	Yes	Yes
Wetland	Yes	Yes
Sites of archaeological and cultural interest	No	No
Need and Desirability	Yes	Yes
Air Quality	No	No
Noise	No	No
Visual aspects	No	No
Socio-economic aspects	No	No
Traffic	Yes	Yes

The terms of reference for the specialist investigations to be conducted during the impact assessment phase set out below.

### **Vegetation**

- Describe the broad ecological characteristics of the site and the surrounding areas,
- In terms of biodiversity pattern, identify or describe, at a community and ecosystem level
  - The main vegetation type,
  - The types of plant communities that occur on, and in the vicinity of the site,
  - Threatened or vulnerable ecosystems,
- In terms of biodiversity pattern, identify or describe species of concern,
  - The viability of, and estimated population size of the Red Date Book and Threatened or Protected Species Regulations,





- Any significant landscape features or rare or important vegetation/faunal associations such as seasonal wetlands, alluvium, seeps, quartz patches or salt marshes in the vicinity,
- The extent of alien plant cover on the site,
- The condition of the site in terms of current or previous land uses,
- In terms of biodiversity process,
  - the key ecological drivers of ecosystems,
  - Environmental gradients,
  - Any possible changes in key processes,
  - The condition and functioning of rivers and wetlands (if present).

### **Animal life**

- Describe the types of animal communities (fish, invertebrates, avifauna, mammals and reptiles).

### **Wetland**

Confirm the presence of a seasonal pond as highlighted by Mr Nicolaas Hanekom in An Ecological Baseline Study of the Farm Eenzaamheid near Saldanha.

### **Geo-hydrological**

The aims of this study are to:

- Combine and interpret available hydrological and hydrogeological and related information.
- Conduct a desktop borehole/spring water hydrocensus to assess groundwater utilisation, including potential risks towards neighbouring properties.
- Estimate surface- and groundwater flow patterns.
- Estimate groundwater recharge for the area using available information.
- Classify the status of the aquifer/s (Parsons).
- Estimate the vulnerability of aquifer/s to pollution (DRASTIC).
- Provide a general assessment of the impact/s posed towards groundwater.

### **Need and Desirability**

The aims of the study are to:

- Completion of the Needs and Desirability Table.
- The study must comply to Appendix 6 of the EIA Regulations, 2014; and
- An assessment of each identified potentially significant impact and risk, including: cumulative impacts, the nature, significance and consequences of the impacts and risk, the extent and duration of the impact and risk, the probability of the impact and risk occurring, the degree to which the impact and risk can be reversed, the degree to which the impact and risk may cause irreplaceable loss of resources, the degree to which the impact and risk can be avoided, managed or mitigated.



## Traffic

### 1. TERMS OF REFERENCE

The consultant interprets the employer's project brief as an investigation into the transport impact of the proposed Eenzaamheid development, including the following:

- Investigating and analysing existing road network and traffic operations;
- Calculate the traffic that will be generated by the development at various stages and at completion;
- Determine what road improvements will be required to accommodate Eenzaamheid development traffic;
- Analyse and evaluate alternative road network improvement options;
- Workshop requirements and proposals with local and provincial roads authorities;
- Obtain approval of the transport impact assessment.

### 2. OBJECTIVES

The consultant's objectives are:

- to deliver services in an efficient and cost effective manner,
- to ensure that all legal and legislative obligations are met,
- to obtain approval for the development,

### 3. METHODOLOGY

In order to meet the employer and consultant's objectives, the consultant intends to employ the methodology described below.

- Meeting with the project team in order to finalise the scope of work, to understand the challenges at hand and to co-determine the preferred outcome of the task
- Visiting the site for which planning and solutions are required;
- Doing a desktop study to determine the extent of information required from the field, the employer or external sources;
- Interpretation of information received from the field and recommending a preferred solution;
- Reporting on the investigation, with recommendations for improvements.

## 8.8 Potential impacts identified

### Potential impacts in the design and planning phase

- Soil, surface water and groundwater pollution during the operational phase due to inadequate design of the storm water system;
- Soil, surface water and groundwater pollution;
- Generation of noise and subsequent nuisance to nearby landowners;
- Generation of atmospheric emissions, dust and odours and subsequent nuisance to nearby landowners;



- Loss or disturbance of vegetation;
- Loss of topsoil;
- Soil erosion;
- Contamination of surface water runoff.
- Soil, surface water and groundwater pollution during the operational phase due to inadequate design of the wastewater/sewage treatment system, if applicable;
- Community and Institutional Structures,
- Individual and family changes,
- Community Resources,
- Disturbance of alleged seasonal pond.

#### **Potential impacts during the construction phase**

- Soil, surface water and groundwater pollution;
- Generation of noise and subsequent nuisance to nearby landowners;
- Generation of atmospheric emissions, dust and odours and subsequent nuisance to nearby landowners;
- Loss or disturbance of vegetation;
- Loss of topsoil;
- Soil erosion;
- Disturbance of alleged seasonal pond; and
- Contamination of surface water runoff.
- Soil, surface water and ground water pollution due to incorrect management and disposal of cement and concrete;
- Generation of dust, atmospheric emissions and nuisance;
- Wear of access roads, accidents on access roads, unpermitted transport of materials and loss of materials being transported on the access roads;
- Potential traffic impacts during the construction phase.
- Potential groundwater impacts on the Langebaan Road aquifer.
- Soil, surface water and groundwater pollution;
- Generation of noise and subsequent nuisance to nearby landowners;
- Generation of atmospheric emissions, dust and odours and subsequent nuisance to nearby landowners;
- Loss or disturbance of vegetation;
- Loss of topsoil;
- Soil erosion;
- Disturbance of alleged seasonal pond; and
- Contamination of surface water runoff.
- Soil, surface water and ground water pollution due to incorrect management and disposal of cement and concrete;
- Generation of dust, atmospheric emissions and nuisance;



- Soil, surface water and groundwater pollution during the operational phase due to inadequate design of the storm water system;
- Soil, surface water and ground water pollution due to the run-off of contaminated wash water;
- Soil pollution and degradation due to incorrect management, storage and disposal of construction, general and hazardous waste;
- Soil, surface water and groundwater pollution due to the contamination of clean surface water runoff;
- Soil, surface water and ground water pollution due to potential hydrocarbon spillages;
- Soil, surface water and ground water pollution due to unsanitary conditions onsite;
- Generation of dust, atmospheric emissions and nuisance;
- Wastage and depletion of valuable resources such as water and electricity as a result of poor management and redundant use;
- Potential impacts on birds as the site is located within the Saldanha Flyway bird corridor,
- Loss of habitat for fauna species on site; and,
- Disturbance or destruction of sites, features or artefacts of archaeological and/or historical importance.
- Destruction of the cluster of six, vulnerable *Arctopus dregei* plants on site
- Disturbance of vegetation surrounding the site during site clearance;
- Generation of dust, atmospheric emissions and nuisance;
- Destruction of degraded vegetation onsite;
- Unsuitable management of topsoil may lead to loss of fertility of the soil as well as soil erosion;
- Visual impact upon receptors in the vicinity of the site, including neighbouring properties and the R27 and potentially R45;
- Generation of noise pollution and nuisance;
- Generation of dust, atmospheric emissions and nuisance;
- Spillages
- Fire hazards
- Surface and groundwater pollution
- Soil, surface water and ground water pollution due to the incorrect management, storage and disposal of chemicals;
- Soil, surface water and groundwater pollution during the operational phase due to inadequate design of the wastewater/sewage treatment system, if applicable;
- Population impact due to potential in-migration,
- Community and Institutional Structures,
- Individual and family changes,
- Community Resources,
- Alternative land-use,
- Increase in Investment,
- Increase in GDP,
- Increase in employment



- Potential traffic impacts associated with the development during construction phases.

### **Potential impacts during the operational phase**

- Soil, surface water and groundwater pollution during the operational phase due to inadequate design of the storm water system;
- Soil, surface water and ground water pollution due to the run-off of contaminated wash water;
- Soil pollution and degradation due to incorrect management, storage and disposal of construction, general and hazardous waste;
- Soil, surface water and groundwater pollution due to the contamination of clean surface water runoff;
- Soil pollution and degradation due to incorrect management, storage and disposal of general and hazardous waste;
- Soil, surface water and ground water pollution due to unsanitary conditions on site;
- Soil, surface water and ground water pollution due to potential hydrocarbon spillages;
- Soil, surface water and ground water pollution due to unsanitary conditions on site;
- Generation of dust, atmospheric emissions and nuisance;
- Wastage and depletion of valuable resources such as water and electricity as a result of poor management and redundant use;
- Visual impact upon receptors in the vicinity of the site, including neighbouring properties and the R27 and potentially R45;
- Generation of noise pollution and nuisance;
- Generation of dust, atmospheric emissions and nuisance;
- Wear of access roads, accidents on access roads, unpermitted transport of materials and loss of materials being transported on the access roads;
- Generation of noise pollution and nuisance;
- Spillages;
- Fire hazards;
- Surface and groundwater pollution;
- Soil, surface water and ground water pollution due to the incorrect management, storage and disposal of chemicals,
- Soil, surface water and ground water pollution due to potential hydrocarbon spillages;
- Potential ineffective treatment of wastewater/effluent and sewage and subsequent pollution of the soil, surface water and ground water;
- Population impact due to potential in-migration,
- Community and Institutional Structures,
- Individual and family changes,
- Community Resources,
- Alternative land-use,
- Increase in Investment,
- Increase in GDP,



- Increase in employment
- Potential pollution of the alleged seasonal pan.
- Potential traffic impacts associated with the development during operational phase.



## 9. CONCLUSION

This scoping process has been carried out in accordance with the NEMA, 1998, and the Regulations there under.

Refer to section 7.2 of the report Table 34 & Table 35 for the potential impacts identified during the Scoping phase.

Appropriate mitigation measures will assist in minimising the potential impacts on the surrounding environment during the construction and operational phases of the development. These will be identified during the Environmental Impact Assessment Phase of this project.

Knowledge gaps identified as part of this scoping phase include specialist studies [Social and Economic Impact Assessment, Traffic Impact Assessment Study, Desktop Geohydrological Assessment, Botanical Survey (already completed), Wetland study, Application to the South African Civil Aviation Authority for obstacle approval, and Application in terms of Section 53 of the Mineral Petroleum Resources Development Act, 2002].

At this stage the development will consist of heavy and light industry. Dependent on the type of industry, there will be general and hazardous waste. However, the capacities are not known at this stage. If a waste license is required or additional listed activities are triggered, these will be applied for as part of a new application.

Based on the above-mentioned information and the identification of the potential environmental impacts as a result of the proposed Industrial Park, it is concluded that a full Environmental Impact Assessment may commence.

