

# Schanskraal Sporting Estate Scoping and Environmental Impact Reporting Process – Scoping Report

Report Prepared for

**Ranor Karoo Farm Holdings cc**

Report Number 424086/1



Report Prepared by

The logo for srk consulting, featuring a stylized orange and grey graphic to the left of the text 'srk consulting'.

June 2012

# Schanskraal Sporting Estate Scoping and Environmental Impact Reporting Process – Scoping Report

## Ranor Karoo Farm Holdings cc

NCDENC Reference Code: NC/EIA/PIX/UBU/RIC1/2011

DEA Reference Code: 12/9/11/L622/8

### SRK Consulting (South Africa) (Pty) Ltd.

The Administrative Building  
Albion Spring  
183 Main Rd  
Rondebosch 7700  
Cape Town  
South Africa

e-mail: [capetown@srk.co.za](mailto:capetown@srk.co.za)

website: [www.srk.co.za](http://www.srk.co.za)

Tel: +27 (0) 21 659 3060

Fax: +27 (0) 21 685 7105

**SRK Project Number 424086**

**June 2012**

#### **Compiled by:**

Matthew Law  
Environmental Management  
Consultant

Email: [mlaw@srk.co.za](mailto:mlaw@srk.co.za)

#### **Authors:**

Matthew Law

#### **Peer Reviewed by:**

Chris Dalgliesh  
Principal Environmental Management  
Consultant

---

# Executive Summary

**EXECUTIVE SUMMARY:**  
**SCOPING REPORT FOR THE**  
**PROPOSED SCHANKRAAL SPORTING ESTATE**

NCDENC Reference Number: NC/EIA/PIX/UBU/RIC1/2011

DEA Reference Number: 12/9/11/L622/8

## 1 INTRODUCTION

Ranor Karoo Farm Holdings cc (the developer or Ranor) proposes to subdivide and rezone a portion of the Elands Kloof Farm (remainder of Farm 121) (the site) in order to develop the "Schanskraal Sporting Estate" (the development). The site is demarcated on Figure 1.

The Elands Kloof property is one of three farms owned by the developer and collectively referred to as the "Schanskraal Farm" (the farm) (see Figure 1). The developer aims to establish a low density residential estate and sporting community, which would offer a host of outdoor sporting activities on the premises. Schanskraal Farm is located in the Ubuntu Local Municipality in the Northern Cape Province.

SRK Consulting (South Africa) (Pty) Ltd (SRK) was appointed by Ranor as the independent Environmental Assessment Practitioner (EAP) to undertake the Scoping and Environmental Impact Reporting (S&EIR) process, which is required in terms of the National Environmental Management Act 107 of 1998, as amended (NEMA), the Environmental Impact Assessment (EIA) Regulations, 2010 (promulgated in terms of NEMA) and the National Environmental Management Waste Act 59 of 2008 (NEMWA).

## 2 LEGAL REQUIREMENTS

The EIA Regulations, 2010 and Waste Management Activities, 2009 list certain activities that are deemed to be potentially harmful to the environment and thus require Environmental Authorisation (EA) or Waste Management Licensing respectively from the respective competent authorities – in this case the Northern Cape Department of Environment and Nature Conservation (NCDENC) and the National Department of Environmental Affairs.

An Environmental Impact Assessment (EIA) process must be followed in support of the application for EA and Waste Management Licensing. The proposed sporting estate involves a number of activities listed in the EIA Regulations and Waste Management Listed Activities that require a

Basic Assessment process. These are listed in Government Notice (GN) 544, GN546 and in Category A of GN718:

*GN544: 9 The construction of infrastructure for the transport of water, sewage or stormwater exceeding 1000m in length.*

*GN544: 11 The construction of infrastructure within 32 meters of a water course.*

*GN544: 18 The infilling or deposition of any material of more than 5 cubic metres or the removal of any material from a watercourse.*

*GN546: 11 The construction of tracks or routes (excluding the conversion of existing tracks) for the recreational use of motor powered vehicles within areas of indigenous vegetation outside urban areas (in the Northern and Eastern Cape).*

*GN546: 14 The clearance of 5 hectares or more of vegetation which constitutes 75% or more of indigenous vegetation outside urban areas in the Northern Cape.*

*GN718: A1 The storage, including the temporary storage, of general waste at a facility that has the capacity to store in excess of 100m<sup>3</sup> of general waste at any one time, excluding the storage of waste in lagoons.*

*GN718: A11 The construction of facilities for activities listed in Category A of GN718.*

In addition, the proposed project involves one activity listed in the EIA Regulations (GN) R545 and three activities listed in Category B of GN718 that require a Scoping and Environmental Impact Reporting (S&EIR) process:

*GN545: 15 The physical alteration of 20 hectares or more of undeveloped land for residential and recreational purposes.*

*GN718: B5 The treatment of hazardous waste using any form of treatment regardless of the size or capacity of such a facility to treat such waste.*

*GN718: B7 The treatment of effluent, wastewater or sewage with an annual throughput capacity of 15 000 cubic meters or more.*

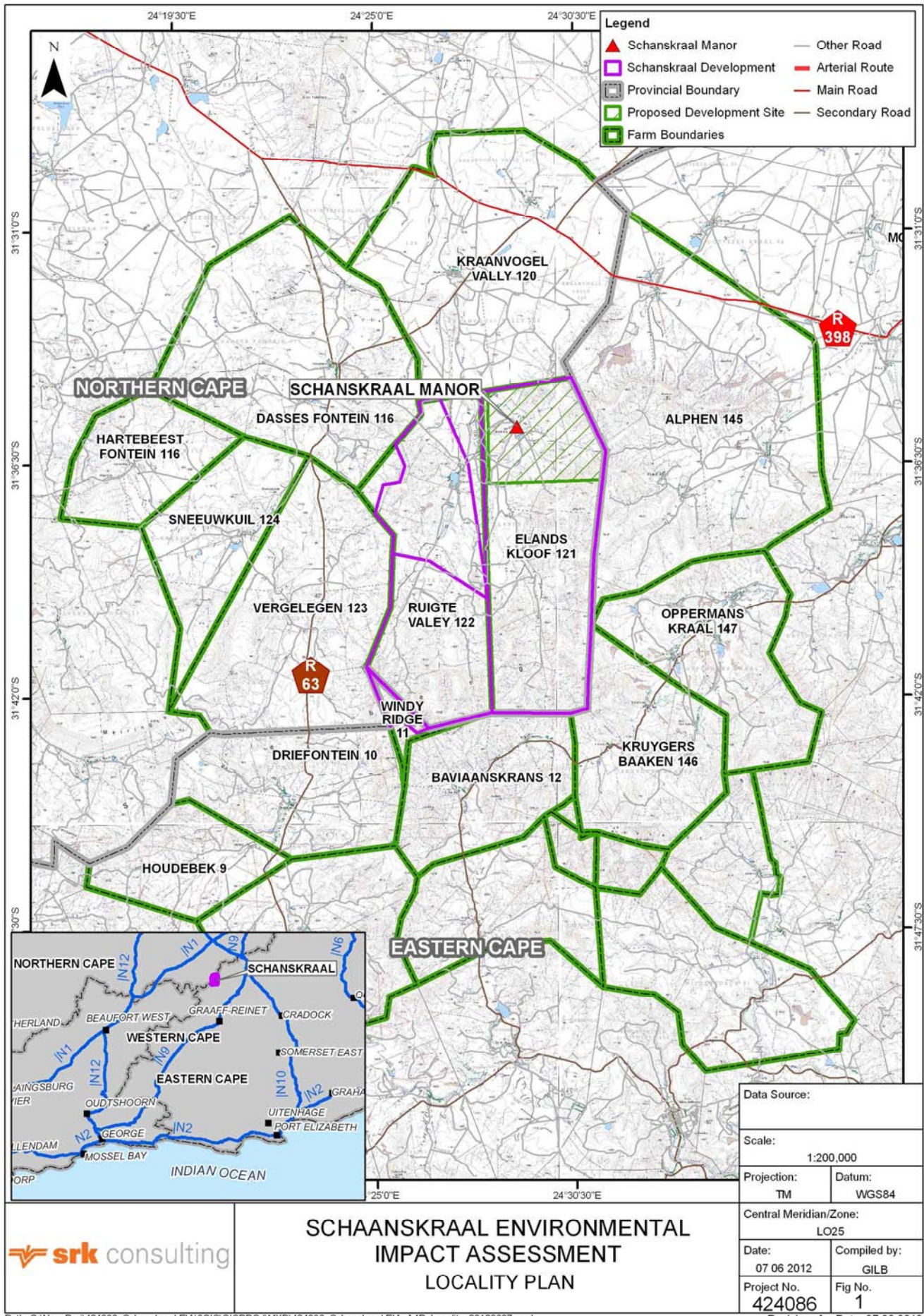


Figure 1: Schanskraal Sporting Estate Locality Map

*GN718: B11 The construction of facilities for activities listed in Category B of GN718.*

The proponent is therefore required to obtain an EA in terms of NEMA and a Waste Management Licence in terms of NEMWA, and to undertake a S&EIR process to inform the authority's decision.

### 3 OBJECTIVES OF THE SCOPING REPORT

The key objectives of the Scoping Study and the Scoping Report are to:

- Inform stakeholders in more detail of the proposed activity and S&EIR process;
- Identify feasible project alternatives that should be investigated in the impact assessment phase;
- Identify areas of likely impact and environmental issues that require further investigation in impact assessment;
- Develop terms of reference for specialist studies to be undertaken in the impact assessment phase; and
- Provide stakeholders with the opportunity to participate effectively in the process and identify any issues and concerns associated with the proposed activity.

Once Scoping has been completed, the impact assessment phase will commence. The overall aim of the impact assessment phase is to assess the significance of potential impacts and to determine measures to mitigate the negative impacts and enhance the benefits (or positive impacts) of the proposed project.

### 4 OVERVIEW OF THE PROJECT AREA

The Elands Kloof property is one of three farms, together measuring ~13 000 ha and collectively known as "Schanskraal Farm" (the farm) owned by Ranor.

The Elands Kloof property is 6 689ha in size and is located in the Ubuntu Local and Pixley ka Seme District Municipalities, wholly within the Northern Cape Province, approximately 60km south-east of Richmond (see Figure 1), on the northern flank of the Sneeuwberg Mountain Range. The eastern and southern farm boundaries lie on the provincial border with the Eastern Cape.

Livestock (cattle and sheep) farming is the predominant agricultural activity at the farm, while the farm is also host to other fauna such as kudu, leopard, gemsbok, springbok, blesbok, zebra, klipspringer, steenbok, caracal, aardwolf, baboons and an abundance of birdlife (~150 species).

The farm is in a remote location and not visible from any major or scenic transport routes.

The Elands Kloof River (and its tributaries) is located on the farm and is classified as non-perennial (Department of Water Affairs, 2004). There are numerous other small episodic streams on the site, three small wetland / dam areas have been constructed.

Land use in the area in the vicinity of Schanskraal Farm is strongly informed by the regional climate, particularly the low rainfall and consequent water scarcity. The area is largely agricultural, mostly low intensity sheep farming. Since the carrying capacity of the land is low, farms in the area are generally large. Most farms are characterised by a homestead and a limited number of outbuildings, including labourers' cottages. Some of the surrounding farms also offer guest accommodation as secondary income streams.

### 5 PROJECT DESCRIPTION

Ranor proposes to establish a residential estate and sports facilities in a ~2 000 hectare portion of the northern section of the Elands Kloof farm (Figure 1). The residential component of the development would comprise 57 residential units, each constructed on individual plots of 4 000 m<sup>2</sup>. Each residence will have a footprint restricted to ~550 m<sup>2</sup>. Plots will be located in 5 clusters situated within the natural contours of the landscape and be restricted to 4 000m<sup>2</sup> each. The total development footprint will be less than 100 hectares, including sports facilities.

At present, the Schanskraal Farm is host to two guest lodges:

- The Manor House (including conference facilities); and
- The Burgersrust Lodge.

These facilities would be retained and upgraded as part of the Schanskraal Sporting Estate Development.

Existing outdoor recreational facilities at the farm include: freshwater fishing, equestrian, horse riding, mountain biking, hiking, quad-biking, archery and target shooting at a range, bird hunting (in season) and plain game culling / hunting. The facilities and infrastructure proposed would complement the existing recreational facilities at the farm.

A staff community precinct is also proposed as part of the Development, and will comprise ten new two-bedroom houses for general staff and two three-bedroom houses to be used as management quarters (two three bedroom houses). Additionally, sports facilities and a small primary school will be built for the staff, and surrounding rural community.

The Developers propose that the following additional recreational facilities be constructed:

- Nine hole golf course and driving range;

- Sporting clay arena; and
- Tennis courts.

**6 PUBLIC PARTICIPATION**

Public participation is a key component of the EIA process and is being undertaken in accordance with the requirements of the EIA Regulations. The public participation activities related to the Scoping phase are summarised in Table 1 below.

**Table 1: Public participation activities during Scoping**

Activity	Date
<b>Planned activities:</b>	
Scoping reports issued to authorities	18 - 20 June 2012
Newspaper advertisement in Die Burger and Die Noordkaap announcing the commencement of the EIA process and inviting stakeholders to register	20 June 2012
Site posters announcing the EIA and public consultation process at Schanskraal and in Richmond	20 June 2012
Release of the Scoping Report for public comment	20 June 2012
One-on-one meetings	16 – 20 July 2012
40-day public comment period	20 June 2012 – 30 July 2012

**7 KEY ISSUES AND POTENTIAL IMPACTS**

Based on the professional experience of the EIA team the following key environmental issues – potential negative impacts and potential benefits – have been identified:

- Terrestrial and aquatic ecology – potential loss of faunal and floral species associated with construction and operations phases of the development (including the impacts associated with the possible depletion of the groundwater resource and physical encroachment into surface water resources), and possible cross-subsidy from the new development to continued on-site land restoration projects;
- Socio-economic – possible socio-economic costs and benefits of the proposed development to the wider community in the form of job creation, increased tourism, change to farm values, decreased water supply as well as the provision of community services (e.g. housing and education) and infrastructure;
- Archaeological – potential impacts on archaeological resources at the site as a result of construction of housing units and sports facilities;
- Visual and sense of place – loss of the current sense of place as well as potential visual impacts resulting from

the elevated position of housing clusters and expanse of the golf course (including possible impacts on regional cultural heritage);

- Aesthetic – potential impact of noise (as a result of traffic and construction machinery) and possible dust generation during the construction phase; and odours from package plants during the operation phase; and
- Land use – loss of agricultural land and impact on agriculture in the area.

**8 PLAN OF STUDY FOR THE EIA**

To address the key issues and potential impacts identified thus far, specialist studies will be undertaken during the Impact Assessment phase of this EIA. Certain issues will be addressed by SRK with input from the proponent’s project team (planners, engineers and traffic specialists) and do not warrant specialist investigations.

The proposed specialist studies to be undertaken for the EIA are as follows:

- Terrestrial and aquatic ecology impact assessment; and
- Groundwater impact assessment.

Specialists will be required to provide detailed baseline information and to identify and assess the potential impacts of the proposed project within their particular field of study. In addition, specialists will be required to identify practicable mitigation and optimisation measures to avoid or minimise potential negative impact and/or enhance any benefits. SRK’s standard impact rating methodology will be employed in the assessment of impacts.

Once specialist studies have been completed, the results will be collated into an EIR and Environmental Management Programme (EMP). The EIR and EMP will be released for public comment through notifications to registered IAPs. Key authorities will also be consulted as part of the process.

All comments received will be incorporated into a Comments Report which will be appended to the EIR. The EIR and EMP will then be submitted to the NCDENC and DEA for their consideration in decision-making.

## 9 WAY FORWARD

The Scoping Report may be amended based on comments received from IAPs. Copies of the complete SR are available for public review at the following locations:

- The Victoria West Municipal Office (Richmond);
- Ntsikelelo Tida Library (Richmond); and
- SRK's Cape Town office; and
- SRK's website: [www.srk.co.za](http://www.srk.co.za) – click on the 'Public Documents' link.

One-on-one meetings will be held with neighbouring property owners and other interested parties between 16 and 20 July 2012. At these meetings the information presented in the SR will be discussed and additional concerns and issues can be raised. Please contact Matthew Law (contact details below) to arrange a meeting should you wish to do so in the period allocated for these meetings. Alternatively, you can send written comment on the proposed development to **Matthew Law** at SRK Consulting:

Postnet Suite #206	Email: <a href="mailto:mlaw@srk.co.za">mlaw@srk.co.za</a>
Private Bag X18	Tel: 021 659 3060
Rondebosch	Fax: 021 685 7105
7701	

Comments must reach SRK no later than **Monday, 30 July 2012** to be included in the report.

Issues and concerns identified in the Scoping Study will assist in focussing the impact assessment phase, and will be used to refine the terms of reference for specialist investigations. The public is therefore urged to submit comment, as these will be reflected in the Scoping Report submitted to NCDENC and the DEA, as well as in the terms of reference for the EIA. After the comment period, the Scoping Report will be submitted to NCDENC and the DEA for their consideration. If substantial changes are made to the Scoping Report, a Final Scoping Report will be released for further public review.



## Profile and Expertise of EAPs

SRK Consulting (South Africa) (Pty) Ltd has been appointed by Ranor Karoo Farm Holdings cc as the independent consultants to undertake the EIA process required in terms of the National Environmental Management Act 107 of 1998 (NEMA).

SRK Consulting comprises over 1 100 professional staff worldwide, offering expertise in a wide range of environmental and engineering disciplines. SRK's Cape Town environmental department has a distinguished track record of managing large environmental and engineering projects and has been practicing in the Western Cape since 1979. SRK has rigorous quality assurance standards and is ISO 9001 accredited.

As required by NEMA, the qualifications and experience of the key individual practitioners responsible for this project are detailed below.

**Project Director:** Christopher Dalglish, BBusSc (Hons); MPhil (EnvSci)

*Certified with the Interim Board for Environmental Assessment Practitioners South Africa (CEAPSA)*

Chris Dalglish is a Partner at SRK Consulting and the Head of the Environmental Department in Cape Town. He has over 17 years experience as an environmental consultant working on a broad range of EIA, auditing, environmental planning and management, public consultation and environmental management system projects. Chris's experience includes managing and co-ordinating major EIAs throughout Southern Africa and South America in the mining, energy, land-use planning and development, water and waste management, and industrial sectors.

**Project Consultant:** Matthew Law, MCom Environmental Economics

Matthew has been practicing as an Environmental Management Consultant since early in 2007. Matthew has significant experience in Environmental Impact Assessment (throughout Southern Africa), the drafting of Environmental Management Plans and as an Environmental Control Officer. Matthew has managed a variety of projects, predominantly in the petrochemical industry.

## Statement of SRK Independence

Neither SRK nor any of the authors of this Report have any material present or contingent interest in the outcome of this Report, nor do they have any pecuniary or other interest that could be reasonably regarded as being capable of affecting their independence or that of SRK.

SRK has no prior association with Ranor Karoo Farm Holdings cc in regard to the development that is the subject of this Report. SRK has no beneficial interest in the outcome of the assessment which is capable of affecting its independence.

SRK's fee for completing this Report is based on its normal professional daily rates plus reimbursement of incidental expenses. The payment of that professional fee is not contingent upon the outcome of the Report.

# Table of Contents

Executive Summary .....	ii
Profile and Expertise of EAPs .....	viii
Statement of SRK Independence.....	viii
Disclaimer.....	xii
List of Acronyms and Abbreviations.....	xiii
<b>1 Introduction .....</b>	<b>1</b>
1.1 Purpose of the Report .....	1
1.2 Assumptions and Limitations .....	1
1.3 Structure of this Report .....	1
<b>2 Legal Requirements .....</b>	<b>3</b>
2.1 South African Legislation .....	3
2.1.1 National Environmental Management Act 107 of 1998, as amended.....	3
2.1.2 NEMA EIA Regulations, 2010 .....	4
2.1.3 The National Environmental Management Waste Act 59 of 2008 .....	5
2.1.4 The National Heritage Resources Act 25 of 1999.....	6
2.1.5 The National Water Act 36 of 1998 .....	7
2.2 Planning Policy Framework .....	8
2.2.1 Act 7 of 1998: Northern Cape Planning and Development Act.....	8
2.2.2 Act 70 of 1970: Subdivision of Agricultural Land Act .....	8
2.2.3 Ordinance 15 of 1985: Land Use Planning Ordinance of the Western Cape .....	8
2.3 Environmental Process .....	8
<b>3 Site Description, Surrounding Land Use and Project Description.....</b>	<b>13</b>
3.1 Site Description .....	13
3.2 Surrounding Land Use .....	15
3.3 Project Motivation.....	15
3.4 Project Description .....	16
3.5 Project Alternatives .....	20
3.5.1 Location Alternatives .....	20
3.5.2 Activity Alternatives .....	20
3.5.3 Technology Alternatives .....	20
3.5.4 Layout Alternatives.....	20
3.5.5 The No Go Alternative.....	21
3.6 Need and Desirability .....	21
3.6.1 Analysis of Need and Desirability of the Schanskraal Development .....	21
<b>4 Affected Environment .....</b>	<b>23</b>
4.1 Biophysical Environment.....	23
4.1.1 Flora .....	23
4.1.2 Fauna .....	23

4.1.3	Climate .....	24
4.1.4	Topography and Geology.....	27
4.1.5	Hydrology .....	27
4.1.6	Geohydrology .....	27
4.1.7	Soils and Land Capability.....	29
4.2	Socio-economic Environment .....	29
4.2.1	Regional Context.....	29
4.3	Historical and Cultural Environment.....	35
4.3.1	Cultural Landscapes and Sense of Place .....	36
<b>5</b>	<b>Stakeholder Engagement .....</b>	<b>37</b>
5.1	Objectives and Approach to Stakeholder Engagement.....	37
5.2	Stakeholder Engagement Activities .....	37
5.2.1	Applications .....	37
5.3	Newspaper Advertisements and Posters.....	38
5.4	Identification of key Stakeholders and IAPs .....	38
5.5	Notification of Scoping Report for Public Comment.....	38
<b>6</b>	<b>Plan of Study for the EIA .....</b>	<b>40</b>
6.1	Potential Issues and Impacts .....	40
6.2	Description of the proposed Impact Assessment Phase .....	40
6.2.1	Consultation with the relevant authorities .....	41
6.2.2	Specialist Studies .....	41
6.2.3	Compilation of a Draft Environmental Impact Assessment Report.....	42
6.2.4	Stakeholder Engagement.....	42
6.2.5	Submission of the Final EIAR and EMP to NCDENC and DEA.....	42
6.3	Specialist Study Terms of Reference.....	42
6.3.1	General Terms of Reference.....	42
6.3.2	ToR for Terrestrial and Aquatic Ecology Specialist Study .....	44
6.3.3	ToR for Groundwater Specialist Study.....	44
6.3.4	ToR for Socio-economic Comment .....	45
6.3.5	ToR for Agricultural Comment.....	45
6.3.6	ToR for Visual Comment .....	45
6.4	Impact Rating Methodology .....	45
<b>7</b>	<b>Findings and Recommendations .....</b>	<b>48</b>
7.1	Key Findings .....	48
7.2	Way Forward.....	49
<b>8</b>	<b>References .....</b>	<b>51</b>
	<b>Appendices .....</b>	<b>52</b>
	<b>Appendix A: Application for Environmental Authorisation .....</b>	<b>53</b>
	<b>Appendix B: Application for Waste Management Licence.....</b>	<b>54</b>
	<b>Appendix C: Initial Database of IAPs.....</b>	<b>55</b>

## List of Tables

Table 2-1: Activities undertaken during the Initiation Scoping Phase of the Schanskraal EIA .....	11
Table 4-1: Temperature data for De Aar - based on monthly averages for the 30-year period 1961 – 1990 ..	26
Table 4-2: Dependency Ratio for the Ubuntu Local Municipality Population .....	31
Table 5-1: Activities to be undertaken during the Scoping Phase.....	37
Table 6-1: Criteria to be used to determine the Consequence of the Impact.....	46
Table 6-2: Method to be used to determine the Consequence Score.....	46
Table 6-3: Probability Classification .....	46
Table 6-4: Impact significance ratings .....	46
Table 6-5: Impact status and confidence classification .....	46

## List of Figures

Figure 2-1: The S&EIR Process .....	10
Figure 3-1: Schanskraal Sporting Estate - Locality Map .....	14
Figure 3-2: Schanskraal Development Layout .....	19
Figure 4-1: Schanskraal recorded annual precipitation since 1916 .....	24
Figure 4-2: Mean annual precipitation in the Schanskraal study area .....	25
Figure 4-3: Physiographic setting of the study area .....	28
Figure 4-4: Population of the Ubuntu Local Municipality .....	30
Figure 4-5: Age Profile for the Ubuntu Local Municipality Population .....	30
Figure 4-6: Education Levels in the Ubuntu Local Municipality for Persons Over 20 Years Old in 2007 .....	31
Figure 4-7: Monthly Personal Income Levels in the Ubuntu Local Municipality .....	32
Figure 4-8: Household Types in the Ubuntu Local Municipality .....	33
Figure 4-9: Household Sizes in the Ubuntu Local Municipality .....	33
Figure 4-10: Contribution of Various Economic Sectors in the Ubuntu Local Municipality GVA-R.....	34
Figure 4-11: Employment in Ubuntu Local Municipality Population .....	35
Figure 4-12: Sectoral Employment in the Ubuntu Local Municipality .....	35

## Disclaimer

The opinions expressed in this Report have been based on the information supplied to SRK Consulting (South Africa) (Pty) Ltd (SRK) by Ranor Karoo Farm Holdings (Ranor). The opinions in this Report are provided in response to a specific request from Ranor to do so. SRK has exercised all due care in reviewing the supplied information. Whilst SRK has compared key supplied data with expected values, the accuracy of the results and conclusions from the review are entirely reliant on the accuracy and completeness of the supplied data. SRK does not accept responsibility for any errors or omissions in the supplied information and does not accept any consequential liability arising from commercial decisions or actions resulting from them. Opinions presented in this report apply to the site conditions and features as they existed at the time of SRK's investigations, and those reasonably foreseeable. These opinions do not necessarily apply to conditions and features that may arise after the date of this Report, about which SRK had no prior knowledge nor had the opportunity to evaluate.

## List of Acronyms and Abbreviations

Note the units of measurement are not abbreviated in text.

DEA	National Department of Environmental Affairs
DWA	Department of Water Affairs
EA	Environmental Authorisation
EAP	Environmental Assessment Practitioner
EIA	Environmental Impact Assessment
EIAR	Environmental Impact Assessment Report
EIR	Environmental Impact Reporting
EMP	Environmental Management Programme
FEI	Fédération Equestre Internationale
GN	Government Notice
GVA-R	Regional Gross Value Added
ha	Hectares
IAP	Interested and Affected Party
IEM	Integrated Environmental Management
km	Kilometres
km <sup>2</sup>	Square kilometres
mamsl	Meters above mean sea level
MAP	Mean annual precipitation
mm/a	Millimetres per annum
NBKB	Ngwao Boswa Kapa Bokoni
NCDENC	Northern Cape Department of the Environment and Nature Conservation
NEMA	National Environmental Management Act 107 of 1998 as amended
NEMWA	National Environmental Management Waste Act 59 of 2008
NHRA	National Heritage Resources Act 25 of 1999
NID	Heritage Notification of Intent to Develop
NWA	National Water Act 36 of 1998
Ranor	Ranor Karoo Farm Holdings cc
S&EIR	Scoping and Environmental Impact Reporting
SAHRA	South African National Heritage Resources Agency
SR	Scoping Report
SRK	SRK Consulting (South Africa) (Pty) Ltd
WML	Waste Management Licence

# 1 Introduction

## 1.1 Purpose of the Report

In terms of relevant legislation, construction and operation of the Schanskraal Development may not commence prior to a suite of authorisations (see Section 2). This draft report has been compiled in support of these applications and will be released to provide an opportunity for stakeholders to comment on the Impact Assessment Phase of the EIA, prior to compilation and submission of the final report to the relevant authorities for approval.

## 1.2 Assumptions and Limitations

As is standard practice, the report is based on a number of assumptions and is subject to certain limitations. These are as follows:

- It is assumed that information provided by Ranor, other consultants and specialists is accurate;
- Sufficient information is available for the purposes of Scoping, though a more detailed project description will be required and presented in the Environmental Impact Assessment Report (EIAR);
- A limitation is the relative dearth of socio-economic information for the Ubuntu Local Municipality; and
- Detailed assessment of the potential positive and negative environmental impacts of the proposed development will only be undertaken during the Impact Assessment Phase.

Notwithstanding the above limitations, SRK is confident that these assumptions and limitations do not compromise the overall findings of this report.

## 1.3 Structure of this Report

This report describes the proposed activity and its context, details the public participation process followed, presents the results of the Scoping Phase and sets out the plan of study for the Impact Assessment Phase. The report consists of the following sections:

### **Section 1: Introduction**

Provides an introduction and background to the proposed project.

### **Section 2: Legal Requirements**

Provides a brief summary and interpretation of the relevant legislation and outlines the approach to the study.

### **Section 3: Project Description**

Describes the location and current status of the site and provides a brief summary of the surrounding land uses; and provides background to and a motivation for the proposed project.

### **Section 4: Description of the Affected Environment**

Briefly describes the biophysical and socio-economic receiving environments that will be considered in the assessment of project impacts.

### **Section 5: Public Participation**

Details the approach followed in public participation.

**Section 6: Plan of Study for the EIA**

Describes the anticipated impacts associated with the development, outlines the methodology that will be adopted in assessing the potential impacts during the Impact Assessment Phase, and identifies the specialist studies that are required and proposes the preliminary terms of reference for these studies.

**Section 7: Findings and Recommendations**

Summarises the key findings of the Scoping Phase and makes recommendations for the Impact Assessment Phase of the EIA. This section also outlines the way forward in the S&EIR process.



## 2 Legal Requirements

There are a number of regulatory requirements at local, provincial and national level with which the proposed development will have to conform. Some of the key legal requirements include the following:

- National Environmental Management Act 107 of 1998, as amended;
- Environmental Impact Assessment (EIA) Regulations 2006, promulgated in terms of NEMA;
- The National Environmental Management Waste Act 59 of 2008;
- National Heritage Resources Act 25 of 1999 (NHRA);
- Northern Cape Planning and Development Act 7 of 1998;
- Subdivision of Agricultural Land Act 70 of 1970; and
- Land Use Planning Ordinance 15 of 1985 of the Western Cape.

A brief summary of the SRK's understanding of the relevant Acts and Regulations which are applicable to this study is provided below. Note that other legislative requirements may also pertain to the proposed development. As such, the summary provided below is not intended to be definitive or exhaustive, and serves to highlight key environmental legislation and obligations only.

### 2.1 South African Legislation

#### 2.1.1 National Environmental Management Act 107 of 1998, as amended

NEMA establishes a set of principles, which all authorities have to consider when exercising their powers. These include the following:

- Development must be sustainable;
- Pollution must be avoided or minimised and remedied;
- Waste must be avoided or minimised, reused or recycled;
- Negative impacts must be minimised; and
- Responsibility for the environmental consequences of a policy, project, product or service applies throughout its life cycle.

Section 28(1) states that "*every person who causes, has caused or may cause significant pollution or degradation of the environment must take reasonable measures to prevent such pollution or degradation from occurring, continuing or recurring*". If such degradation/pollution cannot be prevented, then appropriate measures must be taken to minimise or rectify such pollution. These measures may include:

- Assessing the impact on the environment;
- Informing and educating employees about the environmental risks of their work and ways of minimising these risks;
- Ceasing, modifying or controlling actions which cause pollution/degradation;
- Containing pollutants or preventing movement of pollutants;
- Eliminating the source of pollution; and
- Remedying the effects of the pollution.

### **Legal requirements for this project:**

Ranor has a responsibility to ensure that the proposed activities and the EIA process conform to the principles of NEMA. The proponent is obliged to take actions to prevent pollution or degradation of the environment in terms of Section 28 of NEMA, and to ensure that the environmental impacts associated with the project are considered, and mitigated where possible.

### **2.1.2 NEMA EIA Regulations, 2010**

Sections 24 and 44 of NEMA make provision for the promulgation of regulations that identify activities which may not commence without an environmental authorisation issued by the competent authority, which in the Northern Cape is the Department of the Environment and Nature Conservation (NCDENC). In this context, EIA Regulations contained in our Government Notices (GN) in terms of NEMA<sup>1</sup> came into force on 30 July 2010.

GN R543 lays out two alternative EIA processes. Depending on the type of activity that is proposed, either a Basic Assessment process or a Scoping and Environmental Impact Reporting (S&EIR) process is required to obtain Environmental Authorisation (EA). GN 544 and GN 546 list activities that require a Basic Assessment process, while GN 545 lists activities that require S&EIR. The regulations for both alternative processes stipulate that:

- Public participation must be undertaken at various stages of the assessment process;
- The assessment must be conducted by an independent EAP;
- The relevant authorities must respond to applications and submissions within stipulated time frames;
- Decisions taken by the authorities can be appealed by the proponent or any other Interested and Affected Party (IAP); and
- A draft Environmental Management Programme (EMP) must be compiled and released for public review.

GN R543 sets out the procedures to be followed and content of reports compiled during the Basic Assessment and S&EIR processes.

GN R543 also makes provision for appeal against any decision issued by the relevant authorities<sup>2</sup>. In terms of the Regulations, a notice of intention to appeal has to be lodged with the relevant authority in writing within twenty days of the decision. The appeal must be lodged within 30 days of the lapsing of the 20 days allowed for submission of the notice of intention to appeal.

### **Legal requirements for this project**

*The proposed Schanskraal Sporting Estate may include<sup>3</sup> a number of activities that are listed in GN 544, namely:*

*GN 544 - 9 The construction of infrastructure for the transport of water, sewage or stormwater exceeding 1000m in length.*

*GN 544 - 11 The construction of infrastructure within 32 meters of a water course.*

<sup>1</sup> GN 543, GN 544, GN 545 and GN 546 from 30 July 2010, promulgated in terms of section 24(5) of NEMA.

<sup>2</sup> Sections 58 – 66.

<sup>3</sup> The final list of activities to be applied for will be confirmed during the detailed design phase.

*GN 544 - 18 The infilling or deposition of any material of more than 5 cubic metres or the removal of any material from a watercourse.*

*The proposed Schanskraal Sporting Estate will include the following activity that is listed in GN 545 namely:*

*GN 545 – 15 The physical alteration of 20 hectares or more of undeveloped land for residential and recreational purposes.*

*The proposed Schanskraal Sporting Estate may include a number of activities that are listed in GN 546, namely:*

*GN 546 – 11 The construction of tracks or routes (excluding the conversion of existing tracks) for the recreational use of motor powered vehicles within areas of indigenous vegetation outside urban areas (in the Northern and Eastern Cape).*

*GN 546 – 14 The clearance of 5 hectares or more of vegetation which constitutes 75% or more of indigenous vegetation outside urban areas in the Northern Cape.*

*As such, the proponent is obliged to apply for EA for these activities and to undertake a S&EIR process in support of the application, in accordance with the procedure stipulate in GN 543 under NEMA.*

### **2.1.3 The National Environmental Management Waste Act 59 of 2008**

NEMWA aims to (amongst other things) regulate waste management in order to protect health and the environment by providing reasonable measures for the prevention of pollution and ecological degradation and for securing ecologically sustainable development.

The Act makes provision for the listing of waste management activities that have, or are likely to have, a detrimental effect on the environment and may not be undertaken without a Waste Management Licence (WML) issued by the competent authority. NEMWA must be read in conjunction with NEMA (see above) and the principles of NEMA are applicable to the application process for waste management licensing.

Two categories of listed waste management activities were published in terms of NEMWA in GN 718 on 3 July 2009. A person wishing to undertake:

- an activity listed under Category A, must conduct a Basic Assessment process, or
- an activity listed under Category B, must conduct a S&EIR process,

as set out in the NEMA EIA Regulations, 2010 (see above), as part of the WML application process.

NEMA makes provision for a single environmental assessment process in instances where both EA and WML applications are required.

#### **Legal requirements for this project**

*The proposed Schanskraal Sporting Estate development includes the following activities that are listed under Category A in GN R718:*

- (1) *The storage, including the temporary storage, of general waste at a facility that has the capacity to store in excess of 100m<sup>3</sup> of general waste at any one time, excluding the storage of waste in lagoons.*

(11) *The construction of facilities for activities listed in Category A of GN 718.*

*The proposed development also includes the following activities that are listed under Category B in GN R718<sup>4</sup>:*

(5) *The treatment of hazardous waste using any form of treatment regardless of the size or capacity of such a facility to treat such waste.*

(7) *The treatment of effluent, wastewater or sewage with an annual throughput capacity of 15 000 cubic meters or more.*

(11) *The construction of facilities for activities listed in Category B of GN 718.*

*The proponent is therefore obliged to apply for a WML for these activities and to undertake a S&EIR process (in accordance with the procedure stipulated in GN R543 under NEMA) in support of the application.*

## **2.1.4 The National Heritage Resources Act 25 of 1999**

The protection and management of South Africa's heritage resources are controlled by the National Heritage Resources Act 25 of 1999 (NHRA). The enforcing authority for this act is the South African National Heritage Resources Agency (SAHRA). In the Northern Cape, SAHRA has delegated this authority to Ngwao Boswa Kapa Bokoni (NBKB). In terms of the Act, historically important features such as graves, trees, archaeological artefacts/sites and fossil beds are protected. Similarly, culturally significant symbols, spaces and landscapes are also afforded protection.

Section 38 of the NHRA requires that any person who intends to undertake certain categories of development must notify SAHRA and/or NBKB at the very earliest stage of initiating such a development and must furnish details of the location, nature and extent of the proposed development. SAHRA has designed a Notification of Intent to Develop (NID) to assist the developer in providing the necessary information to enable SAHRA/NBKB to decide on the level of heritage assessment required.

Section 38 also makes provision for the assessment of heritage impacts as part of an EIA process and indicates that, if such an assessment is deemed adequate, a separate Heritage Impact Assessment is not required (as is assumed to be the case for this development – see Section 6.2.2). There is however the requirement in terms of Section 38 (8) for the consenting authority (in this case the NCDENC) to ensure that the evaluation of impacts on the heritage resources fulfils the requirements of the relevant heritage resources authority (in this case SAHRA / NBKB), and that the comments and recommendations of the heritage resources authority are taken into account prior to the granting of the consent.

### **Legal requirements for this project**

*The proposed Schanskraal Sporting Estate includes a number of activities that are identified in the NHRA as requiring notification to SAHRA and/or NBKB, namely:*

*Section 38 (1) (a): Construction of a road, wall, powerline, pipeline, canal or other similar form of linear development or barrier over 300m in length;*

---

<sup>4</sup> This activity applies to the possible construction of on-site sewerage package plants and pump stations as part of the proposed development (see Section 3.3).

*Section 38 (1) (c) (ii): Any development or other activity which will change the character of a site exceeding 5 000m<sup>2</sup> in extent; and*

*Section 38 (1) (d): Rezoning of a site exceeding 10 000 m<sup>2</sup>.*

*Ranor is thus required to submit a NID to NBKB notifying them of these proposed activities and then undertake any assessments deemed necessary by NBKB.*

## **2.1.5 The National Water Act 36 of 1998**

Water use in South Africa is controlled by the National Water Act 36 of 1998 (NWA). The enforcing authority is the Department of Water Affairs (DWA). The NWA recognises that water is a scarce and unevenly distributed national resource in South Africa. Its provisions are aimed at achieving sustainable and equitable use of water to the benefit of all users and to ensure protection of the aquatic ecosystems associated with South Africa's water resources. The provisions of the Act are aimed at discouraging pollution and waste of water resources.

In terms of the Act, a land user, occupier or owner of land where an activity that causes or has the potential to cause pollution of a water resource has a duty to take measures to prevent pollution from occurring. If these measures are not taken, the responsible authority may do whatever is necessary to prevent the pollution or remedy its effects, and to recover all reasonable costs from the responsible person.

Section 21 of the NWA specifies a number of water uses, including taking water from a water resource, the storing of water, impeding or diverting the flow of water in a watercourse, discharging waste or water containing waste into a water resource through a pipe, canal, sewer, sea outfall or other conduit, disposing of waste in a manner which may detrimentally impact on a water resource, disposing in any manner of water which contains waste from, or which has been heated in, any industrial or power generation process and altering the bed, banks, course or characteristics of a watercourse. These water uses require authorisation in terms of Section 22 (1) of the Act, unless it is listed in Schedule 1 of the NWA, is an existing lawful use, falls under a General Authorisation issued under section 39 or if the responsible authority waives the need for a licence.

Schanskraal falls within Quaternary Catchment D32A. The General Authorisation for Quaternary Catchment D32A is 75 m<sup>3</sup> per hectare per annum (DWA, 2004), which means that 486 489 m<sup>3</sup>/a of groundwater can be abstracted from the Roelofsfontein property and 464,516 m<sup>3</sup>/a from the Schanskraal property without the need to apply for a water use license (WUL). As water demand for the development is anticipated to be ~229 300 m<sup>3</sup> per annum, a WUL licence is not required for abstraction. However, if water must be transferred from one property to another a WUL is required. The need for water transfer, and therefore a WUL, is a factor of a) the ultimate water demand requirements of the proposed development, b) groundwater recharge potential and sustainability, and c) borehole localities, and will therefore be confirmed during the EIR Phase.

### ***Legal requirements for this project***

*Ranor has a responsibility to implement measures to prevent pollution of any water resources during construction and operation (and potentially decommissioning although this is not anticipated) of the sporting estate.*

## **2.2 Planning Policy Framework**

Northern Cape regional and provincial planners were consulted regarding the proposed development during a site meeting on 11 March 2011. During this meeting local government and provincial planners indicated their principal support for the development.

The following planning legislation will be addressed in the application to the local authority for development rights:

### **2.2.1 Act 7 of 1998: Northern Cape Planning and Development Act**

Since the democratic elections of 1994, the Northern Cape Province further approved a local planning act and promulgated the Northern Cape Planning and Development Act, Act 7 of 1998. Development applications, rezonings and subdivisions have to be submitted and processed in terms of this act.

### **2.2.2 Act 70 of 1970: Subdivision of Agricultural Land Act**

An application will also have to be submitted to the Department of Agriculture for a permit to subdivide agricultural land in terms of the above-mentioned act.

### **2.2.3 Ordinance 15 of 1985: Land Use Planning Ordinance of the Western Cape**

This is the original planning ordinance of the Western Cape that came into effect on the 1st of July 1986. Application will thus have to be made in terms of Section 17 and 24 of this Ordinance for the Rezoning of Agricultural Land for residential purposes and well as the subdivision thereof into smaller erven to facilitate the sale and transfer of ownership of these subdivided portions to individual owners.

Further, the subject property is still zoned in terms of the Section 8 Scheme Regulations and is currently zoned Agricultural Zone 1. The subject property will thus have to be rezoned from this zoning to the most appropriate alternative zoning to allow residential use of the units that will be created by the approval of the proposed applications.

## **2.3 Environmental Process**

The general approach to this study is guided by the principles of Integrated Environmental Management (IEM). In accordance with the IEM Information Series (DEAT, 2004), an open, transparent approach, which encourages accountable decision-making, has been adopted. The underpinning principles of IEM require:

- Informed decision making;
- Accountability for information on which decisions are made;
- A broad interpretation of the term "environment";
- An open participatory approach in the planning of proposals;
- Consultation with interested and affected parties;
- Due consideration of alternatives;
- An attempt to mitigate negative impacts and enhance positive impacts of proposals;

- An attempt to ensure that the social costs of development proposals are outweighed by the social benefits;
- Democratic regard for individual rights and obligations;
- Compliance with these principles during all stages of the planning, implementation and decommissioning of proposals; and
- The opportunity for public and specialist input in the decision-making process.

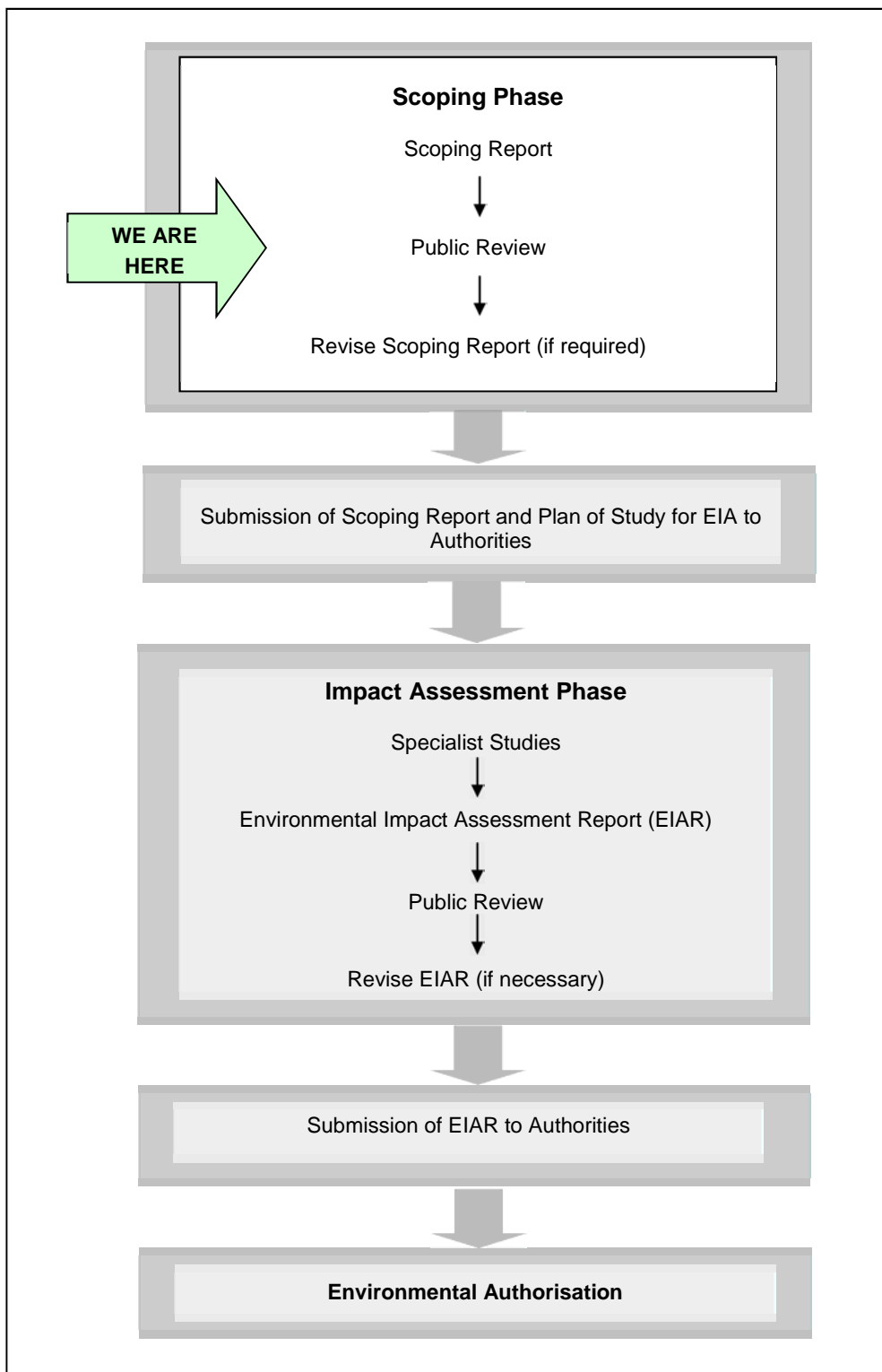
Managing EIA processes to satisfy the requirements of NEMA, the EIA Regulations 2010 and, NEMWA can be challenging. The regulatory authorities are committed to the principle of cooperative governance and in order to give effect to this principle only a single S&EIR process is required. To this end a single EIAR (this report) will be compiled. The EIAR will be submitted to:

- NCDENC in support of the application for environmental authorisation of NEMA listed activities; and
- DEA in support of the application for a WML.

The study will also be guided by the requirements of the NEMA EIA Regulations, 2010 (see Section 2.1.2), which are more specific in their focus and define the detailed approach to the S&EIR process, as well as relevant guidelines published by the National Department of Environmental Affairs (DEA), including:

- DEA's Draft Companion to the NEMA Environmental Impact Assessment Regulations of 2010 (DEA, 2010); and
- DEA's NEMA Integrated Environmental Management Guideline Series guideline on Public Participation (Guideline 7) (DEA, 2010b).

The EIA process will consist of three phases, namely a brief Initiation Phase, the Scoping Phase (the current phase) and an Impact Assessment EIR Phase (see Figure 2-1 below).



**Figure 2-1: The S&EIR Process**

The overall aim of the Scoping Phase is to determine what the environmental issues and impacts are that require further investigation in the Impact Assessment Phase. More specifically, the objectives of the Scoping Phase of this EIA are to:

- Identify stakeholders and inform them of the proposed activity, feasible alternatives and the S&EIR process;



- Provide stakeholders with the opportunity to participate effectively in the process and identify any issues and concerns associated with the proposed activity;
- Identify areas of likely impact and environmental issues that may require further investigation in the Impact Assessment Phase;
- Develop terms of reference for specialist studies to be undertaken in the Impact Assessment Phase; and
- Produce a Scoping Report for submission to the relevant authorities (in this case, the NCDEC and DEA).

Once Scoping has been completed the Impact Assessment Phase will be undertaken. The overall aim of the Impact Assessment Phase is to assess the significance of potential impacts and to determine measures to mitigate the negative impacts and enhance the benefits or positive impacts of the proposed development. The outcome of the Impact Assessment Phase is an EIAR, for submission to the decision making authorities. Public participation is also an important and integral part the S&EIR process (see Chapter 5).

The activities that are being undertaken as part of the Initiation and Scoping Phases of this S&EIR process are outlined in detail in Table 2-1 below.

**Table 2-1: Activities undertaken during the Initiation Scoping Phase of the Schanskraal EIA**

TASK	OBJECTIVES	REFERENCE	DATES
Submit Application Forms to NCDENC and DEA	Register the application for EA and a WML.	SRK Project No: 424086 – EA Application Form and WML Application Form	June 2011
Compile Scoping Report (SR) (this document) including the Plan of Study for the Impact Assessment Phase	To provide a description of the proposed activity, alternatives and the affected environment, as well as a description of potential environmental issues, and the proposed approach to the Impact Assessment Phase of the project (presented in a Plan of Study).	SRK Report No: 424086/1	June 2011 - October 2011
Advertise commencement of S&EIR process and placement of poster and release Scoping Report for public comment period.	To notify Interested and Affected Parties (IAPs) of the commencement of the S&EIR process. To provide a description of the proposed project and the affected environment, as well as a description of potential environmental issues, and the proposed approach to the Impact Assessment Phase.	SRK Report No: 418696/1	June 2012
Public comment period	To provide stakeholders with the opportunity to review and comment on the results of the Scoping Phase of the EIA.	N/A	June – July 2012
One-on-one meetings	To present the findings of the SR to neighbouring property occupants, to and provide an opportunity for questions and discussion.	N/A	July 2012

Finalise Scoping Report	To record all issues and concerns raised, collate these comments in the final report that will be submitted to NCDENC and DEA for decision-making. And to present the proposed approach to the Impact Assessment Phase of the project (presented in a Plan of Study).	SRK Report No. 424086/2	July 2012
Submit Revised Scoping Report (and public comments) to NCDENC and DEA	To provide NCDENC and DEA with information for acceptance of Plan of Study.	SRK Report No. 418696/2	August 2012

The following chapter provides a description of the project, project alternatives and a motivation for the project (as provided by the proponent). Further details relating to the project description will be provided during the Impact Assessment Phase.

## **3 Site Description, Surrounding Land Use and Project Description**

### **3.1 Site Description**

The Elands Kloof property is one of three farms, together measuring ~13 000 ha and collectively known as “Schanskraal Farm” (the farm) owned by Ranor. The other properties that make up Schanskraal Farm include: Farm No. 122 Ruigte Valey, and Farm No. 11 Windy Ridge (see Figure 3-1). To avoid possible confusion over nomenclature, note that the Schanskraal Sporting Estate will be located and developed exclusively on the Elands Kloof property.

The Elands Kloof property is 6 689ha in size and is located in the Ubuntu Local and Pixley ka Seme District Municipalities, wholly within the Northern Cape Province, approximately 60km south-east of Richmond, on the northern flank of the Sneeuwberg Mountain Range. The eastern and southern farm boundaries lie on the provincial border with the Eastern Cape (see Figure 3-1).

Livestock (cattle and sheep) farming is the predominant agricultural activity at the farm, while the farm is also host to other fauna such as kudu, gemsbok, springbok, blesbok, zebra, klipspringer, steenbok, caracal, aardwolf, baboons and an abundance of birdlife (~150 species).

At present, the farm infrastructure includes two guest lodges (the Manor House and Burgersrust Lodge), stabling and paddocks (the farms secondary commercial activity), conference facilities, an aircraft landing strip, a farm (manager’s) house and four houses for labourers. Existing outdoor recreational activities at the farm include freshwater fishing, horse riding, mountain biking, hiking, quad-biking, archery and target shooting, bird watching and bird hunting (in season) and plain game culling / hunting. These activities and existing facilities will be incorporated into the Schanskraal Sporting Estate development.

Both the Manor House and Burgersrust Lodge are older than 60 years, and therefore have heritage significance. Burgersrust Lodge has noteworthy heritage value as it was built in 1793 and was once home to President Thomas Burgers, a former president of the former Orange Free State. Both buildings have been renovated in recent years.

San rock art as well as a number of sites thought to have been of cultural significance to the San People have been found at Schanskraal (but not on the Elands Kloof Farm).

The Elands Kloof River (and its tributaries) is located on the farm and is classified as non-perennial (Department of Water Affairs, 2004). There are numerous other small episodic streams on the site, three small wetland / dam areas have been constructed, two close to the Burgersrust Lodge, and one close to the Manor House.

The farm is in a remote location and not visible from any major or scenic transport routes.

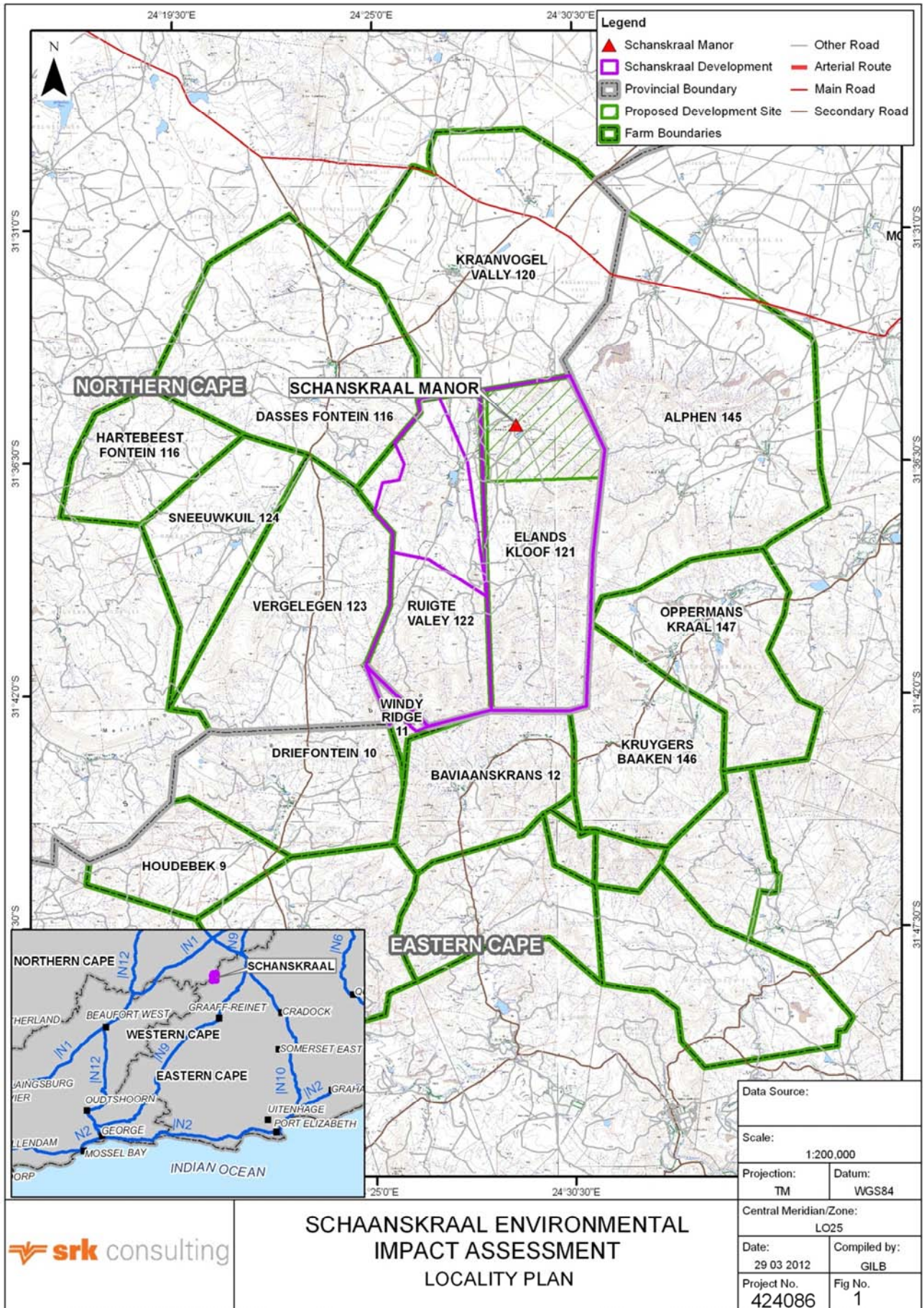


Figure 3-1: Schanskraal Sporting Estate - Locality Map

## 3.2 Surrounding Land Use

The R398 main road, which runs between Richmond and Middleburg, is located to the north of the site (see Figure 3-1). The R63 secondary road runs to the west of the site between the R398 Graaff-Reinet. The site is accessed off the R398 on an unnamed farm road that crosses Farm 120, Kraanvogel.

The rural village of Nieu Bethesda and town of Graaff-Reinet are located ~60 km and ~90 km south of the proposed development portion on the R63. The towns of Richmond and Middleburg are located ~64 km (to the west) and ~67 km (to the east) from the site on the R63 and R398 respectively.

Land use in the area in the vicinity of Schanskraal Farm is strongly informed by the regional climate, particularly the low rainfall and consequent water scarcity. The area is largely agricultural, mostly low intensity sheep farming. Since the carrying capacity of the land is low, farms in the area are generally large. Most farms are characterised by a homestead and a limited number of outbuildings, including labourers' cottages. Some of the surrounding farms also offer guest accommodation as secondary income streams.

The area is very sparsely populated and the nearest town is Nieu Bethesda, ~60km to the south.

Schanskraal Farm is bound by Farm No. 120 Kraanvogel Vally to the north; Farm No 116 Dasses Fontein to the northwest, Farm No. 123 Vergelegen to the west; Farm No. 10 Driefontein to the southwest; Farm No. 12 Baviaanskrans to the south; Farm No. 146 Kruygers Baaken to the southeast; Farm No. 147 Oppermans Kraal and Farm No. 145 Alphen, both to the east (see Figure 3-1).

## 3.3 Project Motivation

The proposed Schanskraal Sporting Estate seeks to be a unique development in the greater Karoo area. Having already spent significant effort on rehabilitation to secure the ecological sustainability of the farm as an agricultural entity over the last decade, Ranor now seeks to build on its vision for the farm to create a viable sporting estate that offers sustainable and ecologically sensitive sporting facilities in the scenic Karoo Highlands to both domestic and foreign owners.

The development has potential to attract visitors that have not previously been exposed to the region by providing a venue for sporting events in a variety of disciplines, such as long distance horse riding, mountain biking and trail running. Already Schanskraal organises and hosts an Fédération Equestre Internationale (FEI) Endurance Ride, an event which pays homage to Richmond's heritage as a centre for equestrian activities in South Africa in Richmond's early years. Last year more than 300 entrants and supporters attended the event. In addition this region of the Karoo Highlands also provides an excellent climate and environment for sport fishing, and there are plans to develop the lake and accommodation at the Burgersrust Lodge specifically for catching Yellow Fish on the fly.

Given that the *raison d'être* of the proposed development is the unfettered enjoyment of the outdoors and nature, there is an in-built incentive for the developer to continue to manage the estate in an ecologically sustainable manner. Indeed, the proponent indicates that one of the development goals of the project is to continue to reverse historical degradation associated with previous unsustainable land management practices at Schanskraal.

Integral to this vision is the socioeconomic betterment of the local community residing on the farm. The development makes provision for an expansion of formal housing for labour (which will largely be sourced from the local community), as well as the construction of sports and education facilities for staff members and their families, and the broader farming community. Furthermore, the proponent has expressed a desire to invest a percentage of the revenue produced by the sales of

residential units on the estate in social initiatives for the upliftment of the local community (further detail in this regard will be determined in the Impact Assessment Phase).

As a result of the redevelopment of a relatively small proportion of the farm, the proponent hopes to cross-subsidise and ensure the financial viability of the remainder of the farm. Initiatives under consideration include improved irrigation and sustainable land use programmes that would allow the farm to increase its stock of cattle without a negative impact on indigenous flora and fauna.

### 3.4 Project Description

Ranor proposes to establish a residential estate and sports facilities in a ~2 000 hectare portion of the northern section of the Elands Kloof farm ( Figure 3-1 and Figure 3-2). The residential component of the development would comprise 57 residential units, each constructed on individual plots of less than 4 000m<sup>2</sup> each. Each residence will have a footprint restricted to ~550 m<sup>2</sup>. Plots will be located in 5 clusters situated within the natural contours of the landscape and be restricted to 4 000m<sup>2</sup> each. The total development footprint will be less than 100 hectares, including sports facilities.

At present, the Schanskraal Farm is host to two guest lodges (see Figure 3-2):

- The Manor House (including conference facilities); and
- The Burgersrust Lodge.

These facilities would be retained and upgraded as part of the Schanskraal Sporting Estate Development.

Existing outdoor recreational facilities at the farm include: freshwater fishing, equestrian, horse riding, mountain biking, hiking, quad-biking, archery and target shooting at a range, bird hunting (in season) and plain game culling / hunting. The facilities and infrastructure proposed would complement the existing recreational facilities at the farm.

A staff community precinct is also proposed as part of the Development near the Manor House, and will comprise ten new two-bedroom houses for general staff and two three-bedroom houses to be used as management quarters (see Figure 3-2). Additionally, sports facilities and a small primary school will be built for the staff, and surrounding rural community.

The Developers propose that the following additional (commercial) recreational facilities be constructed:

- Nine hole golf course and driving range (see Figure 3-2);
- Sporting clay arena<sup>5</sup> (site still to be determined); and
- Tennis courts (site still to be determined).

The nine hole golf course is intended to be a private course for homeowners to make use of at their leisure. Given the topography of the property and regional water scarcity, the course will, as far as possible, incorporate natural features and vegetation into the design, and locally occurring grasses will be used for the greens and fairways (where possible). As a result, the course will not be built to 'championship specifications', but should rather be considered a small 'country course' designed for recreational use only.

---

<sup>5</sup> A sporting clay arena is a series, or course, of unique shooting stations established in natural terrain. Clay targets, which must be destroyed in order to earn points, are fired in a variety of methods from each station.

A water feature will be the central focus of the sporting clay arena, and the design will utilise the natural terrain to provide elevated traps and shooting stands. Preference will be given to tall, fast growing, indigenous tree species to provide visual obstacles on the arena.

Rehabilitation of the natural environment is an important component of the current farm operations, and includes the planting of indigenous trees and shrubs, the reintroduction of indigenous grasses, re-development of lakes and dams and the restoration of existing watercourses.

The additional service infrastructure required for the development includes (see Figure 3-2):

- Roads – Access to the site is currently via a 15km gravel access road from the R398 (see Figure 3-1). This access road runs a further 1.5km to the Manor House. Internal roads to the development will all lead from the Manor House. The road is in a good condition and requires no upgrading.

The internal road network is defined as the roads from The Manor to the development and provides access to the individual erven. Although existing farm tracks are generally used to provide access to the houses, new roads need to be constructed as well. Existing roads on the property will be resurfaced by the developer.

Existing and proposed new roads are shown on Figure 3-2. Road sections with an incline of more than 12% will be provided by concrete strips, cast off-site.

Internal roads will be 3m wide, with road widening at strategic positions to allow for safe for two-way traffic. All existing internal roads would be refurbished, and will remain as cambered gravel roads to accommodate surface runoff. The internal speed limit would be 40km/hour and limited signage would only be allowed on the entrance road (i.e. not on the internal road network).

- Stormwater – where stormwater collection as a result of infrastructure development (most notably, for roads) is unavoidable, it will be released into streams and open areas with suitable outlet structures and erosion protection.

Where roads cross streams, suitable drainage structures will be provided to ensure access during rain storms. It is recommended that pipe structures with headwalls which can accommodate storms of a 1 in 10 year recurrence interval be constructed at stream crossings. Storms of a higher occurrence (up to 1:50 years) will be accommodated in an overflow low water bridge structure with the necessary erosion protection.

- Electricity – The surrounding area of Elandskloof is an Eskom distribution area which is currently fed with the Middleburg / Heydon (MBH) 22 kilovolt feeder line. The nearest point of supply is ~ 1 000 m from the proposed development. Discussions with Mr Willie Els of ESKOM, and preliminary investigations indicated that only 300 kVA is currently available on that network.

It is proposed that a 22 kilovolt overhead feeder line is constructed from the nearest point of supply to a position close to the Manor House. Medium volt underground cables would then be installed to miniature substations at each of the development clusters. Low voltage underground cables would then be installed from each of the miniature substations to each of the erven. Peak demand for the proposed development is estimated to be ~500 kilovolts, exceeding available supply by ~200 kilovolts. Proposed cable routes are shown on Figure 3-2.

Given that peak demand is expected to exceed currently available supply, the development will either need to be phased as more supply capacity becomes available, or alternative methods of electricity supply and efficiency (e.g. heat pumps, gas stoves, LED lighting and solar panels) will need to be investigated and implemented.

- Water storage and supply – Initial studies have suggested that there are sustainable underground water sources available for both domestic use and for irrigation of sports facilities.

A usage of 2 000 litres per erf per day is used to calculate the flows and storage requirements. For the 57 erven, the Average Annual Daily Demand (AADD) is calculated at 1,45 litres/s, with a Peak Hourly Demand (PHD) of 13,63 litres/s.

Although it is highly unlikely that all 57 houses will be occupied at the same time over long periods, storage for approximately five days will be provided on site. Five days storage would allow sufficient time for repairs of pump installations, borehole equipment and electricity supply should it be necessary.

A 500 kilolitre reservoir will therefore be constructed at a suitable position at level 1 740 m to supply all the erven with potable water at an acceptable pressure. The final position of the reservoir will be determined during the EIR phase of this assessment.

The proposed distribution network consists of the following:

- Pump and standby pump at borehole no. SKL5;
- Rising main of 90 mm diameter from borehole SKL5 to the reservoir;
- 500 kilolitre reservoir;
- Water treatment works if required (chlorination only);
- Supply line from reservoir to the erven ranging from 110 mm diameter to 200 mm. The diameters will be confirmed during the detail design phase of the project;
- Isolation, air and scour valves where necessary; and
- House connections (32 mm diameter) with a water meter from the main network to each house.

Storage tanks will be provided at each erf to make provision for fire. These tanks can either be filled with rain water or from the main supply network.

Water saving devices such as low flow shower heads and dual flush toilets will be used in the houses to save water. Additional rain tanks will be installed for gardening purposes over and above the storage tank and booster pump for fire requirements.

- Waste – It has been calculated that the development will produce a maximum of ~1 100 kg of waste per day (although full occupation at any given time is unlikely). Each home owner will receive two 240 liter wheelie bins, one being for recyclable refuse, and the other for general waste.

A dedicated fenced area of at least 20 m<sup>3</sup> in capacity will be provided at the main guest lodge where waste can be stored for weekly removal by a private contractor for disposal at the authorised Richmond landfill. Refuse will be collected on a weekly basis (or more frequently if necessary) at each house with a tractor and trailer and dumped at the dedicated fenced temporary storage area for collection.

- Sanitation / sewerage – With an estimated flow of 1 000 litres per erf per day, a peak factor (PF) of 2,5 and 15% infiltration, the Average Dry Weather Flow (ADWF) and Peak Wet Weather Flow (PWWF) is calculated at 0,66 litres per second and 1,90 litres per second respectively for the 57 erven.

On site treatment (either localised or centralised package treatment) is proposed and will comply with the legislation of the Department of Water Affairs (see Section 3.5.3).



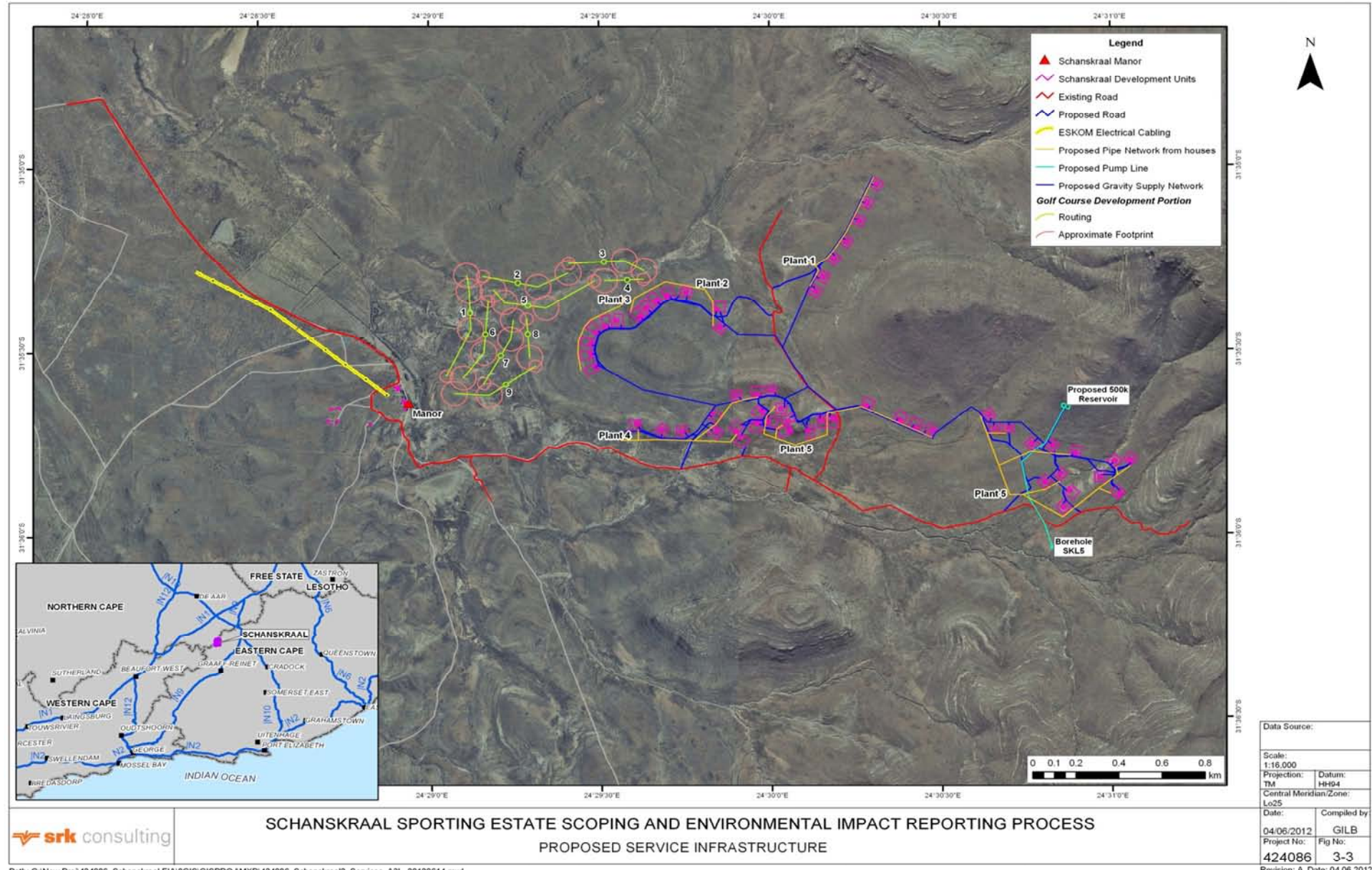


Figure 3-2: Schanskraal Development Layout

## 3.5 Project Alternatives

The EIA Regulations, 2010 require that all S&EIR processes must identify and describe “alternatives to the proposed activity that are feasible and reasonable”. Different types or categories of alternatives can be identified, e.g. location alternatives, type of activity, design or layout alternatives, technology alternatives and operational alternatives. The “no go” or “no development” alternative must also be considered.

Not all categories of alternatives are applicable to all projects. However, the consideration of alternatives is inherent in the detailed design and the identification of mitigation measures, and therefore, although not specifically assessed, alternatives have been and will be taken into account in the design and S&EIR processes.

### 3.5.1 Location Alternatives

The proponent believes that the physical characteristics of the site are particularly well suited to a development such as the one proposed.

Other locations on the farm that have been considered for the proposed development include:

- Southern portion of the farm (Erf 121) – excluded due to inappropriate topography; and
- Erf 122 – excluded due to lack of vehicular access (no suitable roads).

As these location alternatives have been considered, and eliminated on the grounds described above, no location alternatives will be assessed in the Impact Assessment Phase.

### 3.5.2 Activity Alternatives

Feasible and reasonable activity alternatives for the proposed development of the site are limited by the proponent’s motivation and intentions, current land use (including surrounding land use), water availability and the character of the environment.

### 3.5.3 Technology Alternatives

#### Effluent Disposal

To be considered by specialists during detailed assessment:

#### *Alternative A*

This alternative will consist of a conventional underground sewer reticulation network with manholes to a central packaged wastewater treatment plant. Due to the proposed layout and natural topography, six plants will be required to serve the clusters.

#### *Alternative B*

This alternative makes provision for a smaller packaged wastewater treatment plant on each erf. This system will be installed by each owner when building the houses. The plumbing network from the house is connected to the plant which will be constructed on the topographical low point of the erf.

### 3.5.4 Layout Alternatives

A considerable amount of pre-planning, informed by technical, financial and environmental factors, has gone into the layout of the Sporting Estate. Consequently, the only layout alternative being considered is the one described in the project description (see Section 3.3). The layout has been informed by:

- Access to services: the cost of construction of services to 65 individual plots vs the installation of services to a number of housing clusters;
- Access to water: sustainable abstraction volumes have been inferred for the site during a preliminary groundwater assessment, and will be confirmed during the Impact Assessment Phase;
- Vehicular access: the site is easily accessed by vehicles off the unnamed rural road leading to the farm;
- Environmental impact: the site has been selected because of the absence of sensitive environmental features (given the current knowledge base – e.g. vegetation clusters, seeps and wetlands);
- Geographical aspect: north facing units preferred;
- Aesthetic considerations: housing units have been sited so as to enhance the views of occupants, and reduce the visual impact of the development; and
- Topographical features: particularly the housing clusters and golf course.

The site layout (see Figure 3-2) will continued to be defined by the location of sensitive environmental features (e.g. geohydrological, ecological or archaeological), and will therefore be refined during the Impact Assessment Phase.

### 3.5.5 The No Go Alternative

In addition, the no go alternative will be considered in the EIA in accordance with the requirements of the EIA Regulations, 2010. The no go alternative entails no change in the property's existing *status quo*, in other words no development, rezoning or subdivision. Sustainable livestock agriculture will continue at the site under this scenario (as it would with the development proposal).

## 3.6 Need and Desirability

Best practice requires that the need and desirability of a project (including viable alternatives) is considered and evaluated against the tenets of sustainability. It requires an analysis of the effect of the project on social, economic and ecological systems; and places emphasis on consideration of a project's *justification* not only in terms of financial viability, but also in terms of the specific needs and interests of the community and the opportunity cost of development. Proposed actions of individuals are therefore measured against the interests of the broader public, and project impacts are not allowed to be distributed in such a way that they unfairly discriminate against members of society.

Regional planning documents such as Spatial Development Frameworks, Integrated Development Plans and Environmental Management Frameworks enunciate the strategic needs and desires of communities, and project alignment with these documents must therefore be considered and reported on in the EIAR. With the use of these documents or - where these planning documents are not available, using best judgement - the EAP (and specialists) must consider the project's strategic context, or justification, in terms of the needs and interests of the broader community (EIA Regulations, 2010).

### 3.6.1 Analysis of Need and Desirability of the Schanskraal Development

The Integrated Development Plan for the Pixley Ka Seme District Municipality lists strategic priorities for local development in the district. While the Schanskraal Development is not in conflict with any of the strategic goals of the municipality, the project is likely to, to a limited extent, contribute to the following:

- LED, tourism and poverty alleviation – with specific emphasis on the creation of job opportunities;
- Education and Youth Development;
- Land and land reform;
- The provision of formal housing;
- The development of sports and recreation; and
- The promotion of tourism.

Further, this is an area deprived of investment and development so development initiatives, provided it is (ecologically) sustainable is supported.

### **Socio-economic initiatives**

While the Regional Growth Development Strategy for the Integrated Development Plan focuses predominantly on the development of the mining and associated industries, it places emphasis on the development of complementary industries, such as tourism. Although the proposal is to sell plots, the facility at the estate will, to a limited extent, promote local tourism.

### **EMF and SDP**

While an Environmental Management Framework does not exist for the area, the environmental impact of the proposed development will be considered during the Impact Assessment Phase of the EIA, and any impact on strategic or sensitive environmental resources will be considered and reported on.

Preliminary market analysis undertaken by the proponent suggests that there will be sufficient demand for the housing units to secure financial viability of the estate. Further, while the sporting facilities will largely be funded by and serve the property owners, large sporting events at the farm are testament to the viability of similar events in the future.

## 4 Affected Environment

The following chapter presents the biophysical baseline for the Schanskraal Development. The baseline is in some places site specific, and where site specific information is not available information is reported on a regional scale: generally the Little Karoo or Karoo basin for the biophysical baseline, and the Ubuntu Local Municipality for the socio-economic. The baseline is reported on a scale that will enable an accurate assessment of the impacts typically associated with a development such as the one proposed (refer to Section – 3.3).

### 4.1 Biophysical Environment

Some of the sub-sections below are drawn extensively from a preliminary groundwater investigation report undertaken for the proposed development (SRK Report number: 433122/1), such as the sections detailing regional geology and geohydrology, and are hereby referenced.

#### 4.1.1 Flora

The farm falls within the *Nama-Karoo* and *Grassland* biomes and comprises two broad vegetation types, namely *Eastern Upper Karoo* and *Upper Karoo Hardeveld*, which are both considered to be Unthreatened (not critically endangered or endangered) according to the South African National Biodiversity Institute. Over the last 10 years the developer has rehabilitated the farm, after many years of overgrazing and neglect. These efforts have resulted in the re-emergence of a variety of floral and faunal species at the farm (Wels, pers comm) characteristic of both ecosystems.

Although poorly conserved, the Nama-Karoo biome is well represented. The largest threat to this biome is overgrazing, and to a lesser extent alien plant species infestation (by species such as Prickly Pear and Mesquite). There are very few plant Species of Conservation Concern in the Nama Karoo Biome (Hudson and Kimberg, 2011).

The grassland biome comprises sour and sweet grass species (the former being unpalatable to livestock in the winter). Being a fairly resistant species (to fire and other disturbance) the most significant threat to the grassland biome is from overgrazing at the margin between sweet and sour grass species (where the integration of sour species into sweet pastures is possible), and management of the biome should be focussed in these areas (Hudson and Kimberg, 2011).

The presence of any floral Species of Conservation Concern<sup>6</sup> at the site will be confirmed during the Ecology Specialist Study – see Section 6.3.2.

#### 4.1.2 Fauna

The following provides an overview of faunal species in the general area in which Schanskraal is located. A site specific baseline will be produced following fieldwork associated with the Ecology Specialist Study.

##### **Mammals**

Apart from common (typically larger) mammal species such as Kudu, Gemsbok, Springbok, Blesbok, Zebra, Klipspringer, Caracal, Jackal, Steenbok, Aardwolf and Baboon (all of which have been observed on the farm) four mammal Species of Conservation Concern occur regionally. These

---

<sup>6</sup> The recent Red List of South African Plants (Raimondo et al 2009) has assessed all plant species in South Africa, and all indigenous species are now technically Red Listed or Red Data Book species, and thus it is preferable to use the term Species of Conservation Concern to refer to species that are listed as either Threatened or Rare.

include: Riverine rabbit (*Bunolagus monticularis*), White-tailed mouse (*Mystromys albicaudatus*), Mountain zebra (*Equus zebra zebra*); Karoo rock sengi (*Elephantulus pilicaudus*). None of these is expected to occur at Schanskraal farm (Hudson and Kimberg, 2011).

### Reptiles and Amphibians

Although there are no reptile Species of Conservation Concern expected to occur at the site, reptiles in the area display a high degree of endemism and are therefore of conservation value (Hudson and Kimberg, 2011).

No sensitive or threatened amphibian species are expected to occur in the study area (Hudson and Kimberg, 2011).

### Avifauna

Approximately 350 bird species are known to occur in the region (~150 species have been recorded on the Schanskraal Farm), 10 of which are listed as either threatened or protected in terms of the National Environmental Management: Biodiversity Act 10 of 2004. Of these species, the only one listed as a Species of Conservation Concern is the Blue crane (*Grus paradise*). (Hudson and Kimberg, 2011)

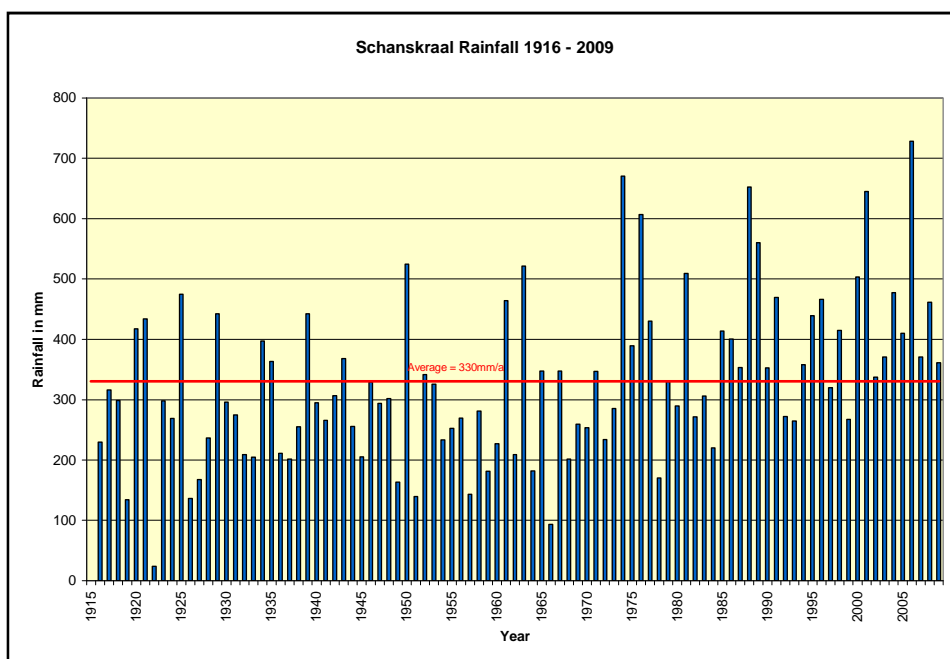
## 4.1.3 Climate

### Precipitation

The mean annual precipitation (MAP) for Quaternary catchment D32A is 314 mm (DWAF, 2005). Rainfall data collected at Schanskraal since 1916 is graphically depicted in Figure 4-1.

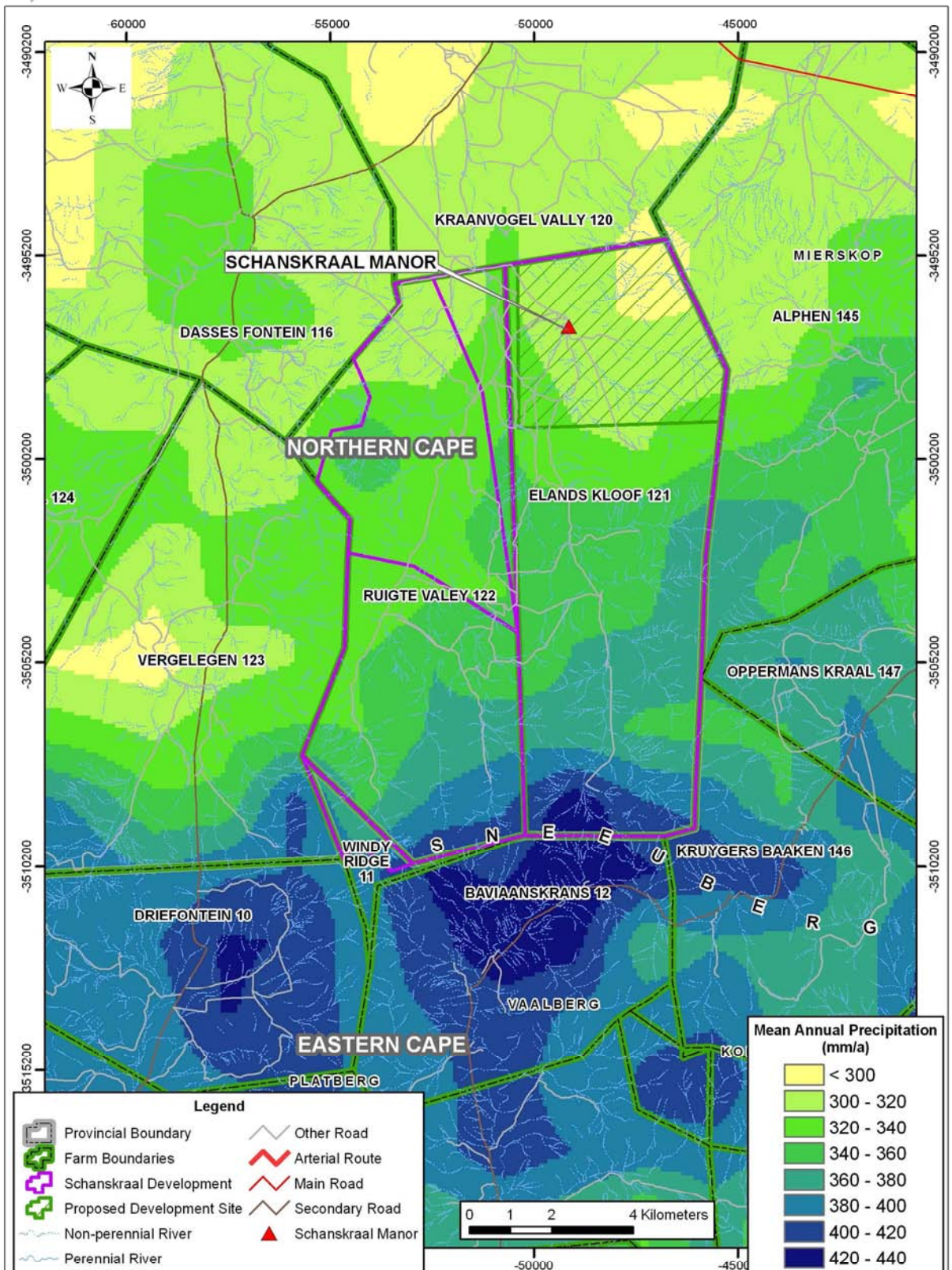
Based on this data the MAP is 330 mm for Schanskraal, slightly higher than reported for the Quaternary catchment<sup>7</sup>. The site falls in a summer rainfall region. Figure 4-1 also indicates that the average precipitation and the MAP in the study area is increasing.

From Figure 4-2 it can be seen that precipitation is higher on the high-lying areas in the northern parts of the farm.



**Figure 4-1: Schanskraal recorded annual precipitation since 1916**

<sup>7</sup> Note: The catchment’s MAP is based on a number of rainfall stations. The difference in the MAP for the catchment reflects regional variation in rainfall.



Project No. 423122	Datum: Hartebeeshoek '94 Projection: Transverse Mercator Central Meridian/Zone: 25°	<b>SCHANSKRAAL GROUNDWATER ASSESSMENT</b> MEAN ANNUAL PRECIPITAITON (mm/a)	Date: 21/09/2010	Scale: 1:125,000
Path: G:\New Proj\423122_Schanskraal2\8GIS\GISPROJ\MXD\423122_Schanskraal2_MAP_A4P_20100920.mxd			Compiled by: GOES	Fig No. 005
			Revision: A	Date: 20/09/2010

Figure 4-2: Mean annual precipitation in the Schanskraal study area

## Temperature

Information on temperature is drawn from the South African Weather Service historical climate data (WeatherSA, 2011) for the weather station nearest to the site, i.e. De Aar, ~100 km to the north west.

**Table 4-1: Temperature data for De Aar - based on monthly averages for the 30-year period 1961 – 1990**

Month	Highest Recorded Average	Average Maximum	Average Minimum	Lowest Recorded
January	40	32	16	7
February	38	31	15	4
March	37	28	13	1
April	34	24	9	-1
May	30	20	4	-5
June	26	16	1	-7
July	25	17	1	-8
August	28	19	2	-8
September	35	23	6	-5
October	36	26	9	-3
November	38	29	12	-1
December	39	31	14	3
<b>Year</b>	<b>40</b>	<b>25</b>	<b>9</b>	<b>-8</b>

Source: WeatherSA, 2011

Table 4-1 indicates the monthly average temperatures for De Aar weather station. Although this station is ~100km northwest of the site, its data is considered suitable for the purposes of this report as there are no noteworthy physical barriers between De Aar and the site that would result in significant variation in temperature. However, because of the local topography of the site (see Section 4.1.4), some local temperature variation is expected.

From Table 4-1 it can be seen that the lowest average daily maximum and minimum temperatures occur between April and October. The lowest and highest average maximum daily temperature occurs in June and January (16° and 32° Celsius) respectively, and the lowest and highest average daily minimum temperatures occur in June and July, and January (1° and 16° Celsius) respectively. The annual average maximum and minimum temperatures are 25° Celsius and 9° Celsius.

Higher temperatures during the summer months correspond with increased rainfall.

There is significant maximum / minimum temperature variation in the study area.

## Wind Speed and Direction

The prevailing wind is north easterly, though wind speeds of > 5m/s occur less than ~25% of the time for north easterlies. Wind is also experienced from the south west at a lower frequency but higher velocity than winds from the east (typically > 6m/s 50% of the time the wind is blowing from the south west) (Burger, 2011).

## Air Quality

There are no significant sources of air pollution in the area. Farming activities generate limited emissions, mainly airborne particulates. It is therefore expected that air quality is very good.



#### 4.1.4 Topography and Geology

The study area falls on the northern foothills of the Sneeuberg Mountain Range. The site is rugged, and ranges in elevation from 1 300 mamsl in the north to over 2 000 mamsl in the south to south east (Figure 4-3). Several butte and mesa landforms are characteristic of local relief.

Schanskraal is mainly underlain by sediments of the Beaufort Group of the Karoo Supergroup, with post-Karoo dolerite intrusions in the form of dykes and sills. Outcrops of the Adelaide Subgroup of the Beaufort Group occur in the north-western part of the property. These consist of red, purple, grey and blue-green mudstone with subordinate sandstone. The higher lying south-eastern part of the property is underlain by fine grained sandstone and red and green-grey mudstone of the Katberg Formation of the Tarkastad Subgroup. These sediments overlie the sediments of the Adelaide Subgroup.

Large areas of the study area have been intruded by post-Karoo-age dolerite. These intrusions occur as dykes (vertical to sub-vertical intrusions) and sills (horizontal to sub-horizontal intrusions). The sills can be >100 m in vertical thickness, whilst the dykes are normally <25 m in width. Several dykes in the area are <5 m wide.

#### 4.1.5 Hydrology

The Elands Kloof River (and its tributaries) is located on the Schanskraal Farm and is classified as non-perennial (Department of Water Affairs, 2004). There are numerous other small non-perennial and episodic streams on the site. The Elands Kloof River and other streams on the site flow in a northerly direction, draining into the perennial Seekoei River. Three small wetland / dam areas have been constructed, two close to the Burger'srust Lodge, and one close to the Manor House.

The study area falls within the D32A Quaternary catchment.

#### 4.1.6 Geohydrology

Figure 4-3 shows that most of the site is underlain by Beaufort Group rock. Dolerite intrusions result in intermittent occurrences of intergranular and fractured-rock aquifers. The weathered zone measures ~40m in thickness while the fractured zone is ~70m thick. The aquifer is thus approximately 110m thick (GRA-II Project, 2005).

According to Parsons and Conrad (2003) the study area is classed as a "regional scale aquifer".

Aquifer vulnerability is defined as the likelihood for contamination to reach a specified position in the groundwater system after being introduced at some point above the uppermost aquifer. According to the findings of the GRA-II project the study area is for the most part classified as being of "medium vulnerability" with occurrences of "low vulnerability" in the south.

According to the groundwater investigation suitable volumes of groundwater are available for the proposed Schanskraal development.

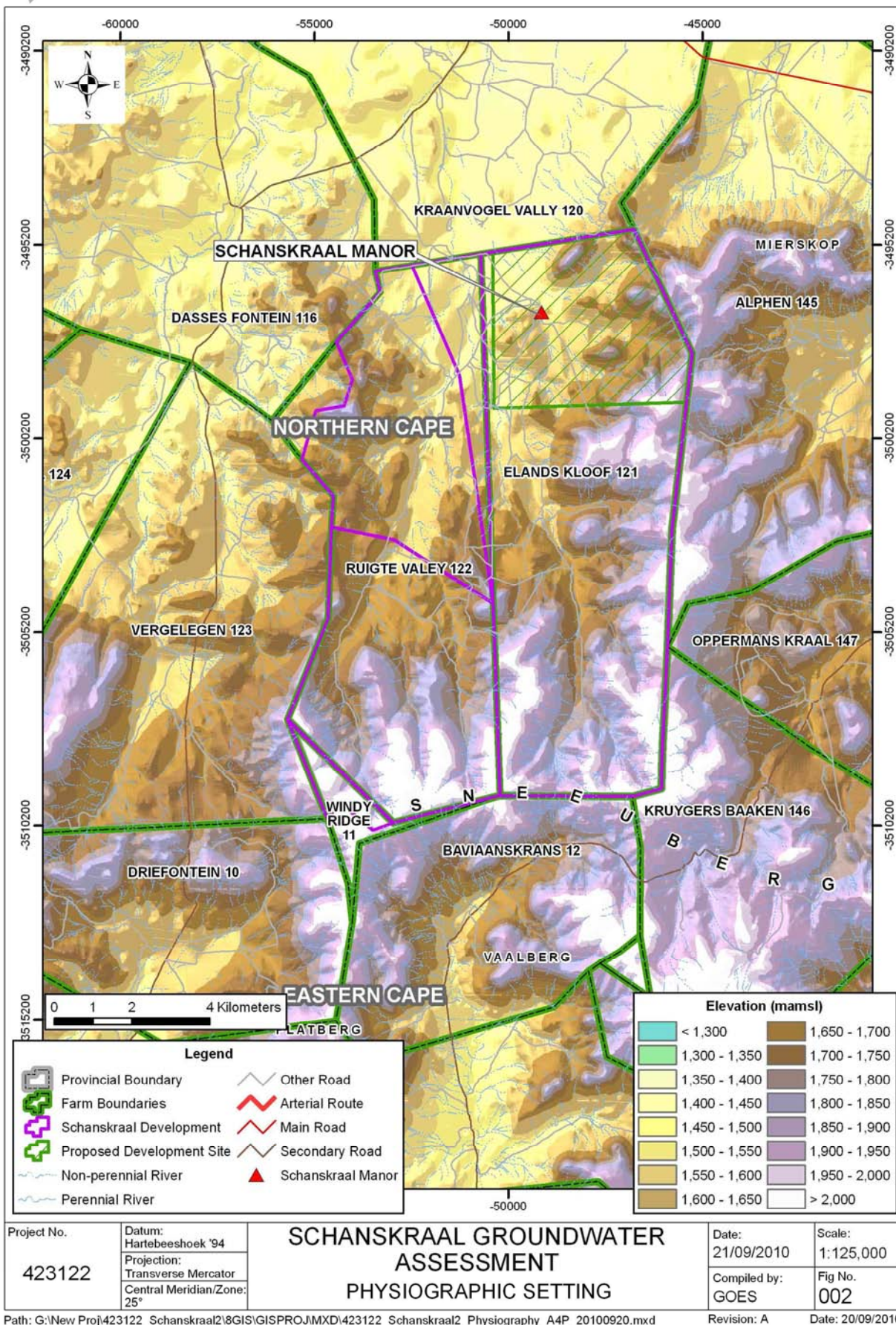


Figure 4-3: Physiographic setting of the study area

### 4.1.7 Soils and Land Capability

The farm is characterised by rocky outcrops and alluvial soil deposits:

Rocky outcrops with limited soil covering are extensive over the Schanskraal Farm. Soil units are found in between rock outcrops and overlying rocks at shallow depths. These soils are associated with dolerite or Beaufort rock group sediments, but tend to be more reddish in colour and of heavier texture when derived from the dolerite.

Alluvial soils are associated with riverbeds and drainage ways and are present in the flatter topography and wide valleys of the site and farm. Alluvial soils can have varying depths and marked differences in textural characteristics. These soils are generally associated with water courses and are therefore of importance in the context of the predominately dry surrounding catchment (because of access to irrigation). Episodic rivers and rocky streambeds serve to channel water from mountainous areas in the region.

Due to the largely shallow profiles and arid environment of the Karoo soils they are considered of low agricultural potential. (Potgieter, Steyn and Baxter, 2011)

## 4.2 Socio-economic Environment

### 4.2.1 Regional Context

The Pixley ka Seme District Municipality includes a number of key transport routes, such as the N1 from Pretoria and Johannesburg to Cape Town; the N9 from Colesberg joining the N10 to Port Elizabeth and the rest of the Eastern Cape; the N12 route from Johannesburg via Kimberley to Cape Town; and the N10 from Namibia via Upington linking Namibia to the Eastern Cape (IDP, 2010).

The Orange River and Vaal River flow through the municipality and the Gariep, Vanderkloof and Boegoeberg Dams are also all located in the district. Intensive crop farming activities occur on the banks of these rivers. Water supply and availability are the key issues associated with development and economic activity in the Pixley ka Seme District Municipal area (IDP, 2010).

The Pixley ka Seme District Municipal is made up of eight local municipalities and a district management area. Schanskraal falls within the Ubuntu Local Municipality

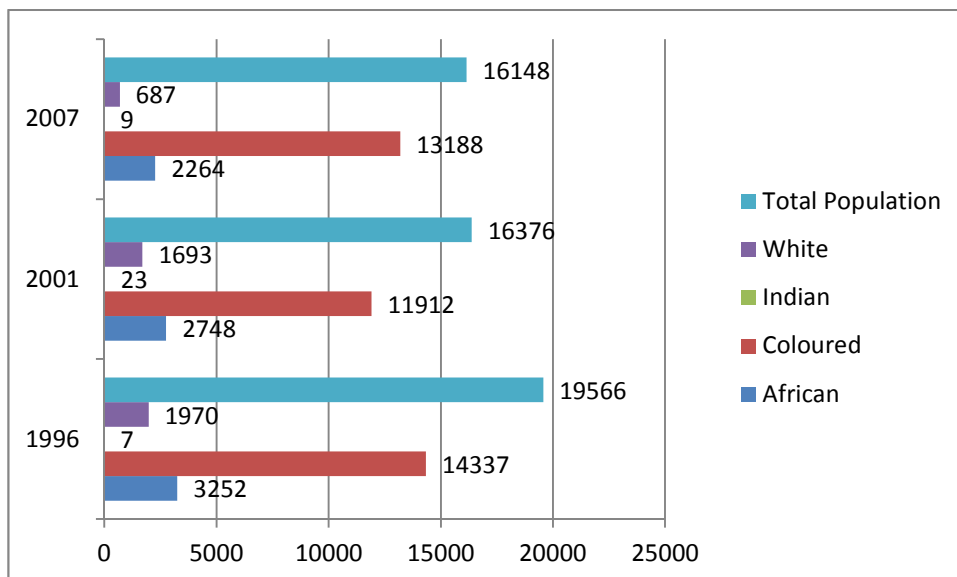
The total size of the Pixley ka Seme District municipality is 102 766km<sup>2</sup> and it has a population of 164 603 people.

The Ubuntu Local Municipality is the southernmost municipality in the district, and it borders the Western and Eastern Cape. The local municipality is ~20 400km<sup>2</sup> in size. The main urban centre in the municipality is Victoria West (2001 estimated population: ~4 000); other towns in the municipality include Richmond (2001 estimated population: ~500), Loxton (permanent population of 65) and two small railway villages Hutchinson and Merriman. The railway line that runs from Cape Town to Kimberley passes through the local municipality.

The following socio-economic baseline focuses on the Ubuntu Local Municipality.

### Population Demographics

Figure 2-1 presents the population structure for the Ubuntu Local Municipality for the years 1996, 2001 and 2007. It can be seen that the majority of the population in the municipal area are of mixed origin, or Coloured. The total population in the municipal area decreased across all population groups between 1996 and 2007, with a disproportionate decline in the White population over the reporting period.



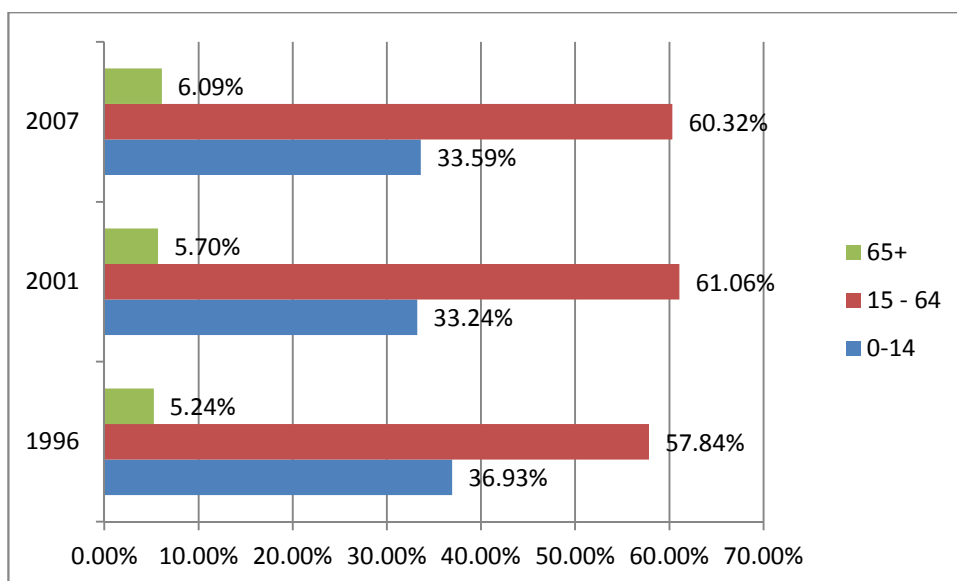
**Figure 4-4: Population of the Ubuntu Local Municipality**

Adapted from: IDP, 2011 and StatsSA Community Survey, 2007

**Population Structure and Dependency**

Figure 4-5 indicates the age profile and Table 4-2 the dependency ratio of the Ubuntu Local Municipality population. It can be seen that ~60% of the population are of a working age, while ~33% are below the age of 15, and ~6% are over the age of 65. An increase in the working age population relative to the young and old between 1996 and 2007 is reflected in a decrease in the dependency ratio over the same period.

A decrease in the dependency ratio indicates a decrease in the dependency of the non-productive portion of the population on the productive, and therefore a decrease in pressure on social services. The marginal decrease in the dependency ratio over the reporting period for the local municipality is positive; however, it remains significantly higher than the national average (~0.50). This indicates that government expenditure will have to focus proportionately more on social and community services as opposed to spending on more productive enterprises. This is likely to account for the disproportionately high government expenditure in the local economy (see Figure 4-10).



**Figure 4-5: Age Profile for the Ubuntu Local Municipality Population**

Adapted from: IDP, 2011 and StatsSA Community Survey, 2007

**Table 4-2: Dependency Ratio for the Ubuntu Local Municipality Population**

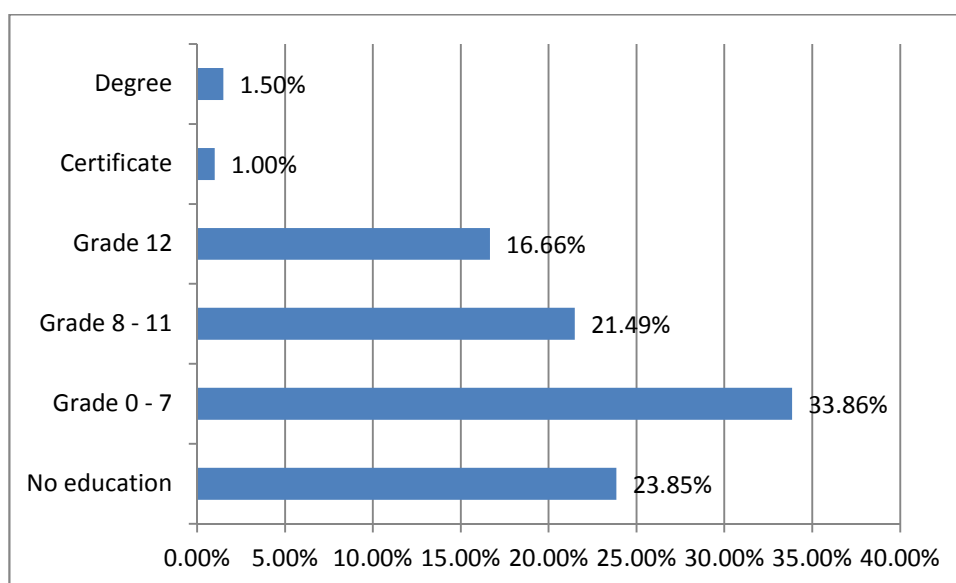
Persons	1996	2001	2007
Dependency Ratio	0.73	0.64	0.66

Adapted from: IDP, 2011 and StatsSA Community Survey, 2007

### Education

Figure 4-6 indicates the education levels in Ubuntu. Just less than a quarter of the population over the age of 20 have no formal schooling whatsoever. Further, only ~20% have formal schooling at Grade 12 level or higher.

Although concerning, low levels of formal education can be anticipated in a largely rural community. Although there are schools in the area, significant distances must be travelled in order to access these facilities from rural areas. The community would benefit from additional education facilities in rural areas (e.g. farm schools).

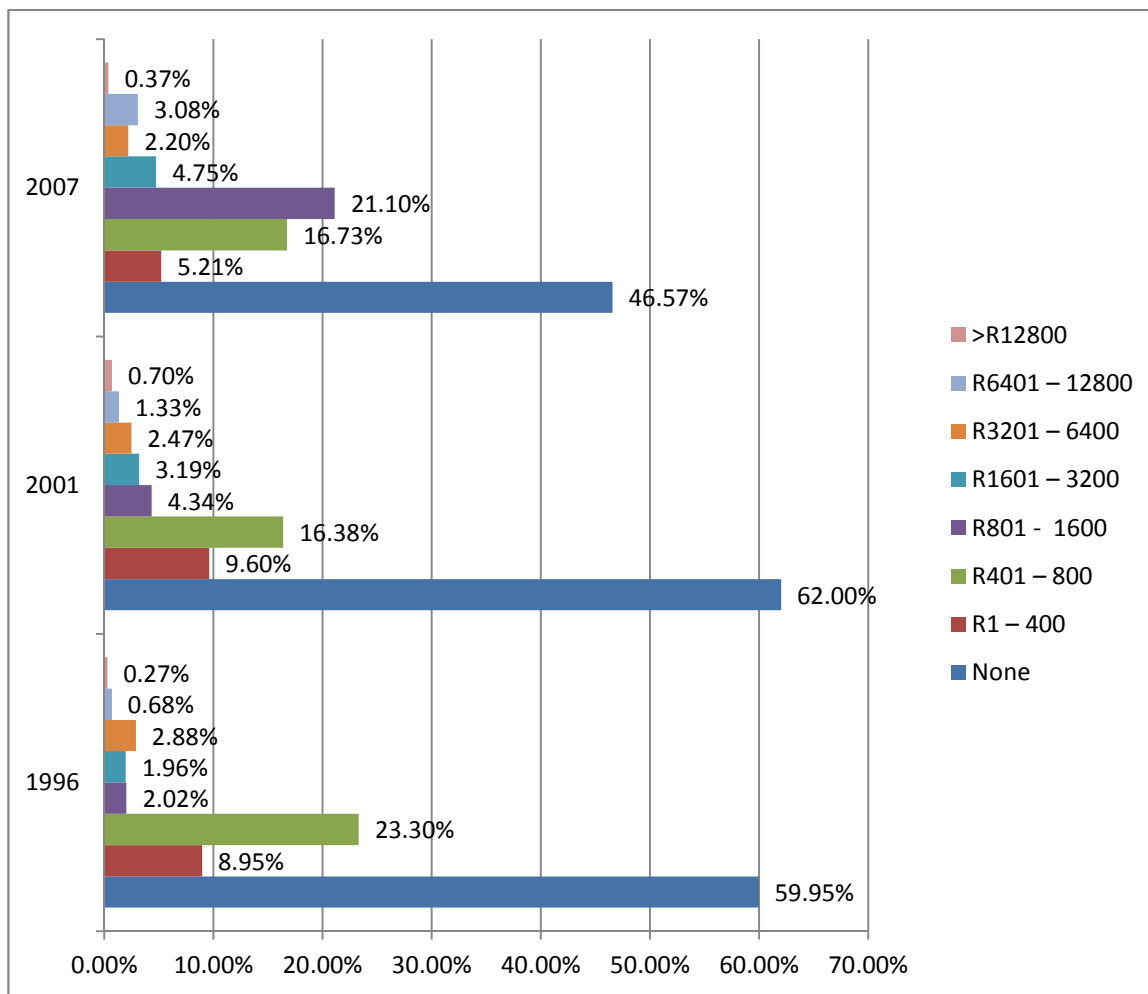


**Figure 4-6: Education Levels in the Ubuntu Local Municipality for Persons Over 20 Years Old in 2007**

Adapted from: StatsSA Community Survey, 2007

### Income

Income levels in the local municipality are provided for the period 1996 – 2007 in Figure 4-7 below. Between 2001 and 2007 the proportion of people in the area that earned no formal income decreased from 62% to ~45%, indicating a significant improvement in the general welfare of the poorest members of the population. The decrease in persons earning no income corresponds with a marked increase in those persons earning between R800 and R1 600 per month – well above the South African Government poverty threshold of ~R320 a month. The fact that ~50% of the population remain below this threshold is an indication of the social challenges facing the region.



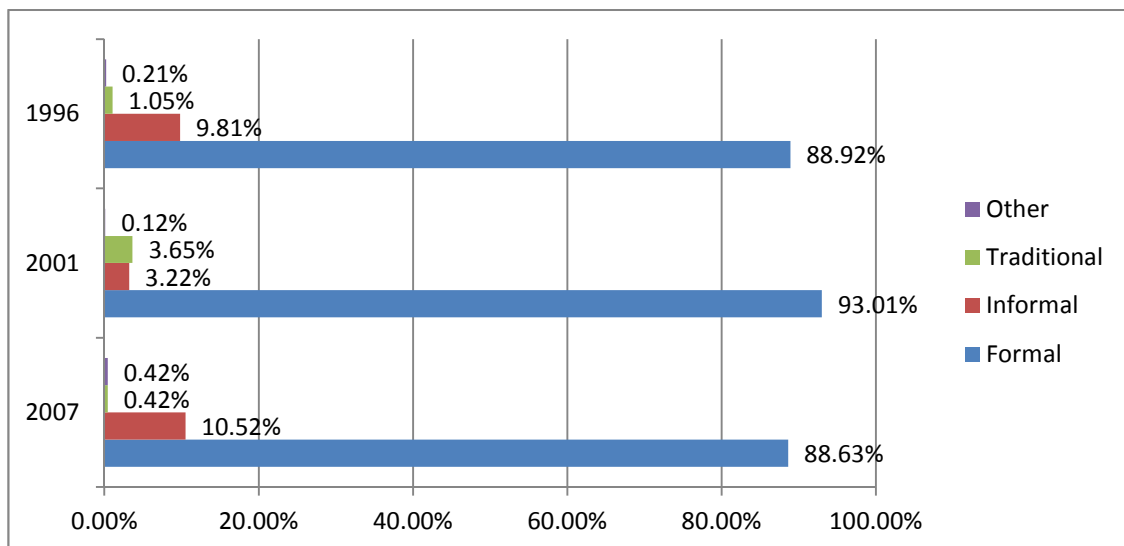
**Figure 4-7: Monthly Personal Income Levels in the Ubuntu Local Municipality**

Adapted from: IDP, 2011 and StatsSA Community Survey, 2007

**Household Types and Sizes**

Housing is a basic human need and influences health, welfare, and economic productivity of individuals. It is also a good indicator of standard of living. To achieve the Millennium Development Goals, South African Government Policy is designed to ensure that its citizens live within good housing conditions (IDP, 2011). In order to achieve this goal, informal dwellings and bucket type toilets must be eliminated, and citizens must have access to electricity for lighting, and clean, safe water within a reasonable distance.

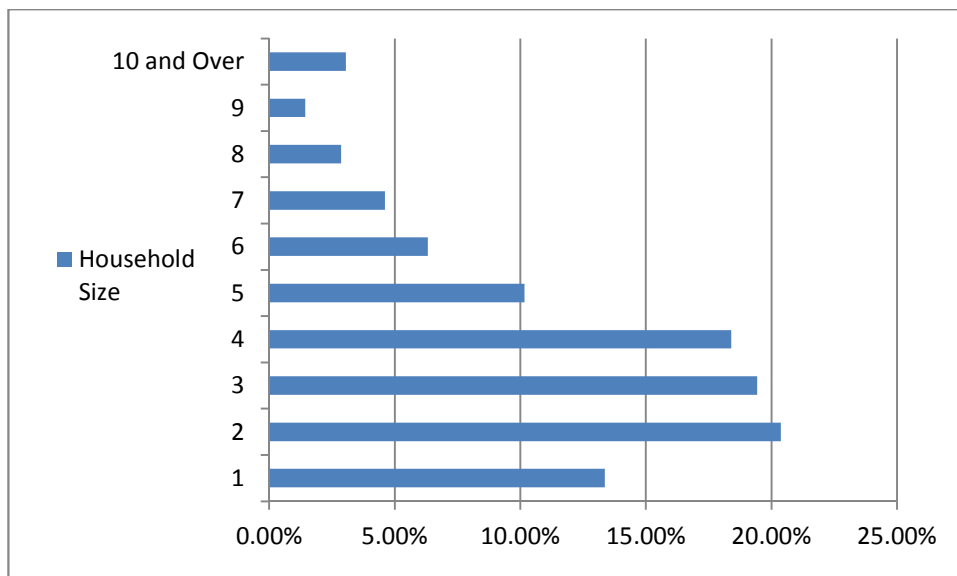
Figure 4-8 illustrates the types of households in the Ubuntu Local Municipality, and Figure 4-9 indicates the average number of persons per household. It can be seen that the number of formal households as a proportion of total households remained fairly stable over the reporting period (1996 – 2007) at ~89%. Further, it is noted that the proportion of informal dwellings in the region has increased from ~9.8% to ~10.5% of the total, after dropping substantially in 2001.



**Figure 4-8: Household Types in the Ubuntu Local Municipality**

Adapted from: IDP, 2011 and StatsSA Community Survey, 2007

Household sizes are typically between one and five persons per household (~80%).



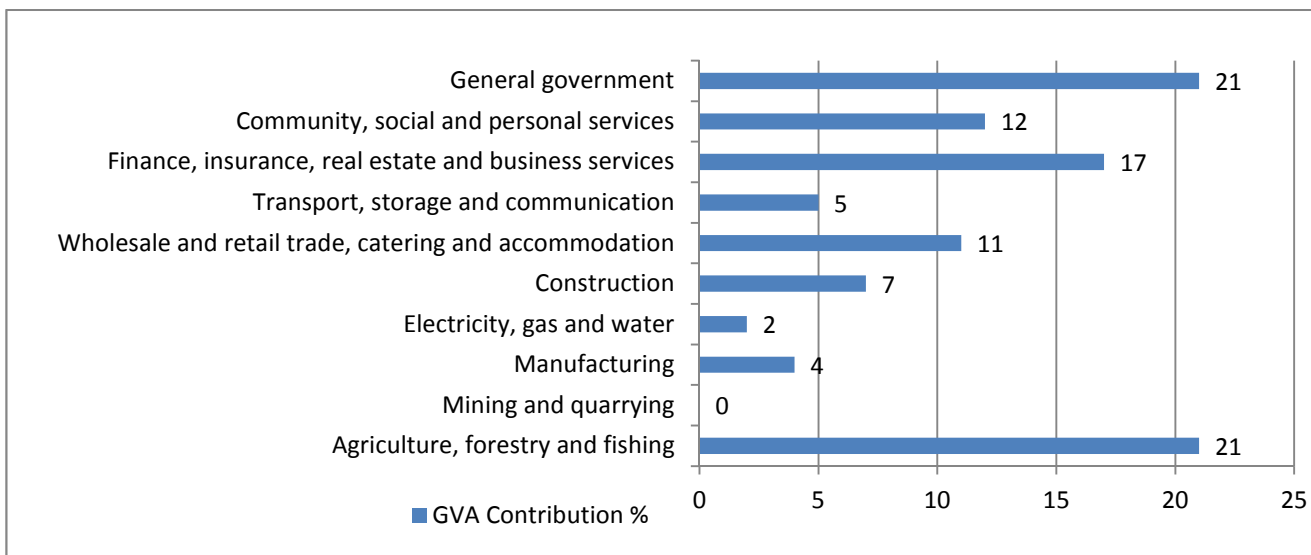
**Figure 4-9: Household Sizes in the Ubuntu Local Municipality**

Source: StatsSA Community Survey, 2007

### Local Economy

Very little data is readily available for the Regional Gross Value Added<sup>8</sup> (GVA-R) for both the district and local municipalities. Figure 4-10 indicates the relative contribution of the various general industries to the GVA-R of the Ubuntu Local Municipality. It can be seen that government services make up a significant portion of the local economy, indicating that social welfare grants are relied on heavily. Agriculture (almost exclusively extensive livestock farming) plays an equally important role in GVA-R, which is typical of a predominantly rural economy.

<sup>8</sup> GVA measures the contribution to the economy of each individual producer, industry or sector. The link between GVA and GDP can be defined as: GVA (at current basic prices; available by industry only) plus taxes on products (available at economy level only) less subsidies on products (available at economy level only) equals GDP (at current market prices; available at whole economy level only).



**Figure 4-10: Contribution of Various Economic Sectors in the Ubuntu Local Municipality GVA-R**

Adapted from: Golder, 2011

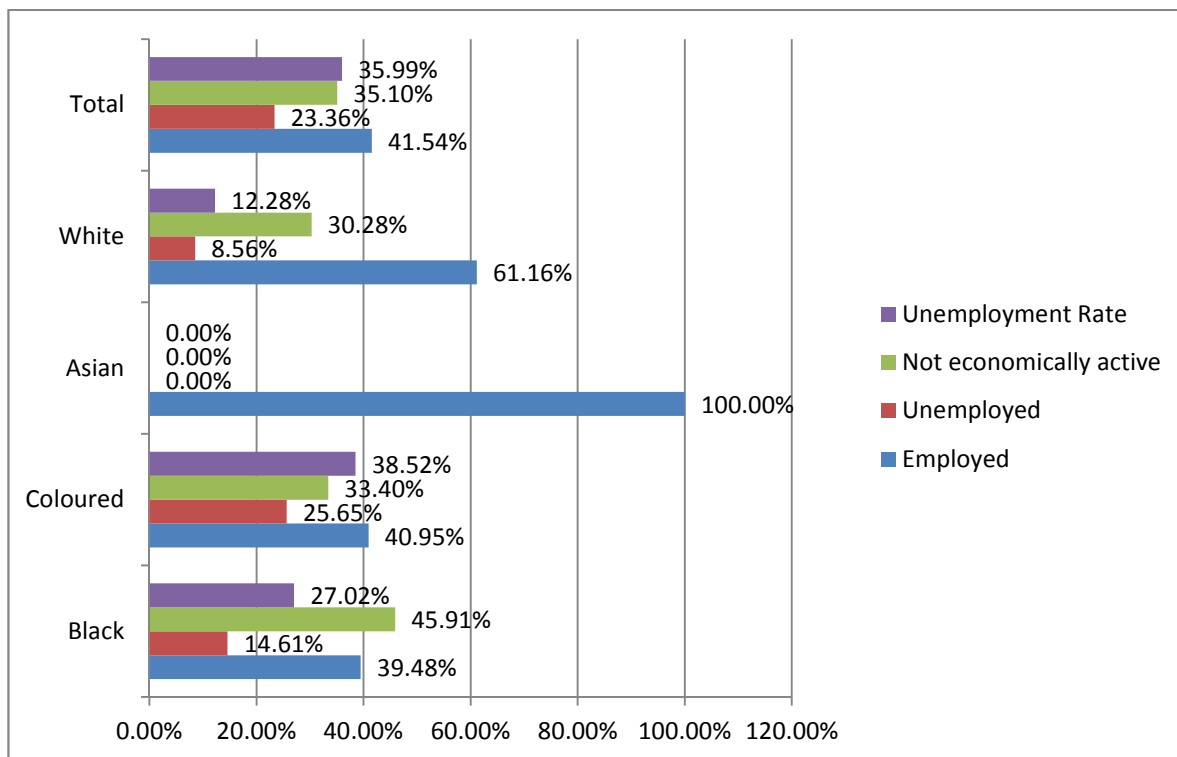
It is also likely that tourism plays an important role in the modest local economy given the size of the wholesale and retail trade, catering and accommodation industries. Apart from the rich cultural-historic heritage, the area is popular as a backpacking and scenic detour ‘roadtrip’ destination, with a variety of hiking, cycling, camping and adventure sports attractions (IDP, 2011). There are a number of guesthouses in the region and amateur astronomy is a popular attraction, owing to the clear night skies and lack of light pollution. The character of the surrounding area is therefore an important aspect of the local economy.

**Local Employment**

From Figure 4-11 it can be seen that the Ubuntu Local Municipality has a particularly high unemployment rate<sup>9</sup> (~36% of “Total” in Figure 4-11) when compared to the national average (~20%). It is also noteworthy that the Coloured population group has a higher unemployment rate when compared to all other population groups.

<sup>9</sup> The unemployment rate is calculated by the ratio of those not employed to those actively seeking employment.

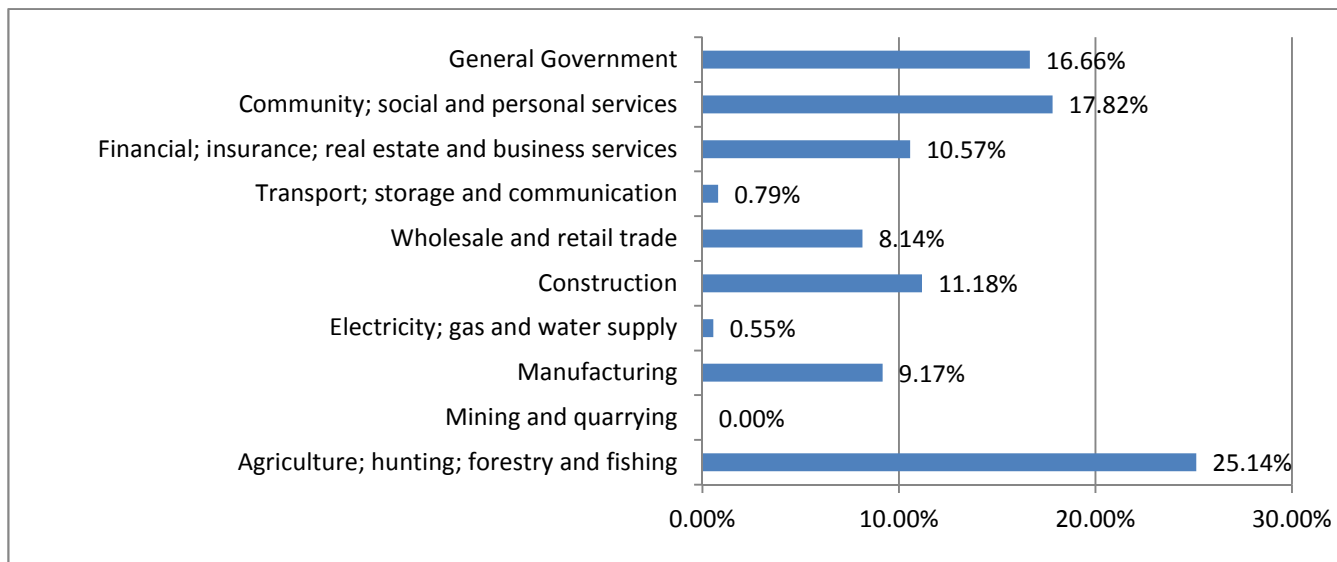




**Figure 4-11: Employment in Ubuntu Local Municipality Population**

Adapted from: StatsSA Community Survey, 2007

Figure 4-12 indicates the relative sectoral contribution to employment in the local economy. As expected, the agricultural sector employs the majority of the employed population (~25%). It is likely that government expenditure in community and social services accounts for the high proportion of employment in this sector.



**Figure 4-12: Sectoral Employment in the Ubuntu Local Municipality**

Adapted from: StatsSA Community Survey, 2007

### 4.3 Historical and Cultural Environment

No field surveys have been conducted for this baseline which draws on research undertaken previously for the general area; however, site specific information is referred to where available and relevant.

Schanskraal Farm is located within the central (western) extent of the Karoo Basin, one of the few basins worldwide in which the terrestrial fossil record, for the 45-million-year interval spanning the Permian and Triassic periods, is preserved and exposed (Golder, 2011). It is possible that fossils from this period are found on the Schanskraal Farm.

Regionally, there are numerous remnants of Xam San archaeology and symbolic use of the landscape. Isolated scatters of stone tools are found in the plains, rock art sites are found in the mountains and shell middens are found along river banks, pans and floodplains (Prins, 2011). San rock art as well as a number of sites thought to have been of cultural significance to the San People have been found on the Schanskraal property,.

Between 1200 and 1400 AD a global climatic fluctuation known as the Little Ice Age made the Karoo suitable for grazing, and as a consequence the remains of stone kraal complexes associated with the Koenkoen people are found in the region (Prins, 2011).

Between 1740 and 1787 Trekboers expanded into the Little Karoo and interior plateaux resulting in fierce conflict with the San people, and the eventual depletion of the San culture. Trekboers had to move regularly and homesteads associated with the Trekboer expansion close to springs and other water sources can be found at various locations in the region (Prins, 2011). There are also numerous stone walls on the property that were constructed by these farmers in the late 1700's and early 1800's.

The Burgersrust Lodge has noteworthy heritage value as it was built by the Trekboers in 1793 and once home to President Thomas Burger.

#### **4.3.1 Cultural Landscapes and Sense of Place**

The landscape of the surrounding area can be described as remote and arid. The visual characteristics of the area are linked to the undulating topography and undisturbed nature of the landscape (Prins, 2011). This largely uninhabited landscape is largely devoid of human intervention – a notable quality of the Karoo (Prins, 2011). Typical visual intrusions (vertical elements) are associated with homesteads, power and phone lines, windmills and some low intensity agricultural infrastructure. These structures contrast with low (sparse) vegetation cover, often not more than 1m high. However these human elements aren't necessarily visual intrusions and in many cases add to the visual interest of the landscape.

Buttes and mesas are significant geological features (landforms) in the landscape characterized by a hard resistant layer of rock creating flat mountain tops. The Sneeuwberg Mountain Range is considered a possible extension of the Graaff-Reinet cultural landscape – the Schanskraal Farm lies on the north western foothills of the Sneeuwberg, while Graaff-Reinet lies to the south. The range is a significant landscape marker in the area and an important icon in the history of the San people (hosting many Later Stone Age sites associated with this people) (Prins, 2011). The town of Nieu Bethesda is also considered a historical settlement.

Richmond, the closest urban centre to the farm, was established in 1843 to meet the religious needs of a growing farming community in the region. Richmond has a number of elements of cultural significance, such as its church, village square, and saddle horse museum.

## 5 Stakeholder Engagement

Stakeholder engagement forms a key component of the S&EIR process. The objectives of stakeholder engagement are outlined in this section, followed by a summary of the approach to be followed.

### 5.1 Objectives and Approach to Stakeholder Engagement

The overall aim of public consultation is to ensure that all interested and affected parties (IAPs) have adequate opportunity to provide input into the process and raise their comments and concerns. More specifically, the objectives of public consultation are to:

- Identify IAPs and inform them about the proposed development and S&EIR process;
- Provide the public with the opportunity to participate effectively in the process and identify relevant issues and concerns; and
- Provide the public with the opportunity to review documentation and assist in identifying mitigation and management options to address potential environmental issues.

### 5.2 Stakeholder Engagement Activities

The key activities that will be undertaken in the stakeholder engagement process during the Scoping Phase are summarised in Table 5-1 below.

**Table 5-1: Activities to be undertaken during the Scoping Phase**

Task:	Approximate Dates:
Submission and acceptance of Application Forms (Appendices B and C)	3 June 2011 (EA and WML application submissions) 6 June 2011 (WML application acceptance) 11 June 2011 (EA application acceptance)
Identification of key IAPs (Appendix C)	August 2011 (ongoing)
Release of Scoping Report for authority comment	18 - 20 June 2012
Advertisements to announce commencement of EIA, availability of the Scoping Report, and to register IAPs	20 June 2012
Placement of On-Site Posters	18-20 June 2012
Release of Scoping Report for public comment period	20 June 2012
Comment period	20 June 2012 – 30 July 2012
One-on-one meetings with neighbouring property owners / occupiers	16 – 20 July 2012
Submission of Scoping Report to NCDENC and DEA	6 August 2012

The key activities are described in further detail below.

#### 5.2.1 Applications

SRK prepared an Application Form (Appendix A) for EA and submitted it to the NCDENC on 3 June 2011. The application was accepted on 11 November 2010.

SRK prepared an Application Form (Appendix B) for a WML and submitted it to the DEA on 3 June 2011. The application was accepted on 6 June 2011.

### 5.3 Newspaper Advertisements and Posters

Newspaper advertisements announcing the commencement of the S&EIR process, the availability of the SR and inviting IAPs to register on the project database will be placed in a regional paper – “Die Burger” (in Afrikaans) – as well as in a local paper, the “Noordkaap” (in Afrikaans and English), on 20 June 2012.

In addition to the advertisements, a set of posters (an English and Afrikaans version) will be placed on the site’s boundary fence. These posters will contain brief details of the proposed project and process and the contact details of the consultant. In addition, A3 copies of the posters (English and Afrikaans) will be placed on community noticeboards located at the Municipal Offices and Post Office in Richmond.

Proof of these notices will be provided in the public consultation comments and responses report.

### 5.4 Identification of key Stakeholders and IAPs

Relevant IAPs from local, provincial and national authorities, conservation bodies, Non-Governmental Organisations (NGO) groups, local businesses and forums and surrounding land owners and occupants were considered for inclusion as IAPs for the project.

Relevant authorities and owners of properties neighbouring the farm have been automatically registered as IAPs. As is specified in GN R 543: 55(1), all persons who submit written comments, attend meetings or request in writing to be placed on the register will be registered as IAPs.

A list of IAPs automatically registered is provided in Appendix C. The IAP database will be updated throughout the process.

### 5.5 Notification of Scoping Report for Public Comment

The release of the SR for public review will be communicated to all automatically registered IAPs by post, email or fax on or by 11 June 2012. Hard copies of the full report were placed at the following venues:

- The Victoria West Municipal Office;
- Ntsikelelo Tida Library (Municipal Building, Loop Street, Richmond, Northern Cape); and
- SRK’s office in Rondebosch.

An electronic version of the report can also be accessed on SRK’s website [www.srk.co.za](http://www.srk.co.za) (via the ‘recent publications’ and then ‘public documents’ links).

Hard copies of the SR will be sent to the following government departments for comment on 18 June 2012:

- The Ubuntu Local Municipality (Municipal Manager for distribution);
- The Pixley Ka Seme District Municipality (Municipal Manager for distribution);
- The Pixley Ka Seme District Municipality (Municipal Planners);
- Northern Cape Provincial Government: Planning
- The Department of Water Affairs (Northern Cape);
- The Department of Agriculture, Fisheries and Forestry (Northern Cape);
- South African Heritage Resources Agency;
- Ngwao Boswa Kapa Bokoni; and

- The Northern Cape Department of Economic Development and Tourism.

As per GN 543, NCDENC and DEA will be notified that the reports will be sent to the entities listed above. NCDENC and DEA are required to request comment from these entities. It is assumed that comment will be requested, as legislated.

One-on-one meetings with neighbouring property owners and occupiers and other interested parties (on request) will be held during the week of 16 to 20 July. This level of direct participation is thought to be appropriate given the nature of the development, and regional population density.

IAPs will be provided with a 40 day comment period, ending on 30 July 2012. Comments received will be included in a comments and responses report to be submitted to the NCDENC and DEA.

## 6 Plan of Study for the EIA

The key potential issues and impacts identified during the Scoping Phase, as well as the proposed plan of study for the Impact Assessment Phase of the EIA to address these issues and impacts, are presented below.

### 6.1 Potential Issues and Impacts

Based on the professional experience of the EIA team the following *key* environmental issues – potential negative impacts and potential benefits – have been identified:

- **Terrestrial and aquatic ecology** – potential loss of faunal and floral species<sup>10</sup> associated with construction and operations phases of the development (including the impacts associated with the possible depletion of the groundwater resource and physical encroachment into surface water resources), and possible cross-subsidy from the new development to continued sustainable land restoration projects;
- **Socio-economic** – possible socio-economic costs and benefits of the proposed development to the wider community in the form of job creation, increased tourism, change to farm values, decreased water supply as well as the provision of community services (e.g. housing and education) and infrastructure;
- **Archaeological** – potential impacts on archaeological resources at the site as a result of construction of housing units and sports facilities;
- **Visual and sense of place** – loss of the current sense of place as well as potential visual impacts resulting from the elevated position of housing clusters and expanse of the golf course (including possible impacts on regional cultural heritage);
- **Aesthetic** – potential impact of noise (as a result of traffic and construction machinery) and possible dust generation during the construction phase; and odours from package plants during the operation phase; and
- **Land use** – loss of agricultural land and impact on agriculture in the area.

The potential direct, indirect and cumulative impact (negative and positive) of the proposed development of a portion of the Schanskraal Farm, based on the key issues listed above, will be addressed in the Impact Assessment Phase of the EIA.

To address these issues specialist studies / comments will be commissioned during the Impact Assessment Phase (see Section 6.2.2). Other issues will, however, be addressed by SRK with input from the project planners and engineers as well as in-house SRK specialists and do not warrant specialist investigations. This is covered in more detail in the remainder of this chapter.

### 6.2 Description of the proposed Impact Assessment Phase

The Impact Assessment Phase of the EIA for the Schanskraal development can be divided into key steps, namely:

- Consultation with relevant authorities;
- Specialist studies;
- Compilation of a Draft EIAR and EMP;

---

<sup>10</sup> Noting however that, in terms of ecosystem status, the only Species of Conservation Concern expected to occur at the site is the Blue Crane.

- Public consultation; and
- Submission of the Final EIAR and EMP to NCDENC and DEA.

These are outlined in more detail below.

### **6.2.1 Consultation with the relevant authorities**

Consultation will be conducted with NCDENC and DEA and other relevant authorities to clarify their requirements for the Impact Assessment Phase of the EIA, and to ensure that comments from the key authorities can be received early to allow for them to be addressed in the EIAR. The authorities that will be consulted include:

- The Northern Cape Department of Environmental Affairs and Nature Conservation;
- The Department of Environmental Affairs (National);
- The Ubuntu Local Municipality (Municipal Councillor and Manager for distribution);
- The Pixley Ka Seme District Municipality (Municipal Manager for distribution);
- The Pixley Ka Seme District Municipality (Municipal Planning Department);
- The Department of Water Affairs (Northern Cape);
- The Department of Agriculture, Fisheries and Forestry (Northern Cape);
- South African Heritage Resources Agency;
- Ngwao Boswa Kapa Bokoni; and
- The Northern Cape Department of Economic Development and Tourism.

### **6.2.2 Specialist Studies**

Specialist assessments will be undertaken as part of the Impact Assessment Phase to investigate the key potential environmental issues identified during Scoping. These key issues have been identified based on:

- The legal requirements (Section 2.1);
- The nature of the receiving environment (Chapter 4) and the proposed activity (Chapter 3); and
- Professional experience of the EIA team.

The specialist studies that are proposed for the Impact Assessment Phase are:

- Terrestrial and aquatic ecology impact assessment; and
- Groundwater impact assessment.

Additionally, the following specialist comments, which will be written directly into the EIAR, will be solicited:

- Agricultural comment;
- Socio-economic comment; and
- Visual comment.

Draft Terms of Reference for these studies are presented in Section 6.3 below.

Additionally, a heritage specialist will be required to, based on a desktop study and information on existing infrastructure at the Site, complete a NID and submit this document to NBKB and SAHRA for comment.

### 6.2.3 Compilation of a Draft Environmental Impact Assessment Report

The compilation of the Draft EIAR and EMP will include the following tasks:

- Assimilation of the specialist studies into the EIAR and EMP;
- Identification and assessment of environmental impacts based on the results of the specialist studies and professional judgement of the EIA team. This will entail an assessment of the duration, extent, probability and intensity of the impacts to determine their significance (see Section 6.4 below);
- Identification of mitigation measures and recommendations for management of the proposed project to minimise environmental impacts; and
- Collation of the above information into a Draft EIAR, and EMP for the design, construction and operation phases of the development.

### 6.2.4 Stakeholder Engagement

The stakeholder engagement process initiated during the Scoping Phase (see Section 5) will continue in the Impact Assessment Phase of the EIA. The following key tasks will be undertaken:

- Release of the Draft EIAR and EMP for public and authority comment (40 days), including distribution of an Executive Summary to all registered IAPs;
- Placing advertisements announcing the availability of the Draft EIAR for public comment;
- Holding one on one and/or focus group meetings to discuss the results of the EIA with IAPs; and
- Obtaining written comments from IAPs and key stakeholders on the Draft EIAR and EMP.

### 6.2.5 Submission of the Final EIAR and EMP to NCDENC and DEA

All comments received will be incorporated into a Comments Report which will be appended to the Final EIAR. The Final EIAR (including EMP) will then be submitted to NCDENC to inform their decision on the authorisation of the proposed development and to DEA to inform their decision on licensing of waste management activities associated with the proposed development. At the same time, the documents will be made available for public information but will not be distributed for a further round of public review (given that no substantial changes to the report are required).

Once NCDENC and DEA have reached decisions on the applications, they will each issue a separate record of their decision – NCDENC will issue an EA and DEA will issue a WML, or reasons for not issuing the EA and / or WML will be issued.

## 6.3 Specialist Study Terms of Reference

The assessment of impacts will be based on the professional judgment of the specialists, fieldwork and desk-top analysis, as required. General Terms of Reference (ToR) applicable to all specialists, as well as specific ToR for each specialist study are set out below. The general ToR may not apply equally to all specialists but are included to provide a comprehensive guideline. Specialists will be instructed to disregard those elements of the ToR which are not applicable to them.

### 6.3.1 General Terms of Reference

Various provincial authorities have published guidelines for involving specialists in S&EIR processes. SRK recommends that specialists be aware of and utilise these guidelines where appropriate.

The specialist studies shall be based on the procedure outlined below.



## Approach to the Study

The specialist is to provide an outline of the approach used in the study. Assumptions, limitations and sources of information must also be clearly identified. The knowledge of local people should, where possible, be incorporated in the study. The description of the approach shall include a short discussion of the appropriateness of the methods used in the specialist study. The assessment of the data shall, where possible, be based on accepted scientific techniques, failing which the specialist is to make judgments based on professional expertise and experience.

## Description of the Affected Environment or Baseline

A description of the affected environment must be provided, both at a site-specific level and for the wider region, the latter to provide an appropriate context. The focus of this description shall be relevant to the specialists' field of expertise. It is essential that the relative uniqueness or irreplaceability of the farm be understood in the context of the surrounding region at a local, regional (and, if necessary, national) scale. This will largely be based on a comparison to existing data sources, where available.

The specialist must provide an indication of the sensitivity of the affected environment. Sensitivity, in this instance, refers to the 'ability' of an affected environment to tolerate disturbance (given existing and expected cumulative impacts). For example, if very little disturbance results in the permanent loss of the biodiversity of a habitat, the affected environment could be categorised as having a low tolerance to disturbance and is consequently a highly sensitive habitat. If, on the other hand, a habitat is able to withstand significant disturbance without a marked impact on its biodiversity the affected environment could be categorised as having a high tolerance to disturbance (i.e. 'low sensitivity' habitat).

The specialist must provide a sufficiently comprehensive description of the existing environment in the study area to ensure that a detailed assessment of the potential impacts of the proposed development can be made. The baseline should include data collected through a thorough literature review as well as field surveys (where applicable).

## Impact Identification and Assessment

Clear statements identifying the potential environmental impacts of the proposed project must be presented. This includes potential impacts of the construction and operation of the project. The specialist shall clearly identify the suite of potential **direct, indirect and cumulative environmental impacts**<sup>11</sup> in his/her study. The assessment of these impacts should take into account any other existing development proposals in the surrounding area (e.g. hydrological fracturing for shale gas in the Karoo).

Direct impacts require a quantitative assessment which must follow the impact assessment methodology laid out in Section 6.4. The significance of impacts must be assessed both without and with assumed effective mitigation. Indirect and cumulative impacts should be described qualitatively.

The specialist shall comparatively assess environmental impacts of the development (and each alternative if applicable), and shall indicate any fatal flaws, i.e. very significant adverse environmental impacts which cannot be mitigated and which will jeopardise the project and/or activities in a particular area. All conclusions will need to be thoroughly backed up by scientific evidence.

---

<sup>11</sup> An **indirect** impact is an effect that is related to but removed from a proposed action by an intermediate step or process. **Cumulative** impacts occur when: Different impacts of one activity or impacts of different activities on the natural and social environment take place so frequently in time or so densely in space that they cannot be assimilated; or Impacts of one activity combine with the impacts of the same or other activities in a synergistic manner.

Should specialists wish to make use of a different impact rating system; this will be considered provided there is sufficient motivation.

### **Mitigation Measures**

Specialists must recommend practicable **mitigation measures** or management actions that effectively minimise or eliminate negative impacts, enhance beneficial impacts, and assist project design. If appropriate, specialists must differentiate between essential mitigation measures, which must be implemented (i.e. implicit in the “assuming mitigation” rating), and optional mitigation measures, which are recommended, (i.e. “nice-to-haves”, but which do not affect the impact rating). Unsubstantiated recommendations for further studies should be avoided where possible.

Specialists are also required to recommend appropriate monitoring and review programmes to track the efficacy of mitigation measures (if appropriate).

Specialists must indicate the environmental acceptability of the proposal (and alternatives if applicable), i.e. whether the impacts are acceptable or not. A comparison between the “no development” or “no go” alternative and the proposed development alternative(s) must also be included.

### **6.3.2 ToR for Terrestrial and Aquatic Ecology Specialist Study**

This study will address the ecological issues (including those associated with flora and fauna) identified in the Scoping Phase. The following ToR apply to the study:

- Describe the existing terrestrial and aquatic ecological characteristics (including habitats, corridors and linkages between the various ecological systems, and groundwater dependant ecosystems) of the Schanskraal Farm (with specific reference to the northern portion of the Elands Kloof property (i.e. the development site)) and surrounds;
- Identify and assess potential ecological impacts and any benefits resulting from the development of the Sporting Estate (including impacts associated with the construction, operation, phases of the project), using the impact rating methodology provided in Section 6.4;
- Identify and assess potential cumulative ecological impacts resulting from the proposed development in relation to proposed and existing developments in the surrounding area;
- Recommend mitigation measures to minimise impacts associated with the proposed development (including the recommendation of setback lines for surface water features), and enhancement measures; and
- Recommend monitoring measures to ensure the correct implementation and adequacy of recommenced mitigation measures, if applicable.

### **6.3.3 ToR for Groundwater Specialist Study**

This study will address groundwater issues identified in the Scoping Phase. The following ToR apply to the study:

- Undertake a water point survey (hydrocensus) to obtain background information on, inter alia, existing borehole/well locations, groundwater levels, water quality, and groundwater use;
- Identify, describe and map groundwater resources (i.e. the baseline) in the area that may be affected by the proposed development of the Schanskraal Farm, and obtain a holistic understanding of the interactions with surface water resources in the area (if applicable);
- Identify and assess potential impacts on groundwater resources and implications for aquatic biota (if applicable) (including impacts associated with the construction and operation phases), resulting from the project;

- Recommend mitigation measures to minimise impacts associated with the proposed development, and enhancement measures; and
- Recommend monitoring measures to ensure the correct implementation and adequacy of recommenced mitigation measures, if applicable.

### 6.3.4 ToR for Socio-economic Comment

Economic input on baseline information has been provided as presented in Section 4.2. The study will also comment on the potential impacts of the proposed development. More specifically the following ToR apply:

- Describe existing socio-economic conditions in the region, with reference to surrounding communities and income/employment derived from agricultural activities on the farm;
- Identify (with reference to the other specialist studies being undertaken for the proposed development) and outline the economic benefits and/or adverse economic effects of the proposed development; and
- Qualitatively assess the potential significance of economic impacts, with emphasis on the impacts on surrounding property values, tourism in the region and formal and informal employment.

### 6.3.5 ToR for Agricultural Comment

The study will comment on the impact of the proposed development on agricultural resources at the site. The following ToR apply:

- Describe the agricultural context of the Schanskraal Farm and discuss the Elands Kloof property's significance as an agricultural resource; and
- Comment on the potential impact of the development on the Schanskraal Farm and surrounding agricultural activities.

### 6.3.6 ToR for Visual Comment

The study will comment on the visual impact of the proposed development and the impact on the sense of place of the area. The following ToR apply:

- Comment on the visual zone of influence and spatial scope of the project using professional judgement;
- Describe the existing visual characteristics of the area;
- Comment on potential visual impacts of the development on the cultural landscape; and
- Advise the project team regarding visual softening / mitigation measures.

## 6.4 Impact Rating Methodology

The assessment of impacts was based on specialists' expertise, SRK's professional judgment, field observations and desk-top analysis.

The significance of potential impacts that may result from the proposed project was determined in order to assist decision-makers (in this case, the NCDENC and DEA).

The **significance** of an impact is defined as a combination of the **consequence** of the impact occurring and the **probability** that the impact will occur.

The criteria used to determine impact consequence are presented in Table 6-1 below.

**Table 6-1: Criteria to be used to determine the Consequence of the Impact**

Rating	Definition of Rating	Score
<b>A. Extent</b> – the area over which the impact will be experienced		
Local	Confined to project or study area or part thereof (e.g. Elands Kloof property)	1
Regional	The region, which may be defined in various ways, e.g. the Ubuntu Local Municipality	2
(Inter) national	Nationally or beyond	3
<b>B. Intensity</b> – the magnitude of the impact in relation to the sensitivity of the receiving environment, taking into account the degree to which the impact may cause irreplaceable loss of resources		
Low	Site-specific and wider natural and/or social functions and processes are negligibly altered	1
Medium	Site-specific and wider natural and/or social functions and processes continue albeit in a modified way	2
High	Site-specific and wider natural and/or social functions or processes are severely altered	3
<b>C. Duration</b> – the timeframe over which the impact will be experienced and its reversibility		
Short-term	Up to 2 years	1
Medium-term	2 to 15 years	2
Long-term	More than 15 years	3

The combined score of these three criteria corresponds to a **Consequence Rating**, as follows:

**Table 6-2: Method to be used to determine the Consequence Score**

Combined Score (A+B+C)	3 – 4	5	6	7	8 – 9
Consequence Rating	Very low	Low	Medium	High	Very high

Once the consequence is derived, the probability of the impact occurring is considered, using the probability classifications presented in Table 6-3 below.

**Table 6-3: Probability Classification**

<b>Probability</b> – the likelihood of the impact occurring	
Improbable	< 40% chance of occurring
Possible	40% - 70% chance of occurring
Probable	> 70% - 90% chance of occurring
Definite	> 90% chance of occurring

The overall **significance** of impacts is determined by considering consequence and probability using the rating system prescribed in Table 6-4 below.

**Table 6-4: Impact significance ratings**

		Probability			
		Improbable	Possible	Probable	Definite
Consequence	Very Low	<b>INSIGNIFICANT</b>	<b>INSIGNIFICANT</b>	<b>VERY LOW</b>	<b>VERY LOW</b>
	Low	<b>VERY LOW</b>	<b>VERY LOW</b>	<b>LOW</b>	<b>LOW</b>
	Medium	<b>LOW</b>	<b>LOW</b>	<b>MEDIUM</b>	<b>MEDIUM</b>
	High	<b>MEDIUM</b>	<b>MEDIUM</b>	<b>HIGH</b>	<b>HIGH</b>
	Very High	<b>HIGH</b>	<b>HIGH</b>	<b>VERY HIGH</b>	<b>VERY HIGH</b>

Finally the impacts are also considered in terms of their status (positive or negative impact) and the confidence in the ascribed impact significance rating. The prescribed system for considering impacts status and confidence (in assessment) is laid out in Table 6-5 below.

**Table 6-5: Impact status and confidence classification**

<b>Status of impact</b>	
Indication whether the impact is adverse (negative) or beneficial (positive).	+ ve (positive – a 'benefit')
	– ve (negative – a 'cost')
<b>Confidence of assessment</b>	
The degree of confidence in predictions based on available information, SRK's judgment and/or specialist knowledge.	Low
	Medium
	High

The impact significance rating should be considered by authorities in their decision-making process based on the implications of ratings ascribed below:

- **Insignificant:** the potential impact is negligible and will not have an influence on the decision regarding the proposed activity/development.
- **Very Low:** the potential impact is very small and should not have any meaningful influence on the decision regarding the proposed activity/development.
- **Low:** the potential impact may not have any meaningful influence on the decision regarding the proposed activity/development.
- **Medium:** the potential impact should influence the decision regarding the proposed activity/development.
- **High:** the potential impact will affect the decision regarding the proposed activity/development.
- **Very High:** The proposed activity should only be approved under special circumstances.

In the EIR, practicable mitigation and optimisation measures will be recommended and impacts rated in the prescribed way both without and with the assumed effective implementation of mitigation and optimisation measures. Mitigation and optimisation measures are either:

- **Essential:** must be implemented and are non-negotiable; and.
- **Optional:** must be shown to have been considered and sound reasons provided by the proponent if not implemented.

Negative impacts (with mitigation) rated high or very high should be shaded in red, while positive impacts (with optimisation) rated high or very high should be shaded green.

## 7 Findings and Recommendations

### 7.1 Key Findings

In order to apply for environmental authorisation and waste management licensing of the proposed Schanskraal Development, a Scoping Study has been undertaken in terms of the EIA Regulations, 2010, promulgated in terms of NEMA. The objectives of the study were to:

- Identify stakeholders and plan for a suitable participation process to inform them of the proposed activity and the EIA;
- Provide stakeholders with the opportunity to review the scoping report, and identify any issues and concerns associated with the proposed activity;
- Identify areas of likely impact and environmental issues that may require further investigation in an EIA; and
- Develop terms of reference for specialist studies to be undertaken in the Impact Assessment Phase of the EIA.

The key findings of the Scoping study are as follows:

- Ranor Karoo Farm Holdings cc proposes to subdivide and rezone a portion of the Elands Kloof Farm (remainder of Farm 121) in order to develop the “Schanskraal Sporting Estate”;
- The site is zoned for agriculture. The site will therefore need to be re-zoned for residential use – an application for a change in land use will be submitted following the S&EIR process in terms of the Northern Cape Planning and Development Act. Regional and provincial planners have indicated their ‘in principle’ support for the application;
- With the release of this report, the public participation process is underway, in line with the requirements of the EIA Regulations, 2010, and associated public participation guidelines;
- The following potential environmental impacts associated with the proposed development have been identified through the Scoping process:
  - **Terrestrial and aquatic ecology** – potential loss of faunal and floral species associated with construction and operation phases of the development (including the impacts associated with the possible depletion of the groundwater resource and physical encroachment into surface water resources);
  - **Social-economic** – possible socio-economic costs and benefits of the proposed development to the wider community in the form of job creation, increased tourism, change to farm values, decreased water supply as well as the provision of community services (e.g. housing and education) and infrastructure;
  - **Visual and sense of place** – loss of the current sense of place as well as potential visual impacts resulting from the elevated position of housing clusters and expanse of the golf course (including impacts on elements of cultural heritage associated with the property);
  - **Aesthetic** – potential impact of noise (as a result of traffic and construction machinery) and possible dust generation during the construction phase; and odours from package plants during the operation phase; and
  - **Land use and planning** – loss of agricultural land and impact on agriculture in the area, as well as the implications of existing planning documents and policies.

## 7.2 Way Forward

Based on the findings of the Scoping Study it is recommended that specialists be appointed to undertake the following assessment studies as part of the EIR Phase of the EIA:

- Terrestrial and aquatic ecology impact assessment; and
- Groundwater impact assessment.

Additionally, the following specialist comments are recommended to draft information directly into the EIAR:

- Agricultural comment;
- Socio-economic comment; and
- Visual comment.

Other impacts which SRK believes to be less significant will be assessed by the EIA team through desktop investigation and groundtruthing.

This SR is not a final report and may be amended based on comments received from stakeholders. The Executive Summary of this SR will be sent to all registered IAPs. Copies of the complete SR document will be made available for viewing at the Victoria West Municipal Office (Loop Street, Richmond) and the Ntsikelelo Tida Library (Richmond) and SRK's Cape Town office. The report is also available as a download from SRK's website [www.srk.co.za](http://www.srk.co.za) (via the 'recent publications' and then 'public documents' links). Upon request, hard copies of the SR and digital copies on CD can also be mailed to IAPs at a cost. One-on-one meetings will be held with occupants of properties adjoining Schanskraal – if you are a neighbouring property owner, or would like to discuss the assessment with a project consultant in the week of 16 – 20 July please inform the project team at the contact details provided below.

The public is invited to review this Scoping Report and send written comment to:

**Matthew Law** at SRK Consulting:

Postnet Suite #206  
Private Bag X18  
Rondebosch  
7701

email: [mlaw@srk.co.za](mailto:mlaw@srk.co.za)

Tel: (021) 659 3060

Fax: (021) 685 7105

For comments to be included in the submission of the SR to NCDENC and DEA, it must reach the above contact person **no later than 30 July 2012**.

Issues and concerns identified in the Scoping Phase will assist in focussing the Impact Assessment Phase, and will be used to refine the terms of reference for specialist investigations. The public is therefore urged to submit written comment.

## **Prepared by**

---

Matthew Law

Environmental Management Consultant

## **Reviewed by**

---

Chris Dalgliesh

Principal Environmental Assessment Consultant

All data used as source material plus the text, tables, figures, and attachments of this document have been reviewed and prepared in accordance with generally accepted professional environmental practices.



## 8 References

- Cape Town Heritage Trust., No date. The History of Richmond, Northern Cape, *Available at: <http://www.heritage.org.za/karoo/rich.htm>, Accessed in: July 2011*
- Burger, L., 2011. Air Quality Technical Assessment: Report in Support of the EMP for the South Western Karoo Basin Gas Exploration Application Project – Central Precinct. *Airshed Report No.:APP/10/GA-11 Rev 0.*
- DEA., 2010. Companion to the EIA Regulations 2010, *Integrated Environmental Management Guideline Series 5, Department of Environmental Affairs.*
- DEA., 2010b. NEMA Integrated Environmental Management Guideline Series guideline on Public Participation (Guideline 7), *Department of Environmental Affairs and Tourism (DEAT), Pretoria.*
- DEAT., 2004. Overview of Integrated Environmental Management, *Integrated Environmental Management, Information Series, Department of Environmental Affairs and Tourism (DEAT), Pretoria.*
- DWAF., 2004. Revision of General Authorisations in Terms of Section 39 of the National Water Act, 1998, *Government Gazette no. 26187, Government Notice No. 399, 26 March 2004*
- DWAF., 2005. National Groundwater Resource Assessment Phase 2 (GRAII). *Department of Water Affairs and Forestry, Reports 2C and 3E*
- GRA-II Project., 2005. Groundwater Resource Assessment II, *Department of Water Affairs and Forestry, Report number 2003-150*
- Golder, 2011 Environmental Management Plan South Western Karoo Basin Gas Exploration Application: Central Precinct, *Golder Report Number. 12800-10534-29*
- IDP., 2010. Pixley ka Seme District Municipality Integrated Development Plan 2010 – 2015. *Pixley ka Seme Report Number: Unknown*
- IDP., 2011. Ubuntu Local Municipality Integrated Development Plan 2011 – 2016. *Ubuntu Municipality Report Number: Unknown*
- Hudson, A., and Kimberg, P., 2011. Ecology Technical Report – EMP for the South Western Karoo Basin Gas Exploration, *Golder Associates (Pty) Ltd, Golder Report No. 12800-10444-21*
- Potgieter, L., Steyn, C., and Baxter, B., 2011. Soil Technical Report in support of the EMP for the South Western Karoo Basin Gas Exploration Application Project – Central Precinct. *Golder Report Number: 12800-10368-6*
- Prins, F., 2011. Technical Report in support of the EMP for the South Western Karoo Basin Gas Exploration Application Project: Cultural Heritage: Central Precinct
- WeatherSA, 2011. WeatherSA Climatic Records for the town: DeAar, *Available at: <http://old.weathersa.co.za/Climat/Climstats/DeAarStats.jsp>, Accessed in: July 2011*
- Wels, C., 2011. Schanskraal Farm Manager, *Personal communication, January – October 2011*

# Appendices

## **Appendix A: Application for Environmental Authorisation**



**APPLICATION FORM FOR AUTHORIZATION  
in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998),  
as amended and the Environmental Impact Assessment Regulations, 2010**

File Reference Number:  
NEAS Reference Number:  
Date Received:

(For official use only)

**Kindly note that:**

1. This application form is current as of 02 August 2010.
2. The application must be typed within the spaces provided in the form. The sizes of the spaces provided are not necessarily indicative of the amount of information to be provided. It is in the form of a table that can extend itself as each space is filled with typing.
3. Where applicable **black out** the boxes that are not applicable in the form.
4. Incomplete applications may be returned to the applicant for revision.
5. The use of "not applicable" in the form must be done with circumspection as if it is used in respect of material information that is required by the competent authority for assessing the application, and may result in the rejection of the application as provided for in the regulations.
6. This application must be handed in at the offices of the Northern Cape Department of Environment and Nature Conservation.
7. No faxed or e-mailed applications will be accepted.
8. The application must be completed by an independent environmental practitioner.
9. Unless protected by law, all information filled in on this application will become public information on receipt by the competent authority. Any interested and affected party should be provided with the information contained in this application on request, during any stage of the application process.

**SITE IDENTIFICATION AND LINKAGE**

Please indicate all the Surveyor-General 21 digit site (erf/farm/portion) reference numbers for all sites (including portions of sites) that are part of the application.

C	0	6	3	0	0	0	0	0	0	0	0	0	0	1	2	1	0	0	0	0	0
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

If there are more than 10, please attach a list with the rest of the number  
(These numbers will be used to link various different applications, authorisations, permits etc. that may be connected to a specific site)

## 1. BACKGROUND INFORMATION

<b>Project applicant:</b>	Ranor Karoo Farm Holdings cc			
<b>Trading name (if any):</b>	N/A			
<b>Business reg. no./ID. no.:</b>	Ck 9852601/23			
<b>Contact person:</b>	Mr Chris Wells			
<b>Physical address:</b>	Schanskraal, Richmond, Northern Cape, 7090			
<b>Postal address:</b>	PO Box 684, Graaf Reinet			
<b>Postal code:</b>	6280	<b>Cell:</b>	083 654 3104	
<b>Telephone:</b>	049 842 2326	<b>Fax:</b>	049 842 1719	
<b>E-mail:</b>	schanskraal@telkomsa.net			
<b>Project consultant/firm:</b>	SRK Consulting (Pty) Ltd			
<b>Business reg. no./ID. no.:</b>	1995.012890.07			
<b>Contact person:</b>	Matthew Law			
<b>Postal address:</b>	Postnet Suite #206, Private Bag X18, , Rondebosch			
<b>Postal code:</b>	7701	<b>Cell:</b>	082 4717 544	
<b>Telephone:</b>	021 659 3060	<b>Fax:</b>	021 685 7105	
<b>E-mail:</b>	mlaw@srk.co.za			
<b>Qualifications:</b>	BSc Hons MCom – Environmental Economics			
<b>Landowner:</b>	Ranor Karoo Farm Holdings cc			
<b>Business reg. no./ID. no.:</b>	Passport Details -UK 093220588			
<b>Contact person:</b>	Mr Roger Beach			
<b>Postal address:</b>	La Rosa Maris, 29.Avenue des Papalins, Monaco			
<b>Postal code:</b>	98 000	<b>Cell:</b>	[REDACTED]	
<b>Telephone:</b>	+44 7802 673 466	<b>Fax:</b>	[REDACTED]	
<b>E-mail:</b>	<a href="mailto:Rogeribbeach@aol.com">Rogeribbeach@aol.com</a>			
	In instances where there is more than one landowner, please attach a list of landowners with their contact details to this application.			
<b>District Municipality</b>	Pixley ka Seme District Municipality (DC7)			
<b>Local authority in whose jurisdiction the proposed activity will fall:</b>	uBuntu Local Municipality (NC071)			
<b>Contact person:</b>	Sam Diokpala and Sonwabile Nkodeshe			
<b>Postal address:</b>	Culvert Road, Private Bag X1012, De Aar			
<b>Postal code:</b>	7000	<b>Cell:</b>	083 256 9930 082 316 6570	
<b>Telephone:</b>	053 631 0891	<b>Fax:</b>	053 631 2529 / 0897	
<b>E-mail:</b>				
	Please note that a complete list of all organs or state and or any other applicable authority with their contact details must be appended to this application.			
<b>Project title:</b>	Schanskraal Sporting Estate			
<b>Brief project description</b>	A proposed mixed use residential and recreational estate (including, but not limited to, 60 new residential units, a sports shooting arena and a golf course)  Waste management activities such as domestic waste storage, on-site disposal and incineration, and sewage treatment (see Waste Licence Application – Appendix A).			
<b>Project Location:</b>	Remainder of Farm 121, Elands Kloof (refer to locality map: Appendix B) (Farm name, portion etc.) Where a large number of properties are involved (e.g. linear activities), please attach a full list to this application.			
<b>Closest Town(s) or district(s):</b>	Richmond	<b>Distance (in km):</b>	63.7	
<b>Physical address:</b>	Schanskraal Farm, Richmond, Northern Cape, 7090			
	In instances where there is more than one town or district involved, please attach a list of towns or districts to this application.			
<b>Current land-use zoning:</b>	Agriculture			
	In instances where there is more than one current land-use zoning, please attach a list of current land use zonings that also indicate which portions each use pertains to, to this application.			
<b>Coordinates:</b>	Latitude:	31 <sup>0</sup>	34'	48.90"
	Longitude:	24 <sup>0</sup>	27'	56.52"
<b>Property size:</b>	6689 ha			

Is a change of land-use or a consent use application required?

YES	
YES	

Must a building plan be submitted to the local authority?

Locality map:

A locality map must be attached to back of this document, as Appendix B. The scale of the locality map must be at least 1:50 000. The scale must be indicated on the map. The map must indicate the following:

- an accurate indication of the project site position as well as the positions of the alternative sites, if any;
- road access from all major roads in the area;
- road names or numbers of all major roads as well as the roads that provide access to the site(s);
- all roads within a 1km radius of the site or alternative sites; and
- a north arrow.

## 2. ACTIVITIES APPLIED FOR

An application may be made for more than one listed or specified activity that, together, make up one development proposal. All the listed activities that make up this application must be listed.

Indicate the number and date of the relevant notice:	Activity No (s) (in terms of the relevant or notice) :	Describe each listed activity:
544, 18 June 2010	9	The construction of infrastructure for the transport of water, sewage or stormwater exceeding 1000m in length: <i>It is likely that linear infrastructure will be constructed in order to service the estate units.</i>
544, 18 June 2010	11	The construction of infrastructure within 32 meters of a water course: <i>It is possible that some infrastructure will be developed in close proximity to a watercourse on the property.</i>
544, 18 June 2010	18	The infilling or deposition of any material of more than 5 cubic meters or the removal of any material from a watercourse: <i>It is likely that some earth moving activity may be necessary for the proposed construction of a golf course.</i>
544, 18 June 2010	41	The expansion of facilities or infrastructure for the off-stream storage of water, including dams and reservoirs, where the combined capacity will be increased by 50000 cubic metres or more. <i>Existing water storage and/or dams at the site may need to be expanded.</i>
545, 18 June 2010	15	The physical alteration of 20 hectares or more of undeveloped land for residential and recreational purposes: <i>The site for the estate will exceed 20 hectares, the footprint will not however exceed 20 hectares.</i>
546, 18 June 2010	11	The construction of tracks or routes (excluding the conversion of existing tracks) for the recreational use of motor powered vehicles within areas of indigenous vegetation outside urban areas (in the Northern and Eastern Cape). <i>It is possible that some tracks will be developed for access to recreational activities / game viewing on the farm.</i>
546, 18 June 2010	14	The clearance of 5 hectares or more of vegetation which constitutes 75% or more of indigenous vegetation outside urban areas in the Northern Cape. <i>It is possible that more than 5 hectares will be cleared for the construction of infrastructure and facilities (including golf course). This will be confirmed during the detailed design phase of the development.</i>

Please note that any authorisation that may result out of this application will only cover activities applied for. Omissions may render any authorisation that is based on incomplete information to be nil and void.

## 3. OTHER AUTHORISATION REQUIRED

3.1 Do you need any Authorisation in terms of any of the following laws?

	Yes	No
3.1.1 National Environmental Management Act: Waste Act		
3.1.2 National Environmental Management Act : Air Quality Act		No
3.1.3 National Environmental Management Act : Protected Areas		No
3.1.4 National Environmental Management Act : Biodiversity Act		No

3.1.5	Mineral Petroleum Development Resources Act	<input type="checkbox"/>	<input type="checkbox"/> No
3.1.6	National Water Act	<input type="checkbox"/> Yes	<input type="checkbox"/>
3.1.7	National Heritage Resource Act	<input type="checkbox"/> Yes	<input type="checkbox"/>
3.1.8	Other ( Please Specify )	<input type="checkbox"/>	<input type="checkbox"/> No

3.2 Have such applications been lodged already?\*

<input type="checkbox"/>	<input type="checkbox"/> No
--------------------------	-----------------------------

\* The application for waste management licence has been submitted at the same time as this application and is included as Appendix A to this form.

#### 4. TYPE OF APPLICATION

##### 4.1. Application for Basic Assessment (BA)

Is this an application for conducting a basic assessment (as defined in the regulations)?

<input type="checkbox"/>	<input type="checkbox"/> NO
--------------------------	-----------------------------

If, YES, is a basic assessment report attached?

If, NO, please indicate when the basic assessment report will be submitted:

N/A

##### 4.2. Application for Scoping and Environmental Impact Assessment (EIA)

Is this an application for Scoping and EIA (as defined in the regulations)?

<input type="checkbox"/> YES	<input type="checkbox"/>
------------------------------	--------------------------

If, YES, is a Scoping Report and Plan of Study for EIA attached?

<input type="checkbox"/>	<input type="checkbox"/> NO
--------------------------	-----------------------------

If, NO, please indicate when the Scoping Report and Plan of Study for EIA will be submitted:

The Scoping Report and Plan of Study for EIA will be submitted at the conclusion of the Scoping Phase - ~ July 2011

The scoping report and/or the plan of study for EIA will be submitted after consultation with the competent authority:

<input type="checkbox"/>	<input type="checkbox"/> NO
<input type="checkbox"/>	<input type="checkbox"/> NO

A consultation with the competent authority is hereby requested:

## 5. Declarations

### 5.1 The Applicant

I, \_\_\_\_\_, declare that I -

- am, or represent<sup>1</sup>, the applicant in this application;
- have appointed an environmental assessment practitioner to act as the independent environmental assessment practitioner for this application;
- will provide the environmental assessment practitioner and the competent authority with access to all information at my disposal that is relevant to the application;
- will be responsible for the costs incurred in complying with the Environmental Impact Assessment Regulations, 2010, including but not limited to –
  - costs incurred in connection with the appointment of the environmental assessment practitioner or any person contracted by the environmental assessment practitioner;
  - costs incurred in respect of the undertaking of any process required in terms of the Regulations;
  - costs in respect of any fee prescribed by the Minister or MEC in respect of the Regulations;
  - costs in respect of specialist reviews, if the competent authority decides to recover costs; and
  - the provision of security to ensure compliance with conditions attached to an environmental authorisation, should it be required by the competent authority;
- will ensure that the environmental assessment practitioner is competent to comply with the requirements of these Regulations and will take reasonable steps to verify whether the EAP complies with the Regulations;
- will inform all registered interested and affected parties of any suspension of the application as well as of any decisions taken by the competent authority in this regard;
- am responsible for complying with the conditions of any environmental authorisation issued by the competent authority;
- hereby indemnify the Government of the Republic, the competent authority and all its officers, agents and employees, from any liability arising out of the content of any report, any procedure or any action which the applicant or environmental assessment practitioner is responsible for in terms of these Regulations;
- will not hold the competent authority responsible for any costs that may be incurred by the applicant in proceeding with an activity prior to obtaining an environmental authorisation or prior to an appeal being decided in terms of these Regulations;
- will perform all other obligations as expected from an applicant in terms of the Regulations;
- all the particulars furnished by me in this form are true and correct; and
- I realise that a false declaration is an offence in terms of regulation 71 and is punishable in terms of section 24F of the Act.

\_\_\_\_\_  
Signature of the applicant<sup>2</sup>/ Signature on behalf of the applicant:

\_\_\_\_\_  
Name of company (if applicable):

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature of the Commissioner of Oaths:

\_\_\_\_\_  
Date:

\_\_\_\_\_  
Designation:

\_\_\_\_\_  
Official stamp (below):

<sup>1</sup> If this is signed on behalf of the applicant, proof of such authority from the applicant must be attached.

<sup>2</sup> If the applicant is a juristic person, a signature on behalf of the applicant is required as well as proof of such authority.



5.2 The Environmental Assessment Practitioner

I, \_\_\_\_\_ declare that --

- I act as the independent environmental practitioner in this application
- I act independently
- I will perform the work relating to the application in an objective manner, even if this results in views and findings that are not favourable to the applicant
- I declare that there are no circumstances that may compromise my objectivity in performing such work;
- I have expertise in conducting environmental impact assessments, including knowledge of the Act, regulations and any guidelines that have relevance to the proposed activity;
- I will comply with the Act, regulations and all other applicable legislation;
- I will take into account, to the extent possible, the matters listed in regulation 8 of the regulations when preparing the application and any report relating to the application;
- I have no, and will not engage in, conflicting interests in the undertaking of the activity;
- I undertake to disclose to the applicant and the competent authority all material information in my possession that reasonably has or may have the potential of influencing - any decision to be taken with respect to the application by the competent authority; and - the objectivity of any report, plan or document to be prepared by myself for submission to the competent authority;
- I will ensure that information containing all relevant facts in respect of the application is distributed or made available to interested and affected parties and the public and that participation by interested and affected parties is facilitated in such a manner that all interested and affected parties will be provided with a reasonable opportunity to participate and to provide comments on documents that are produced to support the application;

\_\_\_\_\_  
Signature of the environmental assessment practitioner:

SRK Consulting (Pty) Ltd

Name of company:

\_\_\_\_\_  
Date:

\_\_\_\_\_  
Signature of the Commissioner of Oaths:

\_\_\_\_\_  
Date:

\_\_\_\_\_  
Designation:

Official stamp (below):

## **Appendix A**

### **Waste Management License Application Form**

## **Appendix B**

### **Locality Map**

## **Appendix B: Application for Waste Management Licence**



**WASTE LICENCE  
APPLICATION PROCESS  
FOR WASTE ACTIVITIES  
IN TERMS OF THE  
NATIONAL  
ENVIRONMENTAL  
MANAGEMENT :WASTE  
ACT 2008 (No. 59 of 2008)**

---

## TABLE OF CONTENTS

PART 1: WASTE ACTIVITIES LICENSING APPLICATION PROCESS EXPLAINED:.....	4
1.1 Licensing process:.....	4
1.2 Where to submit applications.....	4
1.3 Making an Application.....	6
2. DEFINITIONS:.....	7
3. THE WASTE LICENSING APPLICATION STAGES:.....	7
3.1 Stage 1: Pre-application .....	7
3.2 Criteria for determining whether basic assessment or scoping is to be applied to applications .....	7
PART 2: APPLICATION FORM FOR NEW LICENCE.....	8
SECTION 1 – TYPE OF APPLICATION AND FACILITY:.....	9
SECTION 2: SITE IDENTIFICATION, LOCATION AND LANDUSE.....	11
Size of Site and Classification.....	12
Current land-use where the site is situated: .....	12
Geographical coordinates of all external corner points of the site:.....	12
Site Address:.....	12
Schanskraal Farm.....	12
Schanskraal, Richmond, Northern Cape, 7090 .....	12
Richmond.....	12
Northern Cape.....	13
uBuntu Local Municipality (NC071) .....	13
Pixley ka Seme District Municipality (DC7) .....	13
Schanskraal Farm .....	13
P.O. Box 684.....	13
Graaff Reinet.....	13
6280.....	13
049 842 2326.....	13
schanskraal@telkomsa.net .....	13
Northern Cape Department of Environment and Nature Conservation.....	13
053 807 7430.....	13
SECTION 3: CONTACT INFORMATION .....	13
Operational times.....	14
SECTION 4: PROCESS/ACTIVITY DESCRIPTION: .....	14
Project Title .....	14

Project Description: .....	15
SECTION 5: WASTE QUANTITIES .....	16
Recovery, Reuse, Recycling, treatment and disposal quantities:.....	16
SECTION 6: GENERAL .....	16
Prevailing wind direction (e.g. NWW).....	16
The size of population to be served by the facility.....	17
The geological formations underlying the site: .....	17
SECTION 7: COMPETENCE TO OPERATE SITE .....	17
Legal compliance .....	17
Technical competence .....	18
Financial Provisions .....	18
SECTION 8: LANDFILL PARAMETERS – N/A .....	19
SECTION 9: DECLARATIONS.....	20
The independent Environmental Assessment Practitioner .....	20
The Applicant .....	21
APPENDIX: A1 .....	22
APPENDIX B1 .....	23
APPENDIX: C.....	24
Locality Map .....	24

## **THE WASTE LICENSING APPLICATION PROCESS IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT: WASTE ACT 2008 (No. 59 of 2008) “NEMWA”.**

### **PART 1: WASTE ACTIVITIES LICENSING APPLICATION PROCESS EXPLAINED:**

#### **1.1 Licensing process:**

- 1.1.1 The waste licensing process for listed activities under Schedule 1 in the National Environment Management Waste Act 2008 is as defined in the environmental impact assessment (EIA) regulations made under section 24(5) of the National Environment Management Act 2008 (NEMA) No. 107 of 1998.
- 1.1.2 This application form is the official form in terms of Regulation 13 (2) (a) of the EIA regulations R385 of 2006 and must accompany every licence application pertaining to waste activities in terms of NEMWA.

#### **1.2 Where to submit applications**

- 1.2.1 The Minister of Water and Environmental Affairs is the licensing authority in respect of all activities listed in both categories of Schedule 1 of NEMWA pertaining to hazardous waste. The application for a waste licence in terms of section 45 of the National Environment Management Waste Act 2008 (59 of 2008) for hazardous waste activities must be submitted by lodging an application with the National Department of Environment. The application must be marked for the attention of:

The Director: Authorisation and Waste Disposal Management  
Private Bag X447  
Pretoria 0001  
Tel: 012 310 3920  
Fax: 012 310 3753

- 1.2.2 The Member of the Executive Council of a province who is responsible for waste management in the province “MEC” is the licensing authority in respect of all activities listed in both categories of Schedule 1 of NEMWA pertaining to general waste. The application for a waste licence in terms of section 45 of the National Environment Management Waste Act 2008 (No. 59 of 2008) for general waste activities must be submitted by lodging an application with the relevant provincial department and applications must be marked for the attention of the Head of Department in the relevant province at the following addresses:

Head of the Department  
Department of Environmental Affairs and Development Planning  
Private Bag X 9086  
**CAPE TOWN**  
8000  
Fax: 021 483 4425  
Tel: 021 483 5109



Head of Department  
Department of Economic Development and Environmental Affairs  
Private Bag X 0054  
**BHISHO**  
5605  
Fax: 040 609 4700  
Tel: 040 609 4702

Head of Department  
Department of Economic Development Tourism and Environment Affairs  
Private Bag X 20801  
**BLOEMFONTEIN**  
9300  
Fax: 051 400 4772  
Tel: 051 400 4917

Head of Department  
Department of Agriculture and Rural Development  
P.O. Box 8769  
**JOHANNESBURG**  
2000  
Fax: 011 333 0667  
Tel: 011 355 1927

Head of Department  
Department of Agriculture Environmental Affairs and Rural Development  
Private Bag X 9059  
**PETERMARITZBURG**  
3200  
Fax: 033 355 9593  
Tel: 033 355 9621

Head of Department  
Department of Economic Development, Environment and Tourism  
Private Bag X 9484  
**POLOKWANE**  
0700  
Fax: 015 291 5809  
Tel: 015 291 5447

Head of Department  
Department of Economic Development Environment and Tourism  
Private Bag X 11219  
**NELSPRUIT**  
1200  
Fax: 013 766 8445  
Tel: 013 766 6063

Head of Department  
Department of Agriculture, Conservation and Rural Development  
Private Bag X 2039  
**MMABATHO**  
2735  
Fax: 018 389 5006  
Tel: 018 389 5341

Head of Department  
Department of Environmental Affairs and Nature Conservation  
Private Bag X 6102  
**KIMBERLEY**  
8300  
Fax: (053) 807 7367

### **1.3 Making an Application**

- 1.3.1 The applicant must fill in all relevant sections of this form. Incomplete applications will not be processed. The applicant will be notified of the missing information in the acknowledgement letter that will be sent within 14 days of receipt of the application. Sections in the form that do not apply to the applicant must be marked “not applicable”
- 1.3.2 There is no prescribed fee.
- 1.3.3 This application form is in effect as of 01 July 2009. It is the responsibility of the Applicant/Environmental Assessment Practitioner “EAP” to ascertain whether subsequent versions of the form have been published or produced by the licensing authority. It is the applicant’s responsibility to download the current version of the application form from the South African waste information centre website ([www.sawic.org.za](http://www.sawic.org.za)).
- 1.3.4 The application form may be submitted electronically **and** four hardcopies of the form must be submitted to the Directorate: Authorisation and Waste Disposal Management where the national department is the licensing authority. The applicant must contact the relevant provincial office regarding the number of copies required to process the application where provincial departments are the licensing authorities. All application forms must be signed as stipulated in the form. Applications that are not signed or completed accordingly will not be considered.
- 1.3.5 Where the national department is the licensing authority, all applications forms must be accompanied by four copies of reports and other documents required in terms of the EIA Regulations.
- 1.3.6 Where the provincial department is the licensing authority, all applications forms must be accompanied by the number of copies required by that province for reports and other documents required in terms of the EIA Regulations.

1.3.7 The applicant must clearly mark confidential sections of the information submitted in the application form and supporting documents. All other information will become public information on receipt by the licensing authority.

## **2. DEFINITIONS:**

2.1 Definitions in this form are as per EIA Regulation in terms of Chapter 5 of the National Environmental Management Act , 1998 and waste management activities list in terms of the National Environmental Management: Waste Act 2008, No. 59 of 2008.

## **3. THE WASTE LICENSING APPLICATION STAGES:**

### **3.1 Stage 1: Pre-application**

Before making an application:

- The applicant must appoint an EAP in terms of EIA regulations
- The EAP must comply with general requirements as given in EIA regulations
- The EAP may be disqualified in terms of EIA regulations

### **3.2 Criteria for determining whether basic assessment or scoping is to be applied to applications**

3.2.1 Basic assessment must be applied to an application if the authorisation applied for is in respect of an activity listed in Category A in schedule 1 of the NEMWA (59 of 2008).

3.2.2 Scoping and EIA must be applied to an application if the authorisation applied for is in respect of an activity listed in Category B in schedule 1 of the NEMWA (59 of 2008).



# **WASTE LICENCE APPLICATION FORM**

**PART 2: APPLICATION FORM FOR NEW LICENCE**



(For official use only)

**File Reference Number:**

**Date Received:**

**Classification:**


**WASTE LICENCE APPLICATION FORM**  
**in terms of the National Environmental Management: Waste Act, 2008 (No. 59 of 2008)**

**THE APPLICATION FORM MAY BE TYPED OR HAND-WRITTEN.**

**SECTION 1 – TYPE OF APPLICATION AND FACILITY:**

Indicate the type of application by marking with a cross and fill in the required sections only

TYPE OF APPLICATION	MARK	SECTIONS OF THE FORM TO BE FILLED IN
A new licence	<b>X</b>	Part 2 and see table of activities below for relevant sections of part 2
A licence amendment		Part 3 and Part 2 only if there are changes to the information or the applicant holds a permit issued in terms of section 20 of ECA (No. 78 of 1989) as amended.
A licence for closure		Part 4, Section 2, 3a, 3b, & 3c. of part 2 of this application form

Indicate the type of facility/operation and fill in the required sections only

TYPE OF ACTIVITY	MARK	SECTIONS OF THE FORM TO BE FILLED IN
Recycling and/or recovery Facility		All except Section 8
Storage and or transfer Facility	<b>X</b>	All except Section 8
Treatment facility	<b>X</b>	All except Section 8
Disposal facility		All

## Activities applied for

An application may be made for more than one listed or specified activity that, together, make up one development proposal. All the listed activities that make up this application must be listed.

INDICATE THE NO. & DATE OF THE RELEVANT NOTICE:	ACTIVITY NUMBERS (AS LISTED IN THE WASTE MANAGEMENT ACTIVITY LIST) :	DESCRIBE EACH LISTED ACTIVITY:
Government Gazette 32368 of 3 July 2009	A1	The storage, including the temporary storage, of general waste at a facility that has the capacity to store in excess of 100m <sup>3</sup> of general waste at any one time, excluding the storage of waste in lagoons. <i>Domestic waste will be stored temporarily before being removed from the site or disposed of. The storage capacity will be determined during detailed design.</i>
Government Gazette 32368 of 3 July 2009	A18	The construction of facilities for activities listed in Category A of this Schedule (not in isolation to associated activity).
Government Gazette 32368 of 3 July 2009	B5	The treatment of hazardous waste using any form of treatment regardless of the size or capacity of such a facility to treat such waste. <i>It is likely that a package sewage treatment plant will be installed as part of the development.</i>
Government Gazette 32368 of 3 July 2009	B7	The treatment of effluent, wastewater or sewage with an annual throughput capacity of 15 000 cubic metres or more. <i>It is likely that a number of package sewage treatment plants will be installed as part of the development. Either each unit will have a 'Tecroveer micro sewage treatment plant', or each housing cluster will have a central package plant.</i>
Government Gazette 32368 of 3 July 2009	B11	The construction of facilities for activities listed in Category B of this Schedule (not in isolation to associated activity).

NB: Authorisation issued will only cover activities applied for and listed above. Activities added in the middle or after the processing of this authorisation may mean a totally new application.

### Application for Category A (equivalent to Basic Assessment)

Is this an application for a basic assessment (as defined in the EIA regulations)?

	NO
--	----

If, YES, is a basic assessment report attached?

--

If, NO, please indicate when the basic assessment report will be submitted:

N/A
-----

Is information required as per Appendix B1 of this form attached?

	NO
--	----

If, NO, please ensure that it is submitted together with the basic assessment report (BAR)

### Application for Category B (equivalent to Scoping and Environmental Impact Assessment (EIA))

Is this an application for Scoping and EIA (as defined in the EIA regulations)?

YES	
-----	--

Please indicate when the Scoping Report and Plan of Study for EIA will be submitted:

~July / August 2011 – Application form for environmental authorisation attached as Appendix D
---

Please ensure that both Appendix B1 and B2 are completed and included in reports

The scoping report and/or the plan of study for EIA will be submitted after consultation with the competent authority

A consultation with the competent authority is hereby requested:

	NO
	NO

## SECTION 2: SITE IDENTIFICATION, LOCATION AND LANDUSE

Please indicate all the Surveyor-general Cadastral Code 21 digit site (erf/farm/portion) reference numbers:

C	0	6	3	0	0	0	0	0	0	0	0	0	1	2	1	0	0	0	0	0
1	2		3			4					5									

### LEGEND:

1. Refers to the Surveyor's-General Office (T = Pretoria, F = Free State, C = Cape Town & N = Kwazulu-Natal)
2. Major Code (Registration Division)
3. Minor code
4. Property No (i.e. Farm No./Erf No./Holding Area No./Scheme No.)
5. Portion Number

If the property type is not surveyed, complete the following:

Full name of leader of village, community or tribal authority	N/A
Local Authority	N/A
Magisterial District	N/A
Tribal Authority/Council	N/A

Ownership of the property (mark only one with an X)

Property owned by applicant (100% Share value)	X	Property leased by applicant	
Property owned by applicant (Share value less than 100%)		The property is communal land	

## Size of Site and Classification

Size of facility for a waste management activity	To be confirmed through S&EIR.
Area where the waste management activity takes place	To be confirmed through S&EIR.
Classification of facility in terms of climatic water balance	N/A as not a disposal facility (assume that B < 0)
Classification of Facility in terms of the type and the quantity of waste received	N/A as not a disposal facility (assume G:C(:B-)

## Current land-use where the site is situated:

Industrial  
Agriculture  
Residential  
Forestry  
Wetlands  
Open spaces



Recreation  
Commercial  
Mining & quarrying  
Wilderness areas  
Nature area



Other current land-use **N/A**

MARK YES/NO	SECTION IN THE REPORTS WHERE RELEVANT AUTHORISATION IS ATTACHED
Is a change of land-use or a consent use application required?	<b>YES</b> To be included in EIR
Must a building plan be submitted to the local authority for approval?	<b>YES</b> To be included in EIR

## Geographical coordinates of all external corner points of the site:

Refer to locality map: Appendix C

Number of corner	Latitude (South)			Longitude (East)		
Elands Kloof 1	31°	34'	48.90"	24°	27'	56.52"
Elands Kloof 2	31°	34'	28.84"	24°	30'	26.26"
Elands Kloof 3	31°	36'	13.35"	24°	31'	22.65"
Elands Kloof 4	31°	42'	17.94"	24°	30'	51.04"
Elands Kloof 5	31°	42'	23.43"	24°	28'	13.15"

## Site Address:

Building Name or Number	Schanskraal Farm
Street	Schanskraal, Richmond, Northern Cape, 7090
City/Closest Town	Richmond



Province	Northern Cape		
Local Municipality	uBuntu Local Municipality (NC071)		
District Municipality	Pixley ka Seme District Municipality (DC7)		
Property Description (Deeds Act or name of farm, town, city or agricultural holding)	Schanskraal Farm		
Postal address	P.O. Box 684		
	Graaff Reinet		
Postal code:	6280	Cell:	083 654 3104
Telephone:	049 842 2326	Fax:	049 842 1719
E-mail:	schanskraal@telkomsa.net		

Local authority in whose jurisdiction the activity will fall:	Northern Cape Department of Environment and Nature Conservation		
Contact person:	To be determined (at this stage Nnditsheni Ramuhulu)		
Postal address:	Private Bag X6102, Kimberley		
Postal code:	8300	Cell:	
Telephone:	053 807 7430	Fax:	053 831 3530
E-mail:	eia@half.ncape.gov.za		

In instances where there is more than one local authority involved, please attach a list of local authorities with the contact person and contact details to this application.

### SECTION 3: CONTACT INFORMATION

#### A) Person to contact about application (EAP)

First name & Surname	Matthew Law		
Company name (if any):	SRK Consulting (Pty) Ltd – Cape Town		
Company Registration	Company Registration: 1995.012890.07		
Physical address:	Albion Spring 183 Main Road		
	Rondebosch		
Postal address:	Postnet Suite #206, Private Bag X18		
	Rondebosch		
Postal code:	7701	Cell:	082 471 7544
Telephone:	021 659 3060	Fax:	021 6857105
Email Address	mlaw@srk.co.za		

#### B) Person wishing to hold licence

First name & Surname of Applicant	Mr Roger Beach (c/o Mr Chris Wells)		
Company name (if any):	Ranor Karoo Farm Holdings		
Company Registration/Identity number for individuals	Ck 9852601/23		

Physical address	Schanskraal, Richmond, Northern Cape		
	7090		
Postal address	C/O Schanskraal Farm		
	P.O. Box 684, Graaff Riet		
Postal code:	6280	Cell:	083 654 3104
Telephone:	049 842 2326	Fax:	049 842 1719
E-mail:	schanskraal@telkomsa.net		

### C) Landowner where activity takes place

First name & Surname	Mr Roger Beach		
Company name (if any):	Ranor Karoo Farm Holdings		
Company Registration/Identity number for individual(s)	Passport Details - UK 093220588		
Physical address	Schanskraal, Richmond, Northern Cape		
	7090		
Postal address	La Rosa Maris, 29 Avenue des Papalins		
	Monaco	Cell:	
Telephone:	+44 7802 673 466	Fax:	
E-mail:	<a href="mailto:Rogerjbbeach@aol.com">Rogerjbbeach@aol.com</a>		

### Operational times

PERIOD	FROM	UNTIL
Weekdays	N/A	N/A
Saturdays	N/A	N/A
Sunday	N/A	N/A
Public holidays	N/A	N/A

The waste management facilities proposed are not for public use, but for the exclusive use for residents and staff of the estate. Facilities by nature will not have operating times.

### SECTION 4: PROCESS/ACTIVITY DESCRIPTION:

<b>Project Title</b>	“Schanskraal Sporting Estate” – A proposed mixed use residential and recreational estate (including, but not limited to, 60 new residential units, a sports shooting arena and a golf course)
----------------------	---

## Project Description:

Please provide a brief description of the activities and operations at the site. Provide a flow chart of the operation showing all inputs and outputs of the process. Give particulars of the source, location, nature, composition and quantity of emission to the atmosphere, surface water, sewer, and ground-water including noise emissions. Solid waste must be in tons and specify units for liquids and gases.

At present, the Schanskraal Farm is host to two separate guest lodges, staff residences and conference facilities. Existing outdoor recreational activities at the farm include freshwater fishing, equestrian horseback riding, horse riding, mountain biking, hiking, quad-biking, archery and target shooting at a range, bird hunting (in season) and plain game culling / hunting. The facilities and infrastructure proposed would complement the existing recreational facilities at the farm.

The developer proposes to establish a residential estate and sports facilities in the northern section of the Elands Kloof farm (see Appendix C – locality map). The residential component of the development comprises 60 residential units, each constructed on individual plots of 1 - 1.5 hectares. Each residence will be single or double storey, with a footprint restricted to ~600 m<sup>2</sup>. Plots will be located far apart and will be “nested” within the natural contours of the landscape, so as to provide each property with a unique view of the natural terrain.

The developer proposes that the following additional recreational facilities be constructed:

- Golf course and driving range;
- Sporting clay arena, i.e. a series/course of unique target shooting stations established in natural terrain; and
- Tennis courts.

The golf course is intended to be a private course for homeowners to make use of at their leisure. Given the concerns related to water availability the course will, as far as possible, incorporate natural features and vegetation into the design, and indigenous grasses will be used for fairways and greens where possible. As a result, the course will not be built to ‘championship specifications’, but should rather be considered a small ‘country course’ designed for recreational use only. The driving range would be designed to accommodate a maximum of eight players.

A water feature will be the central focus of the sporting clay arena, and the design will utilise the natural terrain to provide elevated traps and shooting stands. Preference will be given to tall, fast growing, indigenous tree species to provide visual obstacles on the arena.

Rehabilitation of the natural environment is an important component of the development and includes the planting of indigenous trees and shrubs, the reintroduction of indigenous grasses, re-development of lakes and dams and the restoration of existing watercourses.

The additional service infrastructure required for the development includes:

- Sanitation – Package plant(/s) or septic tanks will be installed at the residential and staff units.
- Waste – domestic waste will be stored temporarily at the site in skips, and domestic waste may be disposed of / buried.
- Electricity – alternative energy (e.g. solar panels and wind turbines) will be used to supplement electricity that will be drawn from the national grid; and
- Water – Initial studies have suggested that there are sustainable underground water sources available for both domestic use and for irrigation of sports facilities. Boreholes will be developed for abstraction

and pipelines will be laid to convey groundwater.

**SECTION 5: WASTE QUANTITIES**

Indicate or specify types of waste and list the estimated quantities expected to be managed daily (should you need more columns, you are advised to add more)

Hazardous waste	Non hazardous waste	Total waste handled (tonnes per day)
Sewage		< 90 m <sup>3</sup> / day (at full occupation)
	Domestic waste	120 kg / day (at full occupation)

Source of information supplied in the table above Mark with an “X”

- Determined from volumes
- Determined with weighbridge/scale
- Estimated

[Redacted]
X

**Recovery, Reuse, Recycling, treatment and disposal quantities:**

Indicate the applicable waste types and quantities expected to be disposed of and salvaged annually:

TYPES OF WASTE	MAIN SOURCE (NAME OF COMPANY)	QUANTITIES		ON-SITE RECOVERY REUSE RECYCLING TREATMENT OR DISPOSAL	OFFSITE RECOVERY REUSE RECYCLING TREATMENT OR DISPOSAL	OFFSITE DISPOSAL
		TONS/MONTH	M <sup>3</sup> /MONTH	method & location	method location and contractor details	
Domestic waste	N/A	< 4	< 26	N/A	Waste sorting for recycling will be a condition of authorisation as a waste minimisation strategy. Goods for recycling will be sorted on-site and transported to an off-site recycling facility.	Waste will be transported to a municipal waste site.

**SECTION 6: GENERAL**

**Prevailing wind direction (e.g. NWW)**

November – April	Unknown – to be determined through S&EIR
May - October	Unknown – to be determined through S&EIR

**The size of population to be served by the facility**

	Mark with "X"	Comment
0-499	X	The waste facilities proposed will only be for the service of the development. No waste will be brought to the site.
500-9,999		
10,000-199,999		
200,000 upwards		

**The geological formations underlying the site:**

Granite		Quartzite	
Shale		Dolomite	
Sandstone	X	Dolerite	X

Other: **There are also alluvium deposits underlying the site.**

**SECTION 7: COMPETENCE TO OPERATE SITE**

It is imperative that the holder of the waste licence is a fit person in terms of section 59 of the NEMWA (59 of 2008). To assess the holder's competence to operate the site, please disclose the following:

**Legal compliance**

	YES/NO	DETAILS
Has the applicant ever been found guilty or issued with a non compliance notice in terms of any national environmental management legislation?	No	
Has the applicant's licence in terms of the Waste Act 2008 ever been revoked?	No	
Has the applicant ever been issued with a non compliance notice or letter in terms of any South African Law?	No	

***NB:*** Details required above include any information that the applicant wants the Department to take into consideration in determining whether they are a "fit person" and this includes reasons why the offence happened and measures in place to prevent recurrence

## Technical competence

What technical skills are required to operate the site?

The manufacturer of the sewage treatment plants selected would need to train on-site staff in the operation of the facility.

The manufacturer of the sewage plant would be contracted to perform ongoing maintenance.

Management and maintenance requirements for domestic waste disposal will be specified in the environmental management programme. Compliance with the environmental management programme will be a condition of licensing.

How will the applicant ensure and maintain technical competency in the operation of the site?

Training will be provided for any new employees that are expected to be involved in waste management activities.

Details of applicant's experience and qualification along with that of relevant employees must be summarised as shown in the table below:

NAME	POSITION	DUTIES AND RESPONSIBILITIES	QUALIFICATIONS AND EXPERIENCE
To be determined following S&EIR			

## Financial Provisions

Provide a plan of estimated expenditure for the following:

	ATTACHED/NOT ATTACHED	SECTION OF THE REPORT WHERE IT IS ATTACHED
Environmental Monitoring	Not attached – to be determined during S&EIR	N/A
Provision and replacement of infrastructure	Not attached – to be determined during S&EIR	N/A
Restoration and aftercare	Not attached – to be determined during S&EIR	N/A

**SECTION 8: LANDFILL PARAMETERS – N/A**

## SECTION 9: DECLARATIONS

### The independent Environmental Assessment Practitioner

I, \_\_\_\_\_, declare under oath that I –

- act as the independent environmental assessment practitioner in this application ;
- do not have and will not have any financial interest in the undertaking of the activity, other than remuneration for work performed in terms of the Environmental Impact Assessment Regulations, 2006;
- have and will not have no vested interest in the proposed activity proceeding;
- have no, and will not engage in, conflicting interests in the undertaking of the activity;
- undertake to disclose, to the competent authority, any material information that have or may have the potential to influence the decision of the competent authority or the objectivity of any report, plan or document required in terms of the Environmental Impact Assessment Regulations, 2006;
- will ensure that information containing all relevant facts in respect of the application is distributed or made available to interested and affected parties and the public and that participation by interested and affected parties is facilitated in such a manner that all interested and affected parties will be provided with a reasonable opportunity to participate and to provide comments on documents that are produced to support the application;
- will ensure that the comments of all interested and affected parties are considered and recorded in reports that are submitted to the competent authority in respect of the application, provided that comments that are made by interested and affected parties in respect of a final report that will be submitted to the competent authority may be attached to the report without further amendment to the report;
- will keep a register of all interested and affected parties that participated in a public participation process; and
- will provide the competent authority with access to all information at my disposal regarding the application, whether such information is favourable to the applicant or not.

---

Signature of the Environmental Assessment Practitioner:

SRK Consulting (Pty) Ltd

---

Name of company:

---

Date:

---

Signature of the Commissioner of Oaths:

---

Date:

---

Designation:

Official stamp (Above)



## The Applicant

I, \_\_\_\_\_ declare under oath that I -

- Am, or represent, the applicant in this application;
- appointed the environmental assessment practitioner as indicated above to act as the independent environmental assessment practitioner for this application;
- will provide the environmental assessment practitioner and the competent authority with access to all information at my disposal that is relevant to the application;
- will be responsible for the costs incurred in complying with the Environmental Impact Assessment Regulations, 2006, including but not limited to –
- costs incurred in connection with the appointment of the environmental assessment practitioner or any person contracted by the environmental assessment practitioner;
- costs incurred in respect of the undertaking of any process required in terms of the regulations;
- costs in respect of any fee prescribed by the Minister in respect of the regulations;
- costs in respect of specialist reviews, if the competent authority decides to recover costs; and
- the provision of security to ensure compliance with conditions attached to an environmental authorisation, should it be required by the competent authority;
- will ensure that the environmental assessment practitioner is competent to comply with the requirements of these regulations;
- am responsible for complying with the conditions of any environmental authorisation issued by the competent authority;
- hereby indemnify, the government of the Republic, the competent authority and all its officers, agents and employees, from any liability arising out of the content of any report, any procedure or any action for which the applicant or environmental assessment practitioner is responsible in terms of these regulations; and
- will not hold the competent authority responsible for any costs that may be incurred by the applicant in proceeding with an activity prior to an appeal being decided in terms of these regulations.

---

Signature of Applicant

---

Name of company:

---

Date:

---

Signature of the Commissioner of Oaths:

---

Date:

---

Designation:

Official stamp (Above)

## APPENDIX: A1

### Information needed when applying for scheduled activities listed under Category A, but is not limited thereto:

**Basic Assessment Report which must include supplementing documentation such as:**

Description of the environment that may be affected by the proposed activity and the manner in which the geographical, physical, biological, social, economic and cultural aspects of the environment may be affected by the proposed activity  
Description of significant environmental impacts, including cumulative impacts, that may occur as a result of the undertaking of the activity  
Conducting public participation as outlined in EIA Regulations  
Waste disposal facility designs  
Closure plan (report)  
Operational plan  
All applicable legislation, policies and/or guidelines  
End-use plan (only apply to site landfill closure)  
Closure/Remedial designs (only apply to the landfill closure)  
Latest external audit report (only apply for permit amendment)  
Application and report documents (four hard copies for all applications)  
A3 size layout plans (four hard copies for all applications)  
Landfill conceptual designs (only apply for construction and decommissioning of landfill sites)  
Geo-hydrological report (only apply to landfill sites, storage facilities and treatment of waste)  
Consideration of alternatives  
Description of mitigation measures and risk assessment  
Any inputs made by specialists to the extent that may be necessary  
Any specific information as may be required by the competent authority

### Information needed when applying for scheduled activities listed under Category B, but is not limited thereto:

**Scoping and Environmental Impact Assessment Report which should include:**

Description of the environment that may be affected by the proposed activity and the manner in which the geographical, physical, biological, social, economic and cultural aspects of the environment may be affected by the proposed activity  
Description of significant environmental impacts, including cumulative impacts, that may occur as a result of the undertaking of the activity  
Conducting public participation as outlined in EIA Regulations  
Closure plan (report)  
Operational plan  
Waste disposal facility designs  
End-use plan (only apply to site closure)  
Closure/Remedial designs (only apply to site closure)  
Latest external audit report (only apply to permit amendment)  
Application and report documents (four hard copies for all applications)  
A3 size layout plans (four hard copies for all applications)  
Landfill conceptual designs  
Geo-hydrological report (only apply to landfill sites, storage and treatment of waste)  
Consideration of alternatives  
Description of mitigation measures and risk assessment  
Any inputs made by specialists to the extent that may be necessary  
Any specific information as may be required by the competent authority

**Plan of study for environmental impact assessment which must among others include:**

Description of the tasks to be undertaken as part of the environmental impact assessment process, including specialist report or specialized processes, and a manner in which such tasks will be undertaken  
An indication of stages of stages at which the competent authority will be consulted  
Description of methods for assessing issues and alternatives, including the no-go alternative  
Particulars of participation process that will be conducted during the EIA process  
**NB: Compilation of EIA report must be based on tasks outlined in the Plan of Study for EIA, and the below listed reports must also be attached.**  
Draft environmental management plan (only apply to EIA reports. No draft EMP should be included in the scoping report)  
Copies of any specialist reports and specialized processes (only apply to EIA reports. No copies of specialist studies and specialized processes should be included in the scoping report)

## APPENDIX B1

The following **MUST** be included in the application as supporting documentation and the applicant must indicate specific section(s) where they are appended in the reports.

**To be provided following S&EIR.**

REQUIRED PIECE OF INFORMATION	SECTION IN THE REPORTS WHERE IT CAN BE FOUND	COMMENTS (If any)
1. Extremely clear Google Earth colour picture of the site (dated not more than a month from the date of the application)		
2. 1:50 000 topography /topo-cadastral map of the area showing		
2.1 the site and 5km radius		
2.2 Existing residential and industrial areas		
2.3 Possible future development (indicate the type of development)		
2.4 Other waste handling sites (existing or closed) in the area		
2.5 Existing and possible future residential areas.		
2.7 Sites which are listed as national monuments or archaeological, paleontological and cultural historical sites or objects worthy of conservation;		
3. Security and access aspects of the site		
4. The site plan drawn to scale showing the site's boundary showing:		
4.1 Activities or development existing on all 4 directions of the site.		
4.2 Waste receipt, storage and handling areas		
4.3 Impermeable surfaces		
4.4 Sealed drainage systems		
4.5 Drainage system for the site including sumps and discharge points		
4.6 Road names and access from all major roads in the area		
4.7 Land Owner's consent (letter with signature)		
5. Waste hierarchy implementation plan		
6. Emergency preparedness plan		

## **APPENDIX: C**

### **Locality Map**

**APPENDIX: D**

**Application for Environmental Authorisation**

## **Appendix C: Initial Database of IAPs**

**Title****Institution****RELEVANT AUTHORITIES**

The Manager	The Northern Cape Department of Economic Development and Tourism
Municipal Manager	Ubuntu Local Municipality
Provincial Planner	Northern Cape Provincial Government
Municipal Manager	Pixley Ka Seme District Municipality
Case Officer	Department of Environmental Affairs: Waste
Case Officer	Northern Cape Department of Environment and Nature Conservation
The Manager	Agriculture, Land Reform and Rural Development
Town Planning and Housing	Pixley Ka Seme District Muni
Chief Director: Northern Cape	Department of Water Affairs
The Manager	Ngwao Boswa Kapa Bokoni (Northern Cape Heritage)
The Provincial Manager	SAHRA Northern Cape Provincial Office

**OTHER IDENTIFIED STAKEHOLDERS**

Manager	Agri Northern Cape
Terrestrial bird conservation	Birdlife South Africa
Director	Botanical Society of South Africa
The Manager	Endangered Wildlife Trust
Avi-fauna specialist	Endangered Wildlife Trust
Director	Northern Cape Tourism Authority
Director	Northern Cape Tourism
Director	SA Hunters & Game Conservation Association
Northern Cape	South African Heritage Resource Agency
Chairperson: Northern Cape Region	Wildlife and Environmental Society of South Africa
Principal Hydrologist	Department of Water Affairs (Groundwater) (Northern Cape)
Economic Development Officer	Ubuntu Local Municipality
Chief Executive Officer	SAHRA
Chairperson	Richmond Farmers Association
Neighbouring Property Owner	Driefontein,
Neighbouring Property Owner	The Lands
Neighbouring Property Owner	Donkerhoek
Neighbouring Property Owner	Leopardsvlei
Neighbouring Property Owner	Eureka
Neighbouring Property Owner	Highlands
Neighbouring Property Owner	Kruygers Baaken,
Neighbouring Property Owner	Vergelegen
Neighbouring Property Owner	Fairview
Neighbouring Property Owner	Dassiesfontein
Neighbouring Property Owner	Dassiesfontein

## SRK Report Distribution Record

Report No.

424086/1

Copy No.

Name/Title	Company	Copy	Date	Authorised by
Matthew Law	SRK Consulting	1	13/06/12	DALC
Mr Chris Wells	Schanskraal Farm	2	13/06/12	DALC
The Librarian	Ntsikelelo Tida Library	3	13/06/12	DALC
The Manager	Victoria West Municipal Office	4	13/06/12	DALC
The Manager	The Northern Cape Department of Economic Development and Tourism	5	13/06/12	DALC
The Manager	Ubuntu Local Municipality	6	13/06/12	DALC
Provincial Planner	Northern Cape Provincial Government	7	13/06/12	DALC
The Manager	Pixley Ka Seme District Municipality	8	13/06/12	DALC
Town Planning and Housing	Pixley Ka Seme District Municipality	9	13/06/12	DALC
The Manager	Northern Cape Department of Agriculture, Land Reform and Rural Development	10	13/06/12	DALC
Chief Director: Northern Cape	Department of Water Affairs	11	13/06/12	DALC
The Manager	Ngwao Boswa Kapa Bokoni	12	13/06/12	DALC
The Provincial Manager	The South African Heritage Resources Agency: Northern Cape	13	13/06/12	DALC

Approval Signature:

This report is protected by copyright vested in SRK (SA) (Pty) Ltd. It may not be reproduced or transmitted in any form or by any means whatsoever to any person without the written permission of the copyright holder, SRK.